

**61st
AIIMS
ANNUAL REPORT
2016–2017**



शरीरमाद्यं खलु धर्मसाधनम्

ALL INDIA INSTITUTE OF MEDICAL SCIENCES

NEW DELHI - 110029

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AIIMS
ANNUAL REPORT
2016–2017

All India Institute of Medical Sciences
New Delhi 110029

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All India Institute of Medical Sciences

The All India Institute of Medical Sciences (AIIMS) was established in 1956 as an institution of national importance by an Act of Parliament to develop patterns of teaching in undergraduate and post-graduate medical education in all its branches so as to demonstrate a high standard of medical education to all medical colleges and other allied institutions in India; to bring together in one place educational facilities of the highest order for the training of personnel in all important branches of health activity and to attain self-sufficiency in postgraduate medical education.

The Institute has comprehensive facilities for teaching, research and patient care. AIIMS conducts teaching programmes in medical and para-medical courses both at the undergraduate and postgraduate levels and awards its own degrees. Teaching and research is conducted in nearly 100 disciplines. AIIMS is a leader in the field of medical research with over 2000 research publications by its researchers in a year. AIIMS also runs a College of Nursing.

Various departments and centres manage practically all types of disease conditions with support from para-clinical departments. AIIMS also runs a 50-bedded hospital and the Comprehensive Rural Health Centre at Ballabgarh in Haryana and provides health cover to nearly 8 lakh people through the Centre for Community Medicine.

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AIIMS AT A GLANCE

2016–2017

Year of establishment 1956

Teaching Departments and Centres	55	Medical graduates	3059
Faculty members (Sanctioned 882)	701	Postgraduates	9635
Non-faculty staff (Sanctioned 11648)	9625	Nursing/paramedical graduates	3104
Undergraduate students	818	Publications in journals/abstracts	2485
Postgraduate students	1844	Chapters in books/books/monographs	330

Hospital Services

Hospital/Centre	Outpatients (including casualty)	Admission	Surgery (Operations/ procedures)	Beds		
				General	Private	Total
Main Hospital	20,04,377	1,10,348	87,965	988	165	1,153
Dr RP Centre	6,09,261	41,150	42,002	280	22	302
Dr BRA IRCH	1,57,884	40,501	9,298	167	15	182
Cardiothoracic Centre	1,91,778	12,611	4,060	185	33	422
Neurosciences Centre	1,32,505	8,661	3,383	174	30	
NDDTC*	1,27,109	1,224	—	50	—	50
CCM†	4,88,687	13,040	2,529	50	—	50
JPNAT Centre	1,10,145	5,373	5,437	186	—	186
CDER	2,08,138	1,260	22,169	17	—	17
Outreach outpatients, Badsha, Jhajjar	1,08,863	—	—	—	—	—
Total	41,40,747	2,34,168	1,76,843	2,097	265	2,362

* Inclusive of Trilokpuri, Sunder Nagri

† Inclusive of PHC Dayal Pur

Hospital performance indices

Parameters	Main Hospital		Cardiothoracic and Neurosciences Centre		Inference
	2016–17	2015–16	2016–17	2015–16	
Average length of stay (days)	9.8	7.7	9.6	9.0	Effective utilization of beds for regular admissions
Average bed occupancy rate (%)	86.9	88.4	91.5	86.1	Fair occupancy
Net death rate (%)	1.7	1.8	3.1	3.2	Low mortality rate despite a large number of critically ill patients admitted
Combined crude infection rate (%)	6.9	5.7	—	—	—

CCM: Centre for Community Medicine

CDER: Centre for Dental Education and Research

Dr BRA IRCH: Dr B.R. Ambedkar Institute Rotary Cancer Hospital

Dr RP Centre: Dr Rajendra Prasad Centre for Ophthalmic Sciences

JPNAT Centre: Jai Prakash Narain Apex Trauma Centre

NDDTC: National Drug Dependence Treatment Centre

1. Director's Review

I feel privileged to present the Sixty-first Annual Report and audited statement of accounts for the year 2016–2017.

All India Institute of Medical Sciences, Delhi (AIIMS) is unusual in the sense that it makes discoveries, life altering research, and transformative care, appear routine. The inspired and untiring toil of thousands of faculty members, scientists, nursing personnel, engineering staff, technicians, sanitation and health attendants and students undergird this sustained brilliance. I am grateful for and humbled by the work that they do at AIIMS each day; and I recognize how fortunate I am to be a part of this extraordinary community.

Reminiscing as we go ahead

The Institute owes its origin to the Bhore Committee which in 1946 had recommended the establishment of a national medical centre which would concentrate on meeting the need for highly qualified manpower to look after the nations expanding healthcare needs. New Zealand granted 1 million pounds for the development of the Institute under the Colombo Plan and the foundation stone of the All India Institute of Medical Sciences was laid in 1952. The AIIMS was finally created in 1956 as an autonomous institution through an Act of Parliament to serve as a nucleus for nurturing excellence in all aspects of healthcare.

True to its mandate, the institute is setting the pace for biomedical research and clinical medicine. Our work promises to advance science, come up with deep insights, and transform human health.

AIIMS celebrated its diamond jubilee by organizing 15 public lectures and 34 workshops, conferences and CMEs during the year. The AIIMS diamond jubilee exhibition was on view in the Jawaharlal Nehru Auditorium of the Institute in September and October 2016. The exhibition chronicled the journey of 60 eventful years of AIIMS through rare monochrome and coloured images and archival documents including those of Queen Elizabeth II ceremonially opening the institute buildings in the august presence of President Rajendra Prasad on January 27, 1961. The contributions of Rajkumari Amrit Kaur, who was instrumental in founding of the Institute were fondly remembered.

Clean AIIMS, Green AIIMS

AIIMS, New Delhi, has won the first prize for maintaining high standards of sanitation and hygiene under the Government's Kayakalp awards. The thrust of Kayakalp is to inculcate a culture of cleanliness for gaining the trust and confidence of the community that we serve.

An agreement has been signed between a Japanese organization (New Energy and Industrial Technology Development Organisation), the Ministry of Finance and the Ministry of Health and Family Welfare (MoHFW) of the Government of India (GOI) to set up a green hospital demonstration project at AIIMS. The Japanese consumer durables firm Hitachi is building Information and Communications Technology (ICT) based infrastructure for AIIMS to reduce the hospitals power consumption by 30 per cent. As part of the project, AIIMS will install a new photo-voltaic power generation facility, update existing facilities, and build a system to control and monitor the status of energy consumption of the hospital. In addition, the project will accelerate electronic management of medical image data by introducing energy-saving Information Technology equipment. Efforts will then be made to widely disseminate these technologies in India.

Patient centred services

The AIIMS hospital maintains high quality standards while providing cost effective services to a large numbers of patients. The AIIMS main hospital and its centres—Cardiothoracic and Neurosciences Centre (CN Centre), Jai Prakash Narain Apex Trauma Centre (JPNATC), Dr BR Ambedkar Institute Rotary Cancer Hospital (BRA IRCH), Dr Rajendra Prasad Centre for Ophthalmic Sciences (RPCOS), Centre for Dental Education and Research (CDER), National Drug Dependence Treatment Centre (NDDTC)—have a total bed strength of 2362. During the year 2016–2017, AIIMS attended to about 41.40 lakh outpatients and 2.34 lakh inpatients and performed over 1.7 lakh surgical procedures at optimal patient care service parameters with an average bed occupancy of about 86%, average hospital stay of about 9 days, and at a low net death rate of less than 2%. AIIMS continues to advance the delivery of healthcare within and outside India, particularly in South and Southeast Asia.

A centre for advanced research and excellence for childhood neurodevelopmental disorders will soon come up at AIIMS with a focus on use of technology aided rehabilitation strategies. The key elements of the centre of excellence

will be creation of a National Registry, the National Knowledge and Training Centre, Advanced Diagnostics, Advanced Therapeutics & Rehabilitation and a Helpline for Teleconsultation.

Digital AIIMS

The Prime Minister, in his Independence Day address to the nation last year, had recommended the Digital AIIMS Project for pan-India replication. Expanding on its successes, we have added online video consultation facility for patients based out of Delhi. Doctors from 20 departments are available for consultation.

‘MeraAspataal’

AIIMS has started holding meetings with heads of departments, medical superintendents and other key officials periodically to work on the shortcomings identified by it through feedback received from patients via the mobile application ‘MeraAspataal’ (My hospital) launched by the health ministry. Since staff behaviour was recorded as a source of dissatisfaction, the institute has started conducting counselling sessions for various levels of staff including the security personnel, who sometimes serve as the first point of contact for patients and their relatives; in an effort to make them people-friendly.

AIIMS is also implementing the Sugamya Bharat Abhiyan to become a more patient-friendly hospital for those with disabilities. The Institute has also launched an ‘adopt a patient’ policy, under which public donations are sought for patients who are unable to continue their treatment or to bear the cost of buying equipment needed for rehabilitation at home.

The National Disaster Response Force has created a 30-bed night shelter for the stay of family members of poor patients getting treated at the AIIMS trauma centre.

Quality Improvement

The Department of Paediatrics’ Quality Improvement program has now spread to 12 departments. The Department of Paediatrics has also launched an Antimicrobial Stewardship program across all its divisions. The division of Neonatology is partnering with Postgraduate Institute of Medical Education and Research, Chandigarh, Government Medical College Hospital, Chandigarh, and the Public Health Foundation of India to improve the quality of care of preterm neonates being treated in special newborn care units in 4 states of the country. The major objective of this activity is to reduce the incidence of retinopathy of prematurity in preterm neonates by implementing evidence based practices. The work is funded by Queen Elizabeth Diamond Jubilee Trust, United Kingdom. The division of Neonatology has also created a training tool on quality improvement, which will be used globally for quality control programs on maternal and newborn health.

Service innovations

The Virology Section of the Department of Microbiology provided diagnostic services and programmatic support during the Chikungunya fever outbreak during August–November 2016. Rapid research in response to the outbreak revealed that the Chikungunya virus strain (i.e. East Central South African genotype) which caused the 2016 outbreak belonged to the same genotype that was circulating since 2006. This helped in effective treatment for affected patients.

A brain robot has been installed at AIIMS to help neurosurgeons in planning surgeries and reaching locations in the brain with exquisite precision. The Institute installed a state of the art, current generation Cardiovascular CT system with advanced post-processing workstations, which allow for highly precise information for diagnosis and treatment planning for various cardiovascular diseases. Plaque brachytherapy for treatment of ocular malignancies was introduced at RPCOS in collaboration with BRA IRCH. AIIMS has also set up a digital radiological unit in its mortuary to enable doctors to conduct virtual autopsies with the help of hightech digital X-rays.

The division of Paediatric Gastroenterology conducted several procedures that were not previously available for children; namely, endoscopic cystogastrostomy, endoscopic glue injections, neonatal esophageal stricture dilatation, and balloon retrograde venous obliteration. It also established specialized interventions for paediatric hepatic vascular diseases.

The work of the Stem Cell Facility as Centre of Excellence in Stem Cell Research was recognized by the Department of Biotechnology (DBT), GOI; which has renewed support to it for the next 5 years. The Neurology department has initiated haematopoietic stem cell transplantation for patients with multiple sclerosis.

AIIMS has started training a specialist cadre of nurses in cardiac rehabilitation program and heart failure management introducing the model of ‘nurse-coordinated disease management program’ in the country.

The behavioural addiction clinic at AIIMS is looking to offer treatment as well as prevention, early detection and protection against Internet addiction by joining hands with educational institutions.

People’s Health

On a broader scale we are informing the healthcare of the nation on many fronts. The Centre for Community Medicine has provided technical inputs into the National Program for Prevention and Control of Cancer, Diabetes, and Cardiovascular Diseases including Stroke; and co-ordinated the National Non Communicable Diseases monitoring survey across ten implementing agencies.

The RPCOS is supporting the national task force set up by the MoHFW, GOI to reduce the incidence of irreversible blindness caused by glaucoma. The taskforce aims to train ophthalmologists working at the district level across the country on early diagnosis and appropriate management of glaucoma to prevent loss of vision. The RPCOS was also instrumental in the revision of the definition of blindness under the National Program for Control of Blindness, MoHFW, GOI as well as visual disability re-classification under the Ministry of Social Justice and Empowerment (MoSJE), GOI. In addition, the RPCOS has started 11 new Vision Centres for the vulnerable urban population in collaboration with the Delhi Government.

The Department of Geriatrics has created infrastructure for application of mobile telephony in old age care (mAg-ing Project) with technical support from “*Be He@lthy, Be Mobile*” initiative of World Health Organization (WHO) and financial support from MoHFW, GOI. A national thalassaemia and sickle cell control program was initiated by MoHFW through the endeavours of faculty of the department of Haematology, AIIMS. The divisions of Genetics and Neonatology of the Department of Paediatrics are running the ‘Birth Defects Surveillance’ program and WHO South East Asia Region birth defects database.

The Organ Retrieval and Banking Organization organized 46 awareness camps to raise public education and awareness on organ and tissue donation; and obtained pledges from 12282 persons regarding the same.

The MoHFW, GOI in collaboration with AIIMS, will come up with a National Death Registry. The registry will help policy-makers have a better understanding of disease outbreaks so as to optimise resources and healthcare facilities in respective regions. AIIMS has already implemented the pilot version of the death registry with a coding system called the Systematized Nomenclature of Medicine (SNOMED).

Preparing the Next Gen

AIIMS ranks first among India’s medical colleges in all three independent surveys conducted by India Today, the Outlook, and the Week. AIIMS is also the only medical institutions from India in the top 1000 degree-granting institutions of higher education worldwide according to the Centre for World University Rankings. It improved its international ranking substantially over the past year. However, as the Union Home Minister, Shri Rajnath Singh Ji noted in his Convocation address, while India has successfully overcome many health challenges, there are many health frontiers that still need to be conquered. We are committed to training the next generation of physician-scientists; while setting the highest standards for patient care and research.

With its 7 centres comprising of various teaching departments and facilities and 42 stand-alone Departments, and a manpower of over 10,000 including over 700 faculty members, AIIMS, Delhi produces a large number of specialists (MD/MS), super-specialists (DM/MCh), PhD scholars and allied health and basic sciences experts, including nurses and paramedical professionals. During the year, we enrolled 917 scholars in various courses. Under its short term training scheme, the Institute provided postgraduate training to 665 short-term trainees, 11 long-term trainees, 6 WHO fellows (foreign nationals) under the WHO fellowship programme. AIIMS, New Delhi also continued to play a mentorship role for the other AIIMS and conducted entrance examinations and counselling leading to final selection of students to the MBBS and BSc (Honours) Nursing courses for them.

AIIMS will admit 100 students for its undergraduate programme from the next academic session, increasing the number of seats from the existing 72. Many new courses were initiated at AIIMS, including Doctor of Medicine (DM) in Cardiac Surgical Intensive Care, and Medical Genetics; Master of Surgery (MCh) in Head and Neck Surgery; Fellowships in Skull Base Surgery, Aortic Surgery, Paediatric Cardiac Anaesthesia, Bone Marrow Transplantation, Fetal Medicine, Gastrointestinal Radiology, Thoracic Radiology and Pediatric Radiology; and Doctor of Medicine (MD) course in Transfusion Medicine. Approval for starting a Master of Science (MSc) course in Reproductive Biology & Clinical Embryology and the Masters of Technology in Biomedical Engineering has also been obtained.

Our faculty and researchers share their expertise with the world, providing education, training and research opportunities to many. AIIMS offered Continuing Medical Education to thousands of physicians and healthcare professionals to help improve skills, increase knowledge and improve performance. We organized/hosted over 150 workshops, symposia, conferences and training programmes in collaboration with various national and international agencies.

We continue to cultivate our greatest resource—our students—and evolve our transformative curriculum by creating new ways to train tomorrow's doctors. The Department of Biophysics has received grant from the Funds for Improvement of Science and Technology Infrastructure in Higher Educational Institutions (FIST) of the Department of Science and Technology, GOI.

Research for the Nation

The efforts to better understand, treat and prevent disease are supported and enhanced by our extraordinary biomedical research enterprise. A study on the quality of medical research in India found that AIIMS was the top institution, on the basis of research output. It published over 1900 research papers in national and international journals and over 300 monographs, books and chapters in books.

Driving research and innovation

The Research Section serves as a catalyst for research at AIIMS. The faculty and scientists at the institute conducted over 600 funded research projects and attracted more than Rs. 100 crores worth of extramural research grants. In addition, the research section disbursed grants amounting to Rs. 4.35 crores for 226 Intramural Research Projects largely to junior faculty members.

The National Cancer Institute (NCI) coming up in Jhajjar will be equipped with the best medical facilities, including a first-of-its-kind tissue repository, and plans are afoot for conducting research there on cancers which are more specific to India like tobacco-related cancers, cancer of the uterine cervix, gall bladder cancer and liver cancers. A Stem Cell Translational and Neurosciences Laboratory has been set up at the Jai Prakash Apex Trauma Center.

Fostering research networks

The Health Minister, Shri Jagat Prakash Nadda Ji in his convocation speech advised us to explore possibilities for formation of interdisciplinary research groups to address larger research priorities, the grand challenges of basic, translational, clinical and public health research. AIIMS has launched a Cohort Study Centre with support from the Erasmus University in the Netherlands, the National Brain Research Centre at Manesar; and DBT, GOI. The project will help in finding protective and risk factors (genetic, lifestyle and socio-economic) for heart ailments and dementia in old people. AIIMS signed a memorandum of understanding with France-based FAM-Medical Academy Foundation, Paris for research collaboration on cardiovascular diseases, infectious diseases and cancer.

Glimpses of research

Given below are some examples of the research work taking place at AIIMS. These are emblematic of the creativity, drive and innovation that make AIIMS the nucleus of a dynamic biomedical research and training ecosystem.

A national three-year survey conducted by RPCOS in collaboration with the MoHFW, GOI under the National Trachoma Control Programme showed that trachoma, a common eye infection among children that often leads to blindness, has been eliminated from the country following mass treatment programs among children. On the other hand, a national survey conducted by RPCOS showed that over 13% of school-going children in India are myopic (near-sighted or short-sighted), up from about 7% a decade ago. It is speculated that the doubling of figures over the past decade is related to excess use of electronic gadgets.

The NDDTC supported the first major government survey to estimate the prevalence of drug use among Delhi's street children by Delhi government's Women and Child Development Department. The survey showed that drug use was

rampant among street children and started at an early age; some of them started using drugs when they were only 9 years old. About 30% of these children had dropped out of school due to drug abuse. The Delhi government is planning to start dedicated juvenile drug deaddiction centres in six hospitals based on this report. The MoSJE, GOI and NDDTC have signed a Memorandum of Understanding to conduct a national survey to find the extent and pattern of substance use, in an effort to formulate a holistic policy to tackle the menace of drug abuse in the country.

A study conducted at the Department of Neurology has shown that the average age for the onset of stroke in Delhi is 55 years, as compared to 70 years worldwide. Even more alarming is the fact that 15% of strokes in the capital occur in people under 40 years of age. According to the study, hypertension, diabetes and alcohol consumption are the major risk factors for strokes.

Studies conducted in the past year at AIIMS showed that Delhi's pollution is adding to respiratory disorders. A recent study has found that increasing particulate matter levels in Delhi's air has significant correlation with a spike in arthritis symptoms and rheumatoid arthritis flare. Studies on the effect of pollution on other disorders including stroke are underway.

Our pharmacology and pathology departments are working on methods that would enable drug delivery to diseased cells directly through nano-technology. This would increase the effectiveness of medicines, while reducing the toxicity and costs. The clinical microbiology department has isolated the parasite of kala-azar from goat blood; raising the possibility that screening of animal vectors may be needed to control the spread of this communicable disease.

Age-related macular degeneration is a common cause of irreversible vision loss among the elderly. A study conducted at RPCOS indicated that fruits and vegetables, including broad and cluster beans, carrots, green chilli, curry leaves, drumstick leaves, edible amaranth, fenugreek leaves, ginger, pumpkin, ivy gourd, mango and snake gourd, are good for eye health.

The cancer division at AIIMS in collaboration with the Central Council for Research in Ayurvedic Sciences is about to embark on a major research project to study and validate the efficacy of Ayurvedic drugs used for treating cancer of the breast, cervix and oral cavity, among others. The large-scale project follows pilot studies conducted at the Institute that showed better recovery in cancer patients treated with Ayurvedic preparations in terms of reduced side-effects such as hair fall, nausea and fall in vital blood parameters.

Socially conscious research

Euthanasia is the termination of a very sick person's life in order to relieve them of their suffering. The Supreme Court in 2011 legalised passive euthanasia by means of the withdrawal of life support to patients in a permanent vegetative state; but later referred it to a constitution bench. The Centre prepared a draft bill and invited public suggestions last year for authorising passive euthanasia. An AIIMS study has revealed the doctors are deeply divided over passive euthanasia for terminally ill patients. While oncologists and haematologists seem to be against the practice, most other doctors expressed support.

A five-year retrospective analysis of abandoned fetuses brought to AIIMS for medical autopsy has revealed that female foeticide and illegal abortions occur even in South Delhi, underscoring the country's prevailing male-chauvinistic attitudes and deep-seated cultural preference for sons.

ACCOLADES

The Centre for Dental Education and Research continues as the National Centre of Excellence for the Implementation of National Oral Health Programme of the MoHFW, GOI. The Department of Pharmacology continues to be Adverse Drug Reactions monitoring centre under the Pharmacovigilance Programme of India and it has been designated as the Medical Device Monitoring Centre for Materiovigilance Program of India by the MoHFW, GOI. The NDDTC continues to be the WHO Collaborating Centre on Substance Abuse; and the Centre for Community Medicine continues as the WHO Collaborating Centre for Capacity Development and Research in Community based NCDPC. The virology laboratory of the Department of Microbiology was designated a Regional Reference Laboratory for HIV Viral Load Testing by NACO in 2016. The Jai Prakash Narayan Apex Trauma Center was awarded the prestigious Asia Pacific Hand hygiene Excellence Award by the WHO-Asia Pacific Society of Infection Control.

Our extraordinary level of achievement is in no small measure, attributable to the creativity and commitment of the stellar faculty. Dr Randeep Guleria, Dr Rajesh Malhotra, Dr J.B. Sharma, Dr C.S. Yadav, Dr P.N. Dogra, Dr Amlesh Seth and Dr A.K. Bisoi, received the prestigious Dr B.C. Roy Award for excellence in the field of medicine. Professor N.R. Jagannathan received the prestigious S.K. Mitra Birth Centenary Gold Medal Award of the Indian Science Congress Association. Shri Suresh Chand Sangi, a trauma nurse coordinator at the JPNATC, AIIMS, New Delhi, was awarded the National Florence Nightingale Award.

As the Director of the institute, I am inspired by the dedication of my colleagues who are pursuing therapies with a will to save or improve human lives. I am assured that AIIMS will be the vanguard of research breakthroughs that promise to transform human health. I am proud to be leading an institution dedicated to educating and training the biomedical and healthcare leaders of tomorrow.

Randeep Guleria
Director

2. The Institute and Its Committees

INSTITUTE BODY

- | | | |
|-----|---|--------------------------|
| 1. | Shri Jagat Prakash Nadda
Minister of Health and Family Welfare
Nirman Bhawan, New Delhi 110011 | President |
| 2. | Professor Ram Gopal Yadav, MP (Rajya Sabha)
8-A, Lodhi Estate, New Delhi 110003 | Member |
| 3. | Shri Ramesh Bidhuri, MP (Lok Sabha)
H. No.179, Sunpath House,
Village Tughlakabad, New Delhi 110044 | Member |
| 4. | Shri Parvesh Sahib Singh Verma, MP (Lok Sabha)
1/14B, Shanti Niketan, New Delhi | Member |
| 5. | Shri Vinay Sheel Oberoi
Secretary, Department of Higher Education,
Ministry of Human Resource Development,
Government of India, Shastri Bhawan, New Delhi 110001 | Member (up to 28.2.2017) |
| 6. | Professor M.K. Bhan
Former Secretary, Department of Biotechnology,
Ministry of Science and Technology, New Delhi | Member |
| 7. | Shri C.K. Misra
Secretary (Health and Family Welfare),
Ministry of Health and Family Welfare, Government of India
Nirman Bhawan, New Delhi 110011 | Member (from 17.8.2016) |
| | Shri B.P. Sharma
Secretary (Health and Family Welfare),
Ministry of Health and Family Welfare, Government of India
Nirman Bhawan, New Delhi 110011 | Member (up to 16.8.2016) |
| 8. | Professor Yogesh Kumar Tyagi
Vice Chancellor
University of Delhi, Delhi 110007 | Member (Ex-Officio) |
| 9. | Dr Jagdish Prasad
Director General of Health Services
Government of India,
Nirman Bhawan, New Delhi 110011 | Member (Ex-Officio) |
| 10. | Dr D.S. Rana
Chairman, Board of Management,
Sir Ganga Ram Hospital, New Delhi 110060 | Member |
| 11. | Dr (Smt) Vijay Laxmi Saxena
Former General Secretary,
Indian Sciences Congress Association (ISCA),
Kolkata, West Bengal | Member |
| | Coordinator Bioinformatics
Infrastructure Facility Centre of DBT (Government of India),
Head, Department of Zoology, Dayanand Girls P.G. College,
Kanpur, Uttar Pradesh
7/182, Swarup Nagar, Kanpur 208002, Uttar Pradesh | |

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|-----|---|--------------------------------------|
| 12. | Dr Mahesh B. Patel
F-001, Shilalekh Tower, Opposite Police Stadium,
Shahi Baug, Ahmedabad 380004, Gujarat | Member |
| 13. | Dr D.G. Mhaisekar
Vice Chancellor, Maharashtra University of Health Sciences,
Dindori Road, Mhasrul, Nashik 422004, Maharashtra | Member |
| 14. | Dr N. Gopalkrishnan
Professor (Nephrology), Madras Medical College,
Chennai, Tamil Nadu 600003 | Member |
| 15. | Smt Vijaya Srivastava
Additional Secretary and Financial Adviser
Ministry of Health and Family Welfare, Government of India
Nirman Bhawan, New Delhi 110011 | Member |
| 16. | Professor Randeep Guleria
Director, AIIMS | Member Secretary
(from 24.3.2017) |
| | Professor M.C. Misra
Director, AIIMS | (up to 31.1.2017) |
| 17. | Shri Arun Singhal
Joint Secretary, Ministry of Health and Family Welfare
Government of India, Nirman Bhawan, New Delhi 110011 | Special Invitee |
| 18. | Professor Balram Airan
Dean, AIIMS | Special Invitee |
| 19. | Dr D.K. Sharma
Medical Superintendent, AIIMS | Special Invitee |

GOVERNING BODY

- | | | |
|-----|---|--------------------------------------|
| 1. | Shri Jagat Prakash Nadda | President |
| 2. | Professor Ram Gopal Yadav, MP (Rajya Sabha) | Member |
| 3. | Shri Ramesh Bidhuri, MP (Lok Sabha) | Member |
| 4. | Shri C.K. Misra | Member (from 17.8.2016) |
| | Shri B.P. Sharma | Member (up to 16.8.2016) |
| 5. | Shri Vinay Sheel Oberoi | Member (up to 28.2.2017) |
| 6. | Dr D.S. Rana | Member |
| 7. | Dr Jagdish Prasad | Member (Ex-Officio) |
| 8. | Dr Mahesh B. Patel | Member |
| 9. | Dr D.G. Mhaisekar | Member |
| 10. | Smt Vijaya Srivastava | Member |
| 11. | Professor Randeep Guleria
Director, AIIMS | Member Secretary
(from 24.3.2017) |
| | Professor M.C. Misra
Director, AIIMS | (up to 31.1.2017) |

FINANCE COMMITTEE

- | | | |
|----|---|--------------------------------------|
| 1. | Shri C.K. Misra | Member (from 17.8.2016) |
| | Shri B.P. Sharma | (up to 16.8.2016) |
| 2. | Shri Parvesh Sahib Singh Verma, MP (Lok Sabha) | Member |
| 3. | Dr Jagdish Prasad | Member (Ex-Officio) |
| 4. | Shri Vinay Sheel Oberoi | Member (up to 28.2.2017) |
| 5. | Professor M.K. Bhan | Member |
| 6. | Dr D.G. Mhaisekar | Member |
| 7. | Smt Vijaya Srivastava | Member |
| 8. | Professor Randeep Guleria
Director, AIIMS | Member Secretary
(from 24.3.2017) |
| | Professor M.C. Misra
Director, AIIMS | (up to 31.1.2017) |

STANDING ACADEMIC COMMITTEE

- | | | |
|----|---|--------------------------------------|
| 1. | Dr Mahesh B. Patel | Chairman |
| 2. | Dr Jagdish Prasad | Member (Ex-Officio) |
| 3. | Professor M.K. Bhan | Member |
| 4. | Shri Vinay Sheel Oberoi | Member (up to 28.2.2017) |
| 5. | Dr D.G. Mhaisekar | Member |
| 6. | Dr D.S. Rana | Member |
| 7. | Dr (Smt) Vijay Laxmi Saxena | Member |
| 8. | Professor Randeep Guleria
Director, AIIMS | Member Secretary
(from 24.3.2017) |
| | Professor M.C. Misra
Director, AIIMS | (up to 31.1.2017) |

STANDING ESTATE COMMITTEE

- | | | |
|----|---|--------------------------------------|
| 1. | Professor Ram Gopal Yadav, MP (Rajya Sabha) | Chairman |
| 2. | Shri Parvesh Sahib Singh Verma, MP (Lok Sabha) | Member |
| 3. | Dr D.S. Rana | Member |
| 4. | Dr Jagdish Prasad | Member (Ex-Officio) |
| 5. | Professor Yogesh Kumar Tyagi | Member |
| 6. | Smt Vijaya Srivastava | Member |
| 7. | Dr N. Gopalkrishnan | Member |
| 8. | Professor Randeep Guleria
Director, AIIMS | Member Secretary
(from 24.3.2017) |
| | Professor M.C. Misra
Director, AIIMS | (up to 31.1.2017) |

STANDING HOSPITAL AFFAIRS COMMITTEE

1.	Shri Parvesh Sahib Singh Verma, MP (Lok Sabha)	Chairman
2.	Shri Ramesh Bidhuri, MP (Lok Sabha)	Member
3.	Dr D.S. Rana	Member
4.	Dr (Smt) Vijay Laxmi Saxena	Member
5.	Professor M.K. Bhan	Member
6.	Dr D.G. Mhaisekar	Member
7.	Dr N. Gopalkrishnan	Member
8.	Professor Randeep Guleria Director, AIIMS	Member Secretary (from 24.3.2017)
	Professor M.C. Misra Director, AIIMS	(up to 31.1.2017)

3. Academic Section

Dean

Balram Airan

Sub-Dean

Virinder Kumar Bansal

Registrar

Sanjeev Lalwani

The Academic Section develops policy and plans, and executes academic activities. These activities encompass the undergraduate, postgraduate and doctoral programmes for medical, nursing and paramedical courses. These activities are conducted by the undergraduate, postgraduate and paramedical cells.

UNDERGRADUATE EDUCATION

The section handles post-admission formalities for new students, develops and revises curricula and administers teaching programmes including internal assessment of undergraduate students admitted to various courses. The courses include MBBS, BSc (Hons) Medical Technology in Radiography and Ophthalmic Techniques, BSc Nursing (Post-certificate) and BSc (Hons) Nursing courses.

Bachelor of Medicine and Bachelor of Surgery (MBBS)

The pattern of education in MBBS course was reviewed and re-structured in July 2004. The MBBS course is of 5½ years duration and comprises of 3 phases and internship. The details are as follows:

Phase	Duration (years)	Training
First	One	Pre-clinical
Second	One-and-a-half	Para-clinical
Third	Two	Clinical
Internship	One	Compulsory rotation in various departments

In MBBS course, at present, every year 72 Indian students (37 General category, 11 Scheduled Caste, 5 Scheduled Tribe and 19 Other Backward Classes) are admitted. These admissions were made based on merit through an All-India Entrance Examination. For Orthopaedic physically handicapped (OPH) candidates 3% reservation was provided on horizontal basis. For these 72 seats, 2,45,865 applications were received and 1,89,357 candidates appeared in the entrance examination held on 29 May 2016. The MBBS students on rolls as on 31 March 2017 were 372 including 72 interns. There is a provision for admitting 5 foreign nationals on the recommendations of the Ministry of External Affairs, Government of India and 5 foreign nationals were recommended for admission.

In this year, 9 meritorious MBBS students were awarded scholarships for securing first, second and third positions in the first, second and final phase of professional examinations.

Paramedical and Nursing Education

In 2016–17, 75 students (36 General category, 11 Scheduled Caste, 6 Scheduled Tribe and 19 Other Backward Classes, 3 Foreign Nationals) were admitted in BSc (Hons) Nursing course. For BSc Nursing (Post-certificate) course, 25 students (13 General category, 4 Scheduled Caste, 2 Scheduled Tribe and 6 Other Backward Classes) were admitted.

For BSc (Hons) Ophthalmic Techniques, 19 students (8 General category, 3 Scheduled Caste, 1 Scheduled Tribe and 6 Other Backward Classes, 1 Foreign Nationals) and BSc (Hons) Medical Technology in Radiography, 10 students (5 General

category, 1 Scheduled Caste, 1 Scheduled Tribe and 2 Other Backward Classes, 1 Foreign National) were admitted. The number of students on rolls in these courses as on 31 March 2016 was:

Course	Number of students
<i>Nursing</i>	
BSc Nursing (Post-certificate)	46
BSc (Hons) Nursing	313
<i>Paramedical</i>	
BSc (Hons) Ophthalmic Techniques	58
BSc (Hons) Medical Technology in Radiography	29

POSTGRADUATE EDUCATION

The Academic Section looks after all activities pertaining to admission and training of postgraduate students including junior and senior residents. It handles all activities related to Fellowship, PhD, DM, MCh, MD, MS, MDS, MHA, MBio-technology (MBiotech) and MSc courses in different disciplines.

Admissions to all postgraduate courses for Indian nationals as well as sponsored candidates are made through an All-India Entrance Examination held twice a year for all postgraduate courses except MSc and MBiotech courses, for which the examination is held once a year. Under sponsored category, foreign nationals are admitted through the same entrance examination. In 2016–17, 716 students were admitted in various courses. The number of postgraduate and doctoral students on roll as on 31 March 2017 was 1844.

Admissions in various courses

S. no.	Name of course	July 2016	January 2017	Total
1	MSc/MBiotech/MSc Nursing (August)*	73	–	73
2	MD/MS/MDS/MHA	157	200	357
3	DM/MCh	78	120	198
4	PhD	36	28	64
5	Fellowship	2	22	24
	Total	346	370	716

*Admissions are done once in a year.

Postgraduate students on rolls

S. no.	Name of course	Number of students enrolled
1	PhD	437
2	DM	368
3	MCh	116
4	Fellowship programme	24
5	MD/MHA	617
6	MS	93
7	MDS	43
8	MSc/MBiotech/MSc Nursing	146
	Total	1844

Subject-wise distribution of PhD students on rolls

S. no.	Subject	Open	Sponsored
1	Anaesthesiology (Dr BRA IRCH)	5	0
2	Anaesthesiology and Intensive Care (JPNATC)	1	0

3	Anatomy	34	0
4	Biochemistry	30	0
5	Biophysics	34	0
6	Biostatistics	5	0
7	Biotechnology	6	0
8	Blood Bank	0	1
9	Cardiac Anaesthesiology	1	2
10	Centre for Community Medicine	1	0
11	Cardiac Biochemistry	2	0
12	Clinical Neuropsychology, NS Centre	2	0
13	CTC (Stem Cell)	2	0
14	College of Nursing	0	0
15	Cardiac Radiology	1	0
16	Cardiothoracic and Vascular Surgery	2	0
17	Community Ophthalmology (Dr RP Centre)	2	1
18	Dental Surgery	1	0
19	Dermatology and Venereology	4	0
20	Emergency Medicine	2	0
21	Endocrinology and Metabolism	8	0
22	Forensic Medicine	5	0
23	Gastroenterology and Human Nutrition Unit	8	0
24	Geriatric Medicine	3	0
25	Haematology	7	0
26	Laboratory Medicine	15	0
27	Laboratory Oncology	1	0
28	Medical Oncology (Dr BRA IRCH)	6	0
29	Medical Physics (Dr BRA IRCH)	3	0
30	Medicine	8	0
31	Microbiology	27	2
32	Neurobiochemistry	2	0
33	Neuropsychology (Neurosciences)	3	0
34	Neurology	23	0
35	Neurosurgery	7	1
36	Nuclear Magnetic Resonance	12	0
37	Nuclear Medicine	5	0
38	Neuroradiology	0	0
39	Obstetrics and Gynaecology	0	2
40	Ocular Biochemistry (Dr RP Centre)	3	0
41	Ocular Microbiology (Dr RP Centre)	1	0
42	Ocular Pathology (Dr RP Centre)	2	0
43	Ocular Pharmacology (Dr RP Centre)	5	0
44	Ophthalmology (Dr RP Centre)	5	1
45	Paediatrics	10	0
46	Paediatrics (Clinical/Epidemiology)	0	2
47	Paediatrics (Genetics/Basic Sciences)	9	1
48	Pathology	8	0
49	Pharmacology	15	0
50	Physiology	39	0
51	Psychiatry (Addiction Psychology)	1	0

52	Psychiatry (Clinical Psychology)	11	0
53	Psychiatry (Addiction Psychiatry)	3	0
54	Psychiatry (Clinical Psychiatry)	1	0
55	Pulmonary Medicine and Sleep Disorders	6	1
56	Radiation Oncology (IRCH)	2	0
57	Reproductive Biology	6	0
58	Radiotherapy	0	4
59	Surgery	3	3
60	Trauma Surgery	0	1
61	Transplant Immunology and Immunogenetics	7	0
	Total	415	22

Subject-wise distribution of DM students on rolls

S. no.	DM	Open	Sponsored
1	Addiction Psychiatry (NDDTC)	6	0
2	Cardiac Surgical Intensive Care	2	0
3	Cardiac Anaesthesiology	14	3
4	Cardiology	20	3
5	Clinical Haematology	11	2
6	Clinical Pharmacology	3	0
7	Critical Care Medicine	12	2
8	Endocrinology	8	3
9	Gastroenterology	9	3
10	Haemato-Pathology	7	3
11	Infectious Diseases	9	2
12	Medical Genetics	1	0
13	Medical Oncology	18	3
14	Neonatology	6	2
15	Nephrology	8	5
16	Neuro-Anaesthesiology and Critical Care	14	3
17	Neurology	29	3
18	Neuroimaging and Interventional Neuroradiology	5	2
19	Onco-Anaesthesia, Dr BRAIRCH	9	0
20	Paediatric Cardiology	1	1
21	Paediatric Nephrology	2	2
22	Paediatric Neurology	7	3
23	Paediatric Pulmonology and Intensive Care	2	2
24	Pulmonary, Critical Care and Sleep Medicine	12	3
25	Reproductive Medicine	1	0
26	Therapeutic Medicine	3	1
27	Vascular Radiology	4	2
	Total	223	53

Subject-wise distribution of MCh students on rolls

S. no.	Subject	Open	Sponsored
1	Breast, Endocrine and General Surgery	2	0
2	Cardiothoracic and Vascular Surgery	22	2
3	Gastrointestinal Surgery	12	3
4	Gynaecologic Oncology	2	1
5	Head-Neck Surgery and Oncology	1	1
6	Minimal Access Surgery and General Surgery	3	0
7	Neurosurgery	17	3
8	Paediatric Surgery	6	3
9	Plastic and Reconstructive Surgery	5	2
10	Surgical Oncology	12	3
11	Trauma Surgery and Critical Care	9	0
12	Urology	8	1
	Total	99	19

Subject-wise distribution of Fellowship Students on rolls

1	Bariatric and Metabolic Surgery	1	0
2	Renal Transplant Surgery	0	0
3	Paediatric Cardiac Anaesthesia	1	0
4	Epilepsy Surgery and Functional Neurosurgery	1	0
5	Spine Surgery	1	0
6	Skull Base and Cerebrovascular Surgery (NS)	2	0
7	Paediatric Neurosurgery	0	0
8	Skull Base Surgery	1	1
9	Uro-Oncology	0	0
10	Minimal Invasive Urology (Laparoscopic and Robotics)	1	0
11	Genitourinary Reconstructive Surgery (Adult)	0	0
12	GI Radiology	2	0
13	Thoracic Radiology	1	0
14	Paediatric Radiology	2	0
15	Minimally Invasive Gynaecological Surgery	0	0
16	Uro-Gynaecology	1	0
17	Blood and Marrow Transplantation	1	0
18	Stroke	2	0
19	Cleft and Craniofacial Orthodontics	1	0
20	Neuro-Critical Care	2	0
21	Aortic Surgery	1	0
22	Maternal Foetal Medicine (MFM) in Department of Obstetrics and Gynaecology	1	0
23	Clinical Research Methodology and Evidence Based Medicine	1	0
	Total	23	1

Subject-wise distribution of MCh (6 years course) on rolls

S. no.	MCh	Open	Sponsored
1	Neurosurgery	11	0
2	Paediatric Surgery	6	0
	Total	17	0

Subject-wise distribution of DM (6 years course) on rolls

S. no.	D. M	Open	Sponsored
1	Infectious Diseases	9	0
	Total	9	0

Subject-wise distribution of MD/MS/MDS students on rolls

S. no.	MD	Open	Sponsored
1	Anaesthesiology	42	3
2	Anatomy	18	0
3	Biochemistry	13	0
4	Biophysics	14	0
5	Community Medicine	22	1
6	Dermatology and Venereology	15	3
7	Forensic Medicine	08	0
8	Hospital Administration (MHA)	08	4
9	Laboratory Medicine	09	0
10	Medicine	55	3
11	Microbiology	14	0
12	Nuclear Medicine	13	3
13	Obstetrics and Gynaecology	40	3
14	Ophthalmology	109	3
15	Paediatrics	30	2
16	Pathology	28	3
17	Pharmacology	13	1
18	Physical Medicine and Rehabilitation	09	2
19	Physiology	16	0
20	Psychiatry	29	3
21	Radiodiagnosis	25	0
22	Radiotherapy	09	3
23	Geriatric Medicine	23	3
24	Emergency Medicine	15	3
25	Palliative Medicine	04	1
26	Transfusion Medicine	2	0
	Total	583	44
	MS		
27	Orthopaedics	18	3
28	Otorhinolaryngology (ENT)	17	3
29	Surgery	50	2
	Total	85	8
	MDS		
30	Conservative Dentistry and Endodontics	9	1
31	Orthodontics	9	3
32	Prosthodontics	7	1
33	Oral and Maxillofacial Surgery	8	3
34	Pedontics and Preventive Dentistry	2	0
	Total	35	8

Subject-wise distribution of MSc students on rolls

S. no.	MSc	Open	Sponsored
1	Anatomy	10	–
2	Biochemistry	10	–
3	Biophysics	05	–
4	Pharmacology	10	1 (Foreign National)
5	Physiology	09	–
6	Perfusion Technology	12	–
7	Biotechnology	24	–
8	Nuclear Medicine Technology	17	–
9	Reproductive Biology	4	–
	Total	101	1

Subject-wise distribution of MSc (Nursing) students on rolls

S. no.	MSc (Nursing)	Open	Sponsored
1	Cardiological/CTVS Nursing	7	2 (Foreign National)
2	Neurosciences Nursing	6	–
3	Paediatric Nursing	8	–
4	Psychiatric Nursing	6	–
5	Oncological Nursing	6	–
6	Nephrological Nursing	6	–
7	Critical Care Nursing	6	–
	Total	45	2

TRAINING PROGRAMMES

There is a provision for short term, long term and elective training for students and employees of various organizations in India as well as abroad. During 2016–17, 851 persons underwent training as listed below:

S. no.	Training	Number of trainees
1	Short Term training: Indian nationals	572
2	Short Term training: Foreign nationals	54
3	Long Term training: Indian nationals	11
4	Elective Training: Foreign nationals (UG students)	39
5	WHO Fellows: Indian nationals	0
6	WHO Fellows: Foreign nationals	6
	Total	682

COMMITTEE MEETINGS

The Academic Section organized meetings of the Academic committee, Staff Council, Dean's Committee, Faculty and Research Presentations as per details given below:

S. no.	Committee	Number of meetings
1	Academic Committee	1
2	Staff Council	2
3	Dean's Committee	3
4	Faculty (General Discussions)	8
5	Research Presentations	8

The following workshops/conferences/CMEs were held under Diamond Jubilee Celebration activities.

S. no.	Faculty/Department	Events	Dates
1	Academic Section/CMET	Institute Logo Design Competition	Launched by Hon'ble Health Minister on the Occasion of Institute Day 24.9.2015
2	Academic Section	Release of Postal Stamp	Released on 3.12.2016 at 44th Convocation
3	Department of Neurosurgery	9th Asian Epilepsy Congress	3–10 October 2015
4	Dr Nikhil Tandon, Head, Department of Endocrinology and Metabolism	AIIMS Diabetes of Young Day Programme	24 October 2015
5	Dr P.N. Dogra, Head, Department of Urology	AIIMS Golden Jubilee Celebration	21 November 2015
6	Dr Praveen Vashist, Dr R.P. Centre for Ophthalmic Sciences	WHO Sponsored Inter country Workshop for Training of Trainer to Involve Volunteers in Primary Eye Care and Strengthening School Vision Screening Programme	5–6 December 2015
7	Dr Sanjeev Sharma, Head, Department of Cardiac Radiology	Image Guided Therapy-2015 Meeting	1–13 December 2015
8	Dr M.K. Arora, Head, Department of Anaesthesiology	AIIMS Pain and Regional Anaesthesia Conference	8–10 January 2016
9	Dr Subodh Kumar, Addl. Professor, JPNATC	GETS-2016 Conference	25–26 February 2016
10	Dr S.K. Choudhary, Professor, Department of Cardiothoracic and Vascular Surgery	Proximal Aorta: Aortic Dissection; How we manage at AIIMS.	11–13 March 2016
11	Dr Subodh Kumar, Additional Professor, Department of Trauma Surgery, JPNA Trauma Centre	AIIMS Surgical Week (Endosurg 2016)	3–6 March 2016
12	Dr Nand Kumar, Additional Professor, Department of Psychiatry	Recent Technology Advances and Intervention in Psychiatry Disorder	2 April 2016
13	Dr Nikhil Tandon, Head, Department of Endocrinology and Metabolism	World Health Day Programme on the Prevention and Control of Diabetes	7 April 2016
14	Dr B.S. Sharma, Head, Department of Neurosurgery	AIIMS Complex Spine Operative Workshop	7–8 May 2016
15	Dr S.K. Khandelwal, Head, Department of Psychiatry and Chief, NDDTC	Alcohol Use Disorders: Contemporary Issues	30 April 2016
16	Dr S.K. Choudhary, Professor, Department of Cardiothoracic and Vascular Surgery	Bentall Procedure	20–21 August 2016
17	Dr A.K. Gupta, Head, Department of Radiodiagnosis	Paediatric Chest Imaging Course	30–31 July, 2016
18	Dr Deepak Agarwal, Additional Professor, Department of Neurosurgery (Trauma Centre)	6th AIIMS Complex Spine Live Operative Workshop	7–8 May 2016
19	Dr Deepak Agarwal, Additional Professor, Department of Neurosurgery (Trauma Centre)	Life after spinal cord injury and disability	4 June 2016

20	Dr D. Bhowmik, Professor, Department of Nephrology	World Kidney Day	9–11 March 2016
21	Dr A.K. Deorari, Dr Seema Singhal Dr K. Aparna Sharma, Departments of Paediatrics and Obstetrics and Gynaecology	Quality Improvement Workshop cum Symposium	2–3 August 2016
22	Dr O.P. Kharbanda, Chief, Centre for Dental Education and Research	International Symposium at CDER, AIIMS, New Delhi	1 November 2016
23	Dr Maneesh Singhal, Additional Professor, Department of Surgery	AIIMS Breast Course (Theme Oncoplasty)	11–13 August 2016
24	Dr Suman Jain, Professor, Department of Physiology	Hands on training one day workshop on assessment of pain in animal and human	18 October 2016
25	Dr Tony George Jacob, Assistant Professor, Department of Anatomy	Hands on training one day workshop on Neurostereology	18 October 2016
26	Dr Deepak Aggarwal, Additional Professor, Department of Neurosurgery (Trauma Centre)	6th International CME & Symposium on Cost effective use of technology in healthcare (CEUTEH-2016)	8–10 October 2016
27	Dr Harsh Priya, Assistant Professor, Centre for Dental Education and Research	Sugar Symposium: Is Sugar the new Tobacco	11 November 2016
28	Dr Amar Ranjan, Assistant Professor, Department of Laboratory Oncology, Dr BRA IRCH	National Book Authors Workshop	10 September 2016
29	Dr Rajinder Parshad, Professor, Department of Surgical Disciplines	CME on Contemporary Practices in Surgery: Symposium on Thoracic Surgery-2017	21–22 January 2017
30	Dr Keshav Goyal, Assistant Professor, Department of Neuroanaesthesiology and Critical Care, JPNA Trauma Centre	AIIMS Neurological Life Support (ANLS)	January 2017
31	Dr A.B. Dey, Head, Department of Geriatric Medicine	Indian Ageing Congress 2016	9–11 November 2016
32	Dr Ajoy Roychoudhury, Professor, Centre for Dental Education and Research	First AIIMS Total TMJ Replacement workshop with Hands	30–31 January 2017
33	Dr P. Ramesh Menon, Assistant Professor, Department of Cardiothoracic and Vascular Surgery	Paediatric Nursing Care Training Course	16–17 March 2017
34	Dr Sanjeev Lalwani, Professor, Department of Forensic Medicine, JPNA Trauma Centre	Symposium on approach towards victims of sexual violence	25–26 March 2017

CONVOCATION

The 44th Annual Convocation was held on 3rd December 2016 at the Jawaharlal Auditorium, AIIMS, New Delhi. The Honourable Union Minister of Home Affairs, Shri Raj Nath Singh addressed the Convocation. He distributed Institute Medals/Awards to outstanding meritorious students and delivered convocation address. The President, AIIMS and Honourable Minister of Health and Family Welfare, Government of India, Shri J.P. Nadda distributed the degrees.

4. Examination Section

Dean (Examinations)

S. Datta Gupta

Associate Dean (Examinations)

Ashok Kumar Jaryal

Assistant Controller of Examinations

O.P. Sharma

Accounts Officer

D.K. Gupta

EXAMINATIONS

During the period under review, the Examination Section conducted the following Professional and Entrance Examinations:

Postgraduate and Undergraduate Professional Examinations

S. no.	Month and year	Examination	Number of students			
			Appeared	Absent	Passed	Failed
1.	May 2016	DM	26	–	25	1
2.	-do-	MCh	10	–	10	–
3.	-do-	MD	80	–	76	4
4.	-do-	MS	14	–	13	1
5.	-do-	MDS	7	–	7	–
6.	-do-	Master in Hospital Administration	4	–	4	–
7.	-do-	MSc courses	36	–	35	1
8.	-do-	MBiotechnology	10	–	10	–
9.	-do-	MSc (Nursing) Phase-I	22	–	22	–
10.	-do-	MSc (Nursing) Phase-II	23	–	23	–
11.	December 2016	DM	23	–	22	1
12.	-do-	MCh	23	–	23	–
13.	-do-	MD	58	–	57	1
14.	-do-	MS	13	–	13	–
15.	-do-	MDS	6	–	6	–
16.	-do-	Master in Hospital Administration	3	–	3	–
17.	-do-	Fellowship programme	1	–	1	–
18.	-do-	MSc courses	1	–	1	–
19.	-do-	MSc (Nursing) Phase-I	22	–	22	–
20.	-do-	MSc (Nursing) Phase-II	23	–	23	–
21.	May 2016	Second MBBS (Supplementary)	7	–	6	1
22.	-do-	Final MBBS (Supplementary)	3	1	1	1
23.	-do-	BSc Nursing (Post-certificate) Phase-I	24	1	21	2
24.	-do-	BSc Nursing (Post-certificate) Phase-II	21	–	19	2
25.	-do-	BSc (Hons) Nursing Phase-I	81	–	80	1
26.	-do-	BSc (Hons) Nursing Phase-II	70	–	70	–
27.	-do-	BSc (Hons) Nursing Phase-III	73	–	69	2+2 (NE)

S. no.	Month and year	Examination	Number of students			
			Appeared	Absent	Passed	Failed
28.	-do-	BSc (Hons) Nursing Phase-IV	68	–	68	–
29.	July 2016	First MBBS	77	–	72	5
30.	-do-	BSc (Hons) Ophthalmic Techniques Phase-I	18	–	11	7
31.	-do-	BSc (Hons) Ophthalmic Techniques Phase-II	13	3	9	1
32.	-do-	BSc (Hons) Ophthalmic Techniques Phase-III	13	–	10	3
33.	-do-	BSc (Hons) Medical Techniques in Radiography Phase-I	10	–	6	4
34.	-do-	BSc (Hons) Medical Techniques in Radiography Phase-II	7	–	5	2
35.	-do-	BSc (Hons) Medical Techniques in Radiography Phase-III	8	–	6	2
36.	August 2016	First MBBS (Supplementary)	3	–	3	–
37.	September 2016	First MBBS Part-II (Supplementary)	1	–	–	1
38.	November 2016	BSc (Hons) Ophthalmic Techniques Phase-I (Supplementary)	8	–	6	2
39.	-do-	BSc (Hons) Ophthalmic Techniques Phase-II (Supplementary)	7	–	4	3
40.	-do-	BSc (Hons) Ophthalmic Techniques Phase-III (Supplementary)	4	–	4	–
41.	-do-	BSc (Hons) Medical Techniques in Radiography Phase-I (Supplementary)	4	–	3	1
42.	-do-	BSc (Hons) Medical Techniques in Radiography Phase-II (Supplementary)	3	–	3	–
43.	-do-	BSc (Hons) Medical Techniques in Radiography Phase-III (Supplementary)	2	–	1	1
44.	December 2016	Final Postgraduate/Postdoctoral	113	–	111	2
45.	-do-	Final MBBS	80	3	70	7
46.	-do-	Second MBBS	77	1	65	8 2 (NE) 1 (RWH)
47.	-do-	BSc (Post Basic) Nursing Phase-I (Supplementary)	2	–	–	2
48.	-do-	BSc (Post Basic) Nursing Phase-II (Supplementary)	3	–	3	–
49.	-do-	BSc (Hons) Nursing Phase-I (Supplementary)	1	–	–	1
50.	-do-	BSc (Hons) Nursing Phase-II (Supplementary)	15	–	14	1 (left)
51.	-do-	BSc (Hons) Nursing Phase-III (Supplementary)	4	–	4	–
52.	-do-	BSc (Hons) Nursing Phase-IV (Supplementary)	4	–	4	–
53.	January 2017	Final MBBS (Supplementary)	1	–	1	–
Grand Total			1230	9	1145	72+4

Entrance Examinations for Undergraduate and Postgraduate Courses

S. no.	Courses	Date of examination	Number of applicants	Number of those who appeared
1.	MD/MS/MDS (AIIMS), July 2016	8.5.2016	20909	16561
2.	DM/MCh/Fellowship Programme/MD (Hospital Administration), July 2016	2.4.2016	3015	2399
3.	MBBS (AIIMS) August 2016	29.5.2016	245865	189357
4.	Online BSc (Hons) Nursing, 2016	19.6.2016	5159	3266
5.	Online BSc Nursing (Post-Basic), 2016	11.6.2016 (Evening)	247	146
6.	Online BSc (Hons) Paramedical Courses, 2016	11.6.2016 (Morning)	1469	815
7.	Online MSc Courses, 2016	25.6.2016 (Evening)	671	380
8.	Online MSc Nursing, 2016	25.6.2016 (Morning)	1714	1038
9.	Online MBiotechnology Entrance Examination, 2016	9.7.2016	548	266
10.	Senior Residents Recruitment Examination, July 2016	3.7.2016	1376	907
11.	PhD, July 2016	16.7.2016	403	236
12.	Senior Residents Recruitment Examination, January 2017	18.12.2016	1347	908
13.	MD/MS/MDS, January 2017	13.11.2016	44464	38987
14.	DM/MCh/Fellowship Programme/MD (Hospital Administration), January 2017	5.11.2016	4058	3252
15.	AIPGDEE, 2016	13.12.2015	12384	10862
16.	PhD, January 2017	11.2.2017	199	134
	Grand Total		343828	269514

Candidates who passed PhD Viva-Voce examination: 63 (Sixty-three)

Examinations for Recruitment

S. no.	Name of examination	Online CBT* examination	Number of applicants	Number of those who appeared
1.	Technician radiotherapy	24.09.2016	207	107
2.	Upper division clerk (Departmental)	24.09.2016	22	15
3.	Lower division clerk (Departmental)	24.09.2016	77	65
4.	Multipurpose worker	22.10.2016	134	88
5.	Store keeper (Drugs)	22.10.2016	481	166
6.	Assistant dietician	19.11.2016	24	3
7.	Store keeper (General)	19.11.2016	57	22
8.	Technical officer (R&AL)	19.11.2016	27	12
9.	Technician radiology	26.11.2016	294	143
10.	Lower division clerk	26.11.2016	54299	19593
11.	Operation theatre assistant	14.01.2017	1890	907
12.	Workshop assistant	14.01.2017	216	135
13.	Staff nurses (DGHS)	22.01.2017	28008	12327
14.	Staff nurses for AIIMS, Jodhpur and Rishikesh	25.03.2017	59145	50924
	Total		144881	84507

*Computer based test (CBT)

Entrance Examinations Conducted

1. AIIMS PG Entrance Examination for admission to MD/MS/MDS courses was conducted on 8th May 2016 for July 2016 session at 68 centres (Delhi 7, Outstation 61) and 13th November 2016 for January 2017 session at 113 centres (Delhi 17, Outstation 96), respectively. The results were declared on 14th May 2016 and 19th November 2016, respectively.
2. Selections for various Post-Doctoral (super-specialty) courses, viz. DM/MCh/Fellowship/MD (Hospital Administration) for July 2016 and January 2017 sessions were made on the basis of a 2-stage performance evaluation between 2nd and 26th April 2016, and 5th and 26th November 2016, respectively.
3. The Institute also conducted online test for Senior Residents/Senior Demonstrators for July 2016 session on 3rd July 2016 and for January 2017 session on 18th December 2016, respectively.
4. Selections of candidates for registration to PhD programme for July 2016 and January 2017 sessions were made on the basis of 2-stage performance evaluation between 16th and 29th July 2016, and 11th and 23rd February 2017, respectively.
5. The Entrance Examination for admission to MBBS course of AIIMS including 6 new AIIMS for August 2016 session was held in 444 (Local 47, Outstation 397) centres in 173 cities of India on 29th May 2016.
6. BSc (Hons) Nursing Entrance Examination was held in Delhi and 6 new AIIMS (Bhopal, Bhubaneswar, Jodhpur, Patna, Raipur and Rishikesh) on 14th June 2016 in CBT online mode.
7. The Entrance Examination for admission to MSc and MBiotechnology courses for August 2016 session was held in Delhi on 25th June 2016 in online mode.
8. The Entrance Examination for admission to MSc Nursing course was held on 25th June 2016 in Delhi only in CBT online mode. The admission was made by allotment of seats on merit basis through counseling held on 2nd August 2016.
9. BSc Nursing (Post-Basic) Entrance Examination was held in Delhi in CBT online mode on 11th June 2016 followed by personal assessment of candidates on 24th June 2016.
10. The Entrance Examination for admission to Para-Medical courses, viz. BSc (Hons) in Bachelor of Optometry and BSc (Hons) Medical Technology in Radiography for August 2016 session was held in Delhi in CBT online mode on 11th June 2016. The admissions to these two courses were made by allotment of seats on merit basis through counselling held on 30th June 2016 and 11th July 2016, and open counseling held on 19th September 2016.

Participation in Other Events

1. The Examination Section actively participates in the counselling for admission to AIIMS-PG, MBBS, BSc (Hons) Para-Medical, MSc (Nursing) courses and personal assessment for BSc (Nursing) Post-Certificate course.
2. Examination Section is also providing technical expertise to various universities and institutions in India for conducting their entrance examinations.

SIGNIFICANT EVENTS

The Examination Section of AIIMS plays a pivotal role in conducting AIIMS Entrance and Recruitment Examinations. Entrance Examinations are conducted for admission of students in various undergraduate and postgraduate courses of AIIMS, New Delhi as well as for the six AIIMS situated at Bhopal, Bhubaneswar, Jodhpur, Patna, Raipur and Rishikesh as per direction of the Ministry of Health and Family Welfare, Government of India, New Delhi. Sometimes as per direction of the Ministry, in addition, Entrance Examinations, for Recruitment Examinations are being conducted to cater the needs of Ministry and other six AIIMS.

To conduct these Examinations in more transparent, secured and efficient manner, Examination Section has revamped its conduction of Examination System from 2015 onwards. Entire examinations either Entrance or Recruitment are being conducted only through online (CBT) mode. In 2016, Examination Section has conducted the largest number of recruitment examinations in a year. This year, more than 14 recruitment examinations were conducted in addition to 16 entrance examinations.

To understand the quantum of work at the Examination Section, the 2016 MBBS Entrance Examination was conducted through online (CBT) mode only in 173 cities at 444 centres across India and 2,45,865 candidates participated in two shifts. It was the largest online Entrance Examination in medical education in India conducted in a single day.

The Examination Section has shifted from old PC Block to first floor Convergence block, AIIMS. The new office of Examination Section has provision for CCTVs, Mobile Jammers and large TV Screens for display of information related to the Examination and all Professional Examinations being conducted.

Recently, Examination Section has started online registration process for students appearing for the Professional Examinations. Students of AIIMS do not have to submit examination forms, fee (through challan), etc. manually. Even Admit Cards are generated through auto-generated process.

The cash transactions of Examination Section have almost stopped after demonetization. Now, most payments are transferred through RTGS in respective accounts of Faculty/Officer and Staff of AIIMS.

5. General Administration

Deputy Director (Administration)

Shri V. Srinivas

Deputy Secretary

Dr M. Bajpai

The General Administration, including Personnel and Establishment Security, Estate, matters related to Engineering Services Department, Stores, Vigilance and Public Relations activities of the Institute are controlled and supervised by the Deputy Director (Administration). There are various branches looking after the above mentioned areas. Each branch is headed by a Senior Officer with supportive officers and staff members. A brief description of the Officers/Staff looking after various branches is given below.

Chief Administrative Officer

Arun Kumar Singh (1 May 2016 to 17 August 2016)

Dr Maneesh Singhal (from 18 August 2016)

Superintending Engineer

Manjul Rastogi

Executive Engineers

J. Malhotra

V.K. Sharma

V.K. Jaiswal

Vidya Bhushan

Chief Procurement Officer

Anil Bhatia

Deputy Chief Security Officer

R.S. Rawat

Senior Administrative Officers

Arun Kumar Singh (up to 7 November 2016)

K.K. Giridhari (up to 8 September 2016)

Deo Nath Sah (from 6 January 2017)

Manoj Kumar Jha (from 1 September 2016)

Administrative Officer

Chakravarthi E.V.S
Pallav Kumar Chittej
Mamta Kukrati
R.K. Sharma
(up to 10 October 2016)

Satish Kumar Singh
Renu Bhardwaj
Narender Kumar

Lalit Oraon
B.K. Singh
K.P. Singh (up to 7 October 2016)
Razi Javed (up to 27 September 2016)

Senior Stores Officer

Pradeep Gupta

Store Officers

Rakesh Kumar Sharma
Bhawani Ram

Narender Kumar
Arvind Kumar Sharma

Assistant Administrative Officers

S.L. Chamoli
Ealias P.I

Rajendran Pillai
Anita Tete

B.S. Gill
Raj Kumar

Responsibilities of Establishment Section and General Administration include appointments, arranging meetings of the statutory committees, management of estate and property, purchase of equipment, materials and consumables, security arrangements, employees' welfare, etc.

The total sanctioned staff of the Institute is 11,767 including staff of all Centres/Main Hospital/DO. The number of group-wise sanctioned strength and staff in-position is mentioned below.

S. no.	Category/Group	Sanctioned Strength	In-position
1.	Faculty	883	697
2.	A	617	428
3.	B	5947	5022
4.	C	4810	4143
	Total	12257	10290

SC/ST Cell

Liaison Officer

Dr Rajpal, Professor of Ophthalmology, Dr R. P. Centre

Administrative Officer

Anita Tete

During the year 2016-17 various representations from SC/ST category employees were received in the SC/ST Cell, AIIMS. There were:

Total representations received:	4
Total cases resolved/disposed off:	1
Total cases under consideration:	3

Brief summary of the cases

1. Representation of Shri Banwari Lal, Librarian Grade-I (Retd.), H. No. 10426, Gali No. 2, Bagichi Allouddin, Pahar Ganj, New Delhi regarding harassment and biased practice against SC candidates by AIIMS authority.
2. Received anonymous grievance which relates to issues in main OT (Nursing Duty Roster). The matter has been disposed off.
3. Representation of Shri Ashok Kumar, Asstt (NS), NDDTC, AIIMS, New Delhi regarding atrocity in grant of benefit of departmental examination by Recruitment Cell, AIIMS.
4. Representation of Shrimati Aruna w/o Shri Arvind Kumar, Asstt (NS), 2nd Room, Sector-2, Rajinder Nagar, Sahibabad, Ghaziabad, UP regarding atrocity in grant of benefit of departmental examination by Recruitment Cell, AIIMS.

6. Main Hospital

Medical Superintendent	
D.K. Sharma	
Department of Hospital Administration	
Professor and Head	
Sidhartha Satpathy	
Professors	
I.B. Singh	Sanjay Kumar Arya
Associate Professors	
Nirupum Madaan	Amit Latwal
Anoop Daga	Mahesh R.
Assistant Professors	
Angel Rajan Singh	Parmeshwer Kumar
Vijaydeep Sidharth	Kanika Jain
Abdul Hakim	

Bed category	Main hospital	Cardiothoracic and Neurosciences Centre (CNC)	Centre for dental education and research
General	827	277	17
Intensive Care	92	73	0
Observation	69	09	0
Private	165	63	0
Total	1153	422	17

Parameters	Main Hospital		CNC		Inference
	2016–17	2015–16	2016–17	2015–16	
Average length of stay (days)	9.8	7.7	9.6	9.0	Effective utilization of beds for regular admissions
Average bed occupancy rate (%)	86.9	88.4	91.5	86.1	Fair occupancy
Net death rate (%)	1.7	1.8	3.1	3.2	Low mortality rate despite a large number of critically ill patients admitted
Combined crude infection rate (%)	6.9	5.7	—	—	

6.1. Medical Records Department

Chief Medical Record Officer (Acting) and Sub-Registrar, Births and Deaths

Patty S. Lyngdoh

EDUCATION

- 35 students pursuing Medical Record Officer and Medical Record Technician Course from Safdarjung Hospital, New Delhi, visited Medical Record Section (Main Hospital), Central Admission/Enquiry Office and Rajkumari Amrit Kaur (RAK) Outpatient department and a brief lecture on Medical Record Management, was delivered by Mrs Patty S. Lyngdoh, Chief Medical Record Officer and Shri Ashok Kumar, Junior Medical Record Officer on 25 April 2016, at AIIMS.
- 25 BSc (PB) Nursing 1st year students of College of Nursing, AIIMS visited Medical Record Section, Main Hospital and a brief lecture on Medical Record Management was delivered by Chief Medical Record Officer/ Junior Medical Record Officer on 5 August 2016, at AIIMS.
- 30 students pursuing Medical Record Officer and Medical Record Technician Training Course from Safdarjung Hospital, New Delhi visited Medical Record Section (Main Hospital), Central Admission/Enquiry Office and RAK Outpatient department and a brief lecture on Medical Record Management was delivered by Mrs Patty S. Lyngdoh, Chief Medical Record Officer and Shri Ashok Kumar, Junior Medical Record Officer on 25 October 2016, at AIIMS.
- 22 MSc Nursing Students from the College of Nursing, AIIMS visited Medical Record Section, Main Hospital and a brief lecture on Medical Records Management by Shri Ashok Kumar, Junior Medical Record Officer on 30 March 2017.

TRAINING

- A training programme was conducted by Nurse Informatics Specialist (NIS) on Medical Records Modules of National Informatics Centre (NIC) for Medical Record, Main Hospital and Central Admission Office staff on 27 June 2016.
- A training program was organised by Computer Facility with C-DAC, Pune on SNOMED CT as a part of integration of SNOMED CT code with e-Hospital application in AIIMS for all staff of Medical Records Department on 24 August 2016.
- Shri Ashok Kumar, Junior Medical Record Officer, Mrs Anju Dixit, Medical Record Technician and Shri Satendra Singh, Lower Division Clerk attended a meeting organised by the MOH, New Delhi Municipal Council with regard to providing Aadhaar number to newly born children before discharge from hospital on 22 November 2016.
- Dr Nishant, Resident, Hospital Administration and Mr Ashok Kumar, Junior Medical Record Officer attended a workshop on Prevention and Control of Vector Borne Disease organised by South Delhi Municipal Corporation on 9 March 2017.

COURT ATTENDANCE

- 370 summons/notices were received in the Medical Record Section (Main Hospital) from various courts of Delhi and outside Delhi. The concerned doctors/consultants (as per case) and staff from the Medical Record Department were deputed to attend the court to depose/settle the case.

Aid in medical education and research

- Approximately 6325 medical case records were retrieved and issued to Residents authorised by concerned consultants for research, education and other official purposes.

Computerization and digitization of medical records

- Central Admission Office and Hospital Enquiry Section of Main Hospital including Medical Records Section, Ward areas of Main Hospital and CT and NS Centre have been computerized and inter-connected with the software of NIC. All admission slips, and death and birth events occurring in the Main Hospital are generated using this software.
- Digitisation of inpatient medical records of Main Hospital was started in 2014 for easy retrieval of records. More than 71 lakh pages of patient case records have been scanned for future references.

Inpatient services

- The yearly statistical health bulletin of Main Hospital, Centre for Dental Education and Research (CDER), and Cardiothoracic (CT) and Neurosciences (NS) Centres, is provided in Table I.
- The hospital has maintained its tradition of services and quality of patient care despite increasing number of patients from all over India and abroad. A total of 1,32,880 patients were admitted in various clinical units of the Main Hospital, CT and NS Centres and CDER (details are provided in Tables II–III and Figures 1–2).
- A total of 1,17,577 surgical procedures (major and minor) were done in various surgical specialties of the Main Hospital, CT and NS Centres and CDER (Table IV).
- Medical records of indoor patients are classified and categorized for easy retrieval for education, research, thesis, presentations, insurance purposes, court cases, etc. These records are stored in compactors according to the CR number. All inpatient records of Main Hospital, CT and NS centres, and CDER are maintained separately by the medical record section of the Main Hospital.
- During the year the following special clinics have been started to facilitate patient care:

Sr. no.	Name of clinic	Department/Centre
1.	Fragility Fracture Clinic and Fracture Liaison Services	Orthopaedics
2.	Bone and Soft Tissue Sarcoma Clinic	Orthopaedics
3.	Oral Ulcer Clinic	CDER

Central admission office and hospital enquiry

- This functions round the clock for 365 days without break.
- All admissions to inpatient areas of Main Hospital, CT and NS centres and CDER are done through this office. It performs important functions such as patient registration for initiation of admission slip (Face Sheet) and issuing of attendant passes, etc.
- The Admission Office also gives information to several ministries as well as to the higher authorities of AIIMS about the hospitalisation of VIPs/VVIPs.
- It also functions as a general enquiry providing prompt and accurate information regarding the patients and AIIMS. The staff works in shifts and includes Receptionists, Junior Medical Record Officers, Medical Record Technicians, etc.

Outpatient departments and specialty clinics

- A total of 20,04,377 patients attended various OPDs, specialty clinics and emergency department of the Main Hospital (Table V).

Medical records: Revamping and cleanliness

- The Medical Record Section has undergone major spatial reorientation in the past year with shifting of records from 1st floor of New Private Ward to 1st floor of Porta Cabin, Near D1 Ward. The basement has been cleaned and partially vacated. These services have been appreciated under Ministry of Health and Family Welfare's flagship *Kayakalpp* scheme. All records have been catalogued and either stored off-site or on-site in compactors.

Other activities

S. no.	Name of activity	Number
1.	Amendments made in inpatients records	615
2.	Amendments made in birth records	586
3.	Amendments made in death records	425
4.	Admission and other charges exempted for indigent patients and patients admitted under JSSK Scheme —in Main Hospital —in CN Centre	20,002 993

The statistical data has been prepared/compiled by Mr Rajbir Singh, Medical Record Technician.

Table I. Yearly statistical health bulletin

Sr. no.	Item	Main Hospital and CDER		CT and NS Centres	
		2016-17	2015-16	2016-17	2015-16
1.	Patients admitted	111608	102037	21272	20654
	a. Adults and children	108949	99478	—	—
	—Regular	34013	—	13742	—
	—Short	74936	—	7530	—
	b. Newborn infants	2659	2559	—	—
	—Regular	2657	—	—	—
	—Short	2	—	—	—
2.	Patients discharged (including LAMA, absconded, discharge on request and deaths)	107285	97423	20549	19235
	a. Adults and children	104686	94948	—	—
	—Regular	32954	—	13362	—
	—Short	71732	—	7187	—
	b. Newborn infants	2599	2475	—	—
	—Regular	2597	—	—	—
	—Short	02	—	—	—
3.	Total days of care	419302	331525	135373	117636
	a. Adults and children	400787	314974	—	—
	—Regular	329055	—	128186	—
	—Short	71732	—	7187	—
	b. Newborn infants	18515	16551	—	—
	—Regular	18513	—	—	—
	—Short	02	—	—	—
4.	Average length of stay of regular patients	9.8	7.7	9.6	9.0
	a. Adults and children	10.0	7.8	—	—
	b. Newborn infants	7.1	6.7	—	—
5.	Total patient care days (as per daily census)	349335	349833	137939	131667
	a. Adults and children	346408	347040	—	—
	b. Newborn infants	2927	2793	—	—
6.	Daily average number of patients (as per daily census)	957	958	378	361
	a. Adults and children	949	951	—	—
	b. Newborn infants	08	07	—	—
7.	Average bed occupancy (%)	86.9	88.4	91.5	86.1
	a. Adults and children	86.2	87.7	—	—
	b. Newborn infants	0.7	0.7	—	—

8.	Births in hospital	2659	2559	–	–
	a. Male	1386	1312	–	–
	b. Female	1269	1245	–	–
	c. Intersex	04	02	–	–
9.	Total inpatient deaths (including new-borns)	3035	2971	944	877
	a. Deaths under 48 hours	1181	1193	311	263
	b. Deaths over 48 hours	1854	1778	633	614
	c. Gross death rate	2.8%	3.0%	4.6%	4.6%
	d. Net death rate	1.7%	1.8%	3.1%	3.2%
10.	Total attendance in casualty	162523	180270	–	–
	a. Deaths	1925	2206	–	–
	b. Brought dead	1286	1219	–	–
11.	OPD attendance including specialty clinics (Main hospital)	1841854	1652886		–
	a. New cases	737103	660609	–	–
	b. Old cases	1104751	992277	–	–

Table II. Department wise admissions (Main hospital, CN Centre and CDER)

Department	Admissions		Discharges (including LAMA, Absconded, OR, Deaths)		Total days of care		Average length of stay
	Regular	Short	Regular	Short	Regular	Short	Regular
Anaesthesiology (Pain Clinic)	0	527	0	490	0	490	0.0
Centre for Dental Education and Research (CDER)	645	615	605	608	4600	608	7.6
Dermatology and Venereology	745	2811	735	2761	9353	2761	12.7
Endocrinology and Metabolism	435	117	457	112	8293	112	18.1
Gastroenterology and Human Nutrition	1835	2361	1806	2276	19043	2276	10.5
Gastrointestinal Surgery and Liver Transplantation	738	389	704	370	12207	370	17.3
Geriatric Medicine	721	492	735	491	8639	491	11.8
Haematology	841	10656	849	10414	18721	10414	22.1
<i>Medicine</i>							
Unit I	1224	535	1198	476	13341	476	11.1
Unit II	1072	319	1043	311	9920	311	9.5
Unit III	1076	686	1073	643	10275	643	9.6
Nephrology	975	8936	929	8706	18734	8706	20.2
Newborn	2657	02	2597	02	18513	02	7.1
Neonatal ICU	174	28	164	20	1469	20	9.0
Nuclear Medicine	419	245	385	262	757	262	2.0
<i>Obstetrics and Gynaecology</i>							
Unit I	2455	2377	2364	2305	16317	2305	6.9

Unit II	2298	2407	2156	2368	14480	2368	6.7
Unit III	2119	2060	2017	1998	15400	1998	7.6
Oncology (Main)	455	0	468	0	2981	0	6.4
<i>Orthopaedics</i>							
Unit I	1285	2223	1238	1998	10766	1998	8.7
Unit II	1033	1861	1028	1693	10400	1693	10.1
<i>Otorhinolaryngology and Head & Neck Surgery</i>							
Unit I	595	1474	561	1348	4048	1348	7.2
Unit II	482	1093	460	1010	4269	1010	9.3
Unit III	502	1227	545	1076	4537	1076	8.3
<i>Paediatrics</i>							
Unit I	1048	3329	901	3183	7032	3183	7.8
Unit II	827	1603	796	1568	8573	1568	10.8
Unit III	933	10139	936	9815	9098	9815	9.7
Paediatric Surgery	1595	1774	1597	1642	15948	1642	10.0
Physical Medicine and Rehabilitation	34	0	35	0	1583	0	45.2
Psychiatry	285	2	249	3	8799	3	35.3
Pulmonary Medicine and Sleep Disorders	825	4397	804	4188	9942	4188	12.4
Plastic and Reconstructive Surgery	78	5	74	5	362	5	4.9
Radiotherapy	6	0	5	0	5	0	1.0
Rheumatology	12	1657	13	1646	165	1646	12.7
<i>Surgical Disciplines</i>							
Unit I	1116	891	1083	777	9389	777	8.7
Unit II	1169	717	1137	598	8692	598	7.6
Unit III	810	493	818	448	8616	448	10.5
Unit IV	1510	1049	1378	889	9864	889	7.2
Urology	1641	5441	1608	5234	12437	5234	7.7
Total (Main and CDER)	6246	8591	6024	7946	48998	7946	9.8

Cardiology	4582	4545	4520	4380	29709	4380	6.6
Cardiothoracic and vascular surgery	3479	5	3415	0	35970	0	10.5
<i>Neurology</i>							
Unit I	926	616	926	592	9442	592	10.2
Unit II	851	547	776	542	8046	542	10.4
Unit III	817	597	775	584	8042	584	10.4
<i>Neurosurgery</i>							
Unit I	1479	694	1408	660	18728	660	13.3
Unit II	1597	522	1536	427	18215	427	11.9
Neuroradiology	11	4	6	2	34	2	5.7
Total (CNC)	13742	7530	13362	7187	128186	7187	9.6

Fig 1. Gender wise inpatients in Main Hospital, C NCs and CDER.

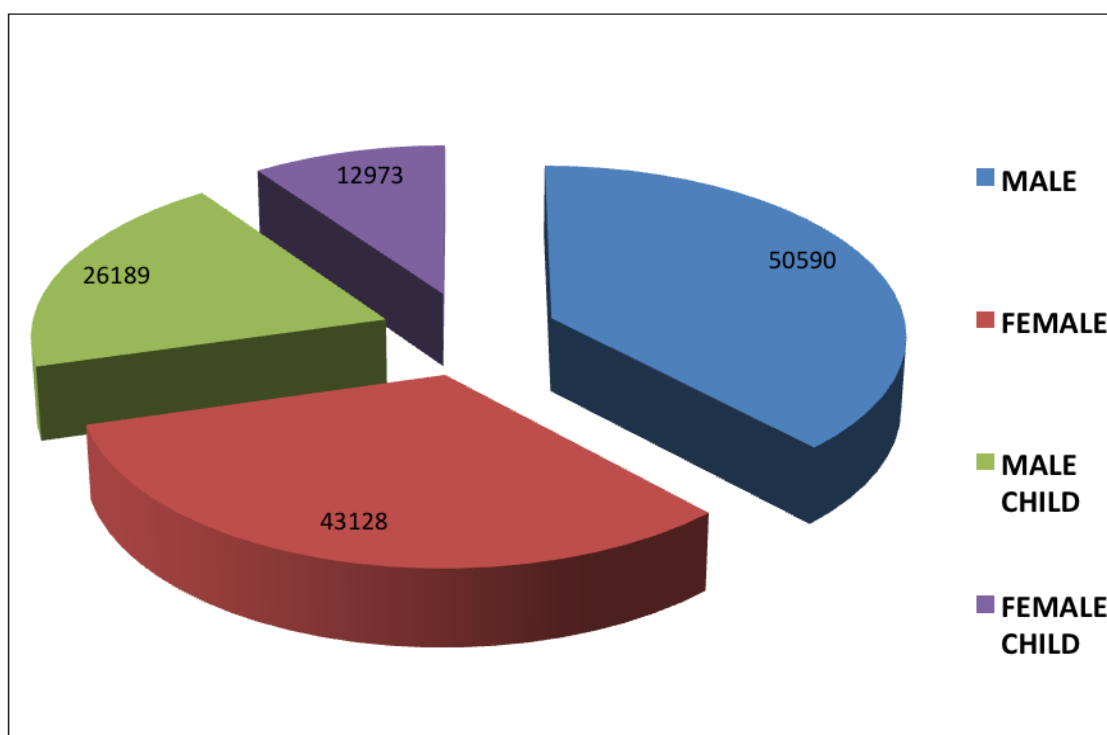


Table III. Department wise deaths in Main Hospital, CNCs and CDER.

Department	Total	Under 48 hours	Over 48 hours	Gross rate (%)	Net rate (%)
Dermatology and Venereology	14	3	11	1.9	1.5
Endocrinology and Metabolism	7	1	6	1.5	1.3
Gastroenterology and Human Nutrition	500	233	267	27.7	17.0
Gastrointestinal Surgery and Liver Transplantation	48	7	41	6.8	5.9
Geriatric Medicine	119	32	87	16.2	12.4
Haematology	305	108	197	35.9	26.6
<i>Medicine</i>					
Unit I	367	165	202	30.6	19.6
Unit II	299	140	159	22.1	13.1
Unit III	311	128	183	29.0	19.4
Nephrology	160	54	106	17.2	12.1
Newborn	23	11	12	0.9	0.5
Neonatal (NICU)	35	11	24	22.4	16.6
Nuclear Medicine	1	1	0	0.3	0.0
<i>Obstetrics and Gynaecology</i>					
Unit I	6	3	3	0.3	0.1
Unit II	12	4	8	0.6	0.4
Unit III	6	1	5	0.3	0.2
Oncology (Main)	177	100	77	37.8	20.9

<i>Orthopaedics</i>					
Unit I	2	1	1	0.2	0.1
Unit II	3	0	3	0.3	0.3
<i>Otorhinolaryngology and Head & Neck Surgery</i>					
Unit I	4	2	2	0.7	0.4
Unit II	5	2	3	1.1	0.7
Unit III	8	4	4	0.5	0.7
<i>Paediatrics</i>					
Unit I	57	16	41	6.3	4.6
Unit II	80	22	58	10.1	7.5
Unit III	95	28	67	10.1	7.4
Paediatric Surgery	58	19	39	3.6	2.5
Pulmonary Medicine and Sleep Disorders	181	41	140	22.5	18.3
Radiotherapy	1	1	0	20.1	0.0
<i>Surgical Disciplines</i>					
Unit I	42	9	33	3.9	3.1
Unit II	43	13	30	3.8	2.7
Unit III	19	6	13	2.3	1.6
Unit IV	28	7	21	2.0	1.5
Urology	19	8	11	1.2	0.7
Total (Main)	3035	1181	1854	2.8	1.7
Cardiology	312	171	141	3.5	1.6
Cardiothoracic and Vascular Surgery	235	32	203	6.9	6.0
<i>Neurology</i>					
Unit I	76	24	52	5.0	3.5
Unit II	101	30	71	7.7	5.5
Unit III	59	17	42	4.3	3.1
<i>Neurosurgery</i>					
Unit I	78	13	65	3.8	3.2
Unit II	83	24	59	4.2	3.0
Total (CNC)	944	311	633	4.6	3.1

*There were no deaths in the following departments/centres: (i) Anaesthesiology (Pain Clinic); (ii) CDER; (iii) Physical Medicine and Rehabilitation; (iv) Psychiatry; (v) Plastic and Reconstructive Surgery; (vi) Rheumatology; and (vii) Neuroradiology

Fig 2. Geographic distribution of inpatients in Main Hospital, CNCs and CDER.

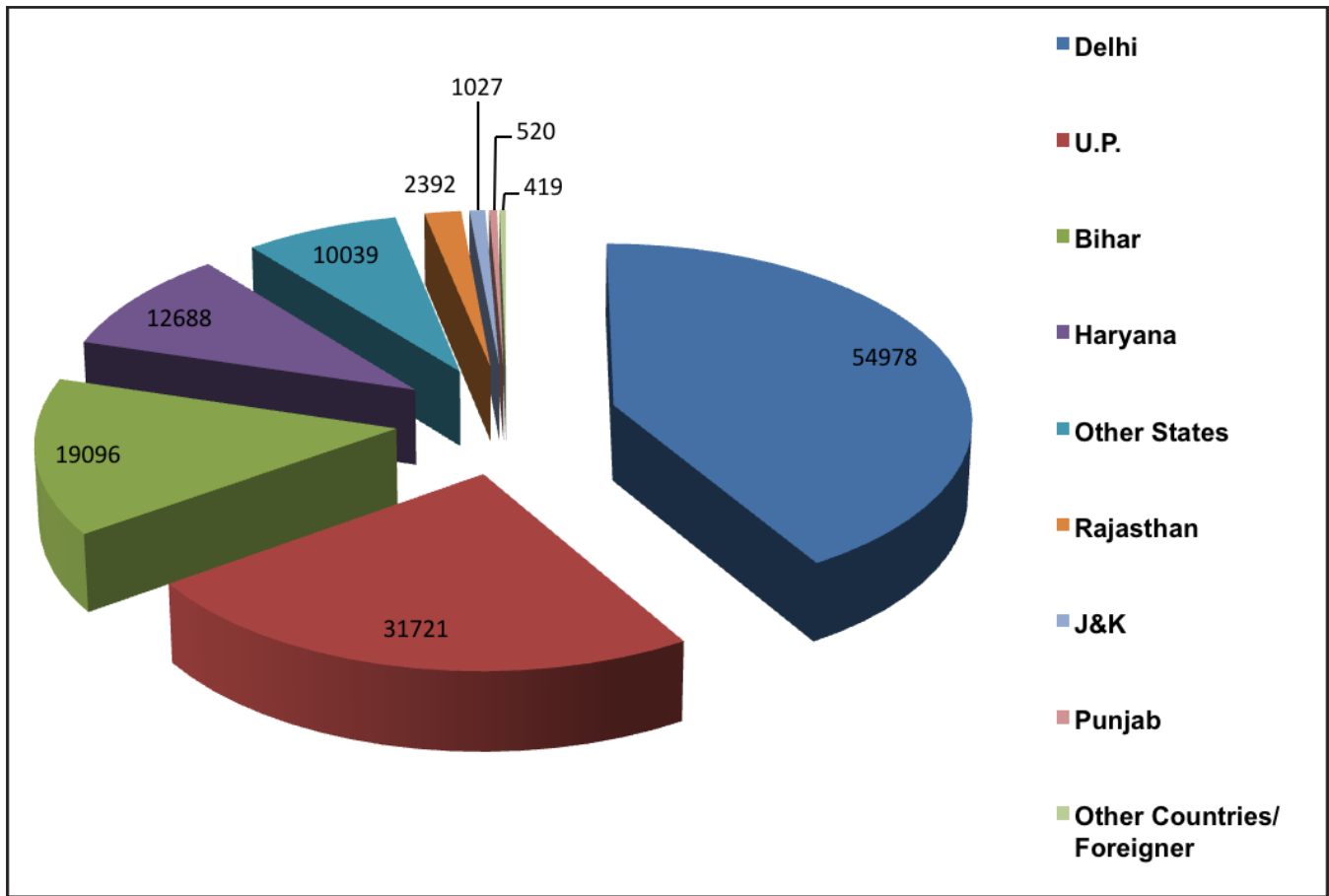


Table IV. Surgical procedures done in Main Hospital, CNCs and CDER.

Department	Major	Minor		Total
		Inpatients	Outpatients	
Surgical Disciplines				
Unit I	828	517	3678	5023
Unit II	1109	254	2909	4272
Unit III	744	258	3101	4103
Unit IV	1169	603	3535	5307
Gastrointestinal Surgery and Liver Transplantation	603	0	0	603
Urology	1629	465	12696	14790
Obstetrics and Gynaecology				
Obstetrics	1353	682	0	2035
In vitro fertilization	0	1324	0	1324
Gynaecology Unit I	907	491	0	1398
Gynaecology Unit II	1038	611	0	1649
Gynaecology Unit III	660	414	0	1074
Fetal Medicine	0	918	0	918
Otorhinolaryngology and Head & Neck Surgery				
Unit I	1051	739	6938	8728
Unit II	818	521	6368	7707

Unit III	878	617	6232	7727
<i>Orthopaedics</i>				
Unit I	1756	1081	0	2837
Unit II	1620	1049	0	2669
Paediatric Surgery	2204	3	0	2207
Casualty	0	221	0	221
Plastic and Reconstructive Surgery	177	22	0	199
Anaesthesiology (Pain Clinic)	59	440	0	499
Haematology	9	0	0	9
Physical Medicine and Rehabilitation	0	0	3966	3966
Dermatology	0	0	8700	8700
Total (Main)	18612	11230	58123	87965

Cardiothoracic and vascular surgery	4060	0	0	4060
<i>Neurosurgery</i>				
Unit I	1582	107	0	1689
Unit II	1595	99	0	1694
Total (CNCs)	7237	206	0	7443

Dental Surgery (CDER)	558	1312	20299	22169
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Table V. Department-wise attendance in outpatients in Main Hospital, CNCs and CDER.

Medical specialties		New cases	Old cases	Total
Medicine		72575	92931	165506
Rheumatology	<i>General</i>	4166	13504	17670
	<i>Specialty Clinics</i>			
	Rheumatology	39	4531	4570
Geriatric Medicine		16156	29078	45234
Pulmonary Medicine and Sleep Disorders	<i>General</i>	11749	18413	30162
	<i>Specialty Clinics</i>			
	Sleep Disorder	347	453	800
	Lung Cancer	412	2076	2488
	ILD – PAH	298	1000	1298
	Combined Pulmonary Surgery	229	358	587
Nuclear Medicine		2020	7917	9937
Endocrinology		14127	32696	46823
Nephrology	<i>General</i>	10781	36067	46848
	<i>Specialty Clinics</i>			
	Transplant	110	10303	10413
	Renal Transplant Counselling	471	1607	2078
Haematology		7236	10986	18222

Gastroenterology		27441	38046	65487
Paediatrics	<i>General</i>	38690	61974	100664
	<i>Specialty Clinics</i>			
	Well Baby	552	150	702
	Follow up Tuberculosis	273	1722	1995
	Renal Clinic	320	1912	2232
	Paediatric Neurology	1064	4427	5491
	Paediatric Chest Clinic	392	2113	2505
	High Risk Neonatal	309	1827	2136
	Genetic and Birth Defects Clinic	3366	1046	4412
	Oncology Clinic	80	2220	2300
	Child Development Clinic	1047	1716	2763
	Endocrinology Clinic	273	1358	1631
	Neurocysticercosis Clinic	379	1903	2282
	P.C.S.C.	163	986	1149
	Rheumatology Clinic	290	1714	2004
	Myopathy Clinic	411	1444	1855
	Paediatric Gastro Clinic	550	1878	2428
Dermatology	<i>General</i>	35562	48902	84464
	<i>Specialty Clinics</i>			
	Sexually Transmitted Disease (Dermatology Surgery)	1388	2590	3978
	Allergy Clinic	795	1967	2762
	Leprosy	304	2393	2697
	Psoriasis	356	1536	1892
	Dermo-Surgery	926	644	1570
	Vitiligo	348	1525	1873
Psychiatry	<i>General</i>	20302	59714	80016
	<i>Specialty Clinic</i>			
	Child Guidance	812	981	1793

Surgical specialties		New cases	Old cases	Total
Surgical Disciplines		54795	43101	97896
Plastic Surgery		1714	1579	3293
Urology		18601	40560	59161
Gastrointestinal Surgery and Liver Transplantation		3062	6681	9743
Paediatric Surgery	<i>General</i>	8365	15165	23530
	<i>Specialty Clinics</i>			
	Hydrocephalus	9	93	102
	Paediatric Urology	308	3032	3340
	P.S.T.C.	98	1078	1176
Anaesthesiology	Pain Clinic	755	2058	2813
	Pre-Anesthesia Clinic	6325	535	6860

Orthopaedics	<i>General</i>	57026	89343	146369
	<i>Specialty Clinics</i>			
	Physiotherapy	25518	33384	58902
	Occupational Therapy	1722	5891	7613
	Hydrotherapy	1101	7048	8149
	Follow up	1525	14131	15656
	Tuberculosis	53	512	565
	Scoliosis	670	1453	2123
	Hand Clinic	1280	1567	2847
	CTEV	199	2399	2598
	Sports Clinics	123	74	197
	Fragility Fracture Clinic and Liaison Services	106	122	228
	Bone and Soft Tissue Sarcoma Clinic	51	59	110
Otorhino-laryngology (ENT) including RUAS	<i>General</i>	64692	70839	135531
	<i>Specialty Clinics</i>			
	Audiology	247	109	356
	Speech	4028	3633	7661
	Hearing	231	295	526
	Voice	493	123	616
	Vertigo	332	313	645
	Rhinology	405	186	591
Obstetrics and Gynaecology	<i>General</i>	42108	86981	129089
	<i>Specialty Clinics</i>			
	IVF	1135	3884	5019
	Family Welfare	4993	4507	9500
	Antenatal	1017	2986	4003
	Endo-Gynaecology	31	67	98
	High Risk Pregnancy	352	12680	13032
Radiotherapy		500	1224	1724
Physical Medicine and Rehabilitation	<i>General</i>	16902	22710	39612
	<i>Specialty Clinics</i>			
	Prosthetics and Orthotics	3009	7623	10632
	Disability Evaluation Clinic	00	136	136
	OPD (PT Section)	00	14540	14540
	OPD (OT Section)	00	8833	8833
	OPD (MSW)	1466	1226	2692
Others	Emergency/Casualty	118528	43995	162523
	E.H.S.	125074	83383	208457
	Nutrition	9573	00	9573
Grand Total		855631	1148746	2004377

6.2. Dietetics

Chief Dietician

Dr (Mrs) Alka Mohan Chutani

Senior Dietician

Dr (Mrs) Parmeet Kaur

Dietician

Ms Swapana Chaturvedi

Assistant Dietician

Ms Gurdeep Kaur

Ms Vasundhara Singh

Ms Anjali Bhola

Ms Monita Gahlot

Ms Rekha Pal

- The Department of Dietetics takes care of the therapeutic dietary needs of approximately 2000 indoor patients every day. There are various kinds of diet given to patients based on nutritional screening and assessment done by the Dieticians in their respective wards. These are as follows:

No. of indoor patients served different diets (main hospital and centres)

S. no.	Type of diet	Number
1.	Normal Diets	374026
2.	Private Ward Diets	89053
3.	Semisolid Diets	52156
4.	Therapeutic Diets	160003
5.	Enteral Feeds	71390
	Total	746628

- In addition, Nutrition Counselling OPD and Clinics are also run by the department and associated centres where counselling of each patient is done after detailed nutritional assessment. Similarly indoor patients are also given individualised diet charts and counselling. The approximate number of Indoor and OPD patients counselled are as follows:

Outdoor and indoor nutrition counselling (OPD)

(excluding Endocrinology and Paediatric wards and centres)

Sex	OPD patients	Indoor	Total
Male	5425	2060	7485
Female	4148	2607	6755
Total	9573	4667	14240

6.3. Hospital Billing Section

The following are the donations received and payments made to patients during 2016-2017:

Donations received (bank interest + donations + poor fund boxes):	Rs. 20,33,970
Payments made [173 + 89 = 262 patients]:	Rs. 3,68,500

(The amount disbursed is from donations received from donors during the year as well as from the previous balance in the 'AIIMS Poor Fund Account').

6.4. Nursing Services

Chief Nursing Officer (Acting)

Ms Sarita Mehta
(up to June 2016) (July 2016–February 2017)

Ms Nishi Giri

Ms Kamlesh Chandel
(from March 2017)

Nursing service is an integral part of AIIMS, which aims at high quality nursing care to the patients and community. The professional nurses work in an environment that encourages professionalism and expertise in providing comprehensive patient care with the members of allied disciplines in the hospital.

Staff strength

The main stratum of workforce in AIIMS is constituted by the well trained professional nurses from different departments. Staffing in nursing service is based on SIU (Staff Inspection Unit) norms in AIIMS.

Staff strength in hospital & centres	
Chief Nursing Officer	1 (Acting)
Nursing Superintendent	4
Deputy Nursing Superintendent	36
Assistant Nursing Superintendent	170
Senior Nursing Officer	896
Nursing Officer	3159
Total	4265

Continuing nursing education

Nursing staff education is carried out throughout the year by in-service and continuous education programmes to update the clinical knowledge of practicing nurses thereby aiming to improve standard of nursing care at AIIMS.

Nursing in-service education programme

A well structured in-service education program has been initiated since January 2011. Initially it started with twice a week class of one hour each, which was later increased to thrice in a week. Two classes in a week are conducted for bedside nurses (senior nursing officers and nursing officers), whereas one class in a week is for senior nurses (senior nursing officers HR and above).

Facilitator: Chief Nursing Officer

Mentor: Ms Suman R Kashyap, DNS (up to November 2016)
Ms Hanumati Devi (from December 2016)

Educator: Ms Rebecca J. Herald, SNO (HR)
Ms Jessy Shaji Paul, SNO (up to December 2016)
Ms Poonam Anand, SNO
Ms J. Subbulakshmi NO

Since January 2014, under the '**National Programme for Health Care of the Elderly (NPHCE)**', monthly workshops for nurses from main hospital are being conducted with support from Department of Geriatrics. Nursing educators are also facilitating sessions in the workshops.

Clinical teaching programme

Clinical teaching was initiated in A, B, C and D wings of the main hospital with the objective of upgrading standard of nursing care and solving practical issues in the area itself. This initiative started from 1 January 2015 with active participation of bedside nurses and supervisory nursing personnel of the clinical areas.

- 182 sessions were conducted till 31 March 2017 in AB wing under supervision of Ms Rebecca Herald
- 136 sessions were conducted till 31 March 2017 in C wing under supervision of Ms Jessy Shaji Paul (till December 2016) and J. Subbulakshmi
- 131 sessions were conducted till 31 March 2017 in D wing under supervision of Ms Poonam Anand
- Since November 2016 clinical sessions were started in Old and New Private Ward Block, Casualty OPD, New Emergency and OPD. A total of 106 sessions have been conducted in these areas so far.

Orientation programme

A well planned orientation programme was conducted for BSc PC batch of 2016–18.

Induction programme

A well structured induction programme was carried out with CMET for newly joined nurses. All newly recruited nurses attend orientation and briefing programme.

- Since 2014 an induction programme, coordinated by Dr K.L. Wig Centre for Medical Education and Training (CMET) and facilitated by in-service educators from Main Hospital is an ongoing activity.
- The topics include pride of AIIMS, Ward and Record Management, Infection Control Practices and Bio-Medical Waste Management, RTI Rules, Consumer Protection Act, Conduct Rules and Leave policies, Communication Skills, Team Building, and Stress Management.

Patient awareness programmes

Health talk, Role play and Poster competitions are frequently organised in different clinical areas to update nursing knowledge and public awareness.

- Breast feeding awareness programme: D3 and MCU
- CKD awareness programme: AB4
- Hygiene awareness programme: D5
- Vaccination awareness programme: Paediatric OPD







Quality improvement initiative

A Quality Improvement Initiative has been started since 2015 under leadership of Professor A.K. Deorari. A number of QI projects have been taken up in AIIMS. Few of the projects have been presented at National as well as International Forums. Half day Workshops on QI, exclusively for nurses have been organised. Till date, 250 nurses have been sensitised regarding QI.



NIE weekly classes

A total of 1839 nurses from different departments in main hospital attended the in-service education weekly classes. The following lectures were delivered in 2016–17.

1. Classes for Senior Nursing Officers/ANS/DNS/NS/CNO

- Hypertension
- Staff development
- Care of patient on ventilator
- Legal and ethical issues
- Pre and postoperative nursing care
- Nursing Audit
- Communication and IPR
- Bio-medical Waste Rules 2016
- Kayakalp

2. Classes for Nursing Officers

- Management of patient with hypertension
- Care of patient on ventilator
- Legal and ethical issues
- Pre and postoperative nursing care
- Influenza
- Shock
- Bio-medical Waste Rules 2016
- Kayakalp

A total of 127 lectures were taken on the above topics in different batches. The number of nursing personnel who attended the in-service education classes are as follows:

CNO: 1	NS: 2	DNS: 36
ANS: 128	Senior Nursing Officer: 556	Nursing Officer: 1111

Higher studies in nursing

Nursing services at AIIMS focus on improving the nursing care by facilitating abundant opportunities for higher studies. After 5 years of regular services, nurses are eligible for pursuing higher studies with full pay. Five nurses were pursuing BSc (Post Basic) Nursing Programme and three nurses were pursuing MSc Nursing Programme during this year.

Nursing attendance in conferences and workshops

Nurses from different departments in main hospital attended several National and International Conferences / Workshops. These included:

- 28 March–1 April 2016: ‘Transforming Nursing Education Practice’ at RAK College of Nursing, New Delhi. Total participant: 01
- 28 March–2 April 2016: ‘Management Development Programme for Nursing Administrators’ at AHA House, Noida. Total participants: 02
- 28–30 March 2016: ‘Facility based Newborn Nursing with Quality Improvement’ at Conference Hall, AIIMS, New Delhi. Total participants: 06
- 22 April 2016: CNE on Computerization at CMET, AIIMS. Total participants: 11
- 22 April 2016: ‘Training of Nurses on Deceased Organ and Tissue Donation’ at Seminar Room, ORBO, AIIMS. Total participants: 06
- 27 April 2016: Workshop on ‘Research Ethics and Publication (REAP)’, CMET, AIIMS, New Delhi. Total participants: 08
- 27–28 April 2016: ‘AIIMS Ultrasound Trauma Life Support Course’ for nurses at Seminar Room Trauma Centre, AIIMS, New Delhi. Total participants: 15
- 1 May 2016: BLS Course for Pediatrics at CMET, AIIMS. Total participants: 09
- 24 May 2016: ‘Training of Nurses on Deceased Organ and Tissue Donation’ at Seminar Room, ORBO, AIIMS. Total participants: 07
- 25 May 2016: Workshop on ‘Personality Development and Communication Skills’ in Seminar Room, JPNATC, AIIMS, New Delhi. Total participants: 04
- 25 May 2016: Managerial and Communication skills for Nursing Administrators in MS Seminar Room, AIIMS New Delhi. Total participants: 31
- 27 May 2016: CNE on Computerization at CMET, AIIMS. Total participants: 09
- 30 May 2016: Kayakalp Session at Conference Hall, AIIMS. Total participants: 36
- 6 June 2016: Perioperative Nursing Summit at the Lalit Hotel, New Delhi. Total participants: 08
- 12–13 June 2016: ‘Advanced Ultrasound Trauma Life Support Course for Nurses’ at Seminar Room, JPNATC, AIIMS, New Delhi. Total participants: 15
- 22 June 2016: CNE on Computerization at CMET, AIIMS. Total participants: 23
- 11–16 July 2016: ‘Quality Management Programme for Nursing Administrators’, AHA House, Noida, UP. Total participants: 02
- 20 July 2016: Workshop on ‘Personality Development and Communication Skills’ at Seminar Room, JPNATC, AIIMS, New Delhi. Total participants: 04
- 12–13 August 2016: 25 Annual Conference of Neurotrauma Society of India at JLN Auditorium, AIIMS. Total participants: 30
- 17 August 2016: CNE on Computerization at CMET, AIIMS. Total participants: 05
- 18–20 August 2016: World Trauma Congress 2016 at Vigyan Bhawan, New Delhi. Total participants: 60
- 22 August 2016: Dengue update & Workshop 2016 at CMET, AIIMS. Total Participants: 12
- 23 August 2016: ‘Training of Nurses on Deceased Organ and Tissue Donation’ at Seminar Room, ORBO, AIIMS. Total participants: 08
- 5–7 September 2016: ‘Course on Chemical/Radiological and Public Health Emergency Management at Board Room, AIIMS
- 8–10 September 2016: Conference on ‘Cost effective use of e-Health care at JLN Auditorium’, AIIMS. Total participants: 44
- 17 September 2016: Workshop on ‘Advances in Paediatrics and Adult Liver Transplantation’. Total participants: 06
- 19–24 September 2016: ‘Quality Management Programme for Nursing Administrators’, AHA House, Noida, UP. Total participants: 02
- 28–29 September 2016: ‘Advanced Ultrasound Trauma Life Support Course for Nurses’ at Seminar Room, JPNATC, AIIMS, New Delhi. Total participants: 14
- 13 October 2016: “Child trafficking and commercial sexual exploitation of children; Medical and psychosocial services for the victims” Workshop at India International Centre, New Delhi. Total participants: 03
- 15–16 October 2016: BRICS Summit, 2016 at Goa for Medical Care Arrangements. Total participants: 02

- 16 October 2016: 4th Annual General Meeting of the Ostomy Society at AIIMS New Delhi. Total participants: 04
- 17 October 2016: CNE on Computerisation at CMET, AIIMS. Total participants: 26
- 18 October 2016: Workshop on 'Research Ethics And Publication (REAP)', CMET, AIIMS, New Delhi. Total participants: 19
- 20 October 2016: 'National Programme for Health Care of the Elderly (NPHCE) Training of Nurses in Care of the Elderly', Department of Geriatrics & Inservice Education Unit, Main Hospital, AIIMS, New Delhi. Total participants: 26
- 20–23 October 2016: 12th Indo US World Congress of Academic Emergency Medicine. Total participants: 07
- 21 October 2016: 'Training of Nurses on Deceased Organ and Tissue Donation' at Seminar Room, ORBO, AIIMS. Total participants: 08
- 24 October 2016: Pediatric Nursing Update 'Care of critically ill children at CMET Hall', AIIMS. Total participants: 11
- 24–28 October 2016: Self defense training programme for the benefit of the female members of AIIMS family at Community Hall, AIIMS. Total participants: 40
- 26–27 October 2016: 'Advanced Ultrasound Trauma Life Support Course for Nurses' at Seminar Room, JPNATC, AIIMS, New Delhi. Total participants: 13
- 4–6 November 2016: Multidisciplinary Health Care Conference and Workshop at JHN Auditorium, AIIMS New Delhi. Total participants: 35
- 7–9 November 2016: AHA BLS & ACLS provider course at AIIMS. Total participants: 04
- 9–11 November 2016: Indian Ageing Congress 2016 at JLN Auditorium, AIIMS. Total participants: 62
- 11–12 November: The New Millennium Smart Nursing Conference at NDMC Convention Centre, New Delhi. Total participants: 01
- 16 November 2016: 7th Annual National Nursing Conclave at Taj Vivanta, Haryana. Total participants: 01
- 24 November: 'Educational support for OT nurses at Covidien Centre of Innovation, at Mumbai. Total participants: 03
- 30 November 2016: Workshop on 'Personality Development and Communication Skills' in Seminar Room, JPNATC, AIIMS, New Delhi. Total participants: 20
- 6–7 December 2016: Advanced Ultra sound Trauma Life Support Course for Nurses' at Seminar Room, JPNATC, AIIMS, New Delhi. Total participants: 08
- 14–15 December 2016: Training Programme on Disciplinary Proceeding at CMET, AIIMS. Total participants: 02
- 23 December 2016: CNE on computerization at CMET, AIIMS. Total participants: 12
- 12 January 2017; Educational Programme on general baby care by Himalaya Drug Company at MS Seminar Room, AIIMS. Total participants: 28
- 18 January 2017: Workshop on 'Personality Development and Communication Skills' in Seminar Room, JPNATC, AIIMS, New Delhi. Total participants: 19
- 30 January 2017 – 1 February 2017: BLS & ACLS Provider Course at CMET, ITC, AIIMS. Total participants: 04
- 6 February 2017: Workshop on 'Research Ethics And Publication (REAP)', CMET, AIIMS, New Delhi. Total participants: 05
- 09–11 February 2017: 14th National HISCON-2017 at Guwahati, Assam. Total participants: 03
- 15–18 February 2017: 6th Annual Conference of Neurological Surgeons Society of India at PGI, Chandigarh. Total participants: 11
- 20 February 2017: Oncology Nursing Update at CMET, AIIMS, Total participants: 15
- 20–25 February 2017: Nursing Care Administration & Quality Management Programme at AHA House, Sec 62, Noida, UP. Total participants: 01
- 21 February 2017: Human Relations in Health Care at CMET. Total participants: 10
- 22 February 2017: Advanced Nursing Care at CMET. Total participants: 15
- 22 February 2017: Workshop on 'Personality Development and Communication Skills' in Seminar Room, JPNATC, AIIMS, New Delhi. Total participants: 05
- 23 February 2017: CNE on Rheumatoid Arthritis at MS Seminar Room, AIIMS. Total participants: 35
- 26 February 2017: Pediatric Basic Life Support Course at CMET, AIIMS. Total participants: 13
- 28 February 2017: International Myeloma Workshop for nurses at Ramalingaswamy Board Room, AIIMS. Total participants: 02
- 27 February–3 March 2017: Workshop on managerial knowledge, skill & practice at RAK CON, New Delhi. Total participants: 01

- 20–22 March 2017: BLS & ACLS Provider Course at CMET, ITC, AIIMS. Total participants: 04
- 23 March 2017: ‘Training of Nurses on Deceased Organ and Tissue Donation’ at Seminar Room, ORBO, AIIMS. Total participants: 15
- 27–29 March 2017: Medical & Surgical Nursing Update at CMET, AIIMS. Total participants: 10
- 28–29 March 2017: AUTLSN at Seminar Room, JPNATC, AIIMS, New Delhi. Total participants: 20
- 28 March 2017: CNE on Rheumatoid Arthritis at MS Seminar Room, AIIMS. Total participants: 25
- 29 March 2017: Wound Care & Pressure Sore Prevention at CMET, AIIMS. Total participants: 15

A total of 998 nursing personnel attended a total of 75 workshops/conferences in the year 2016–2017 excluding consultancy and participation as experts

CNO: 02	NS:06	DNS:39
ANS:134	Senior Nursing officer: 275	Nursing Officers: 542

Consultancy and participation as experts

Competent nurses from different departments participated and performed as facilitators for skill stations and hands-on-training sessions in various Workshops, CNE and National Conferences conducted last year. Nursing In-service Educators also facilitated Workshops conducted by ORBO for sensitizing nurses on organ donation.

New initiative

With support of Dr Uma Kumar, Professor and Head, Department of Rheumatology, NIE unit undertook a new initiative of sensitising nurses regarding Rheumatological diseases and disorders. Two workshops were organised in February and March 2017, 85 nurses were sensitised on rheumatoid arthritis.

Visitors from various educational institutions

Nursing educators in AIIMS conducted orientation sessions for groups from different educational institutions across India as listed below:

- Charotar University of Science and Technology, Gujarat, 7 July 2016 (18 MSc Nursing final year students and 2 faculty)
- Annaswamy Rajammal College of Nursing, Tamilnadu on 11 January 2017(35 Bsc, 20 Msc & 4 Faculty)
- Charotar University of Science and Technology, Gujarat on 9–10 February 2017 (40 GNM & 40 BSc & 2 Faculty)
- National Institute of Mental Health & Neurosciences, Bengaluru on 14 February 2017 (40 Bsc & 2 Faculty)
- SDPS CON, Indore on 21February 2017 (35 BSc, 2 MSc & 2 Faculty)
- Terna Nursing College, Mumbai on 2 March 2017 (18 BSc & 2 faculty)
- RDO CON, Manipur on 9 March 2017 (32 BSc & 2 Faculty)
- Vellalar CON, Erode, TN on 23 March 2017 (35 BSc & 2 Faculty)
- St. Martha’s Hospital CON, Bengaluru on 28 March 2017(35 BSc & 2 Faculty)

A total of 350 visitors from various hospitals received orientation at AIIMS.

6.5. Infection Control Activities

Hospital Infection Control Core Committee (HICCOM)

Chairperson

D.K. Sharma, Medical Superintendent

Members

1.	Dr Arti Kapil	Professor, Department of Microbiology
2.	Dr Rakesh Lodha	Professor, Department of Paediatrics
3.	Dr Rashmi Ramachandran	Additional Professor, Department of Anaesthesia
4.	Dr Anoop Daga	Associate Professor, Department Hospital Administration
5.	Dr Karan Madan	Assistant Professor, Department of Pulmonary Medicine
6.	Dr Gagandeep Singh	Assistant Professor, Department of Microbiology
7.	Dr Jhuma Sankar Assistant	Professor, Department of Paediatrics
8.	Ms Pushplata	Deputy Nursing Superintendent, Infection Control
9.	Ms Elpreda. M. Victor	Infection Control Nurse
10.	Ms M.R.E. Vasanth	Infection Control Nurse
11.	Ms Srinithya Raghavan	Infection Control Nurse
12.	Mr Mukesh Kumar Saini	Infection Control Nurse
13.	Mr Dhawal Dwivedi	Infection Control Nurse
14.	Mr Kunj Bihari Gauttam	Infection Control Nurse

The committee meets periodically to discuss day-to-day activities and interventions. HICCOM administrative rounds are conducted periodically with infection control core committee, identifies problems, discusses these and rectifies them.

Activities of HICCOM

- Number of HICCOM half day training programmes conducted: 6 programmes (April 2016–March 2017), trained 174 nursing personnel.
- Number of sessions taken on standard precautions, infection control and bio-medical waste management for newly recruited nurses during induction programme for 40 nurses in each session at CMET: 17 sessions (660 nurses).
- The infection control nurses took a session on ‘Role of Infection Control Nurse’ for Clinical Nursing Update on ‘Advance Nursing Care’ organised by College of Nursing, AIIMS for 30 Inservice Nursing Personnel.
- Nursing Staff for HICCOM activities increased to 6 and the areas in Main Hospital divided among them.
- Sensitisation programme on ‘New Bio-Medical Waste Rules-March 2016’ conducted for all Healthcare Personnel and new rules were implemented.
- Involved in the teaching programme for nursing students of College of Nursing, AIIMS related to infection control prevention and practices.

Activities

1. Individual area rounds conducted by Infection Control Nurses on daily basis using Checklist and whenever need arose onsite training programmes were conducted in clinical areas and problems were rectified after discussing with HICCOM.
2. Surveillance activities: Surveillance of environmental culture and sterility samples taken every month and reports recorded and distributed to concerned areas and discussed to reinforce proper protocols as per hospital policy.

Surveillance samples collected (Main Hospital)

Surveillance samples	Environmental and sterility samples	In use Solutions samples	Sterile samples		Unsterile samples	
			Environmental and sterility	In use solutions	Environmental and sterility	In use solutions
5698	3848	1850	3084	1532	764	318

3. Data analysis done monthly for all surgical units and ICUs. Data analysis was distributed to all Professors in-charge of Surgical Units and ICUs

Annual Health Care Associated Infection (HCAI) Rate

Area	Major surgeries/admissions	HCAI (%)
Surgical Units	15,289	530 (3.4)
ICUs	4703	859 (18.3)
	Combined rate	1389 (6.9)

4. Annual combined data analysis of surgical units and ICUs is calculated and is provided to members of HICCOM, Chief Nursing Officer and Medical Record Section.
5. Monthly Surveillance and Data for surgical units and ICUs is calculated and submitted to Medical Record Section for monthly newsletter.
6. Bio-medical waste rounds are conducted bi-weekly along with Senior Resident Hospital Administration, Sanitary Inspector and DNS Floor Supervisor
 - Ministry of Health and Family Welfare has launched “**Kayakalp**”: Clean hospital campaign under Swachh Bharat Abhiyan. ‘Clean and Green AIIMS’ campaign guidelines have been formulated. AIIMS is uniquely poised to lead this movement of “Kayakalp” transformation by being the agent of change and adopting these guidelines. There are eight key result areas in this and Infection Control Nurses were part of KRA 6: Infection Control and KRA 5: Bio-medical waste management
 - Infection Control Nurses were actively involved in KRA 5 and KRA 6 and took intensive rounds
 - There was a need for Spill Management Kit under KRA 5. Infection Control Nurses promoted and made available the Kit in all clinical areas
 - Needle Stick Injury Register is maintained in New Emergency Ward and made in Form 3.
 - AIIMS was awarded first position for Kayakalp, Clean Hospital Campaign under Swachh Bharat Abhiyan
 - WHO Hand Hygiene Day was observed and poster competition organised.

Research and Publications

Conducted a research study on occupational health safety among the nurses on ‘Effect of In-service Education Workshop on Occupational Health and Safety in Terms of Knowledge and Awareness among Nurses in a Selected Tertiary Care Hospital in India: An evaluation’. This was published in Journal of Nursing and Patient Care, June 2016.

6.6. Nursing Informatics Activities

Nursing Informatics Specialists (NIS) integrate Nursing Science with multiple information management and analytical sciences to identify, define, manage and communicate data, information, knowledge and wisdom in health practice, thereby helping to realign services to satisfy the ever changing organisational needs of AIIMS. NIS has played a major role in digitization and workflow optimisation of AIIMS.

NIS have been posted at all centres of AIIMS and are actively involved in education, patient care, research and computerisation of activities.

EDUCATION

1. Online CNE for nurses has been initiated by computer facility, which is now mandatory for all nurses across AIIMS. The online modules were developed in-house and administered through Computer Facility by NIS. NIS is actively involved in developing the contents, validation and training of users. A total of 10 modules are onboard.

Name of the course	Total enrolled users
Glasgow Coma Scale (GCS)	3649
Central Venous Pressure (CVP) Monitoring	3560
Computerisation	2822
Infection Control 1	3230
Infection Control 2	2970
Critical Care	1516
Care of Unconscious Patients	670
Cardio Pulmonary Resuscitation (CPR)	2215

- Initiated and implemented Quality Assurance Module for 360 degree evaluation of residents. This module is fully implemented in Neurosurgery and across 8 departments in AIIMS. NIS has been actively involved in training of users, updation of seminars/workshops, etc. and ensuring compliance.
- Live streaming of all CCR/CGR, conferences and workshops in AIIMS with archival on Youtube.
- Patient education videos (video consent): Prepared for five procedures in various departments. These are uploaded on website as well as on Youtube.

CMEs/Workshops/Symposia/National and International Conferences

- CEUTEH 2016, 3–7 September 2016, JLN Auditorium, AIIMS, New Delhi, Dept. of IT, JPNATC
- Workshop on Personality Development Communication and Presentation (PDCP) Skills, 27 April 2016, JPNA Trauma Centre, AIIMS, New Delhi
- Workshop on Personality Development Communication and Presentation (PDCP) Skills, 25 May 2016, JPNA Trauma Centre, AIIMS, New Delhi
- Workshop on Personality Development Communication and Presentation (PDCP) Skills, 20 July 2016, JPNA Trauma Centre, AIIMS, New Delhi
- Workshop on Personality Development Communication and Presentation (PDCP) Skills, 8 September 2016, JPNA Trauma Centre, AIIMS, New Delhi
- Workshop on Personality Development Communication and Presentation (PDCP) Skills, 5 November 2017, JPNA Trauma Centre, AIIMS, New Delhi
- Workshop on Personality Development Communication and Presentation (PDCP) Skills, 18 January 2017, JPNA Trauma Centre, AIIMS, New Delhi
- Workshop on Personality Development Communication and Presentation (PDCP) Skills, 22 February 2017, JPNA Trauma Centre, AIIMS, New Delhi
- Workshop on Research Ethics And Publications (REAP), 27 April 2016, K.L. Wig CMET, AIIMS, New Delhi
- Workshop on Research Ethics And Publications (REAP), 11 May 2016, K.L. Wig CMET, AIIMS, New Delhi
- Workshop on Research Ethics And Publications (REAP), 3 September 2016, K.L. Wig CMET, AIIMS, New Delhi
- Workshop on Research Ethics And Publications (REAP), 18 October 2016, K.L. Wig CMET, AIIMS, New Delhi
- Workshop on Research Ethics And Publications (REAP), 6 February 2017, K.L. Wig CMET, AIIMS, New Delhi
- Workshop on Research Ethics And Publications (REAP), 19 April 2017, K.L. Wig CMET, AIIMS, New Delhi.
- Workshop on IT Implementation at AIIMS, 3 March 2017, K.L. Wig CMET, AIIMS, New Delhi
- Organised monthly CNES in Main Building, IRCH, RPC and CNC. Trained 1390 nurses during 2016–17
- Total number of research studies done during 2016–17: 23
- 13 NIS presented papers in NSSI conference, PGIMER, Chandigarh, 16–18 February 2017

Lectures delivered at CMEs, national and international conferences

- Mr Reghunathan, e-Hospital: Implementation at AIIMS, 2 March 2017, AIIMS, Bhopal
- Mr Linto, e-Hospital: Implementation at AIIMS, 28 February 2017, AIIMS, Raipur

3. Mr Harish, e-Hospital: Implementation at AIIMS, 28 September 2016, PGIMER, Chandigarh
4. Ms Angeleena Singh and Mr Shailender, Nursing informatics specialist: A way ahead, 22 October 2016, Global Education Summit, New Delhi

Awards, Honours and Significant Events

1. Ms Metilda Robin, In-charge NIS was appointed Nodal Officer for SNOMED CT project at AIIMS by Ministry of Health and Family Welfare.
2. Ms Metilda Robin (Indian representative of International Medical Informatics Association–Nursing), Ms Preethy S, Ms Neetu Verma, Ms Teenu Xavier attended NI 2016 Conference, Geneva, Switzerland, 23–26 June 2016.
3. Ms Metilda Robin was appointed India's representative in e-Learning Advisory Group of IHTSDO and deputed by MoHFW to participate in SNOMED CT EXPO, New Zealand, 22–27 October 2016.
4. Ms Metilda Robin was awarded AIIMSONIANS BEST NURSE – ADMINISTRATION, 2015. Prize was received from Honorable Union Health Minister Shri JP Nadda on AIIMS Institute Day.
5. Ms Metilda Robin won Second prize for Oral Paper Presentation on 'Effectiveness of Midazolam in reducing the ICP during Endotracheal Suctioning' in World Trauma Congress, New Delhi, 17–20 August 2016.
6. Ms Anu K.P., NIS, Dr R.P. Centre, AIIMS won first prize in Award Paper Presentation on 'Validation of Body Weight Approximation Using Simple Anthropometric Measurements in Indian setting', NSSI Conference, PGIMER, Chandigarh, 16–18 February 2017.
7. Ms Teenu Xavier, NIS, AIIMS won first prize in Debate on 'Leading Change by Changing the way you lead' organised by Indraprastha Apollo Hospitals, New Delhi on 7th Annual National Nursing Conclave. She also won Third prize for Award Paper Presentation on 'Effectiveness of video based Consent Programme', NSSI Conference, PGIMER, Chandigarh, 16–18 February 2017.
8. NIS coordinated with MoHFW in Indian International Trade Fair, 2016, AIIMS DIGITALISATION PROJECT was highlighted and appreciated.
9. Awarded Skotch Order of Merit Award for Top 100 projects in India for AIIMS Video Consults and e-Learning Project (2016).
10. Awarded Skotch Order of Merit Award for Top 50 projects in India for Nursing Informatics Specialist (2017).
11. The MoHFW also appreciated efforts of NIS during its launch of e-hospital modules at AIIMS and recommended adoption of similar cadres in all hospitals of India.
12. The work of NIS was highlighted and appreciated in the Book Innovations released by Prime Minister of India on Civil Service Day.

PATIENT CARE

Emergency Nurse Coordinator System was successfully implemented in Emergency and has helped in workflow optimisation and coordination of patient care activities at emergency. Additional responsibilities given to ENC – Patient assignment to doctor, has played a major role in bringing down the average door to doctor time of patients visiting New Emergency.

NIS staff posted in the Registration Area to screen every patient so as to avoid wrong referrals and act as interface between the patient and the registration staff. This has been a big success with around 10 NIS posted in OPD and Patient Reception Counter and Single Window Exit Counters, which has made the entry of patients into this premiere hospital much easier and making this a patient friendly hospital.

Compliance of modules in main building

Sr. no.	Module name	Compliance (%)
1	Admission transfer and discharge	100
2	Radiology requisitions for in-patients	100
3	Laundry	70
4	Dietary	100
5	Store Module	100
6	Billing	Service entries 100% done by staff
7	e-Death	100

8	e-Birth	100
9	e-Blood-Request	100
10	Admission Slip	
11	e-MLC	100 (except Gynaecological cases)
12	e-Roster	100
13	e-Vital-Entry	Once in a shift

New initiatives

AIIMS Video Consults (AVC): AVC is a part of OPD services in all departments of AIIMS. In this initiative there is no need to go to a doctor. Those who require consultation or expert opinion can have it at home through video consultations. Fifty-four doctors from various departments have been enrolled in the system.

Nurses for Tracheostomy, Stoma, CIMR, Heart-failures, have been also enrolled and are providing consultation and home care through video consultations.

e-Office Nursing Section: This is a new module for file tracking where all leaves and letters are sent through e-office with an e-office number. There is 100% compliance from all wards enabling easy file tracking.

Online Admission Slip: This is implemented all over AIIMS so that admission requisition can be prepared online by concerned doctor.

RADIOLOGY

The complete process of ordering, scheduling for reporting of all radiological investigations is 100% online (except for MRI) for all IPD patients. Doctors can view both images and reports online.

Anaesthesia Register: For maintaining online records of Anaesthesia: Module live from 1 May 2016.

RP Centre

- Neuro-ophthalmic clinical note
- Day care registry
- 10 afternoon specialty clinic appointments, Lasik lab, Refraction clinic, ROP clinic and ROP refraction registers stopped
- Patient display system in RPC Casualty
- OT Display in RPC OT: Real time status update of operations performed in RPC OT

CN Centre

1. Cardio Angiography report, Holter, HUTT, Ambulatory Blood Pressure, ECHO report, EEG, Nerve conduction studies are accessible through open PACS
2. Cardiology Cath lab procedure consent is uploaded to the hospital information system for future reference
3. Cardiology Cath lab procedure LIVE status displayed in waiting room
4. Educational information related to appointment system, valvular surgery, heart transplant are displayed in CNC OPD
5. Heart transplantation online registry is LIVE and accessible to concerned consultants/staff through their mobile devices
6. Gamma Knife online registry is live and the data used for future reference and research
7. Online OPD consultation started in CNC OPD on pilot basis
8. 10 POS machines are installed in all billing counters where patients can do cashless transaction

NS Centre

1. QAM of neuroanaesthesia is online and doing 100% grading for academic events
2. IMPLANT FORM is made online and company personnel is using it, print out of the form is kept in patient file
3. Display system installed in all wards reflecting the PPTs taken from e-Learning module

IRCH

- Tumour marker lab online, April 2016
- Human Papilloma virus Lab investigation live in e-hospital, March 2017
- E-medical certificate online, May 2017
- E-grievance module compilation of all related data and physical layout
- MSSO exemption in e-hospital successfully started, December 2016

JPN Apex Trauma Centre

- Dispatch Register of ED made online
- Admission register/plaster room register/minor OT register of ED made online
- Master register of wards/Intubation-extubation register of ICU
- E-hospital Implementation: Surgical store, Computer store, General store/Stationary store/Linen store.
- Revamped death registry: National Death Registry of India (NDR), SNOMED-CT Coded Death Notes
- Blood Bank Module Online: Donor Registration/Donor Registration Camp/Donor Search/Component Separation/TTI Screening Test Entry/TTI Screening Test Update/Blood Grouping

6.7. Welfare Unit

Patients and employees welfare services were organised by the Welfare Officer, Mrs Preeti Ahluwalia.

Patients Welfare

Patients' Care: Rs. 48,44,000/- (approx.) raised as donation		
Purpose	Donation	Donor
For treatment and surgery of poor and needy patients who are undergoing treatment in the Main Hospital & Centres	Rs. 3,39,000/-	Sahu Jain Trust
	Rs. 2,13,000/-	Jawahar Bhawan Trust
	Rs. 2,00,000/-	Rajendra Bhawan Trust
	Rs. 1,29,000/-	Baij Nath Bhandari Public Charitable Trust
	Rs. 57,513/-	Other Donors
	Rs. 23,769/-	Sewa Prkalp Mahila Mandal Trust
	Rs. 3,00,000/-	Mrs Dwarka Prasad Trust
	Rs. 1,50,000/-	Mrs Dwarka Prasad Trust
	Rs. 40,000/-	Mrs Maharani Prasad
	Rs. 35,000/-	Mrs Preeti Bhatnagar
AIIMS Poor Fund Account	Rs. 20,000/-	Mrs Diljeet Kaur Verma
	Rs. 17,000/-	Mrs Anjana Ahluwalia
	Rs. 12,000/-	Mrs Anjana Ahluwalia
	Rs. 10,000/-	Mrs Smita Singh
	Rs. 1,000/-	Prof Ravi Mittal
	Rs. 31,34,205/-	Gopal Foundation
	Rs. 1,62,554/-	Dr Chetan Memorial Divine Trust
Anti-Cancer drugs provided free to Cancer Patients		

In addition to above, poor patients are being guided and assisted to avail of financial assistance for their treatment from Rashtriya Arogya Nidhi, P.M. National Relief Fund, Health Minister's Discretionary Grant and other Governmental Agencies. Poor patients are also guided to avail of assistance from the Hospital Poor Fund Account and for exemption of levy charges, investigation charges, etc.

Dharamshalas

There are three Vishram Sadans being run as a welfare activity i.e. to provide shelter to outstation patients and their attendants who are undergoing treatment at AIIMS. The Rajgarhia Vishram Sadan, Sureka Vishram Sadan and Shri Sai Vishram Sadan provided shelter to over 19,900 patients and their attendants who were undergoing treatment at the Institute and its centres. A pick and drop facility from the Sadans to the hospital is also being run during day time by the Institute for the benefit of the patients and their attendants.

A play room facility has been provided in Rajgarhia Vishram Sadan for the children staying in the Vishram Sadans. This facility is being run on Monday, Wednesday and Friday from 2:30 to 4:30 p.m. by Cancer Patient Aid Association (CPAA). In addition, CPAA organises Yoga Class once a week for the benefit of the inmates. CPAA also celebrated Diwali & Holi with the inmates of the Sadans. Sapna (NGO) distributed 58 milk packets daily and 60 packets of ration once in a week to the poor patients of the Vishram Sadans.

Rain Basera

A Rain Basera facility was set up in November 2012 near Sureka Vishram Sadan and is being managed by Delhi Urban Shelter Improvement Board. The facility provides shelter to poor and needy outstation patients and their attendants who are undergoing treatment at AIIMS.

Further, a tented Rain Basera facility with a maximum of 70 beds was set up by SSB (Sashastra Seema Bal) and Wives Welfare Association (Sandiksha) from 6 January 2017 to 31 March 2017 near CDER, AIIMS to provide relief to the poor outstations patients & their attendants from the cold during the harsh winter season. A 50 bed Rain Basera was also set up by ITBP Force from 9 January 2017 to 31 March 2017.

Employees welfare

Appointment on compassionate grounds

Cases for appointment on compassionate grounds were dealt with Counselling services and moral support was provided to the family members so as to assist them to accept/overcome the great loss they have suffered and thereby enable them to shoulder the responsibilities befallen upon them.

Committee for addressing complaints of sexual harassment at AIIMS, New Delhi

The formation of the Committee for dealing with complaints regarding sexual harassment of women at AIIMS which had been initiated in 1999, has been since then providing an effective Complaint Redressal Mechanism for the female staff working at AIIMS. The said Committee enquires into the complaints received. The meetings are also attended by a member of an NGO who has been recommended by Delhi Commission for Women. The inquiry report along with recommendations is forwarded to the competent authority for necessary action. This is to ensure as far as possible, a safe, secure and healthy environment for women by prohibiting their harassment at work place.

- **As a part of AIIMS commitment to women safety and with the objective to create a safe work place for female staff at AIIMS "Women Helpline Boards" were installed in prominent places in the Institute.**

Women Grievance Cell

A Women Grievance Cell has been constituted at AIIMS in January 2014 to resolve grievances/complaints made by: (i) women students of the Institute; (ii) women employees of the Institute who are working on a regular, temporary, adhoc project, temporary status, daily wages, contract or other than outsourced. The Women Grievances Cell deals with the grievances received as per its terms of reference.

Self-Defence training programme

The Sub Task Force for Development of Gender Sensitisation/ Awareness Modules at AIIMS organised the fourth batch of the 'Training Programme in Self Defence' for the benefit of female members of AIIMS Family that is girl students, resident doctors, faculty and staff as well as the wives and dependent daughters of employees. The Training was conducted by the Special Police Unit for Women and Children (Delhi Police) Nanak Pura, New Delhi. The training was free and for a period of 5 days (24–28 October 2016). 48 female members of the AIIMS Family attended the training programme.

Counselling services

Counselling services were provided to employees, patients and their relatives so as to enable them to overcome/adjust to their physical, social, emotional, economic, familial and marital problems and thereby enhance their social functioning.

Redressal of grievances

Services for redressal of grievances to staff and patients are being provided.

Diwali celebration

The Employees Welfare Committee celebrated Diwali with children of AIIMS employees who are studying in the Nursery and Primary school being run by Medical Institute Residents Welfare Association (MIRWA). On this occasion Dr D.K. Sharma, Medical Superintendent, AIIMS presented sweaters, gifts and sweets to the school children. (Courtesy Donors: Mrs and Mr Sunil Bhutani).



Celebration of Diwali with school children. Seen in the picture (L to R): Professor Ratna Sharma, Mr Sunil Bhutani, Mrs Preeti Ahluwalia, Welfare Officer, Dr D.K. Sharma, Medical Superintendent, AIIMS presenting gifts to students studying in the Nursery and Primary school being run by MIRWA alongwith Mrs Shweta Bhutani, Professor Raj Pal and members of MIRWA.

6.8. Medical Social Welfare Unit

INTRODUCTION

The Medical Social Welfare Unit was started in 1960 with the appointment of the first Medical Social Worker in the main hospital. The unit works under supervision of the Medical Superintendent. The integration of Medical Social Services has yielded positive results as it provides social, psychological and financial support for patients and alleviates the distress while receiving the treatment. The unit in the Main Hospital has 12 Medical Social Service Officers (MSSOs) taking care of OPDs and Wards of 16 departments. In addition, there are 19 Part-Time Social Guides (PTSG) and one Hospital Attendant Working for patient care and guidance.

Objectives

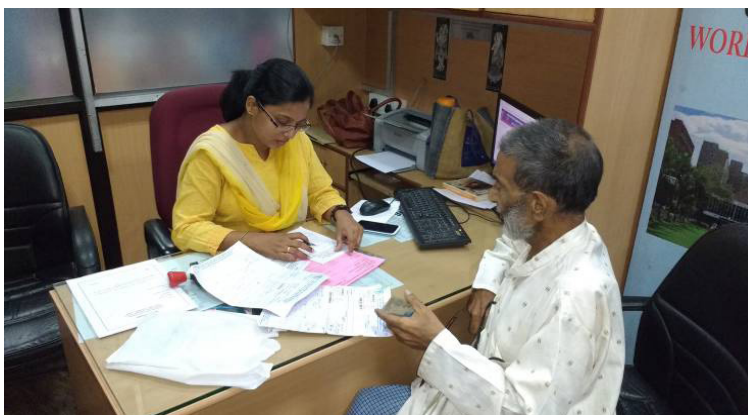
1. To create a Therapeutic-Network among the doctor, paramedical staff, the patient, the family and the community.
2. To facilitate a Holistic-Healing leading towards a complete physical, psychological, social and vocational rehabilitation.
3. To ensure the protection of the basic human rights of the patients.
4. To facilitate the various services for the poor and indigent patients.
5. To coordinate with the Hospital Administration and treating faculties to facilitate the basic patient welfare services.
6. To impart Training and Orientation of Medical Social Work to the Social Work Students.
7. To conduct and coordinate the Research Studies initiated by our unit and other departments of AIIMS.

Staff

Designation	Number of staff
Medical Social Service Officer Grade I	2
Medical Social Service Officer Grade II	8

HIGHLIGHTS

Financial Assistance to poor and indigent patients for treatment: Rs. 25,39,94,814/-



1. Financial assistance of Rs 24,30,92,344 through Rashtriya Arogya Nidhi (RAN) MOHFW to 656 patients.
2. Corporate Social Responsibility (CSR) donations for poor and indigent patients and financial assistance of approximately Rs 80,00,000 for 69 patients.
3. Arranged approximately Rs 5,00,000 through Trust and Voluntary donors for 150 poor and indigent patients.
4. Poor fund donation box installed in OPD area: Rs 20,33,970 collected (deposited in AIIMS Poor Fund through Hospital Billing Section).
5. Helped 262 poor patients for Rs. 3,68,500/- through AIIMS poor fund.

Free medicines and other donations for poor and indigent patients

1. Free medicines worth Rs 16,00,000 to 10500 OPD patients through voluntary donation at MSWU.
2. Free medicines/surgical items to approximately 350 admitted patients.

Exemptions of hospital levy charges and railway concession

1. Exemption of different hospital levy charges including CT, MRI, PET and HLA etc. of approximately 12500 BPL/ poor patients.
2. Railway Concession facility provided to approximately 10000 outstation patients.

Counselling and guidance

1. Counselling and guided approximately 32000 patients.
2. Special counselling and guidance given to approximately 7500 patients during Dengue period.

Rehabilitation & referral through casualty

1. Rehabilitated approximately 160 patients: Medico-Legal Cases (MLC) and Non-MLC Unknown/Unattended/ Destitute/Orphan.
2. Facilitated the shifting of approximately 9000 patients to Safdurjung Hospital and other Govt. Hospitals for admission through Casualty MSSO due to Non-availability of the beds.
3. Facilitated the referral of patients to Pvt. hospitals for free treatment under EWS category as per the Hon'ble High Court Order.

Authorization of Organ Transplant under THOA Act

22 cases of Unrelated Kidney Donors were scrutinized, assessed, documented and presented before the Renal Transplant Authorization Committee as per the THOA, 1994.

Training and orientation

1. Imparted Social Work training to 30 students of Social Work came from different colleges across the country.
2. Four Orientation Sessions on 'Medical Social Services in Hospital Setting' were given to approximately 69 MSW students from different colleges across India.

Special celebrations

1. Diwali Celebration & Magic show in AB-5 ward on 26 October 2016: The Medical Social Welfare Unit organised a Magic Show & Diwali Celebration in the presence of the Director, DDA, Medical Superintendent, Senior Financial Advisor, and HOD, Pediatric Surgery.



2. Displayed a comprehensive poster of Medical Social Welfare Unit in the Institute Day Celebration and exhibition. Chief MSSO explained the Medical Social Services to the Union Minister of Health.



3. Organised the celebration of World Social Work Day on 21 March 2017 with poor and indigent patients in presence of Director, Medical Superintendent and facilitated CSR units/Trusts who helped poor patients.

Other contributions

1. NMLC to MLC conversion 131 and patient data correction 17 in Casualty.
2. Started the digitalization process for the social services. Started online-exemption through e-hospital.
3. The Chief MSSO gave his contributions to the Hospital Health & Hygiene promotion sub-committee (KAYAKALP).

EDUCATION

- a) Teaching activities:
 - i) Induction training for newly joined nurses: 17 sessions on the topic 'How you can help poor patients through MSSO' organised by CMET were conducted by Mr B. R. Shekhar, Chief MSSO and Mr Vivek Kumar Singh, MSSO.
 - ii) Mr B. R. Shekhar (Chief MSSO), Ms Dona Kurian (MSSO), Mr Vivek Kumar Singh (MSSO) delivered a lecture on 'Medical Social Service in AIIMS' for faculty members & residents of Department of Geriatric Medicines on 10 August 2016.
 - iii) Regular sessions were conducted by Mr B. R. Shekhar, Chief MSSO for MHA Students (Hospital Administration) at Medical Social Welfare Unit, Main Hospital on Role of MSSO in Hospital Setting.
- b) Training activities by Medical Social Welfare Unit:
 - i) Social Work Training: Total 30 students of Social Work from different schools and colleges were given training in Medical Social Work in hospital setting.
 - ii) Social Work Orientation Session: 4 Orientation Sessions on 'Medical Social Services in hospital setting' were given by Mr B. R. Shekhar (Chief MSSO), Mr Pankaj Kumar (Supervising MSSO) and Mr Vivek Kumar Singh (MSSO) to the Social Work Student groups along with their faculty members.

CMEs/Workshops/Symposia/National and International Conferences

- A) Seminar conducted
 - i) Title of the Symposium: World Social Work Day Celebration
Date & Place: 21 March 2017, AIIMS, New Delhi
- B) Seminar/Workshop/Conference attended in AIIMS
 1. Name of the Workshop: RTI Online Training
Date & Place: 22 June 2017, AIIMS, New Delhi
Attended by: Mr B. R. Shekhar, Chief MSSO & Mr Vivek Kr. Singh, MSSO
 2. Name of the Workshop: Grassroot Comics as Graphic Medicine
Date & Place: 1-2 July 2016, AIIMS, New Delhi
Attended by: Mr Vivek Kr. Singh, MSSO
 3. Name of the Workshop: Cashless Transaction Step-by-Step
Date & Place: 14 December 2016, AIIMS, New Delhi
Attended by: Mr B. R. Shekhar (Chief MSSO), Mr Pankaj Kumar (Supervising MSSO) and Mr Vivek Kumar Singh (MSSO)
 4. Name of the Symposium: National Symposium on Preventive Psychiatry
Date & Place: 11 September 2016, AIIMS, New Delhi
Attended by: Mr Vivek Kr. Singh, MSSO
 5. Name of the Symposium: TEDx AIIMS
Date & Place: 27 September 2016, AIIMS, New Delhi
Attended by: Mr B. R. Shekhar, Chief MSSO & Mr Vivek Kr. Singh, MSSO

C) Seminar/Workshop/Conference/Symposium attended outside AIIMS:

1. Name of the Conference: 4th Indian Social Work Congress
Date & Place: 22–24 October 2016, MGKVP, Varanasi, U.P.
Attended by: Mr B. R. Shekhar, Chief MSSO/ Mr Pankaj Kumar, Supervising MSSO
2. Name of the Seminar: 4th National Seminar on Social Work Practices in Health Care: Advance Approaches & Emerging Trends
Date & Place: 28 January 2017, KGMC, Lucknow, U.P.
Attended by: Mr B. R. Shekhar, Chief MSSO / Mr Pankaj Kumar, Supervising MSSO/ Mr Aftab Alam Shah, MSSO/ Md Shahid, MSSO
3. Name of the Conference: 3rd National Conference on Disability
Date & Place: 17 November 2016, India Islamic Cultural Center, New Delhi
Attended by: Mr B R Shekhar, Chief MSSO & Mr Vivek Kr. Singh, MSSO
4. Name of the Workshop: Nonviolent Communication (NVC)
Date & Place: 10–21 October 2016, Ruppolding, Germany
Attended by: Mr Vivek Kr. Singh, MSSO

PATIENT CARE

1. The MSSO helps the patient to get benefits from different schemes for poor patients through their Psycho-social and economic assessment.
2. Facilitating free medicines and surgical items: Consultation comes from various wards to the MSSO for the Socio-economic review along with the recommendation of the Chief MSSO which helps poor/indigent patients to get free medicines/surgical items.
3. Poor/indigent patients on follow-up in OPDs are helped to obtain free medicines/surgical items.
4. Exemption of hospital levy charges of BPL patients and indigent patients: The MSSO exempts various hospital investigation and admission charges after the recommendation of the Chief MSSO on the basis of socio-economic assessment of the patients.
5. Facilitation of services available for Economically Weaker Section (EWS) patient: As per the Honourable High Court orders, all individuals with a family income of Rs 1 lakh or below are categorized as EWS and are entitled to free medical treatment in 46 private hospitals in Delhi which have been built on land acquired at concessional rates from the Government.
6. Facilitation of financial assistance through Rashtriya Arogya Nidhi (RAN): RAN is a centrally sponsored scheme under MoHFW, started in 1997, with the aim to provide financial assistance to patients living below poverty line, who suffer from major life threatening diseases. The RAN cases are counseled and documented by Mr Pankaj Kumar, Supervising MSSO and he represents these cases in the AIIMS RAN subcommittee with Mr B.R. Shekhar, Chief MSSO.
7. Coordination of Renal Authorization Committee (RAC) and assessment of unrelated Kidney Donors: The cases of Unrelated Kidney Donors are referred to Mr B.R. Shekhar, Chief MSSO/Nodal Officer for authorization. The Chief MSSO and Mr Anil G. Mali, MSSO do the counselling, coordination and documentation to present the cases in the RAC as per The Transplantation of Human Organs Act (TOHA), 1994.
8. Counselling services: The Medical Social Welfare Unit is acting as the first point of contact of the patients when they enter AIIMS. The patients and their attendants not only receive basic information but the MSSO also gives psycho-social counselling and guidance to them throughout their stay in the hospital.
9. Coordination and Rehabilitation of Medico-Legal Cases (MLC) and Non-MLC Unknown/ Unattended/Destitute/ Orphan Patients: The Casualty MSSO coordinates with all the stakeholders to rehabilitate unknown, without attendant, destitute, orphan patients through Government/NGOs.
10. Financial help through AIIMS Poor Fund: In case of immediate need and urgency, the poor/indigent patients can get financial help from AIIMS Poor Fund. The MSSO does the socioeconomic assessment and facilitates this service.
11. Providing Railway concession facility: The Medical Social Welfare Unit provides Railway Concession to patients suffering from Cancer, Aplastic Anaemia, TB, Leprosy, Thalassemia, Kidney Transplant, Dialysis, and to Deaf and Mute patients as per guidelines of the Ministry of Railways. This facility results in good treatment follow-up and compliance from patients.

12. Providing accommodation facilities to outstation patients and their attendants.
13. Research and Training: Imparting training to NSS, BSW, MSW students from different colleges across India and conducting and coordinating the Research Studies.
14. Health promotional and educational activities: Disseminating health-education and health-awareness through IEC material and health-camps (eg. Blood Donation Camp, AIDS Awareness Camp, Health Awareness Meetings).
15. Planning & Administration: Coordination with the Hospital Administration and various Departments to improve the patient welfare activities and create a more patient-friendly environment.
16. Managing various information and guidance services in the main hospital through Part-time Social Guides.
17. Fund-raising and networking: Coordinating and networking with various Corporate Social Responsibility (CSR) units, trusts and donors for patient welfare.
18. Emergency care in casualty: Providing all Medical Social Services round-o-clock including shifting and rehabilitation of patients, creating a smooth work-flow in the casualty.
19. Special services during Epidemics, Disasters and Natural Calamities for managing the patient care efficiently.

6.9. Main Blood Bank

Workload Blood Donation/Apheresis

Sr. no.	Blood collection	Total unit
1.	Replacement donors	21260
2.	Replacement voluntary donors	15318
3.	Voluntary donors (In house)	1047
4.	Voluntary donors (from donation camps)	5786
5.	Aphaeresis procedures (Rep)	1892
6.	Aphaeresis procedures (Vol)	02
Total Collection		45305
7.	Total Voluntary donor camps organised	76

Workload Routine Lab and Emergency Counter

Sr. no.	Name of test	Total patients/units
1.	Total patient request received	58181
2.	Total Blood Group (ABO and Rh) performed	84140
3.	Total X-match (Emergency and Routine) performed	130016
4.	Total Donor Grouping performed	44082
5.	Total ICT performed	2409
6.	Total Titre (ICT + ABO) performed	496
7.	Total Antibody Screening performed	58181
8.	Total DCT performed	2339

Issued units

Sr. no.	Issued/discarded	Total units
1.	Total Blood issued	47385
2.	Total Blood Issued to outside hospital	138
3.	Total units discarded due to TTI reactive status	1266
4.	Total surplus Plasma issued to Plasma Fractionation Centre from 14 January till date	649 litres

Workload Special Procedure Laboratory

Sr. no.	Name of test	Total patients/units
1.	Minor Grouping	2513
2.	Cross Matching Discrepancy	2109
3.	Gr. Discrepancy	59
4.	AB Identification	472
5.	EQAS	04
6.	Anti Sera Q.C.	13
7.	Transfusion Reaction work up	64

Workload Component Lab

Sr. no.	Name of components	Total prepared units
1.	Platelet Rich Concentrate	40909
2.	Fresh Frozen Plasma	25671
3.	LIQUID Plasma	16392
4.	Cryoprecipitate	257
5.	Red Blood Cells	42672
6.	Component Q.C.	270

TTI Tests

Sr. no.	Name of test	Total no. of unit tests
1.	HIV Test	43442
2.	HBV Test	43442
3.	HCV Test	43442
4.	VDRL	43442
5.	NAT	43442

7. College of Nursing

Principal

Dr Manju Vatsa

Lecturers

Dr Sandhya Gupta
Dr Kamlesh Sharma
Mr L. Gopichandran
Dr Pragya Pathak
Ms Cecilia MS
Ms Y Surbala Devi

Dr Rachel Andrews
Ms Shashi Mawar (from 1 June 2016)
Ms Sibi Riju
Ms Ujjwal Dahiya
Ms Manju
Ms Smita Das

Dr Deepika C Khakha
Dr Poonam Joshi
Ms Aditi P Sinha
Ms Rimple Sharma
Ms Levis Murry
Mr Ajesh Kumar TK
(from 29 November 2016)

Ms Milan Tirwa
(from 20 December 2016)

Senior Nursing Tutor

Ms Gita Razdan

Nursing Tutor

Ms Kiran Singh Simak
Ms Babita Sahoo
Ms Seema Sachdeva
Ms Nemkholam

Ms Gayatri Batra
Dr Philomina Thomas
Ms Anubha D.
Ms Hansaram

Ms Sucheta
Ms Meena Ara
Ms Neelima Raaj
Ms Monika Sabharwal

EDUCATION

This academic year 72 BSc (Hons) Nursing, 22 BSc Nursing (PB) students and 23 MSc Nursing students graduated from the college.

Undergraduate

1. BSc (Hons) Nursing: Four year course.
2. BSc Nursing (Post Basic): Two year course.

Postgraduate

MSc Nursing: Two year course. 23 students joined the program this year in the following specialties:

1. Oncological Nursing
2. Critical Care Nursing
3. Pediatric Nursing
4. Neurosciences Nursing
5. Nephrological Nursing
6. Cardiological / CTVS Nursing
7. Psychiatric Nursing

The College of Nursing conducted orientation/briefing sessions for 7 groups of visitors from various educational institutions from India.

Continuing Nursing Education (CNE)

1. *Workshop on Pediatric Nursing Update: Current status of Child health in India, 24th October 2016.* 31 nurses from AIIMS attended the workshop. Dr Poonam Joshi, Lecturer, was the Coordinator.
2. *Workshop on Psychological First Aid, 26th November 2016.* 24 nurses from AIIMS attended the workshop. Dr Sandhya Gupta, Lecturer, was the Coordinator.
3. *Workshop on Oncological Nursing Update: Cancer Therapies, 20 February 2017.* 31 nurses from AIIMS attended the workshop. Dr Rachel Andrews, Lecturer, was the Coordinator.
4. *Workshop on "Human Relations in Health Care" on 21st February, 2017.* 36 Nurses from AIIMS attended the Workshop. Dr Deepika C. Khakha was the Coordinator.

5. *Workshop on "Advanced Nursing Care" organized on 22nd February, 2017.* 30 Nurses from AIIMS attended the workshop. Ms Ujjwal Dahiya was the Coordinator.
6. *Clinical Nursing Update on "Clinical Emergencies" organized on 27th March, 2017.* Total 35 Nurses from AIIMS attended the Workshop. Mr L.Gopichandran, Ms Ujjwal Dahiya, Ms Sibi Riju and Ms Manju Singh, Lecturer were Coordinators.

Lectures delivered

Dr Manju Vatsa: 11

Dr Kamlesh Sharma: 3

Ms Sibi Riju: 2

Ms Cecilia MS: 2

Ms Smita Das: 3

Ms Babita: 2

Ms Anubha Devagourou: 1

Dr GR Andrews: 10

Dr Poonam Joshi: 8

Ms Aditi P. Sinha: 3

Ms Manju: 6

Mr Ajesh Kumar: 1

Dr Philomina Thomas: 1

Ms Nemkholam: 1

Dr Deepika C Khaka: 13

Mr L Gopichandran: 10

Ms Ujjwal Dahiya: 3

Ms Y Surbala Devi: 3

Ms Milan Tirwa: 2

Dr Seema Sachdeva: 3

Ms Monika Sabharwal: 6

Dr Manju Vatsa

1. Communication, AIIMS Quality Improvement Workshop for Nurses, 26.8.16, AIIMS, New Delhi
2. Evidence Based Practice, Video Conference for PhD INC Consortium, 23.9.17, Indian Nursing Council, New Delhi
3. Quality Assurance in Nursing, Training Course on Management for Senior Nursing Administrators, 5.10.17, NIHF, New Delhi
4. Training in Geriatric Nursing, Indian Ageing Congress 2016, Department of Geriatrics, 9.11.16, AIIMS, New Delhi
5. Experimental Research Designs, Video Conference for INC PhD Consortium, 29.11.16, Indian Nursing Council, New Delhi
6. Research Critique, Video Conference for INC PhD Consortium, 29.11.16, Indian Nursing Council, New Delhi
7. Palliative and Institutionalized Care of Older Person, Training Course on Health Care Management of Elderly, 9.12.16, NIHF, New Delhi
8. Nursing leadership, 14 Forces of Magnetism Affecting Work Environment, National Workshop on Emerging Trends in Nursing Management, 28.2.17, RAK College of Nursing, New Delhi
9. Quality Assurance in Nursing, 13th National Conference of Nepal Association of Nurses: Advocating for Quality Health Care, 2.3.17, BPKIHS, Dharan, Nepal
10. Hypotheses, Assumptions and Delimitations, National Workshop on Research Methodology: Academics and Beyond, 6.3.17, Rifaat College of Nursing, Jamia Hamdard University, New Delhi
11. Role of Kidney in Homeostasis, Symposium on Kidney Diseases, World Kidney Day 2017, Department of Nephrology, AIIMS, 8.3.17, AIIMS, New Delhi

Dr GR Andrews

1. Cancer Therapies, Oncological Nursing Update on Cancer, 20.2.17, CMET, New Delhi
2. Nurses Role in Administration of Chemotherapy, Oncological Nursing Update on Cancer, 20.2.17, CMET, New Delhi
3. Palliative Care, Lymphedema Nursing Management, 20.9.17, RML College of Nursing, New Delhi
4. Palliative Care, Lymphedema Nursing Management, 15 .3.17, SJH College of Nursing, New Delhi
5. Palliative Care, Lymphedema Nursing Management, 20.3.17, Lady Hardinge College of Nursing, New Delhi
6. Palliative care, Lymphedema Nursing Management, 21.3.17, RAK College of Nursing, New Delhi
7. ECG Interpretation, Nurses Role in Identifying Arrhythmia, CNC Update, 2.3.17, AIIMS, New Delhi
8. ECG Interpretation, Nurses Role in Identifying Arrhythmia, CNC Update, 9.3.17, AIIMS, New Delhi
9. Latest Trends in Chemotherapy and Nursing Management, International One Day Conference on Multiple Myeloma, 28.2.17, AIIMS, New Delhi
10. Panel Discussion on Problems Associated with Ostomy Care, Ostomy Society of India (IRCH), 20.11.16, AIIMS, New Delhi

Dr Deepika C Khakha

1. Role of Communication in Improving Nursing Practice, Nursing Update, 12.5.16, RP Centre, AIIMS, New Delhi
2. Communication Skills, Pedagogical Approaches for Delegates from University of Medical Sciences, Thimphu, Bhutan, 17.5.16, Max Institute of Health Education and Research College of Nursing, Greater Noida

3. Evaluation Strategies in Medical Education, Pedagogical Approaches for Delegates from University of Medical Sciences, Thimphu, Bhutan, 17.5.16, Max Institute of Health Education and Research College of Nursing, Greater Noida
4. Counseling in Palliative Care, 26th Annual Conference of RUPCHA, 4.8.16, Naveenta, Okhla, New Delhi
5. Stress Management, Annual CNE, 4.8.16, Ruffaida College of Nursing, New Delhi
6. Importance of Communication, Human and Public Relations in nursing, Nursing Administration and Supervision for effective and Efficient Patient Care, 31.8.16, TNAI's Central Institute of Nursing Education, Greater Noida
7. Role of Communication, Quality Improvement Workshop, 17.9.16, College of Nursing, New Delhi
8. Stress Management in Nursing, CME for Nursing Personnel, 13.10.16, RP Centre, New Delhi
9. Human Dignity and Human Rights, World Bioethics Conference, 19.10.16, RML Hospital, New Delhi
10. Role of Communication in ICU for Nursing Personnel, Pediatrics Nursing Update, 24.10.16, CMET, New Delhi
11. Psychosocial Aspect of Mental Illness, MHC AIIMS Multidisciplinary Health Conference, 4.11.16, AIIMS, New Delhi
12. Nursing Perspective on Active Ageing, Indian Ageing Congress 2016, 11.11.16, AIIMS, New Delhi
13. Interpersonal Relationship in Health Care, Human Relations in Health Care, 21.11.16, AIIMS, New Delhi

Dr Kamlesh Sharma

1. Role of Nurses in Heart Failure Clinics, Cardiovascular Research Convergence and Heart Failure Certification Program, 9.10.16, AIIMS, New Delhi
2. Positive Pressure Ventilation and Chest Compression, Nursing Update on NRP Organized by College of Nursing, AIIMS, 14.2.17, CRHSP, Ballabgarh.
3. Role of Nurses in Heart Failure Clinics, Heart Failure Nursing, 7.3.17, Galgotias University, Noida

Dr Poonam Joshi

1. Pediatric Trauma, World Congress, 19.8.16, Vigyan Bhavan, New Delhi
2. Empowerment in Nursing, Neurotrauma Conference, 12.8.16, AIIMS, New Delhi
3. Current Status of Child Health in India, Pediatric update by College of Nursing, 26.10.16, AIIMS, New Delhi
4. Kangaroo Mother Care, Somi Delhi Chapter Workshop on Caring for Mothers and Their Newborns, Midwives Roles, 2016, 22.11.16, St. Stephens Hospital, New Delhi
5. Neonatal Resuscitation Programme, Workshop on NRP Organized by College of Nursing, 18.2.17, Ballabgarh, Haryana
6. Quality Assurance in Nursing, Nursing Update by College of Nursing, 22.2.17, AIIMS, New Delhi
7. Leadership Role in Emergency Department, CNE at AIIMS in ED Department, 22.3.17, AIIMS, New Delhi
8. Drugs Used in ED, CNE at AIIMS in ED Department, 4.4.17, AIIMS, New Delhi

Mr L. Gopichandran

1. Organ Donation, World Trauma Congress, Nursing Symposium, 18.8.16, AIIMS, New Delhi
2. Technology in Health Care, TNAI Series Workshop, Technology in Health Care, September 2016, TNAI, New Delhi
3. Nursing Specialization, International CUTECH 2016, October 2016, AIIMS, New Delhi
4. Role of Nurse in Cancer Prevention and Management, National Conference on New Emergency Trends and Advanced Treatment in Cancer, 23.9.16, Govt. Nursing College, Jagdalpur
5. Technology Innovation in Nursing, National Conference on Enhancing Quality Nursing Practice, 26.10.16, SRM University, Chennai
6. Cardiac Emergency Management, Workshop on Cardiac Emergency, 9.1.17, Ministry of Health and Family Welfare & Safdarjung Hospital, New Delhi
7. Neuro Rehabilitation, State Level Workshop on Neurologic of Rehabilitation, 18.1.17, College of Nursing, Tata Memorial Hospital, Mumbai
8. Being Assertive, AIIMS Update, 7.2.17, AIIMS, New Delhi
9. ACLS Update, AIIMS Advanced Nursing Update by College of Nursing, 14.2.17, AIIMS, New Delhi
10. Role of Stroke Nurse in Acute Care, National Stroke Congress, March 2017, Amritsar

Ms Sibi Riju

1. Prevention of Bed Sores in Neuro Trauma Patients, Annual Neuro Trauma Conference, 2016, 12.8.16, AIIMS, New Delhi

2. Career Opportunities in Neuro Nursing, 19th Annual Conference of Delhi Neurological Association (DNACON 2017), 4.2.17, India Habitat Centre, Lodhi Road, New Delhi

Ms Aditi P Sinha

1. Bedsore Prevention and Treatment in ICU, 2nd National Critical Care Nursing Conference, 19.7.16, Max Hospital Saket, New Delhi
2. Home Health for Older Persons, 18th Biennial Conference of Association of Gerontology, 8.11.16, AIIMS, New Delhi
3. Pre and Post Operative Nursing Care of Burn Patients, 25th Annual Conference of National Academy of Burns, India, 2.2.17, RML Hospital, New Delhi

Ms Ujjwal Dahiya

1. Complications of Patients on Mechanical Ventilator, 2nd National Critical Care Nursing Conference, 18–20 July 2016, Max Super Specialty Hospital, Saket, New Delhi
2. Cognitive and Behavioural Problems in Neurotrauma Patients, Neurotrauma 2016, 12–13 August 2016, AIIMS, New Delhi
3. Cardiac, Cardiothoracic and Vascular Post Surgical Rehabilitation, 2nd Multidisciplinary Health Care Conference 2016, 4–6 November 2016, AIIMS, New Delhi

Ms Cecilia MS

1. Legal and Ethical Issues in PICU, Pediatric Nursing Update by College of Nursing, 24.10.16, AIIMS, New Delhi
2. Depression Among Children and Adolescents, WHO Day Celebration, Symposium on Depression Across the Life Span, 7.4.17, RML Hospital, New Delhi

Ms Manju

1. Green Shopping: Conserve Future Energy, Faculty Development Programme, 17.9.16, SGT University, Gurgaon
2. Prevention of Falls in Elderly, Indian Ageing Congress 2016, 11.11.16, AIIMS, New Delhi
3. Post Traumatic Stress Disorder and Workplace Violence, ICMR National Seminar on Intangible Love and Silent Shrieks, A Holistic Perspective and Occupational Hazards, 25–26 November 2016, Regional Institute of Medical Sciences, Imphal, Imphal
4. Management of Kidney Injury, CME Program of PAN African e-Network Project, 17.2.17, Telemedicine Facility, AIIMS, New Delhi
5. Effect of Drugs in Kidney Diseases, World Kidney Day 2017, 8.3.17, AIIMS, New Delhi
6. Acute Kidney Injury, Nursing Update by College of Nursing, 27.3.17, AIIMS, New Delhi

Ms Y Surbala Devi

1. Management of Suicidal and Panic Patients, CNE on Psychiatric Emergencies by College of Nursing, 20.10.16, Sarda University, Greater Noida
2. Psychological First Aid, World Mental Health Day by College of Nursing, 10.10.16, SGT University, Haryana
3. Motivating Self and Others, Workshop on Human Relation by College of Nursing, 24.3.16, AIIMS, New Delhi

Ms Smita Das

1. Cardio Renal Connection, World Kidney Day 2017, 8.3.17, RML Hospital, New Delhi
2. Nursing Handover in ICU, 2nd National Critical Care Nursing, 18–20 July 2016, Max Super Specialty Hospital, New Delhi
3. Men: an easy prey for CVD, Men's Health Nursing World Congress 2016, 26–27 February 2016, New Delhi

Mr Ajesh Kumar TK

1. Team Building, CNE-Human Relation in Health Care by College of Nursing, 21.2.17, AIIMS, New Delhi

Ms Milan Tirwa

1. Injection Waste Disposal, Training Programme on Biomedical Waste Management and Injection Safety for ANM from All the Regional Districts of DGHS, GNCT of Delhi, 27.1.17, DGHS, Karkardooma, New Delhi
2. Skill Update on Vital Signs Measurement, Training Programme on Soft Skills and Vital Signs Measurement for Staff Nurses of GNCTD, 31.1.17, DGHS, Karkardooma, New Delhi

Ms Babita Sahoo

1. Role of Nurse in Endocrinological Emergency, 1st International Nursing Conference on Recent Advances in Nursing Education, Research, Nursing Care and Psychiatry Nursing, 26.11.16, YMCA, New Delhi
2. Neural Tube Defects, Multidisciplinary Health Care Conference, AIIMS 2016, 5.11.16, AIIMS, New Delhi

Dr Philomina Thomas

1. Intertracheal Intubation in Newborns, NRP workshop for interns and staff nurses by College of Nursing, Feb 2017, CRHS Ballabhgarh, Haryana, Ballabhgarh

Ms Seema Sachdeva

1. Oral Care Among Elderly Population, Indian Ageing Congress 2016, 9–11 November 2016, AIIMS, New Delhi
2. Cardiac Tamponade, AIIMS Ultrasound Trauma Life Support, 29.10.16, Trauma Centre, AIIMS, New Delhi
3. Head Trauma, ATCN Instructor Course, 21–22 April 2017, Trauma Centre, AIIMS, New Delhi

Ms Anubha Devagourou

1. Nursing Management of Patients with CKD, World Kidney Day, 8–9 March 2017, RML Hospital, New Delhi

Ms Nemkholam

1. Unbundling the Infection Control Bundles: CLABSI, VAP, SSI, Cardiology Nursing Scientific Programme, World Congress on Clinical Preventive Cardiology and Imaging 2016, 22–25 September 2016, Shantivan Abu Road, Rajasthan.

Ms Monika Sabharwal

1. ICU Communication and Conflicts, 2nd National Critical Care Nursing Conference, 19.7.16, Max Super Specialty Hospital, New Delhi
2. Screening for Rheumatic Heart Disease: A Current Approach, World Congress on Clinical, Preventive Cardiology and Imaging 2016, 24.9.16, Shanti Van, Abu Road, Rajasthan
3. Mental Health and Psychological Rehabilitation, Multidisciplinary Healthcare Conference AIIMS 2016, 4.11.16, AIIMS, New Delhi
4. Developing Self Awareness, Workshop by College of Nursing, Human Relation in Health Care, 21.2.17, AIIMS, New Delhi
5. Core of Caring, Compassion, Confidence and Competence, Workshop by College of Nursing, Advanced Nursing Care, 22.2.17, AIIMS, New Delhi
6. Psychosocial Aspect of Kidney Diseases, World Kidney Day, 8.3.17, RML Hospital, New Delhi

Oral Papers/Posters Presented: 20

1. Varghese AM, Vatsa M, Cecilia MS, Bajpai M, Agarwala S. Effectiveness of video assisted on knowledge and practice of parents of children with clean intermittent catheterization; European Congress of Pediatric Surgery; 18–20 May 2017; Limassol, Cyprus
2. Duggal R, Khakha DC, Ambekar A. Catch them young: A study on knowledge regarding alcohol use and refusal skills in adolescents in selected schools of Delhi; EvidenceLive 2016; 22–24 June 2016. University of Oxford; Oxford, England
3. Thomas J, Khakha D, Balhara YPS. A descriptive study to assess the knowledge and attitude of nurses of AIIMS towards prevention of tobacco use; Evidence Live 2016; 22–24 June 2016; University of Oxford, Oxford, England
4. Khakha CC, Jain P, Singh G, Jaggi A, Khakha DC. Outcome of Growth Hormone Therapy on children with idiopathic growth hormone deficiency: An Indian experience; 9th Biennial Scientific meeting of the Asia Pacific Pediatric Endocrine Society at Tokyo International Forum: 17–20 November 2016; Tokyo, Japan
5. Thomas L, Khakha DC, Balhara YPS. Suffering in Silence: Burden and coping of the caregivers of AIDS patients; 22nd World Congress of Social Psychiatry; 30 November–4 December 2016; New Delhi
6. Sojan D, Khakha DC, Kiran U, Devagourou V. A study to assess the effectiveness of a communication board to improve communication among intubated patients (endotracheal/tracheal) in the intensive care units of a selected hospital; Neuro Trauma 2016; 13–14 August 2016; AIIMS, New Delhi
7. Sahu R, Khakha DC, Gulati S. Effectiveness of structured teaching program on first aid measures for convulsion in improving the knowledge of caregivers; First national conference on New emerging trends and advance treatment in cancer; 23.9.2016; College of Nursing, Bhilai

8. Diwedi D, Khakha DC, Dey AB. A study to assess effectiveness of structured teaching programme for primary care givers on the home care management of elderly with dementia; Indian Ageing Congress; 9.11.2016; AIIMS, New Delhi
9. Kalra N, Khakha DC, Satapathy S, Dey AB. Impact of Jacobson Progressive Muscle Relaxation (JPMR) and Deep Breathing Exercises on Anxiety, Psychological Distress and Quality of Sleep of Hospitalized Older Adults; Indian Ageing Congress; 9.11.2016; AIIMS, New Delhi
10. Rai M, Sharma KK, Seth S, Pathak P. A randomized controlled trial to assess the effectiveness of nurse based heart failure management programme; 14th Annual meeting of International Society for Heart Research, Indian Section; 29.1.2017; CSIR—Institute of Genomics and Integrative Biology (CSIR-IGIB), New Delhi
11. Sharma KK, Vatsa M, Bhardwaj DN. Reproductive health effects of domestic violence against women: A community based study; 61st Annual National Conference of Indian Public Health Association (IPHACON 2017) & First State Conference of IPHA Rajasthan; 24.2.2017; AIIMS, Jodhpur
12. Sharma J, Sharma KK, Hote M. A pilot study to assess the effectiveness of cardiac rehabilitative teaching programme on QOL and physiological parameters among CABG patients admitted in tertiary care hospital; 31st Annual Conference of Cardiological Society of India, Delhi Branch; 26.3.2017, Janpath; New Delhi
13. Surbala Devi Y. Effectiveness of psychoeducation among caregivers on care of chronic mentally ill patients; 22nd World Congress of Social Psychiatry, 2016; 30 December 2016–4 January 2017; AIIMS, New Delhi
14. Surbala Devi Y. Exploring the Mental Health Literacy among the University students: A Qualitative study; 3rd International Conference of Indian Society of Psychiatric Nurses (ISPN), 2017 in Collaboration with NIMHANS; 10–12 February 2017; NIMHANS; Bangalore
15. Sharma A, Singhal S, Kumari R, Thomas P, Murray L, John S, Suman. Establishing Skin to Skin Contact as a Standard procedure in Labour Ward –Poster Presentation; International Forum on Quality and Safety in Health Care 2016; 13–15 April 2016; Swedish Exhibition and Congress Center; Gothenburg, Sweden
16. Sharma A, Singhal S, Kumari R, Thomas P, Murray L, John S, Suman. Establishing Skin to Skin Contact as a Standard Procedure in Labour Ward – Poster Presentation; WHO-SEARO Regional Workshop for Improving Quality of Hospital Care for Maternal and Newborn Health; 11–12 May 2016; New Delhi
17. Thomas P. Some Findings from a Study of Migrant Indian Nurses in Selected Countries – Oral Presentation; International Conference on Migration and Diaspora; 23 March 2017; Convention Centre, IGNOU, New Delhi
18. Sachdeva S. Physical restraints in ICU; International Nursing Conference; 25–26 November 2016; YMCA, New Delhi
19. Sachdeva S. Effectiveness of Endotracheal suction and its outcome—Indian Neuro Nursing Conference; 4–5 March 2017; Indian Habitat Centre, New Delhi
20. Chongloi N. Attitudes of Undergraduate Nursing Students toward Objective Structured Practical Examination: An Exploratory Study; 1st International Nursing Conference 2016 (INC); 25–26 November 2016; YMCA, New Delhi

PUBLICATIONS

Journal: 16

Chapters in Books: 4

Books: 2

PATIENT CARE

The faculty and students participated in outdoor and indoor patient care activities of all clinical departments of the institute. The faculty and students also organized and conducted the following:

1. Organized Exhibition showcasing the milestones, mission, vision and the achievements of the College of Nursing, in the Diamond Jubilee Year Institute Day Exhibition-2016 Commemorating the “Six Decades” of AIIMS, New Delhi.
2. 100 health education sessions in urban community.
3. Organized 15 exhibitions and role plays in urban community. Topics were related to current problems and all the role plays were on important World Health Days.
4. Students conducted nine health surveys in urban community. Dr Kamlesh Kumari Sharma & Ms Kiran Singh Simak coordinated and supervised.
5. Students participation in “Swasthya Chetna and Jan Sampark Abhiyan”; NCD, Screening and awareness camps at Pragati Maidan, Delhi from 14 to 27 November 2016 at 36th India International Trade Fair organized by Ministry of Health and Family Welfare.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Dr Manju Vatsa continued as founder President and governing body member of Indian Association of Neonatal Nurses; General Body, Executive & Nursing Education Committee Member of Indian Nursing Council; Core group member of

INC PhD Consortium; Peer team member for Bishop Benzigar College of Nursing, Kerala, Subharti University, Meerut and KGMU Lucknow for NAAC (National Assessment & Accreditation Council of UGC); Member UGC expert committee for inspection of Amity University, Manesar Tania University, Sri Ganganagar, Rajasthan, and KLE University, Belgaon, Karnataka; Member, selection committees for AIIMS Rishikesh, AIIMS Bhubaneswar, PGIMER Chandigarh, NIMHANS Bangalore and JIPMER Puducherry; Participated in various committees of AIIMS: Prevention of sexual harassment at workplace, task force on women safety & gender sensitization, women grievance cell, Staff Council, Convocation, Institute Day, selection committee, CMET-staff development & technical specification committee, AIIMSONIANS of America award selection committee, anti-ragging squad, Counseling for admission to MSc nursing and for 7 AIIMS for BSc (Hons) Nursing, PB Nursing selection committee, Cadre review meeting for college of nursing, Committee for purchase of AC buses, etc; Judge for Hindi Essay Competition by Hindi section, AIIMS during Hindi Pakhwara celebrations; Examiner for West Bengal University of Health Sciences, Kolkata, CMC Ludhiana, Baba Farid University of Health Sciences and Maharishi Markandeswar University Mullan, Ambala; Nominated executive member of AIIMSONIANS; Expert for ROP task force of MoHFW and NCD TAG expert for non-communicable diseases; Acted as expert for NHSRC for TAG meeting on ASHA and NML book selection committee; Member, Board of studies in nursing for PGIMS, Rohtak, Jamia Hamdard University, New Delhi and LGB Regional Institute of Mental Health, Tezpur, Assam; Chairperson for session on (i) 'Practical Considerations in Geriatric Nursing', Indian Ageing Congress AIIMS, 10 October 2016; (ii) 'Role of Kidneys in Homeostasis', Symposium on Kidney Diseases, World Kidney Day, 8 March 2017, Dept. of Nephrology, AIIMS; (iii) 'Research Presentations', 13th National Conference of Nepal Nurses Association on Nurses: Advocating for Quality Health Care at BPKIHS, Dharan, Nepal, 2–3 March 2017; (iv) Research presentation—13th National Conference of Nepal Nurses Association on Nurses: Advocating for Quality Health Care, 3.1.2017, BPKIHS, Dharan, Nepal; (v) Practical Consideration in Geriatric Nursing, Indian Ageing Congress 2016, Dept. of Geriatrics, 10.1.2016, AIIMS, New Delhi.

Dr G.R. Andrews was editorial board member of two journals: Indian Journal of Oncology Nursing, and Review of Lew's Medical Surgical Nursing; Examiner for the West Bengal University of Health Sciences; Inspector for College of Nursing for Indian Nursing Council at Meerut, UP; Participated in and coordinated student participation in "Swasthya Chetna and Jan Sampark Abhiyan"; NCD, Screening and Awareness Camps at Pragati Maidan, Delhi from 14 to 27 November 2016 at 36th India International Trade Fair Organized by Ministry of Health and Family Welfare; Participated in panel discussion on Ostomy Day held in the month of November 2016.

Dr Deepika C. Khakha was editorial board member of the following journals: (i) Journal of Nursing Science and Practice, (ii) Scholar Report, (iii) Indian Journal of Advanced Nursing, (iv) Journal of Comprehensive Nursing Research and Care and (v) Journal of Community Health Management; was reviewer for the following journals: (i) International Journal of Health and Allied Sciences; (ii) Baba Farid University Nursing Journal; (iii) Advanced Research in Nursing Science; (iv) Annals of Nursing and Practice; (v) Journal of Community Medicine and Public Health Care; (vi) *Current Psychiatry Reviews*; (vii) Journal of Affective Disorders; (viii) Journal of Education Technology in Health Sciences; (ix) Asian Journal of Psychiatry; Three of her oral presentations were awarded the first prize in conferences, i.e. Neurotrauma 2016, New Emerging trends & advance treatment in Cancer and Indian Ageing Conference; Member of the World Health Organization's (WHO) Global Clinical Practice Network (GCPN), an international community of mental health and primary care professionals committed to furthering research and practice in global mental health; Organizing committee of Indian Ageing Congress held from 9 to 11 November 2016 at AIIMS, New Delhi; Chaired 3 sessions at International Conferences: (i) Indian Ageing Congress 2016 on Nursing perspective on active ageing on 11.11.2016; (ii) Free paper session at 22nd World Congress of social psychiatry on 2.12.2016; (iii) Symposium on CBT on Substance use Disorders on 6.3.2017 at International Conference on Cognitive Behavioural Interventions; Judge for Award paper presentation 'Cost Effective use of technology in e-healthcare from 8 to 10 September 2016 held at AIIMS, New Delhi; Examiner/Paper setter for eight universities; On doctoral committee of PhD Nursing at AIIMS, Delhi and PhD Supervisor for Shri Jagdish Prasad Jhabarwal Tiberwla University, Rajasthan.

Dr Kamlesh Kumari Sharma was Member, reviewers committee for 'International journal of advanced research in nursing science and midwifery' initiated by Rufaida College of Nursing, Jamia Hamdard (Hamdard University) New Delhi; Examiner for Eleven universities; Member, Doctoral Committee of College of Nursing, AIIMS, New Delhi; Review of the course curriculum on "Bridge Programme in Community Health for Nurses" developed in collaboration with Ministry of Health and Family Welfare, Govt. of India (MoHFW-GoI) for In-service Registered Nurses and Registered Midwife (RN/RM); Ad-hoc inspector of Indian Nursing Council (INC); Co-opted member of Nursing Education Committee (INC).

Dr Poonam Joshi was Certified AUTLS and BLS and ACLS (AHA) Instructor in 2016–2017; Facilitator for on top training programme in essential newborn care on top. Enbc.org; Participating regularly in QI projects and meetings being held at AIIMS; Attending AIIMS Improvement Coach Program in collaboration with IHI; Surviving Sepsis Campaign Pediatric Guideline Panel Member, 2016-17.

Mr L. Gopichandran was Chairperson for Empowerment in nursing, Annual Neurotrauma Congress – Nursing Symposium, 12.8.16, AIIMS, New Delhi.

Ms Sibi Riju was Chairperson of the nursing session of the conference, Multi Disciplinary Health Care Conference, 12.11.16, AIIMS, New Delhi.

Ms Aditi P Sinha was Judge for Poster Competetion, International Myeloma Workshop for Nurses, 28.2.17, AIIMS, New Delhi.

Ms Babita Sahoo chaired the Scientific session Multidisciplinary Health Care Conference, AIIMS 2016, 5.11.16, JLNA, AIIMS, New Delhi.

Dr Seema Sachdeva completed her PhD (Nursing) degree from IGNOU, New Delhi.

8. Research Section

Dean (Research)

A.K. Mahapatra

Associate Dean (Research)

Pramod Garg

Administrative Officer

Narender Kumar

Accounts Officer

Meenakshi Dabral

Stores Officer

Rakesh Sharma

HIGHLIGHT

Research is a major thrust area for the faculty and scientists of AIIMS and towards that end the Research Section plays the role of a facilitator by providing encouragement for obtaining extramural research projects funded by various national/international agencies such as ICMR, DST, DBT, CSIR, Ministry of Health and Family Welfare, WHO, Wellcome Trust and inter-country scientific collaborations. The section acts as the nodal point for supporting all research activities at AIIMS and by providing efficient administration, developing guidelines, maintaining accounts and stores management of research funds, appointment of research staff, payment and purchase of equipment, etc.

The Research Section has three functional units, viz. Administrative, Accounts and Stores. Additionally, a Technology Transfer and Patent Cell guides the faculty/scientists in issues relating to intellectual property rights (IPR) and filing patents. The day-to-day work is managed by Dean (Research) and Associate Dean (Research), a team of senior officials and assistants looking after administration, finance and purchase. The Research Section appoints research, technical and non-technical support staff in the extramural research projects and the staff thus appointed are called Project Staff. All machinery/equipments/chemicals/contingencies etc. are purchased through this section. The Research Section deals with all research related work as per guidelines framed for this purpose.

The extramural research is managed under the guidance of Dean's Research Committee (DRC) and Research Advisory Council (RAC).

DEAN'S RESEARCH COMMITTEE (DRC)

The committee was constituted on 9.12.2013 to discuss various suggestions received towards improving the functioning of the Research Section to provide directions so as to enhance the overall atmosphere of biomedical research and to promote mission oriented and theme based inter-departmental, inter-institutional and inter-country research collaborations. The DRC provides guidance for better coordination with funding agencies to encourage time bound research activities and lay down policies relating to administrative, financial and procurement matters. The present DRC has the following members:—

- | | |
|---|----------|
| 1. Dean (Research) | Chairman |
| 2. Dean (Academic) | Member |
| 3. Dr Anurag Srivastava
Professor and Head, Department of Surgical Disciplines | Member |
| 4. Dr V.K. Paul
Professor and Head, Department of Paediatrics | Member |
| 5. Dr Lalit Kumar
Professor and Head, Department of Medical Oncology | Member |
| 6. Dr Kameshwar Prasad
Professor and Head, Department of Neurology | Member |
| 7. Dr Arvind Bagga
Professor, Department of Paediatrics | Member |
| 8. Dr J.S. Tyagi
Professor, Department of Biotechnology | Member |
| 9. Dr A.K. Dinda
Professor, Department of Pathology | Member |
| 10. Dr K. Anand
Professor, Centre for Community Medicine | Member |

11. Dr Raju Sharma	Member
Professor, Department of Radiodiagnosis	
12. Dr Nikhil Tandon	Member
Professor, Department of Endocrinology	
13. Dr V.K. Mohan	Member
Professor, Department of Anaesthesiology	
14. Dr Vineet Ahuja	Member
Professor, Department of Gastroenterology	
15. Dr Rohit Bhatia	Member
Additional Professor, Department of Neurology	
16. Dr V. Sreenivas	Member
Additional Professor, Department of Biostatistics	
17. Dr Amit Gupta	Member
Additional Professor, Department of Trauma Surgery,	
Jai Prakash Narain Apex Trauma Centre	
18. Associate Dean (Academic)	Member
19. Dr Poorva Mathur	Member
Additional Professor, Department of Microbiology,	
Jai Prakash Narain Apex Trauma Centre	
20. Dr Gurvinder Kaur	Member
Scientist-IV	
Department of Transplant Immunology and Immunogenetics	
21. Associate Dean (Research)	Member-Secretary

INTRAMURAL RESEARCH GRANTS (Basic and Clinical Sciences)

The intramural research projects sanctioned during the year are listed below:

S. no.	Project code	Principal investigator, department/centre	Project title	Sanctioned amount
1	A-401	Dr Sameer Bakhshi, Professor, Department of Medical Oncology, Dr BRA IRCH	Role of mitochondrial complex encoding genes in pediatric AML	500,000
2	A-402	Dr Raj Kumar Yadav, Professor, Department of Physiology	Efficacy of yoga as an adjunct therapy to modify fatigability and stress in breast cancer patients: A randomized controlled trial	500,000
3	A-403	Dr OP Kharbanda, Professor, Centre for Dental Education and Research	Study of cellular responses secondary to surface modification of medical grade V titanium alloy for orthodontic mini-screws	500,000
4	A-404	Dr Jeevan S. Titiyal, Professor, Dr RP Centre for Ophthalmic Sciences	Study of inflammatory mediators in aqueous humor of patients undergoing femtosecond laser assisted cataract surgery	500,000
5	A-405	Dr Nihar Ranjan Dash, Additional Professor, Department of GI Surgery and Liver Transplantation	Safety and efficacy of HIPEC (Hyperthermic Intra-Peritoneal Chemotherapy) in the management of gall bladder and biliary tract cancers: A pilot study	500,000
6	A-406	Dr Vidushi Kulshrestha, Assistant Professor, Department of Obstetrics and Gynaecology	Role of genital Chlamydia trachomatis infection in women with unexplained infertility	500,000
7	A-407	Dr Chittaranjan Behera, Assistant Professor, Department of Forensic Medicine and Toxicology	Association of inflammatory cytokines with suicidal deaths: A hospital based comparative cross-sectional study	500,000

8	A-408	Dr Nishat Hussain Ahmed, Assistant Professor, Ocular Microbiology, Dr RP Centre for Ophthalmic Sciences	Establishment of multiplex PCR for detection of Herpes simplex viruses type 1 and type 2, cytomegalovirus, varicella-zoster virus and adenovirus in ocular viral infections	500,000
9	A-409	Dr Archana Singh (II), Assistant Professor, Department of Biochemistry	Serum hepcidin levels: Its correlation with ferroportin expression and localization and thus iron export in pathophysiology of pulmonary tuberculosis	455,000
10	A-410	Dr Ashok Sharma, Assistant Professor, Department of Biochemistry	Estimate the serum levels of cancer-testis antigen POTE as a biomarker and correlate with DNA methylation in ovarian cancer patients	500,000
11	A-411	Dr Ritu Gupta, Additional Professor, Department of Laboratory Oncology, Dr BRA IRCH	Development of laboratory algorithm for molecular classification of multiple myeloma in clinical practice	500,000
12	A-412	Dr Kalpana Bansal, Assistant Professor, Centre for Dental Education and Research	Assessment of microflora of severe dental caries in Indian children using anaerobic culture and molecular techniques	465,000
13	A-413	Dr Sanjeev Kumar Gupta, Assistant Professor, Department of Laboratory Oncology, Dr BRA IRCH	Prevalence of intrachromosomal amplification of chromosome 21 (iAMP21) in B-ALL	500,000
14	A-414	Dr Vinod Kumar, Assistant Professor, Department of Onco-Anaesthesia and Palliative Medicine, Dr BRA IRCH	Comparison of two techniques (bolus morphine vs. morphine infusion) of analgesic titration with intravenous morphine in palliative cancer patient—a prospective randomized study	150,000
15	A-415	Dr Siddharth Sarkar, Assistant Professor, Department of Psychiatry and NDDTC	Serum BDNF levels in patients with opioid dependence during the early withdrawal period: A case control study	300,000
16	A-416	Dr Partha Halder, Assistant Professor, Centre for Community Medicine	Study to determine the prevalence and associated risk factors of chronic kidney disease (CKD) among adults in a rural community in north India, using the creatinine-cystatin C method	500,000
17	A-417	Dr Rizwana Quraishi, Assistant Professor, Department of Psychiatry and NDDTC	Feasibility of transporting blood/serum samples onto filter paper to screen for biomarkers of harmful alcohol use among opioid dependent patients on agonist maintenance treatment: A pilot study in community setting	280,000
18	A-418	Dr Prabhat Kumar Chaudhari, Assistant Professor, Centre for Dental Education and Research	A clinical study on the investigation of caries risk in children with Cleft Lip and/or Palate (CL/P) and non-cleft control	400,000
19	A-419	Dr Subhash Chandra Yadav, Assistant Professor, Department of Anatomy	Development of nano-drug delivery system for brimonidine for treatment of open angle glaucoma with lower dose, higher efficacy and prolonged action	450,000
20	A-420	Dr Jagriti Bhatia, Additional Professor, Department of Pharmacology	Evaluation of the nephroprotective effect of Mangiferin in cisplatin induced nephrotoxicity in rats	460,000
21	A-421	Dr Shilpa Sharma, Assistant Professor, Department of Paediatric Surgery	Effect of curcumin and its combination with piperine in experimentally induced liver fibrosis in rats: A comparative analysis	500,000
22	A-422	Dr Sharmistha Dey, Assistant Professor, Department of Biophysics	Study of possibility of the hypoxia inducible protein (Hi95) as potential protein marker for Alzheimer's diseases	500,000

23	A-423	Dr Pooja Gupta, Assistant Professor, Department of Pharmacology	Role of Glucose regulated protein (GRP78) in response to bortezomib-based regimen in multiple myeloma	495,000
24	A-424	Dr Priya Jagia, Additional Professor, Department of Cardiac Radiology	Utilization of autologous bone-marrow derived mononuclear cells for treatment of spinal injury	500,000
25	A-425	Dr Pankaj Jorwal, Assistant Professor, Department of Medicine	Incidence of invasive fungal infections in critical care settings at AIIMS, New Delhi	280,000
26	A-426	Dr Arvind Kumar Kairo, Assistant Professor, Department of ENT	Psoriasis—A key to solve enigma of cholesteatoma pathophysiology	500,000
27	A-427	Dr Krishna K Inampudi, Assistant Professor, Department of Biophysics	Peptidyl tRNA hydrolase (PtH): Structure and functional mechanism of PtH with Non hydrolysable peptidyl tRNA	490,000
28	A-428	Dr Sudhir Chandra Sarangi, Assistant Professor, Department of Pharmacology	A prospective observational study to find out correlation of serum antiepileptic drug (AED) and biomarkers levels with seizure recurrence in persons with epilepsy (PWE) undergoing AED tapering	500,000
29	A-429	Dr Vilas Samrit, Assistant Professor, Centre for Dental Education and Research	Evaluation of the effects of miniplate anchored hybrid fixed functional appliance in post adolescent and young adults with class II malocclusion	367,200
30	A-430	Dr Chhavi Sawhney, Additional Professor, Department of Anaesthesiology, Pain Medicine and Critical Care, JPNA Trauma Centre	Stress response to C-Mac videolaryngoscope versus direct laryngoscopy for tracheal intubation in patients with cervical spine immobilization	400,000
31	A-431	Dr Yashdeep Gupta, Assistant Professor, Department of Endocrinology and Metabolism	To evaluate the distribution of glucose tolerance and risk factors predisposing to abnormal glucose tolerance in spouse of high risk pregnant women (gestational diabetes mellitus/overweight/ obese/pre-existing diabetes): A case-control study	400,000
32	A-432	Dr Subodh Kumar, Additional Professor, Department of Trauma Surgery and Critical Care, JPNA Trauma Centre	Role of Th1, Th2, neutrophils and monocytes in the outcome of patients with chest trauma	480,000
33	A-433	Dr Prabhat Singh Malik, Assistant Professor, Department of Medical Oncology, Dr BRA IRCH	Validation of thymidylate synthetase and folate receptor alpha expression as predictive biomarkers for efficacy of pemetrexed based chemotherapy in advanced non squamous NSCLC	450,000
34	A-434	Dr Jagdish Prasad Meena, Assistant Professor, Department of Paediatrics	Prevalence and clinical outcome of respiratory viral infections among children with cancer and febrile neutropenia	500,000
35	A-435	Dr Madhusudhan KS, Assistant Professor, Department of Radiodiagnosis	Benign bilio-enteric anastomotic strictures: Role of percutaneous interventions	500,000
36	A-436	Dr Vivek Gupta, Assistant Professor, Community Ophthalmology, Dr RP Centre for Ophthalmic Sciences	Development of a culturally appropriate health literacy instrument and assessing its validity in Hindi speaking patients receiving primary eye care services in New Delhi	250,000
37	A-437	Dr Prabhjot Singh, Assistant Professor, Department of Urology	Human papillomavirus status in penile carcinoma in Indian patients: Incidence, type distribution and correlation with clinico-pathological staging	500,000
38	A-438	Dr Suhani, Assistant Professor, Department of Surgical Disciplines	Complete oestrogen blockade in precalcitrant mastalgia and giant fibroadenoma	281,400

39	A-439	Dr Geetika Singh, Assistant Professor, Department of Pathology	Investigation into the utility of fibroblast specific protein 1 (Fsp 1) as a surrogate marker for podocyte effacement in renal biopsies	490,000
40	A-440	Dr Priyanka Naranje, Assistant Professor, Department of Radiodiagnosis	Role of MRI in differentiation of mediastinal and hilar lymph nodes in patients suspected of tuberculosis versus sarcoidosis	148,400
41	A-441	Dr Smita Manchanda, Assistant Professor, Department of Radiodiagnosis	Evaluation of incremental role of MR perfusion in the characterization of neck masses	70,000
42	A-442	Dr Purva Mathur, Additional Professor, Department of Laboratory Medicine, JPNA Trauma Centre	To study the role of novel cell types: Th-9, Th-17 and Th-22 in the final outcome of trauma patients	480,000
43	A-443	Dr Vijay Sharma, Additional Professor, Department of Orthopaedics, JPNA Trauma Centre	To study the role of T-helper lymphocytic response in the final outcome of polytrauma patients with pelvic fractures	445,000
44	A-444	Dr Deepika Mishra, Assistant Professor, Centre for Dental Education and Research	Genetic profiling of non syndromic Pierre Robin sequence patients by whole exome sequencing and microarray	500,000
45	A-445	Dr Sudheer Arava, Assistant Professor, Department of Pathology	Fibrillin 1 gene mutation and the role of TGF beta in aortic aneurysms with cystic medial degeneration	500,000
46	A-446	Dr Prasenjit Das, Assistant Professor, Department of Pathology	Histological diagnosis of intestinal and extra-intestinal celiac disease: Outcome of comparative study by using dual immunohistochemistry and dual immunofluorescence techniques in identifying co-localization of IgA and IgG anti-tissue transglutaminase	498,000
47	A-447	Dr S. Arulselvi, Additional Professor, Department of Laboratory Medicine, JPNA Trauma Centre	Evaluation of microRNAs (miRNA) as a marker for bone healing in osteoporotic traumatic proximal femur fractures: Pilot study	500,000
48	A-448	Dr Nitesh Tewari, Assistant Professor, Centre for Dental Education and Research	Effect of various tooth storage media on viability, proliferative ability and differentiation of human periodontal ligament stem cells—an in vitro preliminary study	400,000
49	A-449	Dr Ramesh Doddamani, Assistant Professor, Department of Neurosurgery	Deciphering the role of histone deacetylases (HDACs) in mesial temporal lobe epilepsy	484,000
50	A-450	Dr Vaishali Suri, Additional Professor, Department of Pathology	Establishment of rapid and economical methods for molecular subgrouping and risk stratification of medulloblastomas for routine clinical practice in developing countries	500,000
51	A-451	Dr Harshal R. Salve, Assistant Professor, Centre for Community Medicine	Association of common mental disorders with diabetes mellitus— community based case-control study in north India	500,000
52	A-452	Dr Hitender Gautam, Assistant Professor, Department of Microbiology	Detection of Mycobacterium tuberculosis and study its association in pancytopenia cases	450,000
53	A-453	Dr Neeraj Nischal, Assistant Professor, Department of Medicine	Change in sleep pattern, perceived stress and coping strategies at the end of first year among first year medical undergraduate students—A prospective study	450,000
54	A-454	Dr Pragyan Acharya, Assistant Professor, Department of Biochemistry	Measuring organ cross talk in acute-on-chronic liver failure (ACLF) through metabolomics—A pilot study	500,000

55	A-455	Dr Rishi Nayyar, Assistant Professor, Department of Urology	Role of circulating tumor cells in patients undergoing transurethral resection of bladder tumor (TURBT) for bladder cancer: Effect on tumor cells dissemination and its correlation with histopathology	500,000
56	A-456	Dr Simran Kaur, Assistant Professor, Department of Physiology	Emotion dependent modulation of interference: A QEEG study	414,000
57	A-457	Dr Kamal, Assistant Professor, Department of Surgical Disciplines	Management of superficial subcutaneous lipomas by mesotherapy	407,000
58	A-458	Dr Shalini Gupta, Assistant Professor, Centre for Dental Education and Research	Association between serological levels and genetic polymorphisms of VEGF A and C with clinicopathological characteristics in oral squamous cell carcinoma and oral submucous fibrosis—A pilot study	499,700
59	A-459	Dr Indu, Assistant Professor, Department of Neuroanaesthesiology and Critical Care	Assessment of accuracy of continuous non-invasive versus invasive method of hemoglobin estimation in patients undergoing pituitary surgery	450,000
60	A-460	Dr Devalina Goswami, Assistant Professor, Department of Anaesthesiology, Pain Medicine and Critical Care	Analgesic efficacy of adjuvants dexamethasone or magnesium sulphate added with ropivacaine over ropivacaine alone as continuous infiltration for total abdominal hysterectomy wounds: A randomized controlled trial	500,000
61	A-461	Dr Bhavuk Garg, Assistant Professor, Department of Orthopaedics	Comparison of cytokines, matrix metalloproteins and bone markers between normal, and spine tuberculosis subjects	499,700
62	A-462	Dr Ankur Goyal, Assistant Professor, Department of Radiodiagnosis	Evaluation of the graft kidney by contrast-ultrasound and elastography in early post-operative period	500,000
63	A-463	Dr Renu Bhatia, Assistant Professor, Department of Physiology	A study of psychoneuro-immunological correlates of fibromyalgia: Effect of transcranial magnetic stimulation	285,000
64	A-464	Dr Biswaroop Chakrabarty, Assistant Professor, Department of Paediatrics	Serum matrix metalloproteinase-9: A potential biomarker for predicting calcification and epilepsy in neurocysticercosis; a longitudinal observational study	230,000
65	A-465	Dr Hitesh Verma, Assistant Professor, Department of ENT	Role of ascular endothelial growth factor in management of recurrent respiratory papillomatosis	470,000
66	A-466	Dr Ravindra Rao, Assistant Professor, Department of Psychiatry, NDDTC	Portrayal of psychoactive substance use in Bollywood movies: A mixed methods study	141,000
67	A-467	Dr Prem Sagar, Assistant Professor, Department of ENT	Clinical and biochemical evaluation for depression in patients with recently diagnosed head and neck cancer	500,000
68	A-468	Dr Harlokesh Narayan Yadav, Assistant Professor, Department of Pharmacology	Ameliorative potential of combination of Tribulus Terrestris, Boerhaavia diffusa and Terminalia chebula in cisplatin and mercury chloride induced nephrotoxicity in Wistar rats	469,000
69	A-469	Dr Rajni Sharma, Assistant Professor, Department of Paediatrics	Bone mineral density in children and adolescents with congenital adrenal hyperplasia receiving physiological steroid replacement.	250,000

70	A-470	Dr Dinu S, Chandran, Assistant Professor, Department of Physiology	To study the relationship between components of renin angiotensin aldosterone system and vascular functions following angiotensin converting enzyme inhibition in type 2 diabetes patients with newly diagnosed hypertension	460,000
71	A-471	Dr Raj Kanwar Yadav, Assistant Professor, Department of Nephrology	Pattern of CYP3A5 and MDR-1 single nucleotide polymorphism and its impact on individualization of tacrolimus based immunosuppression in living renal allograft recipient	405,000
72	A-472	Dr Ashish Bindra, Assistant Professor, Department of Neuroanesthesiology and Critical Care	Assessment of effect of cerebral perfusion pressure augmentation in severe head injuries by monitoring of regional energy metabolism by cerebral microdialysis	492,000
73	A-473	Dr Gunjan Pruthi, Assistant Professor, Centre for Dental Education and Research	Effect of systemic and local antibiotic therapies on clinical and patient reported outcomes in healthy, partially dentate patients undergoing dental implant placement—a preliminary study	398,000
74	A-474	Dr Nasreen Akhtar, Assistant Professor, Department of Physiology	Effect of endocannabinoid at the medial septum on sleep-wakefulness	420,000
75	A-475	Dr Nabanita Halder, Assistant Professor, Ocular Pharmacology and Pharmacy, Dr RP Centre for Ophthalmic Sciences	Preclinical studies on selected anti-angiogenic compounds for their suitability in retinal neovascular conditions	450,000
76	A-476	Dr Manjunath Maruti Pol, Assistant Professor, Department of Surgical Disciplines	Centchroman versus tamoxifen in symptomatic benign breast disease: Randomized clinical trial	53,726
77	A-477	Dr Sudip Sen, Assistant Professor, Department of Biochemistry	Investigating the role of traditional medicines and bioscaffold on chondrogenesis in human bone marrow derived mesenchymal stem cells	500,000
78	A-478	Dr Kunaal Dhingra, Assistant Professor, Centre for Dental Education and Research	In-vitro efficacy and safety evaluation of novel mucoadhesive povidone iodine and silver nanoparticle based local drug delivery system for treatment of periodontitis	500,000
79	A-479	Dr Narendra Kumar Bagri, Assistant Professor, Department of Paediatrics	Predicting response to methotrexate in children with juvenile idiopathic arthritis: Role of biomarkers	400,000
80	A-480	Dr Prashant T. Tayade, Assistant Professor, Department of Physiology	Study of EEG microstates and resting state networks in relaxed wakefulness	495,000
81	A-481	Dr Reeta Mahey, Assistant Professor, Department of Obstetrics and Gynaecology	To evaluate the ROS levels in semen samples and effect of FERTISURE-M on ROS levels and IVF outcome in infertile men undergoing in vitro fertilization—A randomized double blind placebo controlled study	500,000
82	A-482	Dr Deepti Vibha, Assistant Professor, Department of Neurology, Neurosciences Centre	Identification of genetic causal and risk alleles in Amyotrophic lateral sclerosis and ALS-frontotemporal dementia	400,000
83	A-483	Dr Rohan Malik, Assistant Professor, Department of Paediatrics	Evaluation of thrombophilic factors and defects in fibrinolysis in pediatric hepatic and portal vein thrombosis	500,000
84	A-484	Dr Rajesh Kumari, Assistant Professor, Department of Obstetrics and Gynaecology	Prevalence of cytological lesions and HPV type in vulval lesion on visual inspection and colposcopy	444,000

85	A-485	Dr Vijay Hadda, Assistant Professor, Department of Pulmonary Medicine and Sleep Disorders	Characterization of leukocytes and prediction of ICU acquired neuromuscular weakness (ICU-AW) among patients with sepsis	270,000
86	A-486	Dr Savita Yadav, Professor, Department of Biophysics	Validation of salivary proteomic markers for early detection of cervical cancer	470,000
87	A-487	Dr Anita Chopra, Assistant Professor, Department of Laboratory Oncology, Dr BRA IRCH	Molecular determinants of prednisolone sensitivity in acute lymphoblastic leukemia	400,000
88	A-488	Dr Madhuri Gupta, Scientist, Department of Pharmacology	Exposure of residuals of DDT, BHC and dieldrin pesticides: Risk factors for Alzheimer's disease in Indian population	250,000
89	A-489	Dr Alpana Sharma, Professor, Department of Biochemistry	Study of microRNAs as a diagnostic approach in multiple myeloma	500,000
90	A-490	Dr Shuchita Singh, Assistant Professor, Department of ENT	Salivary microRNA: Their utility as diagnostic biomarker during premalignant molecular changes in tobacco users vs. tobacco non-users	490,000
91	A-491	Dr Adarsh W Barwad, Assistant Professor, Department of Pathology	Analysis of NPHS1, NPHS2, WT1, ACTN4 and INF2 in non syndromic focal segmental glomerulosclerosis cases	500,000
92	A-492	Dr Kalpana Luthra, Professor, Department of Biochemistry	Characterization of ADCC activity in the plasma of acute HIV-1 infected paediatric patients	350,000
93	A-493	Dr Vijay L. Kumar, Professor, Department of Pharmacology	Studies on the efficacy of latex of Calotropis procera in experimental models of colitis and colorectal cancer	424,000
94	A-494	Dr Rima Dada, Professor, Department of Anatomy	Effect of yoga on inflammatory biomarkers of rheumatoid arthritis	500,000
95	A-495	Dr Jatinder Katyal, Professor, Department of Pharmacology	To determine the relationship between seizures and cardiac remodelling in lithium pilocarpine model in rats—Effect of AT1 receptor blocker losartan and selective beta-1 receptor antagonist atenolol	375,000
96	A-496	Dr Ravinder Goswami, Professor, Department of Endocrinology and Metabolism	Vitamin D status of subjects normally working outdoor and its seasonal variation and its functional significance	300,000
97	A-497	Dr (Mrs) Moganty R Rajeswari, Professor, Department of Biochemistry	Effect of small molecules on the protein expression in PBMC in FRDA patients to identify target proteins for therapeutic evaluation	450,000
98	A-498	Dr Sameer Rastogi, Assistant Professor, Department of Medical Oncology, Dr BRA IRCH	A prospective study to assess the C-kit mutation prevalence in Indian patients with advanced melanoma	438,840
99	A-499	Dr T.S. Roy, Professor, Department of Anatomy	Age related morphological and neurochemical changes in the human inferior colliculus	450,000
100	A-500	Dr Kunzang Chosdol, Professor, Department of Biochemistry	Effect of FAT1 gene modulation on EMT and stemness in glioma cells	494,000
101	A-501	Dr A Shariff, Professor, Department of Anatomy	To study the effects of chronic fluoride exposure on enterochromaffin cells of the entero-endocrine system—a pilot study	500,000

Total grant sanctioned for Intramural Research Projects for 2016–17 was Rs 4,34,63,966 (Rupees Four crores, thirty-four lakhs, sixty-three thousand, nine hundred and sixty-six only).

A total number of 226 ongoing Intramural projects.

EXTRAMURAL RESEARCH PROJECTS

During 2016-17, the Research Section received extramural research support to the tune of Rs 108.82 crores from various national and international agencies.

S. no.	Name of funding agencies	Number of projects	Grant (Rs in lakhs)
1.	ICMR	104	1919.26
2.	DBT	110	2345.47
3.	DST	126	1006.91
4.	Others	214	3796.72
5.	International	71	1814.20
Total		625	10882.56

A total of 1122 project staff are working in various projects.

RECOGNITION OF RESEARCH ACHIEVEMENT AT AIIMS

The Research Section has undertaken a major exercise to recognize quality research outputs of its faculty/scientists by awarding 'AIIMS Excellence Awards'. During the year 2016-17, the following awards were given:

First Prize (A certificate and Rs 50,000)

1. Dr Nikhil Tandon, Professor and Head, Department of Endocrinology (Clinical Category)

Second Prize (A certificate and Rs 30,000 each)

1. Dr Bhavna Chawla, Professor, Department of Ophthalmology (Clinical Category)
2. Dr Vineet Ahuja, Professor, Department of Gastroenterology (Clinical Category)
3. Dr A.K. Dinda, Professor, Department of Pathology (Basic Category)
4. Dr Sumit Rathore, Assistant Professor, Department of Biotechnology (Basic Category)

Third Prize (A certificate and Rs 20,000 each)

1. Dr Sanjay Agarwal, Professor and Head, Department of Nephrology (Clinical Category)
2. Dr Sameer Bakhshi, Professor, Department of Medical Oncology (Clinical Category)
3. Dr Sanjeev Kumar Gupta, Associate Professor, Department of Laboratory Oncology (Clinical Category)
4. Dr Kalpana Luthra, Professor, Department of Biochemistry (Basic Category)
5. Dr Kunzang Chosdol, Professor, Department of Biochemistry (Basic Category)
6. Dr Ritu Gupta, Professor, Department of Lab Oncology, Dr BRA IRCH (Basic Category)

Certificate of Commendation (A certificate and Rs 10,000 each)

1. Dr C.S. Bal, Professor and Head, Deptt. of Nuclear Medicine (Clinical Category)
2. Dr Sarman Singh, Professor, Deptt. of Lab Medicine (Basic Category)
3. Dr Sheffali Gulati, Professor, Deptt. of Pediatrics (Clinical Category)
4. Dr G. Sethuraman, Professor, Department of Dermatology (Clinical Category)
5. Dr Subodh Kumar, Professor, Trauma Surgery & Critical Care, JPNATC (Clinical Category)
6. Dr Praveen Vashist, Professor, Deptt. of Community Ophthalmology, Dr RP Centre (Clinical Category)
7. Dr Ratna Sharma, Professor, Deptt. of Physiology (Basic Category)
8. Dr Pratik Kumar, Professor, Medical Physics Unit, Dr BRAIRCH (Basic Category)
9. Dr T. Velpandian, Professor, Dept of Ocular Pharmacology, Dr R.P. Centre (Basic Category)
10. Dr Sharmistha Dey, Associate Professor, Deptt. of Biophysics (Basic Category)
11. Dr Sumit Malhotra, Assoc. Professor, Centre for Community Medicine (Clinical Category)
12. Dr Prasenjit Das, Associate Professor, Deptt. of Pathology (Basic Category)
13. Dr Hemang K Bhattacharjee, Assistant Professor, Deptt. of Surgery (Clinical Category)
14. Dr Sudip Sen, Assistant Professor, Deptt. of Biochemistry (Basic Category)

OTHER ACTIVITIES

The following activities are being organized for the benefit of the faculty/scientists.

1. Research Methodology Courses during 2016–17:
 - a. 12th to 16th December 2016 (5 days)
 - b. 27th February to 3rd March 2017 (5 days)
2. Courses on Research Methodology for Postgraduate Students during 2016–17:
 - a. 25th to 29th July 2016 (July 2016 Batch)
 - b. 26th to 30th September 2016 (July 2016 Batch)
 - c. 14th to 18th March 2017 (January 2017 Batch)

AIIMS Endowment Fund

Infosys Chair

Dr Dean Brenner, Professor of Oncology from University of Michigan, USA was awarded as an Infosys Chair in Oncology under the AIIMS Endowment Fund.

Projects given under AIIMS Endowment Fund

Two research projects were sanctioned for funding through AIIMS Endowment Fund:

1. Dr Ritu Gupta, Additional Professor, Department of Laboratory Oncology, Dr BRA IRCH
2. Dr Anita Chopra, Assistant Professor, Department of Laboratory Oncology, Dr BRA IRCH

Travel Scholarship under AIIMS Endowment Fund

Twenty students (PhD students, Junior Residents/Senior Residents) were awarded travel scholarship during the year to attend international conferences to present their scientific work.

Patent Cell

AIIMS so far filed 96 patents in the past decade and among them four have been successfully commercialized. AIIMS Innovation Facilitation Division (AIFD) was created to enable Business Incubator facilities to AIIMS Faculty members/Scientists. A new IPR policy has also been created and it is currently in the official process of its implementation.

9.1. Anaesthesiology, Pain Medicine and Critical Care

Professor and Head
Mahesh Kumar Arora

Professors

Ravinder Kumar Batra
Maya Dehran
Ganga Prasad
Vanlal Darlong
Babita Gupta (JPNATC)
Chhavi Shawney (JPNATC)

Rajeshwari Subramaniam
Dilip R. Shende (RPC)
Virender Kumar Mohan
Renu Sinha (RPC)
Ravindra Kumar Pandey

Anjan Trikha
Lokesh Kashyap
Vimi Rewari
Jyotsana Punj
Anjolie Chhabra
Rashmi Ramachandran

Additional Professor
Amar Pal Bhalla

Associate Professors

Dalim Kumar Baidya (CDER)

Devalina Goswami (CDER)

Assistant Professors

Preet Mohinder Singh
Rahul Anand
Ajeet Kumar
Anuradha Borle
Akhil Kant Singh
Kulbhushan Saini

Puneet Khanna
Praveen Talawar
Shailendra Kumar (IVF)
Souvik Maitra
Kanil Ranjith (RPC)
Nishant Patel

Bikash Ranjan Ray
Debesh Bhoi
Manpreet Kaur
Thilaka Muthiah
Rakesh Kumar
Arshad Ayub (RPC)

HIGHLIGHTS

Five funded projects were completed and five funded projects were continued/initiated during the above said period. During the year Anaesthesiology, Pain Medicine and Critical Care Department collaborated on 10 interdepartmental research projects and completed 3 such projects. The department organized the 55th Annual Indian Society of Anaesthesiologists (ISA) Conference (Delhi Branch) in April 2016 and also the monthly meeting of Delhi chapter of ISA in March 2017.

The department organized conferences/workshops/CME involving internationally well-known speakers/academicians. Many of the departmental faculties received recognition/awards at national level from various government agencies for their contribution towards Anaesthesia Specialty.

Initiative was taken to educate and technically equip the paramedical staff. Resulting from this the department continued to conduct regular OT Technicians' classes as a special initiative.

The faculty members delivered around 100 talks on challenging topics at various national and international platforms. The members of the department published around 100 papers in well reputed national and international journals. In addition, many faculty members were elected/reappointed into the editorial boards of various reputed national/international journals. The present year marked the path of progress in all fields of Anaesthesia keeping in mind high standards targeted by our institute.

EDUCATION

The Department of Anaesthesiology, Pain Medicine and Critical Care, during this year pursued actively in teaching of PG students, MBBS students and Nursing both MSc and BSc students and Operating Theatre Technicians.

In addition, the department focused on—teaching inside the operating room that also includes imparting practical skills to MBBS students, Interns, PG students, Operating Room Technicians and Nursing students (both MSc and BSc).

CMEs/Workshops/Symposia/National and International Conferences

1. 50th Golden Jubilee celebration, ophthalmic blocks & resuscitation workshop/CME, 28 January 2017
2. Workshop on Perioperative Sonography for Anaesthesiologists, 10 July 2016
3. Preconference Workshop of World Trauma Conference 2016, Cadaver based ultrasound guided RA Workshop, 16 August 2016
4. 55 Annual Indian Society of Anaesthesiologists (ISA) Conference (Delhi Branch), April 2016

5. CME and Workshop for ORAs and OT Technicians—Basic life support (Organizing Sec: Prof. Maya Dehran), May 2016
6. CME and Workshop for ORAs and OT Technicians—Airway Management (Organizing Sec: Prof. Maya Dehran), November 2016
7. CME and Workshop for ORAs and OT Technicians—Regional Anaesthesia (Organizing Sec: Prof. Maya Dehran), March 2017

Lectures delivered

Mahesh Kumar Arora: 1

Anjan Trikha: 12

Dilip R. Shende: 3

Vanlal Darlong: 3

Babita Gupta: 7

Chavi Sawhney: 5

Devalina Goswami: 5

Bikash Ranjan Ray: 19

Debesh Bhoi: 8

Akhil Kant Singh: 1

Ravinder Kumar Batra: 3

Lokesh Kashyap: 4

Virender Mohan: 11

Renu Sinha: 11

Ravindra Kumar Pandey: 9

Rashmi Ramachandran: 4

Preet Mohinder Singh: 4

Rahul Kumar Anand: 6

Ajeet Kumar: 8

Kulbhushan Saini: 1

Rajeshwari Subramaniam: 8

Maya Dehran: 1

Vimi Rewari: 7

Jyotsna Punj: 9

Anjolie Chhabra: 10

Dalim Kumar Baidya: 7

Puneet Khanna: 10

Praveen Talawar: 6

Shailendra Kumar: 8

Manpreet Rajpal: 4

Mahesh Kumar Arora: 1

1. Pyloric stenosis with deranged ABG, 9th National Conference of Paediatric Anaesthesia, 17–19 February 2017, King George Medical University, Lucknow, Uttar Pradesh

Ravinder Kumar Batra: 3

1. Anaesthesia concerns in patient with End Stage Renal Disease EORCAPS - Department of Anaesthesiology & Critical Care, UCMS & GTB Hospital, 29 August 2016, New Delhi
2. Evidence based Monitoring of Neuromuscular Blockade, 64th Annual National Conference of Indian Society of Anaesthesiologists, 26 November 2016, Ludhiana, Punjab
3. Tracheostomy—Interactive Case, PG Assembly 2017 at GB Pant Hospital, New Delhi, 23 February 2017, GB Pant Institute of PMER and MAMC and LN Hospital, New Delhi

Rajeshwari Subramaniam: 8

1. Panel Moderator: Evaluation of patient with Cardiac Disease for Non-cardiac Surgery, 55th Annual Delhi ISACON, 4 April 2016, AIIMS, New Delhi
2. Does Anaesthetic Technique affect outcome? ISA Telengana, 9 July 2016, Telengana Medical College, Telengana
3. Non-obstetric Surgery in Pregnancy: Anaesthetic Considerations, 'Endofert-2016', 9 August 2016, AIIMS, New Delhi
4. Airway Assessment in the Morbidly Obese, Bariatric CME Series 8: Airway Challenges, MAX Institute of Minimal Access and Bariatric Surgery, MAX Hospital, Saket, New Delhi
5. Valvular heart disease in pregnancy: Dos and Don'ts, AOA-MASCON-2016, 18–20 October 2016, The Renaissance, Powai, Mumbai
6. Management of adrenal mass lesions suspected as pheochromocytoma, Annual ISACON 2016, 26 November 2016, Punjab Agricultural University, Ludhiana
7. Flow Anaesthesia in children: How low can you go? MAX Pediatric Anaesthesia Update, 4 February 2017, MAX Noida, Noida, UP
8. Endocrine emergencies under anesthesia: Diagnosis and Management, RACE 2017, 10 February 2017, SRMC, Chennai

Anjan Trikha: 12

1. Effect of obstetric anaesthesia/analgesia on fetus, CME on Obstetric Anaesthesia, 30 April 2016, Government Medical College, Amritsar
2. Myths and controversies in obstetric anaesthesia, CME on Obstetric Anaesthesia, 30 April 2016, Government Medical College, Amritsar
3. Pain management in total knee replacement, "My First TKR" Basics and Saw Bone Workshop, 24 July 2016, Sports Injury Centre, VMMC and Safdarjung Hospital, New Delhi

4. Patients with Inter costal chest drain with and without broncho pleural fistula, Examination Oriented Refresher Course for Anaesthesia 2016, 27 August 2016, University College of Medical Sciences and Guru Teg Bahadur Hospital, Delhi
5. One lung anaesthesia, Examination Oriented Refresher Course for Anaesthesia 2016, 27 August 2016, University College of Medical Sciences and Guru Teg Bahadur Hospital, Delhi
6. 70 years old patient with Carcinoma Larynx, Tracheostomy, Laryngectomy Laser surgery, Examination Oriented Refresher Course for Anaesthesia 2016, 28 August 2016, University College of Medical Sciences and Guru Teg Bahadur Hospital, Delhi
7. Anaesthesia for robotic surgery, Examination Oriented Refresher Course for Anaesthesia 2016, 28 August 2016, University College of Medical Sciences and Guru Teg Bahadur Hospital, Delhi
8. Management of spinal hypotension in LSCS: Role of old and new vasopressors, 9th National Conference of the Association of Obstetric Anaesthesiologists, India AOA MASCON 2016, 15 October 2016, The Renaissance, Powai, Mumbai
9. Making Obstetric Anaesthesia practice litigation proof, 9th National Conference of the Association of Obstetric Anaesthesiologists, India, 16 October 2016, The Renaissance, Powai, Mumbai
10. Difficult airway: Be prepared for the worst, 9th National Conference of the Association of Obstetric Anaesthesiologists, India, 14 October 2016, The Renaissance, Powai, Mumbai
11. ARDS—Current concepts, Ramachandra Anaesthesia Continuing Education—RACE, 10 February 2017, Sri Ramachandra University, Chennai
12. Pregnancy with MS, Ramachandra Anaesthesia Continuing Education—RACE, 10 February 2017, Sri Ramachandra University, Chennai

Lokesh Kashyap: 4

1. Robotic thymectomy: Anaesthetic implications, 55th Annual ISACON Delhi 2016, 10 April 2016, AIIMS, Delhi
2. Challenges in Thoracic Anaesthesia, Symposium in Thoracic Surgery 2017, 21–22 January 2017, AIIMS, Delhi
3. Anaesthesia for elderly with fracture neck of Femur, Annual ISACON Uttarakhand 2016, 25 September 2016, Haldwani, Uttarakhand
4. Thoracic Anaesthesia: Univent tube placement, 55th Annual ISACON Delhi 2016, Workshop, 9 April 2016, AIIMS, Delhi

Maya Dehran: 1

1. Demonstration on CPR, Public Education Forum, October 2016, Bhatti Centre (Radha Swami Satsang), Delhi

Dilip R. Shende: 3

1. ETT vs LMA, Pearls and Pitfalls in an eye surgery, 4th World Congress of Ophthalmic, Anaesthesiologist (WCOA-2016), 3–4 September 2016, Chennai
2. USG guided lower extremity blocks, ICPM-2016, 5th International Congress on Pain Medicine, 21–25 October 2016, Dept. of Anaesthesiology SGPGI Lucknow, Port Blair, Andamans
3. Sedation during Ophthalmic Surgery: Role of Anaesthesiologist, 64-ISACON 2016, 25–29 November 2016, Ludhiana

Virender Mohan: 11

1. Ultrasound thoracic paravertebral block and pectoral blocks, First Ultrasound Guided Regional Anaesthesia Workshop, 26 June 2016, Yashoda Hospital, Secundrabad
2. USG truncal blocks, Symposium cum Workshop on Role of Ultrasound in Regional Anaesthesia and Pain Management, 6 August 2016, JLN Medical College, Aligarh Muslim University, Aligarh
3. Treatment considerations with evidence, newer treatment options for Ankylosing spondylitis with SI joint involvement, International Conference on Recent Advances in Pain (ICRA-PAIN 2016), 26–28 August 2016, Kolkata
4. Ultrasound guided truncal blocks, Indian Society for Anaesthesiologist-Jharkhand and Bihar Conference 2016, 23–24 September 2016, Govt. Medical College, Muzzafarpur
5. Basics of Ultrasound and Knobology, BHU Interventional Pain Management and Regional Anaesthesia Conference (BIPRACON-2016), 2–3 October 2016, Banaras Hindu University, Varanasi
6. Trigeminal Neuralgia, *Percutaneous Microballoon Compression*, BHU Interventional Pain Management and Regional Anaesthesia Conference (BIPRACON-2016), 2–3 October 2016, Banaras Hindu University, Varanasi

7. Trigeminal Neuralgia, Percutaneous Transforamen Ovale Interventions, Percutaneous Microballoon Compression, Indian Society for Anaesthesiologist, Jharkhand and Bihar Conference 2016, 23–24 September 2016, Govt. Medical College, Muzzafarpur
8. Evaluation of Trigeminal Neuralgia, 5th International Conference on Pain Management 2016 (ICPM 2016), 22–24 October 2016, Port Blair, Andamans
9. Evaluation of shoulder pain, 5th International Conference of Physical Therapy, 10–11 December 2016, AIIMS, New Delhi
10. Basics of Ultrasound and Knobology, CME cum Hands on Workshop on Ultrasound Guided Regional Anaesthesia Blocks, 22 January 2017, SDM Medical Institute cum Research Centre, Jaipur
11. Bedside evaluation of neuropathic pain, Indian Society for Study of Pain Conference 2017 (ISSPCON-2017), 3–5 February 2017, Birla Auditorium, Jaipur

Vimi Rewari: 7

1. Principles and techniques of fibreoptic intubation, 55th Annual ISACON Delhi 2016, 9 April 2016, AIIMS, Delhi
2. TAP block and RSB block, Sixth Cadaveric Course on Perioperative Sonography for Anaesthesiologists, 6 July 2016, Cadaver Training & Research Facility, JPNA Trauma Center, AIIMS, Delhi
3. Oxygen Therapy, Mechanical Ventilation Workshop in the World Trauma Congress 2016, 16 August 2016, JPN Apex Trauma Centre, AIIMS, Delhi
4. Pregnant patient for non-obstetric surgery, general principles, implications for surgery under regional anaesthesia and general anaesthesia, Examination Oriented Refresher Course for Anaesthesia Post Graduate Students, 20 August 2016, UCMS and GTB Hospital, Delhi
5. Anaesthesia for acyanotic congenital heart disease, Examination Oriented Refresher Course for Anaesthesia Post Graduate Students, 3 September 2016, UCMS and GTB Hospital, Delhi
6. Amniotic fluid embolism: It's time to ACT NOW, 9th National Conference of Association of Obstetric Anaesthesiologists, 16 October 2016, Renaissance Mumbai Convention Centre, Mumbai
7. Preoperative evaluation of patient with chronic heart failure undergoing non cardiac surgery: Risk Reduction & optimisation measures, Faculty Panel Moderator, 64th Annual National ISACON, 27 November 2016, Punjab Agricultural University, Ludhiana

Vanlal Darlong: 3

1. Peripheral nerve block of upper limb with ultrasound, CME cum Workshop on Ultrasound Guided Nerve Block, 3–4 December 2016, Agartala Medical College, Agartala
2. Supraglottic airway devices in airway management, Airway Management – Basic and Beyond, 17–19 March 2017, Thimpu, Bhutan
3. Sonoanatomy of upper limb application of ultrasound in regional anaesthesia, 25–27 March 2017, RIMS, Imphal

Renu Sinha: 12

1. Morbidities in syndromic children and their implications, AIIMS ISA Delhi 2016, 10 April 2016, AIIMS, Delhi
2. Intravenous cannulation, Workshop on Perioperative Sonography for Anaesthesiologists, 10 July 2016, JPTC, Delhi
3. Sonoanatomy of brachial plexus block and sonoanatomy of individual nerves, Symposium Cum Workshop, “Role of Ultrasound in Regional Anaesthesia and Pain Management” on 6 August 2016, JN Medical College, AMU Aligarh
4. Syndromic patients for ophthalmic surgery: What should we do World Congress of Ophthalmic Anaesthesia (WCOA) 2016, 3 September 2016, Chennai
5. How I do it: TAP block, 5th International Conference on Pain Management, 21–25 October 2016, Port Blair, Andaman
6. Anaesthetic challenges for ophthalmic surgery in syndromic babies, 64th ISACON 2016, 29 November 2016, Panjab University, Ludhiana, Punjab
7. Management of patients on antiplatelet & anticoagulant for ophthalmic surgery, 50th Golden Jubilee Celebration, Ophthalmic Blocks & Resuscitation Workshop/CME, 28 January 2017, RPC, Delhi
8. Intraoperative common adverse events under eye blocks & their management, 50th Golden Jubilee Celebration, Ophthalmic Blocks & Resuscitation Workshop/CME, 28 January 2017, RPC, Delhi
9. Evaluation of minimum alveolar concentration (MAC) of sevoflurane & bispectral index (BIS) for maintenance of central eye position during short ophthalmic procedure in spontaneous breathing children under general anaesthesia & correlation of MAC of sevoflurane with BIS research presentation, 21 March 2017, AIIMS, New Delhi

10. Ultrasound guided IJV cannulation, 1st Workshop on “Application of Ultrasound on Regional Anaesthesia”, 25 March 2017, RIMS, Imphal, Manipur
11. Ultrasound guided sciatic nerve block, 1st Workshop on “Application of Ultrasound on Regional Anaesthesia”, 25 March 2017, RIMS, Imphal, Manipur

Jyotsna Punj: 9

1. Basics of airway management, Airway management: From basics to beyond, 17–19 March 2017, Jigme Dorjee Referral Centre and Hospital, Thimpu, Bhutan
2. Learning ultrasound management of airway, Airway management: From basics to beyond, 17–19 March 2017, Jigme Dorjee Referral Centre and Hospital, Thimpu, Bhutan
3. Needling & probing, ultrasound blocks: Need of the hour, 25–27 March 2017, RHIMS, Imphal, Manipur
4. Ultrasound truncal blocks, Ultrasound blocks: Need of the hour, 25–27 March 2017, RHIMS, Imphal, Manipur
5. Pediatric CPR, IAPA 2017, 18–19 February 2017, KGMC, Lucknow
6. After endotracheal intubation change over from high to low flows is most haemodynamically stable when guided by State Entropy® when compared to predetermined high fresh gas flow for 10 minutes or ratio of end-expired agent concentration to inspired agent concentration of 0.8: A randomised controlled trial, Annual Conference of Anaesthesiologists of Morocco, 21–26 January 2017, Palmeria, Marrakech, Morocco.
7. Introduction to ultrasound blocks, ultrasound guided blocks, 3–4 November 2016, Agartala, Tripura
8. Truncal ultrasound blocks, ultrasound guided blocks, 3–4 November 2016, Agartala, Tripura
9. Ultrasound guided stellate ganglion block: our experience, ICPM, 21–25 October 2016, Port Blair, Andamans

Babita Gupta: 7

1. Ultrasound guided infraclavicular block, perioperative sonography, 9 July 2016, JPNATC, AIIMS, New Delhi
2. Utility of ultrasound in anaesthesia, Post Graduate Assembly, 27 August 2016, GTB Hospital, New Delhi
3. Ultrasound in trauma (FAST), 5th Interventional Perioperative Sonography Workshop, 25 February 2016, Max Hospital, New Delhi
4. Course Director: Basic Mechanical Ventilation Workshop, World Trauma Congress 2016, 17 August 2016, Vigyan Bhawan, New Delhi
5. Ultrasound guided regional anesthesia, Indian Society of Anaesthesiologists, 25 November 2016, DMC, Ludhiana
6. Fluid management in abdominal surgery, ISACON 2016, 27 November 2016, DMC, Ludhiana
7. Damage control resuscitation, 14th Annual Conference of Society of Critical Care Medicine, 10 September 2016, India Habitat Centre, New Delhi

Ravindra Kumar Pandey: 9

1. Is perioperative administration of 5% dextrose effective in reducing the incidence of PONV in laparoscopic cholecystectomy? A randomised trial, 15th Annual Pain Medicine Meeting by American Society of Regional Anaesthesia & Pain Medicine, 17–19 November 2016, San Diego
2. How I do it? Ultrasound guided Lower Limb nerve blocks (Femoral, Obturator, Adductor Canal & Popliteal Sciatic): A safe approach, 5th International Conference on Pain Management (ICPM), 21–25 October 2016, Port Blair, Andaman
3. Tricks and techniques: Fiberoptic Bronchoscopy and FOB guided Intubation, 33rd Annual Academic Congress of the College of Anaesthesiologists and Intensivists of Sri Lanka and 12th SAARC AA Congress, 23 February 2017, Asiri Surgical Hospital, Colombo, Sri Lanka
4. FOB guided intubation and videolaryngoscopy, “Basics & Beyond”, CME & Workshop on Advanced Airway Management in Anaesthesia, 17–19 March 2017, Department of Anaesthesia, JDWNRH, Thimpu, Bhutan
5. Ultrasound guided nerve blocks for lower limb surgery, CME cum Workshop on Ultrasound Guided Nerve Blocks, 3–4 December 2016, Department of Anaesthesia, Agartala Medical College & GBP Hospital, Agartala, Tripura
6. Ultrasound guided Blocks for Lower Limb Surgery, 1st CME cum Workshop on application of Ultrasound on Regional Anaesthesia, 25–27 March 2017, Department of Anaesthesia, Regional Institute of Medical Sciences, Imphal, Manipur
7. Cardiac Disorders in Obstetric patients & Management, CME on High Risk Parturient & Obstetric Anaesthesia, 25–26 June 2016, Guwahati, Assam
8. Obstetric Hemorrhage (Panel discussion), CME on High Risk Parturient & Obstetric Anaesthesia, 25–26 June 2016, Guwahati, Assam

9. Ultrasound guided Brachial Plexus Block, Infraclavicular and Axillary Approach, Preconference Workshop of World Trauma Conference 2016, Cadaver Based Ultrasound Guided RA Workshop, 16 August 2016, JPN Apex Trauma centre, AIIMS, New Delhi

Anjolie Chhabra: 10

1. USG Regional Blocks for Neck, Shoulder, Breast Surgery, 55th Annual Conference of ISA Delhi branch, 9 April 2016, AIIMS, New Delhi
2. Paravertebral vs Thoracic Epidural for Thoracic Surgery (pro-con), 55th Annual Conference of ISA Delhi branch, 10 April 2016, AIIMS, New Delhi
3. Shall I allow awake beach chair position for Shoulder Surgery? Symposium on Regional Anaesthesia - Achieving excellence through Regional Anaesthesia, 20–21 August 2016, Sancheti Hospital, Pune
4. Complications of Central Neuraxial Blocks. Symposium on Regional Anaesthesia - Achieving excellence through Regional Anaesthesia, 20–21 August 2016, Sancheti Hospital, Pune
5. Outcomes of Peripheral Nerve Blocks, Symposium on Regional Anaesthesia - Achieving excellence through Regional Anaesthesia, 20–21 August 2016, Sancheti Hospital, Pune
6. X-ray and case related viva voce - Foreign Body Trachea/Bronchus, Foreign Body Oesophagus EORCAPS 2016, 1 September 2016, GTB Hospital, Delhi NCR
7. Anaesthesia for Scoliosis Surgery EORCAPS 2016, 1 September 2016, GTB Hospital, Delhi NCR
8. Eye Blocks in children - what is the evidence? 4th World Congress of Ophthalmic Anaesthesia (WCOA), 3–4 September 2016, Shankar Netralaya, Chennai
9. Complications after Central Neuraxial Blocks ABISACON 2017 (Assam State Anaesthesia Conference) hosted by ISA Silchar, 21–22 January 2017, Silchar Medical College, Silchar, Assam
10. Newer Local Anaesthetics - We are succumbing to marketing pressure? (consession) RAPACON 2017, 4 February 2017, SSPH & PGTI, Noida, Delhi NCR

Chavi Sawhney: 5

1. Donor screening and management In House training of Nurses on Deceased Organs and Tissue Donation; Once a month ORBO, AIIMS, New Delhi
2. Conducted Workshop on Perioperative Sonography for Anaesthesiologists, World Trauma Congress, 18 August 2016, AIIMS, New Delhi
3. Shock, Thoracic Trauma, Advance Trauma Life Support Course, 20–22 October 2016, AIIMS, New Delhi
4. Routine Haematological Investigations as Predictors of Mortality in Geriatric Hip Trauma World Trauma Congress, 19 August 2016, Vigyan Bhawan, New Delhi
5. Role of Aggressive, Systematic and Focused Team Approach towards Organ Retrieval (poster) World Trauma Congress, 19 August 2016, Vigyan Bhawan, New Delhi

Rashmi Ramachandran: 4

1. Anaesthesia for ophthalmic procedures, CME in Paediatric Anaesthesia - The Newborn and the Neonates, 4 March 2017, Kalawati Saran Children's Hospital, LHMC, Delhi
2. Essential Monitoring in Anaesthesia – SpO₂, EtCO₂ and NM Monitoring, Examination Oriented Refresher Course for Anaesthesia Postgraduate Students (EORCAPS), 27 August 2016, Department of Anaesthesiology & Critical Care, UCMS & GTB Hospital, Delhi
3. Appropriate use of Sedation and Muscle Relaxants - Do we need to be more cautious in Cirrhotics, Challenges in Mechanical Ventilation in a patient with Liver disease, 1st Conference on Critical Care in Liver diseases, 24 January 2017, Institute of Liver and Biliary diseases, Delhi
4. Basic modes of Ventilation World Trauma Congress 2016, the 3rd International Meeting of WCTC, 17 August 2017, JPNATC, Delhi

Dalim Kumar Baidya: 7

1. Perioperative Hypokalemia, ISA Delhi Annual Conference 2016, 9 April 2016, AIIMS, New Delhi
2. Extubation of Difficult Airway Ramchandra Advanced Airway Life Support Course (RAALS), 14 August 2016, Sri Ramachandra Medical College (SRMC), Chennai
3. Diagnosis and Management of Sepsis CHETMEDICON, 20 August 2016, Chettinad Hospital and Research Institute, Chennai
4. Neuromuscular Blockers and Cough Suppressants: Drug Interaction, ISACON 2016, 29 November 2016, Punjab Agricultural University, Ludhiana, Punjab

5. Deep Vein Thrombosis and Pulmonary Embolism, International Conference of Physiotherapists, 11 December 2016, AIIMS, New Delhi
6. Drotrecogin Alpha (activated) in adults with Septic Shock RESPIC 2016, 17 December 2016, India Habitat Centre, New Delhi
7. Diagnosis and Management of Shock Medical Surgical Nursing update, 27 March 2017, AIIMS, New Delhi

Devalina Goswami: 5

1. Airway Workshop on Arndt Blocker, Indian Society of Anaesthesiologists, Delhi Chapter, 9 April 2016, AIIMS, New Delhi
2. Upper Limb Rescue Blocks Workshop on Perioperative Sonography for Anaesthesiologists, 9 July 2016, Trauma Centre, AIIMS, New Delhi
3. Laparoscopy and Anaesthesia 43rd AMASI Skills Course, 15 July 2016, Agra
4. Equipments in Anaesthesia (Intubating Aids) Exam Oriented Refresher Course for Anaesthesia Post Graduate Students (EORCAPS), 1 September 2016, UCMS & GTB Hospital, New Delhi
5. Anaesthetic considerations for TMJ ankylosis patients, First AIIMS Total TMJ Replacement Workshop with Hands on, 30 January 2017, AIIMS, New Delhi

Preet Mohinder Singh: 4

1. Cardiac corrected patient for non-cardiac surgery, Examination Oriented Refresher Course for Anaesthesia Post Graduate Students, 30 August 2016, UCMS and GTB Hospital, Delhi
2. Cleft-lip & cleft-palate case, interactive lecture, exemplified viva-voce emergency scenarios, If Any examination Oriented Refresher Course for Anaesthesia Post Graduate Students, 1 September 2016, UCMS and GTB Hospital, Delhi
3. Workshop on Perioperative Simulation, ISACON, 64th Annual National Conference of ISA, 25 November 2016, DMC, Ludhiana
4. Panel Discussion, Hemodynamic Monitoring, ISACON, 64th Annual National Conference of ISA, 27 November 2016, DMC, Ludhiana

Puneet Khanna: 10

1. Hellp Syndrome, Medical Surgical Nursing update On Clinical Emergencies, 28 March 2017, CMET, AIIMS, New Delhi
2. Analgesia, sedation and anaesthesia in CT guided intervention, AIIMS Radiology Course: CT Guided Interventions, 9 April 2016, AIIMS, New Delhi
3. Term Pregnant Female with Severe Mitral Stenosis for Emergency Caesarean Section SGPGI Post Graduate Anaesthesiology Refresher Course, 18 March 2017, SGPGI, Lucknow
4. Alarms of ventilator? What to do? Advanced Nursing Care: Nursing Update, 22 February 2017, AIIMS, New Delhi
5. POCUS 1st National Conference on Critical Care and Infections in Liver Disease, 24 January 2017, ILBS, New Delhi
6. Local Anaesthetic Systemic Toxicity (LAST) during ophthalmic surgery, Ophthalmic Blocks and Resuscitation CME/Workshop, 28 January 2017, Dr. R. P. Centre for Ophthalmic Sciences, AIIMS, New Delhi
7. Mixed venous oximetry and lactate: Which one? ISACON 2016, Ludhiana, 28–29 November 2017, Punjab Agricultural University, Ludhiana, Punjab
8. Pediatric sedation ISACON Uttar Pradesh 2016, 9 September 2016, Ramnagar, Bareilly, Uttarakhand
9. Ventilation strategies in ICU, Annual ISACON Uttarakhand 2016, 25 September 2016, Haldwani, Uttarakhand
10. Communication skills in emergency; Evidence Based Approach 1st International Conference of Evidence Based Health Practice Health Champions, 13 July 2016, Maldives

Bikash Ranjan Ray: 19

1. Workshop on Ultrasound Guided Regional Anaesthesia ISACON Delhi Chapter, 9 April 2016, AIIMS, New Delhi
2. Current Role of Colloid in Anaesthetic Practice ISACON Delhi Chapter, 10 April 2016, AIIMS, New Delhi
3. Head & Spine Injury in Trauma Capacity Building Programme for Trauma Care System Development for Haryana State, 3 May 2016, JPNTC, AIIMS, New Delhi
4. RUSH protocol & e-fast, ECHO Workstation AUTLS Course, 4 May 2016, JPNTC, AIIMS, New Delhi

5. Circulation Management in Trauma Capacity Building Programme for Trauma Care System Development for Haryana State, 17 May 2016, JPNTC, AIIMS, New Delhi
6. Airway ultrasound & rush protocol, ECHO Workstation AUTLS Course, 18 May 2016, JPNTC, AIIMS, New Delhi
7. Point of care ultrasound in acute care: Evidence & implementation in clinical practice, Evidence Based Practice (EBP) Health Champions, 14 July 2016, Bandos, Maldives
8. Preconference AUTLS Workshop World Trauma Congress, 16 August 2016, JPNTC, AIIMS, New Delhi
9. Basic Mechanical Ventilation Workshop, Lecture on Management of Patient on Ventilator, World Trauma Congress, 17 August 2016, JPNTC, AIIMS, New Delhi
10. Preconference Workshop on Advance AUTLS CUETEH-2016, 6 September 2016, JPNTC, AIIMS, New Delhi
11. Anaesthetic management of scoliosis ISACON, Uttarakhand Annual Meeting, 24 September 2016, Haldwani, Uttarakhand
12. Workshop on Ultrasound Guided Regional Anaesthesia BIPRACON – 2016, 2 October 2016, BHU, Varanasi
13. Lecture on USG Guided Peripheral Line Placement Ultrasound guided Vascular Access Workshop, 27 October 2016, JPNTC, AIIMS, New Delhi
14. Workshop on Ultrasound Guided Regional Anaesthesia ISACON-2016 (64th Annual Conference of Indian Society of Anaesthesiologists), 25 November 2016, Ludhiana, Punjab
15. Pro-con Debate (Central Neuraxial Block for Day Care Surgery) ISACON-2016 (64th Annual Conference of Indian Society of Anaesthesiologists), 27 November 2016, Ludhiana, Punjab
16. Ultrasound Guided Lower Limb Blocks, CME cum Workshop on Ultrasound Guided Regional Anaesthesia, 22 January 2017, SDM Hospital, Jaipur
17. Airway Ultrasound 1st National Conference on Critical Care & Infection in Liver Disease, 24 January 2017, ILBS, New Delhi
18. Airway Management & Basic Life Support Ophthalmic Block & Resuscitation CME, 28 January 2017, RP Centre, AIIMS, New Delhi
19. Ultrasound for Head Injury, Echo Workstation AUTLS, 4 March 2016, JPNTC, AIIMS, New Delhi

Rahul Kumar Anand: 6

1. Preoperative AKI ISACON Delhi, 9–10 April 2016, AIIMS, New Delhi
2. AKI in Critical Care ISACON UP, 9–10 September 2016, ISA Bareilly, Nainital
3. Newer modes of Mech. Ventilation ICACON Meghalaya, 30 September–2 October 2016, NIGRIMS, Shillong
4. Introduction and Understanding of Mech., Ventilation ICACON Meghalaya, 30 September–2 October 2016, NIGRIMS, Shillong
5. Airway Management in ICU ISCCM National Conference, 1 February 2017, ISCCM, Kochi, Kerala
6. Cardiac life support golden jubilee, Ophthalmic Blocks and Resuscitation CME, 30 January 2017, AIIMS, New Delhi

Praveen Talawar: 6

1. Workshop Faculty, US Guided Cervical Plexus Block, Superficial, Intermediate and Deep, 55th ISACON Delhi 2016, 9–10 April 2016, AIIMS, New Delhi
2. US Guided Lower Limb Blocks Workshop Faculty, US Guided Upper Limb Blocks UGRA Workshop at Yashoda Hospital, 26 June 2016, Yashoda Hospital, Secunderabad
3. Cancer Pain Management, Case Based Discussion ICRA - Pain 2016 (2nd Edition), 27 August 2016, Kolkata
4. US-guided paravertebral & QL block, US-guided lumbar facet joint, Median Branch & Sacro-Iliac Joint Block, BIPRACON 2016, 2–3 October 2016, BHU, Banaras
5. US Guided Upper Limb Blocks Workshop Faculty, Facia Iliaca and Lateral cut Femoral Nerve Block CME and Workshop, 22 January 2017, SDM Hospital, Jaipur
6. US Guided Rescue Blocks of Upper Limb and Station on Image Optimization under US on Phantom IPSA Course 2017, 25–26 February 2017, Max Super Specialty Hospital, Saket, New Delhi

Debesh Bhoi: 8

1. USG guided regional Anaesthesia, Supraclavicular Block, Suprascapular Nerve Block, Axillary Nerve Block ISACON-2016 Delhi Chapter, 8–9 April 2016, JPNTC, AIIMS, New Delhi
2. Lumbar and Thoracic Spine Scanning (USG guided) AORA 2016, 25 September 2016, STAR Hospital, Hyderabad

3. Interventinal Pain Management & Regional Anaesthesia BIPRACON 2016, 2–3 October 2016, BHU, Varanasi
4. Regional Anaesthesia and Pain Management (Basic Paravertebral Block) 64 ISACON 2016 (National), 25 November 2016, Punjab Agricultural University, Ludhiana, Punjab
5. Anaesthetic Management of Elderly Patients with Hip Fracture ISACON ASSAM 2017, 21 January 2016, SMCH, Silchar, Assam
6. USG Guided Regional Anaesthesia Workshop Faculty ISACON, ASSAM 2017, 20 January 2017, SMCH, Silchar, Assam
7. Ultrasound Guided Vascular Access and Workshop Faculty Basic Ultrasound for Surgeons 2017, 28 January 2017, JPNTC, AIIMS, New Delhi
8. Workshop Faculty for USG Guided Sciatic and Pudendal Nerve Block 5th IPSA Course (Interventional Perioperative Sonography), 25–26 February 2017, Max Super Speciality Hospital, Saket, New Delhi

Ajeet Kumar: 8

1. Workshop Faculty for USG Guided Regional Anaesthesia, Infraclavicular, Axillary and Rescue Block, ISACON - 2016 Delhi Chapter, 8–9 April 2016, JPNTC, AIIMS, New Delhi
2. Faculty for Workshop USG Guided Femoral, Adductor Canal and Femoral Nerve Block Volunteer and Cadaveric Scanning Cadaveric Perioperative Sonography for Anaesthesiologists Course, 9–10 July, JPNTC, AIIMS, New Delhi
3. Faculty for Workshop USG Guided Fascia Ilaica, LFCN, Femoral and Obturator Nerve Volunteer Scanning, World Trauma Congress 2016, the 3rd International Meeting of WCTC, 16 August JPNTC, AIIMS, New Delhi
4. Workshop Faculty for Sciatic, Pop Sciatic and Adductor Canal Block Scanning (USG guided) ISACON Bihar & Jharkhand 2016, 23 September 2016, SKMCH, Muzaffarpur
5. Workshop Faculty for Interventinal Pain Management & Regional Anaesthesia BIPRACON 2016, 2–3 October 2016, BHU, Varanasi
6. Workshop Faculty for Regional Anaesthesia and Pain Management (Knobology of Ultrasound), 64th ISACON 2016 (National), 25 November 2016, Punjab Agricultural University, Ludhiana, Punjab
7. USG Guided Regional Anaesthesia Workshop Faculty ISACON, ASSAM 2017, 20 January 2017, Alumni Hall, SMCH, Silchar, Assam
8. Pain Control in TKR: Role of Regional Anaesthesia, ISACON ASSAM 2017, 21 January 2016, Alumni Hall, SMCH, Silchar, Assam

Shailendra Kumar: 8

1. LMA and Supraglottic Devices in Cadaveric Airway Workshop, 7 August 2016, AIIMS, New Delhi
2. 29th Bihar and Jharkhand ISACON 2016 Workshop, 23–25 September 2016, Muzaffarpur, Bihar
3. AIIMS Neuroanaesthesia Update Workshop, 30 September–2 October 2016, AIIMS, New Delhi
4. RSACPCON 2016 Workshop, 14–16 October 2016, Patna
5. AIIMS Technician Workshop 2016 Workshop, AIIMS, New Delhi
6. Dr RPC Golden Jubilee Workshop, 28 January 2017, AIIMS, New Delhi
7. 9th National Conference of Paediatric Anaesthesia Chairperson, 17–19 February 2017, KGMC, Lucknow
8. Coal India Medical Conference Workshop, 20–22 February 2017, Ranchi

Akhil Kant Singh: 1

1. Approach to AKI in a critically-ill cirrhotic patient in different contexts – hypernatremia, 1st National Conference on Critical Care and Infections in Liver Diseases, 24 January 2017, Institute of Liver and Biliary Sciences, New Delhi

Kulbhushan Saini: 1

1. Local Anaesthetics in regional Anaesthesia, Annual Conference of Anaesthesia Technologist, 25 March 2017, AIIMS, New Delhi

Manpreet Rajpal: 4

1. Trouble Shooting of the Ventilator, Skill Station Basic Mechanical Ventilation Workshop, World Trauma Congress 2016, 17 August 2016, AIIMS, New Delhi
2. Do we really need sugammadex as an antagonist of muscle relaxants in Anaesthesia? PRO speaker, ISACON 2016, 27 November 2016, Punjab Agriculture University (PAU), Ludhiana

3. Acute Pain Services at JPN Apex Trauma Center, Overcoming the Challenges ISA Delhi, 23 February 2017, AIIMS, New Delhi
4. Neuraxial Blockade 5th Workshop for Anaesthesia Technicians, 25 March 2017, AIIMS, New Delhi

Oral Papers/Posters Presented: 32

1. Agarwal N, Batra RK, Khanna P. Correlation between Preoperative Pain Prediction Questionnaire, Serum Progesterone and Serum Prolactin Levels with Analgesic Req, ASA Annual Meeting 2016, 24 October 2016, Chicago, USA
2. Baidya DK, Arora MK, Anand RK, Ray BR, Khanna P, Maitra S. A Randomised Comparison between Short Axis and Medial Oblique Approach for USG Guided IJV Cannulation, Canadian Critical Care Forum, 30 October–2 November 2016, Toronto, Canada
3. Bhalla AP. To access Non-Invasive Cardiac Output Guided Hemodynamic Changes during Pneumoperitoneum and Reverse Trendelenburg Position – Observational Study, 16th Anaesthesia World Congress, 20 September 2016, Hong Kong
4. Choudhury AR, Goswami D, Venkateswaran V, Gnanasagar S, Kundu R. AMBU LMA® as Airway Device in children with Cleft Palate undergoing Ophthalmic. ISA Delhi Chapter 2016, 9 April 2016, AIIMS, New Delhi
5. Goswami D, Jain G, Mohod M, Baidya DK, Bhutia O, Roychoudhury A. A Randomised Controlled Trial to Compare Oral Analgesic Requirements and Patient Satisfaction in Using Oral Non-Steroidal Anti-Inflammatory Drugs or Benzydamine Hydrochloride Oral Rinses after Mandibular Third Molar Extraction: A Pilot Study. IASP. 16th World Congress on Pain, 30 September 2016, Yokohama
6. Goswami D, Sardar A, Bhutia O, Roychoudhury A, Baidya DK. Effect of Single Dose Preemptive Etoricoxib on Postoperative Pain Relief Following Open Reduction and Internal Fixation of Mandibular Fracture under General Anaesthesia: A Prospective, Randomised and Double-blind, Placebo Controlled Trial. IASP. 16th World Congress on Pain, 30 September 2016, Yokohama
7. Kashyap L, Khaja Mohideen S, Shende D, Mohan VK, Bajpai M. Comparison of Analgesic Efficacy of Caudal Block vs Penile Block along with Rectal Diclofenac in Children. Asa Australian Society of Anaesthetist 75th National Scientific Congress, 2016, 17–20 September 2016, Melbourne, Australia
8. Khanna P, Arora MK, Kashyap L. Impact of Preoperative Anxiety on Propofol Induced Hypotension in Female Patients of Elective Surgery under General Anaesthesia: Interim Analysis from a Prospective Observational Trial Australian Society of Anaesthetist 75th National Scientific Congress, 2016, 17–20 September 2016, Melbourne, Australia
9. Khanna P, Bhoi D. Low doses Spinal and Ilioinguinal Nerve Block in short statured Kyphoscoliotic Patient for Hernia Surgery, APRA 2015, ISACON Delhi 2016, 9–10 April 2016, AIIMS, New Delhi
10. Khanna P. Anaesthetic Management of a child with Aicardi Goutiere Syndrome, ISACON Delhi 2016, 9–10 April 2016, AIIMS, New Delhi
11. Khanna P. Anaesthetic Challenge in Difficult Mask Ventilation for Rare Tumor involving Maxilla: A Case Report, ISACON Delhi 2016, 9–10 April 2016, AIIMS, New Delhi
12. Khanna P. Anaesthetic Management of Achondroplastic Dwarf with Difficult Airway and Spine for THR, ISACON Delhi 2016, 9–10 April 2016, AIIMS, New Delhi
13. Khanna P. Incidental Detection of Dapsone Induced Methemoglobinemia ... What to do next? ISACON Delhi 2016, 9–10 April 2016, AIIMS, New Delhi
14. Khanna P. Knowledge Attitude and Performance in Management of Trauma Victims: A Questionnaire Vased Survey, ISACON Delhi 2016, 9–10 April 2016, AIIMS, New Delhi
15. Khanna P. Lung Isolation in a Patient with Difficult Airway, ISACON Delhi 2016, 9–10 April 2016, AIIMS, New Delhi
16. Kumar A, Kumar A, Arora MK, Sawhnay C, Bhoi, D Ray BR. Ultrasonographic Assessment of Topographic Anatomy of Brachial Plexus at Infraclavicular Fossa, RSACPCON 2016, 15 October 2016, Patna
17. Kumar K, Naskar S, Bhoi D. Serratus Plane Block: Above or beneath the Serratus Muscle? Initial evaluation of Safety and Efficacy, ESA 2016, 28–30 May 2016, ExCel London, England, UK
18. Kumar S, Ray BR, Sinha R. Anaesthesia Management in a child of Kabuki Syndrome with Obstructive Sleep Apnea for Occuloplastic Surgery, SAARCAA-2017, 25–26 February 2017, BMICH, Colombo, Sri Lanka
19. Kumar S. Intravenous Anaesthetic Agents on AIIMS Technician Workshop, 24–26 February, AIIMS, New Delhi
20. Kumar S. Laryngeal Mask Airway on Cadaveric Airway Workshop, 24–26 February, AIIMS, New Delhi
21. Kumar S. Recent Advances in Traumatic Brain Injury ISACON 2016, 14–16 October 2016, Patna, Bihar.
22. Kumar S. Rectus Sheath and TAP Block 29th Bihar and Jharkhand ISACON 2016, 23–25 September 2016, Muzaffarpur, Bihar.

23. Machanali G, Baidya DK, Bhalla AP, Goswami D. Sono Anatomical Analysis of Right Internal Jugular Vein and Carotid Artery at different levels of positive end expiratory pressure in Anaesthetized Paralyzed patients, Australian Society of Anaesthesiologists, 75th National Scientific Congress, 18 September 2016, Melbourne, Australia
24. Mesharam T, Sagar, Chhabra A. Anaesthetic Management of Follicular Carcinoma of Thyroid with Vertebral Metastasis, Mitral Stenosis and Atrial Fibrillation under TCI with Entropy Monitoring* **[Best Paper Award]**, 55th Annual Conference of ISA Delhi Branch, 10 April 2016, AIIMS, New Delhi
25. Mohan V. Ultrasound Guided Thoracic Paravertebral, Pectoralis and Serratus Anterior Plane Block in Breast Surgeries: Spread of Local Anaesthetic and Postoperative Analgesia, South African Society of Anaesthesiologists, SASA 2017, 22–26 March 2017, Johannesburg, South Africa
26. Narasimhan P, Baruah U, Chhabra A. Ultrasound Guided Paravertebral Block for Mastectomy in a patient with acute Intermittent Porphyria, 55th Annual Conference of ISA Delhi Branch, 10 April 2016, AIIMS, New Delhi
27. Punj J. After Endotracheal Intubation change over from high to low flows is most Haemodynamically Stable when guided by State Entropy® when compared to Predetermined High Fresh Gas Flow for 10 minutes or Ratio of End-expired Agent Concentration to Inspired Agent Concentration of 0.8: A Randomised, Controlled Trial, Annual Conference of Anaesthesiologists of Morocco, 21–25 January 2017, Marrakech
28. Ray BR, Sinha R, Sharma A, Pandey RK, Punj J, Trikha A. Comparison C-MAC Macintosh Blade Size- 2 and D-blade Size-2 in Children with Simulated Cervical Spine Injury: A Prospective, randomised study. Australian Society of Anaesthetists 75th National Science Congress, 17–20 September 2016, Melbourne, Australia
29. Rewari V, Meshram T, Ramachandran R, Trikha A. Comparison of Haemodynamic Responses and Upper Airway Morbidity following Orotracheal Intubation in Hypertensive Patients –Macintosh Direct Laryngoscope vs Glidescope Videolaryngoscope, IX SIMPAR-ISURA Congress, 31 March 2017, Florence, Italy
30. Roychoudhury A, Bhutia O, Yadav R, Goswami D, Baidya DK, Agarwal B. Outcome of Stock Total Temporomandibular Joint Prosthesis in TMJ Ankylosis Patients, 23rd Congress of the European Association for Cranio Maxillary Surgery, 13 September 2016, London
31. Roychoudhury A, Yadav R, Bhutia O, Agarwal B, Soni B, Goswami D, Baidya DK. Is Total Joint Replacement along with Fat Grafts a New Protocol for Adult Temporomandibular Joint Ankylosis Treatment? 23rd International Conference on Oral and Maxillofacial Surgery, 31 March 2017, Hong Kong
32. Satish P, Prasad G, Arora MK, Kashyap L. Double Shot Caudal vs Single Shot Caudal for Postoperative Analgesia in Paediatric Patient undergoing Infra Umbilical Surgeries, 55th Annual Conference of Indian Society of Anaesthesiologists, Delhi State Branch, New Delhi, 10 April 2016, AIIMS, New Delhi

RESEARCH

Funded Projects

Ongoing

1. To evaluate the efficacy of Tranexamic Acid in reducing inflammatory response in Leino-Renal Shunt Surgeries - A Randomised, Double-blind, Placebo Control Study, Ravinder Kumar Pandey, AIIMS, 2 years, 2015–17, Rs 5 lakhs
2. To assess the analgesic efficacy of adjuvant magnesium sulphate added with Ropivacaine over Ropivacaine alone as a continuous infiltration in Total Abdominal Hysterectomy Wounds: A Randomised, Controlled Trial, Devalina Goswami, AIIMS, 1 year, 2016–17, Rs 5 lakhs
3. Evaluation of Plasma and Urine Neutrophil Gelatinase-associated Lipocalin (NGAL) as an early diagnostic marker of Acute Kidney Injury (AKI) in trauma patients in Surgical Intensive Care Unit, Babita Gupta, ICMR, 2 years, 2014–16, Rs 18 lakhs
4. Influence of Anaesthetic Techniques on pro & anti-inflammatory effect in Pelvic-Acetabular and Femur Surgery. Babita Gupta, AIIMS, 2 years, 2015–17, Rs 10 lakhs
5. Comparison of Paralysis of Laryngeal Adductor vs Adductor Pollicis at time of Intubation with NIM EMG Endotracheal Tube, Jyotsna Punj, AIIMS, 1 year, Rs 1 lakh

Completed

1. Evaluation of Minimum Alveolar Concentration (MAC) of Sevoflurane and Bispectral Index (BIS) for maintenance of central eye position during short ophthalmic procedure in spontaneous breathing children under General Anaesthesia and correlation of MAC of sevoflurane with BIS, Renu Sinha, AIIMS, 1 year, 2014–15, Rs 1 lakh
2. Continuous Transverses Abdominis Plane (TAP) Block for Postoperative Analgesia after Leino-Renal Shunt Surgery, Vimi Rewari, AIIMS, 3 years, 2013–16, Rs 0.97 lakhs

Departmental Projects

Ongoing

1. Ultrasonic evaluation of gastric volume after fasting for 6 and 8 hours in diabetic and non diabetic posted for Elective Surgery
2. To compare Postoperative Analgesia between Ultrasound guided continuous Quadratus Lumborum Block with Ultrasound guided Psoas Compartment Block in patients undergoing total Hip Arthroplasty under General Anaesthesia
3. A comparison of efficacy of prophylactic infusion of phenylephrine vs norepinephrine for the prevention of post spinal hypotension in parturients undergoing elective caesarean section - a randomised controlled trial
4. Effects of regional Anaesthesia on Perioperative Inflammatory Cytokines Alteration and Clinical Complications
5. Assessment of Efficacy of Ultrasound guided Corner Pocket vs Two Aliquots Injection Techniques for Supraclavicular Block in Upper Limb Orthopaedic Surgeries: A prospective, randomised study
6. Comparison of Nitroglycerin (NTG), Lignocaine Subcutaneous Perivascular Infiltration for Radial Artery Cannulation after failed attempts: A randomised control trial
7. Effect Of Dexmedetomidine on Serum Cortisol Level and Perioperative Haemodynamics In Children undergoing Elective Ophthalmic Surgery – A prospective, randomised, comparative study
8. Accuracy of Predictive Equations in guiding Tracheal Intubation Depth in children: A prospective, observational study
9. Evaluation of performance of C-MAC Videolaryngoscope Miller Blade size zero blade for Endotracheal Intubation in preterm infants and neonates: A retrospective analysis
10. End Expiratory Occlusion Test and Mini Fluid Challenge for predicting fluid responsiveness in Acute Circulatory Failure
11. Comparative evaluation of efficacy of Ultrasound guided Supra-Inguinal Fascia Iliaca Block with Infra-Inguinal Technique in preoperative positioning for Central Neuraxial Block in patients with Hip Fracture
12. To study the efficacy of Ultrasound guided Caudal Morphine for providing Perioperative Analgesia in patients undergoing Lumbosacral Spine Surgery
13. To study the efficacy of Serratus Anterior Plane Block for Trunk based Flap Surgeries
14. Stress response to C-Mac Videolaryngoscope vs Direct Laryngoscopy for Tracheal Intubation in patients with Cervical Spine Immobilization
15. Epidemiology and Prognostic Utility of Cellular Components of Haematological System in Sepsis
16. Integrated Ultrasound Protocol in predicting Weaning Success and Extubation Failure: A prospective observational study
17. Evaluation of Diaphragmatic Muscle Mass in patients receiving pressure regulated volume controlled ventilation and synchronized intermittent mandatory ventilation for Acute Respiratory Failure: A randomised controlled trial
18. To determine whether implementation of a new ICU Delirium Prevention Bundle will reduce the incidence of Delirium compared to Standard of Care Protocol in mechanically ventilated patients
19. To compare the efficacy of local Anaesthetic Wound Infiltration in Temporomandibular Joint Ankylosis Surgery for control of Post Operative Pain
20. A retrospective study in operated cases of TMJ Ankylosis in a Tertiary Care Centre
21. Comparison of Opioid based and Opioid free TIVA in Laparoscopic Gynaecological Surgery: A randomised, controlled trial
22. Postoperative pain relief in Total Knee Replacement Comparison of USG Adductor Canal Block Vs Local Intraarticular. A randomised, prospective, controlled trial
23. Temporal Evolution of the Pcv CO₂/CaO₂-CcvO₂ ratio vs serum lactate during Resuscitation from Septic Shock
24. Estimation of effective volume of local Anaesthetic (0.75% ropivacaine) in target Intracapsular Injection Approach of Ultrasound guided Supraclavicular Block
25. Role of Neutrophil Gelatinase Associated Lipocalin (NGAL) as early biomarker of Acute Kidney Injury in patients treated with Colistin: A prospective, observational study
26. Effect of Wrist Angulation on ease of Radial Artery Cannulation in pediatric population: Ultrasound guided Anatomical assessment
27. Anaesthetic Management for ophthalmic surgical procedures in children with congenital Rubella Syndrome: a retrospective analysis
28. Knee-Chest position and Subarachnoid Block onset times in Obstetric Parturients: A RCT

29. Accuracy of Predictive Equations in guiding Tracheal Intubation Depth in children: A prospective, observational study
30. Effect Of Dexmedetomidine on Serum Cortisol Level and Perioperative Haemodynamics in children undergoing Elective Ophthalmic Surgery – A prospective, randomised, omparative study
31. Impact of preoperative anxiety on propofol induced hypotension in female patients of Elective Surgery under General Anaesthesia
32. Lung Ultrasound for diagnosis of Ventilator associated Pneumonia in critically ill
33. Evaluation of successful use of C-Mac Videolaryngoscope Miller size zero blade for Intubation in preterm infants: A retrospective analysis
34. A comparative pilot study of Manual Weaning vs Automated Weaning in critically ill patients
35. Comparison of Serum Nucleosomes and Tissue Inhibitor of Metalloproteinase 1 (TIMP1) in predicting Mortality in adult critically ill patients in Sepsis
36. Incidence of Post Operative Cognitive Decline in elderly patients undergoing Open Surgery under General Anaesthesia using Isoflurane or Desflurane: A prospective, observational study
37. Comparison of Phenylephrine vs Norepinephrine to prevent Spinal Anaesthesia induced Hypotension in women undergoing elective LSCS
38. Factors contributing to failure of weaning in ICU
39. Evaluation of Delirium in ICU
40. To determine the optimal length for Central Venous Catheter via Axillary Vein Cannulation
41. Anaesthetic Implications of Laparoscopic Nephrectomy through Transperitoneal and Retroperitoneoscopic Approach- A prospective, observational study
42. Haemodynamic profile in the Perioperative period in patients undergoing Pheochromocytoma and Paraganglionoma Surgery with and without low dose Diltiazem Infusion
43. The Analgesic Efficacy of Ultrasound guided Pectoralis Nerve Blocks I and II in Breast Surgeries
44. Air Q ILA as a conduit for Orotracheal Intubation in children: A comparison between supine and lateral position
45. Comparison of safety and efficacy of Self Pressurised Vs. Conventional Air-Q Intubating laryngeal Airway in children: A prospective, randomised, comparative study
46. Comparison of Glidescope and C-Mac Videolaryngoscope for intubation in paediatric patients: A prospective, comparative & randomised study
47. Evaluation of performance of C-Mac Videolaryngoscope Miller Blade size zero blade for Endotracheal Intubation in preterm infants and neonates: A retrospective analysis
48. Anaesthetic Management for ophthalmic Surgical Procedures in children with Congenital Rubella Syndrome
49. Non-Invasive estimation of Central Venous Pressure in mechanically ventilated patients using bedside Ultrasonography: A comparison of two techniques
50. Postoperative Analgesia for open midline incisions in Gynaecological Oncology Surgery: Ultrasound guided Bilateral Rectus Sheath Block with Multimodal Analgesia vs Intrathecal Morphine
51. Temporal Evolution of The Pcvco₂/Paco₂/Cao₂-Ccvo₂ Ratio vs Serum Lactate during Resuscitation from Septic Shock
52. Transforaminal Epidural Injection of Local Anaesthetic and Dorsal Root Ganglion Pulsed Radiofrequency Treatment in Lumbosacral Radicular Pain- A randomised, triple-blind, active-control trial
53. Perioperative Analgesic efficacy of continuous Quadratus Lumborum Block or continuous Transvs Abdominis Plane Block in patients undergoing Renal Transplant Surgery: A randomised, double-blind controlled study
54. To compare Post-Operative Analgesia between Ultrasound guided continuous Trans-Muscular Quadratus Lumborum Block with Ultrasound guided continuous Psoas Compartment Block in patients undergoing total Hip Arthroplasty under General Anaesthesia
55. Analgesic efficacy and safety profile of Glossopharyngeal Nerve Block using Extraoral Anatomical landmark technique VS Ultrasound guided technique in patients with Eagles Syndrome
56. Comparison of Caudal Epidural Block with Single Shot Paravertebral Block for Renal Surgeries in paediatric patients
57. Lung Ultrasound for diagnosis of Ventilator associated Pneumonia in critically ill
58. Impact of Preoperative Anxiety on Propofol induced Hypotension in female patients of Elective Surgery under General Anaesthesia
59. Incidence of Post Operative Cognitive Decline in elderly patients undergoing Open Surgery under General Anaesthesia using Isoflurane or Desflurane: A prospective, observational study

60. Comparison of Serum Nucleosomes and Tissue Inhibitor of Metalloproteinase 1 (TIMP1) in predicting mortality in adult critically ill patients in Sepsis
61. To determine the minimum effective Tourniquet Cuff Pressure needed in Pediatric Extremity Surgery by comparing Surgical Field, Haemodynamic and Metabolic Changes: A prospective, randomised trial
62. Comparison of 3 different doses of dexmedetomidine use for attenuating the Hemodynamic Response and Airway Response in patients undergoing Elective Microlaryngeal Surgery - A prospective, randomised, double-blind study
63. Molecular detection of Legionella Pneumophila by real time PCR and characterization of isolates by sequence based typing

Completed

1. Air Q ILA as a conduit for Orotracheal Intubation in children: A comparison between supine and lateral position
2. Anaesthesia maintenance with 'induction dose only' sevoflurane during Pediatric Ophthalmic Examination: Comparison with standard low-flow technique through a randomised, controlled trial
3. Comparison of Hemodynamic Responses and upper Airway Morbidity following Orotracheal Intubation in Hypertensive patients–Macintosh Direct Laryngoscope vs Glidescope Videolaryngoscope
4. Comparison of safety and efficacy of Glidescope and C-Mac Video Laryngoscopes for Intubation in Paediatric patients: A prospective, comparative study
5. Comparison of safety and efficacy of Self Pressurised vs Conventional Air Q Intubating Laryngeal Airway in children: A prospective, randomised, comparative study
6. Comparison of the C-Mac Videolaryngoscope size 2 Macintosh Blade with size 2 C-Mac D-Blade for Laryngoscopy and Endotracheal Intubation in children with Simulated Cervical Spine Injury: A prospective, randomised study
7. Comparison of the Storz size 2 Macintosh Blade C-Mac and size 2 D-Blade C-Mac in children with simulated Cervical Spine injury: A prospective, randomised study
8. Comparison of Paravertebral Block performed by Anatomical Landmark Technique with Ultrasound guided Paravertebral Block for providing Anaesthesia in patients undergoing Breast Surgery
9. Continuous Thoracic Paravertebral Infusion in Modified Radical Mastectomy: A randomised, prospective, double-blind study to compare efficacy of Ropivacaine with and without Fentanyl
10. Difference between Response Entropy and State Entropy (RE-SE) vs Train of Four Neuromuscular Monitoring to facilitate Intubation and Extubation
11. Does Perioperative Administration of 5% Dextrose effective in reducing the incidence of PONV in patients undergoing Laparoscopic Cholecystectomy: A prospective, double-blind, randomised, controlled study
12. Double Shot Caudal vs Single Shot Caudal for Postoperative Analgesia in Paediatric patient undergoing Infra Umbilical Surgeries
13. Effect of entropy guided low flow Desflurane Anaesthesia on Laryngeal Mask Airway removal time in children
14. Effect of Entropy guided Low Flow Desflurane Anaesthesia on laryngeal mask airway removal time in children undergoing Ophthalmic Surgery- a prospective, randomised, comparative study
15. Effect of modified 45 degree head up in lateral decubitus position on the success rate of Lumbar Puncture in Obstetrical patients undergoing C-section
16. Efficacy of Left ventricular outflow tract Velocity Time Integral (LVOT VTI) and Carotid Artery VTI as predictor of volume responsiveness to Passive Leg Raising (PLR) in Sepsis and Septic Shock patients by correlation with Echocardiography guided stroke volume change (delta SV%) to PLR
17. Haemodynamic changes during Pneumoperitoneum and Reverse Trendelenberg position in Bariatric Surgery: An observational study using Noninvasive Cardiac Output Monitoring
18. Knee chest position on Sub-Arachnoid block onset times in Obstetric Parturients: A randomised, controlled trial
19. Paravertebral, Pectoralis II and Serratus Anterior Plane Block in Breast Surgeries: Spread of Local Anaesthetic and Postoperative Analgesia
20. Requirement of Isoflurane and Vecuronium in Diabetic Patients with and without Diabetic Autonomic Neuropathy undergoing Elective Surgery; as determined by Entropy and Neuro Muscular Transmission (NMT) Monitor respectively
21. The association between Pulmonary Function Tests and difficult Airway in Morbidly Obese Patients
22. The effect of Rate of Fluid Hydration on Early Graft Function during Live Related Renal Transplantation

23. The use of Ultrasound as a reliable tool for Endotracheal Intubation when performed by novice Anaesthesia Residents - A prospective, observational study
24. To assess the efficacy of local Anaesthetic wound infiltration in Temporomandibular Joint Ankylosis Surgery for control of post operative pain: A randomised, controlled trial
25. To compare the analgesic efficacy of Ultrasound guided Quadratus Lumborum Block to Ultrasound guided Transversus Abdominis Plane Block in patients undergoing Operative Laparoscopic Gynaecological procedures under General Anaesthesia
26. To determine the efficacy of PECS1 and PECS2 block in adult women (20–70 yrs.) undergoing Breast Surgery (MRM/MRM with SLND/MRM with ALND) as compared to conventional group receiving only opioid
27. To study the efficacy of Clonidine as an adjuvant to Ropivacaine in Ultrasound guided Transversus Abdominis Plane Block in adult Renal Transplant Recipients – A double-blind, randomised, controlled trial
28. To study the reduction in Intra- and Postoperative Analgesia requirement and the quality of recovery after Pre-emptive Intrathecal Morphine in patients with Pelvic Acetabular Injuries undergoing stabilization
29. To study the role of Preoperative Echocardiography and Cardiac Evaluation in Perioperative Management of Geriatric patients with Hip Fracture in a level 1 trauma centre in a developing country: A retrospective study
30. Ultrasonic evaluation of gastric volume after Fasting for 6 and 8 hours in Diabetics and Non-Diabetics posted for Elective Surgery undergoing Ophthalmic Surgery – A prospective, randomised, comparative study
31. Ultrasonographic Assessment of Topographic Anatomy of Brachial Plexus at Infraclavicular region in Indian population
32. Ultrasound guided Paravertebral, PECS and Serratus Plane Block in Breast Surgeries: Spread of Local Anaesthetic and Postoperative Analgesia

Collaborative projects

Ongoing

1. Incidence and risk factors of back pain after Cesarean Section: A prospective, observational study (Gynaecology and Obstetrics)
2. Association of Vitamine D deficiency with duration of mechanical ventilation in critically ill adults in ICU: An observational study (College of Nursing)
3. A study to assess the effectiveness of a planned simulation teaching on the knowledge and skill of nurses working in critical care unit of AIIMS (College of Nursing)
4. Efficacy of Diclofenac vs Pentazocine for pain relief in patients with Acute Pancreatitis (GI Surgery and Liver Transplantation)
5. A prospective study to evaluate the patterns of nicotine withdrawal in newly diagnosed head and neck Squamous Cell Carcinoma patients and its impact on immediate post-operative outcomes (Otorhinolaryngology – Head and Neck Surgery)
6. Low pressure vs High Pressure Laparoscopic Cholecystectomy (Surgical Disciplines)
7. Outcome of Patients undergoing Pheochromocytoma and Paraganglioma Removal (Urology)
8. A study to assess the lived in experiences of critically ill patients who were on Mechanical Ventilation in Medical Surgical ICU, AIIMS, New Delhi (College of Nursing)
9. A Study Of Conditioned Pain Modulation in Trigeminal Neuralgia Patients (Physiology)

Completed

1. Development and Implementation of an Automated Electronic Surveillance System for Hospital Acquired Infections (Laboratory Medicine, JPNATC)
2. A comparative study to evaluate the effectiveness of Video Teaching Programme vs Mannequin Demonstration on basic life support to the family members of patients at high risk of Cardio Pulmonary Arrest (College of Nursing)
3. Comparative evaluation of effect of post-operative patching vs no-patching after Strabismus Surgery (Ophthalmology)
4. Outcomes following enhanced Recovery after Surgery (ERAS) Programme in patients undergoing Pancreaticoduodenectomy (GI Surgery and Liver Transplantation)

PUBLICATIONS

Journals: 89

Chapters in books: 14

Books: 1

PATIENT CARE

Procedures performed during the year

Specialities	No. of cases performed
GI Surgery	229
Surgery	2152
Dental Surgery (Main+CDER)	444
Urology	1160
ENT	915
Gynaecology	930
Paediatric Surgery	1454
Orthopaedics	2932
Plastic Surgery	59
Maternity OT	2668
IVF OT	494
Ophthalmic	8114
<i>Emergency</i>	
Cases	4492
Calls	1682
<i>ICU</i>	
New Admission	551
Discharged	433
Expired	115
<i>Peripheral Services</i>	
MRI	406
MECT	349
CT scan	680
Other Radiological Services	194
GI Endoscopy	1227
Pain Interventional OT	351
Pain OPD	1872

Voluntary Community Service

Professor Ravinder Kumar Batra participated as Anaesthesiologist in Annual Orthopaedics Camp at Shri Anandpur Charitable Trust Hospital at Shri Anandpur, Dist. Ashok Nagar, MP from 5–8 Feb, 2017.

Dr Maya Dehran provided Voluntary Medical Services on all Sundays of the year 2016–2017 in the dispensary OPD at Bhatti centre New Delhi – Radha Swami Satsang; Provided Medical and Resuscitation Services and Care of critically ill patients till they are shifted to Tertiary Care Hospital during major public gathering for Satsang for 16 days. 2016–17.

Dr Puneet Khanna conducted safe Anaesthesia for Pediatric Surgery patients in city of Morena in the Welfare Medical Camp for providing community service 'RAHAT', 10–12 Feb 2017, Morena, Madhya Pradesh.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor Ravinder Kumar Batra was Chairman, Formation of OSCE stations for Clinical Examination in Anaesthesiology, National Board of Examinations; Member: (i) Working Group Committee, National Board of Examinations; (ii) Examination Ethics Committee, National Board of Examinations; (iii) Thesis Review Committee, National Board of Examinations; (iv) Committee for Qualitative Assessment of Answer Sheets, National Board of Examinations; Member, Virtual Medical Classroom Teaching Group at AIIMS; Member and Co-ordinator, Speciality Board of Anaesthesiology, National Board of Examinations; Expert Group Member on Medical Algorithm for 104 Health Helpline, Ministry of Health and family Welfare, Govt of India, to attend Expert Group meeting on Medical Algorithm for 104 Health Helpline on 2 March, 2017 in Nirman Bhawan, New Delhi.

Professor Anjan Trikha was awarded Fellowship of National Academy of Medical Sciences (FAMS), by the National Academy of Medical Sciences, New Delhi; Nominated member of Academic Committee of Indian College of Anaesthesiologists; Nominated President of Association of Obstetric Anaesthesiologists; Nominated Chief Editor of Journal of Obstetric Anaesthesiologists and Critical Care.

Professor Ganga Prasad was Member of specification committee of Anaesthesia equipments for Post Graduate Institute of Medical Education and Research in New Delhi & Dr Ram Manohar Lohia Hospital, New Delhi; Member of Bureau of Indian Standard (BIS) for Anaesthesia Equipments, New Delhi.

Professor Anjolie Chhabra was selected as Section Editor for Regional Anaesthesia in Trends in Anaesthesia and Critical Care (Elsevier Journal).

Professor Chhavi Sawhney was Member of National Curriculum Task Force for various allied Health Services (Ministry of Health and Family Welfare); won best paper award at RSACP con in 2017 for presentation ‘Ultrasonographic Assessment of Topographic Anatomy of Brachial Plexus at Infraclavicular Fossa’.

Professor Ravindra K Pandey won best paper award of the meeting ‘15th Annual Pain Medicine Meeting by American Society of Regional Anaesthesia & Pain Medicine (ASRA- 2016)’; Editor in chief of International Journal of Perioperative Ultrasound and applied Techniques (IJPUT); Reviewer for Indian Journal of Anaesthesia (IJA), Journal of Anaesthesiology and Clinical Pharmacology (JOACP), Journal of Clinical Anaesthesia (JCA) and Journal of Medical Case Report; Nominated Examiner for South Campus Delhi University for Evaluation of MD Thesis (Anesthesiology) and MD Anesthesiology Examinations.

Dr. Puneet Khanna was Judge in Poster Assessment in World Trauma Congress, 2016, New Delhi.

Dr. Ajeet Kumar Chair the talk on Approach to patients and recent trend in Management of headache BIPRACON 2016, 3 Oct 2016, BHU, Varanasi; Chaired the talk on Newer modes of ventilation ISACON Bihar and Jharkhand 2016, 24 Sept, 2016, SKMCH, Muzaffarpur; Conducted various ACLS Courses as Faculty CMET, AIIMS, New Delhi.

Dr. Shailendra Kumar was Judge at World Trauma Congress 2016, 17–20 Aug 2016, AIIMS, New Delhi.

9.2. Anatomy

Professor and Head

T.S. Roy

Professors

A. Shariff
Rima Dada
T.C. Nag
(Electron Microscopy)

Pushpa Dhar
Arundhati Sharma (Genetics)

S.B. Ray
Renu Dhingra
Ritu Sehgal

Associate Professor

Saroj Kaler

Assistant Professors

Tony George Jacob
Seema Singh

Neerja Rani
S.C. Yadav

HIGHLIGHTS

The ‘AIIMS eLearning Facility’ **AIIMSeLF** with its powerful servers with Free & Open Source Software (FOSS) functions to support Learning Management, High Definition Video Presentation and Conference systems and web hosting. It hosts the department of Anatomy website and also serves the department by providing a hyperlink on the AIIMS website. Departmental Journal Club presentations and online formative assessment of MBBS students are conducted using this facility. PG seminars are conducted in a collaborative Wiki format and video based learning resources are created by postgraduates and senior residents in the department with help from this facility.

The department has facilitated the organization of cadaveric workshops for several departments and helped in providing training.

Faculty members of the department have delivered guest and invited lectures both in India and abroad. Faculty and students have been engaged in research work that has been presented in several national and international conferences. The students have been awarded for their work in many different areas like embryology, neurosciences, gross anatomy and genetics. The faculty has successfully been able to obtain research grants from both intra and extramural funding agencies and have been able to get their research published in peer reviewed journals. Several faculty members have served on the editorial board of many national and international journals and have acted as reviewers of research projects from various intra and extra mural funding agencies. Service in the form of embalming facilities and patient care through diagnostic tests and counseling for various genetic and metabolic disorders have also been provided by the department.

EDUCATION

Innovative educational activity

Undergraduate, postgraduate, paramedical teaching, Short and long term training

Faculty members from different medical colleges in and outside Delhi have received short term training in the areas of genetics and plastination and graduate students from outside Delhi underwent summer training in Electron microscopy facility.

Faculty members served as adjunct faculty at Jiwaji University, Gwalior for MSc Neuroscience and Molecular Human genetics courses

CMEs/Workshops/Symposia/National and International Conferences

1. Neurostereology Workshop, 18 October 2016, Department of Anatomy, AIIMS, New Delhi as a part of the 34th National Conference of the Indian Academy of Neuroscience, 2016
2. The department has helped in the conduct of several cadaveric workshops which has facilitated in the training of personnel from different departments.
 - a. ENT, 2nd Facial Plastics and Rhinoplasty Workshop, 23–24 April 2016
 - b. Surgical Disciplines, Cadaveric Laparoscopic Surgery Workshop, 23–24 April 2016
 - c. Obstetrics and Gynecology, 1st AIIMS Cadaveric Dissection Workshop in Gynae Endoscopy Surgeries, 8 August 2016
 - d. Physical Medicine and Rehabilitation, Cadaveric pain and MSK Workshop with USA faculty, 21 August 2016
 - e. Surgical Disciplines, Cadaver Workshop during Annual Conference of Association of Plastic Surgeons of India, 23 November 2016
 - f. Neurosurgery, Advanced Skull Base Cadaver Workshop, 25 November 2016
 - g. Surgical Disciplines, 2nd AIIMS Laparoscopic Surgery Cadaveric Workshop, 2–4 December 2016
 - h. Surgical Disciplines, CME on “Contemporary practices in surgery: Symposium on Thoracic Surgery”, 2017, 21 & 22 January 2017
 - i. Surgical Disciplines, 3rd AIIMS Laparoscopic Surgery Cadaveric Workshop, 23 & 24 January 2017
 - j. Radiodiagnosis, International Symposium on Urologic Imaging and Intervention, 2017, 27 January 2017
 - k. Obstetrics and Gynecology, 3rd Hands on Cadaver Dissection Workshop in Gynae Oncology, 11 & 12 February 2017
 - l. Neurosurgery, Advanced Skull based Cadaver Workshop, 13 February 2017
 - m. Pathology, Microscopy session during Annual Meeting of the Dermatopathology Society of India, 18 February 2017.
 - n. ENT, Cadaveric demonstration and Hands on Course on facial flap during 3rd AIIMS Facial Plastics and Rhinoplasty Workshop, 19 February 2017

Lectures delivered

T.S. Roy: 6	A. Shariff: 2	Pushpa Dhar: 1
S.B. Ray: 5	Rima Dada: 20	Arundhati Sharma: 5
T.C. Nag: 3	Tony George Jacob: 5	

T.S. Roy

1. Morphological changes in the human auditory pathway during aging, Symposium on neural functions of the aging Brain, 27 & 28 September 2016, Rajiv Gandhi Center for Biotechnology, Thiruvanthapuram
2. Introduction to stereology, Pre-conference Neurostereology Workshop of Annual Conference of Indian Academy of Neuroscience, 18 October 2016, AIIMS, New Delhi
3. Series of six lectures: Cerebral cortex, Thalamus, Ascending pathways, Descending pathways, Hippocampus, Auditory pathway, MSc Neuroscience, 25 & 26 October 2016, Jiwaji University, Gwalior
4. Morphological changes in the human auditory pathway during aging, 14th Annual Conference of Indian Academy of Geriatrics, 9–11 November 2016, AIIMS, New Delhi
5. Surgical Anatomy of the vertebral column, Mediexpo 2016, 19 November 2016, NSCB Medical College, Jabalpur
6. Deafness in old age: An Anatomist's view, Mediexpo 2016, 20 November 2016, NSCB Medical College, Jabalpur

A. Shariff

1. Selection of Medical Teachers, Symposium on “Selection of Medical Teachers”, 1–4 February 2017, ESIC Medical College and Hospital, Hyderabad
2. Educational technology, eLearning and Blended learning, Basic Course Workshop in Medical and Health Professional Education, 30 March–1 April 2016, CMET, AIIMS, Delhi

Pushpa Dhar

1. An approach to microanatomy, Guest Lecture, 26 May 2016, Sharda University, Greater Noida

S.B. Ray

1. Pain, the good, the bad, and its alleviation, Recent advances in biomedical research: Strategies and innovation, 27 May 2016, AIIMS, New Delhi
2. Neural pathway in pain: Its alteration with age, 14th Annual Conference of Indian Academy of Geriatrics, 11 November 2016, AIIMS, New Delhi
3. Surgical anatomy of thorax, Cadaveric Workshop on Thoracic surgery, 25 November 2016, Trauma Centre AIIMS, New Delhi
4. Cadaveric Workshop on “Contemporary practices in surgery”, 22 January 2017, AIIMS, New Delhi
5. Role of spinal neuroglia and related gap junctions in the pathogenesis of acute inflammatory pain in rats, DBT Brainstorming session on glia, 2 & 3 February 2017, Jiwaji University, Gwalior

Rima Dada

1. Genetics of Retinoblastoma, Meeting of Indian Ophthalmic Society, 6 April 2016, New Delhi
2. Impact of YBLI on unexplained Infertility, Yoga and meditation evidence based update, 14 April 2016, AIIMS, New Delhi
3. Seminal oxidative stress and DNA damage in male infertility, International Symposium on reproductive health, 5 June 2016, NIOH, Ahmadabad
4. Concepts in Genetics, Invited Lecture, 10 July 2016, Hamdard Institute of Medical Sciences, Delhi
5. Mendelian inheritance and atypical pattern of inheritance, Invited Lecture, 14 July 2016, Hamdard Institute of Medical Sciences, Delhi
6. Chromosomal abnormalities, MBBS Course curriculum, Invited Lecture, 17 July 2016, Hamdard Institute of Medical Sciences, Delhi
7. Can yoga reverse complex diseases, Indo-German Health Roundtable The challenge of lifestyle diseases in India, 12 August 2016, German Embassy, New Delhi
8. Paternal Factors in recurrent implantation failure, 22nd IFFS World Congress Organized by International Federation of Fertility Societies, 21 September 2016, India Expo Hall, Noida
9. Sperm a cell in Crisis, 22nd IFFS World Congress Organized by International Federation of Fertility Societies, Pre-congress Workshop, 21 September 2016, India Expo Hall, Noida
10. Our Health ...Our choice, special invited lecture, 12 October 2016, VMMC, New Delhi
11. Polymorphism in *mtHfr* 677 c > t and 1298 a > c in paternal sperm DNA is associated with increased risk of retinoblastoma in Indian children, Annual Meeting of American Society of Reproductive Medicine, 15–19 October 2016, International Conference Centre, Salt Lake City, USA
12. Effects of yoga based lifestyle Modification on Genomic Instability in Major Depressive Disorder Patients: A Randomized Controlled Trial, 64th National Conference of Anatomical Society of India, 23 November 2016, AIIMS, Jodhpur
13. 5 *HTT*PR polymorphisms and risk of MDD, 64th National Conference of Anatomical Society of India, 23 November 2016, AIIMS, Jodhpur
14. Genetic studies in male infertility, clinical correlates, 64th National Conference of Anatomical Society of India, 24 November 2016, AIIMS, Jodhpur
15. Y chromosome, Is it a functional wasteland, Third International Conference on Birth Defects (ICBD-2016) and Third National Conference of the Society of the Indian Academy of Medical Genetics (SIAMG), 9 December 2016, AIIMS, New Delhi
16. Introduction to Molecular Biology, Second Meeting and Workshop on laboratory techniques in cytogenetics and molecular genetics, 22 December 2016, MAMC, New Delhi
17. Yoga, Can it reverse testicular aging, Reproductive health with emphasis on strategies for infertility, Assisted Reproduction and Family Planning, 23 January 2017, AIIMS, New Delhi

18. Application of genetics, Bench to bedside, Second Meeting and Workshop on laboratory techniques in cytogenetics and molecular genetics, 23 December 2016, MAMC, New Delhi
19. Telomere length and genomic integrity-impact health trajectory of offspring, Indian Society for Research in Reproduction and Fertility, 24 January 2017, AIIMS, New Delhi
20. Yoga-Science of inner wellbeing, Delhi Doctor Forum, 26 February 2017, Constitution Club, New Delhi

Arundhati Sharma

1. Applying molecular genetics in ophthalmology and corneal disorders, DOSCON 2016: OPHTHALMIC PANORAMA, 15–17 April 2016, Delhi
2. Patterns of single gene inheritance, MBBS Course curriculum Invited Lecture, 16 November 2016, North DMC medical college Hindu Rao hospital, Delhi
3. Non Mendelian pattern of inheritance, MBBS Course curriculum, Invited Lecture, 19 November 2016, North DMC Medical College Hindu Rao hospital, Delhi
4. Autosomal and sex chromosomal abnormalities, MBBS Course curriculum, Invited Lecture, 19 November 2016, North DMC Medical College, Hindu Rao hospital, Delhi
5. Research strategies for discovery of genetic mutation underlying familial monogenic disorders, Genomics of Hormone and Metabolic Disorders, 3–5 February, Jaipur

T.C. Nag

1. Oxidative stress and oxidative stress responses in aging human retina, 18th Biennial Conference of the Association of Gerontology (Indian Ageing Congress 2016), 10 November 2016, AIIMS, New Delhi
2. Morphological alterations in ageing human choriocapillaris, 64th National Conference of Anatomical Society of India, 29 November 2016, AIIMS, Jodhpur
3. Mechanisms of cone cell death in aging human retina, International Symposium on Neurodegenerative Disorders, 30 March 2017, NIMHANS, Bengaluru

Tony George Jacob

1. Design Based stereology in neuroscience, Neurostereology Workshop AIIMS, 2016; Pre-conference Workshop of Annual Conference of Indian Academy of Neuroscience, 18 October 2016, AIIMS, New Delhi
2. Does Autophagy have a role in ageing? Indian Ageing Congress 2016, 9–11 November 2016, AIIMS, New Delhi
3. Immunoelectron microscopy, National Training Program in EM for scientific investigators 2016, 26 November 2016, AIIMS, New Delhi
4. Animal models in acute pancreatitis, A view to using animals in experimental studies, 64th National Conference of Anatomical Society of India, 28 November–1 December 2016, AIIMS, Jodhpur
5. Communication skills, speaking and listening, Workshop on Personality development, communication and presentation skills, 18 January 2017, JPN Trauma Center, New Delhi

Oral papers/posters presented: 75

1. Kaur C, Jacob TG, Nag TC, Thakar A, Bhardwaj DN, Roy TS. Unbiased stereology of adult human spiral ganglion, 34th National Annual Conference of Indian Academy of Neuroscience, 2016, 19–21 October 2016, NBRC, Manesar,
2. Saini S, Jacob TG, Nag TC, Thakar A, Roy KK, Roy TS. Stereological investigation of morphometric parameters of developing Cochlear Nucleus by Nissl and Neu-N staining, 34th National Annual Conference of Indian Academy of Neuroscience, 2016, 19–21 October 2016, NBRC, Manesar
3. Singh I, Jacob TG, Bhardwaj DN, Ghosh D, Roy TS. Down regulation of Glutamic Acid Decarboxylase (GAD1) gene in human inferior colliculus with aging, Indian Ageing Congress 2016, 9–11 November 2016, AIIMS, New Delhi
4. Kaur C, Jacob TG, Nag TC, Thakar A, Bhardwaj DN, Roy TS. Unbiased stereological estimates of the spiral ganglion neurons in the ageing human cochlea, Indian Ageing Congress 2016, 9–11 November 2016, AIIMS, New Delhi
5. Kaur C, Jacob TG, Nag TC, Thakar A, Bhardwaj DN, Roy TS. Spiral ganglion in an aged adult human cochlea, 46th Annual Meeting of Society for Neuroscience, 12–16 November 2016, San Diego, USA
6. Sharma MK, Bhatt NR, Chaudhari E, Jacob TG, Garg PK, Roy TS, Chakraborty K. Effect of ascorbate in experimental acute pancreatitis with reference to inflammation and cell death, 64th National Conference of Anatomical Society of India, 28 November–1 December 2016, AIIMS, Jodhpur
7. Saini S, Jacob TG, Nag TC, Thakar A, Roy KK, Roy TS. Stereological study of neurons and glia in developing human cochlear nucleus 64th National Conference of Anatomical Society of India, 28 November–1 December 2016, AIIMS Jodhpur, Jodhpur

8. Kumar R, Jacob TG, Roy TS. Standardizing the MCAO model for increased post-stroke survival, 64th National Conference of Anatomical Society of India, 28 November–1 December 2016, AIIMS Jodhpur, Jodhpur
9. Kumar P, Singh I, Kaur C, Jacob TG, Bhardwaj DN, Roy TS. Morphometric changes in the human oculomotor nerve: An electron microscopic study, 64th National Conference of Anatomical Society of India, 28 November–1 December 2016, AIIMS Jodhpur, Jodhpur
10. Quadri JA, Sarwar S, Kumar A, Singh S, Rizvi MA, Roy TS, Shariff A. Protective effects of N-acetylcysteine against fluoride-induced ultrastructural changes in hepatic cell line hepg-2, International Conference on Electron Microscopy (EMSI-2016), 2–4 June 2016, IIT, BHU, Varanasi
11. Subhash B, Shariff A, Singh S, Nag TC, Quadri JA, Sarwar S. Morphology of the myenteric plexus at different gut segments of human foetuses, 64th National Conference of Anatomical Society of India, 28 November–1 December 2016, AIIMS, Jodhpur
12. Subhash B, Shariff A, Singh S, Nag TC, Quadri JA, Sarwar S. Immunohistochemical study of enteric nervous system in human fetuses, Xth American Association of Physicians of Indian Origin (AAPI) Global Healthcare Summit, 28 December 2016, Rabindranath Tagore Medical College, Udaipur
13. Dhar P, Kumar P, Kaushal P. Ameliorating role of antioxidant supplementation on sodium-arsenite induced adverse effects on developing rat cerebellum, 17th International Conference on Oxidative Stress Reduction, 13–15 June 2016, Institute Pasteur, Paris
14. Dhar P, Kaushal P, Kumar P. Antioxidant (AOX) supplementation influences calcium binding protein (CaBP) expression in cerebellum of rat pups subjected to sodium arsenite (NaAsO₂) exposure, 64th National Conference of Anatomical Society of India, 28 November–1 December 2016, AIIMS, Jodhpur
15. Dhar P, Kaushal P, Kumar P. Evidence of antioxidant (AOX) induced modulation of calcium binding protein (CaBP) expression in rat cerebellum following sodium arsenite exposure, 36th Annual Session of the Academy of Environmental Biology and National Symposium on 'Impact of emerging Toxic Chemicals on Human, Plants, disease and sustainable development', 25–27 November 2016, Jamia Hamdard Institute of Med. Science and Research, New Delhi
16. Kaur B, Kumar P, Mehta K, Pandey KK, Dhar P. Beneficial role of Cur cumin on cognitive functioning of mice subjected to arsenic trioxide exposure*, XXXIV Annual Meeting of Indian Academy of Neurosciences (IAN), 19–21 October 2016, National Brain Research Centre (NBRC), Manesar
17. Kaur B, Kumar P, Mehta K, Pandey K, Dhar P. Neuroprotective efficacy of curcumin on arsenic trioxide induced adverse effects in mice basal forebrain, 2nd IBRO/APRC Chandigarh Neuroscience School, 14–22 December 2016, Punjab University, Chandigarh
18. Mehta K, Kumar P, Kaur B, Pandey KK, Dhar P. Role of Cur cumin against arsenic trioxide induced adverse effects on CA-1 of mice hippocampus, XXXIV Annual Meeting of Indian Academy of Neurosciences (IAN), 19–21 October 2016, NBRC, Manesar
19. Kaushal P, Saini C, Dubey A, Singh S, Dhar P. Asymmetrical anomalous branching pattern of the brachial artery in the superior extremity: A case report, 64th National Conference of Anatomical Society of India, 28 November–1 December 2016, AIIMS, Jodhpur
20. Pandey KK, Kumar K, Pavan K, Dhar P. Estrogen (E2) Therapy ameliorates ovariectomy (OVX) induced Neurogenerative & Neuro-inflammatory events in aged rat hippocampus, CUSAT, NUS Joint International Conference on 'Biototechnology and Neuroscience' (CUSBAN, 2016), 19–21 December 2016, Cochin University of Science and Technology, Cochin
21. Mehta K, Kumar P, Kaur B, Pandey KK and Dhar P. Effect of Cur cumin supplementation on behavioural cytoarchitectural and biochemical alterations induced by As₂O₃ exposure in mice hippocampus (CA-1), CUSAT-NUS Joint International Conference on 'Biototechnology and Neuroscience' (CUSBAN-2016), 19–21 December 2016, Cochin University of Science and Technology, Cochin best poster award
22. Tolahunase M, Bisht S, Sagar R, Yadav RK, Khan S, Dada R. Effect of Yoga on Quality of Life and Seminal Quality in Male Infertility Patients with Major Depressive Disorder: Randomized Controlled Trial, ASA 41st Annual conference American Society of Andrology, 2–5 April 2016, New Orleans
23. Gautam S, Kumar SB, Bisht S, Chawla B, Dada R. Paternal lifestyle factors associated with sperm DNA damage, ASA 41st Annual Conference American Society of Andrology, 2–5 April 2016, New Orleans
24. Tolahunase M, Sagar R, Khan S, Dada R. Impact of yoga and meditation on oxidative stress biomarkers and transcriptome in major depressive disorder (MDD), Redox world congress, 13–15 June 2016, Institute Pasteur, Paris,
25. Dhawan V, Kumar M, Malhotra N, Singh N. Paternal influence of sperm transcripts and DNA damage in recurrent implantation failure, 32nd Annual Meeting of European Society of Human Reproduction & Embryology, 3–6 July 2016, Helsinki
26. Faiq MA, Dada R, Saluja D, Dada T. Genetics of glaucoma an Update, CYP1B1 gene and glaucoma, 3rd Asia Pacific Glaucoma Congress, 14–16 July 2016, Asia Pacific Glaucoma Society, Chiang Mai, Thailand

27. Dhawan V, Kumar M, Deka D, Malhotra N, Dadhwal V, Dada R. Sperm gene expression profile in recurrent pregnancy loss, 22nd IFFS World Congress, 21–25 September 2016, India Expo Centre, Greater Noida, Delhi NCR
28. Bisht S, Chawla B, Dada R. Polymorphism in *MTHFR* 677 C > T and 1298 A > C in paternal sperm DNA is associated with increased risk of Retinoblastoma in Indian children, American Society for Reproductive Medicine (ASRM) 2016 Scientific Congress & Expo, 15–19 October 2016, Salt Lake City, Utah, USA
29. Tolahunase M, Sagar R, Yadav RK, Dada R. Effect of yoga and meditation on rate of aging, Indian Ageing Congress 2016, 9–11 November 2016, AIIMS, New Delhi, best paper award
30. Tolahunase M, Sagar R, Dada R. Major depressive disorder is associated with accelerated cellular aging, Indian Ageing Congress 2016, 9–11 November 2016, AIIMS, New Delhi, best oral presentation (2nd position)
31. Tolahunase M, Sagar R, Dada R. Effects of Yoga Based Lifestyle Modification on Genomic Instability in Major Depressive Disorder Patients: A randomized controlled trial, 64th National Conference of Anatomical Society of India, 28 November–1 December 2016, AIIMS, Jodhpur
32. Tolahunase M, Mishra S, Kumar V, Dada R. Yoga mitigates accelerated aging to improve semen characteristics and quality of sperm in infertile males with major depressive disorder: Randomized controlled trial, 64th National Conference of Anatomical Society of India, 28 November–1 December 2016, AIIMS, Jodhpur
33. Gautam S, Kumar U, Kumar A, Chaudhary S, Dada R. Yoga and meditation based lifestyle intervention on rheumatoid arthritis: A pilot study, 64th National Conference of Anatomical Society of India, 28 November–1 December 2016, AIIMS, Jodhpur
34. Dhawan V, Kumar M, Dadhwal V, Deka D, Dada R. Sperm transcript dysregulation: possible role in recurrent pregnancy loss, 64th National Conference of Anatomical Society of India, 28 November–1 December 2016, AIIMS, Jodhpur
35. Deka D, Dadhwal V, Dada R. Dysregulation of sperm transcripts in recurrent pregnancy loss, 2nd World Congress of Recurrent Pregnancy Loss, 19–22 January 2017, Cannes, France
36. Dhawan V, Kumar M, Malhotra N, Singh N, Dada R. Spermatozoal transcripts: role in embryonic development, 27th Annual Meeting of Indian Society of Study of Reproduction and Fertility, 23–25 January 2017, ICMR, New Delhi
37. Gautam S, Kumar SB, Chawla B, Dada R. Seminal Oxidative Stress and Oxidative DNA Damage: Clinical Implications, ISSRF (27th Annual Meeting of the Indian Society for the Study of Reproduction and Fertility), 23–25 January 2017, AIIMS, New Delhi
38. Bisht S, Chawla B, Dada R. Increased seminal plasma levels of 8-hydroxy-2'-deoxyguanosine are associated with increased risk of developing Retinoblastoma in children, International Conference on Reproductive Health with Emphasis on Infertility, Assisted Reproduction and Family Planning (ISSRF-2017), 23–25 January 2017, AIIMS, New Delhi
39. Faiq MA, Dada R, Mohanty K, Mittal D, Dada T. Effect of Yoga on Brain in Glaucoma, 32nd Asia Pacific Academy of Ophthalmology Congress, 1–5 March 2017, Asia Pacific Ophthalmology Society, Singapore
40. Faiq MA, Dada R, Dada T. Bioinformatic and Chronological Analysis of Trabeculectomy by Utilizing Comprehensive Functional Gene Association and Cellular Event Studies: A Focus on Fibrotic Scar Formation (BEST PAPER AWARD), 8th International Congress on Glaucoma Surgery, 17–20 February 2016, Muscat, Oman
41. Faiq MA, Dada R, Saluja D, Dada T. Genomewide Interactome Analysis and Functional Characterization of Novel CYP1B1 Mutations reveals important insights into etiopathogenesis of primary congenital glaucoma and identifies novel therapeutic agents and targets. (Certificate of Appreciation), 42nd Annual Meeting and International Congress of Indian Society of Human Genetics, 3–5 March 2016, Shankar Netralaya, Chennai
42. Sangwan S, Sharma A, Sharma N, Khanna N, Agarwal T, Vajpayee R. Ocular manifestations in Stevens, Johnson syndrome, A molecular perspective, Annual Meeting of ARVO 2016, 1–5 May 2016, Seattle, USA
43. Birla S, Malik E, Sharma An, Grover T, Sharma A. Genetic diagnosis of endocrine disorders: Implications for bench to bedside studies, 66th Annual Meeting of American Society of Human Genetics, 18–22 October 2016, Life Science Institute, Vancouver, Canada
44. Malik E, Jyotsna V, Sharma A. A study on the association of *MEN1* and *AIP* gene variations with sporadic Anterior Pituitary Adenoma, 46th Annual Conference of Endocrine Society of India, 21–23 October 2016, New Delhi
45. Muthukrishnan P, Gupta R, Ambekar A, Grover T, Sharma A. Association of GRIN2A gene Polymorphism with opioid dependence, 64th National Conference of Anatomical Society of India, 28 November–1 December 2016, AIIMS, Jodhpur
46. Singh D, Gupta R, Agarwal T, Sharma A. A preliminary study on the association of VEGF polymorphism with pterygium, 64th National Conference of Anatomical Society of India, 28 November–1 December 2016, AIIMS, Jodhpur
47. Marik B, Shama AN, Agarwal N, Grover T, Kumari S, Sharma A. A study on the association of *HLA-G* variations with recurrent pregnancy loss, India International science festival, 2016, 7–11 December 2016, CSIR, National physical laboratory, New Delhi, India

48. Marik B, Bagga A, Sinha A, Hari P, Sharma A. Genetic study of patients with refractory rickets and hypophosphatemia, India International science festival, 2016, 7–11 December 2016, CSIR, National physical laboratory, New Delhi, India
49. Malik E, Birla S, Tandon N, Ganie A, Sharma A. Importance of genetic testing for early diagnosis of Multiple Endocrine Neoplasia type-2 Syndrome, India International science festival, 2016, 7–11 December 2016, CSIR, National physical laboratory, New Delhi, India
50. Singh R, Gupta R, Ambekar A, Grover T, Jain R, Sharma A. Association study of monoamine pathway gene polymorphisms in alcohol dependence, India International science festival, 2016, 7–11 December 2016, CSIR, National physical laboratory, New Delhi, India
51. Marik B, Bagga A, Sinha A, Hari P, Sharma A. Mutational analysis of *PHEX* gene in patients with hypophosphatemic rickets, Third International conference on birth defects (ICBD) and Third National conference of the Society for Indian Academy of Medical Genetics (SIAMG) 2016, 8–10 December 2016, AIIMS, New Delhi, India
52. Grover T, Gupta R, Ambekar A, Sharma A. A genetic association study of OPRM1 gene with alcohol and opioid dependence, 69th Annual National Conference of Indian Psychiatric Society, 5–8 January 2017, Dr Shyama Prasad Mukherjee Trade Centre, Raipur, Chhattisgarh, India
53. Gupta R, Singh R, Ambekar A, Grover T, Sharma A. Association of Gaba and glutamate receptors gene polymorphism with alcohol dependence: A preliminary study, 69th Annual National Conference of Indian Psychiatric Society, 5–8 January 2017, Raipur, Chhattisgarh
54. Singh R, Gupta R, Ambekar A, Grover T, Jain R, Sharma A. Association of monoamine pathway gene polymorphisms in alcohol dependence, 69th Annual National Conference of Indian Psychiatric Society, 5–8 January 2017, Raipur, Chhattisgarh, India
55. Marik B, Bagga A, Sinha A, Hari P, Sharma A. Clinical significance of genetic testing in children with hypophosphatemic rickets, 42nd Annual meeting of Indian Society of Human Genetics (ISHG), 2–4 March 2017, Indian Institute of Science (IISc), Bengaluru, India
56. Mochan S, Bhatla N, Kumar R, Dhingra R. PERK (arm) pathway of Endoplasmic reticulum stress is induced on treatment of trophoblast cells with the sVEGFR-1(s-flt-1), 64th National Conference of Anatomical Society of India, 28 November–1 December 2016, AIIMS, Jodhpur
57. Gupta SK, N Rani N, Bhatla N, Dhingra R. Hydrogen sulphide producing enzymes are decreased in preeclamptic placentae, 64th National Conference of Anatomical Society of India, 28 November–1 December 2016, AIIMS, Jodhpur
58. Arora P, Bhatla N, and Dhingra R. Study on the genetic expression of MMP 2 and 9 in Preeclampsia, 64th National Conference of Anatomical Society of India, 28 November–1 December 2016, AIIMS, Jodhpur
59. Sharma N, Saxena S, Mochan S, Gupta SK, Dhingra R. Role of hydrogen sulphide in mediating migration of human trophoblast cells, 64th National Conference of Anatomical Society of India, 28 November–1 December 2016, AIIMS, Jodhpur
60. Yadav V, Rani N, Bhatla N and Dhingra R. Endoplasmic reticulum stress is increased in placenta of preeclamptic women, 64th National Conference of Anatomical Society of India, 28 November–1 December 2016, AIIMS, Jodhpur
61. Kumar P, Nag TC, Jha KA, Roy TS, Wadhwa S. Changes in aging rat retina due to oral administration of iron sulphate, 18th Biennial Conference of the Association of Gerontology (Indian Ageing Congress 2016), 10 November 2016, AIIMS, New Delhi
62. Gupta CL, Polisetty V, Jha KA, Nag TC. Light induced outer retinal degeneration and its consequences in inner retina, 64th National Conference of Anatomical Society of India, 29 November 2016, AIIMS, Jodhpur
63. Dheeraj K, Dhingra R, Singh S, Nag TC, Pal S, Kumar R, Bhukya S, Rani N. Expression of cKIT in gastroneuroendocrine tumors, 64th National Conference of Anatomical Society of India, 29 November 2016, AIIMS, Jodhpur
64. Gorla S, Maurya M, Kathpalia P, Nag TC, Roy TS. Expression patterns of BDNF and Trk B in neonatal chick retina exposed to light of variable photoperiods, 64th National Conference of Anatomical Society of India, 29 November 2016, AIIMS, Jodhpur
65. Kumar P, Nag TC, Jha KA, Roy TS, Velpandian T, Wadhwa S. Retinal changes in Wistar rats after iron over dose: comparisons with aging, ARVO-Asia 2017 meeting, 5 February 2017, Brisbane, Queensland, Australia
66. Dubey A, Kumar A, Nag TC, Srivastava A, Jacob TG, Sehgal R. An immunohistochemical approach to diagnosis of mammary phyllodes tumor, AAPI International research competition, GHS, 2016, 28 December 2016, RNT Medical College, Udaipur, Rajasthan
67. Dubey A, Kumar A, Srivastava A, Nag TC, Jacob TG, Sehgal R. Tyrosine receptor Kinase A expression in malignant and benign breast tumor (oral), 64th National Conference of Anatomical Society of India, 29 November 2016, AIIMS, Jodhpur, Rajasthan

68. Bahl A, Gupta S, Ray SB, Kaler S. Expression of Neuropeptide Y in dorsal root ganglia following hind paw incision in rats, 64th National Conference of Anatomical Society of India, 28 November–1 December 2016, AIIMS, Jodhpur
69. Kumari C, Gupta CL, Jain P, Raza K, Jhahhria SK, Singh S, Rani N. Cystoduodenal ligament with hepatic artery variation, 64th National Conference of Anatomical Society of India, 28 November–1 December 2016, AIIMS, Jodhpur
70. Kaler S, Prasoon P, Ray SB. Role of Calcitonin gene-related peptide (CGRP) in postsurgical pain following hind paw incision in rats, AAPI International Research Competition at GHS 2016, 28 December 2016, RNT Medical College, Udaipur
71. Bhatt NR, Chaudhari E, Mathew A, Sharma MK, Mall SR, Jacob TG, Chakraborty K, Garg PK. UPRER in the Pathogenesis of Acute Pancreatitis and Exploring the Therapeutic Potential of Bioactive Small Molecules, Unfolded protein response, from basic to bedside, 4–6 September 2016, Karolinska Institute, Stockholm
72. Singh I, Jacob TG, Bhardwaj DN, Ghosh D, Roy TS. Downregulation of Glutamic Acid Decarboxylase (GAD1) Gene in Human Inferior Colliculus with Aging, Indian Ageing Congress 2016, 9–11 November 2016, AIIMS, New Delhi
73. Sharma MK, Bhatt NR, Chaudhari E, Jacob TG, Garg PK, Roy TS, Chakraborty K. Effect of ascorbate in experimental acute pancreatitis with reference to inflammation and cell death, 64th National Conference of Anatomical Society of India, 28 November–1 December 2016, AIIMS, Jodhpur
74. Dheeraj K, Singh S, Rani N, Harisha K, Pratap H, Banerjee A, Subhash B, Yadav V. Neuromuscular variation in gluteal region with clinical significance, 64th National Conference of Anatomical Society of India, 28–1 December 2016, AIIMS, Jodhpur
75. Mandal R, Singh S, Shariff A, Nag TC. Prenatal development of the myenteric plexus at the human ileocaecal junction, 2nd Federation of Neurogastroenterology and Motility Joint International Meeting, 25–28 August 2016, San Francisco, California

RESEARCH

Funded projects

Ongoing

1. Age related morphological and neurochemical changes in the human inferior colliculus, TS Roy, AIIMS, 1 year, 2016–17, Rs 4.5 lakhs
2. To Study the role of Th (T-helper), 17 cells in Arthritis Patients in Indian Population, A Shariff, ICMR, 3 years, 2015–18, Rs 49 lakhs
3. Evaluation of endemic fluoride associated anemia during pregnancy in the identified Scheduled Castes community in Bihar, counseling and intervention with replacement of safe water, a pilot study, A Shariff, DST, 3 years, 2016–19, Rs 25 lakhs
4. Sperm Telomere length analysis and its correlation with oxidative stress and DNA damage in infertile men, Rima Dada, DBT, 3 years, 2012–16, Rs 55 lakhs
5. Analysis of Sperm DNA damage in fathers of children with non-familial childhood cancer, Rima Dada, ICMR, three years, 2015–18, Rs 36 lakhs
6. A Translational randomized trial of yoga based lifestyle intervention for major depressive disorder (MDD) management in India and analyzing biomarkers of cellular aging associated with it, Rima Dada, Ayush, 3 years, 2016–19, Rs 30 lakhs
7. Effects of Lifestyle Interventions and Psychological Stress on Markers of Aging, Rima Dada, ICMR, 3 years, 2017–20, Rs 40 lakhs
8. Effect of Yoga on Inflammatory Biomarkers of Rheumatoid Arthritis, Rima Dada, AIIMS, 1 year, 2016–17, Rs 5 lakhs
9. Genome, wide association study of phenotypic extremes in primary angle closure glaucoma, Arundhati Sharma, DBT, 3 years, 2016–19, Rs 54 lakhs
10. Genetic study of patients with refractory rickets and hypophosphatemia, Arundhati Sharma, ICMR, 3 years, 2015–18, Rs 30 lakhs
11. Morphological and biochemical changes in neonatal chick retina following exposure to variable photoperiods, TC Nag, SERB, 3 years, 2013–2016, Rs 33 lakhs
12. Expression patterns of iron regulatory proteins in rat retina with aging and in experimental iron overload, TC Nag, CSIR, 3 years, 2015–17, Rs 22.8 lakhs
13. Ultrastructural and immunohistochemical analysis of human choroidal vessels with normal aging, TC Nag, ICMR, 3 years, 2015–2018, Rs 21.4 lakhs

14. Exploration of the nexus between inflammation and cell death in exocrine pancreas in murine models of experimental pancreatitis, Tony George Jacob, AIIMS, 2 years, 2015–17, Rs 10 lakhs
15. The Role of ER Stress in the pathogenesis of caerulein induced acute pancreatitis in mice and the effect of chemical chaperones on the severity of acute pancreatitis, Garg PK, ICMR, 3 years, 2014–2017, Rs 47.7 lakhs
16. Role of hydrogen sulphide in migration of human trophoblast cells and its impact on placentation: an *in vitro* study, Neerja Rani, AIIMS, 2 years, 2015–17, Rs 10 lakhs
17. Organization of the developing myenteric plexus in midgut, hindgut and ileocecal valve in humans, Seema Singh, AIIMS, 2 years, 2015–17, Rs 10 lakhs
18. Development of Nano, drug delivery system for Brimonidine for treatment of open angle glaucoma with lower dose, higher efficacy and prolonged action, Subhash Chandra Yadav, AIIMS, 2 years, 2016–18, Rs 9 lakhs
19. Simple, quick and onsite early diagnostic kit for pathogen detection in asymptomatic stage, Subhash Chandra Yadav, DBT, 3 years, 2016–19, Rs 50.2 lakhs

Completed

1. Mutation analysis of growth hormone deficiency in North Indian children, Arundhati Sharma, ICMR, 4.5 years, 2011–16, ICMR, SRF
2. Endoplasmic reticulum stress in pathogenesis of preeclampsia: an *in vitro* study, Renu Dhingra, AIIMS, 2 years, 2014–16, Rs 10 lakhs
3. Morphological and biochemical changes in neonatal chick retina following exposure to variable photoperiods, TC Nag, SERB, 3 years, 2013–16, Rs 33 lakhs
4. A study on the involvement of specific neurotransmitters and neuropeptides at the spinal cord level in postoperative pain in rats, Saroj Kaler Jhahria, AIIMS, 1 year, 2015–16, Rs 5 lakhs

Departmental projects

Ongoing

1. Development of the human cochlear nucleus
2. Age changes in the human inferior colliculus
3. Age changes in the human spiral ganglion
4. Age changes in the human stria vascularis
5. Age changes in the human trochlear, abducent and cochlear nerve
6. Study of the Expression of Parvalbumin and Calbindin in the Aging Human Inferior Colliculus
7. Development of the human cochlear nucleus
8. To study the effects of chronic fluoride exposure on enterochromaffin cells of the entero-endocrine system, a pilot study
9. Study of the morphology of enteric Glia in myenteric plexus of adult human colon
10. Study of the developing myenteric plexus in human fetus
11. Effect of fluoride exposure on the development of the Enteric Nervous System: an experimental study
12. Effect of curcumin on mice basal forebrain structures following arsenic trioxide exposure
13. Effect of Resveratrol supplementation on cognitive function and Estrogen receptor profile in hypothalamus and hippocampus of Arsenic trioxide-exposed adult female mice
14. Evaluation of the role of curcumin supplementation on Arsenic trioxide induced neurotoxicity in the basal ganglia of mice
15. Cytogenetic and Molecular evaluation in Premature Ovarian Failure
16. Paternal factors in embryonic development
17. Molecular analysis in Depression: A case control study
18. Telomere dynamics in male infertility
19. Genetic and Molecular basis of retinoblastoma
20. To study phenotype genotype correlation in patients with 5 alpha reductase 2 deficiency and androgen insensitivity
21. Molecular Basis of idiopathic male infertility
22. Meditation and its impact on POAG
23. Epidemiological studies in male infertility
24. Meditation based stress reduction: Is it therapeutic for Primary Open Angle Glaucoma (POAG)
25. Impact of short term Yoga based intervention on obesity

26. Molecular studies in Fibromyalgia
27. Impact of yoga and meditation on Epigenome in Rheumatoid Arthritis
28. Mutation analysis of candidate genes (NR5A1, DAX1, DHH, DMRT1, SOX9, SRY, WT1) in patients with Gonadal dysgenesis and 46, XY karyotype
29. Impact of Yoga Based Intervention on Quality of Life of Glaucoma Patients
30. Mutation analysis in Anti Mullerian Hormone gene in poor responders
31. A study on the genetic association and correlation of Monoaminergic and GABAergic pathway gene polymorphisms with brain imaging (PET/SPECT) in Alcohol & Opioid Dependence
32. Epigenetic changes of Dopaminergic pathway genes and association of GRIN2A gene polymorphism in Alcohol Dependence
33. Genetic Study of Posterior Polar Cataract
34. Study to identify the genetic basis underlying Stevens–Johnson syndrome (SJS)
35. Study of genotype-phenotype correlation in Asian Indian subjects with childhood onset of growth hormone deficiency
36. A study on the association of Alcohol dependence with rs9927871 polymorphism in GRIN2A gene
37. Mutational studies in patients with Refractory rickets and Hypophosphatemia
38. Genetic and Epigenetic profiling in patients of Anterior Pituitary Adenoma
39. Study on the association of Polymorphism, Methylation and Expression status of Monoamine Pathway genes with Alcohol Dependence
40. Association of VEGF gene polymorphism and pterygium
41. Association of GRIN2A and DRD4 Gene Polymorphism with Opioid Dependence
42. Role of s-VEGFR in endoplasmic reticulum stress in preeclampsia
43. Effect of hydrogen sulfide on migration of human trophoblast cells and its status in preeclampsia
44. Role of microRNA-30 in cystathionine gamma lyase mediated trophoblast cell invasion and its status in preeclampsia.
45. A correlative study of feto-maternal hydrogen sulphide production with umbilical artery velocimetry in preeclampsia
46. Role of vascular endothelial growth factor receptor (VEGFR) in hydrogen sulphide mediated migration of human trophoblastic cell
47. Expression of cystathionine gamma lyase and GRP78 in different zones of placenta in early and late onset preeclampsia
48. Expression of micro RNA-22, Specificity Protein 1 and Cystathionine Beta Synthase in preeclampsia and their role in regulating trophoblast cell invasion
49. Microsurgical comparison of the operative exposure of meckel's cave and brainstem through transcavernous anterior petrosectomy and retrosigmoidal suprameatal approach in silicon dye injected cadaveric human heads
50. Role of Mi RNAs in modulating trophoblast cell invasion
51. Expression patterns of iron regulatory proteins in rat retina with aging and in experimental iron overload
52. Epigenetic regulation of brain-derived neurotrophic factor in the central auditory pathway and hippocampus of neonatal chicks exposed to prenatal sound stimulation
53. Light-induced oxidative stress and endogenous neuroprotective mechanisms in post-hatch chick retina
54. Light-induced outer retinal damage and its consequences in inner retina
55. Expression patterns of BDNF and Trk-B in neonatal chick retina exposed to light of variable photoperiods
56. Study of the morphology of pyramidal cells and astrocytes in CA1 region of hippocampus in suicidal deaths.
57. Comparison of histological tumor content in human gall bladder cancer with quantitative expression of β -human chorionic gonadotropin and receptor interacting protein-1
58. The Effect of trimethylamine n-oxide (TMAO) on Two murine models of acute pancreatitis
59. Effect of angiotensin receptor modulation in rat middle cerebral artery occlusion: A Morphological and Biochemical Study
60. Effect of curcumin on murine model of mild acute pancreatitis
61. cKit and cytokeratin19 expression and ultrastructural morphology of gastro neuroendocrine tumors
62. Study of association of MMP2 promotor polymorphisms with preeclampsia

Completed

1. Quantitative estimation of total glial cells and neurons of left stellate ganglia in rat model of myocardial hypertrophy
2. Morphological study of neurons in human fetal pancreas
3. To study the effects of chronic fluoride exposure on enterochromaffin cells of the entero-endocrine system, a pilot study

4. Study of the morphology of enteric Glia in myenteric plexus of adult human colon
5. Study of the developing myenteric plexus in human fetus
6. Effect of fluoride exposure on the development of the Enteric Nervous System: an experimental study
7. Effect of curcumin on morphological and biochemical changes in cardiac tissue of adult mice chronically exposed to arsenic trioxide
8. Sperm factors in RSA
9. Micromuclei assay for determining cytotoxicity of radioactive iodine
10. Genetic studies in fibromyalgia
11. Expression patterns of BDNF and Trk-B in neonatal chick retina exposed to light of variable photoperiods
12. An Anatomical and radiological study of the vascular supply of the mammary gland and the nipple-areola complex.
13. Tyrosine Kinase A Receptor Expression in Benign and Malignant Breast Tumors
14. Expression of Somatostatin and Neuropeptide Y in Dorsal Root Ganglia of Rats following hind paw incision in rats.
15. Quantitative estimation of total glial cells and neurons of left stellate ganglia in rat model of myocardial hypertrophy
16. Morphological study of neurons in human fetal pancreas
17. The Effect of trimethylamine n-oxide (TMAO) on Two murine models of acute pancreatitis
18. Role of vascular endothelial growth factor receptor in hydrogen sulphide mediated migration of human trophoblast cell
19. Morphological study of neurons in human fetal pancreas
20. A correlative study of fetomaternal hydrogen sulphide production with umbilical artery velocimetry in preeclampsia
21. Expression of cystathionine Gamma Lyase and GRP78 In different zones of placenta in early and late onset preeclampsia
22. Morphological study of neurons in human fetal pancreas
23. A morphological study of the developing enteric nervous system in the human fetal colon

Collaborative projects

Ongoing

1. Evaluation of development of neurosurgery skills by hands, on skills training and interactive virtual training modules (web based, tele-education and real time evaluation) (Neurosurgery, Anatomy, Forensic Medicine IIT-D: CSE)
2. Development of 3D/stereoscopy based virtual reality simulation platform for endoscopic neurosurgery training and pre-operative neurosurgical planning (Neurosurgery, Anatomy, Forensic Medicine IIT-D: CSE)
3. Retinoblastoma: Genetic and Molecular study (RP Centre)
4. Genotype and Phenotype correlation in POAG (RP Centre)
5. Oxidative stress in pathogenesis of PCG (RP Centre)
6. Genetic studies in fibromyalgia (Physiology)
7. YKL40 levels in asthma (Biophysics)
8. Levels of Oxidative stress biomarkers in Follicular fluid of women with PCOs undergoing IVF and its relation to outcome (Obstetrics and Gynecology)
9. Oxidative stress evaluation in amniotic fluid of couples with normal and couples pregnant with fetus with congenital malformation (Obstetrics and Gynecology)
10. Mutation analysis of seven genes (NR5A1, DAX1, DHH, DMRT1, SOX9, SRY, WT1) in patients with Gonadal dysgenesis and 46, XY karyotype (Endocrinology)
11. Effect of transcranial, magnetic stimulation on pain modulation status in fibromyalgia patients (Physiology)
12. Impact of yoga and meditation on Epigenome in Rheumatoid Arthritis (Medicine)
13. To study the gene mutations in the patients with 46 XY DSD due to Gonadal Dysgenesis/Agenesis (Endocrinology)
14. Impact of YBLI on MDD-RCT (Psychiatry)
15. Impact of short term yoga based intervention in obesity (Physiology)
16. Loss of sperm DNA integrity in childhood cancers (RP Centre)
17. Yoga and impact on QOL in Glaucoma (RP Centre)
18. “Yoga Based Intervention” on Inflammatory Markers and Gene Expression Profile in Blood, Aqueous and Trabecular Meshwork of Primary Open Angle Glaucoma Patients: A Randomized Controlled Trial (RP Centre)

19. Evaluation of the effect of mindfulness based stress reduction in patients with advanced primary open angle glaucoma (RP Centre)
20. Impact of preoperative steroids on trabeculectomy outcomes: a Randomized Controlled Trial (RP Centre)
21. Electroencephalographic changes in early and advanced Glaucoma (RP Centre)
22. Congenital Adrenal hyperplasia – Psychological assessment (Endocrinology)
23. *MEN1* gene mutation in patients of primary hyperparathyroidism, pancreatic tumors and pituitary tumors and its clinical implications (Endocrinology)
24. Genetics of angle closure glaucoma (RP Centre)
25. Genetics of alcohol and drug dependence (NDDTC, Psychiatry)
26. Genetics studies in hypophosphatemic rickets (Pediatrics)
27. Role of hydrogen sulphide in migration of human trophoblast cells and its impact on placentation: an *in-vitro* study (Obstetrics and Gynecology)
28. Radiological and microsurgical comparison of the operative exposures obtained through far lateral and transcondylar approaches in injected cadaveric human heads (Neurosurgery)
29. Effect of dexamethasone and infliximab on the severity of L-arginine induced murine experimental acute pancreatitis (GI Surgery)
30. Organization of the developing myenteric plexus in midgut, hindgut and ileocecal valve in humans (Anatomy, Obstetrics and Gynecology)

Completed

1. Expansion of DST + DBT sponsored neurosurgery skills training facility and development of stereoscopic (3 Dimensional - 3D) Virtual Training Modules for Neurosurgery Skills Training (Neurosurgery, Anatomy, Forensic Medicine IIT-D: CSE)
2. To study the various gastric tubes for esophageal surgery (Paediatric Surgery)
3. Genetic studies in LHON (RP Centre)
4. Genetic studies in congenital cataract (RP Centre)
5. Study on the genotype-phenotype correlation in Asian Indian patients with growth hormone deficiency (Endocrinology)
6. Evaluation of development of neurosurgery skills by hands-on skills training and interactive virtual training (ICMR, Neurosurgery)
7. Department of Science and Technology DST FIST Program DST FIST Level 2 (Neurosurgery)
8. Feasibility study of a novel intraosseous access device for emergency vascular access along (Cardiac Radiology, Cardiology)
9. The Expression of p75NTR and TrkA Receptors in Breast Cancer (Surgery, Pathology)
10. To evaluate predictors of outcome in acute pancreatitis (Gastroenterology)
11. Evaluation of the effect of prophylactic LMW heparin and Unfractionated heparin on surgical model of experimental acute pancreatitis in rats (on disease severity) (GI Surgery)

PUBLICATIONS

Journals: 57

Abstracts: 25

Chapters in books: 3

PATIENT CARE

Genetic diagnostic and counselling services

Karyotyping	578	Seminal ROS	758
Yq microdeletion analysis	91	Sperm DFI	53
Chromosome analysis	593		

Molecular screening

MEN 1 and MEN2 syndrome	33	Miscellaneous cases	54
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Embalming of dead bodies

For transportation	635	For teaching/research	34
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Fluorosis diagnostic laboratory: Fluoride estimation

Urine	36	Blood/serum	36
Drinking water	40		

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor T.S. Roy was elected Fellow of National Academy of Medical Sciences (FAMS) 2016; Nominated member, Editorial board, Journal of the Anatomical Society of India; Reviewer for 16th edition of Cunningham's Manual of Practical Anatomy; Member, Editorial board, Pancreas; Central Public Information Officer (CPIO) for disclosure under RTI for Anatomy Department; Chairperson, Store Purchase Committee, Institute animal welfare committee, MBBS curriculum committee; Co-chairperson, Institute animal ethics committee; Member, PhD reforms committee, Hospital Management Committee, Staff Council, Institute day celebration Committee, Centralized Core Research Facility and Anti ragging Committee of AIIMS; Paper setter and External Examiner for MD at KGMC, Lucknow; External examiner, AIIMS Jodhpur and Raipur, National Brain Research Center (NBRC) Maneswar; External expert for selection of faculty members AIIMS Rishikesh, AIIMS Jodhpur, JIPMER Puducherry, PGI Chandigarh; Reviewer for the journal, Pancreas, Journal of Anatomy, National Medical Journal of India, Journal of Anatomical Society of India and International Journal of Experimental Pathology; Invited as member of the Prize award committee of AIIMS postgraduate clinical thesis; Organizing Chairman, Neurostereology Workshop 2016 held at AIIMS New Delhi as a part of the 34th National Conference of the Indian Academy of Neuroscience; Vice president, Indian Ageing Congress 2016; Judge for poster session, Symposium on neural functions of the aging Brain, Rajiv Gandhi Center for Biotechnology, Thiruvananthapuram; Chairperson, Biogerontology session, Indian aging congress, 18th Biennial conference of the Association of Gerontology (India) and 14th Annual conference of Indian Academy of Geriatrics AIIMS New Delhi; attended 56th Annual Conference of National Academy of Medical Sciences, Raipur and chaired session in the Annual conference of the Anatomical Society of India, 29 November–1 December 2016, Jodhpur.

Professor Pushpa Dhar chaired a scientific session at NATCON-64 AIIMS, Jodhpur on 30 November 2016; Reviewed articles for Journal of Biochemical and Molecular Toxicology, and Surgical and Radiologic Anatomy; thesis reviewer for Delhi University and Dharan Medical College Nepal; External examiner for MSc Anatomy, Jamia Hamdard Institute of Medical Sciences & Research and MD Anatomy at Delhi University.

Professor S.B. Ray was awarded AIIMS Excellence Research Award 2016 in Basic Science category and the Tulsabai Somani award for best oral presentation at Annual conference of Indian Academy of Neurosciences in 2016, National Brain Research Centre, Gurgaon, Haryana; External examiner for 1st Professional examination in Anatomy and for MD thesis submitted to Delhi University and PhD thesis submitted to Manipal University; Guest faculty at Jiwaji University, Gwalior for MSc Neuroscience course.

Professor Rima Dada and her students received three awards by American Congress of Andrology at its annual meeting, New Orleans USA (Received 2 Lalor Foundation awards and 1 NIH award); nominated by MCI and accreditation council for assessment and accreditation of various medical colleges; chaired session in 7 conferences like NATCON, MAMC, ISSRF, IFFS, NIOH; Member, Expert committee to review proposals for DM in Medical Genetics; Jury member, Medical Research Council fellowships, Edinburgh and Royan International research awards in Reproductive Biomedicine and Stem cells, Iran; Editorial board member Telomere and Telomerase, J Paediatr Neurol and J Paediatr Biochem, Open Androl J, Int J Med, Translational Genetics and Genomics, Journal of Clinical Nutrition and Dietetics; member ICMR task force on male Infertility; Reviewed articles submitted to various national and international Journals; Reviewed projects submitted to DBT, ICMR, Indo-US technology Forum and Wellcome Trust; Evaluated 9 MD and 4 PhD theses in Genetics and was external examiner for PhD thesis in Genetics GNDU, Seth GS Medical College, and Delhi University; Examiner for BSc Genetics at Pt BD Sharma University, Rohtak, November 2016; Member Core committee for AIIMS convocation, AIIMS institute day exhibition and cultural evening and Anti ragging committee; Member, Institute Biosafety committee on Recombinant DNA research, Institute committee to look at improvement of standard of research activities in autonomous institutions; Member, Board for framing guidelines for PhD and PGs and determining faculty strength in various departments; Faculty in charge students union elections; Member, Curriculum committee; Invited for senior resident and faculty selection to various medical colleges and AIIMS; Nominated by National Board of examinations for validation of question bank; Judge at SYSCON 2016 for posters at Recent advances in biomedical research and invited for a meeting by TERI on optimal use of lab instruments at TERI; External faculty for genetics at GNDU, Amritsar; Rajkumari Amrit Kaur College of Nursing New Delhi, Hamdard Institute of Medical Sciences New Delhi, and Durgabhai Deshmukh College, New Delhi; Conducted hands on workshop training in Genetics and participated in round table meeting as a special invitee at German embassy to discuss role of Yoga on lifestyle diseases; Invited to India Today Conclave and participated in discussion on men's health; Work on Glaucoma was considered as 'hot topic' and of with immense translational value and was selected among top 5 researchers in Glaucoma.

Professor Arundhati Sharma was external examiner at Delhi University to conduct practical and viva-voce examination and continues to serve as one of the experts of the Metabolism and Molecular Research society for mapping various genetic diseases prevalent in the northern part of India and to create a database of the common and rare mutations in this region; External examiner for PhD thesis and viva of Manipal University, SGP GIMS, Osmania University; Reviewed several papers from National and International journals and projects from different funding agencies; External Faculty for Genetics at the Department of Molecular Human Genetics, Jiwaji University, Gwalior.

Professor Renu Dhingra was chairperson in scientific session in NATCON-64 held in AIIMS Jodhpur and Technical advisor, Anatomy Musculoskeleton ultrasound society; Member, Editorial board, Journal of International Society of Plastination; Member, International Society of Plastination; Executive member, DASMOS and member teaching schedule committee of AIIMS, member of the academic advisory panel for virtual teaching in AIIMS; Reviewed postgraduate thesis from different medical colleges; Assisted in organizing 9 cadaveric workshops by various departments and performed soft embalming of 18 cadavers and prepared vascular heads for neurosurgery; PhD student in her lab received prestigious YW Lok new investigator travel award for International IFPA conference, Oregon, USA, September 2016.

Professor T.C. Nag reviewed manuscripts from PLoS One (1), Indian Heart Journal (2), and DST research projects for financial support (3).

Professor Ritu Sehgal participated as Member, Medical Writers Group, Institute day Exhibition Sub-committees and Advisory Council of AIIMS Student's Union Elections; Currently involved in editing and writing Anatomy textbooks as part of Medical Writers Group, having completed editing the chapter 'Abdomen' in the First South Asia Edition of 'Gray's Anatomy for Students' scheduled for release in forthcoming year; Participated in Training Programmes: 'RTI Act, 2005' held at Ministry of Home Affairs, July 2016 and KL Wig CMETi, AIIMS, December 2016; 'Deceased Organ and Tissue Donation' organized by ORBO at KL Wig CMETi, AIIMS, January 2017; Served in following capacities during the year: Deputy-in-charge of Microanatomy and Micro Techniques Laboratories; Central Assistant Public Information Officer (CAPIO) designated for Anatomy department under Right to Information Act, 2005; Departmental Counselor for Student Mentorship Program; Member, Anti-ragging squad; external examiner for the following exams: MD (Anatomy) exam conducted by the GGSIP University at VMMC and Safdarjung Hospital (April 2016), MBBS 1st Professional Anatomy Supplementary Examination, Delhi University at MAMC/LHMC/UCMS (October 2016) and BPT/BOT Anatomy Exam at the HIMSR and associated HAH Centenary Hospital, Jamia Hamdard (November 2016).

Dr Saroj Kaler Jhahria continues Member, Editorial Board, Indian Journal of Anatomy and Surgery of Head, Neck and Brain; Member, Teaching schedule committee; Member, Faculty for Institutional Anti-Ragging Squad; Received prize in Hindi essay writing competition, Hindi Section, AIIMS; Reviewed a thesis from Dharan Medical College, Nepal; AIIMS representative for various examinations conducted by AIIMS, New Delhi; Judge for various events for Pulse organized by undergraduate students, AIIMS, New Delhi; Contributed teaching material for E-learning facility and assisted conduct of cadaveric workshops; Completed editing chapter 'Lower limb and pelvis' in the First South Asia Edition of 'Gray's Anatomy for Students' scheduled for release in forthcoming year; Helped edit/revise a chapter in the first South Asia edition of *Gray's Anatomy for Students*.

Dr Tony George Jacob was Inspector of various Centres for Examination Section, AIIMS New Delhi; Helped for AIIMS PG Entrance Examination; Continues Member, Editorial Committee for compilation of AIIMS Annual Report and Reviewer for National Medical Journal of India, Journal of Anatomical Society of India, Anatomical Sciences Education, Clinical Anatomy and International Journal of Experimental Pathology; Member, Store Purchase Committees for departments of Anatomy, Microbiology and Central Animal Facility; Member, Core committee for setting up of Central Core Research Facility at AIIMS and Committee to start Human Thiel Cadaver Program at AIIMS, New Delhi for training in various Surgical Disciplines; Committee of AIIMSonians to interview AIIMS veterans for diamond jubilee of AIIMS and interviewed Professor Veena Bijlani; Organizing Secretary, Neurostereology Workshop 2016, AIIMS, New Delhi; Organizing Secretary, Indian Ageing Congress 2016; Judge for various events for annual national conference of the Society for Young Scientists and Pulse organized by undergraduate students at AIIMS, New Delhi; co-authored an article published in the newspaper The Hindu on 'Reclaiming Medicine's Nobility'.

Dr Neerja Rani reviewed manuscripts submitted to Journal of Cellular Physiology and Biochemistry, Gene Reports and Anatomical Sciences Education; Guest faculty at Jiwaji University, Gwalior for MSc neuroscience course; Member of AIIMS Anti-Ragging squad; Participated in Training Programme 'Deceased Organ and Tissue Donation' organized by ORBO at KL Wig CMET, AIIMS, March 2017; External examiner for BSc perfusion technology and BPO at PGIMS, Rohtak; Helped edit/revise 2 chapters in the first South Asia edition of *Gray's Anatomy for Students*.

Dr Seema Singh has reviewed for Computer Methods and Programs in Biomedicine, and Indian journals of clinical anatomy and physiology; External examiner for BPT/BOT Anatomy Exam at HIMSR in Jamia Hamdard Institute of Medical Sciences; Visiting faculty, Jiwaji University, Gwalior for MSc Neuroscience course; Helped in preparation of vascular heads for neurosurgery; Member, AIIMS Anti-Ragging squad; Member, Editorial board, Human Anatomy Open Access Journal; Participated in conference, workshops and symposium, 2nd Federation of Neurogastroenterology and Motility Joint International Meeting, 64th NATCON of ASI, Indian Academy of Neurosciences-2016, Symposium cum exhibition, VMMC, New Delhi, National authors book and CMET workshops; Helped edit/revise a chapter in the first South Asia edition of *Gray's Anatomy for Students*.

9.3. Biochemistry

Professor & Head

S.S. Chauhan

Professors

Subrata Sinha
(on deputation)
Kalpana Luthra

M.R. Rajeswari
Alpana Sharma

P.P. Chattopadhyay
Kunzang Chosdol

Associate Professors

Sudip Sen

Archana Singh-I

Assistant Professors

Archana Singh-II
Ashok Sharma
Rakhee Yadav

Jayanth Kumar P
Pragyan Acharya

Subhradip Karmakar
Riyaz Ahmad Mir
Pramod Kumar Gautam

HIGHLIGHTS

- 31 research projects are ongoing in the department funded by various national and international agencies such as DBT, DST, ICMR, UGC (ePG-Pathshala), Indo-Austrian, Wellcome Trust, Ministry of AYUSH and Intramural AIIMS, amounting to Rs. 13 crores and 7 research projects (Rs. 1.6 Crores) were completed this year.
- 35 departmental projects and 27 collaborative projects are ongoing with different faculty of the department.
- 32 research publications and 10 abstracts were published in indexed National and International Journals.
- 34 Invited talks were delivered by the faculty and 40 research papers were presented by faculty/research students (oral/poster) at various National and International Scientific Forums.
- Departmental faculty and students contributed 7 chapters in different textbooks.
- One of the faculty (Prof. Alpana Sharma) received AIIMS Excellence Award (second prize).
- Faculty and students received various awards and prizes for oral and poster presentations at various conferences such as Prof. L. M. Srivastava Gold Medal Award, G. P. Talwar Young Scientist Award, Travel Award by APFCB 2016 and **Boehringer Ingelheim Fonds** Grant.
- 9 MSc, 12 MD, 7 SR and 26 registered PhD students are working in the department.
- The coursework for MD and MSc students' teaching curriculum was further expanded to add more advanced classes in various topics encompassing the current advances in research.
- Department organized 35th Annual Convention of Indian Association for Cancer Research & 12th International Conference of Asian Clinical Oncology Society (ACOS), 8–10 April 2016 in New Delhi, a Symposium on World Immunology Day on 30 April 2016 at AIIMS, New Delhi and a Symposium on Metabolic Medicine on 30 September 2016 in collaboration with Royal Liverpool & Broadgreen University Hospital NHS Trust, UK.
- Department is providing Clinical Services to the patients and performed different Tests in total of 8518 samples.

EDUCATION

Undergraduate

The department conducted UG Teaching Programme which include MBBS (two semesters), Nursing (one semester) and B.Sc. (Hons) Nursing (one semester). Upgradation of Undergraduate Manual and Introduction of New Practical on 'clinical applications of gas chromatography' has been done.

Postgraduate

These include 9 MSc and 12 MD students. The department also has 26 PhD students. There are two DST women scientists and two N-PDF working as Postdoctoral students. Five Postgraduates (MD and MSc) from BPKIHS, Dharan, Nepal received research training for four weeks in the department. Eight Postgraduate students received training of various techniques of Molecular Biology and Immunology.

The Postgraduate teaching curriculum was further expanded to add more advanced classes in the Molecular Biology, Cell Biology, Cancer Biology, Cell-signalling, Immunology, Stem Cell Biology and Systems Biology Modules. New Modern

Practicals including Flowcytometry and Gas Chromatography have been introduced into their curriculum. Each module is followed by a critical analysis section where the students present a research article pertaining to the module which is taught. They discuss the pros and cons of the techniques and the statistical analysis used in the paper which improves their analytical research ability. A new module called 'Clinical Case Discussion' has been started for the MD students where they present a particular patient's clinical and laboratory findings over time which is followed by an in depth discussion about the Biochemical Basis, Diagnostic Tests, Quality Control as well as the Management of the Patient.

Conferences organised

- 35th Annual Convention of Indian Association for Cancer Research and 12th International Conference of Asian Clinical Oncology Society (ACOS), 8–10 April 2016, New Delhi
- Symposium on World Immunology Day, 30 April 2016, Indian Immunology Society
- Symposium on Metabolic Medicine, 30 September 2016, Royal Liverpool and Broadgreen University Hospital NHS Trust, UK (Dr Vinita Mishra)

CMEs/Workshops/Symposia/National and International Conference

Lectures delivered

Shyam S. Chauhan: 6
Alpana Sharma: 7
Archana Singh I: 1
Ashok Sharma: 1

M.R. Rajeswari: 4
Kunzang Chosdol: 1
Archana Singh II: 2
Pragyan Acharya: 1

Kalpana Luthra: 9
Sudip Sen: 1
Subhradip Karmakar: 1

Shyam S. Chauhan

1. Transcriptional regulation of dipeptidyl peptidase III expression by IL-6 in human glioblastoma cells, 35th Annual Convention of Indian Association of Cancer Research, 8–10 April 2016, New Delhi
2. Regulation of G protein coupled receptor dependent intracellular calcium by dipeptidyl peptidase III, BIOCON–2016, International Conference on Emerging Trends in Biomedical Research in the New Millennium, 29–30 November 2016, Department of Biochemistry, Govt. Medical College, Jammu, Himachal Pradesh
3. Epigenetics: Impact on Prognosis of Chronic Myeloid Leukemia, International Symposium on Stress, Hypertension and diet in an era of globalization, 2–10 January 2017, BITS-Pillani, Hyderabad Campus, Hyderabad, Telengana
4. Epigenetic changes in cathepsin L promoter alter the prognosis of chronic myeloid leukaemia, International Conferences on Recent Advances in Biomedical Sciences, 6–8 January 2017, Department of Biochemistry, Govt. Medical College, Bhavnagar, Gujarat
5. Role of proteases and peptidases in cancer, Symposium on Current Updates in Biochemistry, 26 February 2017, Department of Biochemistry, Motilal Nehru Medical College, Allahabad, UP
6. Cathepsin L promoter hypermethylation in chronic myeloid leukaemia down regulates its expression and alters the prognosis of the disease in blast crisis, National Seminar on Biotechnology in Health Care: Challenges and Opportunities, 18–19 March 2017, Department of Biotechnology, Jamia Hamdard, Hamdard Nagar, New Delhi

M.R. Rajeswari

1. Non-invasive biomarkers for spinocerebellar ataxias type 2 and 12, Symposium on Neural Functions of the Aging Brain, 27–28 September 2016, Regional Centre for Biotechnology, Thiruvananthapuram
2. Aberrant expression of proteins in epilepsy, AP Science Academy Conference on Science and Technology for Health, 7–9 November 2016, Nagarjuna University, Vijyawada, AP
3. Understanding the pathology of DNA triplet repeats, 3rd International South Asian Biotechnology Conference (SABC-2017), 16–18 March 2017, Tribhuvan University and South Asian, Kathmandu, Nepal
4. Dr Walia Memorial lecture, Neuro update 2016, 26 November 2016, Indian Inst. of Chem. Biology, Kolkata

Kalpana Luthra

1. Generation characterization of human monoclonal antibody to HIV-1, Industry – Academia Meet, 18 April 2016, Gautam Budha University, Greater Noida, UP
2. Generation & characterisation of human monoclonal antibodies to HIV-1 as candidates for immunotherapy and vaccine design, CME on Immunology, 29 April 2016, National JALMA Institute for Leprosy & Other Mycobacterial Diseases, Agra
3. Identifying research problem and designing research questions, Workshop on "AIIMS-REAP", 11 May 2016, AIIMS, New Delhi
4. Neutralizing antibodies from HIV-1 C infected Indian donors: Role in vaccine design, 12th Indo-Australian Biotechnology Conference, 8 August 2016, Institute of Life Sciences, Bhubaneswar

5. Isolation and characterization of cross neutralizing monoclonal antibodies from HIV-1 C infected Indian donors, Faculty of Life Sciences & Biotechnology International Symposium on HIV & Hepatitis, 1 September 2016, South Asian University, New Delhi
6. Isolation and characterization of cross neutralizing monoclonal antibodies from chronic HIC-1C infected Indian donors, 5th Molecular Virology Meeting, 11 February 2017, THSTI, NCR Biotech Science Cluster, Faridabad
7. Problem based learning (small group learning), Basic Course Workshop in Medical & Health Professions, Education Programme, 15 February 2017, AIIMS, New Delhi
8. Cross neutralizing antibodies from chronic HIV-1 C infected Indian donors, 16–18 February 2017, 43rd Indian Immunology Society Conference, GITAM University, Visakhapatnam
9. Generation and characterization of human anti-HIV-1 recombinant scFv monoclonals, Seminar on Molecular Medicine & Biotechnology, 15 March 2017, Department of Biotechnology, AIIMS, New Delhi

Alpana Sharma

1. Potential diagnostic biomarkers for the early detection of urothelial carcinoma of bladder, 35th Annual Convention of Indian Association of Cancer Research. Department of Biochemistry, AIIMS, 8–10 April 2016, New Delhi.
2. Modulatory effects of chemoradiation on expression of angiogenic factors and laminin in cervical cancer: Correlation with treatment response, 16th Biennial Meeting IGCS 2016, 29–31 October 2016, Lisbon, Portugal
3. The good, bad & ugly: Different facets of T cell and their impact on immunopathogenesis of pemphigus vulgaris, JIPMER Scientific Soc (JSS) Guest Lecture, 9 December 2016, JIPMER, Puducherry
4. ECM proteins: Potential diagnostic biomarker for the early detection of urothelial carcinoma of bladder, IABSCON 2017, 6–8 January 2017, ISKON Club, Bhavnagar, Gujarat
5. Role of Th17/Treg axis in the immunopathogenesis of pemphigus vulgaris, AWSAT-2017, 13 January 2017, Panjab Univ., Chandigarh
6. Surveying the crossroads of T cell biology in the immunopathogenesis of pemphigus vulgaris, 43rd Annual Conference of Indian Immunology Society, IMMUNOCON 2016, 16–18 February 2017, GITAM University, Visakhapatnam
7. Extracellular matrix component hyaluronic acid mediated CD44 signalling confers survival benefit to tumour cells in urothelial carcinoma of bladder, National Seminar on Translational Research (NSTR), 2017, 4 March 2017, JIPMER, Puducherry

Kunzang Chosdol

1. Hypoxia, inflammation and tumour phenotype in glioblastoma, 35th Annual Convention of Indian Association for Cancer Research, 8–10 April 2016, New Delhi

Sudip Sen

1. Use of flowcytometry in stem cell research, pre-conference CME & workshop on flowcytometry at 64th National Annual Conference of Anatomy (NATCON 2017), 28 November 2016, AIIMS, Jodhpur, Rajasthan

Archana Singh I

1. Assessment of mitochondrial genome copy numbers and integrity in paediatric leukemias, 35th Annual Convention of IACR, 8–10 April 2016, New Delhi

Archana Singh II

1. Nitric oxide: Role of aswagandha, Sixth Euro-India International Conference on Holistic Medicine (ICHM-2016), 9–11 September 2016, Institute for Holistic Medical Sciences, Kottayam and Ayurveda and Venen Praxis, Austria, Kottayam, Kerala
2. Role of vitamin D in innate immunity in tuberculosis, 43rd Annual Conference of Indian Immunology Society (IMMUNOCON 2016), 16–18 February 2017, GITAM University, Visakhapatnam, AP

Subhradip Karmakar

1. TET2 proteins in myeloid leukemia, Targeted Cancer Therapy, 26 February 2017, IOB Bangalore, Bengaluru

Ashok Sharma

1. Epigenetic alterations & cancer testis/germline POTE antigen activation in epithelial ovarian cancer, II India Cell Biology Conference and International Symposium on Functional Genomics and Epigenomics, 17–19 November 2016, Jiwaji University, Gwalior

Pragyan Acharya

1. The plasmodium infected RBC- a new cell altogether EMBO Malaria Genomics and Public Health 2017, 31 January 2017, CRME, Madurai

Oral papers/Posters presented: 40

1. Kumar M, Mehra S, Sharma MC, Roychoudhary A, Thakar A, Shukla NK, et al. End binding 1 (EB1): A potential biomarker for tumour progression and poor prognosis in oral cancer, 12th International Conference of the Asian Clinical Oncology Society, 8–10 April 2016, New Delhi (Best Poster Presentation)
2. Kumar V, Kumar M, Chauhan SS. Transactivation of HnRNPD/Auf-1 by NF- κ B (P65/RelA) in oral cancer, 12th International Conference of the Asian Clinical Oncology Society, 8–10 April 2016, New Delhi
3. Kumar V, Chauhan SS. Soy isoflavone daidzein induces cell death by intrinsic pathway of apoptosis in breast cancer cells, 12th International Conference of the Asian Clinical Oncology Society, 8–10 April 2016, New Delhi
4. Jain P, Singh R, Chauhan SS. Effect of oncogenic K-Ras on the expression of cysteine cathepsin L and B in hepatocellular carcinoma, 35th Annual Convention of Indian Association for Cancer Research, 8–10 April 2016, New Delhi
5. Mehra S, Kumar M, Panwar R, Dash N, Singh R, Yadav R, et al. Diagnostic significance of cathepsin L and cathepsin B expression in human gallbladder cancer—A pilot study, Annual Meeting, American Association for Cancer Research (AACR), 16–20 April 2016, New Orleans, USA
6. Fatima N, Chauhan SS. Epigenetics: The future for diagnosing and treating reproductive disorder, International Conference on Genomic Medicine, 22–24 February 2017, Maryland, USA. (Letter of Appreciation)
7. Pandey G, Bakhshi S, Chauhan SS. Cathepsin B. A prognostic marker and a potential therapeutic target in paediatric acute myeloid leukaemia, Systems Oncology, 10–12 March 2017, Cochin, Kerala
8. Prajwal A, Kumar A, Kumar V, Chauhan SS. Clinical significance of 14-3-3 zeta and prothymosin- α in glioma, 6th Annual CME of Clinical Biochemistry, 17 March 2017, Sir Ganga Ram Hospital, New Delhi, India (Prof. L. M. Srivastava Gold Medal Award for Best Oral Presentation)
9. Rajeswari MR, Singh HN. Aberrant expression of proteins with possible role in cognitive impairment, 24th Annual Meeting Cognitive Neuro Science Society, 25–28 March 2017, San Francisco
10. Singh HN, Rajeswari MR. Effect of various minor groove binding compounds on DNA-triplex containing (GAA)₅ repeat, 13th International Congress of Human Genetics, 3–7 April 2016, Kyoto, Japan
11. Rajeswari MR, Singh HN. Genome wide expression analysis indicates the role of molecular binding genes in tumour-induced epilepsy, Annual Meeting of the American Society of Human Genetics, 18–22 October 2016, Vancouver, Canada
12. Khan L, Kumar R, Jain R, Parrray HA, Kumar S, Sinha S, et al. Identification & characterization of human anti HIV-1 scFv (Single chain variable fragment) monoclonals with CD4 binding site specificity from a recombinant phage library, 23rd International Student Congress of (bio) Medical Sciences, 9 June 2016, ISCOMS, Netherlands
13. Aggarwal H, Chaudhary O, Makhdoomi MA, Lodha R, Kabra SK, Das BK, et al. Defective dendritic cells status correlates with alterations in B cell subsets in HIV-1 infected children at different stages of disease, HIV Research for Prevention (HIVR4P), 18 October 2016, Chicago, USA.
14. Khandelwal M, Anand V, Seth A, Mathur S, Sharma A. Role of RASSF1A gene in pathogenesis of urinary bladder cancer, 12th International Conference of the Asian Clinical Oncology Society, 8–10 April 2016, New Delhi
15. Kumar R, Gupta N, Khan R, Seth T, Sharma A. Tanshinone I, a diterpene, *in vitro* displays cytotoxic and anti-angiogenic effects on human myeloma cell line, 12th International Conference of the Asian Clinical Oncology Society, 8–10 April 2016, New Delhi
16. Saini C, Siddiqui A, Kolhe N, Ramesh V, Sharma A, Nath I. TGF- β showed synergy effect with IL-6 in leprosy reactions to produce Th17 cells, International Conference of Leprosy, 18–21 September 2016, International Conference Centre, Beijing, China
17. Seth A, Appunni S, Anand V, Khandelwal M, Rao N, Sharma A. Altered expression of small leucine rich proteoglycans (SLRPs) in muscle invasive urothelial carcinoma of urinary bladder, 36th Congress of SIU, Buenos Aires, Argentina, 20–23 October 2016, Buenos Aires, Argentina
18. Sharma M, Sharma A. Modification of low risk chorio-carcinoma monotherapy regime by dose intensification achieving reduced treatment time and improved response: A randomised study, 16th Biennial Meeting IGCS 2016, 29–31 October, 2016, Lisbon, Portugal
19. Sharma M, Sharma A. Justification of attempt for cure in Indian patients with “beyond FIGO” stage cancer of uterine cervix employing planned treatment aggression, 16th Biennial Meeting IGCS 2016, 29–31 October, 2016, Convention Centre-Lisbon, Portugal

20. Saini C, Nath I, Ramesh V, Sharma A. Th17 activity in leprosy reactions: Synergistic effect of TGF- β and IL-6, 43rd Annual Conference of Indian Immunology Society (Immunocon), 16–19 February 2017, GITAM University, Visakhapatnam, India
21. Das D, Anand V, Sharma A, Khandpur S. Unmasking the role of multifunctional gamma delta T cells and scavenger receptor in the immunopathogenesis of pemphigus vulgaris, 43rd Annual Conference of Indian Immunology Society (Immunocon), 16–19 February 2017, GITAM University, Visakhapatnam, India (Dayasagar Das has received GP Talwar Young Scientist Award)
22. Ashu, Santosh K, Das D, Gupta S, Arava S, Sharma A. Role of dendritic cells in immunopathogenesis of vitiligo, 43rd Annual Conference of Indian Immunology Society (Immunocon), 16–19 February 2017, GITAM University, Visakhapatnam, India
23. Verma P, Rao DN, Sharma A. Biological role of trace elements and imbalance associated with premature ovarian failure (POF), 43rd Annual Conference of Indian Immunology Society (Immunocon), 16–19 February 2017, GITAM University, Visakhapatnam, India
24. Gupta N, Kumar R, Khan R, Kumar L, Seth T, Garg B, et al. Involvement of a chondroitin sulfate proteoglycan and its correlation with micro RNA in bone marrow microenvironment of multiple myeloma, 16th International Myeloma Workshop, 1–4 March 2017, New Delhi, India
25. Kumar R, Khan R, Gupta N, Seth T, Sharma A. Unveiling the biomarker potential of shelterin complex in myeloma and revealing their role as therapeutic targets, 16th International Myeloma Workshop, 1–4 March 2017, New Delhi, India
26. Srivastava C, Irshad K, Chattopadhyay P, Sarkar C, Suri A, Sinha S, et al. FAT1 knock-down led to reduce EMT and stemness genes expression in hypoxic glioma, European Cancer Congress 2017, 27–30 January 2017, Amsterdam, Netherlands
27. Jalota A, Kumar M, Das BC, Yadav AK, Chosdol K, Sinha S. Abrogating hypoxia induced chemoresistance of glioma cells as well as cancer stem cells by a synergistic combination of drugs-inflammation-driven cancer: Mechanisms to therapy, 5–9 February 2017, Keystone, Colorado, USA
28. Jalota A, Kumar M, Das BC, Yadav AK, Chosdol K, Sinha S. Combination of a COX-2 inhibitor with BCNU sensitizes glioma cells under normoxia and hypoxia, 35th Annual Convention of Indian Association for Cancer Research, 8–10 April 2016, Chanakyapuri, New Delhi
29. Irshad K, Mohapatra SK, Garg H, Mishra S, Sarkar C, Gupta D, et al. Derivation of a multi-gene signature of hypoxia and notch signalling pathways and its prognostic value in glioblastoma patients, 35th Annual Convention of Indian Association for Cancer Research, 8–10 April 2016, New Delhi
30. Srivastava C, Irshad K, Madan E, Srinivas H, Gupta Y, Malik N, et al. FAT1 modulates the expression of molecular regulators of hypoxia and stemness in glioma, 35th Annual Convention of Indian Association for Cancer Research, 8–10 April 2016, New Delhi
31. Jha JK, Srivastav C, Gowda S, Gupta Y, Chattopadhyay P, Chosdol K, et al. Functional interaction of FAT1 & COX2 in glioma cell lines, 35th Annual Convention of Indian Association for Cancer Research, 8–10 April 2016, New Delhi
32. Sen S, Khera N, Saluja S, Agrawal SK, Bhattacharya A, Manhas J, et al. Osteoblastic differentiation of human bone marrow derived mesenchymal stem cells – model system to develop anti-cancer strategies, ISSCR Annual Meeting, 2016, (Poster), 22–25 June 2016, San Francisco, California, USA
33. Thakkar H, Vincent V, Roy A, Singh S, Lakshmy R, Singh A. Estimation of HDL antioxidative activity in subjects with acute coronary syndrome. 84th Congress of the European Atherosclerosis Society, 29 May–1 June 2016, Innsbruck, Austria, Europe
34. Singh A, Ahirwar AK, Tiwari A, Bhattacharjee J. Nitric oxide in health and disease: our experience, 43rd Association of Clinical Biochemists of India (ACBICON 2016), 12–15 December 2016, Kasturba Medical College, Mangalore, Karnataka
35. Panda S, Tiwari A, Luthra K, Sharma SK, Singh A. Expression of VDR and Cathelicidin along with Vitamin D status in category I tuberculosis as compared to household contacts, 14th Asia Pacific Federation of clinical biochemistry and laboratory medicine (APFCB 2016), 26–29 November 2016, Chinese Association of Clinical Biochemistry, Taipei, Taiwan (Sudhasini Panda won travel award at APFCB 2016 for poster presentation)
36. Bhattacharya A, Saluja S, Dey D, Kaur A, Agrawal SK, Palanichamy JK, et al. Studying the expression of CR1 in specific colon cancer cell lines *in vitro*, 35th Annual Convention of the Indian Association for Cancer Research (IACR-ACOS 2016), April 2016, New Delhi
37. Contreras JR, Fernando TR, Tran TM, Zampini M, Rodriguez-Malave NI, Palanichamy JK, ... Rao DS. Molecular characterization of long non-coding RNA CASC15 in leukemogenesis, 58th American Society of Hematology (ASH) Annual Meeting, December 2016, San Diego, USA

38. Palanichamy JK, Tran TM, Bobby E, Contreras JR, Fernando TR, Casero D, ... Rao DS. Does IGF2BP1 (Insulin like growth factor 2 binding protein 1) drive ETV6-RUNX1 positive B-Acute lymphoblastic leukemia, European Cancer Congress Annual Meeting, January 2017, Amsterdam, Netherlands
39. Bobby E, Jain A, Mudassir M, Chattopadhyay P, Chopra A, Bakshi S, Palanichamy JK. Role of IGF2BP1 in ETV6-RUNX1 positive B-ALL, 36th Annual Convention of the Indian Association For Cancer Research (IACR 2017), February 2017, Thrissur Medical College, Thrissur, Kerala
40. Arora M, Zhang W, Klinkebeil D, Karpf AR, Sharma A. POTE antigen expression and epigenetic regulation in human epithelial ovarian cancer, All India Cell Biology Conference and International Symposium on Functional Genomics and Epigenomics, 17–19 November 2016, Jiwaji University, Gwalior

RESEARCH

Funded projects

Ongoing

1. Study the Role of Regulation of Human Heterogenous Ribonucleoprotein D Expression in Oral Carcinogenesis. Shyam S Chauhan, DST, 3 years, 2016–19, Rs. 71.72 Lakhs
2. PG Pathshala e-Content Biophysics, M.R. Rajeswari, UGC & MHRD, 2 years, 2015–17, Rs. 112 Lakhs
3. Plasma Circulating DNA in Mitochondrial the Assessment of Friedreich's Ataxia (FA), M.R. Rajeswari, ICMR, 2 years, 2017–19, Rs. 34.5 Lakhs
4. Recombinant Human Erythropoietin as Potential Therapeutic Agent for Neurological Disease, M.R. Rajeswari, International Collaboration India, Austria, via DST-WTZ, 2 years, 2015–17, Rs. 8.85 Lakhs
5. Assessment of Anticancer Effect of Triplex Forming Oligonucleotides (TFOs) on the Expression of HMGB1 in Hepatoma using Animal Model System, M.R. Rajeswari, DST, 3 years, 2016–19, Rs. 61 Lakhs
6. Effect of Small Molecules on the Protein Expression in PBMC in FRDA Patients to Identify Target Proteins for Therapy. M.R. Rajeswari, AIIMS, 1 year, 2016–17, Rs. 4.5 Lakhs
7. Interaction between Nanoparticles and Cancer Cells in Context of Hypoxia and Stemness and Invasiveness Characteristics, P Chattopadhyay, DST, 3 years, 2017–20, Rs. 80 Lakhs
8. Isolation and Characterization of Human Monoclonal Antibodies from Memory B Cells of HIV-1 Infected Children, Kalpana Luthra, DST, 3 years, 2016–19, Rs. 63 Lakhs
9. Relations of Leucocyte Membrane Complement Regulatory Proteins, MBL and MASP2 with the Pathophysiology and Severity of Coronary Artery Disease, Kalpana Luthra, ICMR, 3 years, 2015–18, Rs. 44 Lakhs
10. Generation and Characterization of Human Recombinant Single Chain Variant Fragments (scFv) against Envelope Glycoprotein of Subtype C HIV-1 from Paediatric Patients, Kalpana Luthra, ICMR, 3 years, 2015–18, Rs. 30 Lakhs
11. Characterization of ADCC Activity in the Plasma of Acute HIV-1 Infected Paediatric Patients, Kalpana Luthra, AIIMS, 2 years, 2016–18, Rs. 7 Lakhs
12. Unveiling the Therapeutic Potential of a Unani Herbal Formulation in Haematological Malignancy, Alpana Sharma, AYUSH, 3 years, 2017–20, Rs. 62.12 Lakhs
13. Study of micro RNAs as a Diagnostic Approach in Multiple Myeloma, Alpana Sharma, AIIMS, 2 years, 2016–18, Rs. 10 Lakhs
14. Evaluation of Immunological Alteration in Anti-Phospholipid Antibody Mediated Recurrent Miscarriage in Women & Role of Coenzyme Q10 in its Modulation, Alpana Sharma, ICMR, 3 years, 2014–17, Rs. 25 Lakhs
15. To evaluate the role of CD4 TCRγδ + Cells in Polar Forms of Leprosy, Alpana Sharma, ICMR, 3 years, 2014–17, Rs. 38.33 Lakhs
16. Effect of FAT1 on Tumour Suppressor Signalling Pathway [Salvador-Wart-Hippo (SWH) pathway] in Glioma, Kunzang Chosdol, AIIMS, 2 years, 2014–16, Rs. 9.94 Lakhs
17. Signalling Interaction between FAT1 and p53 under Hypoxia: Their influence on Tumour Phenotype and Identification of Novel Molecular targets in Glioma, Kunzang Chosdol, DBT, 3 years, 2016–19, Rs. 55.52 Lakhs
18. Elucidating the Mechanisms underlying documented Osteogenic Activity of *Symphytum officinale* in Human Bone Marrow derived Mesenchymal Stem Cells *in vitro*. Sudip Sen, AYUSH, 3 years, 2015–18, Rs. 47.6 Lakhs
19. Isolation and Molecular Characterization of Colorectal Cancer Stem Cells, Sudip Sen, DBT, 3 years, 2015–18, Rs. 25 Lakhs
20. An Assessment of Functional Quality of HDL in Coronary Artery Disease, Archana Singh, AIIMS, 2 years, 2015–17, Rs. 8.5 Lakhs
21. Study of Vitamin D receptor (VDR) and Cathelicidin Expression and their Correlation with FokI VDR Polymorphism in Tuberculosis, Archana Singh, DST, 3 years, 2015–18, Rs. 23 Lakhs

22. Serum Hepcidin Levels: It's correlation with Ferroportin Expression and Localization and thus Iron Export in Pathophysiology of Pulmonary Tuberculosis, Archana Singh, AIIMS, 2 years, 2016–18, Rs. 10 Lakhs
23. Role of IGF2BP1, an RNA binding protein in Lymphomagenesis, Jayanth Kumar Palanichamy, DBT-Wellcome Trust India Alliance Early Career Fellowship for Clinicians and Public Health Researchers, 5 years, 2016–21, Rs. 187 Lakhs
24. TET2 in Myeloid Leukemia, Subhradip Karmakar, DST, 3 years, 2015–18, Rs. 45 Lakhs
25. Genome-Wide DNA Methylation & Genomic Instability Profiling and Evaluating its Potential as a Biomarker and Immunotherapeutic Target for Ovarian Cancer. Ashok Sharma, DBT-Ramalingaswami Project, 5 years, 2015–20, Rs. 25.2 Lakhs
26. Nuclear Architecture as an Epigenetic Regulator in Pericentromeric Localized Cancer-Testis/Germline Antigen POTE Expression in Ovarian Cancer. Ashok Sharma, DST, 3 years, 2017–20, Rs. 54 Lakhs
27. Estimate the Serum Levels of Cancer-Testis Antigen POTE as a Biomarker in Epithelial Ovarian Cancer, Ashok Sharma, AIIMS, 2 years, 2016–18, Rs. 10 Lakhs
28. Investigating the Association of Plasmodium Purine Salvage Pathway Enzymes and Metabolites with Severe Malaria Outcomes. Pragyana Acharya, DST, 3 years, 2017–20, Rs. 49.13 Lakhs
29. Circulating free DNA (cfDNA) as a tool to predict Acute Kidney Injury in Acute-on Chronic Liver Failure, Pragyana Acharya, DBT, 3 years, 2017–20, Rs. 43.4 Lakhs
30. Measuring Organ Cross talk in Acute and Chronic Liver failure (ACLF) through Metabolomics, A Pilot Study. Pragyana Acharya, AIIMS, 2 years, 2016–18, Rs. 10 Lakhs
31. Role of Macrophages in regulation of Bone and Blood Forming Stem and Progenitor Cell Migration and Development, Pramod Kumar Gautam, DST, 5 years, 2017–23, Rs. 35 Lakhs

Completed

1. A study on clinical significance of PTEN regulated genes in human primary Glioblastoma, Shyam S Chauhan, DBT, 3 years, 2013–16, Rs. 42.77 Lakhs
2. Impact of transcriptional gene silencing of HIV1C on ectoenzymes and negative co-stimulatory molecules expressed by T cell substrates: Relevance to Chronic Immune-Activation in HIV in HIV infections, P Chattopadhyay, DBT, 3 years, 2014–17, Rs. 23 Lakhs
3. Study of T_H17 and Treg Lymphocytes in the Pathogenesis of Pemphigus Vulgaris, Alpana Sharma, CSIR, 3 years, 2012–16, Rs. 28 Lakhs
4. Molecular and Proteomic profiling of HAS in Transitional Cell Carcinoma, Alpana Sharma, ICMR, 3 years, 2012–16, Rs. 29.59 Lakhs
5. Study of Dendritic Cells in pathogenesis of Pemphigus Vulgaris, Alpana Sharma, AIIMS, 2 years, 2014–16, Rs. 8.60 Lakhs
6. Analysis of the expression of Mucins in Human Oral Mucosal Epithelial Cells (OMEC) on using Mycophenolate Mofetil (MMF) *in vitro*, Sudip Sen, AIIMS, 2 years, 2014–16, Rs. 8.5 Lakhs
7. Effect of EPO on TET2 in AML, Subhradip Karmakar, AIIMS, 2 years, 2014–16, Rs. 10 Lakhs

Departmental projects

Ongoing

1. Elucidation of Molecular Mechanism of differential expression of Cathepsin B in Breast Cancer Cells with different metastatic potential
2. Role of MIG6 in oral Carcinogenesis
3. Expression of Cysteine Cathepsin L and B in Human Gall Bladder Cancer
4. Proteomics of FRDA positive, FRDA-suspected and FRDA-carriers
5. Search for poly purines in Human Genome
6. Study of Gamma Delta ($\gamma\delta$)-T cells and Scavenger Receptors in the Immunopathogenesis of Vitiligo
7. Role of miR-22, specificity protein-1 and Cystathionine Gamma Lyase in regulating Invasiveness of Trophoblast
8. Role of Hyperglycemia on Macrophage Effector Function in Pulmonary Tuberculosis
9. Study of Hyaluronic Acid Signaling Cascade in Urothelial Carcinoma.
10. Study of Telomerase Activity and Shelterin Complex and its Associated Factors in Multiple Myeloma
11. Study of RASSF genes and their signalling in Bladder Cancer
12. Exploring the role of Versican and its regulation by miRNA in Multiple Myeloma

13. Gamma delta T cells in Immunopathogenesis of Pemphigus Vulgaris
14. Role of Gamma Delta T cells and Scavenger Receptors in Vitiligo
15. Role of Dendritic Cells in Immunopathogenesis of Vitiligo
16. To study the functional interaction of FAT1 and YAPI in Glioma
17. Functional interaction of FAT1 and miRNA in Glioma
18. Signaling interactions between FAT1, p53 and HIF1a in Glioma
19. To study the gene expression in GBM cell lines under different degree of Hypoxia and the role of p53 in HIF1 regulation under Severe Hypoxic Condition
20. Hypoxia and response to Chemotherapy: A study in Glial Tumour Cell Lines
21. FAT1 and p53 on Chemo-Sensitivity of Glioma
22. Association between Cancer Cell Differentiation and Tumour Microenvironment in Human colorectal Carcinoma.
23. Elucidating the role of *Symphytum officinale* in Osteogenesis in Human Bone Marrow derived Mesenchymal Stem Cells *in vitro*
24. Study on Mitochondrial Metabolic reprogramming in Paediatric Acute Lymphoblastic Leukemia (ALL).
25. A study on the effect of HMG-CoA Reductase Inhibitors on HDL functionality in Acute Coronary Syndrome.
26. Expression of Hepcidin and Ferroportin in Pathophysiology of Pulmonary Tuberculosis
27. Effect of Hyperglycemia on Macrophage Function in Pathophysiology of Pulmonary Tuberculosis
28. Role of IGF2BP1 in of ETV6-RUNX1 positive B-cell Acute Lymphoblastic Leukemia
29. Role of IGF2BP3 in Migration and Invasion of Epithelial Cancer Cell Lines
30. Deciphering the role of IGF2BP1, an RNA binding protein, in B-Cell Acute Lymphoblastic Leukemia
31. Effect of Cortisol on Trophoblast Invasion Differentiation
32. Effect of DNA Methylation in Expression of Cancer-Testis/Germline Gene POTEE in Ovarian Cancer
33. DNA Methylation Effect on POTE B Expression in Epithelial Ovarian Cancer
34. Proteomics of Small Intestinal Biopsies in Celiac Disease
35. Analysis of Cell-free Nucleic Acids in Serum of Patients with Acute-on- Chronic Liver Failure

Completed

1. A study on Clinical Significance of 14-3-3 ζ and Prothymosin α in Glioma
2. Clinical Significance of Cathepsin L and B Expression in Pediatric Acute Myeloid Leukemia.
3. Thermodynamic Stability of Binding of Triplex Forming Oligonucleotides with the different regions of HMGB1 Gene and their effect on HMGB1 Expression
4. Evaluation of Plasma Cell-free Nucleic Acids and Micro RNA as Biomarkers for FRDA
5. Study of Complement Receptor 3 and CD46 (regulator of complement activation) on Dendritic Cells in HIV-1 infected ART Naïve and treated individuals
6. Identification and Characterization of single chain variable antibody fragments against HIV-1 gp160 from anti-HIV-1 Human scFv Phage Library
7. Study a Vitamin D Receptor (VDR) and Cathelicidin Expression and their Co-relation with fok 1 VDR Polymorphism in Tuberculosis
8. Impact of transcriptional gene silencing on HIV-1C replication by promoter directed dsRNA among HIV-1C infected individuals
9. Thermodynamic Stability of Binding of Triplex Forming Oligonucleotides with different regions of HMGB1 Gene and their effect on HMGB1 Expression
10. Exploring the role of adipose tissue ATP binding cassette transporter A1 (ABCA1) in determining Serum HDL Cholesterol Levels
11. To study the Expression of Nitric Oxide and Inducible Nitric Oxide Synthase (iNOS) and their correlation with iNOS Gene Polymorphic Variants in Tuberculosis patients and controls
12. Regulation of Cathepsin L and P by Hepatotoxic Agents
13. Study of Small-leucine Rich Proteoglycans in Transitional Carcinoma of Urinary Bladder
14. Study of Dendritic Cells in Pemphigus Vulgaris
15. T-cell Mediated Immunity in Leprosy Patients
16. Evaluation of Immunological Alteration in Recurrent Miscarriage & role of Coenzyme Q10 in its Modulation

17. FAT1 and inflammation related pathways in Glioma
18. Functional interaction of FAT1 and COX2 in Glioma Cell Line.
19. Analysis of the Expression of Mucins and Angiogenesis Markers in Human Oral Mucosal Epithelial Cells (OMEC) on using Mycophenolate Mofetil (MMF) and Bevacizumab (BVCZ) *in vitro*.
20. Comparison of EMT/MET markers with stemness in Colon Carcinoma Cell Lines and Human Bone Marrow derived Mesenchymal Stem Cells
21. Isolation, Identification and Characterization of Cancer Stem Cells from different Histopathological Grades of Colorectal Carcinoma
22. Exploring the role of Adipose Tissue ABCA1 in determining serum HDL Cholesterol Levels
23. Study of the Expression of Nitric Oxide and Inducible Nitric Oxide Synthase (iNOS) and their correlation with iNOS Gene Polymorphic Variants in Tuberculosis patients and controls
24. Role of PPAR alpha in Trophoblast Invasion
25. Role of TET proteins in Trophoblast Invasion Differentiation
26. Cancer-Testis/Germline Antigen POTEE Expression Analysis in Ovarian Cancer

Collaborative projects

Ongoing

1. A study of Epigenetics of Breast Cancer by evaluation of tissue site-specific Promoter DNA methylation profiles in Breast Cancer (Surgery)
2. Expression of Reg-4 and MUC-4 in patients with Carcinoma of Pancreas (Gastroenterology)
3. miRNA as biomarker in Chronic Pancreatitis patients who are at high risk for developing Pancreatic Cancer (Gastroenterology)
4. Role of miRNA mediated modulation of signal transduction in Pancreatic Cancer (Gastroenterology)
5. Development of diagnostic panel of blood biomarkers for acute Ischemic Stroke (Neurology)
6. Circulating Cell-free Nucleic Acids as biomarker around mini screw site during Orthodontic Tooth Movement – A Quantitative Analysis (Dental Surgery)
7. Quantitative Evaluation of Human Macrophage Colony Stimulating Factor Levels in Peri-miniscrew Implant Fluid before and after force application (Dental Surgery)
8. Effects of oral Probiotic Supplementation during pregnancy & lactation in modulating immune response in breast milk, fetus & neonate – A Randomised, Double-blind, Placebo Controlled Trial (Obstetrics and Gynaecology)
9. Association between Serological Levels and Genetic Polymorphisms of VEGF A and C with Clinicopathological Characteristics of Oral Squamous Cell Carcinoma and Oral Submucous Fibrosis - A Pilot Study (Centre for Dental Education & Research)
10. Salivary MicroRNA: Their utility as Biomarker during Molecular Changes in Tobacco Users vs Tobacco Non-Users (Otorhinolaryngology & Head Neck Surgery)
11. Identification of circulatory tumour cells in Bladder Cancer after TURBT procedure (Urology)
12. Human Papillomavirus status in Penile Carcinoma in Indian patients and correlation with Clinico-Pathological Staging (Urology)
13. Epithelial-Mesenchymal Transition (EMT) in Carcinoma of the eyelid – An Immunohistochemical and Molecular Study (RP Centre)
14. Molecular Characterization of NFkB pathway in Uveal Melanoma (RP Centre)
15. Elucidating the Mechanisms underlying documented Osteogenic Activity of *Symphytum officinale* in Human Bone Marrow derived Mesenchymal Stem Cells *in vitro* (Applied Mechanics, IIT Delhi; CCRH, New Delhi; Orthopaedics, AIIMS)
16. Population Prevalence of Vitamin D deficiency in Urban and Rural Delhi and its Association with Cardiovascular Disease Risk Factors (Cardiology)
17. Dietary diversity and nutritive value of indigenous foods in addressing food security and nutritional status of Vulnerable Tribal Communities of India (Wellcome Trust/DBT India Alliance [Intermediate fellowship]; Public Health Foundation of India)
18. Placental Growth Factor as a Predictive and Prognostic Marker for development of Pre-eclampsia in high risk patients (Obstetrics and Gynaecology)
19. Role of Vascular Endothelial Growth Factor – in management of Recurrent Respiratory Papillomatosis (Otorhinolaryngology)

20. Correlation of Hepatic Artery Resistive Index with Portal Pressure and Serum Nitric Oxide Levels in Patients with Extra Hepatic Portal Vein Obstruction (Paediatric Surgery)
21. Influence of CYP2C19 Polymorphism on Bortezomib Blood Concentration & Clinical Response in Multiple Myeloma Patients (Pharmacology)
22. Role of microRNA and mRNA in FECD (RP Centre)
23. Role of PARP1 and γ -Glutamyl Cysteine Synthetase Inhibitor in Cisplatin Sensitivity & Correlation With DNA Methylation in Ovarian Cancer (IRCH)
24. Impact of Yoga and Meditation on Epigenetic Profile in Rheumatoid Arthritis (Anatomy)
25. Investigating the Association of Plasmodium Purine Salvage Pathway Enzymes and Metabolites with severe Malaria outcomes (Medicine, AIIMS; Medicine, SCB Medical College, Cuttack; CRME, Madurai)
26. Circulating free DNA (cfDNA) as a tool to predict acute kidney injury in Acute-on Chronic Liver Failure (Gastroenterology)
27. Proteomics of Small Intestinal Biopsies in Celiac Disease (Gastroenterology)

Completed

1. Effect of Antioxidant Supplementation on Pancreatic Function and Markers of Fibrosis in Chronic Pancreatic: A Randomised, Placebo Controlled, Double-blind Trial (Gastroenterology)
2. HMGB1 Proteins in Peri-impantitis around Temporary Anchorage Device (TAD) (Dental Surgery)
3. A comparative evaluation of levels of interleukin-1- β in GCF during Canine Distraction and Canine Refraction (Dental Surgery)
4. Impact of Transcriptional Gene silencing of HIV1C on ecto-enzymes and negative co-stimulatory molecules expressed by T-cell subsets: relevance to chronic immune activation in HIV infection (Transplant Immunology and Immunogenetics)
5. Determination of catecholamines and their metabolites in Vitiligo patients undergoing Melanocyte Transplantation (Dermatology & Venereology)
6. Study of microRNAs in Renal Cell Carcinoma (Urology)
7. Elucidating Foxp3 expression and Foxp3 promoter methylation level in active non- segmental Vitiligo (Dermatology & Venereology)
8. Role of T helper cytokines in skin autoimmune disorder Pemphigus Vulgaris. (Dermatology & Venereology)
9. Isolation and Molecular Characterization of Colorectal Cancer Stem Cells (GI Surgery, Surgical Oncology & General Surgery, Physiology, Pathology, AIIMS; DRDO, New Delhi)
10. Benzene monitoring at retail outlets of HPCL to compare levels of benzene with and without Vapour Recovery System (VRS) and study the Health Markers in workers. (The Energy Resource Institute, TERI)

PUBLICATIONS

Journals: 32

Abstracts: 10

Chapters in books: 7

PATIENT CARE

S. no.	Test name	Number of test
1	CEA	2150
2	CA 19.9	1350
3	PSA	425
4	CA 125	599
5	CA 15.3	144
6	Testosterone	57
7	FSH	56
8	Beta HCG	360
9	AFP	475
10	S. Ferritin	537
11	Vitamin B12	397

12	Folate	311
13	Total T3	543
14	Total T4	508
15	TSH	606
	Total	8518

Quality control

Apart from routine internal quality assurance scheme, Successful monthly participation in External Quality Assurance Scheme (EQUAS) for last one year to deliver quality reports.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

PhD students

- Heena Aggarwal was awarded full Scholarship as young investigator to attend the conference on ‘HIV Research for Prevention (HIVR4P)’, Chicago, USA, 17–21 October 2016 to present poster titled ‘defective dendritic cells status correlates with alterations in B-cell subsets in HIV-1 infected children at different stages of disease’ and awarded Keystone Symposia Global Health Travel Award to attend HIV Vaccine 2017, Colorado, USA, 26–30 March 2017.
- Sanjeev Kumar was awarded Keystone Symposia Global Health Travel Award to attend HIV Vaccine 2017, Colorado, USA, 26–30 March 2017.
- Dayasagar Das, was awarded Professor G P Talwar Young Scientist Award at Immunocon 2016, Vishakhapatnam, India, 16–19 February 2016.
- Janvie Manhas was awarded Boehringer Ingelheim Fonds Grant to help her attend EMBO Practical Course: Single Cell Gene Expression Analysis, EMBL Heidelberg, Germany, 11–16 April 2016.

Professor S.S. Chauhan was admitted to the fellowship of Indian Academy of Biomedical Sciences; Member of SERB Young Scientist–Life Sciences Expert Committee of DST; Member of Pre-Scientific Advisory Committee of National Institute of Pathology (ICMR), New Delhi; Member of Library Committee, Central Screening Committee for Faculty Recruitment at AIIMS, Task Force for Women Safety and Gender Sensitization at AIIMS, Institute Day Celebration Committee, Biotechnology Teaching Advisory Committee, AIIMS; Member of Bio-Safety Committee, V.P. Chest Institute, University of Delhi; Member of Question Paper Moderation Committee of Interdisciplinary Biotechnology Unit, Aligarh Muslim University, Aligarh; Standing Committee Member of Academic Council, Banaras Hindu University and Course Curriculum Committee of King George Medical University Lucknow; Editorial Board Member of Research and Reports in Biochemistry and Indian Journal of Clinical Biochemistry; Reviewer for various National and International Scientific Journals; Life member of Society of Biological Chemists (India), Association of Clinical Biochemists of India, Indian Association for Cancer Research and Indian Academy of Biomedical Sciences.

Professor M.R. Rajeswari was elected as Vice President of Society of Neurochemistry, India, December 2016; President of DNA Society of India; Executive Council Member of Indian Biophysical Society; ICMR Project Review Committee (PRC) for Neurochemistry and Dept. of Health Research, Min. Of Health (DHR), Medical Technology; PI of National Project (National Mission on Education through Information & Technology (NME-ICT)) on “Development of e-Content for the subject Biophysics” by MHRD for “e-PG PATHSHALA”; University Grants Commission – on various committees; Member of School of Life Sciences, Central University, Rajasthan; Expert Mentor for INSPIRE (Innovation of Science Pursuit for Inspired Research)– DST Programme; Expert Reviewer for International and National Scientific Journals of repute such as PLOS One, J Am Chem Soc, DNA & Cell Biology; Eur J Med Chem, J Physical Chemistry (Am Chem Soc) Molecular Bio Systems (Royal Society of London); Mini Reviews in Medicinal Chemistry; Journal of Cancer Therapy the Journal of Chemical Thermodynamics, BMC Cancer; Oncotarget, Indian J of Biochem & Biophysics.

Professor Kalpana Luthra was Member, Project Review Committee (Basic) for reviewing research proposals for Intramural funding 2016–17, AIIMS; Chairperson, Technical Specification Committee of Real Time PCR, Gel Documentation & Flow Cytometry equipment; Election Officer for Indian Immunology Society 2016; Member, Selection of recruitment to the posts of Senior Resident/Senior Demonstration for the session January 2017; Member, Constitution of Institutional Ethics Committee of University School of Biotechnology, Guru Gobind Singh Indraprastha University, Dwarka, New Delhi-78; Judge for the selection of young scientists for “Prof. G. P. Talwar Young Scientist Award” on 43rd Indian Immunology Society Conference at GITAM University, Visakhapatnam, 16–18 February 2017.

Professor Alpna Sharma received AIIMS Excellence Award-2016, Second Prize (Basic Research); Member, Project Review Committee of Short Term Studentship, ICMR; Expert Selection Committee, JN Med Coll, AMU Aligarh; Treasurer,

Indian Immunology Society (2014-18); Secretary General, Indian Academy of Biomedical Sciences (2014-16); Chief Organizer, Symposium on World Immunology Day on 30 April 2016 at AIIMS, New Delhi; Active Member of American Association for Cancer Research, USA and Int. Gyne Cancer Society, USA; External examiner for PhD thesis and viva at Aligarh Muslim Univ, Kashmir Univ, Delhi Univ and JIPMER, Puducherry; External Examiner for MSc at AIIMS, New Delhi and for MBBS at AMU, UCMS (Delhi Univ) and VMMC (Safdarjung); External Expert for Paper moderation for MD Biochemistry and PhD theory paper setting, AMU Aligarh; Reviewed Adhoc Research Proposals of DBT, DST and CSIR submitted for Financial Grant; Technical Expert for Clinical Biochemistry Equipments Purchase Committee at VMMC, Safdarjung Hospital, New Delhi; Member, Annual Report Committee, AIIMS and Teaching Schedule Committee for UG at AIIMS.

Professor Kunzang Chosdol filed Patent (US9556437B2) FAT Gene in Cancer and Inflammation (Kunzang Chosdol, Bhawana Dikshit and Subrata Sinha); Organizing Secretary, 35th Annual Convention of Indian Association for Cancer Research, IACR, New Delhi, 8–10 April 2016; Vice-President (2016-2019) Indian Association for Cancer Research (IACR); External Expert to Evaluate PhD Research Work Progress at University of Delhi; Reviewed PhD, MD and MSc Thesis of other Institute/Universities (South Campus, Delhi University (DU), IIT Delhi, PGI Chandigarh; Reviewed manuscripts for the Nature Publishing group (NPG) and Impact Journals; Validation/Moderation Expert of MCQ Question Bank (PG Entrance) at NBE, Dwarka.

Dr Archana Singh I developed Teaching Content (on chromatography) for e-PG Pathshala for the Ministry of HRD for its National Mission on Education through ICT; Resource Faculty for Public Health Nutrition Programmes in PHFI, New Delhi (including online PG Diploma in Public Health Nutrition, MPH and Executive Training Programs for PG Diploma - Afghanistan); External faculty for MSc Clinical Research, PHFI, New Delhi.

Dr Archana Singh II was an Elected Executive Member of Indian Immunology Society; Organizer, Hands on Training regarding Blood Collection for Technical Staff of the Department.

Dr Jayanth Kumar P was selected as an Associate Member of Indian Academy of Sciences (2016-19); European Cancer Congress Fellowship Grant to attend and present at the Annual European Cancer Congress held at Amsterdam, Holland in January 2017

Dr Ashok Sharma was a Life Member of the Indian Society of Cell Biology (ISCB); Life member of Indian Association for Cancer Research (IACR) (2016); content provider for Biophysics subject in ePG-Pathshala, an MHRD, National Mission on Education through ICT (NME-ICT) venture.

Dr Pragyan Acharya was Organizer of the EMBO Global Exchange Lecture Course Malaria Genomics and Public Health; 2017 that was held in CRME, Madurai.

VISITING SCIENTISTS

1. Professor Rakesh Kumar, Department of Biochemistry and Molecular Medicine, School of Medicine and Health Sciences, George Washington University, Washington, DC on “Master Chromatin Remodeling Factors in Cancer and Beyond”, 26 October 2016.

9.4. Biomedical Engineering

Professor and Head

Dr Veena Koul

Professor

Dr Harpal Singh

Assistant Professors

Dr Amit Mehndiratta
Dr Dinesh Kalyanasundaram
Mr S.M.K. Rahman

Dr Anup Singh
Dr Jayantha Bhattacharyya

Dr Deepak Joshi
Dr Neetu Singh
Dr Sandeep Kumar Jha

Emeritus Professor

Dr Sneh Anand

HIGHLIGHTS

The **Biomedical Engineering** Department was established in 1971 as a joint venture of AIIMS, New Delhi and Indian Institute of Technology, Delhi. The department has applied engineering principles to address medical and biological problems. The department has collaborative projects with major institutes and hospitals in India.

The department has its vision of dissemination of knowledge and development of techniques, tools and methods for diagnosis, follow-up of treatment responses, drug delivery and help in disease treatment. The faculty of the department are dedicated towards research in the following priority areas:

- Biomaterials
- Bioinstrumentation
- Biomechanics
- Medical Imaging

In the past years reorganisation of research facilities/laboratories was initiated with following new laboratories:

- Experimental and Computational Biomechanics
- Device Testing Laboratory
- Fabrication Laboratory with Laser Cutting and 3D Printing

The following new equipments were installed:

- Dual source laser machine
- Injection moulding (po released)
- Thermal evaporator

Apart from research, the department is engaged in teaching PG, UG and Pre-PhD courses relevant to Biomedical Engineering that are offered at IIT Delhi. In the past years, the department received approval to start a new Master's Course: Masters of Technology in Biomedical Engineering. The first batch of students will be joining in July 2017.

EDUCATION

1. Dr Dikshi Gupta: Development of Biodegradable Nanoparticles for concomitant delivery of paclitaxel and oncogenic peptide for cancer therapy (Professor Harpal Singh and Dr Surender Kharbanda, DFCI, Boston).
2. Dr Vivek Bansal: Development and evaluation of biodegradable polymeric nanoparticles and aluminium based admixture formulations for vaccine delivery (Professor Harpal Singh and Dr. H.G. Brahme, BCG Vaccine labs, Chennai)
3. Dr Manu Dalela: Synthesis, characterization and biological evaluation of polystyrene-co-maleic anhydride as a drug delivery vehicle for cancer therapy (Professor Harpal Singh)
4. Dr Raj Sinha: Development and evaluation of biodegradable nanoparticles for chemo and peptide delivery in cancer therapy (Professor Harpal Singh)

Workshop/Symposia organized

1. International Conference on Biomaterials, Biodiagnostics, Tissue Engineering. Drug Delivery and Regenerative Medicine (BiTERM). Organiser: Dr Veena Koul and Dr Neetu Singh, 15–17 April 2016, Indian Institute of Technology Delhi, New Delhi
2. Neuroimaging Workshop. Organiser: Dr Amit Mehndiratta 12 July 2016, National Brain Research Centre, Manesar, Haryana

Lectures delivered

Harpal Singh: 6

Anup Singh: 1

Neetu Singh: 6

Amit Mehndiratta: 3

Harpal Singh: 6

1. Biodegradable polymeric nanocarriers: Promising approach for the codelivery of drugs for enhanced cancer therapy, 28 March 2017, Jamia Hamdard, Delhi.
2. Nanotechnology for biomedical diagnostics and therapy, 21 April 2017, Dehradun, Utrakhand.
3. Early detection of Ppathogenic bacteria and strategies to overcome drug resistance using MCF7 cell line as a model, 15 January 2017, Hyderabad.
4. Nanodrug delivery modalities for liver cancer therapy, 15 July 2016 and ILBS, Delhi.

5. Polymers for early detection and mitigation of pathogenic bacteria, 11–13 December 2016 and JNU, Delhi
6. Paclitaxel loaded biodegradable polymeric nanodelivery system to overcome drug resistance in human breast cancer cells 10 February 2016 and nanointerface, JNU, Delhi.

Anup Singh: 1

1. Recent advances in CEST MRI. Conference on Recent Advances in MRI and MRS, 21–23 May 2017, Indian National Science Academy (INSA), New Delhi

Neetu Singh: 6

1. Cellular uptake fate of cubosomes and its application in drug delivery, UGC-CoE, NanoSciTech, Punjab University, Chandigarh, 19 February 2016.
2. Role of surface structure of cubosomes and its application in drug delivery, Annum IV, NUS Singapore, 8–10 June 2016.
3. Role of surface structure of cubosomes and its application in drug delivery Kaleidoscope, A discussion meeting in Chemistry, International Centre, Goa 13–17 July 2016.
4. Carbon Dots for Drug Delivery and Cellular Microenvironment Sensing National Conference on Emerging Biomaterials, Bharathiar University, Coimbatore, 19–21 October 2016.
5. Role of surface structure of cubosomes and its application in drug delivery, CompFlu 2016, International Meeting for Researchers in the Interdisciplinary Area of Complex Fluids or Soft Matter, Hyderabad, 12–14 December 2016.
6. Role of surface structure of cubosomes and its application in drug delivery, International Conference on Advances in Biological Systems and Materials Science in Nanoworld, 19–23 February 2017.

Amit Mehndiratta: 3

1. Robotic hand assisted TMS therapy for neuro rehabilitation post stroke, 10 March 2017, Goa University, Goa
2. Research beyond boundaries: Journey of a doctor exploring the world, 2 March 2017, Medanta Institute of Education and Research, Medanta: The Medicity, Gurugram
3. IVIM and DWI imaging for response evaluation in bone tumours, 23 March 2017, Indian National Science Academy (INSA), New Delhi

RESEARCH

Patents filed

1. Dikshi Gupta, Surender Kharbanda, Harpal Singh. Concomitant delivery of Paclitaxel and NuBCP9 from Polymeric Nanoparticles for Cancer Therapy. US Patent Filed (No.: USSN 62/250, 137, 2016)
2. Surender Kharbanda, Donald Kufe, Harpal Singh. Compositions Comprising Polymeric Nanoparticles and Mcl-1 Antagonists. US Patent Filed (621385, 001, 2016)
3. Vansundhra Shukla, Surender Kharbanda, Harpal Singh. Systemic Delivery of the TNF-Gene by Novel Dual DNA Nanocomplex in a Nanoparticle System. US Patent Filed (No.: USSN 62/250, 137, 2016)
4. Veena Koul, Sirsendu Bhowmick, A.V. Thanusha. Triple-layer wound dressing material and method of preparation thereof (Indian Patent Application No.: 201613015936)
5. Veena Koul, Aji Alex M. R. Stimuli Sensitive Polymeric Nanosystem for co-delivery of drugs and nucleic acids (Indian Patent Application No.: 201711008171)

Funded Projects

Ongoing

1. Quantification and Qualification of Breast Cancer Images using frame motion modelling using Ultrasound Elastography, Sneha Anand, S. M. K. Rahman, Rs. 47.50 Lakhs, ICMR.
2. Effect of EMF (GSM-like radiofrequency) exposure on Semenological Parameters including Sperm Morphology by scanning and transmission Electron Microscopy in Rabbits. Sneha Anand, Amit Mehndiratta, Rs. 49.91 Lakhs, DST.
3. Development and evaluation of a Hybrid Nanocomposite Matrices for Topical Haemostasis, Veena Koul, Rs. 27 Lakhs, LSRB (Ministry of Defence)
4. Development of Hybrid Polymeric Nanosystems for combinatorial targeted delivery of siRNA and drug in Breast Cancer Therapy, Veena Koul, Rs. 44.30 Lakhs, DBT
5. Electrically enhanced Transdermal Delivery of Therapeutic Agents, Veena Koul, Rs. 32 Lakhs, DST

6. Development of Stimuli Responsive Biocompatible Nanoparticles for targeted drug delivery in Breast Cancer, Veena Koul, Rs. 11 Lakhs, DBT
7. Development of Iron Oxide based Nanotheranostics for Cancer Diagnostics and Therapy, Harpal Singh, Rs. 25 Lakhs, DBT
8. Development of Biodegradable Nanoparticles for Concomitant Delivery of Anticancer Peptide/DNA and Chemodrugs for Cancer Therapy, Harpal Singh, Rs. 50 Lakhs, DST
9. Stanford Biodesign Program, Harpal Singh, Rs. 164 Lakhs, DBT
10. Structure Activity Relationship in design of Biologically Relevant Nanostructures, Neetu Singh, Rs. 55 Lakhs, Nanomission, DST
11. Novel Materials for Sensing Cellular Biomarkers in 3D, Neetu Singh, Rs. 45 Lakhs, IYBA 2013, DBT
12. Capillary Electrophoresis Amperometric Detector Microchip for in-situ product monitoring in bioreactors, Sandeep K. Jha, Sneha Anand, S. M. K. Rahman, Rs. 61.70 Lakhs, DBT
13. Robotic hand assisted Neurorehabilitation, Amit Mehndiratta, Rs. 27 Lakhs, SERB, DST
14. Quantitative Software Tools for processing DCE perfusion MRI data of patients with Intracranial Mass Lesions, Anup Singh, Rs. 25.31 Lakhs, SERB, DST
15. Design of quick healing, Multi-material Orthopaedic Screws for Femur and Tibia Fracture, Dinesh Kalyanasundaram, Rs. 25.50 Lakhs, SERB, DST
16. Development of variable density composites using Electric Field guided Assembly, Dinesh Kalyanasundaram, Suhasini Gururaja, Rs. 24.97 Lakhs, Naval Research Board
17. Re-engineering High-end Audiometric Devices for robust and affordable Audiological Testing, Dinesh Kalyanasundaram, Rs. 142 Lakhs, Indo-German Science and Technology Centre, Gurugram
18. Fall Prediction and Hip Protection System for the elderly, Dinesh Kalyanasundaram, Sandeep Jha, Rs. 27 Lakhs, IDP, DST
19. Reusable Clinical Amperometric Lactate and Glucose Biosensors based on dissolved Oxygen, Sandeep K. Jha, Rs. 2 Lakhs, CL Micromed Ltd.
20. Aptamer based Inline Monitoring of Therapeutic Protein Production in Bioreactors using Microfluidic Chip, Sandeep K. Jha, Anurag S. Rathore, Rs. 49.90 Lakhs, SERB, DST
21. Artificial Skin (Bio-inspired bi-layer polymeric hybrid Scaffold) for Burn Injuries and Trauma Care, Veena Koul, Rs. 220 Lakhs
22. Fabrication and Evaluation of Bio-nano Composite Scaffold for chronic wounds, Veena Koul, Neetu Singh, Rs. 55 Lakhs, DST Nano Mission
23. Synergy based Adaptive Prosthesis for Transfemoral Amputee, Deepak Joshi, Sneha Anand, Rs. 36.71 Lakhs, ICMR
24. Electroencephalogram Signal Analysis during locomotion in different terrain and transitions: A Neurophysiological Study, Deepak Joshi, Rs. 41.76 Lakhs, DST

Departmental Projects

Ongoing

1. A real time bio-mechanical monitoring system for fall assessment in elderly population
2. A data driven Musculoskeletal Model for lower limb injury investigation
3. Intention detection of locomotion transition using neuromuscular and inertial inputs
4. To study changes in Knee Cartilage Characteristic using MRI under different loads in Healthy and Patients and Develop Patient Specific Simulation Model for Load Distribution Prediction (FIRP)
5. Multimodality Image Segmentation & 3D Printing for Medical Imaging (IRD Discover and Learn Projects (1-2-3-4))
6. Paper fluids based Dopamine Detector

PUBLICATIONS

Journals: 20

Abstracts: 36

Chapters in books: 1

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Dr Anup Singh received E. K. Zavoisky Stipend Award from ISMRM 24th Annual Meeting and Exhibition, Singapore, 7–13 May 2016.

Students

1. Neha Mehrotra received Best Poster Award at Jamia Hamdard in National Seminar on Biomedical Engineering, Food & Fermentation Technology 28 March 2017
2. Gandhi Young Technological Innovation – BIRAC-SRISTI Appreciation Grant Award 2016 by Government of India.
3. Best Poster: ‘Assessment of Biodegradable Polymersomes Encapsulated with SPIONS as Efficient Drug Carriers for Brain Targeting’ in 4th International Imaging Workshop, Biomedical Research Institute, Tsukuba Science City, Japan, January 2017.
4. Best Poster: ‘Click Modified Amphiphilic Graft Copolymeric Micelles of Poly (styrene-alt-maleic anhydride) for Combinatorial Delivery of Doxorubicin and plk-1 siRNA in Cancer Therapy’, 1st Annual Conference of Indian Society of Nanomedicine, AIIMS, New Delhi, 24–26 November 2016.
5. Best Poster: ‘Artificial Microenvironment created by Nanofibrous Composite Scaffold Stimulates Epithelial Differentiation of Human Mesenchymal Stem Cells (hMSCs) while Cultivating in Keratinocytes Proximity’ 1st Annual Conference of Indian Society of Nanomedicine, AIIMS, New Delhi, 24–26 November 2016.
6. Dogra Educational Endowment Medal 2015–2016 to Sirsendu Bhowmick for Best Scientific Publication in CBME, IIT Delhi.
7. Ayan Debnath, Fulbright-Nehru Doctoral Research Fellowships for 2017–18.
8. Anirban Sengupta; consolation award, Open House-2016, IIT Delhi.
9. Anirban Sengupta; Best Poster Award in the Conference on Recent Advances in MRI and MRS; 21–23 May 2017; Indian National Science Academy (INSA), New Delhi.
10. Leave a Nest Award, during Tech Planter in INDIA, 29 April 2017, Organized by Leave a Nest JAPAN.
11. Open House Consolation Prize, Open House 2017, 22 April 2017.
12. 3rd Prize for Paper Presentation at National Conference at NEHU, Shillong, 15–16 September 2016, Organized by ICMR and DST
13. Best Poster, Deshpande, S. and Singh N. Importance of Cubosome Surface Architecture and its Application in Drug Delivery, Nanobiotech 2016, AIIMS, New Delhi, 24–26 November 2016.
14. Dhyani V. Gordon Research Conferences GRC Carl Storm International Diversity (CSID) Award to attend the 2016 GRC–Bioinspired Materials at Les Diablerets Conference Centre, Les Diablerets, Switzerland, 5–10 June 2016.
15. 3rd Place at Department of Chemical Engineering, sponsored by Indian Institute of Chemical Engineers. Singh R, Patil S, Singh N, Gupta S. Surface Engineered Nanoparticles for Theranostics Applications, Poster at Open House, Indian Institute of Technology Delhi, New Delhi, 23 April 2016.
16. Dr Shiv Raj Nandan Sinha Medal to Ashish Ranjan for Portable Gait Recorder and Analyser at Indian Institute of Technology Delhi
17. BOSS Award – the best Innovative Hardcore Experimental/Design to Ashish Ranjan for Portable Gait Recorder and Analyser at Department of Electrical Engineering, Indian Institute of Technology Delhi.
18. Sarul Malik, Awarded 2nd Best Poster Award at BHI-2017 IEEE International Conference on Biomedical and Health Informatics, 16–19 February 2017, Orlando, Florida.
19. P. Swami, Best Presentation Award for Oral Presentation at 19th International Conference on Applied Informatics for Health, Medical and Life Sciences, 16–17 February 2017, London, UK.
20. Dr Pankaj Parashar, 1st Prize in Poster Presentation and 2nd Prize at Pitch Fest STARTUP-BIO 2017, Institute of Bioinformatics and Biotechnology, Bengaluru

VISITING SCIENTISTS

1. Dr Pratap C. Naha, Ovel Nanoparticle Contrast Agents for X-Ray Imaging (Computed Tomography and Dual-Energy Mammography). University of Pennsylvania, Philadelphia, USA. 8 December 2016
2. Dr Siva Kumar Kolluri, Oregon State University, 24 January 2017

9.5. Biophysics

INSA Senior Scientist

T. P. Singh

Professor and Head

Punit Kaur

Professors

Alagiri Srinivasan

Savita Yadav

Sujata Sharma

Associate Professors

Sharmishtha Dey

G. Hariprasad Rao

Assistant Professors

Ethayathulla A.S.

Krishna Kumar Inampudi

Saroj Kumar

Scientists

Asha Bhushan

S. Baskar Singh

Manoj Kumar

Udipan Das

HIGHLIGHTS

During the period under report, the Biophysics department had over 15 ongoing research projects funded by extramural grants. Research in the department is concerned with determining the molecular basis of biological process, rational structure based drug designing and discovering new specific biomarkers. The department provides facilities for data collection on protein and small molecule crystals, medical bioinformatics, protein sequencing and peptide synthesis, proteomics and dynamic light scattering. The department had received a Fund for Improvement of Science and Technology Infrastructure (FIST) in Higher Educational Institutions Grant from Department of Science and Technology (DST), Government of India, which had been ongoing in the past year. Faculty and Scientists also had 30 research publications in various peer reviewed journals, in the past year. The department continued providing Postgraduate Education and short and long term training to MSc, PhD and MD students. The faculty members and scientists were invited to deliver lectures and seminars from all over the country and 94 lectures were delivered by them.

EDUCATION

Postgraduate

The faculty and scientists of the Department of Biophysics continued with teaching and guiding students for PhD degree, MSc (Biophysics) and MD (Biophysics). The Postgraduate teaching includes theory classes, hands-on practical classes and a dissertation project.

Short and Long term training

The department also imparted long and short term training to MSc and MTech students from different institutes and universities.

CMEs/Workshops/Symposia/National and International Conferences

Lectures delivered

T.P. Singh: 17

Punit Kaur: 2

A. Srinivasan: 2

Savita Yadav: 4

Sharmistha Dey: 4

Hariprasad G.: 6

A.S. Ethayathulla: 8

Krishna K. Inampudi: 2

Saroj Kumar: 1

Manoj Kumar: 4

T.P. Singh: 17

1. Structure based drug design and structural basis of the application of innate immune protein as resistance free antibiotics, Special Lecture Series, 14 April 2016, Shiv Nadar University, Greater Noida
2. Principle of protein folding and structure based drug design, Inaugural Lecture for Summer Undergraduate Research Programme, 2016, 1 June 2016, Dr B.R. Ambedkar Center for Biomedical Research, University of Delhi, New Delhi
3. Structural basis of the antibiotic action of innate immunity proteins and their therapeutic applications as protein-antibiotics, Special Lecture, 22 June 2016, Central Salt and Marine Chemicals Research Institute, Bhavnagar
4. Structure based design of antithyroid drug using lactoperoxidase/thyroid peroxidase as drug targets (Plenary talk), 44th National Seminar in Crystallography, 10–13 July 2016, National Centre for Cell Science, Pune
5. New insights into the design of anti-thyroid drugs using structure based approach with lactoperoxidase/thyroid peroxidase as drug target, Bioinformatic Workshop at SCFbio, 19 September 2016, Indian Institute of Technology, Delhi, New Delhi
6. Professor G.N. Ramachandran Born Day Lecture, 8 October 2016, Central University of Hisar, Mahendragarh
7. Structure based drug design and exploitation of proteins of innate immune system as protein antibiotics, International Conference on Current Trends in Biotechnology, 8–10 December 2016, VIT University, Vellore
8. Mammalian heme peroxidases as antibacterial agents through auto-activation and anticancer agents through auto-inactivation, International Conference on Chemistry, Physics and Biology, 11–13 January 2017, Central University, Sagar
9. Self inhibition and auto-catalytic-action in mammalian heme peroxidases are programmed for preventing cancer and bacterial infections in animals, G.N. Ramachandran Lecture, 29–31 January 2017, 29th Kerala Science Congress, Thiruvalla, Kerala.
10. Structural basis of activation of mammalian heme peroxidases (Plenary lecture), Structure based computer aid drug design, 14–16 February 2017, Alagappa University, Karaikudi
11. Structural basis of antibacterial action of innate immune proteins and their exploitation as protein antibiotics, 7th DBT-BIF Workshop on Translational Bioinformatics, 15–16 February 2017, Jamia Milia Islamia, New Delhi
12. Structure based design of antithyroid drug using lactoperoxidase/thyroid peroxidase as drug target, Annual Conference on Genetics and Drug Design, 1–2 March 2017, Department of Biotechnology, Banaras Hindu University, Varanasi
13. Trends in new drug discovery, design of antibacterial agents, current status of antibiotics and latest of protein antibiotics, National Conference on Analytical Techniques and their Application, 14–16 March 2017, G.J.U.S.T., Hisar
14. Structural basis of the antibiotic action of innate immunity proteins and their therapeutic applications as protein-antibiotics, 29th CAFT Training in Veterinary Microbiology on Modern Technologies for Production and Applications of Antibodies for Animal Health Improvement, 1–21 March 2017, LUVAS, Hisar
15. New insights into structure-based design of anti-thyroid drugs using thyroid peroxidase as drug target, Annual Conference and Workshop held at Biotechnology Unit, 16–17 March 2017, Aligarh Muslim University, Aligarh
16. A never ending fight between humans and bacteria: Trends in new drug discovery, Design of antibacterial agents, Current status of antibiotics and latest on protein antibiotics, Institute Lecture, 31 March 2017, Indian Institute of Technology, Roorkee
17. Structural basis of antibacterial action of innate immune proteins and their exploitation as resistance-free antibiotics, International Conference on Drug Design, 7–9 April 2017, Jawaharlal Nehru University, New Delhi

Punit Kaur: 2

1. Sequence alignment, Bioinformatics: Basics to advanced, 9 August 2016, Madhav Institute of Technology and Science, Gwalior
2. Role of structural bioinformatics in biomedical sciences, 7th Workshop on Bioinformatics and Molecular Modeling in Drug Design, 25 March 2017, Dr Ambedkar Center for Biomedical Research, University of Delhi, Delhi

A. Srinivasan: 2

1. The critical variables in cellular dynamics, Applications of metabolomics in biomedical sciences, 23–25 November 2016, Institute of Nuclear Medicine & Allied Sciences, New Delhi
2. Molecular Diagnostics: For the clinical laboratorian, Mass Spectrometry: Biofluid Biomarker Discovery and Analysis of the Next-Generation Sequencing and Mass Spectrometry Meeting, 19–20 August 2016, New Delhi.

Savita Yadav: 4

1. Biomarker discovery by proteomics: Experimental approaches, National Symposium on Perspectives in Genomics & Proteomics, 21 October 2016, Panjab University, Chandigarh
2. Prolactin Inducible Protein (PIP): Role in human seminal plasma, National Conference on Achievements of Women in Science and Technology: Current Scenario and Future Prospects, 13 January 2017, Panjab University, Chandigarh
3. Binding partners of Prolactin Inducible Protein (PIP) and functional implications in human seminal plasma, National Conference on Reproductive Health Challenges: Issues and Remedies, 7 January 2017, Govt. Medical College, Bhavnagar
4. Protein signatures in human seminal plasma and their functional implications, National Seminar on Translational Research-2017, 5 March 2017, JIPMER, Puducherry

Sharmistha Dey: 4

1. Evaluation of expression levels of a signalling protein, p38 in pancreatic cancer and design of peptide inhibitors against the same, 12th International Conference of the Asian Clinical Oncology Society, 8–10 April 2016, New Delhi
2. Combating ageing: Exploration of novel proteins for diagnosis and treatment of age associated diseases, Indian Ageing Congress 2016, 9–11 November 2016, AIIMS, New Delhi
3. Identification of serum sirtuins as novel non-invasive protein markers for frailty, Indian Academy of Biomedical Sciences 2017, 6–8 January 2016, Bhavnagar, Gujarat
4. Biomolecular characterization by surface Plasmon resonance, Analytical tools for biomolecular characterisation, 6–8 March 2017, CBST, VIT University, Vellore

Hariprasad G.: 6

1. Structural basis for weight loss in patients with chronic obstructive pulmonary disease: Modelling of Gly80 and Ser80 variants of human group IID phospholipase A2 and their receptor complexes, American Society of Biochemistry and Molecular Biology Annual Conference, 4 April 2016, San Diego, USA
2. Evaluating the combined effect of IGF-1, TGF- β and FGF on cardiac progenitor stem cells: Implications in regenerative therapeutics of acute myocardial infarction, Nebraska Physiology Symposium, 15 October 2016, Omaha, Nebraska, USA
3. Differential protein expression profiling as means to explain beneficial advantages of co administering growth factor cocktail with cardiac stem cells for regenerative therapy, Advances in structural, functional and interaction proteomics in food and health, 17 December 2016, New Delhi
4. Evaluating the combined effect of IGF-1, TGF- β and FGF on cardiac progenitor stem cells: Implications in regenerative therapeutics of acute myocardial infarction, 14th Annual Meeting of International Society for Heart Research, 29 January 2017, CSIR-IGIB, New Delhi
5. Role of bioinformatics in drug discovery, Workshop on Rational Structure Based Drug Discovery Organized by Bioinformatics Facility, Biophysics, 22 February 2017, AIIMS, New Delhi
6. Clinical proteomics as a platform for research, National Symposium cum Bioinformatics Workshop on Current Trends in Proteomics and Bioinformatics Organized by UGC, DST, DBT, 17 March 2017, Aligarh Muslim University, Aligarh

A.S. Ethayathulla: 8

1. Structure analysis and structure based function prediction methods, DBT-BIF Sponsored National Workshop on “Translational Bioinformatics” (NWTB), 16 February 2017, Jamia Millia Islamia University, New Delhi
2. Role of structural biology in rational drug design, Bioinformatics in drug discovery, 22 February 2017, AIIMS, New Delhi
3. Molecular dynamics as a tool to understand Imidazole Glycerol Phosphate Synthase (IGPS) enzyme catalysis, Current trends in proteomics and bioinformatics, 17 March 2017, Aligarh Muslim University, Aligarh
4. Sequence alignment methods –I, UGC e-PG Pathshala for MHRD Project, UGC, New Delhi
5. Sequence alignment methods –II, UGC e-PG Pathshala for MHRD Project, UGC, New Delhi
6. Protein structure validation tools, UGC e-PG Pathshala for MHRD Project, UGC, New Delhi
7. Molecular docking: Protein-ligand, UGC e-PG Pathshala for MHRD Project, UGC, New Delhi
8. Structures of protein-ligand complexes, UGC e-PG Pathshala for MHRD Project, UGC, New Delhi

Krishna K. Inampudi: 2

1. Protein design for biotech & biotherapeutics-applications, National Symposium on Recent Advances in Chemical and Materials Sciences, 21 August 2016, RGUKT Basar (TS IIIT), Basara, Telangana
2. Protein design for biotech & biotherapeutics-applications, Advanced lecture series in microbiology: An interdisciplinary approach, 20 February 2017, Bhaskaracharya College of Applied Sciences (University of Delhi), New Delhi

Saroj Kumar: 1

1. Understanding of fibroblast role in breast cancer progression, Berzelii technology, Excellence centre of neurodiagnostics, 27 March 2017, Uppsala University, Uppsala

Manoj Kumar: 4

1. Molecular visualization of protein-ligand structure & interactions, Bioinformatics in drug discovery, 22 February 2017, AIIMS, New Delhi
2. Molecular dynamics simulation-I, UGC e-PG Pathshala for MHRD Project, UGC, New Delhi
3. Molecular dynamics simulation -II, UGC e-PG Pathshala for MHRD Project, UGC, New Delhi
4. Virtual screening, UGC e-PG Pathshala for MHRD Project, UGC, New Delhi

Oral papers/Posters presented: 17

1. Sharma P, Sharma S, Singh TP, Kaur P. Conformational profile and assessment of human cathelicidin (IL-37) and its function as neutrophil apoptosis via the activation of FRPL1, Conference on Atomistic Simulations of Biomolecules: Towards a Quantitative Understanding of Life Machinery, 6–10 March 2017, Abdus Salam International Centre for Theoretical Physics, Trieste, Italy
2. Md Tajmul, Sharma JB, Sharma M, Sharma DN, Kumar S, Yadav S. Salivary proteomics of cervical cancer: A step towards non-invasive diagnosis, IGCS 2016, 28–31 October 2016, Lisbon, Portugal
3. Ojha SK, Muhammad Aslam MK, Kumaresan A, Sharma VK, Tajmul Md, Yadav S. et al. Putative fertility markers in seminal plasma of crossbred bulls: A proteomic approach, 27th Annual Meeting of the Indian Society for the Study of Reproduction and Fertility (ISSRF), 23–25 January 2017, AIIMS, New Delhi
4. Tajmul Md, Parween P, Sharma JB, Kumar S, Sharma DN, Yadav S. Salivary proteomic biomarkers of ovarian cancer: Non-invasive approach for early detection, 27th Annual Meeting of the Indian Society for the Study of Reproduction and Fertility (ISSRF), 23–25 January 2017, AIIMS, New Delhi
5. Jain P, Bakhshi S, Singh S, Yadav S. To determine differentially expressed proteins in seminal plasma of male survivors recovered from different types of cancers: A proteomics based approach, 27th Annual Meeting of the Indian Society for the Study of Reproduction and Fertility (ISSRF), 23–25 January 2017, AIIMS, New Delhi
6. Kant K, Tomar AK, Singh S, Yadav S. Deciphering the role of human epididymal proteins 4 in human seminal plasma, 27th Annual Meeting of the Indian Society for the Study of Reproduction and Fertility (ISSRF), 23–25 January 2017, AIIMS, New Delhi
7. Sinha A, Singh S, Yadav S. Unraveling the semen proteome of asthenozoospermia affected males, 27th Annual Meeting of the Indian Society for the Study of Reproduction and Fertility (ISSRF), 23–25 January 2017, AIIMS, New Delhi
8. Sinha A, Singh S, Yadav S. Targeting male infertility through sperm proteome profiling, 6th Annual Meeting of Indian Academy of Biomedical Sciences, 6–8 January 2017, Govt. Medical College, Bhavnagar
9. Dey S, Gupta A, Sahu V, Agnihotri V, Saraya A. Evaluation of expression levels of a signalling protein, p38b in pancreatic cancer and design of peptide inhibitors against the same, 12th International Conference of the Asian Clinical Oncology Society, 8–10 April 2016, New Delhi
10. Dey S, Rai N, Shekhar S, Singh AP, Bajaj T, Charawarty A, et al. Combating ageing: Exploration of novel proteins for diagnosis and treatment of age associated diseases, Indian Ageing Congress 2016, 9–11 November 2016, AIIMS, New Delhi
11. Dey S, Rai N, Shekhar S, Singh AP, Tripathi M, Dey AB. Identification of serum sirtuins as novel non-invasive protein markers for frailty. Indian Academy of Biomedical Sciences 2017, 6–8 January 2016, Govt. Medical College, Gujarat
12. Dey S. Biomolecular characterization by surface plasmon resonance, Analytical tools for biomolecular characterization, 6–8 March 2017, CBST, VIT University, Vellore
13. Shekhar S, Agnihotri V, Gupta A, Sahu V, Prasad R, Dey S. 15-lipoxygenase: A new road map as a serum protein marker and therapeutic, 3rd International Congress of Gerontology and Geriatric Medicine, 23–24 February 2017, Indian Peptide Symposium 2017, Mumbai

14. Agnihotri V, Sahu V, Gupta A, Mohan A, Dey S. Serum Rac1 and Rac1b: A new road map for diagnostic and prognostic marker in NSCLC, 37th Annual Conference of Indian Association for Cancer Research, 9–11 February 2017, Thrissur, Kerala
15. Gupta A, Kumar R, Agnihotri V, Singh AP, Bhaskar S, Dey S. Serum biomarker for the diagnosis of head and neck squamous cell carcinoma, 12th International Conference of the Asian Clinical Oncology Society, 8–10 April 2016, New Delhi
16. Rai N, Shekhar S, Singh AP, Dey AB, Dey S. Sestrin as a blood-based marker for mild cognitive impairment and alzheimer's disease. Indian Ageing Congress 2016, 9–11 November 2016, AIIMS, New Delhi (Best Paper Award)
17. Singh A P, Bajaj T, Rai N, Shekhar S, Yadav Y, Goyal V, et al. Novel, non-invasive biomarker for parkinson's disease, Indian Ageing Congress 2016, 9–11 November 2016, AIIMS, New Delhi

RESEARCH

Funded projects

Ongoing

1. Structural studies of Peptidoglycan Recognition Proteins (PRPs), Peptidylt RNA-hydrolase, Dihydrodipicolinate Synthase (DHDPS), Dihydrodipicolinate Reductase (DHDPR) and Phospholipase A2, T.P. Singh, INSA, 5 years, 2014–19, Rs. 25 Lakhs
2. Fund for improvement of S&T infrastructure in universities & higher educational institutions, Punit Kaur, DST, 5 years, 2012–17, Rs. 323 Lakhs
3. Development of Pan-Genome and knowledge-based identification of Novel Drug targets for Typhoidal Salmonella enteric—a genomic approach to drug discovery, Punit Kaur, ICMR, 2 years, 2014–16, Rs. 32 Lakhs
4. Biomedical Informatics Facility at AIIMS, Punit Kaur, ICMR, 5 years, 2013–18, Rs. 100 Lakhs
5. Validation of medicinal plants for neurodegenerative disorders: Target selective method development, A. Srinivasan, NMPB, MoHFW, 3 years, 2015–18, Rs. 47 Lakhs
6. AMIR-PepKit IVD: R&D of a peptide-based diagnostic kit for an early detection of a fatal immune response in acute myocardial infarction patients, Savita Yadav, CEFIPRA-BIRAC, 2 years, 2016–18, Rs. 39 Lakhs
7. Exploring the role of proteomic signature in saliva: Step towards non-invasive diagnostic tool for ovarian cancer, Savita Yadav, ICMR, 3 years, 2016–19, Rs. 36 Lakhs
8. Validation of salivary proteomic markers for early detection of cervical cancer, Savita Yadav, AIIMS, 1 year, 2017, Rs. 4.7 Lakhs
9. Rational structure-based ligand design for developing the novel antibacterial agents against peptidylt RNA-hydrolase, A drug target from the multidrug resistant bacteria, Acinetobacter baumannii, Sujata Sharma, ICMR, 3 years, 2017–20, Rs. 68 Lakhs.
10. Design of specific peptide activator of Sirtuin as potential therapeutic targets for Mild Cognitive Impairment (MCI) and Alzheimer's disease (AD). Sharmistha Dey, ICMR, 3 years, 2015–18, Rs. 20 Lakhs
11. Potential anti-oxidant effect of selected Ayurvedic herbs in Parkinson's and Alzheimer's disease, Sharmistha Dey, AYUSH, 3 years, 2015–18, Rs. 20 Lakhs
12. Evaluation of serum sirtuin level and their correlation with tubulins, synuclein oligomers in Parkinson's disease, Sharmistha Dey, DBT, 3 years, 2016–19, Rs. 30 Lakhs
13. Study of possibility of the Hypoxia Inducible Protein (Hi95) as potential protein marker for Alzheimer's diseases, Sharmistha Dey, AIIMS, 2 years, 2016–18, Rs. 10 Lakhs
14. Proteomics of CSF for the identification of protein signatures in the dopamine dictated states of Schizophrenia and Parkinson's disease, Hariprasad G, DST, 3 years, 2014–18, Rs. 33 Lakhs
15. Structural based drug-design: Histidine biosynthesis pathway protein HisF/HisH as new drug target against Salmonella Typhi, A.S. Ethayathulla, AIIMS, 2 years, 2016–17, Rs. 4.8 Lakhs
16. Structural and biophysical characterization of bacterial cell division protein FtsZ from Salmonella Enterica: Antimicrobial drug target, A.S. Ethayathulla, DST, 3 years, 2016–19, Rs. 33 Lakhs
17. Structural based drug-design: Histidine biosynthesis pathway protein HisF/HisH as new drug target against Salmonella Typhi, Krishna K Inampudi, AIIMS, 2 years, 2016–18, Rs. 9.8 Lakhs
18. Structural and biophysical characterization of bacterial cell division protein FtsZ from Salmonella Enterica: Antimicrobial drug target, Krishna K Inampudi, DST, 4 years, 2017–20, Rs. 50 Lakhs

Completed

1. Sperm Proteomics: Differential protein expression in normal and non-motile spermatozoa: Possible causes and markers. A. Srinivasan, ICMR, 3 years, 2013–16, Rs. 20.5 Lakhs
2. Infertility in crossbred bulls: Search for spermatogenic cell markers for early prediction of fertility, Savita Yadav, ICAR, 5 years, 2012–17, Rs. 96 Lakhs
3. Development of peptide inhibitor of 5-Lipoxygenase and assessment of their neuro-protective effect in in vitro model of Alzheimer's disease, Sharmistha Dey, AIIMS, 1 year, 2015–16, Rs. 4.9 Lakhs
4. Comparative proteomic analysis of ovarian cancer tissue to understand the protein profile of responders and non-responders to first line chemotherapy, Hariprasad G, AIIMS, 2 years, 2013–15, Rs. 5 Lakhs
5. Evaluating the combined effect of insulin like growth factor-1, Transforming growth factor- β and fibroblast growth factor-2 on cardiac progenitor stem cells, Hariprasad G, AIIMS, 2 years, 2015–17, Rs. 9.8 Lakhs

Departmental projects

Ongoing

1. Molecular analysis and biophysical characterization of proteins from the bacterial peptidoglycan pathway
2. Development of antimicrobial molecules against the drug resistant proteins from *S. Typhi*
3. Structural characterization of the Mur proteins
4. Genome analysis and target identification against *S. Typhi*
5. Expression analysis and interactomics of clusterin in Human Seminal Plasma of Indian males
6. Differential serum proteomic profiling of hypertensive adult female Sprague Dawley rats treated with an Ayurvedic medicine Mukta Vati
7. Development of a protein marker for Parkinson's disease and design of peptide inhibitor for the same
8. Evaluation of cell signalling molecules as serum protein marker in Head and Neck Squamous Cell Carcinoma (HNSCC) and Non Small Cell Lung Cancer (NSCLC) proposing therapeutic target
9. Role of sestrin in neurodegenerative diseases and its therapeutic implication
10. Cloning, expression and purification of Tau protein
11. Promoter specificity for p73 tumor suppressor
12. To study the effect of mutation in DNA binding domain of p53 Tumour Suppressor Gene

Completed

1. Significance of NFKB1 and NFKB1A in progression of HNSCC in Indian population
2. Design, synthesis and assessment of antimicrobial peptides against antibiotic resistant pathogens

Collaborative projects

Ongoing

1. Identification of Novel targets and development of inhibitors against *S. Typhi* (Microbiology)
2. Infertility in crossbred bulls: Search for spermatogenic cell markers for early prediction of fertility (NDRI, Karnal)
3. Investigation of anticancer activities of some selected plants and their molecular target on human oral cancer cell line (biotechnology)
4. Harmonized Diagnostic Assessment of Dementia (DAD) for Longitudinal Aging Study of India (LASI) (Geriatric Medicine)

Completed

1. Evaluation of novel intracellular proteins in serum as marker of ageing (Geriatric Medicine)
2. Cancer in older Indians: Development of an instrument for comprehensive functional assessment and a biomarker (Geriatric Medicine)

PUBLICATIONS

Journals: 24

Abstracts: 1

Chapters in books: 3

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor T.P. Singh was given Lifetime Achievement Award of the Biotech Research Society of India, December 2016; Professor G.N. Ramachandran Born Day Lecture of the Central University of Haryana, 8 October 2016; Professor G.N. Ramachandran Award of the Kerala Science, Technology and Environment Ministry, 29 January 2017; Institute Lecture of the Indian Institute of Technology, Roorkee, 31 March 2017; Elected President of the Biotech Research Society of India (2017–19).

Dr Sharmistha Dey was a member of National Academy of Medical Sciences (India); A life member of the following societies: (i) Indian Biophysical Society; (ii) European Peptide Society; (iii) Indian Peptide Society; (iv) Indian Science Congress; (v) Proteomic Society of India; (vi) Association of Gerontology (India); (vii) Association of Indian Academy of Biomedical Sciences (IABS); (viii) Indian Association for Cancer Research (IACR); (ix) Movement and Disorder Society.

Dr Hariprasad G received AIIMS Excellence Research Award 2016 in Basic Research Category for the paper: Comparative proteomic analysis of advanced ovarian cancer tissue to identify potential biomarkers of responders and non-responders to first line chemotherapy of carboplatin and paclitaxel. Published in *Biomarkers in Cancer*; ICMR International Fellowship from September–December at University of Nebraska Medical Center, USA

VISITING SCIENTIST

1. Dr Ashok Varma, ACTREC, Mumbai
2. Dr S. Mande, National Centre for Cell Science, Pune
3. Dr B. Gopal, Indian Institute of Science, Bangalore
4. Dr Ashish Arora, Central Drug Research Institute
5. Dr Arun Goyal, Indian Institute of Technology, Guwahati
6. Dr Pallavi Manral, Vanderbilt University, USA

9.6. Biostatistics

Professor and Head

R.M. Pandey

Professors

S.N. Dwivedi

V. Sreenivas

Associate Professor

Maroof A. Khan

Scientist I

M. Kalaivani

HIGHLIGHTS

The Department had more than 110 ongoing research projects, mostly collaborative in nature; and 27 completed collaborative research projects with various Centres/Departments in the Institute.

- Faculty members and scientists: Served on various administrative and scientific committees in the Institute;
- Invited members of various scientific committees of the ICMR, DBT, DST, AYUSH; Served on Data Safety Monitoring Boards (DSMB) of several National and International Clinical Trials;
- Delivered more than fifty invited lectures all over the country during various workshops on Research Methodology and Biostatistics; and served as Examiners to various universities in the country.

In the last one year, faculty and scientists had one hundred and four research publications in various peer reviewed medical journals. Faculty members and scientists continued to be reviewer for almost all the major medical journals in the country and for a number of International Medical Journals from various medical specialties.

EDUCATION

The department continued teaching “Biostatistics and Essentials of Research Methods” for the undergraduate, paramedical and postgraduate courses, viz. MBBS, BSc (Hons) in Medical Technology in Radiology, M Biotech, BSc and MSc Nursing, and MD Community Medicine. Department plays major role in conducting Research Methodology, Writing and Communication workshops for the PG students. This is a mandatory five days course work. On request, faculty members delivered series of lectures for the residents, PhD students and participated in departmental scientific presentations in several departments in the Institute. Besides guiding PhD students in the department, faculty members and scientists contributed to the academic activities of other departments in the Institute as Co-Guides, DC Members of PhD, DM, MCH, MD/MS, students. Also, departmental faculty and scientists delivered more than thirty invited lectures in various national workshops/conferences across the country.

CMEs/Workshops/Symposia/National and International Conferences

Conducted a full-day session on Biostatistics covering (i) Biostatistics in Research; (ii) Hypothesis Testing; and (iii) Correlation and Regression; under Research Methodology Workshop for Faculty of Science at The Centre for Research, Innovation and Training (CRIT), The IIS University, Jaipur, organized during 26th March to 1st April 2016.

Lectures delivered

R.M. Pandey: 11

S.N. Dwivedi: 6

V. Sreenivas: 12

M. Kalaivani: 3

R.M. Pandey: 11

1. How to Plan a Research Project and Get It Funded—Workshop on How to Plan a Research Project and get it Funded; 25 June to 2 July 2016, Subharti Medical College, Meerut
2. Application of Statistical Methods in Nutritional Research—Workshop on Nutrition Research Method; 27–29 July 2016, Belgaum, Karnataka
3. Young Clinician Program for the First Year DM/DNB Trainees—Meeting on Young Clinician Program for the First Year DM/DNB Trainees; 3 September 2016, Hyderabad
4. Workshop on Research Methodology; 20th October 2016, PGIMER, Chandigarh
5. Research Methods to Answer Uncertainties to Improve Health of Population—Rajasthan Conclave; 13th November 2016, DMRC (ICMR), Jodhpur, Rajasthan
6. Methods of Statistical Inference—Workshop on 5th National conference of Indian Society of Transfusion Medicine; 17th November 2016, BGMH (ICMR), Madhya Pradesh
7. Research Methodology cum Statistics Methods in Medicine—Workshop on Research Methodology cum Statistics Methods in Medicine; 19th November 2016, Sikkim Manipal Institute of Medical Sciences, Gangtok, Sikkim
8. Role of Biostatistics in Health Research—CME Programme on Research Methodology; 9th November 2016, RUHS, Jaipur, Rajasthan
9. Statistical Methods in Clinical Research—12th Annual National conference of Indian Fertility Society; 9th December 2016, Lucknow, Uttar Pradesh
10. Statistical Methods in Clinical Trials—Workshop on 36th National Clinical Pharmacology and Therapeutics; 9th March 2017, PGIMER, Chandigarh
11. Statistical Methods in Clinical Trials—Workshop on Research Methodology; 22nd March 2017, NIN (ICMR), Hyderabad, Telangana

S.N. Dwivedi: 6

1. Statistics in Clinical Practice—A Non-Inferiority Randomized Controlled Trial—Invited talk; 25th April 2016, University of Kashmir, Srinagar, Jammu and Kashmir
2. Study Designs and Sample Size—Workshop on Biostatistics at Jamia Millia Islamia, New Delhi; 7th September 2016, Jamia Millia Islamia, New Delhi
3. Statistics in Imputation of Missing Covariates in Clinical Research—Silver Jubilee international conference of Forum on Interdisciplinary Mathematics, Statistics and Computational Techniques; 20–24 December 2016, Manipal University, Jaipur, Rajasthan
4. Statistics Involved in Equivalence Randomized Controlled Trials—Workshop on Quantitative Methods for Public Health Researchers of the SAARC Countries; 28–30 December 2016, Calcutta University, Kolkata, West Bengal
5. Study Designs and Measures of Association—STATQUEST 2017; 21st March 2017, Calcutta University, Kolkata, West Bengal

6. Size Determination in various studies—2nd Annual Symposium on Clinical Biostatistics, and 1st Annual Workshop on Clinical Biostatistics; 21–23 October 2016, Himalayan Institute of Medical Sciences, Dehradun, Uttarakhand

V. Sreenivas: 12

1. Randomization and Blinding in Clinical trials—Research Methods Workshop; 30 April 2016, Central Council for Research in Unani Medicine, Jamia Islamia University, New Delhi
2. Biostatistics—Scope and Applications in Health Research—CME on Research Methods; 12 June 2016, ESI Medical College and Hospital, Hyderabad, Telangana
3. Correlation and Regression—Research Methodology and Biostatistics workshop for Biomedical Scientists; 29 July 2016, National Institute of Cancer Prevention and Research, ICMR, NOIDA, Uttar Pradesh
4. Critical Review of Protocols—AIIMS-Michigan Course on Research Methodology for faculty of AIIMS, 16 December 2016; AIIMS, New Delhi
5. Common Statistical Tests—Workshop on Research Methodology and Biostatistics, 23 December 2016; Ambedkar Center for Biomedical Research, Delhi University, New Delhi
6. Probability Distributions and Applications—Workshop on Research Methodology and Biostatistics; 23 December 2016, Ambedkar Center for Biomedical Research, Delhi University, New Delhi
7. Sample Size Calculation—Research Methodology and Biostatistics workshop for Biomedical Scientists; 3 February 2017, National Institute of Cancer Prevention and Research, ICMR, NOIDA, Uttar Pradesh
8. Descriptive Analyses—XXI Quality Improvement Program; 8 February 2017, Delhi Institute of Pharmaceutical Science and Research, New Delhi
9. Logic of Statistical Inference—XXI Quality Improvement Program; 8 February 2017, Delhi Institute of Pharmaceutical Science and Research, New Delhi
10. Sampling Methods and Sample Size—National Research Workshop; 7 March 2017, Jamia Hamdard University, New Delhi
11. Sample Size Calculation—Workshop on Biostatistics—an initiative to educate the educator; 9 March 2017, Zakir Hussain College, Delhi University, New Delhi
12. Logistic Regression—Workshop on Biostatistics—an initiative to educate the educator; 9 March 2017, Zakir Hussain College, Delhi University, New Delhi

M. Kalaivani: 3

1. Statistical tests in Nursing Research—Research Methodology for Clinicians; 7 March 2017, Jamia Hamdard, New Delhi
2. Sample size calculation using nMaster software—AIIMS-DHR operational research workshop; 17 January 2017, Comprehensive Rural Health Services Project, Ballabgarh, Haryana
3. Data management—AIIMS-DHR operational research workshop; 18 January 2017, Comprehensive Rural Health Services Project, Ballabgarh, Haryana

Oral papers/posters presented: 17

1. Pathak M, Dwivedi SN, Deo SV, Sreenivas V, Bhaskar B. Which is Preferred Measure of Heterogeneity in Meta-analysis and Why? 34th Annual Meeting of the Indian Society of Medical Statistics; 1–3 December 2016, Indian Statistical Institute, Kolkata
2. Dwivedi A, Christopher D, Dwivedi SN, Shukla R. Composite Bootstrap Test with Counterintuitive Resampling Method to Compare Two Groups: An Application to Randomized Clinical Trials Joint Statistical Meeting 2015, Organized by American Statistical Association; 30th July–4th August 2016, Chicago, Washington, USA
3. Pathak M, Deo SV, Dwivedi SN, Sreenivas V, Thakur B. Total Preoperative NACT vs Sandwich NACT in Breast Cancer Patients: Systematic Review and Meta-analysis, European Cancer Congress; 27–30 January 2017, Amsterdam, Netherlands
4. Pathak M, Deo SV, Dwivedi SN, Sreenivas V, Thakur B. Impact of neoadjuvant chemotherapy on breast cancer survival: A systematic review and meta-analysis, European Cancer Congress; 27–30 January 2017, Amsterdam, Netherlands
5. Upadhyay AD, Dhawan A, Sreenivas V, Dwivedi SN. Epidemiological understanding of Tobacco Use among Adolescents in India, 37th Annual Conference of IASP; 7–9 December, 2016, Institute of Economic Growth, University of Delhi, New Delhi
6. Nair P, Yadav AK, Thakur B, Vibha D, Dwivedi SN, Prasad K. Association Between Physical Activity, Sleep Duration And Daytime Sleepiness In Community Dwelling Adults Aged 50 Years And Older: AIIMS Cohort Study, World Stroke Congress; 26–27 October 2016, Hyderabad

7. Damke R, Yadav AK, Kant S, Thakur B, Vibha D, Prasad K, Dwivedi SN. Estimation of Morning/Evening Activeness among >50 Years Old Participant in AIIMS Cohort Study for Stroke and Dementia, World Stroke Congress; 26–27 October 2016, Hyderabad
8. Thakur B, Yadav AK, Nair P, Dwivedi SN, Vibha D, Kant S, Prasad K. Quality Improvement With DCA Cycle: Involving First 353 Participants of AIIMS Cohort Study, World Stroke Congress; 26–27 October 2016, Hyderabad
9. Yadav AK, Prasad K, Vibha D, Dwivedi SN, Kant S, Thakur B. AIIMS Cohort Study For Stroke And Dementia: Methodological Approach for Development of Questionnaire, World Stroke Congress; 26–27 October 2016, Hyderabad
10. Thakur B, Yadav AK, Dwivedi SN, Vibha D, Kant S, Prasad K. Prevalence of Multilingualism In Indian Urban Community: Results From Baseline Data of 225 Participants of AIIMS Cohort Study, World Stroke Congress; 26–27 October 2016, Hyderabad
11. Nair P, Yadav AK, Thakur B, Vibha D, Dwivedi SN, Prasad K. Vascular Risk Factors Profile: Baseline Results of AIIMS Cohort Study World Stroke Congress; 26–27 October 2016, Hyderabad
12. Patel AK, Yadav AK, Thakur B, Bhasin R, Shrivastava S, Vibha D, Tripathi M, Kant S, Dwivedi SN, Prasad K. Excessive Day Time Sleepiness as Assessed by Modified Epworth Sleepiness Scale Among Urban Elderly Population: Result from First 582 Participants of AIIMS Cohort Study, World Stroke Congress; 26–27 October 2016, Hyderabad
13. Yadav AK, Gulati A, Thakur B, Vibha D, Dwivedi SN, Kant S, Prasad K. Lack of Applicability of Some Response Options in Morningness-Eveningness Question: Field Experience in AIIMS Cohort Study, World Stroke Congress; 26–27 October 2016, Hyderabad
14. Thakur B, Yadav AK, Patel AK, Dwivedi SN, Vibha D, Kant S, Tripathi M, Prasad K. Baseline Assessment of Sleep Quality Index in Urban Elderly Population: Data on First 583 Participants of AIIMS Cohort Study, World Stroke Congress; 26–27 October 2016, Hyderabad
15. Thakur B, Sreenivas V, Dwivedi SN, Pathak M. Monte Carlo Analysis of Multilevel Binary Logit Model to improve the prediction, 34th Annual Conference of the Indian Society of Medical Statistics; 1–3 December 2016, the Indian Statistical Institute, Kolkata
16. Pathak M, Dwivedi SN, Deo SD, Thakur B. Methods of Estimating the Pooled Effect Size under Meta-analysis: When to Use Fixed Effect, Random Effect and Weighted Least Square method? 34th Annual Meeting of the Indian Society of Medical Statistics; 1–3 December 2016, Indian Statistical Institute, Kolkata
17. Singh V, Dwivedi SN, Deo SV, Khan MA, Sreenivas V. Modeling of Ordinal Outcome: Factors Associated with Extent of Nodal Involvement among Oral Cancer Patients, 34th Annual Meeting of the Indian Society of Medical Statistics; 1–3 December 2016, Indian Statistical Institute, Kolkata

RESEARCH

Funded projects

Ongoing

1. Multicentric trial to study the effect of early active mobilization as compared to three weeks immobilization following tendon transfer procedures for claw hand. V. Sreenivas (Data coordination and study monitoring), ICMR, New Delhi, 3 years, 2015–2018, Rs. 21.22 lakhs
2. Chron's disease in India: A multi-center study from a country where intestinal tuberculosis as well as Johne's disease is endemic, V. Sreenivas (Data coordination and study monitoring), Department of Health Research, 3 years, 2016–2019, Rs. 27.99 lakhs
3. The effect of geographical health inequalities on under five child mortality in India, M.A. Khan, DST, 3 years, 2017–2020, Rs. 15.94 lakhs

Departmental projects

Ongoing

1. Comparison of Statistical Models for Recurrent Exacerbation and Long Term Control of Asthma in Children in Northern India.
2. Comparative Appraisal of Data Collection Methods and Related Epidemiological Models for Smoking, Drinking and Tobacco Chewing among Adolescent Children in India.
3. Competing Risk Survival Models as well as Systematic Review and Meta-Analyses to Assess the Effectiveness of Neo-adjuvant Chemotherapy in Treatment of Breast Cancer Patients.

4. Factors Associated with Lymph Node Involvement and Local Recurrence among Oral Cancer Patients: Biostatistical Considerations.
5. Multilevel modeling to identify the factors associated with the neonatal mortality in India.

Completed

1. A Study on Appropriate Statistical Models to Determine Quality of Life and Mortality in Head Injured Trauma Patients.
2. A Study on Appropriate Statistical Models to Determine In-hospital Mortality and outcome at 6 months in Head Injured Trauma Patients.

Collaborative projects

Ongoing

1. A prospective double-blind, randomized, placebo-controlled trial to determine the effect of vitamin D supplementation on the development of active tuberculosis and pneumonia in HIV-infected individuals (Medicine).
2. A randomized control study to evaluate the efficacy of srambler therapy in the management of oncological pain in cancer patients (IRCH).
3. A Study of Clinical, Epidemiological and Environmental Risk Factors Associated with Fragility Hip Fractures in Elderly Asian Indians, Aged ≥ 60 Years, Endocrinology.
4. A study of endothelial function and gene expression in healthy individuals, and their correlation with various somatotype classifications (Physiology).
5. A study on alternate antimicrobial agents against Typhoidal Salmonellae (Microbiology).
6. A study to evaluate the efficacy of supervised exercise training programme in patients of peripheral artery disease of lower limbs and evaluate their quality of life (Surgical disciplines).
7. Age related changes in the human Inferior Colliculus: A Morphological and Neurochemical Study (Anatomy).
8. AIIMS-ERASMUS Cohort Study, A Population Based Prospective Cohort Study to Unravel the Causes of Stroke and Cognitive Decline: A Cross-Cultural Perspective (Neurology).
9. Analysis of EGFR downstream signaling pathways in non-small cell lung carcinoma and elucidating the mechanisms of EGFR TKI (Pathology).
10. Analysis of putative virulence factors and molecular typing of clinical isolates of Vancomycin and high level Gentamycin resistant Enterococcus faecium and Enterococcus faecalis (Microbiology).
11. Assessment of liver fibrosis in patients with chronic liver disease using Transient elastography, Shear wave elastography and serum biochemical markers (Gastroenterology).
12. Assessment of therapeutic response of radiolabeled anti CD20 antibodies 131 Iodine Rituximab/90 in Delhi and adjoining area (Microbiology).
13. Association of IKZF-1 gene alterations and Cytokine Receptor-Like Factor 2 (CRLF-2) Expression with prognostic parameters at presentation and response to induction chemotherapy in Indian Children with Acute Lymphoblastic Leukemia (ALL) (Pediatrics).
14. Awareness and knowledge of Indian breast cancer patients pertaining to genetic aspect of breast cancer (IRCH).
15. Biomarkers in peripheral arterial disease (Surgical disciplines).
16. Biostatistical Aspects of Prognostic Factors including Molecular Parameters in Breast Cancer Patients: An Epidemiological Appraisal (Radiotherapy).
17. Biostatistical Modeling of Graft Failure in Renal Transplant (Biostatistics and Health Informatics, SGPGIMS, Lucknow).
18. Clinical and Biological significance of mutations in mitochondrial DNA (Medical Oncology, IRCH).
19. Clinical biochemical and radiological profile in mild behavioural impairment (Geriatric Medicine).
20. Clinical, Biochemical, hormonal familial characteristics and FTO gene variation in women with PCOS, with and without family history of type 2 Diabetes Mellitus (Endocrinology).
21. Comparative role of Lutetium - 177 and Rhenium - 188 in radiosynovectomy of Chronic knee arthritis (Nuclear Medicine).
22. Comparison of post extraction bleeding complication in patients taking oral anticoagulants, with and without bridging therapy: A pilot study (Dentistry).
23. Comparison of statistical models for recurrent exacerbations and long term control of Asthma in children in Northern India (Biostatistics).

24. Comprehensive geriatric assessment of older adults attending fragility clinic in a tertiary health care setting in India (Geriatric Medicine).
25. Designing and validation of evidence based questionnaire in English and Hindi for a population based cohort study in India (Neurology).
26. Detection of Minimal Residual Disease (MRD) in B-cell Lineage Acute Lymphoblastic Leukemia by Flow Cytometry at end of Induction (Pediatrics).
27. Developing and validating QSPR model for enhanced penetration of drugs across blood ocular barriers, Ocular Pharmacology (Dr RP Center).
28. Development of a diagnostic panel of blood markers in the diagnosis and prognostication of acute ischemic stroke (Neurology, CN Centre).
29. Development of a molecular diagnostic probe for detection of *Cryptosporidium spp.* and further characterization of the parasite in patients (Microbiology).
30. Development of serum protein marker and study of antioxidative effect using potential modulator for Alzheimer's disease (Biophysics).
31. Dosimetric Studies in Radionuclide Therapy of Neuroendocrine Tumors with ¹⁷⁷Lu DOTA-TATE (Nuclear Medicine).
32. Dosimetric study in children and young adults with Differentiated Thyroid Cancer undergoing radioiodine (¹³¹I-Na) therapy (Nuclear Medicine).
33. Dynamic MRI in evaluating upper airway in Obstructive Sleep Apnoea Syndrome (Radiodiagnosis).
34. Dynamics of differential T-regulatory cell expression in patients with inflammatory bowel disease and intestinal tuberculosis (Gastroenterology).
35. Effect of Angiotensin Converting Inhibitor on Autonomic, Vascular and Endothelial function in Type 2 Diabetes with newly diagnosed Hypertension (Physiology).
36. Effect of graded lower body positive pressure on dynamic cerebral autoregulation (Physiology).
37. Effect of magnetic field on behavioural, electrophysiological and neurochemical correlates of pain in rats exposed to 3G frequency band (Physiology).
38. Effect of multimodal intervention (diet, exercise and computer based cognitive training) amongst elderly subject with subjective cognitive impairment (SCI) from Delhi-NCR-A randomized control trial (Geriatric Medicine).
39. Effect of Vitamin D supplementation on the bone mineral homeostasis in children with congenital Ichthyosis (Dermatology).
40. Effectiveness of bundled intervention in surgical site infections among patients undergoing clean orthopedic surgery with hardware implants: A randomized control trial (Microbiology).
41. Effectiveness of occupational therapy for older people with dementia and their caregivers (Geriatric Medicine).
42. Effects of pre and post-natal exposure to fluoride on enteric nervous system (Anatomy).
43. Epidemiological study of Diabetic Retinopathy in North India, Community Ophthalmology (Dr RP Center).
44. Epidemiological Study of Respiratory Pathogens in Acute Respiratory Tract Infections among children and Elderly in India (Centre for Community Medicine).
45. Evaluation of neck masses using diffusion weighted MR imaging and ultrasound elastography (Radiodiagnosis).
46. Evaluation of novel intracellular proteins in serum as marker of aging (Geriatric Medicine).
47. Evaluation of plasma circulating nucleic acids and *in-vitro* analysis of triplex binding proteins in relevance with the pathogenesis of friedreich Ataxia (Biochemistry).
48. Evaluation of vascular functions, baroreflex sensitivity and angiogenic factors during the course of pregnancy in women with preeclampsia (Physiology).
49. Exploration of Autoimmune basis of Indian patients with Idiopathic Hypoparathyroidism (Endocrinology).
50. Expression of selective neurotransmitters and neuropeptides in the spinal cord of morphine tolerant rats (Anatomy).
51. Gait and balance assessment in patients attending memory clinic (Geriatric Medicine).
52. Gene expression profile and its correlation with mitochondrial energy metabolism in pediatric AML (Medical Oncology, IRCH).
53. Genetic and clinical factors associated with aspirin resistance in Indian patients with Ischemic stroke (Neurology, CN Centre).
54. Genetic and Epigenetic study in Rheumatoid Arthritis: Impact of Yoga and Meditation (Anatomy).
55. Genomic expression and protein profile correlates of peripheral blood mononuclear cells in obesity after Yoga-based lifestyle intervention (Physiology).

56. Harmonized diagnostic assessment of dementia (DAD) for longitudinal aging study of India (LASI) (Geriatric Medicine).
57. Identification of biomarkers in Parkinson's disease using NMR (NMR).
58. Impact of frailty and geriatric syndromes on outcome of major orthopaedic surgery in older Indian (Geriatric Medicine).
59. Incidence of ovarian failure with cyclophosphamide therapy in females <40 years, Medicine.
60. Influence of complete spinal cord injury on ventromedial hypothalamic functions: Role of magnetic field (Physiology).
61. Interventions of human leukocyte Antigen-G in HNSCC and its therapeutic implications (Biophysics).
62. Intestinal Parasitic Co-Infections in Patients with HIV/AIDS and its effect on CD4 count, Viral Load, and Antiretroviral Drug Resistance (Microbiology).
63. Investigating the association between differentiation and tumor microenvironment in human colorectal cancer (Biochemistry).
64. Investigation of Role of Transcranial Magnetic Stimulation in Parkinson's Disease (Neurology).
65. Magnetic Resonance Imaging evaluation of adult traumatic brachial plexus injury (Radiodiagnosis).
66. Magnitude of Prosthetic Joint Infections (PJI) and role of amplification based DNA analysis for identifying microbial profile of prosthetic joint infections in a Tertiary Care Hospital (Microbiology).
67. Metabolomics study of prostate cancer by using NMR spectroscopy (NMR).
68. Minimal Residual Disease in Multiple myeloma (Medical Oncology, Dr BRA IRCH).
69. Molecular Characterization of Neisseria Gonorrhoeae strains with decreased susceptibility to Extended Spectrum Cephalosporins (Microbiology).
70. Molecular characterization of Neisseria meningitides isolated from cases of acute bacterial meningitides in Delhi and adjoining area (Microbiology).
71. Molecular Expression of Micronutrient antioxidants and interaction of Growth Differentiation factor-15 (GDF-15) and Iron Trafficking Proteins in Diabetes and Metabolic Syndrome (Laboratory Medicine).
72. Molecular insights in to the complications of Idiopathic Hypoparathyroidism (Endocrinology).
73. Muscle regeneration after iron oxide nano-particle implantation and effect of magnetic field in complete spinal cord injury rat model (Physiology).
74. Neuroregeneration following implantation of iron oxide nanoparticle along with magnetic field exposures in spinal cord injuries (Physiology).
75. Optical Characterization of Breast Cancer (Surgery).
76. Pediatric Hodgkin Lymphoma—Biology and Outcome (Medical Oncology, IRCH).
77. Phenotypic and genotypic characterization of non-typeable haemophilus influenza (NTHi) from North India (Microbiology).
78. Post Transplant Diabetes Mellitus (PTDM): A prospective observational study (Pharmacology).
79. Prevalence and determinants of cerebral micro-bleeds in people aged 50 years and above residing in urban Delhi: A population based cross sectional study (Neurology).
80. Prevalence of incidental findings on Brain MRI in adults aged 50 years and above: A population based cross-sectional study (Neurology).
81. Quantitative EEG correlates of Cognitive Deficits and Stress Reactivity in Mild Cognitive Impairment and Alzheimer's disease (Physiology).
82. Quantitative EEG correlates of emotion induced changes in cognitive performance in healthy volunteers (Physiology).
83. Quantitative Estimation of Aluminium and Zink using ICP-AES from Fatal Phosphide Poisoning (Forensic Medicine).
84. Quantitative real time PCR and genotyping for Cytomegalovirus in ulcerative colitis (Microbiology).
85. Randomized controlled trial to compare efficacy of injection benzathine penicillin, upper limb exercise and care versus upper limb exercise and care only in prevention of Upper Limb Lymphedema following breast cancer surgery (Surgical disciplines).
86. Rapid Diagnosis of neonatal sepsis with special reference to molecular typing of Klebsiella pneumonia (Microbiology).
87. Role of Contrast enhanced CT abdomen in decision making in elderly patients presenting to the emergency department with acute undifferentiated abdominal pain (Emergency Medicine).

88. Role of contrast enhanced ultrasound in the diagnosis of hepatocellular carcinoma in patients of cirrhosis (Gastroenterology).
89. Role of Dual Energy CT in assessment of renal calculi (Radiodiagnosis).
90. Role of Fluoride Toxicity on Renal Pathogenesis in Childhood Nephrotic Syndrome: An Ultra structural, Biochemical and Proteomic Study (Anatomy).
91. Role of hydrogen sulphide on migration of human trophoblast cells (Anatomy).
92. Role of micro RNA 30 in cystathionine gamma lyase mediated trophoblast cell invasion and its status in preeclampsia (Anatomy).
93. Role of miR-22, specificity protein-1 and cystathionine gamma lyase in regulating invasiveness of trophoblast (Anatomy).
94. Role of MR guided Biopsy in detection of Prostate Cancer (NMR).
95. Role of perfusion CT in evaluation of non-small cell lung carcinoma in patients undergoing chemotherapy (Radiodiagnosis).
96. Role of various Magnetic Resonance Imaging and Spectroscopic methods in the evaluation of prostate cancer (NMR).
97. Standardization of dynamic F-18 FDG PET/CT protocol and comparison of whole body F-18 FDG PET CT with whole body diffusion weighted MRI for early treatment response evaluation in non-small cell lung cancer (Nuclear Medicine).
98. Study of Cognition and Quality of Life in Chronic Intractable Epilepsy using Functional Magnetic Resonance Imaging (fMRI) (Neurology).
99. Study of cognition in frail older adults (Geriatric Medicine).
100. Study of involvement of specific neuropeptides at spinal level in the rat model of post operative pain (Anatomy).
101. Study of muscle regeneration in elderly: Development of a mice model (Geriatric Medicine).
102. Study of Orthostatic Hypotension in Older Indians (Geriatric Medicine).
103. Study of Population Genetics of clinical strains of Pneumocystis Jirovecii and its clinical epidemiological correlation (Microbiology).
104. Study of potential modulator targeting pathways involved in the hyperphosphorylation of tau in Alzheimer disease (Biophysics).
105. Study of TSPO enhanced PET Scan in evaluation of cognitive impairment in older adults (Geriatric Medicine).
106. Study on cytogenetic toxicity of low dose ¹³¹I therapy in hyperthyroid patients by using micronuclei assay (Nuclear Medicine).
107. To study concept of professionalism in nursing, its correlates and prepare a model framework of curriculum in professionalism for nursing education (Nursing).
108. To study the dynamic relationship of airway colonization and Endotracheal tube Biofilm with Ventilator Associated pneumonia (Pulmonary Medicine and Sleep Disorders).
109. To Study the mechanism of altered spontaneous baroreflex sensitivity during blood donation (Physiology).
110. To study the role of vascular function and pain sensitivity in micro vascular angina (Physiology).
111. Understanding the BRB Transponder Functions and Evaluation of Aptamers in the Experimental Model of Uveitis, Ocular Pharmacology (Dr RP Centre).

Completed

1. A comparative study of Immunohistochemistry antigen mapping with immunofluorescence mapping in the diagnosis of inherited epidermolysis bullosa. (Dermatology).
2. A randomized controlled trial comparing single dose versus three doses of antibiotic prophylaxis in surgical oncology patients with clean wounds (IRCH).
3. Age related morphological and neurochemical changes in the human spiral ganglion. (Anatomy).
4. Cancer in older Indians: Development of an instrument for comprehensive functional assessment and a novel protein marker (Geriatric Medicine).
5. Circulating inflammatory biomarkers as predictor of HIV-tuberculosis associated immune reconstitution inflammatory syndrome (IRIS) (Medicine).
6. Circulatory T-regulatory cells in pediatric non-hodgkins lymphoma patients (Medical Oncology, IRCH).
7. Clinical and biological significance of mutations in mitochondrial DNA regulatory region in acute myeloid leukemia. (Medical Oncology, New Delhi).

8. Disease related biomarkers in patients with obstructive sleep apnea using proteomics approach (Medicine).
9. Effect of continuous positive airway pressure (CPAP) on biomarker in patients with obstructive sleep apnea (Medicine).
10. Effect of Hypoxia on the expression of peroxisome proliferator activated receptors (PPARs) and angiogenic factors in trophoblast cells—an *in vitro* study (Anatomy).
11. Evaluation of the expression of NF- κ B and its association with frequency and functionality of T Cells in HIV infected individuals (Microbiology).
12. Expression analysis of potential microRNA in tuberculosis (Medicine).
13. Impact of a package of intensive smoking-cessation interventions versus recommended, basic smoking-cessation advice on outcomes in smear-positive patients with pulmonary tuberculosis; a randomised controlled trial (Medicine).
14. Intensive adverse drug reaction (ADR) monitoring and analysis of pattern of observed ADRs in Medicine and Nephrology Wards at All India Institute of Medical Sciences (Pharmacology).
15. Magnetic resonance (MR) multi-parametric approach to the study of breast cancer and its correlation with biological markers (NMR).
16. Molecular characterization of isolates of invasive and commensal streptococcus pneumonia (Microbiology).
17. Multilevel Modeling to identify the factors associated with neonatal and post neonatal mortality (Biostatistics).
18. Neuro-cognitive and neurobiological aspects of bilingual developmental dyslexia studied pre- and post-therapy (NMR).
19. Optimization of sentinel lymph node biopsy and evaluation techniques in breast cancer in Indian settings (Pediatric Surgery).
20. Outcome and prognostic factors of osteo-sarcoma patients treated at IRCH (Medical Oncology, IRCH).
21. Pathogenetic markers in severe dengue fever (Medicine).
22. Prevalence of X/MDR-TB (extensively/multi-drug resistant tuberculosis) in Delhi state by using LJ (Lowenstein Jensen) media method (Medicine).
23. Profiling of drug resistant pattern in pulmonary TB cases in Delhi state using liquid culture MGIT-960 (Medicine).
24. Role of gain in fat mass in early infancy on programming of adiposity and biochemical markers associated with cardiometabolic risk (Pediatrics).
25. Role of soluble vascular endothelial growth factor receptor-1 (sVEGFR-1/sFLT-1) on endoplasmic reticulum stress in preeclampsia—an *in vitro* study (Anatomy).
26. Sensitivity Analysis and its application in large scale Health Survey—Biostatistics and Health Informatics (SGPGIMS, Lucknow).
27. To study the biological and clinical significance of Wnt/B—Catenin Signaling pathway in AML patients (Medical Oncology, IRCH).

PUBLICATIONS

Journals: 104

Abstracts: 11

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor R.M. Pandey was awarded Fellow, National Academy of Medical Sciences (FAMS). First biostatistician from AIIMS to receive this award. **Ethics Committee:** Chairperson of Indian Institute of Public Health (Under PHFI), Delhi; Member: United Nations Regional Centre for Biotechnology, Under DBT. **Coordinator:** Mandatory five days workshop on Research Methodology, Writing and Communication, for the PG Students at the AIIMS. **Member:** Scientific Advisory Committee of National Institute of Epidemiology (ICMR), and Regional Medical Research Center (RMRC-ICMR); Operations Research on RNTCP (Government of India); Research Advisory Council, BPKIHS, Dharan, Nepal; Research Advisory Committee, Vallabh Bhai Patel Chest Institute, Delhi University; Academic Council Santosh University (Under UGC), Ghaziabad; Steering Committee Member of DBT-ICMR Alliance Studies on SAM Children; Steering Committee Member of Multi-centric collaborative study of the clinical, biochemical and molecular characterization of Lysosomal storage disorders in India; Expert Committee, Task Force project on Cleft Lip and Palate Anomaly (ICMR); Apex Committee to review functioning of HRRC's of ICMR; Technical Advisory Group on grand challenges India/Nutrition and Health funded by Bill Milanda Gates Foundation and DBT; Expert Committee to evaluate R&D proposals on the possible impact of IMF Radiation Exposure from Mobile towers and handsets on life and related R&D initiative by DST; Expert Committee on estimation of burden of Pediatric HIV cases in India (ICMR); Technical Advisory Group of Division of Child studies under the UNICEF for Time and Motion Study; Member DSMB: Community based kangaroo mother care on newborn mortality,

coordinated by WHO; Expert Group, National Mental Health Survey by NIMHANS. **Examiner:** PhD thesis submitted at Delhi University, Delhi; IIPS, Mumbai; and Kerala University.

Professor Dwivedi was awarded “Bharat Ratna Dr. A.P.J. Abdul Kalam Excellence Award” of the India International Friendship Society in recognition of professional excellence; Governing Body of the Institute of Applied Statistics and Development Studies, Lucknow; (UGC Nominee) of the Advisory Committee at Department of Statistics, Calcutta University; External Expert of JIPMER Scientific Advisory Committee (JSAC) to help in improving quality of research; Data Safety Monitoring Board (DSMB) for a Multicentric Study “mWellcare: an integrated mHealth System for Prevention and Care of Chronic Diseases”, at PHFI; Data Safety Monitoring Board (DSMB) in a Clinical Trial entitled “Evaluating the efficacy and safety of an innovative and affordable Goat Lung Surfactant for the Treatment of respiratory distress syndrome in preterm neonates: a multi-site randomized clinical trial”, at Department of Pediatrics; Task Force Committee on Methods for ICMR; Project Review Committee on Oral Health, ICMR; Scientific Advisory Committee SAC of the National Institute of Medical Statistics ICMR; Epidemiological Research Expert Group of National Institute of Research in Environmental Health, Bhopal, (Indian Council of Medical Research). Invited by the Office of the Principal Scientific Advisor (PSA) to the Government of India to attend a Book Review Committee Meeting regarding possible uploading of a book in the website of the Office of the PSA; Statistical Expert for a Clinical Trial on Implantation of total Knee Prosthesis at Nonferrous Materials Technology Development Centre, Hyderabad; Served as judge to assess each of the posters, during a workshop on Quantitative Methods for Public Health Researchers of the SAARC Countries from 28th to 30th December 2016 held at Calcutta University, Kolkata; Chaired an Invited Session on “Symposium on Statistical Methods in Medical Research”, during a Silver Jubilee international conference of Forum on Interdisciplinary Mathematics, Statistics and Computational Techniques held at Manipal University, Jaipur, during 20–24 December 2016 and “Analytical Approaches”, on 7th December 2016 during 37th Annual Conference of Indian Association for the Study of Population held at Institute of Economic Growth, Delhi; Evaluated PhD Theses -in Medical Statistics of Guru Govind Singh IP University Delhi; three in Statistics of Gauhati University, Guwahati; Statistics of BHU, Varanasi; Pediatrics of KGMU, Lucknow; conducted PhD Viva Voce Examinations - two at Statistics Department of Gauhati University, As an External Examiner, in Applied Statistics for MSc (Toxicology) students at Jamia Hamdard University, Conducted practical examination of MA/MSc students in Statistics at University of Kashmir, Srinagar; evaluated research of a faculty to be promoted as Associate Professor for Princess Nora Bint Abdul Rahman University, Ministry of Higher Education, Kingdom of Saudi Arabia; Assessment-cum-Promotion Committee at National Institute of Medical Statistics, ICMR, New Delhi; Selection Committee at Uttar Pradesh Rajarshi Tandon Open University, Allahabad; Editorial Board of Indian Journal of Child Health; Reviewer of the IJMR, International Journal “Systematic Reviews”, International Journal of Educational Research and Reviews”; Elected Member of the International Statistical Institute, and International Association for Statistical Education, Netherlands; International Epidemiological Association, USA; Fellow of the Royal Statistical Society, UK; Member of Institute Ethics Committee for Post Graduate thesis.

Professor V. Sreenivas was a Member, Scientific Advisory Committee (SAC) of the National Institute for Cancer Prevention and Research, ICMR; Member, Assessment Board for promoting the Scientists of ICMR; Member, Selection Committee for the post of Scientist D, National Institute of Cancer Prevention and Research, ICMR; Member, Project Review Committees of Oncology, Neurology and Ophthalmology, ICMR, Department of Health Research, India; Statistical Consultant to the Indian Journal of Dermatology and Venereal Diseases (IJDVL); Biostatistics Reviewer for Journal of Clinical Oncology (American Society for Clinical Oncology), Pediatrics (American Academy of Pediatrics), Indian Journal of Dermatology, Venereology and Leprology, and Indian Pediatrics; Statistical Consultant to the Journal of Indian Association of Child and Adult Mental Health (JIACAM); Member, Institutional Ethics Committee, AIIMS; Member, Project Review Committee for Intramural Funding, AIIMS and Member, Dean’s Research Committee, AIIMS.

Dr M.A. Khan was Associate Editor-Journal of Statistics and Mathematics-USA; Scientific reviewer of Indian Journal of Medical Research, India; Scientific reviewer of American Journal of Applied Mathematics and Statistics, USA; Scientific reviewer of Journal of Biomedical research, UK and Scientific reviewer of Journal of Obesity, UK. etc.

Dr M. Kalaivani was Statistical Editor of Journal of Neuroanaesthesiology and Critical Care; Reviewer of Indian Journal of Dermatology, Venereology and Leprology (Wolters Kluwer).

9.7. Biotechnology

Professor and Head

Y.D. Sharma (up to 31 July 2016)

Jaya S. Tyagi

Professors

S.N. Das

Associate Professor

Anushree Gupta

Assistant Professors (Contract)

Sumit Rathore

Nidhi Batra

ICMR Emeritus Professor

H.K. Prasad

HIGHLIGHTS

Department of Biotechnology runs a successful Masters in Biotechnology course with specialization in Medical Biotechnology admitting 12–14 students per batch. Department also runs a PhD programme. Total strength of MSc and PhD students is about 35. Besides MSc and PhD, the Department also actively mentors Post-Doctoral Scientists and provides support to the Fellowship programme of National Science Academies. Large numbers of extramural research grants are attracted by the Departmental Faculty from Government funding agencies. Faculty serve as experts to the Government of India and various Universities and Institutions on curriculum development and various aspects of teaching and health research, delivered invited lectures, published papers in reputed peer reviewed journals, filed patents in TB diagnostic technologies and developed TB diagnostic kits.

EDUCATION

Postgraduate teaching

The Department conducts a 2-year postgraduate programme in Medical Biotechnology leading to M. Biotech degree. The teaching programme covers 16 subjects and includes Theory and Practical classes, Seminar presentations and Research project (Dissertation) in frontier areas of medical research. Students are given individual attention and extensive hands on experience in Practical classes. Experts are invited from JNU, IGIB, ICGB, NII and NIIT in addition to AIIMS faculty from various specialties to provide insights and motivate students in their respective areas of research and developments related to biotechnology, bioinformatics, molecular medicine, genomics, proteomics etc.

The Department conducts a PhD programme in the area of Medical Biotechnology. The Department mentors and supports young Scientist having DST INSPIRE Faculty award, Innovative Young Biotechnology Associateship, DBT and DST National Post Doctoral and Young Scientist award.

Lectures delivered

J.S. Tyagi: 2

S.N. Das: 5

Sumit Rathore: 1

H.K. Prasad 2

J.S. Tyagi: 2

1. DevR-mediated dormancy development in *M. tuberculosis*—A relevant pathway for inhibitor development; Meeting on Molecular Microbiology; 10–11 February 2017; Centre for DNA Fingerprinting and Diagnostics, Hyderabad
2. From RNA subtraction to insights into Mtb dormancy; Jawaharlal Nehru University, 18.3.2017, Jawaharlal Nehru University, New Delhi

S.N. Das: 5

1. Functional and Phenotypic characteristics of Regulatory T cells in Oral Cancer—35th Annual Convention of Indian Association of Cancer Research; 9.4.2016, New Delhi
2. Role of Biotechnology and Bioinformatics in Drug Development—Integration of Medical Sciences and Life Sciences for Innovative Medical Research; 11.4.2016, Baba Farid University of Health Sciences, Faridkot

3. Anti-tumour effects of Cinnamomum zeylanicum extract (CZE) and Cinnamaldehyde (Cinn) on oral cancer cells—First International Conference on Nutraceutical and Chronic Diseases; 10.9.2016, Cochin
4. Cinnamomum zeylanicum: A potent antitumor and anti-inflammatory agent—National Symposium on Impact of Emerging Toxic Chemicals on Humans, Plants, Diseases and Sustainable Development (IETC 2016) and Annual Session of Academy of Environmental Biology; 25.11.2016, Jamia Hamdard University, New Delhi
5. Regulatory T-cells dynamics in Oral squamous cell carcinoma—43rd Annual Conference of Indian Immunology Society (IMMUNOCON-16); 18.2.2017, Gitam University, Visakhapatnam

Sumit Rathore: 1

1. *Plasmodium vivax* tryptophan-rich antigens and their interactions with Red Blood cells—Prevention and treatment of infectious and Chronic Diseases Symposium, 24.3.2017, Institute for Advance Biosciences, Grenoble, France-Grenoble France

H.K. Prasad 2

1. Profiling metabolites and neuro-endocrine-immune response among TB patients-Guha Research Conference 2016, 8–12 December 2016, Diu Island, Diu
2. Tuberculosis a metabolic disease-Molecular Immunology Forum, 10–11 March 2017, Post Graduate Institute of Medical Education and Research, Chandigarh

Oral Papers/Posters presented: 9

1. Batra SD, Nandi M, Sikri K, Tyagi JS. Insights into modulatory roles of vitamin C on human monocytic cell line, THP-1: An ex vivo model for studying host-pathogen interaction, EMBO Conference Series, Tuberculosis 2016: Interdisciplinary research on tuberculosis and pathogenic mycobacteria, 19–23 September 2016, Institut Pasteur, Paris, France
2. Sikri K, Batra SD, Nandi M, Tyagi JS. Survival strategies of Mycobacterium tuberculosis: Insights from the vitamin C ‘dormancy’ model, EMBO Conference Series Tuberculosis 2016: Interdisciplinary research on tuberculosis and pathogenic mycobacteria, 19–23 September 2016, Institut Pasteur, Paris, France
3. Vashist A, Gupta UD, Bhat R, Gupta R, Tyagi JS. A rapid molecular assay to screen inhibitors of DevR/DosR mediated dormancy programme of Mycobacterium tuberculosis, UK-India Workshop on Tackling the Emergence of Antimicrobial Resistance: Increasing Awareness and Facilitating Research Networks, 7–10 November 2016, CSIR-IMTECH, Chandigarh.
4. Kumari P, Kaur K, Sharma S, Sehgal S, Tyagi JS. DevS/DosS sensor is bifunctional and its DxxxQ motif is essential for its phosphatase activity in Mycobacterium tuberculosis-XL All India Cell Biology Conference; 14–17 November 2016, Jiwaji University, Gwalior.
5. Lavania S, Anthwal D, Bhalla M, Singh N, Halder S, Tyagi JS. Direct and bio-safe detection of rifampicin resistance in sputum from stained slide; 71st National Conference on Tuberculosis and Chest Diseases (NATCON 2016), 16–18 December 2016, PGI, Chandigarh.
6. Kumari P, Lavania S, Tyagi S, Sharma N, Gadpayle AK, Rath D, Sharma TK, Dhiman A, Halder S, Tyagi JS. Utility of qPCR, Xpert MTB/RIF assay and Antigen detection tests for the diagnosis of Pleural TB; 71st National Conference on Tuberculosis and Chest Diseases (NATCON 2016), 16–18 December 2016, PGI, Chandigarh
7. Sikri K, Batra SD, Nandi M, Tyagi JS. Vitamin C modulates the efficacy of anti-TB drugs in vitro—Meeting on Molecular Microbiology; 10–11 February 2017, Centre for DNA Fingerprinting and Diagnostics, Hyderabad
8. Kumari P, Kaur K, Sharma S, Sehgal S, Tyagi JS. DevS/DosS sensor is bifunctional and its DxxxQ motif is essential for its phosphatase activity in Mycobacterium tuberculosis—Meeting on Molecular Microbiology; 10–11 February 2017, Centre for DNA Fingerprinting and Diagnostics, Hyderabad
9. Vashist A, Prithvi Raj D, Gupta UD, Bhat R, Tyagi JS. Importance of $\alpha 10$ helix for DevR activation: Road map to screen inhibitors against DevR mediated dormancy of Mycobacterium tuberculosis—The Second Asian African congress of Mycobacteriology; 25–28 February 2017, Isfahan, Iran

RESEARCH

Funded projects

Ongoing

1. National Alliance Program for Biodesign and in-vitro diagnostics between Translational Health Science and Technology Institute and All India Institute of Medical Sciences. J.S. Tyagi, DBT, 5 years, 2010–15 (extended to September. 2017), Rs 62.045 lakhs

2. Centre of Excellence, Category III—CIEB project: Exploiting temporal transcription profile, computational analysis and post transcriptional gene silencing to identify and intercept interactions between host and dormant and actively replicating *Mycobacterium tuberculosis*. J.S. Tyagi, DBT, 5 years, 2011–16 (extended to September 2017), Rs 219.99 lakhs
3. SysTB: A Network Program for Resolving the Intracellular Dynamics of Host-pathogen Interactions in TB infection. DBT Network project. J.S. Tyagi, DBT, 5 years, 2011–16 (extended to July 2017), Rs 145.57 lakhs
4. J.C. Bose National Fellowship. Jaya S. Tyagi, DST, 5 years, 2012–17, Rs 68 lakhs
5. Novel sample processing for the simple and rapid diagnosis of TB, MDR-TB and XDR-TB. J.S. Tyagi, DBT (SBIRI), 2½ years, 2015–17, Rs 47.41 lakhs
6. Study of Immunological Impact of Type I Interferon (s) on Immune Response in Tuberculosis Patients. J.S. Tyagi, ICMR, 2.5 years, 2014–17, Rs 33.45 lakhs
7. Post Graduate Training Programme in Biotechnology with Special Application to Biomedicine. J.S. Tyagi, DBT, 5 years, 2014–19, Rs 29.20 lakhs
8. Studies on PI3K/AKT signaling and anti-tumor effects of its targeted disruption in oral cancer. S.N. Das, DST, 3 years, 2015–18, Rs 54.22 lakhs
9. To understand Mechanism of Organelle Dynamics in *Plasmodium falciparum*: Involvement of Autophagy. Sumit Rathore, DST, 5 years, 2013–18, Rs 35 lakhs
10. miRNAs as Biomarker of Tuberculosis. Sumit Rathore, Bill Melinda Gates Foundation and BIRAC, DBT, 1.5 years, 2017–19, Rs 50 lakhs

Completed

1. Immunobiological and genetic polymorphism studies on *Plasmodium vivax* tryptophan-rich antigens. Y.D. Sharma, ICMR, 3 years, 2013–16, Rs 22.5 lakhs
2. Investigations of anticancer activities of some select medicinal plants and their molecular targets on human oral cancer cell lines. S.N. Das, AYUSH, 3 years, 2014–17, Rs 25.71 lakhs

Departmental projects

Ongoing

1. To decipher the role of DevR dormancy regulator in antibiotic tolerance of *Mycobacterium tuberculosis* and to target DevR for improving bacterial clearance.
2. Intracellular transcriptome of *Mycobacterium tuberculosis*: A novel approach to identify drug targets against ‘dormant’/drug tolerant/persistent bacteria in Vitamin C-THP-1 infection model.
3. Role of Vitamin C-mediated dormancy in improving the efficacy of Bedaquiline against *Mycobacterium tuberculosis*.
4. In silico prediction and analysis of human –‘dormant’ *Mycobacterium tuberculosis* functional interactions in THP-1 based Vitamin C dormancy model.
5. Characterization of Rv0348 transcriptional regulator of *Mycobacterium tuberculosis*.
6. Characterization of DNA aptamers against DevR response regulator of *Mycobacterium tuberculosis*.
7. Analysis of Host Response to *Mycobacterium tuberculosis* in Vitamin C ex vivo model of infection.
8. Development and validation of rapid and accurate diagnostic tests for tuberculosis.
9. Validation of TB Detect kit.
10. Validation of TB Concentration and Transport kit & DNA Extraction kit.
11. Comparative study of AT & non-AT rich DNA, insertion elements and DNA-binding proteins of pathogenic *Mycobacteria*.
12. Genome wide mapping and functional analysis of DevR/DosR binding sites in *Mycobacterium tuberculosis* strains expressing different levels of DevR response regulator.
13. Study of effect of type I interferons in host immune response to mycobacterial infection.
14. Gene expression signatures of *Mycobacterium tuberculosis* strains in THP-1 infection model.
15. Host Directed therapeutics (HDT) strategy to control infection by ‘dormant’ *Mycobacterium tuberculosis* and to enhance bacterial clearance using conventional TB drugs.
16. Study of Host and Mycobacterial DNA – binding proteins in modulating host response during infection.

Completed

1. Development of TB Detect kit for improved smear microscopy.
2. Development of TB Concentration and Transport kit & DNA Extraction kit.
3. Generation, Characterization and Application of DNA Aptamers for the Diagnosis of Tuberculous Meningitis.
4. Genome wide host expression signatures in vitamin C THP-1 model.
5. Study on key components of PI3K/AKT signaling pathway in oral cancer.
6. To study anti-tumor activities of natural compounds and their possible mode of action.
7. To study the effects of mutation in DNA binding domain of p53 tumor suppressor gene.
8. Role of Iron Oxide Nanoparticles & Magnetic Field Exposure in Attenuating Chronic Pain in Spinal Cord Injured Rats
9. Role of TET family of enzymes during trophoblast invasion & differentiation.
10. To understand interactions among erythrocyte binding tryptophan-rich antigens (pvtrags) of *Plasmodium vivax*
11. Studies on the interaction between transferrin receptor of human erythrocyte and *Plasmodium vivax* tryptophan-rich antigens.
12. Study on key components of PI3K/AKT signaling pathway in oral cancer.
13. To study the anti-tumor activities of natural compounds and their possible mode of action.

Collaborative projects

Ongoing

1. Study of immunological impact of type I interferon(s) on Immune response in tuberculosis patients (Pulmonary Medicine).
2. Diagnosis of extra pulmonary TB by antigen detection using indigenously developed reagents (RML Hospital, New Delhi).
3. Novel sample processing for the simple and rapid diagnosis of TB, MDR-TB and XDR-TB (National Institute of Tuberculosis and Respiratory Disorders, New Delhi; TB Hospital Ambala; MDI Ambala).

Completed

1. Utility of detection of mycobacterial tubercular antigen (HspX and GlcB) and DNA PCR in patients with granulomatous mediastinal lymphadenopathy (Pulmonary Medicine).
2. Study of serum surviving levels in cases of oral submucosal fibrosis and squamous cell carcinoma (ENT).
3. Understanding organelle dynamics in Apicomplexan parasites to identify novel drug targets (University of Grenoble France, University of Bern Switzerland, Technical University of Munich Germany, International Center for Genetic Engineering and Biotechnology, New Delhi).

PUBLICATIONS

Journals: 14

Abstracts: 4

PATIENTS

1. Isolated single stranded polynucleotides and uses thereof in diagnosis and treatment of Tuberculous Meningitis. Indian Provisional Patent Application no. 201611021901, filed on 27.06.2016.
2. Novel Aptamer based Detection System for Tuberculous Meningitis. Inventors TK Sharma, JS Tyagi, A. Dhiman. Indian Patent application no. 201611001550, Full patent filed on 11.01.2017.
3. Aptamer based diagnostic and therapeutic agent for and against HupB of Mycobacterium tuberculosis. Indian Provisional Patent Application no. 201711001246, filed on 12.01.2017.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor J.S. Tyagi is recipient of J.C. Bose National Fellowship; Honorary Visiting Professor and Mentor, TB Diagnostics programme, Centre for Biodesign and Diagnostics, Translational Health Science and Technology Institute, Faridabad; Fellow, Indian National Science Academy; Fellow, Indian Academy of Sciences; Fellow, National Academy Sciences (India); Member of: Guha Research Conference; Council and Sectional Committee IX of INSA, New Delhi; Panel on Scientific Values, Indian Academy of Sciences, Bengaluru; Scientific Advisory Committee of National Institute for Research in Tuberculosis, Chennai; Scientific Advisory Committee of Centre for DNA Fingerprinting and Diagnostics, Hyderabad; Scientific Advisory

Committee of National Centre for Cell Science, Pune; Scientific Advisory Committee of National Institute of Pathology, New Delhi; Committee on Biochemistry, Biophysics, Molecular Biology and Microbiology, Project Advisory Committee (PAC) of SERB, DST; DBT Expert Group on Tuberculosis; ICMR TB Consortium; India Advisory Panel for 5th Global Forum on TB vaccines; Selection Committee for Tata Innovation Fellowship; Expert for Bio-technology for the award of 'Korean Government Scholarship for the year 2017-18', MHRD; Examiner of PhD/MSc Examinations of PGI Chandigarh, University of Delhi, Jawaharlal Nehru University, Indian Institute of Science; Coordinator, Central Core Research Facility and BSL-3 and -2 laboratories, AIIMS; Member, Institutional Ethics Committee (Basic sciences), AIIMS; Member, Patents Committee, AIIMS; Member, Scientific Advisory Committee for AIIMS Endowment Fund; Member, Screening Committee for AIIMS Research Excellence Awards; Developed TB diagnostic kits for detection of TB and drug susceptibility under SBIRI-funded collaborative project involving Industry, Academic, Institutions and Hospitals.

Professor S.N. Das was elected Fellow, National Academy of Medical Sciences, Continues to be Fellow, International Academy of Biological Therapy; Life Member, Indian Immunology Society; The Cytometry Society, India; Member, American Association for Cancer Research, USA, DKFZ Alumni Association, Heidelberg, Germany, Alexander von Humboldt Foundation Alumni Association, Germany; Task Force group on Cancer Biology DBT, Ministry of Science & Technology, Govt of India; Technical Committee, Institute of Pathology (ICMR) New Delhi; Member, Bioethics Committee for Recombinant DNA Research, AIIMS; Member, Negotiation Committee, AIIMS; Member, Research Advisory Committee, Guru Gobind Singh Medical College, Baba Farid University, Faridkot, Punjab; PhD Examiner, Jamia Hamdard University, New Delhi; Pondicherry University; Birla Institute of Technology, Pilani, Rajasthan; Jadavpur University, Jadavpur, Kolkata; Kerala University, Tiruvananthapuram, Kerala; Member, Editorial Board: Open Journal of Toxicology, International Journal of Osteoporosis and Metabolic Disorders; Reviewer for: Oral Oncology, Cancer Investigations, DNA and Cell Biology, Life Sciences, International Journal of Immunogenetics, European Journal of Oral Sciences, Human Immunology, International Journal of Human Genetics, International Journal of Cancer, Journal of Oral Pathology and Medicine, Plos ONE, Cancer Letters, Indian Journal of Medical Research, Indian Journal of Cancer. Received "Certificate of reviewing" from Elsevier, Amsterdam, Netherlands, July 2015; Given "Award for Popularization of Science" by Centre for Excellence in Research, Baba Farid University of Health Sciences, Faridkot, Punjab, April 2016.

Professor H.K. Prasad is Member, Scientific Advisory Committee for Stanley Browne Lab, TLM Community Hospital, Nand Nagari, Delhi; Member, Departmental Research Committee, Amity Institute of Nanotechnology, Member, Institutional Animal Ethics Committee, University of Delhi, South Campus.

9.8. Centre for Community Medicine

Professor and Head

Chandrakant S. Pandav
(upto 30 November 2016)

Shashi Kant
(from 1 December 2016)

Professors

Sanjeev Kumar Gupta
Baridalyne Nongkynrih

Kiran Goswami
Puneet Misra

Anand Krishnan
Sanjay Kumar Rai

Additional Professor

Y. S. Kusuma Kumari

Associate Professors

Kapil Yadav

Sumit Malhotra

Anil Kumar Goswami

Assistant Professor

Partha Halder
Rahul Sharma
(upto 21 April 2016)

Ravneet Kaur

Harshal Ramesh Salve
Rakesh Kumar
(from 24 May 2016)

PHN Supervisor

Mercy John

HIGHLIGHTS

The main focus area of the Centre has been on development of a model of comprehensive health services through its urban and rural health programs. The Urban health program provides community based health services to an urban resettlement colony in Dakshinpuri Extension. The Comprehensive Rural Health Services Project (CRHSP), established in Ballabgarh Block, Faridabad District of Haryana is a collaborative project between Haryana State Government and AIIMS. CCM is the nodal department for Disease Prevention and Outbreak Response Cell (DPORC) at AIIMS with the mandate of prevention and control of vector and water-borne diseases in AIIMS campus. CCM houses the WHO Collaborating Centre for Capacity Development and Research in Community based NCDPC. CCM has contributed significantly in providing technical inputs into the National Program for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases including Stroke (NPCDCS), developing program managers training manuals as well as co-ordinating the National NCD monitoring Survey across ten implementing agencies; Has contributed to elimination of IDD in India, Bangladesh and Sri Lanka and National HIV/AIDS surveillance. Departmental projects with CDC Atlanta has helped in elucidating the epidemiology of acute respiratory infections and viral pathogens in India.

CRHSP Ballabgarh (Sub district hospital and two PHCs) provided the following patient care services:

- Out-door services to **413,780** patients
- In-patient services to **13,040** patients
- Emergency services to **74,907** patients at sub-divisional hospital Ballabgarh
- Surgical services to **2,529** patient at sub-divisional hospital Ballabgarh

Under Urban Health Program (UHP), a total of 24,617 patients were seen including immunization.

EDUCATION

Undergraduate: MBBS students in their 4th–5th semester are posted in the urban health program for five weeks and conduct epidemiological exercise, health talks and family studies. During these two semesters, they also participate in the Family Health Advisory Services (FHAS) in which they follow up their allotted families over a period of nine months and implement interventions to improve the health of the family. From January 2017, FHAS was remodeled to focus on chronic diseases and children only. In the 7th Semester, they are posted for six weeks at Ballabgarh. This is a residential posting that includes training in epidemiology, orientation to community health, community aspects of child health and mental health, orientation to district level health systems, and national health programs including special emphasis on IMNCI.

Interns: The interns are posted for a total duration of three months at the CRHSP Ballabgarh. This period is divided into 6 weeks at sub district hospital (SDH), and 3 weeks each at the Primary Health Centres (PHCs) located at Dayalpur and Chhainsa. The posting at PHC is also residential. At SDH, interns are posted in OPD and Wards that help them in learning basic clinical skills, as well as in-patient management, including conducting normal deliveries. They are rotated in all the available clinical disciplines at SDH under the supervision of respective Senior Resident (SR). During PHC posting, interns participate in health care delivery at the clinics of PHC, sub-centres as well as in antenatal clinics. They are also posted at the delivery hut at each PHC under overall supervision of SR of Community Medicine. They get experience in community level activities such as supervision of health workers, follow-up of patients that have defaulted while on anti-tuberculosis treatment, supervision of sub-centres, undertaking outreach activities, immunization and other ongoing activities at the PHC. At the end of the CRHSP posting interns submit their log-book duly signed by respective SRs under whom they were posted for end posting assessment.

Postgraduates of Community Medicine: The postgraduate students of Community Medicine are posted at urban and rural health program for 16 months each. The regular teaching programme includes seminars, family and clinical case presentations, problem based exercises on hospital and field-practice area as well as journal clubs.

BSc Nursing and Post Certificate Nursing Students: BSc Nursing students and post certificate nursing students are posted both with urban health program and one and half months at CRHSP. The rural posting is residential. They have to spend one month in SDH and two weeks in PHC Dayalpur. They are provided training in ANC care, ward management and immunization. Training of nursing students is supervised by faculty member from College of Nursing, AIIMS.

In-service Training: In addition to teaching of students, periodic in-service trainings were conducted for different cadres of staff working at the CRHSP Ballabgarh. The trainings conducted during 2016–2017 were as follows:

- i. Workshop on Basic Life Support (BLS) was conducted on 11 May 2016, by the Faculty Members from the JPN Apex Trauma Centre and Department of Anesthesia, in which 25 participants (staff nurses, and field health workers of CRHSP Ballabgarh) received hands-on training on scene safety, mouth-to-mouth and mouth-to-mask ventilation, airway management, and cardio-pulmonary resuscitation.
- ii. A total of 50 hours of in-service Training for Field Health Workers and ASHA workers (24*2=48) were conducted at PHC Dayalpur and Chhainsa (figures are inclusive). The training was conducted during the Meetings on first

Saturday of each month. Topics were decided based on the training needs identified during field supervision. The topics covered were as follows: Identification of JSY beneficiaries and facilitating them to avail benefit, Management of animal bite cases, Management of LBW babies, Family Planning-methods, importance and how to improve coverage, Management of biomedical waste management, Tracking of High Risk Pregnancy and Management, Post natal care for mother and newborn including complication management and Kangaroo mother care, IMNCI-Identification and management of sick baby, Identification, care and management of malnutrition at field level, Training on cold chain management PHC Diagnosis and management of TB cases.

- iii. Refresher training on Neonatal Resuscitation for nursing staff and field health workers was conducted on 14 February 2017, in collaboration with Faculty members of the College of Nursing.
- iv. A total of 14 hours of in-service training for nursing staff have been conducted on topics of Standard Operating Procedures (SOPs) in ward, Management of antenatal and postnatal cases, Infection control, Equipment management, and Communication skills. A session on biomedical waste management (BMW) was conducted for sanitation staff.

CMEs/Workshops/Symposia/National and International Conferences

1. CME for PGs students on “Vector Borne Diseases” in co-ordination with NDMC, 8 July 2016. Lodhi Colony NDMC Office, New Delhi
2. Workshop for developing training needs assessment tool for Program Managers under NPCDCS, 12 & 13 August 2016, AIIMS, Delhi
3. Expert Group Meeting on Finalizing Operational Manual for National NCD Monitoring Survey, 2 September 2016, AIIMS, Delhi
4. Training Workshop for pilot study of National NCD Monitoring Survey, 6–11 October 2016, AIIMS, Delhi
5. Role of Medical Fraternity in case of “Nuclear War and Development Activities: Post Traumatic Stress Disorder”, 14 October 2016, CCM, AIIMS
6. Workshop for developing Training Manual for Program Managers under NPCDCS, 25 & 26 October 2016, AIIMS, Delhi
7. AIIMS-DHR Workshop on operational research, 16–19 January 2017, Ballabgarh; Haryana
8. Review Meeting of NPCDCS training manuals, 17 & 18 January 2017, USI, Delhi
9. Workshop on ‘How to present a better Journal Club’, 8 February 2017, CMET, AIIMS, New Delhi
10. Pre-Conference Workshop on Epidemiology of NCDs at IPHACON 2017, 23 February 2017, AIIMS, Jodhpur
11. AIIMS-CDC symposium on Epidemiology, Prevention and Control of Influenza in India, 25 February 2017, IPHACON 2017, AIIMS, Jodhpur

Lectures delivered

Chandrakant S. Pandav: 13

Anand Krishnan: 16

Kapil Yadav: 6

Partha Haldar: 3

Rakesh Kumar: 3

Shashi Kant: 2

Baridalyne Nongkynrih: 3

Sumit Malhotra: 4

Ravneet Kaur: 3

Kiran Goswami: 1

Sanjay Rai: 3

Anil Kumar Goswami: 4

Harshal Salve: 8

Chandrakant S. Pandav: 13

1. Success story of Iodine Deficiency Disorders control in India, 44th Annual Conference of Indian Association of Preventive and Social Medicine (IAPSM), 10–12 February 2017, Science City, Kolkata
2. Role of AIIMS in success story of IDD in India, Institutional arrangement on Nutrition, 13 April 2016, IHC, Delhi
3. 3-Creating an enabling environment for food fortification in India, 61st Annual Conference of IPHA, 24–26 February 2016, AIIMS, Jodhpur, Jodhpur
4. Role of Medical College in strengthening Urban Health, National Workshop on Role of Medical Colleges to strengthen the Initiatives under NUHM, 25 October 2016, USI Auditorium, Delhi
5. Role of AIIMS in success story of IDD in India, Institutional arrangement on Nutrition, 13 April 2016, IHC, Delhi
6. Iodine Deficiency Disorders, National Consultation for addressing Nutrition Challenges, 6 May 2016, ICMR, Delhi
7. USI in Bangladesh, USI Review Mission to Bangladesh, 20–29 August 2016, Dhaka University, Dhaka, Bangladesh
8. USI in Sri Lanka and SEARO Region, WHO SEARO Regional Meeting, 5–9 September 2016, Colombo, Sri Lanka

9. Finding and recommendations of USI review Mission in Bangladesh, Dissemination Meeting with all stakeholders, 29 September 2016, Unicef Office, Dhaka, Bangladesh
10. Lessons learnt from USI success story in India, CFNS roundtable on 'Strategic Directions towards a Suposhan Bharat', 16 September, IHC, Delhi
11. Core competencies for Public Health professionals in India, Workshop PG Level Community Health and Public Health learning programme by SOCHARA, Bangalore, Thelma Narayan, 4 & 5 October 2016, SOCHARA, Bangalore
12. National Iodine and Salt Intake Survey, Meet of the Technical Committee on "Implementation of NIDDCP", 15 November 2017, Nirman Bhawan, Delhi
13. National Iodine and Salt Intake Survey, 1st Meeting of task force on IDD, 27 September 2016, ICMR Red Cross Office, Delhi

Shashi Kant: 2

1. HIV surveillance among high risk group, Pre Surveillance Orientation and Planning Workshop, 1 January 2017, Surajkund, Faridabad
2. Introduction to CRHSP Ballabgarh, Case Control Study, Ethics for Public Health Research, AIIMS-DHR Workshop on Operational Research (Advanced Level), 16–19 January 2017, CRHSP, Ballabgarh

Kiran Goswami: 1

1. Qualitative Research Methods, Operational Research (Basic Level) AIIMS-DHR Operational Research Workshop Series 2016–2017, 16–19 January 2017, CRHSP, Ballabgarh

Anand Krishnan: 16

1. Rationale for RF/RHD intervention and Diagnosis of Rheumatic Fever, Training of Trainers, Piloting of RF/RHD Intervention under NPCDCS, 26–27 May 2016, Firozabad, UP.
2. Rationale for RF/RHD intervention and Diagnosis of Rheumatic Fever, Training of Trainers, Piloting of RF/RHD Intervention under NPCDCS, 10 & 11 August 2016, Bodh Gaya, Bihar,
3. Overview of Epidemiology of Tobacco use and its Control, CME on Tobacco or Health at 56th Annual Conference of National Academy of Medical Sciences (NAMSCON-2016), 21 October 2016, AIIMS, Raipur, Raipur
4. Epidemiology of RSV in India, Symposium on RSV: Indian Epidemiology and Emerging Prevention Strategies at Annual National Conference of Indian Academy of Pediatrics, 21 October 2017, Bengaluru
5. Measures of Burden of Disease, Pre-Conference Workshop on Epidemiology of NCDs at IPHACON 2017, 23 February 2017, AIIMS, Jodhpur, Jodhpur
6. Approaches to NCD Surveillance, Pre-Conference Workshop on Epidemiology of NCDs at IPHACON 2017, 23 February 2017, AIIMS, Jodhpur, Jodhpur
7. Epidemiology of seasonal Influenza in India : Key Findings from CDC, AIIMS ARI Surveillance Platform, AIIMS ND-CDC symposium on Epidemiology, Prevention and Control of Influenza in India at IPHACON 2017, 25 February 2017, AIIMS, Jodhpur
8. Overview of Study Designs in Operational Research, AIIMS-DHR Operational Research Workshop, 16 January 2017, CRHSP, Ballabgarh
9. Burden of NCDs and Determinants, AIMS-PGI Third National Course on Public Health Approaches to NCDs, 2 March 2017, PGI, Chandigarh
10. Health Workforce and capacity building for NCDs, AIMS-PGI Third National Course on Public Health Approaches to NCDs, 4 March 2017, PGI, Chandigarh
11. Public Health Approach to Obesity, Symposium on Evidence Based Reflections on Obesity and its Control Strategies, 26 October 2016, Sharda University, Greater NOIDA
12. Sugar Intake and Burden of Sugar related NCDs and oral Diseases, International Symposium on "Is Sugar the New Tobacco? 11 November 2016, AIIMS, New Delhi
13. Experience from Field in use of frontline workers in NCD prevention and Control, National Workshop on Operationalizing Population Based Screening for Common Non-Communicable Diseases, 17 & 18 October 2016, NIHF, New Delhi
14. Overweight and Obesity among young people in India, Regional Launch Event of Noncommunicable Diseases in Asia: Young People Are Key to Curbing a Growing Epidemic Population Reference Bureau, Thursday, 21 July 2016, New Delhi

15. Study Designs in Research methodology, Workshop on Application of statistical softwares in medical research, 27–29 July 2016, NICPR, ICMR, NOIDA
16. Risk factors: Key terms and concepts and Exposure measurement, ICMR Capacity Building Workshop on burden of disease, 03 September 2016, National Institute of Pathology, New Delhi

Baridalyne Nongkynrih: 3

1. Plan for training needs assessment: tool development, objectives, outline and process, Workshop for Developing Training Needs Assessment for tool Program Manager under NPCDCS, 12 & 13 August 2016, AIIMS, New Delhi
2. Presentation of process and summary of results of TNA, Workshop for Developing Training Manual for Program Manager under NPCDCS, 25 & 26 October 2016, AIIMS, New Delhi
3. Monitoring and supervision, Review Meeting of NPCDCS training manuals, 17 & 18 January 2017, AIIMS, New Delhi

Sanjay Rai: 3

1. Orientation to instrument and Field guide, National Validation of tOPV to bOPV Switch Workshop, 14 May 2016, New Delhi
2. Public Lecture on “Dengue, Chikungunya, Zika: Can new mosquito control strategies conquer new foes? AIIMS Public Lecture Series, 9 May 2016, AIIMS, New Delhi
3. HIV Epidemiology, Pre Surveillance Orientation and Planning Workshop, 1 January 2017, Surajkund, Faridabad

Kapil Yadav: 6

1. Success story of universal salt iodization in India and lessons learned for other food commodities, 61st Annual Conference of IPHA, 24–26 February 2017, AIIMS, Jodhpur
2. Role of AIIMS in success story of IDD in India, Institutional arrangement on Nutrition, IFPRI, 13 April 2016, IHC, Delhi
3. Iodine Deficiency Disorders, National Consultation for addressing Nutrition Challenges, 6 May 2016, ICMR, Delhi
4. Need for revision of technical guidelines of National Iodine Deficiency Disorders Control Program, Meeting of the Technical Committee on “Implementation of NIDDCP”, 15 November 2016, Nirman Bhawan, Delhi
5. National Iodine and Salt Intake Survey, 1st Meeting of task force on IDD, 27 September 2016, ICMR Red Cross Office, Delhi
6. Implementation research on delivery of interventions during pre-pregnancy through lactation, Conference on “Delivering for Nutrition in India: Learnings from Implementation Research”, IFPRI, 9 & 10 November, IHC, Delhi

Sumit Malhotra: 4

1. Cross-sectional studies; Design, conduct and analysis of qualitative study, PG Course on Research Methodology, January batch 2017, 14–18 March 2017, AIIMS, New Delhi
2. Overview of operational research, writing an operational research question, protocol development, experimental and quasi-experimental study designs, AIIMS-DHR Workshop on Operational Research (Advanced Level), 16–19 January 2017, Comprehensive Rural Health Services Project, Ballabgarh
3. Working with Laboratories for Outbreak Investigation, Field Epidemiology Training Programme for IDSP (Integrated Disease Surveillance Programme) Surveillance Medical Officers, 07 February 2017, Indian Institute of Public Health, Delhi, Gurugram
4. How to critique a journal article, cohort studies and Randomized Controlled Trials, CME on Preparing for a successful Journal Club, 08 February 2017, AIIMS, New Delhi

Anil Kumar Goswami: 4

1. First-Aid-Teachers Training Programme for Gyan Bharti School, Saket, 5 August 2016, CCM, AIIMS, New Delhi
2. Dengue, Students Awareness Programme, 19 August 2016, NDMC School Ansari Nagar, New Delhi
3. Chikungunya and Dengue, AIIMS Public Lecture, 22 September 2016, JLN Auditorium, New Delhi
4. First-Aid-Teachers Training Programme for Gyan Bharti School, Saket, 15 October 2016, AIIMS, CCM, AIIMS, New Delhi

Partha Haldar: 3

1. Epidemiology Study methods, PG Course on Research Methodology, Writing and Communication, 25–29 July 2016, AIIMS, New Delhi
2. Issues in Epidemiological Research, Statistical Data Analysis Using R software, 20–22 October 2016, NIMHANS, Bangalore, India
3. Epidemiologic Methods, Case Control and Cohort Studies, Pre-Conference Workshop on NCD Epidemiology, at 61st Annual National Conference of IPHA 2017, 23 February 2017, AIIMS, Jodhpur

Ravneet Kaur: 3

1. Iodine deficiency disorders, Training programme on Nutrition and Health Education for Master Trainers, Food and Nutrition Board, Ministry of Women and Child Development, 29 June 2016, NIPCCD, New Delhi
2. Vit A deficiency, its prevention and control, Training programme on Nutrition and Health Education for Master Trainers, Food and Nutrition Board, Ministry of Women and Child Development, 29 June 2016, NIPCCD, New Delhi
3. Data Sources in NCDs 3rd PGI-AIIMS National Course on Public Health Approaches to NCDs, 5 March 2017, PGIMER, Chandigarh

Harshal Salve: 8

1. Association and Causation, 1st PG Research Methodology Workshop, 27 July 2016, AIIMS, New Delhi
2. Finding and recommendations of USI review Mission in Bangladesh, Dissemination Meeting with Secretary, Ministry of Industries, 28 August 2016, Ministry of Industries, Dhaka, Bangladesh
3. Case-Control Study, Design, conduct and Issues, 2nd PG Research Methodology Workshop, 27 September 2016, AIIMS, New Delhi
4. Finding and recommendations of USI review Mission in Bangladesh, Dissemination Meeting with all stakeholders, 29 September 2016, Unicef Office, Dhaka, Bangladesh
5. National Iodine and Salt Intake Survey, 2015: Findings and recommendation, 44th Annual Conference of Indian Association of Preventive and Social Medicine (IAPSM), 11 February 2017, Science City, Kolkata
6. Framework for state level situation analysis of climate impact in health sector, National level Workshop for building climate resilience for ensuring transformational health outcomes, 6 March 2017, Indian Habitat Centre, New Delhi
7. Case Control study, 1st PG Course on research methodology, writing and communication, 15 March 2017, AIIMS, New Delhi
8. Association and causation, 1st PG Course on research methodology, writing and communication, 16 March 2017, AIIMS, New Delhi

Rakesh Kumar: 3

1. National and State level USI Coalitions in India, Lessons learned, 44th National Annual Conference of Indian Association of Preventive and Social Medicine (IAPSM), 10 February 2017, Science City, Kolkata
2. Hand washing: Timeless wisdom, A healthy habit, 44th National Annual Conference of Indian Association of Preventive and Social Medicine (IAPSM), 10 February 2017, Science City, Kolkata
3. Operational Research: A case study of sustainable elimination of Iodine Deficiency Disorders in India, AIIMS-DHR Workshop on Operational Research (Advanced Level), 17 January 2017, CRHSP, Ballabgarh

Oral papers/posters presented: 20

1. Pandav CS, Yadav K, Kumar R, Salve H, Contribution of AIIMS, New Delhi to Iodine research in India over the last six decades, JIPMER Thyroid update CME, 29 May 2016, JIPMER, Puducherry
2. Pandav CS, Yadav K, Lakshmy R, Pandey RM, Kumar R, Salve HR, et al., Current status of iodine nutrition in India, National Iodine and Salt Intake Survey (NISI), 2014–2015, JIPMER Thyroid update CME, 29 May 2016, JIPMER, Puducherry
3. Narayan VV, Iuliano AD, Bhardwaj R, Chadha MS, Roguski K, Saha S, ... Krishnan A, et al., Estimation of influenza, associated mortality in India, 2010–2013, WHO Consultation on National, Regional and Global Estimates of the Burden of Influenza Disease, 12 & 13 July 2016, WHO Headquarters, Geneva
4. Purakayastha DR, Amarchand R, Lafond K, Kumar R, Saha S, Narayan V, et al., Burden of acute respiratory tract infections among the elderly in a rural area of Haryana, India, OPTIONS for Influenza, IX, 24–28 August 2016, Chicago

5. Kumar R, Amarchand R, Saha S, Narayan V, Kabra SK, Sreenivas V, ... Krishnan A, et al., Design and preliminary safety findings of a trial to assess the efficacy of live attenuated and inactivated influenza vaccine among children aged 2–10 years in Haryana, India, OPTIONS for Influenza, IX, 24–28 August 2016, Chicago
6. Amarchand R, Kumar R, Saha S, Narayan V, Rai SK, ... Krishnan A, et al., The burden of acute respiratory infection among children under-five in arural area of Haryana, India, OPTIONS for Influenza, IX, 24–28 August 2016, Chicago
7. Krishnan A, Kapil A, Broor S, Amarchand R, Kumar S, Gopal G... Krishnan A, et al., Etiology of acute lower respiratory infections in children under-five years old in rural North India, OPTIONS for Influenza, IX, 24–28 August 2016, Chicago
8. Narayan VV, Iuliano AD, Bhardwaj R, Chadha MS, Roguski K, Saha S, ... Krishnan A, Estimation of influenza, associated mortality in India, 2010–2013, OPTIONS for Influenza, IX, 24–28 August 2016, Chicago
9. Saha S, Singh V, Aneja S, Gohain M, Choudekar A, Pandey BG, et al., Epidemiology of influenza and other respiratory pathogens among hospitalized children, OPTIONS for Influenza, IX, 24–28 August 2016, Chicago
10. Saha S, Gupta V, Dawood FS, Broor S, Lafond K, Widdowson MA, et al., Epidemiology of influenza, like illness (ILI) and influenza, associated ILI in a rural community in northern India (IDBI), OPTIONS for Influenza, IX, 24–28 August 2016, Chicago
11. Kant S, Haldar P, Pathania A, Gupta S, Pandav CS, Bachani D, Prevalence of hearing impairment among elderly persons residing in residential care facilities of Delhi, India, using Whisper test, Australasian Epidemiological Association 23rd Annual Scientific Meeting, 14–16 September 2016, Canberra, Australia
12. Pathania A, Haldar P, Kant S, Gupta SK, Pandav CS, Bachani D, Facility Assessment of Old Age Homes of Delhi, India, a cross sectional study. Abstract no: CR-84, World Congress of Gerontology and Geriatrics, 2016, 23–25 November 2016, J.N. Tata Auditorium, India Institute of Science, Bengaluru, India (**received Best paper award**)
13. Kankaria A, Goswami K, Rai S, Kusuma YS, Knowledge, Attitude and Practice (KAP) of health care providers regarding breastfeeding in Government Health Facilities of District Faridabad, Haryana: A qualitative study from North India, APHA Conference, November 2016, Colorado, Denver
14. Rai SK, Misra P, Kant S, Haldar P, Goswami K, The Sustainability of Quality Control Mechanism for HIV Sentinel Surveillance in India: An Experience of Regional Institute, 13th International Conference on Environmental, Cultural, Economic and Social Sustainability, 20 January 2017, Fluminense Federal University, Niteroi, Grater Rio de Janeiro, Brazil
15. Archana A, Haldar P, Rai SK, Misra P, Maternal Health Care utilization among migrant women in Faridabad district, Haryana, A mixed method study, 61st Annual National Conference of IPHA 2017, 24–26 February 2017, AIIMS, Jodhpur, Rajasthan
16. Salve HR, Yadav K, Kumar R, Ramakrishnan L, Chakrabarty A, Pandav CS, High daily salt intake among women in India: National and sub-national estimates from National Iodine and Salt Intake Survey, 2015 (Oral), 44th Annual Conference of Indian Association of Preventive and Social Medicine (IAPSM), 10–12 February, Science City, Kolkata
17. Ramadass S, Salve HR, Krishnan A, Does Traffic Rationing System made any impact on ambient air quality and hospital admissions in Delhi? 61st Annual Conference of Indian Public Health Association (IPHA), 24 & 25 February 2017, Jodhpur, Rajasthan
18. Ahamed F, Yadav K, Kant S, Saxena R, Pandav CS, Weekly home visit and supervision of iron folic acid tablets intake in pregnant women in rural population in Haryana, 61st Annual Conference of IPHA, 24–26 February 2017, AIIMS, Jodhpur, Rajasthan
19. Rath R, Krishnan A, Nongkynrih B, Misra P, Tobacco Related Community Environment and its Relationship with Tobacco use in North India, 61st Annual Conference of IPHA, 24–26 February 2017, AIIMS, Jodhpur, Rajasthan
20. Goswami K, Salve H, Malhotra S, Yogesh, Family Health Advisory Services Posting Assessment: Situational Analysis, 61st Annual National Conference of IPHA, 26 February 2017, AIIMS Jodhpur, Jodhpur, Rajasthan

RESEARCH

Funded projects

Ongoing

1. Strengthening implementation of National Program for Prevention and Control of Cancer, Diabetes, Cardiovascular diseases and Stroke (NPCDCS) in states: Capacity Building of Program Managers/Coordinators, Baridalyne Nongkynrih, WHO, India, 6 months, 2016–2017, Rs 19 lakhs
2. Prevention of type 2 diabetes in women with pre diabetes using vitamin D supplementation and lifestyle intervention in North India, Puneet Misra, DST, 4 years, 2012–2016, Rs 58 lakhs

3. HIV/AIDs sentinel surveillance of five central zone states of India (Bihar, Delhi, Jharkhand, Uttarakhand and Uttar Pradesh), Sanjay K Rai, NACO, 3 years, 2015–2018, Rs 130 lakhs
4. Migration, mobility and antenatal care: an exploratory study to identify key elements to improve coverage and utilization of antenatal care services among migrant pregnant women in Delhi, Y.S. Kusuma, DST, 1.5 years, 2017–2018, Rs 25.8 lakhs
5. Validation of spot urine sample against 24 hr urine sample for estimation of dietary sodium intake at population level, Kapil Yadav, AIIMS, 2 years, 2016–2018, Rs 3 lakhs
6. Assessment of Iodine status amongst pregnant women in select district of India, Kapil Yadav, ICMR, 2.5 years, 2016–2018, Rs 57.6 lakhs
7. Human Resource Development Health Research Scheme, Operational Research, Sumit Malhotra, DHR, 1 year, 2016–2017, Rs 10 lakhs
8. Assessment of implementation and barriers related to Weekly Iron Folic Acid Supplementation Programme (WIFS) for school based adolescents in National Capital Territory Region, Delhi; North India, Sumit Malhotra, WHO, Geneva/Public Health Foundation of India, 1 year, 2017, Rs 6.79 lakhs
9. Study to determine the prevalence and associated risk factors of CKD among adults in a rural community in North India, Partha Hadar, AIIMS, 2 years, 2016–2017, Rs 5 lakhs
10. Impact of an Integrated Diabetes Self-Management Education Program on Self Care and Glycemic Control among Diabetic Patients attending Non-Communicable Diseases (NCD) clinic at a Secondary Level Hospital in a Rural Area, Ravneet Kaur, AIIMS, 2 years, 2015–2017, Rs 1.53 lakhs
11. Epidemiological Study of Respiratory Pathogens in Acute Respiratory Tract Infection Among Children and Elderly in India, Anand Krishnan, CDC, 5 years, 2012–2017, Rs 7 crores each year
12. Establishing a network of population based Influenza Surveillance platforms for elderly persons in India, Anand Krishnan, CDC, 1 year, 2017–2018, Rs 4.5 crores
13. Piloting of The National Survey for Monitoring National Non-Communicable Diseases Targets and Preparation of Operational Manual, Anand Krishnan, ICMR, 6 months, 2016–2017, Rs 80 lakhs
14. Association of Common Mental Disorders with Diabetes, A Community Based Case-Control Study, Harshal R Salve, AIIMS, 2 years, 2016–2018, Rs 9.9 lakhs
15. Developing Community level Climate based Early Warning System (CCEWS) for Vector Borne Diseases in National Capital Region, India, Harshal R Salve, DST, 3 years, 2016–2020, Rs 55.62 lakhs
16. Non-communicable diseases (NCDs) among elderly persons in a resettlement colony of Delhi, Anil K. Goswami, AIIMS, 2 years, 2014–2016, Rs 5 lakhs

Completed

1. Strengthening implementation of National Program for Prevention and Control of Cancer, Diabetes, Cardiovascular diseases and Stroke (NPCDCS) in states: Capacity Building of Program Managers/Coordinators, Baridalyne N, WHO India, 6 months, 2016–2017, Rs 19 lakhs
2. Organizing Diabetes Screening Station on World Health Day, 2016, Harshal R Salve, WHO, SEARO, 1 month, April 2016, Rs 1.03 lakhs
3. Prevention of type 2 diabetes in women with pre diabetes using vitamin D supplementation and lifestyle intervention in North India, Puneet Misra, DST, 2012–2016, Rs 58 lakhs

Departmental projects

Ongoing

1. Effectiveness of intravenous iron sucrose in the treatment of moderate anemia among pregnant women attending a sub district hospital in Haryana, North India
2. Prevalence of Disability and its Association with Quality of Life among Adult Population in Rural Ballabgarh, Haryana
3. Use of screen-based media and screen time evaluation among adolescents in an urban resettlement colony, South Delhi.
4. Out-of-pocket expenditure on health, incurred by elderly residing in rural Ballabgarh, Haryana.
5. Feasibility of introducing yoga and its effect on stress and Perceived well, being on new medical under-graduate students of AIIMS, New Delhi.
6. Pregnancy Wastage in a Rural Community of Haryana
7. Physical Activity among Under Graduates Medical Students of AIIMS

8. Assessment of menstrual hygiene management amongst adolescent girls in a rural area of north India
9. Estimation of mortality burden in India due to respiratory viruses: Influenza and RSV
10. Prevalence of Knee Osteoarthritis among elderly in rural Ballabgarh, Haryana
11. Prevalence of anaemia among community, dwelling elderly persons in rural Ballabgarh, district Faridabad, Haryana.
12. Prevalence of Common Mental Disorders among pregnant women in rural Ballabgarh, Haryana
13. Development of clinical algorithm for diagnosis of bacterial sore throat among outpatients attending a secondary level hospital in Ballabgarh
14. Economic burden, prevention and control of pneumonia among elderly in India
15. Randomized controlled trial of 60 mg vs 100 mg elemental iron with fixed dose of 500 µg folic acid oral supplementation for iron deficiency anemia prophylaxis in pregnant women at a secondary care hospital in Haryana
16. Impact of an Integrated Diabetes Self Management Education Program on Self Care and Glycemic Control among Diabetic Patients attending Non Communicable Diseases (NCDs) clinic at a Secondary level Hospital in a Rural Area, A Randomized Controlled Trial
17. Visual Impairment among Elderly Persons in a urban resettlement colony of Delhi
18. Assessment of readiness of secondary care hospitals for NCD services, New Delhi

Completed

1. A study of falls among elderly persons in a rural area of Haryana
2. Facility assessment of old age homes of Delhi and a study on selected chronic conditions among the elderly persons residing in them
3. Assessment of Quality of Urban Primary Health Centers in Delhi
4. Anxiety disorders amongst adolescents in rural Ballabgarh, Haryana, India
5. Understanding the patterns of technology and internet use by undergraduate medical students: A cross-sectional study
6. Evaluation of Home Based Postnatal Care in District Faridabad, Haryana
7. Burden of anemia among adult males in a rural area of Ballabgarh block of Haryana, India

Collaborative projects

1. Exploring the Sources of Iodine Intake in India: Native Food Content, Salt in Manufactured Foods and Salt used in the Households (Emory University and Global Alliance for Improved Nutrition [GAIN])
2. Visual impairment among elderly persons in an urban resettlement colony of Delhi (Community Ophthalmology, RP Centre).
3. Utility of an audio-Visual Display in Foot Care Education in Patients with Diabetes (Endocrinology)
4. Perception of Reversible and Permanent Contraception in India (POPI) (Obstetrics and Gynecology; University of New Mexico Health Sciences Centre)
5. fMRI changes associated with Cue-induced craving in Tobacco Smokers (Psychiatry)

PUBLICATIONS

Journals: 51

Books: 5

PATIENT CARE

The patient care services of Centre for Community Medicine are in two broad areas, Rural (Comprehensive Rural Health Services Project, Ballabgarh) and Urban Health Program and are described separately. In addition, under its rural component it also provides comprehensive community based health care services which are also included in this report.

1. **Comprehensive Rural Health Services Project, Ballabgarh** is the rural wing of the Centre for Community Medicine of the All India Institute of Medical Sciences, New Delhi. It comprises of a sub district hospital (SDH), and two primary health centres (PHCs) at Dayalpur, and at Chhainsa. The Intensive Field Practice area of CRHSP consisting of a total population of **97,558** is served through a network of 12 sub-centres associated with the two PHCs. In summary, for 2016–2017, CRHSP Ballabgarh (including two PHCs provided following patient care service: Patient care at the CRHSP, Ballabgarh is described under following two categories

A. Sub-district Hospital, Ballabgarh**Outpatient Departments**

Daily	Once weekly
• General Medicine	• Non Communicable Disease Clinic
• General Surgery	• Physical Medicine and Rehabilitation (PMR)
• Paediatric	• Paediatric Surgery
• Obstetrics and Gynaecology	• Orthopaedics
• Ophthalmology	Twice weekly
• Psychiatry	• Dermatology
• Dental	• Ear, Nose and Throat
• AYUSH (Homeopathy)	Thrice weekly
• AYUSH (Ayurveda)	• Ante-natal clinic

Total Outdoor Patients

• Out Door Patients Total (New+Old)	336,345
• New OPD patients (%)	185,372 (55.1)
• Medicine (New + Old)	104,347
• Paediatrics (New + Old)	81,575
• Obstetrics and Gynaecology (New + Old)	27,699
• Antenatal care Clinic registrations, Total visits, (New+Old)	18,451
• Ophthalmology (New + Old)	14,338
• Surgery (New + Old)	12,244
• ENT (New + Old)	10,575
• Dental	7,950
• Physical Medicine and Rehabilitation (New + Old)	3,487
• Non-Communicable Ds clinic, Total (New + Old)	6,590
• Dermatology (New + Old)	9,479
• AYUSH (Homeopathy + Ayurveda)	10,488
• Orthopedic (New + Old)	22,552
• Psychiatry	6,570

In-patient services: Total no. of beds: 50

a. Total Admissions (including births)	12,144
• Admission through casualty	5,596
• Admission through OPD	3,133
• Admission of New Born (births)	3,415
b. Disaggregation of admissions, by specialty (12,144)	
• Obstetrics and Gynaecology	7,456
• Paediatrics	3,516
• Ophthalmology	525
• Surgery	382
• Medicine	112
• ENT	127
• Physical Medicine and Rehabilitation (PMR)	26
c. Average Bed Occupancy Rate (%)	158.9
d. Total Deliveries Conducted (including IUD)	3,438
e. Average duration of stay for all patients (in days)	2.42

Casualty Services	
Patients registered	61,952
Medico-legal cases	5,439
Emergency admissions	1,617
Total Surgical Procedures at SDH Ballabgarh	
1. Obstetrics and Gynaecology	781
2. General Surgery	538
3. Paediatrics Surgery	516
4. Ophthalmology	486
5. ENT	162
6. PMR	46
Total	2,529
Laboratory and Diagnostic Services	
a. Laboratory investigations (biochemical and hematological)	272,420
b. X-ray	17,806
c. Ultrasound	3,775
d. Malaria slides	10,580
• Plasmodium vivax	04
• Plasmodium falciparum	NIL
e. Counseling and testing services provided for HIV	10,515

Revised National Tuberculosis Control Programme

SDH Ballabgarh hospital is a Tuberculosis Unit (TU) under the Revised National Tuberculosis Control Programme. Three designated microscopy centres (DMCs) are attached to this unit. Total tuberculosis cases treated at Ballabgarh Hospital from 1 April 2016 to 31 March 2017 were as follows:

Total cases started on treatment	768
a. New case	641
b. Previously treated case	127

B. Community Health Services

CRHSP, Ballabgarh provides community health services to Intensive Field Practice Area (IFPA) of 28 villages through a network of two Primary Health Centres (Dayalpur and Chhainsa), and 12 sub centres. Domiciliary, outpatient, inpatient, and referral services are provided in the IFPA. Important demographic indicators for the IFPA were as follows:

Indicator	Value
Population	97,558
Birth Rate per 1,000 population	19.6
Death Rate per 1,000 population	6.2
Sex ratio at Birth (females per 1,000 males)	860
Infant mortality rate per 1,000 live births	34.6
Under 5 mortality rate per 1,000 live births	40.8

OPD Services in Intensive Field Practice Area

PHC	New cases	Repeat visits	Total
Dayalpur	22,007	23,577	45,584
Chhainsa	19,019	12,832	31,851
Total	41,026	36,409	77,435

Inpatient Services in Intensive Field Practice Area

PHC	Total
Dayalpur	494
Chhainsa	402
Total	896

Emergency Services at PHCs

PHC	Total
Dayalpur	9,568
Chhainsa	3,387
Total	12,955

Family Welfare and Maternal Child Health

The following services are provided as per the guidelines of National Health Mission

Indicator	Value
Total ante natal registration	2,101
Complete TT coverage of registered cases (%)	96.6
Percentage of Institutional delivery	
PHC Chhainsa (%)	90.0
PHC Dayalpur (%)	91.1
Total deliveries in delivery huts	893
PHC Chhainsa	399
PHC Dayalpur	494

Other National Health Programmes

National Vector Borne Disease Control Programme: Collection of blood slides are done as a part of passive surveillance in OPD and as active surveillance during domiciliary visits in the IFPA.

Indicator	PHC Chhainsa	PHC Dayalpur
Total number of malaria slides tested	4,203	6,815
Total number of positive cases	25	18
Annual Parasite Incidence (API) (per 1000 population)	0.14	0.21
Annual Blood Examination rate (ABER) (%)	10.5	19.9
Slide Positivity Rate (SPR) (%)	0.14	0.11

Revised National Tuberculosis Control Programme: The Revised National Tuberculosis Control Programme is carried out in the IFPA according to national guidelines. Dayalpur PHC has been designated as a Microscopy Centre and caters to all villages under the IFPA. Tuberculosis patients treated in the IFPA (category wise) is as follows:

Indicator	PHC Chhainsa	PHC Dayalpur
Total number of patients started on treatment	101	66
New Cases	73	66
Previously treated cases	28	NIL

Special services: Out Reach Speciality OPD (ORSO) is a special activity conducted at each PHC where Senior Residents posted at SDH Ballabgarh attend the patients at PHCs on a weekly basis. The services were started in June 2013. For the period, 2016–2017, the cases attended at each PHC are as follows:

Services	PHC Chhainsa	PHC Dayalpur
Gynaecology	656	913
Paediatrics	486	582
Ophthalmology	303	751
Psychiatry	094	209
Out Reach Speciality OPD (ORSO)* (Total)	1,539	2,455

Anti-rabies vaccination was provided to 105 individuals in PHC Chhainsa and 406 individuals in PHC Dayalpur.

Computerization: Computerized discharge of patients was already in place at both PHCs. Computer facility with internet is available for all the students at SDH as well as in both the PHCs. OPD registration, admission register and discharge summary of patients, and database are all computerised. The network line from National Knowledge Network (NKN) has been received at this hospital in this financial year.

IEC Activities

Group health talk was delivered on following topics: Neonatal care and kangaroo mother care, Breast feeding and weaning, Antenatal care, high risk pregnancy, anaemia in pregnancy, importance of institutional delivery, Immunization, Malaria and Dengue, Tuberculosis, anaemia in children, malnutrition in children, Vitamin-A deficiency, Diabetes, Hypertension, HIV/AIDS, accidents in children, personal hygiene, family planning methods, postnatal care and diet, care of newborn, swine flu, geriatric care, Mental health programme, etc.

Short film shows were screened in Child welfare centre, Ballabgarh, PHC Dayalpur, and PHC Chhainsa on important topics, i.e. Breast feeding, antenatal care, child care, female feticide, eye care, Vitamin A deficiency, malnutrition, and diarrhea during OPD timings.

Other activities

1. **Intravenous Iron sucrose administration during pregnancy:** The IFPA has high prevalence of anaemia among pregnant women. Intra venous Iron sucrose administration to pregnant women was initiated to combat the problem. Women during antenatal period are tracked from the regular ante natal clinics in all the villages. They are referred to primary health centres for intra venous iron sucrose. Iron sucrose is given as per doses recommended by the National Health Mission Guidelines. Telephonic tracking of patients are done from PHCs through health workers, ASHAs and patients themselves to improve the coverage, utilization and follow up. A total of 2,204 doses were administered to 600 pregnant women during the reporting period.
2. **High-risk pregnancy tracking:** Ante natal clinics are conducted in each and every village of IFPA. We have started a close tracking system for all high risk pregnancies identified during these clinics in year 2016–2017. Details of high risk pregnancy are entered in a software developed by CRHSP based on which a work-plan is generated for further follow up of pregnant woman. Health workers, during their scheduled house to house visits, use this work plan to track the action taken by the pregnant women. This ensures full compliance by the high risk pregnancy in seeking appropriate care. A total of 525 high risk pregnancies were identified and tracked during this year.
3. **Availability of Post Partum IUCD (PPIUCD):** As per the guidelines of National Health Mission, facility for PPIUCD is available at both the Primary Health Centres from May 2014. Pregnant women are counselled during antenatal and intra-natal period for PPIUCD insertion. PPIUCD insertion is done after taking written informed consent. Follow up is done after 6 weeks of pregnancy either during clinic visit or telephonically. A total of 77 PPIUCD were inserted during this year.
4. **Prime Minister's Flagship programme on Immunization-Mission Indradhanush:** Four rounds were conducted during April, May, June and July 2016, covering a total of 1,323 children.
5. **Eye Camp for screening of cataract:** Eye Camps were organized on 22 August 2016 and 17 March 2017 at PHC, Chhainsa and Dayalpur with the help of Ophthalmologists from District Faridabad and support from community leaders. A total of 620 patients were examined by the ophthalmologists, and were provided with appropriate treatment and referral.
6. **Visit of dignitaries:** Dr. Swaroop Sarkar, the Director of Communicable Diseases Division of the World Health Organization (WHO), South East Asia Regional Office visited PHC Chhainsa on 27 October 2016. Faculty Member from University of Erasmus, Netherland visited PHC Chhainsa and met with the Panchayati Raj Institutions (PRI) members on 28 February 2017.

2. Urban Health Programme

The field practice area of the Urban Health Programme, Centre for Community Medicine is located at Dakshinpuri Extension, Dr Ambedkar Nagar in South Delhi, consisting of Blocks 1,2,3,4,5,6,7,14,15,19, Subhash camp, Dakhshinpuri catering to a population of around 35,363. Patient care services are provided at the Urban Health Centre.

A. Clinical Services

Activities		Number
OPD	Total no of patients seen (including immunization)	24,617
	Total number of referrals	1,519
Laboratory services	Total Lab Tests	4,298
	No. of Hb. Test Conducted	1,873
	Of which numbers having Hb.<7 gm%	16
	Of which numbers having Hb.<11gm%	323
	Blood Sugar	1,840
	Urine albumin and sugar tested	108

B. Child Health services

Activities		Number
Immunization	BCG	122
	DPT1	11
	DPT2	6
	DPT3	13
	OPV 0 dose(birth dose)	68
	OPV1	319
	OPV2	301
	OPV3	320
	Hepatitis-B1	17
	Hepatitis-B2	1
	Hepatitis-B3	7
	Pentavalent 1	308
	Pentavalent 2	295
	Pentavalent 3	310
	Injection Polio Vaccine (with Pentavalent 3rd dose)	267
	Measles	340
	Typhoid Vaccine	482
Vitamin A	Administered between 9 months and 5 yrs	681

C. Maternal Health Services

Antenatal Care	Total number of pregnant women seen in the Urban Health Centre	906
	Number of pregnant women given TT1	137
	Number of pregnant women given TT2+ or Booster	113
	Total number of pregnant women given 100 IFA tablets	279
Family planning	No of Condoms distributed	2,540
	No of Oral contraceptive pill cycles distributed	66

D. IEC Activities

Date	Activities
3 May–5 July 2016	‘Heat stroke’ posters were displayed and exhibited at 27 places at AIIMS
5 July–16 November 2016	Displayed posters on ‘Dengue, Chikungunya and Malaria’ at 35 places at AIIMS
17 November–15 December 2016	Displayed poster on “Swine Flu” at 20 sites at AIIMS
9 December–24 February 2017	“Sheet Lahar” Posters displayed at 07 sites of AIIMS
30 January 2017	Health exhibition on ‘Leprosy’ was organized at UHC on ‘World Leprosy Day’
20 March 2017	‘World T.B. Day Exhibition’ organized at UHC Dakshinpuri Extension, New Delhi, on 20 March 2017

National Service Scheme (NSS) Activities at AIIMS

Four Undergraduate project interventions on 'Obstructive Sleep Apnea, Hypothyroidism, Knee Arthritis, Acute Respiratory Infection' were conducted at Urban Health Centre, Dakshinpuri Extension on 13 April 2016, 20 July 2016, 7 September 2016, and 18 February 2017, respectively. Organized an Health Exhibition 'Catalyst 2016' for Delhi School students on Dengue, Malaria, Chikungunya, Heat Wave, Heat Wave, Swachh Bahrat on 25 April 2016, with SU, AIIMS; NSS Orientation Programme was conducted for new batch of MBBS 2016, students on 13 July 2016 at AIIMS; Two Training Programmes on 'First-Aid' were conducted for Gyan Bharti Public School teachers, Saket, New Delhi on 5 August 2016, and 15 October 2016 respectively; Four Role Plays were conducted on 29 August 2016, and 5 September 2016, respectively at Block No. 05 of Dakshinpuri Extension on Anaemia, Diabetes Mellitus, Diarrhoea, Tuberculosis, Dengue and Chikungunya; Attended NSS Conference on "Re-Structuring of NSS" at Vigyan Bhawan on 31 March 2017.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor Shashi Kant was external expert for selection of Professor of Community Medicine at Indira Gandhi Institute of Medical Sciences, Patna; Setting of question paper for MBBS examination in Community Medicine for Gujarat University; External expert for Assessment Promotion Scheme of Community Medicine at Jawaharlal Institute of Postgraduate Medical Education and Research (JIPMER), Puducherry; Executive member, Indian Association of Preventive and Social Medicine; Attended National Level Consultation on Urban and Rural Health Training Centres attached with Medical Colleges organized by Indian Association of Preventive and Social Medicine, 12–14 October 2016, KG Medical University, Lucknow; Nominated as member of Technical Resources Group (Research and Development) of National AIDS Control Organisation, Ministry of Health and Family Welfare; Member, Scientific Advisory Committee, Rajendra Memorial Research Institute of Medical Sciences, Patna; Member, Scientific Advisory Committee, Indian Council of Medical Research, New Delhi, for 2016; Conducted assessment of High Risk Group HIV sentinel site at Rudrapur, Uttarakhand, on behalf of National AIDS Control Society, Ministry of Health and Family Welfare; Participated in National Meeting of HIV sentinel surveillance organized by National Institute of Health and Family Welfare, New Delhi; Conducted assessment of High Risk Group HIV sentinel site at Haridwar, and Antenatal clinic site at Gopeshwar, District Chamoli in Uttarakhand, on behalf of National AIDS Control Society, Ministry of Health and Family Welfare; Provided supportive supervision of HIV sentinel sites and State Reference laboratory in Uttarakhand; Provided supportive supervision of HIV sentinel sites and State Reference laboratory in Jharkhand; Member, Technical Advisory Committee, National Institute of Medical Statistics, New Delhi on Comparing Methods for Assigning Causes of Death by Verbal Autopsy; Nominated member, Scientific Advisory Committee, National Institute of Medical Statistics, New Delhi.

Professor Sanjeev Kumar Gupta was member Core Committee of AIIMS, under Revised National Tuberculosis Control Programme; reviewer of journals like The National Medical Journal of India, Indian Journal of Public Health, Indian Journal of Community Medicine; nominated Member, Inspection Committee to conduct inspection at the National Institute of Health and Family Welfare, Munirka, New Delhi in August 2016; member, Expert Committee for revision of the PGDMCH Program at the Indira Gandhi National Open University, New Delhi; member, Doctoral Committee in respect of one PhD thesis in the Department of Community Ophthalmology, Dr R.P. Centre for Ophthalmic Sciences, AIIMS.

Professor Kiran Goswami is Programme Coordinator, NSS Unit, AIIMS; was involved in field Certification for Madhya Pradesh in National Certification Committee for Polio Eradication-tOPV to bOPV Switch Validation Activity, June 2016; Expert in Selection Committee Meeting for Assistant Professor of Public Health and Community Medicine at Central University of Kerala, September 2016; Trainer field team for INCLIN Project 'Evaluation of Home Based New Born care Program at Districts Level', Madhya Pradesh; Member Technical Advisory Group (TAG) on "Childhood Pneumonia and Public Health Programme in India" INCLIN; attended CMCL-FAIMER Fellowship Training Workshop (2nd contact program), Ludhiana, 4–8 February 2017; Chaired session at 61st Annual National Conference of Indian Public Health Association at Jodhpur, 26 February 2017; Participated level one debate 61st Annual National Conference of Indian Public Health Association at Jodhpur, 25 February 2017; was member **Expert Committee** SEED Division, **TIASN**, DST; External Examiner M.D. at Sharda University, Greater NOIDA June 2016, and Aligarh August 2016; MBBS 3rd Professional final Exam. at AIIMS Raipur, December–January 2016–2017, Delhi November 2016, February–March 2017.

Professor Anand Krishnan was awarded Dr PN Raju Oration for 2014 in Public Health (non-communicable diseases) for research on 'Closing the gaps: Linking research, surveillance and program in NCDs'; Led WHO Team to draft the National Health Research Policy of Bhutan; consultant to Ministry of Health and Sports Myanmar to draft the National Strategic Plan for Prevention and Control of NCDs; attended as Member of the WHO Global Expert Group the WHO Annual Burden of Influenza Meeting 11–14 July 2016; attended the Eighth WHO Meeting on development of influenza vaccines that induce broadly protective and long-lasting immune responses 23 & 24 August 2016, Chicago, USA; attended Regional Consultation of the WHO Collaborating Centers in the South-East Asia Region, New Delhi, India, 20 & 21 October 2016; Chairman, Scientific Committee of International Symposium on "Is Sugar the New Tobacco? Organized by Centre for Dental Education and Research, AIIMS New Delhi, 11 November 2016; Attended Meetings of Global Adult Tobacco Survey as a part of

the National Technical Advisory Group; Attended National Technical Advisory Group Meeting of National mental Health Survey; technical Lead for the National NCD Monitoring Survey by ICMR; Member of the Non-Communicable Disease Technical Advisory Group (NCD TAG) to operationalize the roll out for Prevention, Screening and Control of Common Non-Communicable Diseases: Hypertension, Diabetes and Common Cancers (Oral, Breast, Cervix); attended as panelist and moderator working group at National Civil Society Consultation on NCDs in India 25–27 April 2016; PHD Chamber of Commerce, August Kranti Marg, New Delhi; member AIIMS Intramural Research Grant Project Review Committee; Member Dean's Research Committee; attended WHO MoHFW National Consultation on NCDs in India, New Delhi, 22 June 2016; member, GBD India Expert Group Diabetes.

Professor Baridalyne Nongkynrih was Member, Project Advisory Committee (PAC) for cancer screening in North East India under ICMR; Member, Teaching schedule committee, AIIMS; attended WHO Collaborating Centre Meeting in WHO, SEARO, 20 & 21 October 2016. Member, ICMR project review committee ENT; Reviewer, Indian Journal of Community Medicine, Global Health Action, Indian Journal of Maternal and Child Health, and Journal of Health, Population and Nutrition, ICDDR Bangladesh, International Journal of Medicine and Public Health, International Journal of Advanced Medical Research, WHO South-East Asia Journal of Public Health, BMC public health.

Professor Puneet Misra is Member, Technical Resource Group (TRG), MoHFW, on Adolescent health; Member and Co-Chairperson, Program Advisory Council, DST; involved with assessment of projects for DST and other agencies including ICMR, DBT CPCB; Thesis evaluation for B.P. Koirala Institute of Health Sciences Dharan Nepal, Reviewer for ICMR Short Term Studentship (STS) programme online review, TV talk on Dengue, Zika and HIV, geriatric problems, at channels like Rajya Sabha TV, Lok Sabha TV, NDTV; served as PG examiner, CMC Ludhiana, MBBS examiner at KGMU, Lucknow, 2016–2017; Reviewer of papers for Journals both National and International; Member, 'On the spot assessment of Core support projects by DSTs Expert team; Expert member and Co-Chair of the committee on 'Scheme for Young Scientists and Technologists (SYST); Expert member, Technological Interventions for Tribal Empowerment (TITE) for DST; attended Group Monitoring Workshop of Scheme for Young Scientists and Technologist at Salem and Banasthali for DST; attended Expert Group Meetings for ICMR at New Delhi; Evaluated ICMR projects as a subject expert; TBS Radio South Korea on shortage of doctors in India; Mid Term review by Expert Group of DST on various projects at WWF, New Delhi; Attended state consultation on 'Functioning of grassroots service providers for improved health and nutrition status of the rural communities' supported by Unicef at Hyderabad.

Professor Sanjay Rai was unanimously elected "Vice President" (north zone) of Indian Public Health Association for 2016–2018; nominated by Baba Farid University of Health Sciences, Faridkot, Punjab as member of Board of Examiners for MD Community Medicine; External examiner conducted MD Community Medicine examination, Government Medical College, Patiala, 16 & 17 June 2016; Nominated by Pt. BD Sharma University of Health Sciences, Rohtak, and AIIMS Bhubaneswar, as member of Board of Examiners in Community Medicine; External examiner, MBBS final professional examination in Community Medicine, PGIMS, Rohtak and AIIMS Bhubaneswar; Member, Technical Advisory Group (TAG), on 'Research Programme to Emphasize Public Health Significance of Childhood Pneumonia in India' for INCLIN in Bill and Melinda Gates Foundation supported programme; Nominated by National AIDS Control Organization (NACO), as a "focal person" for providing technical assistance for HIV Sentinel Surveillance (HSS) to five northern states (Delhi, Bihar, UP, UK and Jharkhand) of India; Strategic group member, "Maternal and Newborn Working Group" of INDEPTH and received travel grant to attend the Strategic Planning Meeting with working group leaders held at Johannesburg, South Africa; Reviewed manuscripts for publication in various journals: Health and Population Perspective and Issues, Indian Journal of Public Health, Indian Journal of Community Medicine, International Journal of Epidemiology, Indian Journal of Pediatrics, NMJI, etc.; Conducted supervisory field visits of Bihar, Jharkhand, Delhi, Uttarakhand and UP to monitor HIV Sentinel Surveillance and provided technical support to these states; Deputed by AIIMS examination centre to supervise Online CBT for MD/MS/MDS entrance examination; Member, Core committee of AIIMS under Revised National Tuberculosis Control Programme; Member, Standing Selection Committee, Quality Council of India (QCI) assisted in selection of Dy. Director, Asst. Director; Participated as expert in National Certification Committee for Polio Eradication in India; Chaired plenary session of World Trauma Congress, 2016 at Vigyan Bhawan, New Delhi.

Dr Y.S. Kusuma was Member of 'NCD Risk Factor Collaboration (NCD-RisC); The Global Burden of Metabolic Risk Factors for Chronic Diseases Collaboration Group'; served as reviewer for Indian Council of Medical Research (ICMR) and Department of Science and Technology (DST); Serve as Editorial Board Member for Studies on Ethno-Medicine and Afro-Asian Journal of Anthropology and Social Policy; Served as Reviewer to international and national professional journals.

Dr Kapil Yadav was nominated Member, Technical Committee of National Iodine Deficiency Disorders Control Program (NIDDCP) by MoHFW; Special Invitee to Iodine Task Force constituted by Indian Council of Medical Research; nominated member of IEC Committee on NIDDCP by MOHFW; Advisory Board of Conference titled 'Delivering for Nutrition in India: Learnings from Implementation Research' organised by IFPRI on 9–10 November in Delhi. received RN Roy Best Paper Award along with Dr Rakesh Kumar, published in Indian Journal of Public Health (Original Article) presented

during the 61st All India Annual Conference of the Indian Public Health Association for the paper “A reliable and accurate portable device for rapid quantitative estimation of iodine content in different types of edible salt”.

Dr Sumit Malhotra was selected as PH-Leader and participated in year long mentored programme on Public Health; Leadership and Implementation Academy sponsored by US National Institute of Health; organized a workshop on operational research for faculty and scientists in support with Department of Health Research under Human Resource Development Health Research Scheme (16–19 January 2017); participated in an intensive programme on public health leadership at Rollins School of Public Health, Emory University, USA, July 27 to August 12, 2016; attended Global partnerships to advance Non Communicable Disease Research within sustainable development goal agenda Conference, 8 & 9 August 2016, Atlanta; participated in protocol development workshop organized by WHO Regional Centre for Implementation Research, 12–16 December 2016; attended 44th National Conference of Indian Association of Preventive and Social Medicine, 10–12 February 2017; participated in Basic Course in Medical and Health Professions Education organized by CMET, AIIMS, 15–17 February 2017; Selection committee member, ICMR for selection of research staff in ICMR research project; continue to be resource faculty for post-graduate course on research methodology, AIIMS, New Delhi; evaluated thesis for B.P. Koirala Institute of Health Sciences, Dharan, Nepal.

Dr Anil Kumar Goswami was Patron of ‘All India Association of Medical Social Work Professionals’ Chandigarh. 2016–2018; Nodal Officer, Disease Prevention Outbreak Response Cell (DPORC) AIIMS since 2008 till date; Member, Scientific Advisory Committee, National Seminar of “All India Association of Medical Social Work Professionals” 2017; Member, Sub-committee for Hygiene Promotion (KRA-7 of Clean and Green AIIMS) under KAYA KALP (Clean Hospital Campaign); Member sub-committee for Public Feedback (KRA-8 of Clean and Green AIIMS) under KAYA KALP; attended Review Meetings on Vector Borne Diseases Prevention and Control Preparedness; attended workshop on Prevention and Control of Vector Borne Diseases, organized by SDMC, 18 April 2016; attended Meeting of Joint Monitoring group on Emerging Diseases Chaired by Director General Govt. of India on 12 August 2016, attended session on innovation in “Tobacco Harm Reduction” on 18 August 2016; participated in a workshop on Dengue organized by Medicine department; attended dengue review meeting at Nirman Bawan, New Delhi, attended World Alzheimers Day 2016 and Panel Discussion; attended seminar on Influenza: recent update on 19 October 2016, and Zika on 21 October 2016; attended Indian Public Health Association Conference 2017 (IPHACON 2017) at Jodhpur, Rajasthan, 24–26 February 2017.

Dr Partha Haldar was member of National Working Group (NWG) for HIV Estimates in India, of the National AIDS Control Organization, Ministry of Health and Family Welfare, Government of India; Provided technical support to NACO for deriving National level and State level estimates on HIV prevalence, incidence, deaths, and mother requiring PMTCT, and adults and children requiring ART; Member, National Working Group for HIV Estimates in India for year 2016, constituted by the NACO, MoHFW; Guest Faculty, Executive Education Programme on the Health Care Analytics, Indian Institute of Management, Bengaluru [March, 2017]; Member Central Regional Institute constituted at AIIMS, New Delhi for HIV Sentinel Surveillance; participated in National Conference of IPHA 2017 at AIIMS Jodhpur in March 2017; Guest faculty at the ‘Statistical Workshop on analysis using R Software’, Department of Biostats, NIMHANS, Bengaluru in October 2016.

Dr Ravneet Kaur participated in the meeting of the technical working group for finalizing guidelines for screening of cancers in India held at National Institute of Cancer Prevention and Research, Noida on 14 June 2016; Participated in the International Public Health Management Development Program held at PGIMER Chandigarh (16–20 December 2016).

Dr Harshal Salve participated in 12th Disease Prevention and Outbreak Response Cell (DPORC) Meeting at CCM, AIIMS (9 May 2016); participated in expert group meeting for developing standard guidelines for management of Chronic Respiratory Diseases at Primary Care, Department of Pulmonary medicine and Sleep Disorders, AIIMS, New Delhi, 25 & 26 June 2016, and 24 & 25 September 2016); participated in DST-ICMR Workshop on Climate Change and Health, New Delhi (25 & 26 July, 2016); participated in Quality Improvement Workshop, AIIMS, New Delhi (2–3 August, 2016); Member of team (Unicef-IGN) for evaluation Universal Salt Iodization (USI) Strategy of Bangladesh in Dhaka Bangladesh (20–29 August, 2016); participated in Expert Group Meeting on Developing Operational of National NCD Monitoring Survey at CCM, New Delhi (2 & 3 September, 2016); participated in Expert Group Meeting for Reviewing Guidelines for Management of Chikungunya in India at MOHFW, Nirman Bhavan, New Delhi (14 September, 2016); participated in National Workshop on Heat Action Plan, New Delhi (21 September, 2016); participated in meeting on discussion and dissemination of USI review mission in Dhaka Bangladesh (28–30 September 2016); participated as resource faculty in training of field teams under pilot of National NCD Monitoring Survey at New Delhi (6–10 October 2016) and Chennai (17 & 18 October, 2016); contributed in preparing Training Manual for Program Managers under NPCDCS Program, Government of India; participated in 44th Annual Conference of Indian Association of Preventive and Social Medicine (IAPSM), Kolkata (10–12 February 2017); participated in National level workshop for building climate resilience for ensuring transformational health outcomes organized by NIEHS and Teri at IHC, New Delhi (6 & 7 March 2017).

Dr Rakesh Kumar received RN Roy Best Paper Award along with Dr Kapil Yadav, published in Indian Journal of Public Health (Original Article) presented during the 61st All India Annual Conference of the Indian Public Health Association

for the paper “A reliable and accurate portable device for rapid quantitative estimation of iodine content in different types of edible salt”; attended technical committee meeting on implementation of National Iodine Deficiency Disorders Control Programme (NIDDCP), DGHS, Govt. of India; Resource person, Operational research workshop for faculty and scientists in support with Department of Health Research under Human Resource Development Health Research Scheme; attended workshops “Capacity Building Workshop and Symposium on Quality Improvement” organized jointly by AIIMS, New Delhi, USAID and Institute of Healthcare Improvement, Cambridge, Massachusetts on 2 & 3 August 2016, and “Workshop on operational research, ethics and data analysis in HIV/AIDS” conducted by National AIDS Control Organization on 30 January–2 February 2017; reviewed MD thesis from B.P. Koirala Institute of Health Sciences, Dharan, Nepal; Reviewer for Indian Journal of Public Health, The Journal of Obstetrics and Gynecology of India and International Journal of Medicine and Public Health.

9.9. Dermatology and Venereology

Professor and Head

Vinod Kumar Sharma

Professors

Neena Khanna
Binod K. Khaitan

Kaushal K. Verma
Sujay Khandpur
Somesh Gupta

M. Ramam
G. Sethuraman

Assistant Professors

Kanika Sahni

Savita Yadav

Neetu Bhari

CMEs organized by the department

1. North Zone Workshop of Association of Cutaneous Surgeons (I) in collaboration with organizing committee WCOCD 2017, 13th November 2016, Nehru Place, Delhi.

The department has many funded projects including International collaboration with University of Michigan, USA, for a project funded by NIH titled ‘Genetic Analysis of Psoriasis and Psoriatic Arthritis in India’. Professor G. Sethuraman is focusing on Pediatric Dermatology with 4 research projects in hand, and one has been completed.

Lectures delivered

V.K. Sharma: 7

Neena Khanna: 11

Kaushal K. Verma: 14

M. Ramam: 9

Binod K. Khaitan: 11

Sujay Khandpur: 14

G. Sethuraman: 2

Somesh Gupta: 2

Kanika Sahni: 4

Savita Yadav: 11

Neetu Bhari: 7

V.K. Sharma: 7

1. Dermoscopy of hyperpigmented lesions, Pigmentarycon 2016, The 2nd Biennial Conference of PDS Regional Congress of ISD, 1–3 April 2016, Chanakyapuri, New Delhi
2. Lichen Planus Pigmentosus-Dubai Derma 2016, Dubai World Dermatology and Laser Conference & Exhibition, 12–14 April 2016, Dubai International Convention and Exhibition Centre, Dubai
3. Moderating Sessions: Grand Round—Connective Tissue Disease, Panel Discussion “Biologics”, 2nd PGCON and Dermazone (North), 15–17 July 2016, Chandigarh
4. Patch and photopatch test in facial melanosis, 13th Congress of the European Society for Contact Dermatitis, 14–17 September 2016, Manchester Central Convention Complex, Manchester, U.K.
5. Epidemiology of STI in Asia, 10th Asian Dermatological Congress 2016, 13–16 October 2016, Convention Centre, Mumbai
6. Invited as a Speaker at the Conference, 40th National Conference of Association of Study for Sexually Transmitted Infections and AIDS, Asticon 2016, 25–27 November 2016, AIIMS, Bhopal
7. Management of Urticaria—What is new?, “Clinicon-2017” 2nd Annual Conference of ACDI, 18–19 March 2017, Jaipur

Neena Khanna: 11

1. Moderator of Panel discussion, Acne Mid-year Cuticon (IADVL DSB), 15.05.2016, New Delhi
2. An algorithmic approach to the diagnosis and management of ichthyosis, 4th CME for PGs, 16.07.2016, Christian Medical College, Vellore
3. Think of leprosy, even in the era of elimination, 19th International Leprosy Congress, 19.09.2016, Beijing, China
4. Debate on Mesotherapy—A Gimmick, 10th Asian Dermatological Congress, 13.10.2016, Sahara Star International Convention Centre, Mumbai
5. When to use biologics (in Dermatology), National CME on Biologicals, 4.12.2016, Base Hospital, Delhi
6. Beauty Parlours—the flip side, Plenary Lectures: Dermacon 2017, 4.1.2017, Science City, Kolkata
7. Challenges in leprosy management, Leprosy day celebrations: IADVL-DSB, 28.01.2017, MAMC, New Delhi
8. Scoring systems in dermatology, National Seminar on Dermatology and Cosmology in Unani Medicine, 12.2.2017, Central Research Institute of Unani Medicine, Hyderabad
9. Practical tips while writing prescription for acne, 2nd Acne India Summit, 19.2.2017, Sir Ganga Ram Hospital, New Delhi
10. An algorithmic approach to the diagnosis and management of ichthyosis, 2nd CME for PGs, 11.3.2017, Govt College, Miraj
11. Beauty parlours, a bane or boon, Dubai Derma, 2017, 27.03.2017, Dubai International Convention Centre, Dubai

Kaushal K. Verma: 14

1. Evaluation of effectiveness and safety of acyclovir 1g twice a day for treatment of recurrent genital herpes, 17th International Union Against Sexually Transmitted Infections World Congress, 9–12 May 2016, Marrakash, Morocco
2. Azathioprine does not influence the Patch Tests reactivity in Contact Dermatitis to weed the Parthenium, 96th Annual Meeting of British Association of Dermatologists, 5–7 July 2016, Birmingham, UK
3. Evaluation of effect of betamethasone on Patch Tests reactivity in patients of Contact Dermatitis due to Plant Parthenium, 96th Annual Meeting of British Association of Dermatologists, 5–7 July 2016, Birmingham, UK
4. Challenges in diagnosing contact dermatitis in India, 2nd PGCON & DERAZONE (North Zone), 15–17 July 2016, Chandigarh
5. Challenges in the Management of Pemphigus, National Hospital of Sri Lanka, Colombo, 10 August 2016, Colombo, Sri Lanka
6. Effect of UV on Other Skin Diseases, International Conference on Tropical Dermatology 2016, 11–13 August 2016, Colombo, Sri Lanka
7. Challenges in the Patch Testing with patients known/unknown materials, 10th Asian Dermatological Congress, 13–16 October 2016, Mumbai
8. DCP in Scleroderma, 10th Asian Dermatological Congress, 13–16 October 2016, Mumbai
9. Scenario of Biologics in management of Pemphigus, Annual Conference of Indian Association of Dermatologists, Venereologists & Leprologists Rajasthan State, 23 October 2016, Bikaner
10. Treatment of recalcitrant alopecia areata, 42nd Annual Conference of Indian Association of Dermatologists, Venereologists & Leprologists Punjab, Himachal Pradesh, Chandigarh, Jammu & Kashmir, 5–6 November 2016, Ludhiana
11. Moderated a session on Recalcitrant fungal infections, 34th Annual Conference of Indian Association of Dermatologists, Venereologists & Leprologists-UP, 12–13 November 2016, Lucknow
12. Emerging trends in Syphilis in Asia Pacific, 19th International Union against Sexually Transmitted Infections Asia Pacific (IUSTI-AP) Conference, 1–3 December 2016, Okayama, Japan
13. Challenges in diagnosing of Contact Dermatitis—Tests beyond Patch Tests, 45th National Conference of Indian Association of Dermatologists, Venereologists & Leprologists (IADVL) Dermacon 2017, 12–13 January 2017, Kolkata
14. Azathioprine in Dermatology—An update, 2nd Annual Conference of Association of Clinical Dermatologist of India, 18–19 March 2017, Jaipur

M. Ramam: 9

1. Drug reactions: Myths and reality, CME on Clinical Dermatology, 22 May 2016, Goa
2. Pattern and clues in infections dermatopathology—XXXVII Symposium of the International Society of Dermatopathology, 6–8 October 2016, Lima, Peru

3. Cutaneous TB Mimics of leprosy, International Conference on Tropical Dermatology (ICTD), 11–14 August 2016, Colombo, Sri Lanka
4. Cutaneous TB Chilocoris Pigmentation, Professor T Gopinathan Memorial CME, 21 August 2016, Kozhikode, Kerala
5. Cydnidae pigmentation, 42nd CUTICON 2016, 5–6 November 2016, Ludhiana, Punjab
6. Pattern and clues in infections dermatopathology, Annual Meeting of the Dermatopathology Society of India, 11–13 November 2016, Chandigarh
7. Whos afraid of mycosis fungoids, Annual State Conference of IADVL Kerala, 19–20 November 2016, Kerala
8. Granulomas, Dermatopathology CME, 10 December 2016, Dehradun
9. Drug provocation, Symposium on Urticaria and Cutaneous adverse reactions, 5 March 2017, Chandigarh

Binod K. Khaitan: 11

1. Vitiligo: Update on Classification, Severity and Assessment of Disease, PIGMENTARYCON 2016, 2 April, 2016, New Delhi
2. A randomized comparative study of the effect of betamethasone oral mini-pulse therapy versus oral azathioprine in progressive non-segmental vitiligo, Regional Conference of Dermatology (Asian-Australian), 24 April, 2016, Singapore
3. DERMATOPHYTOSES: Current Clinical Scenario, 9 June, 2016, ESI PGIMER and Model Hospital, New Delhi
4. Non-STD penile dermatoses, 10th Asian Dermatology Congress 2016, 15 October 2016, Mumbai
5. Emergency in Dermatology & Acute Skin Failure, 10th Asian Dermatology Congress, 13–16 October 2016, Mumbai
6. Dermatology and Government Agencies, 10th Asian Dermatology Congress, 13–16 October 2016, Mumbai
7. Management of vasculitis, DERMACon-2017, 13–15 January 2017, Science City, Kolkata
8. Diagnosis of Immunobullous Disease, Panel Discussion at DERMACon-2017, 13–15 January 2017, Science City, Kolkata
9. Issues related to topical corticosteroid abuse—Panel discussion, DERMACon-2017, 13–15 January 2017, Science City, Kolkata
10. Role of Dermatologists in systemic vasculitis, CLINICON-2017, 18–19 March 2017, Jaipur
11. Session on Diagnostic tools in dermatology—Panel Discussion, CLINICON-2017, 18–19 March 2017, Jaipur

Sujay Khandpur: 15

1. Phototherapy and Photochemotherapy, MSc in Clinical Dermatology, 17 March 2017, Department of Dermatology, University Hospital of Wales, Cardiff, UK
2. Light and skin disorders, International Conference on Tropical Dermatology 2016, 11–13 August 2016, Colombo, Sri Lanka
3. Self-Assessment Course, XXXVII Symposium of the International Society of Dermatopathology, 6–8 October 2016, Lima, Peru
4. Mycosis fungoides in India, 10th Asian Dermatological Congress 2016, 13–16 October 2016, Mumbai
5. Relevance of histopathology in diagnosis of pigmentary dermatoses, 2nd Biennial Conference of PDS (Pigmentarycon 2016), 1–3 April 2016, New Delhi
6. Approach to Panniculitis, Dermacon 2017, 45th National Conference of Indian Association of Dermatologists, Venereologists & Leprologists, 14–15 January 2016, Science City, Kolkata
7. Vascular inflammation—A travel across the tunnel, Annual Meeting of Dermatopathology Society of India, 11–13 November 2016, Chandigarh
8. Vascular lasers and panelist in panel discussion on Biologicals in skin diseases, PGCON and DERMAZONE (North), 15–17 July 2016, Chandigarh, Punjab
9. Histopathology of vasculitis, Dermatopathology CME, Kerala 2016, 9–10 July 2016, Thiruvananthapuram
10. Alopecia diagnosis—Role of horizontal section, IADVL SIG (Dermatopathology) Workshop, 31 March 2017, AIIMS, Bhopal
11. Newer diagnostic techniques in pemphigus and microscopy case discussion, IADVL SIG (Dermatopathology) workshop, 10 December 2016, Dehradun
12. Hyperpigmentary skin disorders, SIG Dermatopathology CME, 23 October 2016, Patna, Bihar

13. Panelist at panel discussion on Vasculitis, DAAS Summit, July 2016, New Delhi
14. Panelist in A Compendium of Challenging Cases, Annual Conference of IADVL Delhi Branch, November 2016, New Delhi

G. Sethuraman: 2

1. Vitamin D, Rickets and Congenital Ichthyosis, 42nd Annual meeting, The Society for Pediatric Dermatology, 14–17 July 2016, Minneapolis, USA
2. Skin Tuberculosis in children, Asian Dermatology Congress, October 2016, Mumbai

Somesh Gupta: 2

1. Annual Congress of Dermatologic Aesthetic Surgery International League (DASIL), 19–23 October 2016, Dubai
2. 19th Asia-Pacific Congress of International Union against Sexually Transmitted Infections (IUSTI), 1–3 December 2016, Okayama, Japan

Kanika Sahni: 4

1. In-vivo Preparation of epidermal cell suspension for vitiligo surgery, ACSI North Zone workshop on dermatosurgery, 13 November 2016, AIIMS, Delhi
2. Microneedling: Tips and tricks—Asian Dermatologic Congress 2016, 13–16 October 2015, Mumbai
3. Q switched Nd Yag laser for melasma, Aesthetics 2016, 19–21 August 2016, India Habitat Centre, Delhi
4. Microneedling for periorbital melanosis, Aesthetics 2016, 19–21 August 2016, India Habitat Centre, Delhi

Savita Yadav: 11

1. The Chronicles of Psychodermatology, The Cutis, the Cortex and the Cortisol, Psychodermatology Conclave India 2016, 22 May 2016, Medanta the Medicity Hospital, Gurugram
2. Leprosy and STIs Video Demo: Collection of samples in STD cases, National Symposium on Clinical Dermatology and Bed-side Investigations, 11–12 June 2016, NIMHANS Convention Centre, Bengaluru
3. JAK Inhibitors and their future in dermatology, DAAS Summit 2016, 2–3 July 2016, Delhi
4. Planning a surgical incision, DERMAZONE (North) and PGCON, 15–17 July 2016, Chandigarh
5. Panel discussion on Mosaicism and melanocytorrhagy in Vitiligo, Vitiligo Master Class and Pigmentary Disorders and 3rd Pigment meeting, 9–10 September 2016, Hyderabad
6. Electrosurgery in Dermatology: Gems and Pearls, ADC 2016, 13–16 October 2016, Mumbai
7. Split Ear lobe Repair, ACSI North Zone workshop, 13 November 2016, Delhi
8. Scar revision surgery, ACSI North Zone Workshop, 13 November 2016, Delhi
9. Microneedling for scars other than acne scars, DERMACON 2017, 12–15 January 2017, Science City, Kolkata
10. Panel discussion on Acne scar management, Acne Summit 2017, 19 February 2016, Sir Ganga Ram Hospital, Delhi
11. Being mindful: Living in the present, WDS-Delhi Meet, 26 February 2017, Delhi

Neetu Bhari: 7

1. Management of melanocytic nevi: Current scenario, Pediatric dermatology update, 9 October 2016, New Delhi
2. Mini-grafting-ACSI North Zone Workshop, 13 November 2016, New Delhi
3. Update on the management of onychomycosis, 5th ONYCHOCON The National Conference of Nail Society of India, 18 December 2016, Jaipur
4. Normal skin structure, CME in Dermatopathology, 18 February 2017, AIIMS, New Delhi
5. Molecular markers of immunobullous diseases, CLINICON 2017, 19 March 2017, Jaipur
6. When to suspect paraneoplastic syndrome? CLINICON 2017, 19 March 2017, Jaipur
7. Panel discussion immunobullous disease, CLINICON 2017, 19 March 2017, Jaipur

Oral papers/posters presented: 11

1. Patch and photo test in suspected chronic actinic dermatitis patients, 27th Annual Meeting of the American Contact Dermatitis Society, 3 March 2016, Washington DC, USA
2. e-poster presentation: Patch and photo patch test in suspected Chronic actinic dermatitis patients, 74th Annual Meeting of the American Academy of Dermatology, 3 July 2016, Washington DC, USA

3. Oral presentation: Coded Unani Formulations (UNIM 401 + UNIM-403) & PUVAsoL in chronic plaque psoriasis, Pso 2016, 9 July 2016, Paris, France
4. Poster presentation: Coded Unani Formulations (UNIM 401 + UNIM-403) & PUVAsoL in chronic plaque psoriasis, Pso 2016, 7 July 2016, Paris, France
5. Think of leprosy in the era of elimination, International Conference on Tropical Dermatology, 12 August 2016, Colombo, Sri Lanka
6. Leprosy in post elimination era: A retrospective analysis of clinical characteristics of the diseases, International Conference on Tropical Dermatology, 11 August 2016, Colombo, Sri Lanka
7. Treatment of trophic ulcers in leprosy with intralesional autologous platelet rich plasma, International Leprosy Conference, 19 September 2016, Beijing, China
8. Graft versus host like disease: A rare thymoma associated multiorgan autoimmune syndrome, Indian Association of Dermatologists, Venereologists & Leprologists (IADVL) Delhi State Meeting, April 2016, New Delhi
9. Graft versus host like disease: A rare thymoma associated multiorgan autoimmune syndrome, International Conference on Tropical Dermatology (ICTD) 11–14 August 2016, Colombo, Sri Lanka
10. Saddle nose, cauliflower ears, pyoderma gangrenosum like lesions with pulselessness: Relapsing polychondritis—Takayasu disease—Granulomatosis with polyangiitis overlap? DAAS SUMMIT, 1–3 July 2016, New Delhi
11. Saddle nose, cauliflower ears, pyoderma gangrenosum like lesions with pulselessness: Relapsing polychondritis—Takayasu disease—Granulomatosis with polyangiitis overlap? European Academy of Dermatology & Venerology, 28 September–2 October 2016, Vienna

RESEARCH

Funded projects

Ongoing

1. Elucidating role FoxP3 promoter DNA methylation level in active non-segmental generalized vitiligo, V.K. Sharma, DBT, 4 years, 2011–14, Rs 60 lakhs
2. Genetic analysis of psoriasis and psoriatic arthritis in Indians, V.K. Sharma, NIH, USA, 5 years, 2011–16, Rs 60 lakhs
3. Defining MiRNA signatures in vitiligo and skin pigmentation. V.K. Sharma, IADVL, 1 year, 2015–16, Rs 4.9 lakhs
4. Defining the role of genetic epigenetic and immunological components involved in the pathogenesis of alopecia areata, V.K. Sharma, ICMR, 3 years, 2015–18, Rs 45 lakhs
5. Comparison of clinical efficacy and safety of PUVAsoL and Unani formulation UNIM-004 (oral) and UNIM-005 (LA) and sunlight in treatment of vitiligo, Neena Khanna, CCRUM, Ministry of Ayush, 3 years, 2015–18, Rs 35.47 lakhs
6. Comparison of the efficacy of Rituximab infusion and Dexamethasone cyclophosphamide pulse in moderate to severe pemphigus vulgaris, Sujay Khandpur, ICMR, Rs 9.10 lakhs
7. Prospective non-randomized controlled trial to compare the efficacy of subcutaneous etanercept versus oral methotrexate in moderate to severe chronic plaque psoriasis and to correlate response with Th1, Th2, Th17 and Treg cell patterns. Sujay Khandpur, Pfizer, Rs 20.32 lakhs
8. A comparative study of Immunohistochemistry antigen mapping with immunofluorescence mapping in the diagnosis of inherited epidermolysis bullosa, G. Sethuraman, DST, 2013–16, Rs 40 lakhs
9. Efficacy and safety of non-cultured extracted follicular outer root sheath cell suspension and conventional epidermal cell suspension transplantation in stable vitiligo and correlation with constituent stem cell populations, Somesh Gupta, ICMR, First year, Rs 10.59 lakhs
10. A pilot study to find the effect of perineural injections of platelet rich plasma at multiple sites along the ulnar nerve trunk on improvement in leprosy related peripheral neuropathy, Savita Yadav, AIIMS, New Delhi, 2 years, 2015–17, Rs 3.3 lakhs

Completed

1. Elucidating role Fox3 promoter DNA methylation level in active non-segmental generalized vitiligo, V.K. Sharma, DBT, 3 years, 2011–14, Rs 60 lakhs
2. Randomized trial of systemic steroids and propranolol in Infantile hemangioma, G. Sethuraman, ICMR, 3 years, 2012–15, Rs 14 lakhs

Departmental projects

Ongoing

1. Interdisciplinary variations in the spectrum of oral mucosal lesions
2. A randomized, double-blind, placebo-controlled, split-head trial to study the effects of autologous platelet-rich plasma on hair growth and lesions T-helper and T-regulatory cells expression markers in alopecia areata.
3. Cosmetic Contact Dermatitis
4. Can PRP improve outcome of NCES in Vitiligo?
5. Rituximab in Pemphigus—Long term outcome?
6. Genetic Study of Psoriasis
7. Micro RNA in Vitiligo
8. Role of platelet rich plasma in leprosy induced ulnar neuropathy
9. Study of epidemiological factors contributing to treatment failure in patients with dermatophytic infection attending tertiary care hospital in Northern India
10. Evaluation of patch test reaction time with varying concentrations of parthenium acetone extract in patients of parthenium dermatitis
11. Evaluation of effectiveness of combination of isotretinoin with terbinafine and terbinafine alone in the treatment of recurrent Dermatophytosis: A Randomised Controlled Trial
12. Patch testing with mercapto mix with a high content of 2-mercaptobenzothiazole
13. Patch testing with a Methylchloroisothiazoline/methylisothiazolinone mix with a higher concentration of methylisothiazoline
14. A study to assign clinical meaningfulness to VIS-22 scores
15. Study of stability and spontaneous repigmentation in vitiligo
16. Dexamethasone–Cyclophosphamide pulse therapy in pemphigus
17. A cross-sectional study to assess the correlation between morphology and extent of pigmentary changes and the degree of cutaneous sclerosis and major organ involvement in systemic sclerosis
18. A comparative, observational study to evaluate the effect of narrow band UV-B therapy in patients with progressive non-segmental vitiligo versus non-progressive non-segmental vitiligo
19. Utility of hand-held NB-UVB device in treatment of localized vitiligo
20. Assessment of liver fibrosis by ultrasound elastography in patients of psoriasis and Reiter's disease on long term methotrexate therapy
21. An Investigator Initiated Trial to assess the efficacy and safety of adalimumab biosimilar (Exemptia; ZRC-3197) in patients of psoriatic arthritis with concomitant moderate to severe chronic plaque psoriasis: An open labelled prospective pilot case series
22. Role of gamma-delta T-cells in pemphigus vulgaris
23. A study of histopathological features of androgenetic alopecia and alopecia areata on horizontal sections of scalp biopsies
24. Clinico-histopathological study of childhood-onset photodermatoses
25. Study of T cells and its scavenger receptor in the pathogenesis of pemphigus vulgaris
26. Autologous Non-cultured Dermal Cell Suspension Transplantation for facial volume loss
27. A split face randomized control study comparing the efficacy and safety of 1064 nm Q-switched Nd-YAG laser in the treatment of melasma compared to topical modified Kligman's formulation
28. Non cultured epidermal cell suspension (NCES) for the treatment of stable vitiligo; can suspension in PRP improve pigmentation: A single blinded randomized control study
29. A study of spontaneous repigmentation and disease quiescence (stability) in Vitiligo
30. A comparative observational study to evaluate the effect of narrow band UV-B therapy in patients with progressive non-segmental vitiligo V/S non-progressive non-segmental vitiligo
31. Evaluation of efficacy of isotretinoin and terbinafine combination vs terbinafine alone in the treatment of recurrent dermatophytosis: A randomized controlled prospective trial
32. To find the effect of perineural PRP injections on leprosy related peripheral neuropathy
33. To compare the efficacy of microneedling and fractional ablative CO2 resurfacing in treatment of acne scars

Completed

1. Elucidating Role of Regulatory T cells and T cell Immunoglobulin and mucin containing domain in active generalized vitiligo
2. Skin Typing—Modification of Fitzparick Scale for Indian skin
3. Study of Hyperpigmentation: Role of patch testing
4. Study of Contact Sensitizers in Patients with Contact Dermatitis due to Cosmetics at a Tertiary Care Centre in India
5. A comparative study of efficacy and composition of various cell populations of extracted hair follicle outer root sheath cell suspension prepared using a single enzyme (trypsin) and multiple enzymes (trypsin, collagenase and dispase) for transplantation in vitiligo

Collaborative projects

Ongoing

1. Immuno-genetics mechanisms in epilepsy patients taking anti-epileptic medications (Neurology)
2. A study to identify the genetic basis of Stevens-Johnson syndrome (SJS) (Anatomy)
3. To evaluate the role of CD4 TCR δ in leprosy patients (Biochemistry)
4. Improvement on levothyroxine replacement of clinical, biochemical, hormonal and insulin sensitivity parameters in women with polycystic ovary syndrome (PCOS) presenting with subclinical hypothyroidism (Endocrinology)
5. Interdisciplinary variations in the spectrum of oral mucosal lesions (Otorhinolaryngology, Centre for Dental education and Research)

Completed

1. Elucidating Role of Regulatory T Cells and T-cell Immunoglobulin and mucin containing domain in active generalized vitiligo

PUBLICATIONS

Journals: 83

Abstracts: 6

Chapters in books: 9

Books: 1

PATIENT CARE

The department has a 29 bedded ward including two isolation rooms. The total number of admissions from April 2016 to March 2017 was 763 and total short admission for pulse therapy was 2812. The OPD caters to both general dermatology patients (in first half) and special clinics (STD, leprosy, dermatosurgery, Pigmentation, Allergy) and lasers (Diode, carbon dioxide, NdYAG laser, Pulse Dye laser) in afternoon Phototherapy and side lab procedures are conducted in both morning and afternoon. Total number of cases seen in morning OPD in the year was 84464, in afternoon clinics was 14772 and OT minor procedure was 8568. Sexually Transmitted Diseases (STD) clinic started on Wednesday afternoons under Prof. Kaushal K Verma and Dr. Somesh Gupta. One Senior Resident is visiting Ballabgarh for skin OPD once a week.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor V.K. Sharma was Associate Editor, British Journal of Dermatology; **Member** Editorial Board, Dermatitis, Journal American Contact Dermatitis Society; Vice President, International Society of Dermatology; International Member of Board of Directors, American Academy of Dermatology; Elected Assistant General Secretary, International Society of Dermatology 2017-2021; Attended the meeting—AAD, Summer Meeting and Board of Directors Meeting, 28–31 July 2016, Hynes Convention Center, Boston, USA; Chaired Scientific Plenary Session 1. Lichen Planus Pigmentosus: What have we achieved in 40 years? 2. Overview of Tropical Dermatology in Asia, International Conference on Tropical Dermatology 2016, 11–14 August 2016, The Kings Bury, Colombo, Colombo, Sri Lanka; Invited Faculty for Chairing a session (LPP in India), 45th National Conference IADVL (Dermacon 2017), 12–15 January 2017, Science City, Kolkata, Kolkata, West Bengal.

Professor Neena Khanna delivered the Ambady oration awarded by Indian Association of Dermatol Venereol Leprol, for original work, 2017; Member of IADVL Text Book Advisory Committee.

Professor Kaushal K. Verma was Elected Regional Chair, International Union against Sexually Transmitted Infections, Asia Pacific (IUSTI-AP) at an Asia Pacific Executive Committee & General Assembly held in Dec 2016 in Japan; Awarded Prof. L.K. Bhutani Award for Excellence in Teaching and Research in Dermatology for the year 2016 by the Indian Association of Dermatologists, Venereologists and Leprologists; Examiner for MD (Dermatology, Ven. & Leprology) Examination at SMS Medical College Jaipur; Participated in a week long Annual Medical / Health Camp at Leh, Ladakh to attend to serious and chronic patients at Leh; Expert for selection of Assistant Professors in the Department of Dermatology & STD

at North Eastern Indira Gandhi Institute of Health & Medical Sciences (NEIGRIHMS), Shillong; Participated as an Expert in Health Show on TV on a Public Awareness and Education program at Doordarshan, Prasar Bharati; Expert for selection of Faculty for Dermatology at AIIMS Jodhpur; Chaired a symposium on “Leishmaniasis” at International Conference on Tropical Dermatology 2016, Colombo, Sri Lanka; Central Council Member Delhi; Participated in Central Council Meeting of Indian Association of Dermatologists, Venereologists & Leprologists (IADVL), at Bhubaneswar; Chaired a scientific session on 5th Annual Conference of Nail Society of India, Jaipur (17-18 December 2016).

Professor M. Ramam was Visiting Professor, Department of Dermatology, University of California, San Francisco, April 2016; Editor-in-Chief Indian Journal of Dermatology, Venereology and Leprology from January 2014 to January 2017.

Professor Sujay Khandpur was Editor-in-Chief, Indian Journal of Dermatopathology and Diagnostic Dermatology; Coordinator, Special Interest Group on Dermatopathology of Indian Association of Dermatologists, Venereologists & Leprologists.

Professor G. Sethuraman was Recipient of 2016 Dermatologist of the Developing Countries Award by the Society for Pediatric Dermatology, USA (Minneapolis, July 2016); AIIMS Research Excellence Award 2016 Certificate of commendation for the following paper: Sethuraman G, Marwaha RK, Apoorva C, Vamsi KY, Lakshmy R, Thulkar S, Sharma VK. Vitamin D: A new promising therapy for congenital Ichthyosis. *Pediatrics*. 2016; 137: 1-5.

Professor Somesh Gupta was selected as a Member of International Traveling Mentorship Program of American Society for Dermatologic Surgery (ASDS); Regional Director of International Union against Sexually Transmitted Infections, Asia-Pacific (IUSTI-AP); Joint Editor of Journal, Sexual Health (Published from Australia-CSIRO); Chairman of Academy of Association of Cutaneous Surgeons (I); Chairman, Finance Committee, Indian Association of Dermatologists, Venereologists and Leprologists (IADVL).

Dr Kanika Sahni was Assistant editor of Indian Journal of Dermatology, Venereology and Leprology; Reviewer for IJDVL, JCAS, IJD, BJD, CED.

Dr Savita Yadav was Assistant editor of Indian Journal of Dermatology, Venereology and Leprology; Organizing secretary for the ACSI North Zone Workshop held in association with organising committee WCOCD 2017 at Eros Hotel, Nehru Place, Delhi on 13th November 2016; Got Imrich Sarkany Non-European Memorial Scholarship (ISNEMS), at EADV 2016, held at Vienna on 27th September to 2nd October 2016; Member of IADVL—SIG Dermatosurgery for 2017-2019; Reviewer for IJDVL, JOCD, IJD, IDOJ, BJD, CED, JAPMA, JEADV; Chairperson—Focus Session II on Vitiligo, ACSICON 2016, 21–23 April 2016, Karnataka State Open University, Mukthagangotri, Mahabaleshwar.

Dr Neetu Bhari received Imirich Sakarany Scholarship for EADV Spring Symposium, Greece, 19 May 2016.

VISITING SCIENTISTS

1. April 4, 2016: Dr Trilokraj Tejasvi, Assistant Professor, Department of Dermatology, University of Michigan, on “Teledermatology and dermoscopy”.
2. August 20, 2016: Dr. Marti Kassir from Dallas, Texas, lectured on Energy based devices.

9.10. Emergency Medicine

Professor and Head
Praveen Aggarwal

Professor
L.R. Murmu

Assistant Professors

Mohammed Tahir Ansari (up to October 2016)
Meera Ekka
Prakash Ranjan Mishra (Contract)

Nayer Jamshed
Akshay Kumar
Ritin Mohindra (Contract)

HIGHLIGHTS

The Emergency Medicine Department has been in the forefront of providing round-the-clock, holistic, timely and world-standard emergency care to patients with different types of medical, pediatric and non-traumatic surgical emergencies. More than 1,62,000 patients visited the department in the year 2016-17. The department has been providing training to its postgraduates in the specialty of Emergency Medicine since 2012. The departmental faculty is also involved in teaching and training of postgraduates from other departments, undergraduate students, nursing students and paramedics in the field of emergency medicine including life support courses. The department has actively participated in providing training to the existing and future faculty from other colleges and hospitals in the specialty of Emergency Medicine. In order to smoothen the flow of patients, the department has improved the triage procedure of the patients. It is involved in developing guidelines for Emergency Ambulance Services for the Ministry of Health and Family Welfare. The department is actively involved in framing core content of National Emergency Life Support (NELS) Course which is being conducted by the Directorate General of Health Services, Govt. of India. Under the AIIMS Quality Improvement Programme, Emergency Medicine Department has started several projects to further improve patient care and outcome. This has also resulted in shorter stay of patients. At international level, the department has been actively collaborating with several universities from the USA with the aim of training doctors, nurses and paramedics. Some of these Universities include University of South Florida and SUNY Downstate New York.

EDUCATION

The faculty organized life support courses for undergraduates and postgraduates posted in the department. It runs a schedule of academic activities for the residents of Emergency Medicine (seminars, journal clubs, case discussions) once a day for 6 hours. Education and skills are imparted to residents on the use of ultrasound in emergency care of patients. Simulation-based teaching and training is imparted to the residents. In addition, the department faculty was involved in didactic teaching of undergraduates, postgraduates and nursing students through lectures and seminars.

The department imparted short term training to seven undergraduate students from other countries (Australia, USA, Sudan).

CONTINUING MEDICAL EDUCATION

Conferences/seminars/workshops organized

1. 2nd National Emergency Medicine Board Review of India Course (NEMBRIC), Delhi, 14–18 February 2017
2. 1st Delhi Undergraduate Emergency Medicine Quiz (EM-iQ), 15 January 2017

Lectures delivered

Praveen Aggarwal: 8

Meera Ekka: 1

Akshay Kumar: 9

Prakash Ranjan Mishra: 8

Praveen Aggarwal: 8

1. Approach to Acutely Poisoned Patients, 12th Indo-US World Congress of Emergency Medicine 2016, 21–23 October 2016, St. John's Medical College, Bangalore
2. Poisoning by Prescription Drugs, 12th Indo-US World Congress of Emergency Medicine 2016, 21–23 October 2016, St. John's Medical College, Bangalore
3. Acute Poisoning, Emergency Nursing Conference, 12th Indo-US World Congress of Emergency Medicine 2016, 22 October, 2016, St. John's Medical College, Bangalore
4. Neurological Emergencies, National Emergency Life Support Course, 11–15 January 2017, Ram Manohar Lohia Hospital, New Delhi
5. Acute Fever in Adults and Children, National Emergency Life Support Course, 11–15 January 2017, Ram Manohar Lohia Hospital, New Delhi
6. Environmental Emergencies, National Emergency Life Support, 11–15 January 2017, Ram Manohar Lohia Hospital, New Delhi
7. Acute Toxicology and Pharmacology, 2nd National Emergency Medicine Board Review of India Course (NEMBRIC), 14–18 February 2017, National Board of Examinations, New Delhi
8. Injuries to Bones and Joints, 2nd National Emergency Medicine Board Review of India Course (NEMBRIC), 14–18 February 2017, National Board of Examinations, New Delhi

Meera Ekka: 1

1. EtCO₂ for non-Intubated patients: A must in ED, Cost-Effective Use of Technology in E-Healthcare (CEUTEH-2016), 9 September 2016, All India Institute of Medical Sciences, New Delhi

Akshay Kumar: 9

1. Altered Sensorium in a Surgical Patient, World Trauma Conference, 2016, 16 August 2016, All India Institute of Medical Sciences, New Delhi
2. Communication in the High-stake Environment, Cost Effective Use of Technology in E-Healthcare (CEUTEH) 2016, 9 September 2016, All India Institute of Medical Sciences, New Delhi
3. Paediatric Resuscitation & Adult Resuscitation, Capacity Building Programme for Doctors of State of Haryana, 16 May 2016, All India Institute of Medical Sciences, New Delhi
4. Emergency approach to critically ill patients, Capacity Building Programme for Doctors of State of Haryana, 20 July and 23 August 2016, All India Institute of Medical Sciences, New Delhi
5. Emergency Approach Scenarios, Triage, BLS, Advanced Cardiac Life Support (ACLS), Workstations, Emergency Life Support Course (ELS), 10 courses in 2016–17, All India Institute of Medical Sciences, New Delhi
6. Perioperative Management of Diabetes, AIIMS Critical Care Course (ACCC), 25–26 November 2016, JPNATC, All India Institute of Medical Sciences, New Delhi
7. FAST Scan in Trauma, AIIMS Ultrasound Trauma Life Support (AUTLS), 4 March 2017, JPNATC, All India Institute of Medical Sciences, New Delhi
8. Airway Pathology by Ultrasound—Emergency Sonography (EM-SONO), 6 March 2017, JPNATC, All India Institute of Medical Sciences, New Delhi
9. Compression, Airway and Breathing, Capacity Building Programme for Doctors of State of Rajasthan, 8 March 2017, JPNATC, All India Institute of Medical Sciences, New Delhi

Prakash Ranjan Mishra: 8

1. Skill station instructor, EM-SONO, 27–28 April 2016, JPNATC, AIIMS, New Delhi
2. Skill station instructor during basic trauma life support course and Interactive videos during AUTLS course, Capacity building program for trauma care system development for the state of Haryana, 2–6 May 2016, JPNATC, AIIMS, New Delhi
3. (i) Skill station instructor during basic trauma life support course (ii) Concepts on head-to-toes: Secondary management and monitoring during AUTLS course, Capacity building program for trauma care system development for the state of Haryana, 17–19 May 2016, JPNATC, AIIMS, New Delhi
4. e-FAST and IVC assessment, AIIMS ultrasound trauma life support course, 12 June 2016, JPNATC, AIIMS, New Delhi
5. Breathing assessment—AUTLS (as a part of World trauma Congress-WTC), 17 August 2016, JPNATC, AIIMS, New Delhi
6. Shock and Skill station instructor during AUTLS course, Advance AUTLS (as a part of pre-conference workshop during Cost Effective Use of Technology in E-Healthcare (CEUTEH-2016), 5–6 September 2016, JPNATC, AIIMS, New Delhi
7. Medical Documentation in ED, Issues and Hurdles, Cost Effective Use of Technology in E-Healthcare (CEUTEH-2016), 10 September 2016, AIIMS, New Delhi
8. (i) Breathing assessment (ii) Skill Station instructor, AUTLS, 1 December 2016, JPNATC, AIIMS, New Delhi

Oral papers/posters presented: 1

1. Roshan, Aggarwal P. CPC—Left atrial myxoma with aortic and bilateral femoral embolism causing bilateral lower limb ischemia, 12th Indo-US World Congress of Emergency Medicine 2016, 21–23 October 2016, St. John's Medical College, Bangalore (**Won First Prize in CPC competition**)

RESEARCH**Funded projects****Ongoing**

1. Role of Newer Cardiac Markers in Risk Stratification of Patients with Acute Coronary Syndrome (ACS) in the Emergency Department, Praveen Aggarwal, ICMR, 2 years, January 2015 to April 2017, Rs. 35.26 lakhs

Departmental projects**Ongoing**

1. Prognostic significance of plasma neutrophil gelatinase associated Lipocalin (NGAL) in acute heart failure
2. Utility of urinary toxicology screen in patients with undifferentiated altered level of consciousness presenting to the Emergency Department
3. Characteristics of unscheduled emergency department revisits within 72 hours of discharge

4. Perception of workplace violence in the Emergency Department
5. Accuracy of urinary Multistix 10 SG leukocyte esterase reagent strip test in making the diagnosis of spontaneous bacterial peritonitis.
6. Serum lactate and shock index as clinical metrics in predicting adverse outcomes in patient with STEMI
7. To study the risk of major adverse cardiac events within 30 days of emergency department presentation in patients with acute onset chest pain categorized as low risk group based on HEART pathway—Profile of acute poisoning cases in ED
8. USG guided Ryles tube insertion and confirmation
9. Role of Point of care Ultrasound in patients with cardiac arrest in Emergency Department
10. To study the presentation and outcome of complications related to cirrhosis in ED
11. Altered Sensorium in Emergency Department of AIIMS: Causes, Management & Outcomes

Completed

1. Clinico-laboratory and microbiological profile in severe sepsis and septic shock in emergency department
2. Point of care ultrasound in cervical spine injuries
3. Role of wide awake local anaesthesia in Emergency Department
4. Role of serum neutrophil gelatinase associated lipocalin as prognostic marker of severe pancreatitis

Collaborative projects

Completed

1. Role of Cardiac Bio Markers in Risk Stratification of Patients with Acute Coronary Syndrome (ACS) in the Emergency Department (Cardiology)

PUBLICATIONS

Journals: 7

PATIENT CARE

Patient attendance in the Department (2016-17): 1,62,523

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor Praveen Aggarwal continues to be Chief co-Editor of Journal of Emergencies, Trauma and Shock, an international journal indexed in PubMed. He also continues to be a member of Signal Review Panel of the Central Drugs Standard Control Organization and the Indian Pharmacopoeia Commission for the Pharmacovigilance Programme of India, Member of Scientific Body, Indian Pharmacopoeia Commission, Ministry of Health & Family Welfare, Government of India and the Dean of the Academic College of Emergency Experts in India. He is also continuing to be a Member of Panel of Experts constituted by the Ministry of Health & Family Welfare (Emergency Medical Relief Division) to develop curriculum for advanced National Emergency Life Support Course for Doctors. He is also a Faculty for this course. In order to reduce overcrowding and better availability of admission beds, he in collaboration with other faculty from the department as well as from the Hospital Administration has given a proposal for a separate Emergency Block which is under active consideration in the Ministry of Finance.

Dr Jamshed Nayer was involved in improvement of Triage and Screening area of the department. He is actively involved in planning for preventive emergency medicine. He has been instrumental in furthering simulation-based training of residents. He had received travel grants from CRDF Global and U.S. Department of States—Chemical Security Protection to attend MENATOX-2017—an international conference on toxicology held at Muscat and Sohar, Oman.

Dr Meera Ekka received travel grants from CRDF Global and U.S. Department of States—Chemical Security Protection to attend MENATOX-2017—an international conference on toxicology held at Muscat and Sohar, Oman. She is pursuing a three months coaching programme to become a mentor for Quality Improvement in Health Care (sponsored by Institute for Healthcare Improvement).

Dr Akshay Kumar was selected as an Instructor in Advanced Trauma Life Support Course. He conceptualized and implemented Nurses Education Programme in the department. He has been actively pursuing training of residents and undergraduates in emergency care and has developed Emergency Life Support Courses for nurses and residents. He is also involved in quality improvement projects.

Dr Prakash Ranjan Mishra and **Dr Ritin Mohindra** were involved with planning and implementation of quality improvement programmes.

9.11. Endocrinology and Metabolism

Professor and Head

Nikhil Tandon

Professors

Nandita Gupta
Rajesh Khadgawat

Ravinder Goswami
Viveka P. Jyotsna

Associate Professor

Mohd Ashraf Ganie
(up to 20.9.2016)

Assistant Professors

Yashdeep Gupta

(from 1.2.2017)

Nishant Raizada

HIGHLIGHTS

The Endocrinology and Metabolism Department is engaged in many academic activities such as Endocrine-Pathology Conference every alternate week, Endocrinology-Surgery-Nuclear Medicine (Wednesday) and Endocrinology-Radio diagnosis (Friday) meet every week. There are Seminar (Wednesday), Journal Club (Friday) and Clinical class (Thursday) every week. During these academic events the topics of clinical importance and recent high impact articles are discussed. The department runs daily outpatient facilities, has state-of-the-art laboratory services for hormone assays, metabolic studies and bone density measurement.

EDUCATION

Undergraduate, Postgraduate, Paramedical Training

The department was actively involved in teaching undergraduate medical students and nursing students. Postgraduate students (MD) from Internal Medicine and Geriatric Medicine come for one and two month postings to the department.

Long and Short Term Training

- Three candidates joined the DM course (2 General and 1 Sponsored).
- Two candidates permitted for short term training.
- One candidate permitted for long term training.

CMEs/Workshops/Symposia/National and International Conferences

Lectures delivered

Nikhil Tandon: 18

Ravinder Goswami: 4

Rajesh Khadgawat: 6

Mohd Ashraf Ganie: 4

Yashdeep Gupta: 5

Nikhil Tandon: 17

1. Access and quality of care of diabetes (at secondary and tertiary level of health care), World Health Day, 2016: Beat Diabetes, 7 April 2016, New Delhi
2. Prevent, treat, beat diabetes, WHO Regional Office for South East Asia, 7 April 2016, WHO, New Delhi
3. Diabetes—Public Lecture, 7 April 2016, AIIMS, New Delhi
4. New avenues in biomedical research: Endocrinology, Brainstorming Session on Healthcare Biotechnology, 18 June 2016, Gujarat State Biotechnology Mission, Gandhinagar
5. Nutrition and Diabetes, 6th International Nutrition Seminar, 25 July 2016, KLE University Research Foundation, Belgaum
6. Improving quality of diabetes care at clinic level, Diabetes Academia 2016 (Theme: Contemporary Advances), 2–3 July 2016, Nagpur
7. Clinical based diabetes care: Strategies for quality improvement, Dr. Mohan's International Diabetes Update 2016, 31 July 2016, Guindy, Chennai
8. Vitamin D: How much is too much? International Osteoporosis Foundation (IOF) Regionals, 6th Asia Pacific Osteoporosis Meeting, 4–6 November 2016, Singapore

9. Nutrition and Frailty in the Asian Context, International Osteoporosis Foundation (IOF) Regionals, 6th Asia Pacific Osteoporosis Meeting, 4–6 November 2016, Singapore
10. Multicomponent quality improvement strategy to improve diabetes care: Are these possible at every level of health care? Workshop on Obesity and Diabetes in India: Public Health Challenges, 12 November 2016, Delhi
11. Longitudinal cohorts and understanding nutrition, Kamala Puri Sabharwal Memorial Lecture, 10 November 2016, Lady Irwin College, New Delhi
12. Metabolism of sugar, variation and health outcomes, International Sugar Symposium: Is sugar the new tobacco? 11 November 2016, India Habitat Centre, New Delhi
13. Technology and Task Shifting: Improving Quality of Diabetes Care, International Symposium on Diabetes (World India Diabetes Foundation), 7–8 January 2017, Mumbai
14. Longitudinal cohorts and understanding diabetes risk and causation, Diabetes India, 23–26 February 2017, New Delhi
15. Diabetes in Youth—A Status Report from India, Diabetes India, 23–26 February 2017, New Delhi
16. Thyroid Associated Ophthalmopathy: Meet the Professor, Indian Thyroid Society Conference, 24–26 February 2017, India Habitat Centre, New Delhi
17. Diabetes of the Young—An Indian perspective, International Diabetes Summit, 10, 12 March 2017, Pune
18. Nutrition and diabetes, Public Health Nutrition Training Workshop, 26 February 2017, PHFI, New Delhi

Ravinder Goswami: 4

1. Diseases of National Importance: Diabetes, MSc, PhD Integrated Program on Molecular Medicine, 23 February 2017, Center for Molecular Medicine, Jawaharlal Nehru University, New Delhi
2. Unique aspects of the Graves' Disease in India, Indian Thyroid Society Conference, 24–26 February 2017, India Habitat Centre, New Delhi
3. Vitamin D Deficiency: Myth or Reality, UGC-SAP Symposium, 18 March 2017, University of Delhi South Campus, New Delhi
4. Hypoparathyroidism in India, UGC-SAP Symposium, 18 March 2017, University of Delhi South Campus, New Delhi

Rajesh Khadgawat: 6

1. Management of thyroid disorders during pregnancy, Thyroid Symposium, 17 April 2016, Gandhi Medical College, Bhopal
2. Use of Bisphosphonates and Teriparatide in Osteoporosis, “PGI-NAMS CME on Osteoporosis”, 17 April 2016, PGI Chandigarh, Chandigarh
3. Interpretation of growth charts in evaluation of a case of short stature, Growth Hormone Update, 24 January 2017, NRS Medical College, Kolkata, Kolkata
4. Adult growth hormone deficiency, Growth Hormone Update, 24 January 2017, NRS Medical College, Kolkata, Kolkata
5. Genetics of GH deficiency, Symposium on Genomics of Hormone and Metabolic Disorders, 4–5 February 2017, Metabolism and Molecular Research Society, Jaipur
6. Congenital Hypothyroidism, Thyroid Update, 4 March 2017, All India Institute of Medical Sciences, Jodhpur, Jodhpur

Mohd Ashraf Ganie: 4

1. Epidemic of Lifestyle disease, Central University, 26 April 2016, Nowgam, Srinagar
2. Grant Application Basics and Research Funding, Research Ethics Workshop, 9–10 May 2016, SKIMS, Srinagar
3. PCOS and Glucose intolerance, Delhi, Chapter of RSSDI, 9 October 2016, New Delhi
4. Thyroid disorders and Polycystic Ovarian Syndrome: An emerging relationship, ITSCON 2017, 24–26 February 2017, India Habitat Center, New Delhi

Yashdeep Gupta: 4

1. Gestational diabetes mellitus—Current guidelines from a South Asian perspective, Annual academic sessions of Endocrine society of Sri Lanka, 11–14 August 2016, Colombo, Sri Lanka
2. Approach to patient with thyrotoxicosis, Annual academic sessions of Northern Thyroid Society, 21 August 2016, Haridwar
3. Does treatment effect outcomes of GDM consequences? 21st Annual National Conference of North Eastern Diabetes Society, NEDSCON 2016, 4–6 November 2016, Hotel Radisson Blue, Guwahati

4. Series of 4 lectures: Certificate course in evidence based management of diabetic retinopathy, cycle 2, PHFI, November 2016–January 2017, AIIMS, Delhi
5. Series of 4 lectures: Certificate course in evidence based management of thyroid disorders, cycle 2, PHFI, January–March 2017, AIIMS, Delhi

RESEARCH

Funded projects

Ongoing

1. Registry of people with diabetes in India with young age at the onset phase II, Nikhil Tandon, ICMR, 5 years, 2012–17, Rs 93.9 lakhs
2. Solan Surveillance Study, Nikhil Tandon, ICMR, 2 years, 2014–17, Rs 48.92 lakhs
3. A trial comparing cardiovascular safety of insulin degludec versus glargine in subjects with Type-2 diabetes at high risk of cardiovascular events, Nikhil Tandon, Nova Nordisk India Pvt. Ltd., 4 years, 2014–18, Rs 7.69 lakhs
4. Integrated care for co-morbid diabetes and depression, Nikhil Tandon, National Institute of Mental Health, NIH, USA, 5 years, 2014–19, Rs 88.22 lakhs
5. A lifestyle intervention program for the prevention of Type-2 diabetes mellitus among South Asian women with gestational diabetes mellitus, Nikhil Tandon, ICMR, 5 years, 2015–20, Rs 72.77 lakhs
6. Prevention of Blindness due to Diabetes Retinopathy (DR) among patients with Type-1 Diabetes in India, Nikhil Tandon, PHFI, 1½ years, 2016–17, Rs 52.16 lakhs
7. Mobile Health Technology for Prevention of Type-2 Diabetes-m Diab, Nikhil Tandon, BIRAC, 2 years, 2015–17, Rs 42 lakhs
8. Harmonization of existing registries of diabetes in youth: A US-India Collaborative Research Partnership, Nikhil Tandon, ICMR, 2 years, 2016–18, Rs 40.21 lakhs
9. ICMR-India Diabetes INDIAB Study Phase-II Rest of India (Excluding North East), Nikhil Tandon, ICMR, 1 year, 2017–18, Rs 49.58 lakhs
10. CARRS Translation Trial: Implementing Quality Improvement Strategies in Diabetes, Nikhil Tandon, ICMR-Emory University, 5 years, 2014–19, US\$ 17.55 lakhs
11. Prevalence of Non-Alcoholic Fatty Liver Disease (NAFLD) and its association with cardio-metabolic disease risk factors in North India, Nikhil Tandon, ICMR, 3 years, 2017–20, Rs 172.53 lakhs
12. Vitamin D and calcium supplements for improvement in skeletal muscle strength in young Asian India males: RCT, Ravinder Goswami, ICMR, 2 years, 2015–17, Rs 51.04 lakhs
13. Functional significance of calcium sensing receptor autoantibodies in patients with idiopathic hypoparathyroidism, Ravinder Goswami, DBT, 3 years, 2016–19, Rs 44 lakhs
14. A Study of Clinical, Epidemiological and Environmental Risk Factors Associated with Fragility Hip Fractures in Elderly Asian Indians, Aged ≥60 Years, Rajesh Khadgawat, ICMR, 3 years, 2014–16, Rs 33.2 lakhs
15. Addressing concerns of iodine supplementation with regard to aggravation of autoimmune thyroiditis and thyroid dysfunction in Indian school children: Three decades following Universal Salt Iodization (USI), Rajesh Khadgawat, DRDO, Ministry of Defence, 3 years, 2014–17, Rs 42 lakhs
16. Efficacy and safety of Liraglutide in combination with metformin versus metformin monotherapy on glycemic control in children and adolescents with type 2 diabetes: A 26 weeks double blind randomized, parallel group, placebo controlled multi-centre trial followed by a 26-week open label extension, Rajesh Khadgawat, Novo Nordisk, 5 years, 2014–19, Rs 30 lakhs.
17. A randomised, multinational, active-controlled (open-labelled), dose finding (double-blinded), parallel group trial investigating efficacy and safety of once-weekly NNC0195-0092 treatment compared to daily growth hormone treatment in growth hormone treatment naïve pre-pubertal children with growth hormone deficiency, Rajesh Khadgawat, Novo Nordisk, 3 years, 2017–20, Rs 30 lakhs
18. Development of a standardized formulation of Trigonellafoenum-graecum seeds for preventing or delaying the development of type-2 diabetes in subjects with pre-diabetes, Rajesh Khadgawat, ICMR, 5 years, 2017–21, Rs 35 lakhs
19. A Phase II trial to assess the efficacy and safety of Pasireotides. c. alone or in combination with cabergoline in patients with Cushing's disease, Viveka P. Jyotsna, Novartis, 6 years, 2015–21, Rs 10 lakhs
20. A Phase III, multi-center, double-blind, randomized withdrawal study of LCI699 following a 24 week, single-arm, open-label dose titration and treatment period to evaluate the safety and efficacy of LCI699 for the treatment of patients with Cushing's disease, Viveka P. Jyotsna, Novartis, 5 years, 2016–21, Rs 29.53 lakhs

21. Prevalence of vitamin B12 deficiency among Indian women with polycystic ovary syndrome (PCOS) and the impact of vitamin B12 supplementation on the efficacy of conventional drugs in the management of the conventional drugs in the management of women with PCOS, Mohd Ashraf Ganie, DBT, 3 years, 2014–17, Rs 99.69 lakhs
22. Impact of Genetic polymorphism of ACE NF κ B IL-6 and TNF α on ventricular function and effect of spironolactone therapy on ventricular function in women with polycystic ovary syndrome (PCOS), Mohd Ashraf Ganie, DST, 3 years, 2014–17, Rs 16 lakhs
23. Trial ID: EX1250-4080, A trial comparing cardiovascular safety of insulin degludec versus insulin glargine in subjects with type 2 diabetes at high risk of cardiovascular events. Multicenter trial SUSTAIN Trial sponsored by Novo Nordisk, Mohd Ashraf Ganie, Novo Nordisk, 5 years, 2013–18, Rs 40 lakhs
24. Efficacy and safety of semaglutide versus dulaglutide as add-on to metformin in subjects with type 2 diabetes (SUSTAIN 7), Yashdeep Gupta, Novo Nordisk, 2 years, 2016–17, Rs 3 lakhs
25. A 38 week trial comparing effect and safety of insulin degludec/insulin as part vs insulin glargine plus insulin as part in subjects with type 2 diabetes treated with basal insulin with or without oral antidiabetic treatment in need of treatment intensification, Yashdeep Gupta, Novo Nordisk, 2 years, 2016–17, Rs 8 lakhs
26. A pilot multicentre open label parallel arm RCT evaluating whether yoga can delay initiation of insulin therapy in patients with type 2 diabetes mellitus with suboptimal glycemic control on near maximal oral drugs and/or who may require insulin therapy in near future, Yashdeep Gupta, ICMR, 3 years, 2017–20, Rs 75 lakhs

Completed

1. Global health activities in developing countries to combat non-communicable chronic cardiovascular and pulmonary disease (CVPD)—Centre of Excellence (COE), Nikhil Tandon, National Institute of Health, USA, 5 years, 2011–16, Rs 41.77 lakhs
2. Glue grant scheme childhood obesity: Inflammatory markers, gene variation and epigenetics, An association study in urban and rural areas of North India, Nikhil Tandon, DBT, 5 years, 2011–16, Rs 60.91 lakhs
3. A randomized, double-blind, multicenter, phase III study to evaluate the efficacy and safety of pasireotide LAR in patient with Cushing's disease, Nikhil Tandon, Novartis India, 2 years, 2014–16, Rs 11.26 lakhs
4. A Study of Clinical, Epidemiological and Environmental Risk Factors Associated with Fragility Hip Fractures in Elderly Asian Indians, Aged ≥ 60 years, Rajesh Khadgawat, ICMR, 3 years, 2014–16, Rs 33.2 lakhs
5. To study the variability in content strength of commercially available cholecalciferol preparations in India, Rajesh Khadgawat, Indian Society of Bone & Mineral Research (ISBMR), 1 year, 2014–16, Rs 2.5 lakhs
6. Disorder of sexual differentiation, clinical, social and psychological implications, Viveka P. Jyotsna, ICMR, 3 years, 2014–17, Rs 39.86 lakhs
7. To study the gene mutations in the patients with 46, XY DSD due to Gonadal Dysgenesis/Agenesis, Viveka P. Jyotsna, DBT, 3 years, 2014–17, Rs 15 lakhs
8. Role of inflammation in Indian women with polycystic ovary syndrome (PCOS) and its modulation by dietary factors. Sponsored by DBT India, Mohd Ashraf Ganie, DBT, 3 years, 2013–16, Rs 56.87 lakhs
9. Health survey of tribal population in Kashmir valley with special reference to magnitude and risk factors of non-communicable disease: A collaborative cross sectional study, Mohd Ashraf Ganie, DST, 3 years, 2013–16, Rs 172.86 lakhs
10. Quantitation and Comparative Evaluation of Insulin resistance, Proinflammatory and Procoagulant Markers in Drug Naive versus Oral Contraceptive Pills (OCP's) Treated PCOS Women, Mohd Ashraf Ganie, DST, 3 years, 2013–16, Rs 18 lakhs
11. Evaluation of genetic variants of ICAM-1, TNF- α , MCP-1, and PAI-1 gene in Kashmiri polycystic ovary syndrome (PCOS) women and Comparative expression analysis of these genes in drug naive versus oral contraceptive pills (OCP's) treated PCOS women, Mohd Ashraf Ganie, DST, 3 years, 2013–2016, Rs 15 lakhs
12. Optimal Vitamin D Supplementation strategies for vitamin D deficient Indian children, Mohd Ashraf Ganie, Endocrine and Diabetic Forum, 2 years, 2015–16, Rs 36 lakhs

Departmental projects

Ongoing

1. To study the distribution of glucose tolerance among women with previous history of Gestational Diabetes Mellitus and their spouses
2. Bone Health in patients with Cushing's syndrome
3. An open label 3 arm Randomised Control Trial to evaluate the effect of different modalities of lifestyle intervention (videos educating on lifestyle modification, yoga and standard care) on HbA1C in individuals with Type 2 Diabetes Mellitus on half maximal dose of 2 or more oral anti-hyperglycemic drugs for at-least 3 months.

4. Evaluation of eating disorders and dietary patterns and their association with metabolic parameters and glycemic control in adult patients with diabetes mellitus type 2
5. To compare the glycemic profiles of normoglycemic normal weight pregnant women with obese normoglycemic women with GDM during second trimester using CGMS
6. Longitudinal change in bone mineral density and prevalence of fractures in hypoparathyroidism
7. Vitamin D status of outdoor workers
8. TREC and KREC as marker of Thymic and bone-marrow T and B cell emigrant in idiopathic hypoparathyroidism
9. Characterization of Neuroendocrine Tumors with Ga68-DOTANOC PET/CT and F18- FDG PET/CT and compare results with histopathology
10. To study the determinants of insulin resistance in Asian Indian children with obesity aged 11-17 years
11. Effect of Vitamin D supplementation on pancreatic β cell functions in obese Indian subjects: A randomized controlled trial.
12. To compare the efficacy of 90,000 and 1,80,000 IU oral single dose vitamin D for treatment of rickets in 6 months to 5 years of age
13. Assessing Indian vegetarian diets with respect to their “potential protective impact” on cardio-metabolic health of urban adults in Delhi
14. To study the effect of personality on diet quality & academic performance among adolescents: A comparison between boys & girls
15. Determinants of bone mass in Asian Indian newborns—Nutritional perspective
16. To study the effect of parental origin of X chromosome on clinical features and biochemical profile in patients with Turner syndrome
17. Evaluation of eating disorders and dietary patterns and their association with metabolic parameters and glycemic control in adult patients with diabetes mellitus type 2
18. Bone Health in patients with Cushing’s syndrome
19. Effectiveness of a Patient Education Package on Diabetic Foot Care in Out Patient Setting.
20. Evaluation of non alcoholic fatty liver disease among young women with polycystic ovary syndrome and its correlation with insulin sensitivity and body fat distribution.
21. Clinical, biochemical and hormonal predictors of success of in-vitro fertilization in infertile women with polycystic ovary syndrome (PCOS)
22. Metabolic abnormalities and sleep disorders in PCOS
23. Assessment of sleep disordered breathing, cognitive dysfunction and THEIR correlates in acromegaly
24. Evaluation of Impact of Bariatric Surgery on Clinical, Biochemical and hormonal parameters in Women with Polycystic Ovary Syndrome (PCOS)
25. Clinical, biochemical, hormonal and familial characteristics in particular reference to FTO, omentin gene polymorphism in women among PCOS with/without family history of T2DM.
26. To compare the glycaemic profiles of pregnant normoglycaemic normal weight, normoglycaemic obese and those with gestational diabetes mellitus, in early second trimester using CGMS

Completed

1. Cathelicidin Expression in patients with youth onset diabetes and its functional significance
2. Association of environmental exposures, lifestyle behaviour and BMI among 6–12 years old children in three rural clusters of Haryana
3. Association of inflammatory markers, cardio-metabolic risk factors, body composition, diet and physical activity with weight status of 13–18 years old urban and rural adolescents
4. Estimation of insulin sensitivity and determination of prevalence of metabolic syndrome in patients with type 1 diabetes mellitus
5. Prevalence of Non Alcoholic Fatty Liver Disease in patients with Type 1 diabetes mellitus
6. Evaluation of Nonalcoholic fatty liver disease among young women with Polycystic ovary syndrome and its correlation with insulin sensitivity and body fat distribution
7. Economic Evaluation of Chronic Disease Care Delivery Strategies in people with high cardiovascular risk
8. Evaluation of a Peri-Operative Low Dose Steroid Regimen for Steroid Treated Inflammatory Bowel Disease patients—A Prospective Randomized Study

9. Epidemiology of acute and chronic diabetes complications and cardiovascular disease risk factors among patients with youth onset type 1 and type 2 diabetes in India—A registry based study
10. Vertebral fractures and bone mineral density in patients with Idiopathic Hypoparathyroidism on long-term follow-up
11. Presence of Autoreactive, MHC Class I-Restricted, Calcium-Sensing Receptor (CaSR)-Specific CD8+ T Cells in Idiopathic Hypoparathyroidism
12. Long-term outcome of cataract surgery in patients with idiopathic hypoparathyroidism and its relationship with their calcemic status
13. Prevalence of pulmonary tuberculosis in young adult patients with Type 1 diabetes mellitus in India.
14. Identification of reference housekeeping-genes for mRNA expression studies in patients with type 1 diabetes.
15. Vitamin D-binding protein, vitamin D status and serum bioavailable 25(OH)D of young Asian Indian males working in outdoor and indoor environments.
16. Prevalence of celiac disease in idiopathic hypoparathyroidism and effect of gluten-free diet on calcaemic control
17. To study the prevalence of vitamin D deficiency in pregnant women at first and third trimester during the routine care
18. Correlation between first trimester glucose screening & serum insulin levels with development of gestational diabetes mellitus in pregnancy
19. Prevalence of thyroid peroxidase antibody positivity in pregnant Asian-Indian subjects
20. To assess the prevalence of vitamin D deficiency in patients with non-traumatic fracture of hip
21. To study the clinical, biochemical and radiological features of primary hyperparathyroidism: Impact of vitamin D nutrition and histopathology
22. To study Carotid Intima Media Thickness (CMT) as a marker of atherosclerosis and its correlation to insulin resistance in children with obesity in the age group of 4–18 years
23. To study the correlation of serum vitamin D level with insulin resistance and beta cell function in subjects with obesity in the age group of 6–18 years
24. Assessment of arterial stiffness in obese children and adolescents in the age group of 6–18 years
25. To study the impact of adiposity on serum androgen parameters in apparently healthy male subjects
26. To study determinants of insulin resistance in children and adolescents with obesity
27. Study of mitochondrial defects and VDR polymorphisms in Type 2 Diabetes
28. A randomized double blind controlled trial to investigate the effects of vitamin D supplementation on insulin resistance and Beta cell function in obese Asian-Indian subjects, aged 11–17 years
29. To study the variability in content strength of commercially available cholecalciferol preparations in India
30. To study determinants of insulin resistance in children and adolescents with obesity
31. Phenotype and radiological correlation in children with growth hormone deficiency
32. To study the impact of adiposity on serum androgen parameters in apparently healthy male subjects
33. To study pituitary morphometry across different age groups
34. Bone health in patients with Cushing's syndrome
35. Effectiveness of a patient education module on diabetic foot care in outpatient setting in AIIMS
36. Invasive fungal rhinosinusitis in diabetes: Clinical, microbiological and radiological profile
37. Serum vitamin B12 levels in type 2 diabetes patients on metformin compared to those never on metformin
38. Cardiovascular risk factors, bone mineral density and body composition in endogenous Cushing's syndrome after 1 year of remission
39. Lipid profile in subjects with endogenous Cushing's syndrome: Impact of correction of hypercortisolism

Collaborative projects

Ongoing

1. Molecular basis of basal ganglia calcification in hypoparathyroidism (Anatomy, Forensic Medicine)
2. To study relation between components of Renin angiotensin aldosterone system & vascular functions following Angiotensin converting enzyme inhibition in type 2 diabetes patients with newly diagnosed hypertension (Physiology)

Completed

1. Evaluation of systemic factors in the causation and recovery of ischaemic ocular mononeuropathies (Dr R.P. Centre for Ophthalmic Sciences)
2. Long term outcome of cataract surgery in patients with idiopathic hypoparathyroidism and its relationship with their calcemic status (Dr R.P. Centre for Ophthalmic Sciences)
3. Prevalence of Vitamin D deficiency and associated risk factors among children residing at high altitude in Shimla district, Himachal Pradesh, India. (Gastroenterology and Human Nutrition Unit)
4. A comprehensive analysis and functional characterization of naturally occurring non-synonymous variants of nuclear receptor PXR. (School of Molecular Medicine, JNU)

PUBLICATIONS

Journals: 67

PATIENT CARE

Month	Old patient	New patient	DOY clinic	Total
April, 2016	1737	911	165	2813
May, 2016	2540	1251	105	3896
June, 2016	2790	1049	150	3989
July, 2016	2344	898	160	3402
August, 2016	2861	1252	135	4248
September, 2016	3170	1122	133	4425
October, 2016	2595	947	145	3687
November, 2016	2932	1240	115	4287
December, 2016	3070	1131	125	4326
January, 2017	2900	970	130	4000
February, 2017	2981	949	127	4057
March, 2017	1318	3525	145	4988
Total	31,238	15,245	1635	48,118

In-patient and other patient related details: Please see Chapter 6. Hospital (Medical Record Division)

Laboratory Services

Hormone investigations

No	Hormone	Tube assays done	No	Hormone	Tube assays done
1	T4	10,973	13	Vitamin D	8023
2	TSH	17,189	14	Insulin	4351
3	TPO	1861	15	C peptide	303
4	LH	2269	16	GH	707
5	FSH	2011	17	GAD	224
6	PRL	2427	18	F T4	2031
7	CORTISOL	3764	19	T3	1058
8	Testosterone	2585	20	F T3	337
9	DHEA	1251	21	IGF 1	663
10	17 OHP	62	22	E2	337
11	ACTH	1138	23	SHBG	334
12	PTH	6207	24	B-12	179
TOTAL					71,010

Biochemical investigations

No	Investigation	Number of samples
1	Blood glucose	19,263
2	Glycated hemoglobin (HbA1c)	17,535
3	Urine pH	294
4	Osmolality (urine and serum)	676
5	Lipid Profile	8465
	Total tests	46,233

Specialty Clinics

- (a) Diabetes of Young on Saturdays
- (b) Paediatric and Adolescent Endocrine Clinic on Monday Afternoons.
- (c) Community Services/Camps.

The department regularly holds camps especially awareness and screening programs on obesity, PCOS, diabetes and thyroid disorders.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor Nikhil Tandon was National Expert in the ICMR—WHO National Consultation Meeting on National Ethical Guidelines for Biomedical and Health Research involving human participants held on 14 December 2016; National Expert in the Certificate Course in Evidence Based Diabetes Management (CCEBDM) conducted by PHFI and Dr. Mohan's Diabetes Education Academy; National Expert in Certificate Course in Management of Thyroid Disorders (CCMTD) conducted by PHFI and Dr. Mohan's Diabetes Education Academy; National Expert in the Certificate Course in Evidence Based Management of Diabetic Retinopathy (CCDR) (2016-2017) supported by Queen Elizabeth Diamond Jubilee Trust and conducted by PHFI and Dr. Mohan's Diabetes Education Academy held on 19 September 2016 at Chennai; National Expert in the Certificate Course in Cholesterol Diabetes Mellitus conducted by PHFI and Dr. Mohan's Diabetes Education Academy; Study LIVING trial Investigators Meeting as Principal Investigator of multi-country study held on 25 March 2017 at Colombo, Sri Lanka; Member of the Standing Selection Committee of AIIMS, Jodhpur, to participate in the Standing Selection Committee meetings at AIIMS Jodhpur held from 6 to 8 March 2017; Fifth TEG meeting on 'Developing National Guidelines' and Diabetic Retinopathy meeting held at Hotel AVASA in Hyderabad on 28 February 2017; Assist the Standing Selection Committee of the PGIMER as an External Expert for Selection of Assistant Professors in the Dept. of Endocrinology at PGI, Chandigarh held on 19 November, 2016; Member of the Global Health Trials Committee for a period of 3 years commencing from October 2016 to September 2019 by the Board of Governors of the Wellcome Trust. This Committee will meet twice in a year in London, UK, with its first meeting held on 28–29 November 2016; The National Institute of Mental Health—NIMH Investigator's Meeting on the Research project entitled, "The INtegrating DEPrEssion and Diabetes treatmENT (INDEPDENT) study" in India held on 27 September 2016 at Chennai at Madras Diabetes Research Foundation; Member of the Technical Advisory Group (TAG) for Project Hope—Project UDAAN—United Dialogue and Action Against Non Communicable Disorders in collaboration with Jharkhand Rural Health Mission Society; Member in the (i) NASI Young Scientist Platinum Jubilee Award Committee Meeting, (ii) Fellowship Scrutiny Committee Meeting, (iii) NASI-Senior Scientist Selection Committee Meeting and (iv) Fellowship Scrutiny Committee meeting for the NASI Award/Lectures held on 21–22 July 2016 organized by NASI, Allahabad; Queen Elizabeth Diamond Jubilee Trust participated in the Diabetic Retinopathy Learning Workshop held from 24 to 26 October 2016 at the Tsogo Sun Elangeni and Maharani Hotel, Durban, South Africa; Emory University, Atlanta, Georgia participated in the "Global Partnerships to Advance NCD Research within the Sustainable Development Goal Agenda", Emory University in Atlanta, Georgia, from 6 to 10 August 2016; Chairman of the Selection Committee for conducting the interviews for the selection of Medical Officers for the 36-ISEA Indian Scientific Expedition to Antarctica held on 5 August 2016 at National Centre for Antarctic & Ocean Research (NCAOR), Goa; External Examiner for DM (Endocrinology) practical examination held from 13 to 14 May 2016 at SGPGI, Lucknow.

Professor Ravinder Goswami was Subject expert for selection of the Faculty (Assistant, Associate, Additional and Professor) for the Department of Endocrinology AIIMS, Jodhpur; Expert for PhD viva at Sanjay Gandhi Post graduate Institute of Medical Sciences, Lucknow; Member, Project Review Committee for Medical Projects, CSIR since 2015.

Professor Rajesh Khadgawat participated in medical camp in Leh, Ladakh, on deputation from the institute from September 20 to 27, 2016; Subject Expert for the Interview for Endocrinology—Rajasthan Public Service Commission, UPSC, Institute of Liver & Biliary Sciences (ILBS); DM examiner for NRS Medical College, Kolkata, Srimanata Sankaradeva University of Health Sciences, Guwahati, West Bengal University of Health Sciences; Member, SAE-Death Committee,

DCGI; Member, Subject Expert Committee (Endocrinology), DCGI New Delhi; Subject Expert, Medical Council of India; Subject Expert, National Anti-doping Agency (NADA), New Delhi; Organized 46th Annual Conference of Endocrine Society of India (ESICON-2016), Hotel Pullman, Aerocity, New Delhi, 20–23 October 2016 and worked as “Organizing Secretary”; Best Paper Award (Clinical Sciences category)—46th Annual Conference of Endocrine Society of India (ESICON-2016), Hotel Pullman, Aerocity, New Delhi, 20–23 October 2016, Paper title—To compare the efficacy and safety of 90,000IU and 3,00,000IU oral single dose vitamin D3 for treatment of nutritional rickets in children—A randomized control trial, Chacha Nehru Bal Chikitsalaya, Delhi; Second Best Paper Award (Clinical Sciences category)—46th Annual Conference of Endocrine Society of India (ESICON-2016), New Delhi, 20–23 October 2016, Paper title—Pituitary morphometry using MRI in Indian population; Second Best Paper Award (Diabetes & Metabolic syndrome category)—46th Annual Conference of Endocrine Society of India (ESICON-2016), New Delhi, 20–23 October 2016, Paper title—Beneficial Effects of 12-week Yoga-based Lifestyle Intervention on Stress and Inflammation in Subjects with Metabolic Syndrome; Best Paper Award (Basic sciences category)—46th Annual Conference of Endocrine Society of India (ESICON-2016), New Delhi, 20–23 October 2016, Paper title—Female preponderance in patients with congenital adrenal hyperplasia: How can it be possible in an autosomal recessive disorder?; Second Best Paper Award in 7th World Congress of Diabetes “Diabetes-India” 23–26 February 2017, New Delhi; Paper title - Effect of High Dose Vitamin D Supplementation on Beta Cell Function in Obese Asian-Indian children and adolescents, Aged 11–17 years: A Randomized, Double Blind, Active Controlled Study.

VISITING SCIENTIST

1. Professor Rita Rastogi Kalyani, USA

9.12. Forensic Medicine and Toxicology

Professor and Head

S.K. Gupta

Professors

O.P. Murty

Millo Tabin

D.N. Bhardwaj
Sanjeev Lalwani (JPNATC)

Adarsh Kumar (JPNATC)

Associate Professor

Chittaranjan Behera

Assistant Professors

Kulbhushan Prasad

Abhishek Yadav

Scientist

Nidhi Sharma

Chemist

A.K. Jaiswal

HIGHLIGHTS

The Forensic Medicine and Toxicology department is the apex referral centre for complicated medico legal problems. The department is providing expert opinions in referred cases from CBI, Crime Branch of different states, other investigating agencies, courts and NHRC. It is involved in medico-legal autopsy, teaching, training, research, embalming of MLC deaths, clinical forensic medicine services, expert opinion in medico-legal cases and court related works. The department is running three laboratory services—Toxicology, DNA Fingerprinting and Histopathology, and two support services in the form of Forensic Radiology and Forensic Anthropology. Toxicology laboratory services are provided for research and diagnosis. The histopathology laboratory unit is providing histopathology services for the medico legal autopsy conducted at AIIMS and referred cases from outside. Forensic radiology unit is used for medico legal and academic purposes. Forensic anthropology division is functional. The automatic biochemical analyzer is working and used for academic purpose. For development of odorless mortuary, tendering process is already done. A total of 10 departmental research projects are continuing and 11 have been completed. One ICMR funded extramural project and one intramural funded project is undergoing. Thirty-eight research papers were published in various scientific journals. A total of 2496 medico legal autopsies were conducted by doctors of the department and attended 684 summons from courts including both at main as well as trauma centre.

EDUCATION

The department is actively engaged in undergraduate and post graduate teaching. There are nine postgraduate (MD) students and 3 PhD students enrolled in the department. The department is also imparting training in DNA–Fingerprinting and Medical Toxicology to BSc, MSc and MD students of other universities from all over India. Nine students from different universities were trained for short term training.

CMEs, National and International conferences

Lectures delivered

Adarsh Kumar: 11

Ashok Kumar Jaiswal: 3

Chittaranjan Behera: 2

Adarsh Kumar: 11

1. Disaster Victim Identification, Keynote Lecture on Forensic Odontology: From evidence to conclusion, 7 April 2016, Dept of Oral Pathology and Microbiology, Dental College, Jamia Milia Islamia, Delhi
2. Military Airplane Crash in Delhi, India, International Academy of Legal Medicine Intersocietal Symposium-2016, P5 Medicine & Justice, 21–24 June 2016, Venice, Italy
3. Panelist on Medicolegal Issues, 9th IMA State Level Refresher Course, 17 July 2016, Allahabad, UP
4. Medicolegal Investigations of Custodial Deaths and Torture in India—An update, 12th Indo Pacific Association of Law Medicine & Science (INPALMS) Congress 2016, 17–23 September 2016, Bali, Indonesia
5. Medical Negligence & Defensive Medicine, CME Speaker on Medicolegal Issues for medical practitioners, 7 October 2016, Dept. of Forensic Medicine, North Eastern Indira Gandhi Regional Institute of Medical Sciences (NEIGRIMS), Shillong, Meghalaya
6. Defensive Medicine for medical practitioners, 34th Annual Conference of Associations of Physicians of India (UP APICON 2016), 14–15 October 2016, MLN Medical College, Allahabad, UP
7. Plagiarism—What it is and how to avoid it, Resource person/CME Speaker on Scientific Writing, 10–11 November 2016, Medical Education Unit, Jawaharlal Nehru Institute of Medical Sciences, Imphal, Manipur
8. Custodial Death Investigation in India: NHRC Experience Dignified, 24th Annual Conference of Karnataka Medico Legal Society KAMLSCON-2016, 21–22 December 2016, Dept. of Forensic Medicine, Devraj URS Medical College, Kolar, Karnataka
9. Management of Dead in Mass Disaster-Resource person/CME Speaker, 24th Annual Conference of Karnataka Medico Legal Society KAMLSCON-2016, 21–22 December 2016, Dept. of Forensic Medicine, Devraj URS Medical College, Kolar, Karnataka
10. Dowry Death—An extreme form of Domestic Violence in India, First International Forensic Conference, “FIFC-2017” having theme as “Towards improving forensic education and practice in the Middle-East”, 28–31 Jan 2017, Kuwait University, Kuwait
11. Current status of Forensic Toxicology in India—Scope & Need of hour for quality research, National Seminar on Research Prospects in Forensic Science”, 20–21 February 2017, Department of Forensic Sciences at SHIATS, Allahabad University, Allahabad, UP

Ashok Kumar Jaiswal: 3

1. HPLC, Skill Development Course on QA/QC of Pesticides, 8 August 2016, IPFT, Gurgaon
2. Chemical aspects of Toxicology, National Conference on Clean & Green Energy: The chemical and environmental aspects, 17 February 2017, Department of Chemistry, Bhaskaracharya College of Applied Sciences, University of Delhi, New Delhi
3. Importance and examination of alcohol in breath, 24 January 2017, RBVRR, Telangana State Police Academy, Hyderabad, Telangana

Chittaranjan Behera: 2

1. Association of menstruation with completed suicide, A hospital based case control study, 16th Symposium on suicide and suicidal behavior, 8–10 September 2016
2. Oviedo Spain Medico Legal autopsy on female, particularly the victim of violent crimes, 34th Annual conference of State Medico Legal Society of Odisha, 13–15 May 2016, Department of Forensic Medicine, IAMS & SUM Hospital, Bhubaneswar, Odisha

Oral papers/posters presented: 10

1. Postmortem detection of child abuse: Two case reports, Forensic Medicon, 2017, XXXVIII Annual Conference of Indian Academy of Forensic Medicine, 23 Feb 2017, Indian Institute of Technology

2. Electrocution death; by laptop charger, Forensic Medicon, 2017, XXXVIII Annual Conference of Indian Academy of Forensic Medicine, 23 February 2017, Indian Institute of Technology
3. Alcohol a confounding factor for depressive illness (suicide): A case report, Forensic Medicon-2017, XXXVIII Annual Conference of Indian Academy of Forensic Medicine, 24 February 2017, Indian Institute of Technology
4. Delhi aircraft crash, Experience of managing closed population disaster, 12th Indo Pacific Association of Law Medicine & Science (INPALMS) Congress 2016, 17–23 September 2016
5. Profile of fatal poisoning cases brought at tertiary care hospital in India, 15 years retrospective study, 12th Indo Pacific Association of Law Medicine & Science (INPALMS) Congress 2016, 17–23 September 2016
6. Quantitative estimation and method validation of acetaminophen by RP-HPLC in biological samples, 10th Annual Conference of Indian Society of Toxicology TOXOCON-10, 28–29 December 2016, Dept. of Forensic Medicine & Toxicology, Amrita Institute of Medical Sciences ***Awarded First Prize**
7. Aluminium phosphide versus zinc phosphide lethality—A lurking danger in Indian rural homes, 10th Annual Conference of Indian Society of Toxicology TOXOCON-10, 28–29 December 2016, Dept. of Forensic Medicine & Toxicology, Amrita Institute of Medical Sciences
8. Development of UV visible spectrophotometric method for qualitative and quantitative array of paracetamol in powder and pharmaceutical formulation, Future Perspectives of Forensic Science in India, 9–10 March 2017, Bundelkhand University, Jhansi, Uttar Pradesh
9. Quality assessment in water in Delhi Region, India, 6th International Science Congress, 8–9 December 2016, Hutatma Rajguru Mahavidyalaya, Rajgurunagar
10. Quantitative estimation and method validation of acetaminophen by RP-HPLC in Biological Samples, TOXOCON–10, 28–29 December 2016, Amrita Institute of Medical Science and Research

RESEARCH

Funded projects

Ongoing

1. Bioinformatics identification and *in vitro* evaluation of single nucleotide polymorphisms associated with completed suicide in Indian population, Chittaranjan Behera, ICMR, 3 years, 2017–2020, Rs 69.11 lakhs
2. Association of inflammatory cytokines with suicidal deaths: A hospital based comparative cross-sectional study, Chittaranjan Behera, AIIMS, 2 years, 2016–2018, Rs 1 lakh

Departmental projects

Ongoing

1. Estimation of endogenous production of alcohol in human body by different microbes after death and its relevance to medico-legal issues
2. Toxicological analysis and distribution pattern of different drugs in various biological samples and their neurobiological effects in suicidal deaths
3. Histopathology of endocrine glands in hypothermia deaths: A hospital based case control study
4. Postmortem Sperm Retrieval (PMSR): Analysis of survival period of sperm
5. Study of Alleged Medical Negligence cases and the issues thereof
6. Retrospective study of Medico Legal Autopsy cases between 1 January 2009 and 31 December 2013 where viscera have been preserved, and their subsequent opinion thereof
7. Student suicide: A cross sectional descriptive study for South Delhi
8. Study of the variations in injuries on various muscles along with other associated external and internal injuries of the neck with positional variation of ligature mark in the cases of death due to hanging
9. Association of lipid profile in completed suicides: A hospital based case control study
10. Student suicide: A cross sectional descriptive study for South Delhi

Completed

1. A quantitative study of alcohol in post-mortem blood samples with respect to different time interval
2. Toxicological, biochemical and histopathological findings in sudden death in epilepsy
3. Toxicological findings in death due to hanging reported at mortuary, AIIMS
4. Study of quantitative determination of aluminum and zinc levels as a tool in fatal phosphide poisoning
5. Histopathological and biochemical parameters in sudden death: An autopsy study
6. Pathological and biochemical analysis in case of electrocution death

7. Non-ligature injuries in suicidal hanging: A prospective study
8. Gross and histopathological differentiation of skin lesions caused by antemortem and postmortem electrocution, calluses of skin and postmortem peeling with drying of skin
9. 5 years (2010-14) retrospective study of unidentified/unknown/unclaimed deaths brought for medico legal autopsy at premier hospital in New Delhi, India

Collaborative projects

Ongoing

1. Study of the morphology of pyramidal cells and astrocytes in CA1 region of hippocampus in suicidal deaths (Anatomy)
2. Immunohistochemical analysis of matrix metalloproteinases (MMP-2 and 9), tissue inhibitors of matrix metalloproteinases (TIMP-1 and 2), Collagen I and Collagen IV in ascending thoracic aortic aneurysm (Pathology)
3. Epithelial-to-mesenchymal transitions (EMTs) in ependymoma (Pathology)
4. Fibrillin 1 gene mutation and the role of TGF beta in aortic aneurysms with cystic medial degeneration (Pathology)

Completed

1. Anatomical variations of round window niche in human cadaveric temporal bones and its relevance to cochlear implant electrodes insertion (E.N.T.)

PUBLICATIONS

Journals: 38

Chapters in books: 1

PATIENT CARE

1. **Casualty services:** The department provides round-the-clock medico-legal services like in cases of injury, sexual offences, poisoning etc. to the South and South-east district of Delhi. A total of 1500 such calls were attended during this period.
2. **Mortuary Services:** A total of 2496 (1783 + 713-JPNATC) medico legal autopsies were conducted at mortuary.
3. **Clinical Forensic Medicine:** 646 cases of age estimation, potency and other medico-legal examination brought by investigating officer and referred from court were dealt by the department. Twenty-three cases from CBI were dealt by medical board of the department. A subsequent opinion in complicated cases including reference from Casualty etc. was offered in total of 925 cases.
4. **Summons:** Doctors of the department attended court of law in 684 cases from Delhi and other states.
5. **Medical Toxicology:** 373 tests for 354 samples were performed for various poisons referred from the clinical department of AIIMS, medico-legal cases and in academic cases.
6. **Biochemistry:** 459 tests were conducted on the samples received for academic purpose (64 cases).
7. **Forensic Pathology:** The department is providing histopathology services for the samples of medico-legal autopsy cases from South and South-east district and also research purpose. Total of 39 cases and 289 samples were done during this period.
8. **Embalming facility:** The department is providing embalming facility for MLC cases (Postmortem cases). Total of 260 cases of embalming were done during this period.
9. **Organ Retrieval for Therapeutic Transplantation:** Total of 132 corneas were retrieved at mortuary for transplantation by National Eye Bank.
10. **Forensic Radiology Services:** Total of 131 cases were dealt involving whole body.
11. **Forensic Anthropology Services:** Total of 15 cases were dealt for age estimation referred from various courts and sports authorities.
12. **Community services:** The department continues to participate in training program for CBI officials, police officers and public prosecutors from all over the country.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor Adarsh Kumar received Award for Teaching Excellence by INDUS Foundation during Indo-American Education Summit-2016 held at Hotel Taj Vivanta, New Delhi on 14 September 2016; awarded Fellowship of Indian Society of Toxicology at 10th Annual Conference "TOXOCON-10" held on 28–29 December 2016 at AIIMS, Kochi, Kerala; elected as Governing Council Member of Indo-Pacific Association of Law Medicine & Science (INPALMS) for 2016-2019 at Bali, Indonesia; nominated as Board Member of Asia Pacific Medico Legal Association (APMLA) for two years 2016-2018; Medico Legal Expert to National Human Rights Commission and Central Bureau of Investigation; Member, Editorial Board of various journals: HSOA Journal of Forensic, Legal & Investigative Sciences (USA), Egyptian Journal

of Forensic Sciences, Egypt, Adli Tip Bulletin, Turkey; Associate Editor: Medico Legal Update, Journal of Research in Medical Education and Ethics; Web Editor, International Journal of Health Research & Medico Legal Practice; Member, Editorial Board: Journal of Indian Society of Toxicology, Journal of Karnataka Medico Legal Society, Journal of South India Medico Legal Association, Indian Journal of Community & Family Medicine, Indian Journal of Forensic Medicine & Toxicology, Journal of Forensic Chemistry & Toxicology.

Dr A.K. Jaiswal received the highest number of international publication award by International Science Congress Association in 2016; chaired Session for Forensic and Medical Sciences Section in 3rd International Virtual Congress (IVC-2016) held on 5–10 August 2016 at www.isca.net.co; Sectional President for Forensic, Medical, Dental and Nursing in 6th International Science Congress held on 8 and 9 December 2016 at Hutatma Rajguru Mahavidyalaya, Rajgurunagar, Pune, Maharashtra, organized by International Science Community Association; Editorial board member for Research Journal of Forensic Science.

Dr Abhishek Yadav received Certificate of Appreciation for outstanding contribution to National Eye Bank by Dr. RP Centre, AIIMS, on 29th National Eye Donation Fortnight-2016.

9.13. Gastroenterology and Human Nutrition Unit (HNU)

Professor and Head
Anoop Saraya

Professors

Umesh Kapil (HNU)
Vineet Ahuja

Pramod Garg
Govind K Makharia (HNU)

Associate Professors

Shalimar

Baibaswat Nayak

Assistant Professors

Saurabh Kedia

Deepak Gunjan

HIGHLIGHTS

The Gastroenterology and Human Nutrition Unit (HNU) department organised a CME on ‘Management of HCV in difficult to treat patients’ at India Habitat Centre, New Delhi on 16 July 2016 in which approximately 100 delegates participated from all parts of India; organised public lecture to increase awareness of Viral Hepatitis in India on the eve of World Hepatitis Day at AIIMS on 28 July 2016; organised a CME on ‘Gastrointestinal Immunology’ during 14–15 January 2017 which was attended by more than 200 delegates from India and abroad; also organised a teaching programme ‘Gastroenterology Young Masters’ for gastroenterology trainees from different parts of India, on behalf of Indian Society of Gastroenterology, at AIIMS during 29–30 January 2017.

The faculty and residents published 66 scientific papers in indexed journals and delivered numerous lectures both within and outside the country. The faculties of the department continued to be on National and International Boards associated with education, research and programmes. The faculty and residents also presented many papers in the National and International Conferences and many of them bagged Best Paper Awards.

EDUCATION

The department continued the training programme for courses on DM in Gastroenterology, and PhD in Gastroenterology and Human Nutrition. The department also participated in the training of Undergraduate and Postgraduate students.

Long-term training: 14 DM students; 6 PhD candidates

Short-term training: 4

CME/Workshops/Symposia organised by the department

1. Management of HCV in difficult to treat patients, India Habitat Centre, New Delhi, 16 July 2016
2. Public lecture to increase awareness of Viral Hepatitis in India on the eve of World Hepatitis Day, AIIMS, 28 July 2016
3. Gastrointestinal Immunology, 14–15 January 2017
4. Gastroenterology Young Masters, AIIMS, 29–30 January 2017

Lectures delivered

Anoop Saraya: 14

Pramod Garg: 13

Govind Makharia: 23

Shalimar: 10

Baibaswat Nayak: 4

Saurabh Kedia: 5

Anoop Saraya: 14

1. Newer modalities for evaluation of small intestine, ISGCON (UP Chapter), 4 April 2016, Allahabad, UP
2. New targets in pancreatic cancer, ACOS, 9 April 2016, New Delhi
3. Noninvasive assessment of NAFLD, LIVERCON, 10 July 2016, Max Super Specialty Hospital, New Delhi
4. Management of chronic hepatitis, 5–7 August 2016, Gurgaon
5. Pharmacotherapy in portal hypertension: Is it effective alone? ILGPS, 3–4 September 2016, New Delhi
6. Gastro Intensive Therapeutic Unit: Bed No. 1 to 12, GASTROCON, 24 September 2016, Kolkata
7. Nutrition in acute pancreatitis, 2 October 2016, PGIMER, Chandigarh
8. Nutrition in clinical practice – An unerring perspective, 1st National Conference of Indian Society of Clinical Nutrition, 14–16 October 2016, ILBS, New Delhi
9. New horizons in the management of liver diseases, CPLD, 27 November 2016, Chandigarh
10. Improving nutrition and performance in ALD, ISGCON 2016, 15–18 December 2016, New Delhi
11. GI immunology: Bridging the clinician-scientist gap, UK-India educational and research initiative, 14–15 January 2017, Gurgaon
12. Liver diseases and transplantation-back to basics, 7th MCLD Conference, 20–22 January 2017, Chennai
13. Neurological challenges in a liver ICU, National conference on critical care and infections in liver diseases, 25 January 2017, ILBS, New Delhi
14. Development of non-transplant therapeutic strategies for advanced liver diseases, Review Expert Committee, 25 January 2017, DST, New Delhi

Pramod Garg: 13

1. Endoscopic vs laparoscopic drainage of pancreatic pseudocyst/walled off necrosis: A randomised, controlled trial, DDW-2016, May 2016, USA
2. Acute pancreatitis: Current management, 3rd International Hepto-Pancreato-Biliary Surgery Forum, June 2016, Hangzhou, China
3. Chronic Pancreatitis in Asia-Oceania: Epidemiology and Etiopathogenesis, Joint meeting of International Association of Pancreatology and Japan Pancreas Society, September 2016, Japan
4. Early chronic pancreatitis: A conceptual framework, Joint meeting of International Association of Pancreatology and Japan Pancreas Society, September 2016, Japan
5. Chronic pancreatitis: Is it all environment, Annual Conference of American Pancreatic Association, October 2016, Boston, USA
6. Acute pancreatitis: Overall philosophy of management, CME, October 2016, PGI, Chandigarh
7. Toxins and human diseases: Empiricism and evidence, NASA Award Lecture, October 2016, New Delhi
8. Acute pancreatitis, ISPEN Conference, October 2016, ILBS, New Delhi
9. Diagnosis and treatment of acute pancreatitis in India, APDW-2016, November 2016, Kobe, Japan
10. Recent progress in chronic pancreatitis, APDW-2016, November 2016, Kobe, Japan
11. Management of pancreatic fluid collections and necrosis, Annual Conference ISG, December 2016, New Delhi
12. EUS in the management of solid and cystic neoplasms of the pancreas, ISG, West Bengal Chapter, February 2017, Kolkata, West Bengal
13. Management of large CBD stones, World Congress of Endoscopy, February 2017, Hyderabad, Telangana

Govind Makharia: 23

1. Celiac disease, Midterm ISGCON 2016, 2–3 April 2016, Allahabad
2. Optimizing biologic therapy in crohn's disease, Mid-term ISGCON 2016, 2–3 April 2016, Allahabad
3. Terminal ileitis: Are we investigating too much, Purvanchal Gastrocon 2017, Gut Chat Club, Kolkata, 9 April 2016, Kolkata
4. Optimizing steroid use in IBD, International Inflammatory Bowel Disease Symposium, 22–24 April 2016, Hyderabad
5. Diet and Gut-Nutrition Summit, World Gastro Organization Foundation, 13–14 May 2016, Barcelona, Spain

6. Your diet and gut health, SCB Medical College, 29 May 2016, Bhubaneswar, Odisha
7. Innovation in gastroenterology, Gastroenterology and Liver Forum, CME, 17 June 2016, Chandigarh
8. Celiac disease, Gastroenterology and Liver Forum, CME, 17 June 2016, Chandigarh
9. Chronic diarrhea, Midterm Conference of ISG, 24 July 2016, Jaipur
10. TB and crohn's disease, 12th Edition of SGPGI Clinics, 20 August 2016, Lucknow
11. Extra-intestinal manifestations of IBD, 2nd Clinical Forum on IBD, APAGE, 26–27 August 2016, Chiang Mai, Thailand
12. How to make a good presentation, Young Clinician Programme, 2–4 September 2016, Hyderabad
13. Celiac disease in developing countries, 33rd Annual Congresso Nazionale, SIGENP, 29 September–1 October 2016, Milan, Italy
14. Non-invasive biomarkers for diagnosis and monitoring celiac disease, Guest lecture, Universita Politecnica Delle Marche, Ancona, 3 October 2016, Ancona, Italy
15. Celiac disease in Asia, Asia Pacific Digestive Week, 2–5 November 2016, Kobe, Japan
16. Diet and gut, GASTRO 2016, World Gastroenterology Organization, 17–19 November 2016, Abu Dhabi (UAE)
17. Are there other gluten related disorders, Annual Conference of Indian Society of Gastroenterology, 15–18 December 2016, Delhi
18. Non-celiac gluten sensitivity, Gastro Expert Opinion, 8 January 2017, Kolkata
19. H Pylori, ISG Single Theme Meeting, 28–29 January 2017, Bhubaneswar
20. Biologics in IBD, Midterm ISG, WB Chapter, 10–11 February 2017, Kolkata
21. Panel discussion: IBD-ENDO 2017, 17–18 February 2017, Hyderabad
22. Approach to chronic diarrhea, Midterm ISGCON 2017, Gujarat Chapter, 5 March 2017, Rajkot
23. Bloody diarrhea, Panel discussion, Midterm ISGCON 2017, Gujarat Chapter, 5 March 2017, Rajkot

Shalimar: 10

1. Needle prick from a HBV/HCV positive patient. What next, CME on Viral Hepatitis, 24 July 2016, Dr Ram Manohar Institute of Medical Sciences, Lucknow
2. Algorithmic approach in the management of acute and chronic BCS, 15th Current Perspectives in Liver Disease (CPLD) 2016, 26–27 November 2016, PGIMER, Chandigarh
3. Liver Clinics (case based discussion), It is appropriate to consider infections as acute precipitating events of ACLF, Budd-Chiari syndrome – when to consider LT? 24th Annual Scientific Meeting of INASL, 5–7 August 2016, Delhi NCR
4. Nuclear receptor modulation and NASH therapy, 7th Kolkata Liver Meeting, 1–3 December 2016, Indian Institute of Liver & Digestive Sciences
5. Viral hepatitis ABCDE: Whom, when and how to treat in India, PGI GI emergency update, 1–2 October 2016, PGIMER, Chandigarh
6. To study the pathogenesis of nonalcoholic fatty liver disease in Indian population, EMR Projects, Funded by DST-SERB, 21–22 October 2016, Goa
7. NCIPH, 4th Annual Scientific Meeting (SAASL), 16–17 September 2016, CMC Vellore, Tamil Nadu
8. INASL Hepatitis B Taskforce Meeting, 11–12 February 2017, Andaman and Nicobar Islands
9. Overview of endothelium in liver diseases: Clinician's perspective, CME in Hepatology, 18 March 2017, Vellore, Tamil Nadu
10. Arterial ammonia independently predicts outcome in acute on chronic liver failure, ISHEN Symposium, 9–11 March 2017, Gurgaon-Delhi

Baibaswat Nayak: 4

1. Genetic association of single nucleotide polymorphisms with hepatitis virus infection, Disease progression and therapeutic response, International Symposium on HIV and Viral Hepatitis, 1 September 2016, Faculty of Life Sciences and Biotechnology, South Asian University, New Delhi
2. Molecular basis of fibrogenesis, Society for Prevention and Research and Education in Liver Diseases, September 2016, Army Research and Referral Hospital, New Delhi
3. RNAi therapeutics, Modern molecular biology tools for biodefense, 23 September 2016, DRDE (Defense Research and Development Establishment), Gwalior
4. Molecular basis of non-alcoholic fatty liver disease, CME Programme of Pan-African e-Network Project, 5 January 2017, Telemedicine Facility, AIIMS, New Delhi

Saurabh Kedia: 5

1. Checklist for biologics therapy, A primer of immunotherapy in IBD: Practical tips and guidance, 15 October 2016, Mussoorie
2. Prokinetics: The science behind practice, 57th Annual Conference of the Indian Society of Gastroenterology (ISG); ISGCON 2016, 17 December 2016, Delhi
3. Differentiating crohn's disease and intestinal tuberculosis, Joint Indian Society of Gastroenterology (ISG) and Indian Radiological and Imaging Association (IRIA) Consensus guidelines on imaging in patients with crohn's disease, 26 November 2016, Mumbai
4. Acute severe pancreatitis, Guidelines 2017, 8 January 2017, Dinanath Mangeshkar Hospital, Pune
5. Fecal microbiota transplantation, 4th Biennial Conference of Indian Motility and Functional Disease Association 2017, 30 April 2017, KIMS Hospital, Hyderabad

Oral papers/Posters presented: 23

1. Pooja Goswami, Ujjwal Sonika, Vishnubhatla Sreenivas, Anoop Saraya. Mo1404 Intestinal Fatty Acid Binding Protein (I-FABP) and Citrulline as markers of Gut injury and poor Prognosis in patients with acute Pancreatitis, DDW-2016, 21–25 May 2016, San Diego, California, USA
2. Sumaira Rashid, Safoora Rashid, Prasenjit Das, N. R. Dash, Siddhartha Datta Gupta, Peush Sahni, R.M. Pandey, Anoop Saraya. Sa1526 MUC-4 Immunohistochemical Stain can predict Metastatic Potential of Pancreatic Carcinoma, DDW-2016, 21–25 May 2016, San Diego, California, USA
3. Sumaira Rashid, Safoora Rashid, Prasenjit Das, Siddhartha Datta Gupta, N. R. Dash, Ashish Datt Upadhyay, Anoop Saraya. Sa1475 MUC-1 Immunohistochemical expression is a differentiating marker of Pancreatic Ductal Adenocarcinoma from Chronic Pancreatitis, DDW-2016, 21–25 May 2016, San Diego, California, USA
4. Namrata Singh, Vineet Ahuja, Vikas Sachdev, Ashish Datt Upadhyay, Ravinder Goswami, Lakshmy Ramakrishnan, Anoop Saraya. 958 effect of Antioxidant Supplementation on Pancreatic Functions and markers of Fibrosis in Chronic Pancreatitis: A randomised, controlled trial, DDW-2016, 21–25 May 2016, San Diego, California, USA
5. Priyanka Sharma, Anoop Saraya, Rinu Sharma. Clinical and functional implications of miRNAs and their targets in Esophageal Cancer, 35th Annual Convention of Indian Association for Cancer Research (IACR), 8–10 April 2016, New Delhi
6. Shivam Singh, Anoop Saraya, Prasenjit Das, Rinu Sharma, Increased expression of MARCH E3 Ligase in human Esophageal Squamous Cell Carcinoma, 35th Annual Convention of Indian Association for Cancer Research (IACR), 8–10 April 2016, New Delhi
7. Indu Arora, Deepak Gunjan, Namrata Singh, Ujjwal Sonika, Anoop Saraya, Micronutrient assessment in chronic Liver disease/Cirrhosis of North Indian patients, ISGCON 2016, 15–18 December 2016, New Delhi
8. Ajmal Hasan, Deepak Gunjan, Mamta Bhusan Singh, Jaya Benjamin, Yogendra Kumar Joshi, Anoop Saraya. Plasma nitrotyrosine level does not differentiate between patients with Minimal Hepatic Encephalopathy and without Minimal Hepatic Encephalopathy in Liver Cirrhosis, ISHEN_2017, 9–11 March 2017, Delhi
9. Shalimar, Ujjwal Sonika, Saurabh Kedia, Baibaswata Nayak, Bhaskar Thakur, Subrat K. Acharya. Alcohol related acute, chronic Liver Failure: Comparison of various prognostic scores in predicting outcome, AASLD 2016, 11–15 November 2016, Boston, USA
10. Shalimar, Shivanand Gammanagatti, Saurabh Kedia, Subrat K Acharya, Transjugular Intrahepatic Portosystemic Shunts in Hepatic Venous Outflow Tract: Results and comparison of prognostic scores, APDW 2016, 2–5 November 2016, Kobe, Japan.
11. Shalimar, Saurabh Kedia, Soumya J. Mahapatra, Baibaswata Nayak, Dawesh P. Yadav, Bhaskar Thakur, Subrat K. Acharya. Comparison of Dynamic MELD, ALFED, CLIF-Consortium ACLF score and KCH criteria in Viral Hepatitis related acute Liver Failure, AASLD 2016, 11–15 November 2016, Boston, USA
12. Shalimar, Saurabh Kedia, Soumya J. Mahapatra, Baibaswata Nayak, Deepak Gunja, Bhaskar Thakur, Subrat K. Acharya. Natural course and outcomes in acute, chronic Liver Failure is dependent upon the Etiology of acute hepatic insults: Analysis of 368 patients, AASLD 2016, 11–15, November 2016, BOSTON, USA
13. Shalimar, Saurabh Kedia, Ujjwal Sonika, Subrat K Acharya, Comparison of models for end stage Liver disease, CLIFC Consortium Score, Kings College Hospital criteria and ALF early dynamic model for outcome in Viral Hepatitis related acute Liver Failure, APDW 2016, 2–5 November 2016, Kobe, Japan
14. Shalimar, Saurabh Kedia, Ujjwal Sonika, Shekhar Jadaun, Sandeep Goyal, Baibaswata Nayak, Deepak Gunjan, Mona Pathak, Subrat Kumar Acharya. Arterial ammonia independently predicts outcome in acute on chronic Liver Failure, ISHEN Symposium 2017, 9–11 March 2017, Gurgaon

15. Shalimar, Ajay Kumar, Saurabh Kedia, Shivanand Gammmanagatti, Subrat Acharya. Hepatic venous outflow tract obstruction: Treatment response, Outcome and Prognostic score comparisons, EASL 2016, 13–17 April 2016, Spain
16. Shalimar, Saurabh Kedia, Ujjwal Sonika, Subrat Acharya. Elevated ammonia levels and infection in acute Liver Failure – cause or effect? EASL 2016, 13–17 April 2016, Spain
17. Bopanna S, Ananthakrishnan A, Kedia S et al. Risk of colorectal cancer in Asian patients with Ulcerative Colitis: A systematic review and meta-analysis, ISGCON 2016, 15–18 December 2016, New Delhi
18. Kedia S, Sharma R, Sreenivas V, et al. Accuracy of computed Tomographic based imaging features in differentiating Intestinal Tuberculosis from Crohn's disease: A systematic review and meta-analysis, ISGCON 2016, 15–18 December 2016, New Delhi
19. Arora U, Aananthakrishnan A, Kedia S, et al. Oral tobacco use and smoking do not affect disease outcomes in Indian patients with Crohn's disease, ISGCON 2016, 15–18, December 2016, New Delhi
20. Indu Arora, Deepak Gunjan, Namrata Singh, Ujjwal Sonika, Anoop Saraya, Micronutrient assessment in chronic Liver disease/Cirrhosis of North Indian patients, ISGCON 2016, 15–18 December 2016, New Delhi
21. Imteyaz Ahmad Khan, Surabhi Gupta, Deepak Gunjan, Raghibul Hasan, Sumaira Rashid, Safoora Rashid, Meera Vaswani, Anoop Saraya. Alcohol Metabolizing Enzyme Gene Polymorphism in idiopathic and alcoholic chronic pancreatitis patients in Indian population, ISGCON 2016, 15–18 December 2016, New Delhi
22. Namrata Singh, Deepak Gunjan, Indu Arora, Anoop Saraya. Micronutrients assessment in patients with chronic pancreatitis, ISGCON 2016, 15–18 December 2016, New Delhi
23. Hasan A, Gunjan D, Benjamin J, Singh MB, Joshi YK, Saraya A. Plasma Nitrotyrosine Level does not differentiate between patients with Minimal Hepatic Encephalopathy and without Minimal Hepatic Encephalopathy in Liver Cirrhosis, 17th ISHEN Symposium 2017, 9–11 March 2017, Gurgaon

RESEARCH

Funded projects

Ongoing

1. To study the gut mucosal injury in severe, acute Pancreatitis and their correlation with organ failure and mortality, Anoop Saraya, DBT, 3 years, 2015–18, Rs. 56.38 Lakhs
2. MicroRNAs as biomarkers in chronic Pancreatitis patients who are at risk of developing Pancreatic Cancer, Anoop Saraya, DBT, 3 years, 2016–19, Rs. 91 Lakhs
3. Chronic Liver disease: Status of micronutrients with special reference to Vit. D and its supplementation on Hepatic Osteodystrophy—A randomised, controlled trial, Anoop Saraya, ICMR, 3 years, 2013–17, Rs. 69 Lakhs
4. Expression of Reg-4 & MUC-4 in patients with Carcinoma of Pancreas, Anoop Saraya, ICMR, 3 years, 2013–17, Rs. 25 Lakhs
5. The role of Endoplasmic Reticulum Stress in the Pathogenesis of Caerulein induced acute Pancreatitis in mice and the effect of chemical chaperones on the severity of acute Pancreatitis, Pramod Garg, ICMR, 3 years, 2013–17, Rs. 45 Lakhs
6. Genomic and Epigenomic expression in Gallbladder Cancer, Pramod Garg, AIIMS, 2 years, 2014–16, Rs. 10 Lakhs
7. Vitamin A is the 'microenvironmental cue' for triggering disease activity in patients with Inflammatory Bowel disease (Ulcerative colitis, Crohn's disease), Vineet Ahuja, DBT, 3 years, 2013–16, Rs. 82 Lakhs
8. Indo US Centre of Excellence on Inflammatory Bowel diseases, Vineet Ahuja, Indo US Science and Technology Forum, 3 years, 2013–16, Rs. 60 Lakhs
9. Phase III Multicenter trial for evaluating Integrin Inhibitor in Ulcerative Colitis and Crohn's disease, Vineet Ahuja, Millenium Pharmaceuticals, Boston, 9 years, 2008–17, Rs. 15 Lakhs
10. Comparative gut Eukaryotic Microbiome in Inflammatory Bowel disease: Search for a common link in genetically similar population residing in areas with differing disease prevalence, Vineet Ahuja, DST (DSTUKERI), 2 years, 2015–17, Rs. 21 Lakhs
11. Human Gastrointestinal Immunology Translational Programme, Vineet Ahuja, DBT, 3 years, 2014–17, Rs. 78 Lakhs
12. Crohn's disease in India: A multicenter study from a country where intestinal Tuberculosis as well as Crohn's disease is endemic, Vineet Ahuja, ICMR, 3 years, 2016–19, Rs. 45.7 Lakhs
13. A double-blind, randomised, two-armed and parallel clinical study to evaluate efficacy, Safety and tolerability of two dose strengths of Tacrolimus Lipid Suspension for injection rectally administered in adult patients with mild to moderately active left-sided/distal Ulcerative Colitis including Proctosigmoiditis/Proctitis Refractory to Mesalamine treatment, Vineet Ahuja, Lambda Therapeutic Research Ltd., 1 year, 2016–17, Rs. 3.5 Lakhs

14. Biomarker(s) for assessment of Villous Abnormalities in patients with Celiac disease and other Enteropathies, Govind Makharia, DST, 3 years, 2014–17, Rs. 64 Lakhs
15. Exploration for development of wheat with low Immunogenic Gluten, Govind Makharia, ICAR, 3 years, 2014–17, Rs. 49 Lakhs
16. Development of reverse genetic based recombinant Newcastle disease virus model for understanding immune response in patients infected with Hepatitis C virus, B. Nayak, DBT-NER, 3 years, 2016–19.
17. Clinical relevance of human Leukocyte Antigen (HLA-G) Molecules and its polymorphism in Hepatocellular Carcinoma, B. Nayak, AIIMS, 1 year, 2016, Rs. 4 Lakhs
18. Diabetes-Liver disease embrace: A cross sectional multicentric study to explore the effect of diabetes on short term outcome of acute and chronic liver disease, Shalimar, Liver Foundation, 2014–17, Rs. 10.08 Lakhs

Completed

1. Genome-wide Association Study of Chronic Pancreatitis, Pramod Garg, DBT, 3 years, 2012–16, Rs. 163 Lakhs
2. An inexpensive and rapid diagnostic method for detection of HCV RNA by LAMP, Shyam Prakash, DBT, 2013–16, Rs. 24.75 Lakhs
3. To study the pathogenesis of non-alcoholic fatty Liver disease in Indian population, S.K. Acharya, DST, 2013–16, Rs. 27 Lakhs

Departmental projects

Ongoing

1. Clinical significance of epithelial cell adhesion molecule (Ep-CAM) in Esophageal Cancer
2. The role of miRNA(s) regulating metabolic reprogramming enzyme to promote Tumour Progression
3. Study of prognostic significance of DNA methylation pattern in patients with Carcinoma of Pancreas
4. Role of miRNA mediated modulation of signal transduction in Pancreatic Cancer
5. A comparative study of changes in intestinal microbiome and intestinal permeability in Alcoholic Liver disease, non-alcoholic fatty Liver disease and healthy subjects
6. To study the frequency, natural course and outcome of acute Kidney injury in acute on chronic Liver failure patients
7. To evaluate the predictors of outcome in acute Pancreatitis
8. Mesenchymal stem cell therapy in patients with acute on chronic Liver failure: A double blind randomised placebo controlled trial
9. To study the prevalence of cerebral edema and neuropathological changes in acute on chronic Liver failure patients
10. Role of microRNA as biomarker and its modulation in HCC targeting mTOR pathway
11. Genetic variations of CD14 gene and its interaction with MD-2 protein in patients with alcohol induced Liver disease and Alcoholic Pancreatitis
12. Laboratory investigations of hepatotropic viruses isolated from CLD, ALF and ACLF patients
13. Hepatitis B virus breakthrough in chronic hepatitis patients on Nucleos(t)ide analog therapy and its effect on HBV polymerase activity.
14. To evaluate predictors of outcome of acute Pancreatitis
15. Whether early onset organ failure predisposes to subsequent development of infected pancreatic necrosis in patients with severe acute Pancreatitis?
16. Global prevalence of Celiac disease: A systematic review and meta-analysis
17. To study the prevalence of clinical/subclinical endocrinopathies and endocrine organ autoimmunity in treatment naive patients with Celiac disease.
18. Prevalence of thyroid autoimmunity in first degree relatives of Celiac disease patients
19. Evaluation of etiological and histological feature of the liver in patients with Celiac disease having Liver dysfunction
20. Prevalence of Celiac disease in patients with Cerebellar Ataxia

Completed

1. To study intestinal permeability and expression on claudin 2 & 4 in intestinal mucosa in patients with cirrhosis
2. Expression of REG4 and MUC4 in patients with Carcinoma of Pancreas
3. Effect of different etiologies on the outcome and long term survival of acute Liver failure
4. To study the pathophysiological changes in patients with acute, chronic Liver failure

5. Role of C-Reactive protein (CRP) in predicting response to loco-regional therapy of HCC
6. Assessment of cytokine profile in an open labelled randomised, controlled trial of standard dose vs once a day intravenous albumin in patients with spontaneous bacterial peritonitis
7. Assessment of oxidative stress and antioxidant levels in patients with idiopathic recurrent acute pancreatitis
8. Efficacy and safety of Tenofovir Disoproxil Fumarate/TDF in Indians with chronic Hepatitis B

Collaborative projects

Ongoing

1. Prevalence and molecular characterization of occult Hepatitis C virus infection (OCI) in patients with Cryptogenic Liver disease (Microbiology)
2. Association of inflammatory cytokines with completed suicide: A hospital based case control study (Forensic Medicine)
3. Impact of bariatric surgery on oxidative stress and pro-antiinflammatory pathways in non-alcoholic fatty Liver disease of morbidly Obese patients (Surgical Disciplines)
4. Hepatic regenerative potential of exosomes derived from human Mesenchymal Stem Cells in Liver fibrosis model (Stem Cell facility)
5. Role of multiparametric MRI and Ga-68 PSMA PET Scan in evaluation of high risk prostate cancer and its correlation with histopathology and genomic markers (Radiodiagnosis)
6. To assess the prognostic value of various cytokines in acute on chronic Liver failure (ACLF) patients (Medicine/ Infectious disease)
7. Nanotechnology based vaccine against Hepatitis E virus (Biotechnology, Jaypee Institute of Information Technology, NOIDA, UP)
8. Nanoparticles based Amperometric Biosensor for detection of Thyroid Dysfunctioning (Biotechnology, Jaypee Institute of Information Technology, Noida, UP)
9. Comparison of combination therapy of corticosteroids and bovine colostrum vs corticosteroids and placebo: A multicentre, randomised and double-blind, placebo controlled trial in treatment of alcoholic Hepatitis 'in Extremis' (Gastroenterology, Dayanand Medical College and Hospital, Ludhiana, G.B. Pant Hospital, New Delhi and Global Hospital, Hyderabad)
10. Correlation of Hepatic fat content and angiographic coronary artery stenosis (Cardiology, VMMC and Safdarjang Hospital)
11. A randomised trial of endoscopic vs laparoscopic drainage of Pancreatic Pseudocysts (Surgery).
12. A randomised trial of surgery vs endoscopic therapy for chronic Pancreatitis (GI Surgery)
13. Effect of anti-inflammatory drugs on duct ligation and sodium taurocholate model of experimental acute pancreatitis in rats (G.I. Surgery, Anatomy)

Completed

1. Correlation between Serum Biomarkers, Dynamic Contrast-Enhanced Magnetic Resonance Imaging & Histopathology in Paediatric Osteosarcomas (Orthopaedics)

PUBLICATIONS

Journals: 62

Abstracts: 34

Chapters in books: 4

Books: 1

PATIENT CARE

Routine Gastroenterology Clinic (Monday to Friday)

New cases: 26742 Old cases: 38743

Special clinics

Name of clinic	New cases	Old cases
Liver	1940	13227
Pancreas	603	2840
IBD and ITB	611	4925
Interventional	224	225
Celiac	—	452

Endoscopy services

Diagnostic and therapeutic endoscopies:	25775
Diagnostic and therapeutic colonoscopies:	4270
Diagnostic sigmoidoscopies:	4290
Side viewing endoscopies:	1020
Endoscopic retrograde cholangiopancreatography (ERCP):	3870
Endoscopic ultrasound (Diagnostic and therapeutic):	870

List of tests done in the department

Department has molecular biology, cell culture, immunology, virology and biochemistry laboratory for patient services. Different molecular diagnostic and biochemical test are offered to the patients. The following tests were done in the departmental laboratories:

1.	Hepatitis B virus quantitation by realtime PCR	3954
2.	Hepatitis C virus quantitation by realtime PCR	2793
3.	HCV genotyping by real time PCR	190
4.	HEV detection qualitative	97
5.	HEV detection quantitative	10
6.	HBV resistance (sequencing)	03
7.	HCV resistance (sequencing)	02
8.	HBsAg by ELISA	296
9.	HBeAg by Vidas/Flurometry	1911
10.	Anti Hbe by Vidas	1815
11.	Anti HBc Total by Vidas	132
12.	HBcIgM by Vidas	43
13.	HAV IgM by ELISA	56
14.	HEV IgM by ELISA	89
15.	Anti HCV by ELISA	257
16.	Arterial Ammonia	790
17.	Prothrombin time	7115
18.	Ceruloplasmin by turbidometr	7225
19.	D-Xylose	300
20.	Fecal Chymotrypsin Kinetic method	154
21.	Fecal Fat by ether extraction	114
22.	Fecal elastase by ELISA	242
23.	Hydrogen Breath Test	162
24.	Fecal Calprotectin BY ELISA	300
25.	Endotoxin by ELISA	160
26.	Urinary Sodium/Pottasium	250
27.	Ceruloplasmin by turbidometry	1764
28.	Serum Copper by colorimetry	1680
29.	24 hrs. urinary copper	1000
30.	GGT	157
31.	MDA by spectrophotometry	104
32.	(FRAP) by colorimetry	104
33.	Vitamin C	104
34.	SOD by kinetic method	104
35.	Total nitric Oxide	104
36.	sHLA G ELISA	80
37.	hsCRP by ELISA	232
38.	IL 1beta by ELISA	104

39.	IL6 by ELISA	104
40.	TNFalpha by ELISA	104
41.	Adiponectin by ELISA	104
42.	Resistin by ELISA	104
43.	Leptin by ELISA	104
44.	Visfatin by ELISA	104

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor Pramod Garg was nominated as the Secretary, International Association of Pancreatology; ‘Lecture Award in the field of Toxicology’ for 2016 by National Academy of Science, India; Continuing as Associate Editor of an international journal ‘Pancreatology’ (5years impact factor 2.39).

Professor Govind Makharia was the recipient of First Prize, AIIMS Excellent Award 2016, recipient of Research Paper of the Year Award 2016 by BMJ South East Asia Award; Elected Secretary General of Indian Society of Gastroenterology (2016–19); Cochairman of World Digestive Health Day 2016 by World Gastroenterology Organization; Cochairman of making of Global guidelines on ‘Diet and Gut’ by World Gastroenterology Organization; Board Member, International Association for the Studies on Celiac Disease (2015–19); Editorial Advisory Board Member, Clinical and Translational Gastroenterology (American College of Gastroenterology); Governing Body member of Central Council for Research in Ayurvedic Sciences, Ministry of Ayush, Government of India (2015–17); Governing Body Member of Central Council for Research in Unani Medicine, Ministry of Ayush, Government of India (2015–17); Coordinator of the Department of Biotechnology Consortium on Celiac Disease; Elected Governing Council Member, Indian Motility and Functional Diseases Association; Member, Research Committee, World Gastroenterology Organization; Continued as Coordinator of Indian Society of Gastroenterology Task Force on Inflammatory Bowel Disease and Coordinator of Young Clinician Programme, Indian Society of Gastroenterology.

Dr Baibaswata Nayak was a reviewer for 14 national and international journals including Nature Scientific Report, PLoS Pathogen, PLoS One, Actatropica, Journal of Virology, Biochemistry and Biotechnology Research, Drug Research, Virus Research, Vaccine, Virology Journal, Viral Immunology, Tropical Gastroenterology, Indian Journal of Virology and Journal of Veterinary Science; He is also a reviewer to extramural funding of DST SERB, AYUSH/CCRH, ICMR STS 2016 and DBT nominee for IBSC grant proposal.

VISITING SCIENTISTS

1. Dr Vikas Dudeja, University of Miami, USA visited the department on 9 August 2016
2. Professor Soren Schou Olesen, Medical Doctor, Department of Gastroenterology and Hepatology, Aalborg University Hospoital, Denmark visited the department on 14 March 2017
3. Professor Asbjorn Mohr Drewes, Director of Mech-Sense and Centre for Pancreatic Diseases, Aalborg University Hospital, Denmark visited the department on 14 March 2017

9.14. Gastrointestinal Surgery and Liver Transplantation

Professor and Head
Peush Sahni

Professors

Sujoy Pal

Nihar Ranjan Dash

Assistant Professors (On contract)

Rajesh Panwar

Anand Narayan Singh

HIGHLIGHTS

The **Gastrointestinal Surgery and Liver Transplantation** department organised the 4th Annual Meeting of the Indian Ostomy Society at AIIMS, New Delhi on 12 October 2016. The department also conducted a Workshop on Cadaveric Multiorgan Retrieval for residents on 16 April 2016. In addition, we organised a Workshop on Study Design and Data Analysis on 22–23 October 2016 and a Workshop on Peer Review on 15–17 January 2017.

EDUCATION

The department is actively involved in the teaching of Undergraduate students. The following topics are taught to sixth and eighth semester students through didactic lectures and integrated seminars:

Benign and malignant esophageal disorders	Cancer of the stomach
Upper gastrointestinal bleeding	Lower gastrointestinal bleeding
Acute intestinal obstruction	Intestinal tuberculosis
Inflammatory lesions of small and large bowel	Amoebic lesions of the bowel and liver
Portal hypertension	Gall stone disease and complications
Biliary strictures	Gall bladder cancer
Obstructive jaundice	Diseases of the pancreas
Acute pancreatitis	Chronic pancreatitis
Nutrition in surgical patients	

The department offers 3 years training leading to the award of an MCh in Gastrointestinal Surgery. There are 15 MCh students in the department. The department also offers shortterm observership for a period of 1–3 months. The department has also been providing 1 year longterm training to one MCh student from National Academy of Medical Sciences, Kathmandu, Nepal for the past 2 years. The weekly academic activities include a weekly audit, presentations of abstracts of recently published papers, a seminar, journal club, and discussions on research and dissertation projects. Beside these, a combined round with Gastroenterology and a GI Radiology conference are held once in a week, and a GE-GI Surgery Histopathology Conference, once in two weeks.

CMEs/Workshops/Symposia/National and International Conferences organised by the department

1. Workshop on Cadaveric Multi-organ Retrieval, AIIMS, New Delhi, 16 April 2016.
2. The 4th Annual Meeting of the Indian Ostomy Society, AIIMS, New Delhi, 12 October 2016.
3. Workshop on Study Design and Data Analysis, AIIMS, New Delhi, 22–23 October 2016
4. Workshop on Peer Review, AIIMS, New Delhi, 15–17 January 2017

Lectures delivered

Peush Sahni: 42

Sujoy Pal: 11

Nihar Ranjan Dash: 1

Rajesh Panwar: 1

Anand Narayan Singh: 1

Peush Sahni: 42

1. Problems faced by medical journals in the SAARC region, Third Conference of the Pakistan Association of Medical Editors (PAME), Lahore, Pakistan, 1–2 April 2016
2. Tables and figures, KL Wig CMET, AIIMS, 11 May 2016
3. If it is not published, it didn't happen, Fraud, misconduct and plagiarism, Results section: Choosing a journal, editorial process conflict of interest, citation analysis, impact factor and its pitfalls, SGPGI-NIH Workshop on Scientific Paper Writing, 13–15 May 2016, SGPGI, Lucknow
4. Publication ethics, skype lecture, Bioethics Certificate Course 2016, Manipal Centre for Bioethics, Manipal University, Manipal, 5 May 2016
5. Approach to a liver SOL, IHPBA India Chapter Certificate Course in HPB Surgery, 22–26 June 2016, Lakeshore Hospital and Research Centre, Kochi
6. Surgery for non-cirrhotic portal hypertension, IHPBA India Chapter Certificate Course in HPB Surgery, 22–26 June 2016, Lakeshore Hospital and Research Centre, Kochi
7. Video lecture: Devascularisation, IHPBA India Chapter Certificate Course in HPB Surgery, 22–26 June 2016, Lakeshore Hospital and Research Centre, Kochi
8. Acute abdomen, Panelist in panel discussion, Delhi Chapter, Indian Society of Radiodiagnosis, 23 July 2016, India Habitat Centre, New Delhi
9. ICMJE recommendations, introduction, discussion, abstract, title, keywords, reference, PG Course on Research Methodology, Writing and Communication, 29 July 2016, AIIMS New Delhi
10. IMRAD format, results, tables, figures, discussion, abstract, title, keywords and editorial process, Workshop on Writing a Research Paper, Indira Gandhi Institute of Medical Sciences, Patna, 5–6 August 2016
11. IMRAD format, discussion, editorial process, Scientific misconduct/predatory journals and choosing a journal, CMET–NMJI Workshop on Writing a Research Paper, K.L. Wig CMET, AIIMS, 19–20 August 2016

12. Writing, communicating and reporting research, Research Methodology Workshop, International Centre for Genetic Engineering and Biotechnology (ICGEB), Aruna Asaf Ali Marg, New Delhi, 1 September 2016
13. Scientific misconduct, Research Methodology Workshop, International Centre for Genetic Engineering and Biotechnology (ICGEB), Aruna Asaf Ali Marg, New Delhi, 1 September 2016
14. How to write an abstract for a conference presentation, IHPBA Certificate Course, BHU, Varanasi, 24 September 2016
15. Carcinoma gall bladder: Algorithmic approach, IHPBA Certificate Course, BHU, Varanasi, 25 September 2016
16. Management of bile duct injury (moderated panel discussion), IHPBA Certificate Course, BHU, Varanasi, 25 September 2016
17. Surgery for portal hypertension, Surgery update 2016, Maulana Azad Medical College, New Delhi, 27 September 2016
18. Presenting a journal club, ICMJE recommendations, Results/tables/figures, discussion,; abstract, title, keywords, reference, PG Course on Research Methodology, Writing and Communication, 30 September 2016, AIIMS New Delhi
19. Surgeon's perspective in acute pancreatitis, PGI-GI emergency update, Putting evidence into practice in the Indian scenario, 1 October 2016, PGIMER, Chandigarh
20. Case discussion: Young lady with lower gastrointestinal bleeding, PGI-GI emergency update, Putting evidence into practice in the Indian scenario, 1 October 2016, PGIMER, Chandigarh
21. Diagnosis and management of early and delayed presentation of CBD injury, SELSI Consensus Meeting on Prevention and Management of Bile Duct Injury, AIIMS, New Delhi, 2 October 2016
22. Setting up of a GI surgical unit, Bursary Programme, XXVI Annual Conference of Indian Association of Surgical Gastroenterology, Coimbatore, Tamil Nadu, 6–9 October 2016
23. PG clinics: Case discussions, Bursary Programme, XXVI Annual Conference of Indian Association of Surgical Gastroenterology, Coimbatore, Tamil Nadu, 6–9 October 2016
24. Case capsules in GI bleed: Upper, lower and obscure, XXVI Annual Conference of Indian Association of Surgical Gastroenterology, Coimbatore, Tamil Nadu, 6–9 October 2016
25. Abstract and manuscript writing, Bursary Programme, XXVI Annual Conference of Indian Association of Surgical Gastroenterology, Coimbatore, Tamil Nadu, 6–9 October 2016
26. Critical analysis of a published manuscript: Cohort study, Bursary Programme, XXVI Annual Conference of Indian Association of Surgical Gastroenterology, Coimbatore, Tamil Nadu, 6–9 October 2016
27. Publication ethics, Skype lecture, Bioethics Certificate Course 2016, Manipal Centre for Bioethics, Manipal University, Manipal, 8 October 2016
28. Writing, communicating and reporting research, Research Methodology Workshop, PGIMER, Chandigarh, 20 October 2016
29. Scientific misconduct, Research Methodology Workshop, Research Methodology Workshop, PGIMER, Chandigarh, 20 October 2016
30. A. Preparing slides and B. Poster presentation, Public speaking and scientific presentation, KL Wig CMET, AIIMS, New Delhi, 18 November 2016
31. Getting your study published, Coffee with expert session, Annual Conference of the Indian Society of Gastroenterology, New Delhi, 18 December 2016
32. Diverticulitis, Case based panel discussion, Annual Conference of the Indian Society of Gastroenterology, New Delhi, 18 December 2016
33. Identifying the research topic, Art of grant writing for undergraduate teachers, D.S. Kothari Centre for Research and Innovation in Science Education, Miranda House, University of Delhi, 5–6 January 2017
34. Applied anatomy and physiology of pancreas and its clinical relevance, Zonal CME on pancreas-IHPBA, Ranchi, 8 January 2017
35. Periampullary malignancy: Tips for surgical and endoscopic management, Zonal CME on Pancreas-IHPBA, Ranchi, 8 January 2017
36. Peer review: What is it all about? The peer review process: History and methods, How to write a review report? Expectations of an editor from a peer reviewer, IAMJE Workshop on Peer Review, AIIMS, New Delhi, 16–17 January 2017
37. Methods, discussion, abstract, predatory journals, XXI Quality Improvement Programme, Delhi Institute of Pharmaceutical Sciences and Research, New Delhi, 4 February 2017
38. Shunt surgery in portal hypertension: Current status, CME in Surgery, 18 February 2017, AIIMS
39. Case discussions, IASG Clinics, Hyderabad, 4–5 March 2017

40. Publication ethics, Workshop on Bioethics, KL Wig CMET, AIIMS, New Delhi, 9 March 2017
41. ICMJE recommendations, introduction, discussion, abstract, title, keywords, reference, 1st PG Course on Research Methodology, Writing and Communication, 24–25 March 2017, AIIMS New Delhi
42. IMRAD format, discussion, editorial process, Scientific misconduct, Predatory journals, Choosing a journal, CMET–NMJI Workshop on Writing a Research Paper: Structure of Workshop/IMRAD Format & Scientific Misconduct/Predatory Journals, 24–25 March 2017

Sujoy Pal: 11

1. How I do it: Video demonstration of pancreatojejunal anastomosis: Dunking technique, CME on Pancreatic Surgery, 6 August 2016, Indraprastha Apollo Hospital, New Delhi.
2. Panel discussion on hilar cholangiocarcinoma, GI Master Class 2016, 27–28 August 2016, Global Hospitals, Bengaluru
3. Surgery for portal hypertension: Current status: 11th IHPBA Indian Chapter Certificate Course in Hepato-Pancreato-Biliary Surgery, 21–25 September 2016, IMS BHU, Varanasi
4. Surgical anatomy of the liver: Surgeon's perspective, 11th IHPBA Indian Chapter Certificate Course in Hepato-Pancreato-Biliary Surgery, 21–25 September 2016, IMS BHU, Varanasi
5. Anastomotic techniques following pancreaticoduodenectomy. 1st International Conference of the Nepal Society of Gastroenterologists, 9–11 December 2016, Kathmandu, Nepal
6. Video Lecture: Proximal lienorenal shunt for portal hypertension, 11th IHPBA Indian Chapter Certificate Course in Hepato-Pancreato-Biliary Surgery, 21–25 September 2016, IMS BHU, Varanasi
7. Video Lecture: Proximal lienorenal shunt for portal hypertension, 26th Annual Conference of the IASG, 6–9 October 2016, Coimbatore
8. Video lecture: Proximal lienorenal shunt for portal hypertension, 1st International Conference of the Nepal Society of Gastroenterologists, 9–11 December 2016, Kathmandu, Nepal
9. Management of colonic obstruction in emergency setting, HALS Colorectal Symposium, 18 January 2017, Rohini, New Delhi
10. Debate: Transplantation vs resection for resectable hilar cholangiocarcinoma (speaking for resection), 14th National Conference of the Indian Chapter of IHPBA, 27–29 January 2017, Bengaluru
11. Surgical anatomy of the liver, HALS CME in Hepato-Pancreato-Biliary Surgery, 2 February 2017, Sir Ganga Ram Hospital, New Delhi

Nihar Ranjan Dash: 1

1. Damage control surgery, CME on Emergencies, JDWNR Hospital, 3–4 March 2017, Khesar Gyalpo University of Medical Sciences, Bhutan

Rajesh Panwar: 1

1. Cystic Tumours of Pancreas, CME in Surgery 2017, Department of Surgical Disciplines, 19 February 2017, AIIMS, New Delhi

Anand Narayan Singh: 1

1. Fundoplication, CME in Surgery 2017, Department of Surgical Disciplines, 19 February 2017, AIIMS, New Delhi

Oral papers/posters presented: 13

1. Kilambi R, Singh AN, Pal S, Dash NR, Sahni P. Extensive resections in carcinoma gall bladder: A decade long experience, 3rd ILS Conference, 1–3 April 2016, New Delhi (Best Oral Paper Award)
2. Mehra S, Kumar M, Panwar R, Dash NR, Singh R, Yadav R, *et al.* Diagnostic significance of cathepsin L and cathepsin B expression in human gallbladder cancer – A pilot study, AACR 107th Annual Meeting, 16–20 April 2016; New Orleans, Los Angeles, USA.
3. Khan AA, Pal S, Garg P, Dash NR, Sahni P. Predicting postoperative pancreatic fistula (POPF) after pancreatic resections using preoperative endoscopic ultrasound (EUS) elastography (EUSE): A prospective study, 12th World Congress of IHPBA, 20–23 April 2016, Sao Paulo, Brazil.
4. Kilambi R, Pal S, Dash NR, Kumble M, Shalimar, Saxena R, *et al.* Hypersplenism in patients with Extrahepatic Portal Venous Obstruction (EHO): Its correlation with splenomegaly and severity of portal hypertension, 12th World Congress of IHPBA, 20–23 April 2016, Sao Paulo, Brazil

5. Panwar R, Khan AA, Pal S, Sharma R, Dash NR, Sahni P. Prediction of pancreatic fistula and fibrosis in patients undergoing pancreatic resections using differential pancreatic enhancement pattern on Multiphasic Computed Tomography (MPCT) scan: A prospective study, 12th World Congress of IHPBA, 20–23 April 2016, Sao Paulo, Brazil
6. Singh AN, Pal S, Dash NR, Madhusudhan KS, Tandon N, Sahni P. Correlating pancreatic parenchymal remnant volume following pancreaticoduodenectomy with occurrence of new-onset diabetes using Multidetector Row Computed Tomography (MDCT) imaging volumetry, 12th World Congress of IHPBA, 20–23 April 2016, Sao Paulo, Brazil
7. Dash NR, Mahapatra V, Kilambi R, Singh AN. Traumatic experience with balloon inflated catheters for enteral feedings, World Trauma Congress, 20 August 2016, New Delhi
8. Das SAP, Singh AN, Pal S, Dash NR, Sahni P. Gastrointestinal Stromal Tumours (GIST): Experience at an Indian tertiary care centre, 26th National Conference of IASG, 6–9 October 2016, Coimbatore
9. George A, Singh AN, Pal S, Dash NR, Sahni P. Surgical management of peptic ulcer: Where are we? 26th National Conference of IASG, 6–9 October 2016, Coimbatore
10. Jain HA, Das P, Pal S, Dash NR, Garg P, Gupta S, Sahni P. Posterior (SMA- first) approach vs standard pancreaticoduodenectomy in patients with periampullary tumours and pancreatic cancer with special focus on circumferential resection margins and medium term survival outcome: A prospective, randomised controlled trial. 26th National Conference of IASG, 6–9 October 2016, Coimbatore
11. Jain HA, Dash N, Madhusudhan KS, Pal S, Sahni P, Srivastava DN. Safety and efficacy of unilateral vs bilateral Percutaneous Transhepatic Biliary Drainage (PTBD) in patients with malignant obstruction of the biliary hilum: A randomised, controlled study, 26th National Conference of IASG, 6–9 October 2016, Coimbatore
12. Raichurkar K, Mohapatra V, Panwar R, Pal S, Dash NR, Sharan P, *et al.* Prospective validation of Comprehensive Clinical Index (CCI) in patients undergoing GI surgical procedure, 26th National Conference of IASG, 6–9 October 2016, Coimbatore (Best Special Mention Poster Award)
13. Raichurkar K, Panwar R, Mohapatra V, Pal S, Dash NR, Sharan P, *et al.* Correlation of intraoperative events with postoperative outcomes and quality of life in patients undergoing gastrointestinal surgery, 26th National Conference of IASG, 6–9 October 2016, Coimbatore

RESEARCH

Funded projects

Ongoing

1. A preliminary study to document the genetic and molecular profile of resected colorectal cancers in India, Sujoy Pal, 3 years, 2016–17, Rs. 5 Lakhs
2. Development of an indigenous affordable no-frill enteral feeding pump, Peush Sahni, DST, 3 years, 2015–17, Rs. 23.85 Lakhs.
3. Oesophageal resection vs bypass in patients with corrosive stricture of the oesophagus requiring surgery. N.R. Dash, AIIMS, 5 years, 2012–17, Rs. 1.50 Lakhs
4. Posterior (SMA-first) approach vs standard pancreaticoduodenectomy in patients with pancreatic cancer with special focus on circumferential resection margins and medium term survival outcome: A prospective randomised, controlled trial, Sujoy Pal, AIIMS, 5 years, 2014–17, Rs. 5 Lakhs
5. Randomised, controlled trial on skin preparation with chlorhexidine alcohol prep. vs savlon/betadine prep. in elective gastrointestinal surgery, Peush Sahni, AIIMS, 5 years, 2012–17, Rs. 1.50 Lakhs
6. Safety and effectivity of HIPEC in gall bladder cancer, Nihar Ranjan Dash, AIIMS, 1 year, 2016–18, Rs. 5 Lakhs

Completed

1. Development of low cost device for non-invasive management of incontinence (faecal/urinary), Peush Sahni, 5 years, DST, 2012–17, Rs. 21.60 Lakhs
2. Unilateral vs bilateral PTBD in the management of malignant hilar biliary obstruction. Nihar Ranjan Dash, AIIMS 2 year, 2014–16, Rs. 5 Lakhs.

Departmental projects

Ongoing

1. Surgery for corrosive stricture oesophagus: Assessment of complications, mental health and quality of life (QOL)
2. Comparison of CT portography and ultrasonography with color doppler in patients with EHPVO

3. Effect of steroids and anticytokine monoclonal antibodies on the severity of murine experimental acute pancreatitis
4. A randomised, controlled trial to compare neoadjuvant chemoradiotherapy vs direct surgery for SCC of the esophagus
5. A randomised, controlled trial to compare SEMS+chemoradiotherapy vs SEMS+RT alone in patients with unresectable/metastatic oesophageal cancer
6. A randomised, controlled trial of pyloric ring excising vs classical pancreaticoduodenectomy with respect to occurrence of delayed gastric emptying
7. Evaluation of a perioperative low dose steroid regimen for steroid treated inflammatory bowel disease patients: A prospective, randomised study
8. Comparison of preoperative supervised and routine incentive spirometry on postoperative pulmonary complications in open abdominal and thoracic surgery: A randomised, clinical trial
9. Prevalence of frailty and its association with morbidity in elderly surgical patients
10. VAAFT (video assisted anal fistula treatment) in Crohn's disease associated perianal fistulae (CDAPF): A prospective evaluation
11. Incidence of deep vein thrombosis (DVT) in major gastrointestinal surgery: A prospective observational study
12. Impact of proton pump inhibitors on the development of anastomotic complications after gastric pull-up and cervical oesophago-gastric anastomosis - A randomised, control study

Completed

1. Assessment of long term quality of life following oesophagectomy in patients with carcinoma oesophagus
2. Correlation of intraoperative events with postoperative outcomes and quality of life in patients undergoing gastrointestinal surgery
3. Prospective validation of comprehensive complication index (CCI) in patients undergoing gastrointestinal and hepatobiliary procedures
4. Feasibility and outcomes of implementation of an Enhanced Recovery After Surgery (ERAS) protocol in patients undergoing oesophageal resection
5. Evaluation of prophylactic low molecular weight heparin and unfractionated heparin on severity of experimental acute pancreatitis in rats
6. Outcomes following Enhanced Recovery After Surgery (ERAS) programme in patients undergoing pancreaticoduodenectomy

Collaborative projects

Ongoing

1. An observational study of portal vein embolization in patients with hepatobiliary malignancies (Radiodiagnosis)
2. Endoscopic vs surgical treatment of chronic pancreatitis: A comparison of outcomes (Gastroenterology)

Completed

1. Percutaneous transhepatic biliary drainage for obstructive jaundice: Assessment of outcome and quality of life (Radiodiagnosis)
2. Gemcitabine and oxaliplatin vs gemcitabine and capecitabine in unresectable carcinoma gall bladder with obstructive jaundice post PTBD/stenting (PTBD or ERCP): A randomised, controlled study (Medical Oncology)

PUBLICATIONS

Journals: 22

Abstracts: 15

Chapters in books: 1

Books: 1

PATIENT CARE

OPD

Total number of new patients seen: 3062

Total number of old patients seen: 6681

Specialty clinics

Department is running a daily clinic for stoma patients.

Special laboratory facilities

Anal manometry, Oesophageal manometry, 24-hour ambulatory oesophageal pH monitoring, Endotraining laboratory.

Inpatients

Total Surgical procedures: 575

Elective: 394

Emergencies: 181

Special interest areas

Biliary obstruction:	87	Portal hypertension:	36
Oesophageal cancer:	25	Carcinoma gall bladder:	35
Ulcerative colitis:	39	Upper GI haemorrhage:	6
Lower GI haemorrhage:	8	Acute pancreatitis:	15
Chronic pancreatitis:	12	Biliary strictures:	17
Pancreatoduodenectomy:	60	Liver resections:	31

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor Peush Sahni continues as the representative of the World Association of Medical Editors (WAME) at the International Committee of Medical Journal Editors (ICMJE) and as the Chair, Membership Committee, WAME; Editor, The National Medical Journal of India and Associate Editor, G. I. Surgery Annual; President-Elect, Indian Association of Surgical Gastroenterology and Chairperson, Education Committee, Indian Association of Surgical Gastroenterology; President, Indian Association of Medical Journal Editors; Was invited to the SELSI Consensus Meeting to Formulate Guidelines for Prevention and Management of Bile Duct Injury, 2 October 2016, AIIMS, New Delhi.

Dr Sujoy Pal is a member of the Scientific Committee, Indian Association of Surgical Gastroenterology and helped in reviewing all the scientific presentations/posters submitted to the 26th National Conference of the IASG, Coimbatore, 6–9 October 2016; Was appointed by the Union Public Service Commission (New Delhi) and the King George Medical University (Lucknow) as an Expert to assist in faculty selection; Was invited to conduct selection of MCh GI Surgery candidates by the West Bengal Medical University, Kolkata; Associate Editor, GI Surgery Annual since 2004; Reviewer for British Medical Journal-Case Reports, Journal of Gastroenterology and Hepatology, National Medical Journal of India, Indian Journal of Medical Research, World J GI Surgery, Indian Journal of Gastroenterology, Tropical Gastroenterology and Indian Journal of Surgery; Was invited to SELSI Consensus Meeting to Formulate Guidelines for Prevention and Management of Bile Duct Injury, 2 October 2016, AIIMS, New Delhi; Was a part of Resident Outreach Programme 'PRASHNA' for CME in GI surgery (conducted by Prof VK Kapoor, SGPGI), He has been a contributing faculty and has participated in Webinars.

Dr Nihar Ranjan Dash was re-elected for the seventh time as the President, Indian Ostomy Society; organised Annual Meeting of Indian Ostomy Society, 12 October 2017; organised field visits in Delhi and NCR; Wrote 5 articles in Hindi newspapers on various aspects of GI disorders to increase public awareness; Member of web committee of International Society for Diseases of Esophagus; Reviewer for European Journal of Radiology; Chairperson at 11th AIIMS Surgical Week, International Conference, CME cum Live Workshop (ENDOSURG 2017), 16–19 March 2017, AIIMS, New Delhi; Was invited to the SELSI Consensus Meeting to Formulate Guidelines for Prevention and Management of Bile Duct Injury, 2 October 2016, AIIMS, New Delhi; 30th Annual National Conference of Indian Association of Surgical Oncology NATCON-IASO 2016, 22–25 September 2016, Jodhpur; Dinner Symposium, CME on HIPEC, Department of Obstetrics and Gynaecology, AIIMS, India Habitat Centre, New Delhi, 2 February 2017; Was appointed as an Expert for the Union Public Service Commission in Surgery with specialization in GI Surgery, Central Drugs Standard Control Organisation (CDSCO), Prashna India and Selection of Faculty, Department of Surgical Gastroenterology, AIIMS, Rishikesh, 29 March 2017; Member of the organising committee of 1st Annual Conference of Indian Society of Clinical Nutrition (INSCN) organised by the Department of Clinical Nutrition, ILBS, 14–16 October 2016, New Delhi.

9.15. Geriatric Medicine

Professor and Head

A.B. Dey

Assistant Professors

Prasun Chatterjee

Avinash Chakrawarty

N.N. Prem

HIGHLIGHTS

The Geriatric Medicine Department organized the 18th Biennial Conference of Association of Gerontology (India) and 14th Annual Conference of Indian Academy of Geriatrics during 9–11 November 2016 as Indian Ageing Congress 2016.

The Congress was preceded by CME Program on 8 November 2016. The Department was assigned the task of creating the infrastructure for application of mobile telephony in old age care (mAging Project) with technical support from “Be He@lthy, Be Mobile” initiative of World Health Organization and financial support from Ministry of Health and Family Welfare, Government of India. A “National Consultation on the application of mobile telephony in old age care” was held on 26 August 2016. The consultation was inaugurated by Shri CK Mishra, Secretary, Ministry of Health and Family Welfare, Government of India and was attended by officers from WHO SEARO, WHO India and WHO Geneva Office.

EDUCATION

The department continues to be the largest postgraduate department of Geriatric Medicine in India. It has major focus on postgraduate training with five sessions of teaching every week. The department imparted training in old age care to 30 nurses of AIIMS in a half-day program during the year under the National Programme for Health Care of the elderly. The department also started sensitizing undergraduate student regarding Geriatric medicine by providing lectures on assessment of older patients. Five students of PG Diploma in Health and Social Gerontology from Institute of Home Economics, Delhi University, were provided theoretical and practical training during the year. Thirty students of Certificate Courses in Geriatric Care from National Institute of Social Defense, Ministry of Social Justice and Empowerment were provided hands on training in care senior citizens for two weeks. Lt Col Dheeraj Nauhwaar from Army Medical Corp joined the department for one year training in Geriatric Medicine.

CMEs/Workshops/Symposia/National and International Conferences

1. Association of Gerontology India (18th Biennial Conference) and Indian Academy of Geriatrics (14th Annual Conference) Indian Ageing Congress 2016, 8 November 2016, New Delhi

Lectures delivered

A.B. Dey: 1 Prasun Chatterjee: 2 Avinash Chakrawarty: 1 Naganath Narasimhan Prem: 4

A.B. Dey: 1

1. Policy levers for making change happen: Incentives for better integrated care, 6th Global Forum on Incontinence, 19 April 2016, Berlin

Prasun Chatterjee: 2

1. Subjective cognitive impairment, Next big thing in cognitive research? Indian Aging Congress, 10 November 2016, AIIMS, New Delhi
2. Inter-generational solidarity: As an innovative model of long term, Family care which will de-stress the existing hospital based model of health care, Advances in Health Care Management Services, 11 December 2016, IIM, Ahmedabad

Avinash Chakrawarty: 1

1. Cardiovascular profile of elderly patients attending geriatric clinic, Indian Aging Congress, 2016, 10 November 2016, AIIMS, New Delhi

Naganath Narasimhan Prem: 4

1. Comprehensive geriatric assessment, GERICON 2016 (Maharashtra), Latur, Maharashtra
2. Falls Workshop, GERICON 2016 (Maharashtra), 23 September 2016, Latur, Maharashtra
3. Outpatient management and advances in COPD, Indian Aging Congress, 10 November 2016-AIIMS, New Delhi
4. Nursing assessment of older patients (CGNA), Nursing Training Program, 27 February 2017, Conference Hall, BHU, Varanasi

Oral papers/posters presented: 18

1. Haldar A. Easy-care standard instrument to screen for geriatric syndromes among the very old, Indian Aging Congress, 2016, 11 November 2016, AIIMS, New Delhi
2. Desai G. Mobile health initiatives in old age care: Needs, attitudes and expectations of older Indians, Indian Aging Congress, 2016, 11 November 2016, AIIMS, New Delhi
3. Harjit Singh H. Geriatric syndromes with heart failure: Implication in clinical practice, Indian Aging Congress, 2016, 11 November 2016, AIIMS, New Delhi
4. Indani H*. Orthostatic hypotension among Indian elderly, Indian Aging Congress, 2016, 11 November 2016, AIIMS, New Delhi
5. Bandhu K. Evaluation of syncope for cardiovascular causes and its impact on cognitive status, Indian Aging Congress, 2016, 11 November 2016, AIIMS, New Delhi

6. Saravanan M*. Gait profile of health seeking elderly in a tertiary care hospital, Indian Aging Congress, 2016, 11 November 2016, AIIMS, New Delhi
7. Pramod Kumar P. Association of diabetes and its complications with the quality of life in older people of India, Indian Aging Congress, 2016, 11 November 2016, AIIMS, New Delhi
8. Sah R Study of rheumatoid arthritis in older patients, Indian Aging Congress, 2016, 11 November 2016, AIIMS, New Delhi
9. Bansal R*. Association of diabetes and its complications with cognitive dysfunction in older people of India, Indian Aging Congress, 2016, 11 November 2016, AIIMS, New Delhi
10. Yadav SK. Serum Tau protein as an early biomarker of cognitive impairment in elderly, Indian Aging Congress, 2016, 11 November 2016, AIIMS, New Delhi
11. Singh S. Urinary incontinence in the geriatric population, Impact on quality of life, Indian Aging Congress, 2016, 11 November 2016, AIIMS, New Delhi
12. Singhal S. Quantitative and qualitative study of lower extremity muscle function in older adults in Indian scenario, Indian Aging Congress, 2016, 11 November 2016, AIIMS, New Delhi
13. Sharma S. Multicentric clinical trial to study the effect of Ayush Rasayana (A & B) on ageing in apparently healthy elderly subjects, Indian Aging Congress, 2016, 11 November 2016, AIIMS, New Delhi
14. Anwar M*. Effect of ageing on skeletal muscle and muscle stem cells in correlation with calorie restriction: A morphometric analysis, Indian Aging Congress, 2016, 11 November 2016, AIIMS, New Delhi
15. Pradhan R. Evaluation of serum levels of FOXO3a and sirtuin 3 proteins in older cognitively impaired patients, Indian Aging Congress, 2016, 11 November 2016, AIIMS, New Delhi
16. Kurian D. Awareness and utilization of Social Security schemes among the elderly patients visiting the geriatric medicine department, AIIMS, Indian Aging Congress, 2016, 11 November 2016, AIIMS, New Delhi
17. Ambashtha AK. Biomarker of frailty and sarcopenia, Indian Aging Congress, 2016, 10 October 2016, AIIMS, New Delhi
18. Ambashtha AK. Experience with easy care instrument: Indian perspective, EASYCARE International Research and Development Meeting, 12 November 2016, Thailand

RESEARCH

Funded projects

Ongoing

1. Development of platform and technical guidelines for application of mobile telephony in old age care (mAging program), A.B. Dey, (MoHFW), 1 year, 2016–2017, Rs. 8.46 lakhs
2. Harmonized Diagnostic Assessment of Dementia (DAD) for Longitudinal Aging Study of India (LASI), A.B. Dey, NIH (R01), 3 years, 2015–2018, Rs. 528.66 lakhs
3. Longitudinal Aging Study of India (LASI), A.B. Dey, MoHFW, 4 years, 2015–2019, Rs. 20 lakhs
4. Collaborative multi-centric Clinical Trial to study the effect of Ayush Rasayana (A & B) on ageing in apparently healthy elderly subjects, A. B. Dey, CCRAS, 3 years, 2014–2017, Rs. 36.45 lakhs
5. www.oldage solutions.org—A web portal for older people and their care givers, A.B. Dey, DST, 3 years, 2014–2017, Rs. 33,00,000
6. A randomized clinical trial on the effect of Laser Therapy treatment on diabetic peripheral neuropathic pain in older adults, Prashun Chatterjee, Lab India Healthcare Limited, 1 year, 2016–2017, Rs. 12.23 lakhs
7. Predicting frailty in Indian hospital setting; Comparison of three indicators, Prashun Chatterjee, AIIMS, 1 year, 2016–2017, Rs. 0.9 lakhs.

Departmental projects

Ongoing

1. Assessment of cardiac status in the very old population
2. Assessment of gait and balance in the very old population
3. Quantitative and qualitative study of lower extremity muscle function in older adults
4. Assessment of family care giver needs of older patients requiring long term care
5. Study of older patients undergoing elective orthopedic procedure in Indian tertiary care hospital
6. Study of cognition in frail older adults

7. Gait and balance assessment in patient attending memory clinic
8. Clinical, biochemical and radiological profile in mild behavior impairment
9. Comprehensive geriatric assessment of older adults attending fragility clinic in a tertiary health care setting in India
10. Evaluation of novel intracellular proteins in serum as marker of aging
11. Study of skeletal muscle regeneration in old age
12. Quantitative Assessment of Cardiopulmonary fitness in Indian older adults attending the Geriatric OPD
13. A randomized placebo controlled trial to assess the clinical and immunological efficacy of pneumococcal vaccine in Indian older adults
14. Assessment of autonomic function in frailty status in elderly population

Completed

1. Study of orthostatic hypotension among older Indians
2. Impact of diabetes and its complications on mental health and quality of life in older people in India
3. Study of TSPO enhanced Pet Scan in evaluation of cognitive impairment in older adults
4. Evaluation of syncope for cardiovascular causes and its impact on cognitive status
5. Study of rheumatoid arthritis in older patients
6. Application of easy-care instruments in detection of geriatric syndromes in older people
7. Cancer in older Indians—Development of an instrument for comprehensive functional assessment and a novel protein marker

PUBLICATIONS

Journals: 12

Abstracts: 24

Chapters in books: 1

Books: 1

PATIENT CARE

The department provided daily OPD service and weekly memory clinic. During the year, 45213 (15997 new and 29216 revisit) consultations were provided to patients in OPD and 372 (194 new and 178 old) patients were seen in the memory clinic. Rehabilitation services from the day care service of the department were provided to 5692 patients. 1008 patients were admitted in the geriatric medicine ward during the year.

Community Service

The department organized several community activities in collaboration with Healthy Aging India, a philanthropic organization. These included: Senior citizens' cultural program and health awareness program in Vasant Kunj, New Delhi in July 2016; BSF Officers' health awareness program in July 2016, intergenerational empowerment program in Gandhi Nagar, Gujarat in presence of Honorable Governor of Gujarat Shri O.P. Kohli in July and September 2016; Pneumococcal pneumonia and Influenza vaccination program for senior citizens on 11 November 2016 during the Indian Ageing Congress 2016 in presence of Honorable Union Minister of Human Resource Development Shri Upendra Kushwaha; health camp at Tau Devi Lal Old Age Home, Faridabad, Haryana on 31 December 2016; Health Camp and Awareness Program at Hazaribagh, Jharkhand on 20 & 21 February 2017 and Health Camp and Awareness Program at NOIDA, Uttar Pradesh on 25 February 2017.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor A.B. Dey was nominated for the Fellowship of National Academy of Medical Sciences (FAMS). He participated in inter RAI World Conference and Community Meeting in Toronto, Canada and 6th Global Forum on Incontinence in Berlin, Germany in April 2016. He also participated in Regional Meeting on Healthy Ageing in Bangkok, Thailand between 26 & 28 October 2016.

Dr Prasun Chatterjee was invited as a speaker at the Advances in Health Care Management Services at IIM Ahmedabad.

Dr NN. Prem was invited as a speaker at the GERICON 2016, Latur, Maharashtra and participated as faculty in the Nursing Training Program on 27 & 28 February 2017 at the Institute of Medical Sciences, BHU, Varanasi. During Indian Ageing Congress 2016 following residents and doctoral students received awards and prizes: Mr Mashroor Anwar, Dr Manicka S Sarvanan, Dr Hrishikesh Indani, Dr Rishav Bansal and Dr Ayantika Halder.

Dr Akash Kumar Ambashtha participated in the EASYCARE international research and development meeting on 12 & 13 September 2016 at Chiang Mai, Thailand. The department was awarded "Jack Watters Memorial Award 2016" for the project "EASY care Standard instrument for early detecting geriatric syndrome in very old" by E.

VISITING SCIENTISTS

The department was visited by a group of academics from various universities in India and USA to participate in a consultative meeting related to development of the NIH funded project “Harmonized Diagnostic Assessment of Dementia (DAD) for Longitudinal Aging Study of India (LASI)” on 22 and 23 March 2017. They included: Professor Jinkook Lee, Mr Albert Weerman, Professor Eileen Crimmins; Professor Arthur Toga, Professor David Weir, Professor Kenneth M. Langa, Professor Peifeng Hu, Professor Mary Ganguli, Professor Jorge Jovicich, and Dr Andrea Ganna from USA; and Professor P Arokiasamy, Dr Sarang Pedgaonkar, Professor Mathew Varghese, Dr John P John, Dr SS Chakrabarty, Professor Arvind Jain, Professor G Shanthi and Dr Aruna Raman from India.

Dr Niharika Suchak, Associate Professor, Department of Geriatrics, Florida State University College of Medicine, Tallahassee, Florida, USA, spent 2 weeks (28.10.2016 to 11.11.2016) in the Department as visiting faculty to augment postgraduate training and education.

Professor Gunnar Akner Professor in Geriatric Medicine at Linnæus University visited the Department on 18 & 19 January 2017. He discussed extensively on multi-morbidity and its importance in Geriatric Medicine.

9.16. Haematology		
Professor and Head		
Renu Saxena		
Professors		
H.P. Pati	S. Tyagi	M. Mahapatra
Additional Professors		
Tulika Seth		Pravas Mishra
Scientist-II		
S. Sazawal		
Scientist-I		
Ravi Ranjan		Ravi Kumar

Dr Ravi Ranjan and Dr Ravi Kumar joined the department in 2016.

HIGHLIGHTS

The Department of Haematology was involved in utilising cutting edge technology like real time PCR/PCR/ flowcytometry, for the diagnosis and management of haematological disorders. It was involved in routine diagnosis and management of patients with haematological disorders. The department continues to perform allogeneic haematopoietic stem cell transplants for aplastic anaemia, thalassemia, leukaemias and myelodysplastic syndrome, and has also performed haplo-identical allogeneic and transplants for multiple sclerosis with the department of Neurology, AIIMS. The ISHTM-AIIMS External Quality Assessment Programme for haemogram, was accredited as PT provider by NABL. Department was granted the status of Regional Training Centre by International Society of Haemostasis and Thrombosis in collaboration with the Institute of Experimental Haematology and Transfusion Medicine, University of Bonn. A National Thalassemia and Sickle Cell Control Programme was initiated by MOH through the endeavours of faculty of the department of Haematology, AIIMS.

EDUCATION

The department conducts DM Clinical Haematology and DM Haemato-Pathology courses along with PhD programme. The faculty take undergraduate classes for Haematology and Medicine, and Clinical case studies for the students of Paediatrics department. It also trains the MD Pathology students in Haematology. The department has provided training in the field of clinical and laboratory haematology to one doctor from other institutions for the periods varying from one to six months. Moreover, six MSc students also undertook short-term training in Molecular Haematology for the periods varying from one to six months during this year.

CMEs/Workshops/Symposia/National and International Conferences

1. Department of Haematology, AIIMS alongwith National Thalassemia Welfare Society,organised 8th National Thalassemia Conference, 17–18 December 2016 at Jawahar Lal Auditorium AIIMS, India
2. ISHTM Quiz, Stateand Zonal Rounds, September–October 2016, New Delhi, India

Lectures delivered

Renu Saxena: 19

H.P. Pati: 6

M. Mahapatra: 9

Seema Tyagi: 5

Tulika Seth: 32

Pravas Mishra: 6

Renu Saxena: 19

1. Diagnosis in haemophilia and common hereditary bleeding disorders—Challenges in India, Haemophilia Symposium, 11–12 June 2016, New Delhi
2. Considerations before starting to write a book, National Medical Book Authors-Workshop (NMBA-W), 10 September 2016, AIIMS, New Delhi
3. AIIMS EQAS in CBC—Important lessons learnt, 7th Haemocytomorphometry Series, 10–11 February 2017, Christian Medical College, Vellore
4. MRD in acute lymphoblastic leukaemia, Meeting on Minimal Residual Disease in Haematological Malignancies, 15 February 2017, Delhi Haematology Group, New Delhi
5. The 2016 WHO classification of acute leukaemias, Delhi Society of Haematology, 10 December 2016, UCMS and GTB Hospital, New Delhi
6. Haematologists journey to thrombosis, Annual CME, East Delhi Physician Association Conference (EDPA), 11 December 2016, New Delhi
7. Roles and responsibilities of human ethics committee on essentials of writing a research proposal, 6 January 2017, Miranda House, University of Delhi, New Delhi
8. Prenatal diagnosis of haematological disorders, Workshop on Fetal Medicine, 4–7 April 2016, Division of Fetal Medicine, Department of Obstetrics and Gynaecology, AIIMS, New Delhi
9. Genetic alterations and the clinical expression of sickle cell disease, 3rd Global Congress on SCD, 1–24 February 2017, Bhubaneswar
10. Platelet function test: The old and the new, 57th Annual Conference of the Indian Society of Haematology and Blood Transfusion (ISHBT) Haematocon–2016, 10–13 November 2016, Birla Auditorium, Jaipur
11. Establishing a coagulation lab, National Haemophilia Care Meeting 2017, 18–19 February 2017, New Delhi
12. Institute ethics committee—Composition, roles and responsibilities, CME for Members of Ethics Committee IIT Delhi, 24 January, Department of Pharmacology, AIIMS and CDSA, New Delhi
13. Importance of diagnosis in haemophilia and bleeding disorders: A reality check, Rajasthan Haemophilia Conclave, 3 April, SMS Medical College, Jaipur
14. Approach to bleeding disorder, CME on Haematology, 13 August 2016, Bengal Society of Haematology (BSH), Kolkata
15. Molecular genetics in diagnosis of acute leukaemia: Newer insights, Scientific Seminar on Dr (Maj) SK Lal Centenary Celebrations, 14–15 November 2016, New Delhi
16. Experience sharing of NABL accreditation, NABL: Essential for excellence, 11 March 2017, NABL, New Delhi, India
17. Factor assay, Inhibitor assessment and quality assurance in the haemostasis laboratory, 6th National Haemostasis Update (NHU), 23–24 April 2016, CMC, Vellore
18. Acute leukaemia: 2016 classification and diagnostic algorithm, CME series on Haemato Oncopathology, 23–24 July 2016, Board Room, AIIMS, India
19. Control of thalassemia: Screening for haemoglobinopathies and prenatal diagnosis, Workshop on Haemoglobinopathy, 14–15 February 2017, Govt. of Rajasthan, Jaipur, Rajasthan

H.P. Pati: 6

1. Haemoglobin HPLC and capillary electrophoresis, 6th Basic Haematopathology Course, 1–2 July 2016, Tata Memorial Centre, Mumbai, India
2. Haematology postgraduate quiz, 6th Basic Haematopathology Course, 1–2 July 2016, Tata Memorial Centre, Mumbai, India

3. Acute leukaemia, case based discussion, 8th Annual Meet of Odisha Haematology, 3–4 September 2016, SCB Medical College, Cuttack, India
4. Diagnosis and management of HLH, HAEMATOCON, 10–13 November 2016, Birla Auditorium, Jaipur, India
5. Panel discussion on pure red cell anaemia, HAEMATOCON, 10–13 November 2016, Birla Auditorium, Jaipur, India
6. Diagnostic challenges in thalassemia and haemoglobinopathy, 8th National Conference of Thalassemia Society, 17–18 December 2016, Conference Hall, AIIMS, New Delhi, India

M. Mahapatra: 9

1. Issues in management of thalassemia, WHO Meeting on Training Medical Professional and Counselors on Prevention and Control of Thalassemia and Haemoglobinopathies, 27–28 April 2016, Sterco Auditorium, Male, Maldives
2. Role of stem cell transplant of thalassemia, WHO Meeting on Training Medical Professional and Counselors on Prevention and Control of Thalassemia and Haemoglobinopathies, 27–28 April 2016, Sterco Auditorium, Male, Maldives
3. Thalassemia intermedia: Management, WHO Meeting on Training Medical Professional and Counselors on Prevention and Control of Thalassemia and Haemoglobinopathies, 27–28 April 2016, Sterco Auditorium, Male, Maldives
4. Ischemic stroke in youngs, 57th Annual Conference of Indian Society of Haematology and Blood Transfusion (HAEMATOCON 2016), 10–13 November 2016, Birla Auditorium, Jaipur, India
5. ITP: Challenges of management in Indian context, 78th Annual Meeting of Japanese Society of Haematology (JSH), 13–15 October 2016, Yokohama Convention Centre, Yokohama, Japan
6. Concept of thalassemia day care centre, Workshop on Haemoglobinopathy, 14–15 February 2017, Jaipur, India
7. Rational use of blood transfusion in sickle cell disease, 3rd Global Congress on SCD, 21–24 February 2017, Bhubaneswar, India
8. Multiple myeloma in Indian context: Highlights of American Society of Haematology in Asia-Pacific Meeting, 11–12 March 2017, Hong Kong
9. Aplastic anaemia: Management issues in India, 2nd Joint Annual Conference of Bihar Haematology Group and Eastern Haematology Group, 25–26 March 2017, Patna, India

Seema Tyagi: 5

1. Flow cytometry in platelet disorders, Haematology Symposium in APCON 2016, 1–4 December 2016, Birla Auditorium, Jaipur, Rajasthan, India
2. MDS—Telemedicine and CME services for Pan-Africa e-network project, 24 August 2016, AIIMS, New Delhi, India
3. Capillary electrophoresis, Workshop on Challenges in Diagnosis of Thalassemia, 16 December 2016, Department of Haematology, AIIMS, New Delhi, India
4. AML with MDS related changes, CPC, 30 August 2016, AIIMS, Delhi, India
5. Minimal residual disease in multiple myeloma/CLL, Minimal residual disease in haematological malignancies, 15 February 2017, India Habitat Centre, New Delhi, India

Tulika Seth: 32

1. Management of haemophilia patient with inhibitors, Rajasthan Haemophilia Conclave, 2 April 2016, Jaipur, India
2. Challenges in haemophilia management in the Indian clinical setting, Novoeight Expert Panel Meeting, 7 April 2016, New Delhi, India
3. Management of haemophilia patient with inhibitors, Western Haemophilia Conclave: Mumbai Haematology Group, 10 April 2016, Mumbai, India
4. Update of management of hepatitis C in haemophilia patients and haemophilia care at AIIMS, 2nd Initiative on Haemophilia Care (IHC) II, 18 April 2016, IIC, New Delhi, India
5. ASH update on ITP and AA—advances in haematology, 19 April 2016, New Delhi, India
6. Donor information for allogeneic peripheral blood/bone marrow donation, Conference on World Thalassemia Day, 7 May 2016, Faridabad, India
7. Novoeight from design to manufacturing, Novoeight Launch Symposium, 7 May 2016, New Delhi, India

8. Panel on antifungals, Midsummer CME update, 8–10 July 2016, Hyderabad, India
9. Talk ethics in research, REAP, AIIMS, 2016 Workshop, 3 September 2016, Trauma Centre, New Delhi, India
10. Ethical and legal issues in e health, CEUTAH, 10 September 2016, JL Auditorium, New Delhi, India
11. Special issues in haemophilia—Vaccinations, surgery and genetic counselling and prenatal diagnosis, Consultative guidelines meeting in haemophilia, 18 September 2016, Rajinder Nagar, New Delhi, India
12. Panel discussion on iron chelation and transfusion therapy for thalassemia major patients, Thalassemia Conference, 25 September 2016, New Delhi, India
13. Chair CLL management in elderly, 1st Indian B Cell Malignancies Conclave, 23 October 2016, Mumbai, India
14. Deep molecular response in CML, CML TFR, 18 October 2016, New Delhi, India
15. Chair-Consultative Guidelines Meeting in ALL, 24–25 October 2016, Rajinder Nagar, New Delhi, India
16. Palliative care talk on management of dyspnea, panel ethics, panel integration of palliative care into paediatric oncology care, PHOCON, Pre-Conference Workshop, 4 November 2016, Sir H. N. Reliance Foundation Hospital, Mumbai, India
17. Challenges in thrombosis, PHOCON, 5 November 2016, Tata Memorial Cancer Centre, Mumbai, India
18. Indications and preparation for haematopoietic stem cell transplant, HAEMATOCON, Pre-Conference Workshop on Stem Cell Collection, Counting and Cryopreservation, 9 November 2016, Birla Cancer Centre, Jaipur, India
19. Acute lymphoblastic leukaemia unique subtypes unique treatment, HAEMATOCON, 10 November 2016, Birla Auditorium, Jaipur, India
20. Solutions to eliminate early childhood anaemia: Translate knowledge into practice, Comprehensive early childhood care and development: Health care and learning, 18 November 2016, Conference Hall, AIIMS, New Delhi, India
21. Iron deficiency anaemia in children, Investing in every right for every child, From commitments to real change, 13 December 2016, India International Centre Annex Lecture, New Delhi, India
22. Case Scenarios of Haemoglobinopathies Workshop, Challenges in diagnosis of thalassemia, 16 December 2016, Haematology Seminar Room, AIIMS, New Delhi, India
23. Iron monitoring: Challenges, 8th National Thalassemia Conference, 18 December 2016, Conference Hall, AIIMS, New Delhi, India
24. Venous Thrombosis Workshop, SEAD, 21 January 2017, Haematology Seminar Room, New Delhi, India
25. Panel discussion on childhood cancers, International Childhood Cancer Day, Public Lecture, 8 February 2017, JL Auditorium, AIIMS, New Delhi, India
26. Eltrombopag in paediatric ITP, Round table discussion paediatric ITP, 16 February 2017, New Delhi, India
27. Newer treatment options for haemophilia care, 4th National Haemophilia Care Meeting (NHCM), 19 February 2017, New Delhi, India
28. Management of haemophilia patient with inhibitors haemophilia care scenario in India: Current perspectives and challenges ahead, Mumbai Haematology Group, Western Haemophilia Conclave, 10 March 2017, Mumbai, India
29. Molecular monitoring: International standardised issues and Indian scenario, CML update, 18 March 2017, New Delhi, India
30. Panel discussion: Multiple sclerosis newer therapies, Symposium on Cellular Therapy, 30 March 2017, New Delhi, India
31. Paediatric palliative care, 16th Annual Foundation Course in Palliative Care Communication, 30 March 2017, Conference Hall AIIMS, New Delhi, India

Pravas Mishra: 6

1. Haemophilia inhibitors: Towards eradication and prevention, 57th Annual Conference of ISHBT, 11–13 November 2016, SMS Medical College, Jaipur, India
2. Prophylaxis in haemophilia, Rajasthan Haemophilia Conclave, 3 April 2016, SMS Medical College, Jaipur, India
3. Optimum joint management, Haemophilia Care–II, 18 April 2016, Haemophilia Federation of India, IIC, Delhi, India
4. Academic Haematology, Young Haematologists Orientation Programme, 27–28 August 2016, SGPGI Lucknow, India
5. Unusual sites of thrombosis: Epidemiology and outcome, 62nd Scientific and Standardisation Committee Meeting of the International Society of Thrombosis and Haemostasis, 24–28 May 2016, Montpellier, France
6. 2nd line TKI as first line, Best of ASH-2016 and the 21st Annual CME in Haematology, 20–21 January 2017, Mumbai, India

Oral papers/posters presented: 14

1. Sharma RK, Mahapatra M, Sazawal S, Seth T, Mishra P, Saxena R. Experience of a 6 color flow cytometry based MRD detection approach in Indian Cohort of B, Lineage acute lymphoblastic leukaemia patients, Best Poster in ACOS 2016, New Delhi, 12th International Conference of Asian Clinical Oncology Society (ACOS), 8–10 April 2016, New Delhi, India (Best Paper Award)
2. Singh J, Saraya A, Saxena R. Normalisation of Prothrombin Time in chronic liver disease and its significance in decision making in hepatic transplantation, 27th Annual Conference of Delhi Society of Haematology, 25 September 2016, Delhi, India
3. Pandey H, Ranjan R, Mahapatra M, Seth T, Saxena R. Effect of alpha gene numbers on phenotype of sickle cell syndrome patients in India, 3rd Global Congress on Sickle Cell Disease 2017, 21–24 February 2017, Bhubaneswar, India
4. Pandey H, Ranjan R, Mahapatra M, Saxena R. Comparison of co-existence of alpha thalassemia deletion in sickle cell anaemia with sickle beta thalassemia patients, 3rd Global Congress on Sickle Cell Disease 2017, 21–24 February 2017, Bhubaneswar, India
5. Sazawal S, Chaubey R, Chikkara S, Singh K, Chandra D, Mishra P, Mahapatra M, Seth T, Saxena R. Detection of CALR mutation by Allele Specific PCR vs Sanger Sequencing in PMF and ET patients –AIIMS Experience, HAEMATOCON 2016, 10–13 November 2016, Birla Auditorium, Jaipur, India
6. Chaubey R, Sazawal S, Chhikara S, Singh K, Mahapatra M, Saxena R. Clinical and molecular profile of low, intermediate and high risk MDS patients: AIIMS Experience, HAEMATOCON 2016, 10–13 November 2016, Birla Auditorium, Jaipur, India
7. Singh K, Sazawal S, Chikkara S, Chaubey R, Mishra P, Seth T, Saxena R. Paediatric Chronic Myelogenous Leukaemia with myeloid blast crisis at presentation: A rare case report, HAEMATOCON 2016, 10–13 November 2016, Birla Auditorium, Jaipur (Best Paper Award)
8. Subramanian A, Albert V, Saxena R, Bhoi SK, Agrawal D, Pandey RM, Misra MC. Utility of thromboelastography (TEG) to predict trauma induced disseminated intravascular coagulation (DIC), HAEMATOCON 2016, 10–13 November 2016, Birla Auditorium, Jaipur (Best Paper Award), India
9. Singh J, Tyagi S, Seth T, Pati HP, Mahapatra M, Mishra P, Saxena R. Detection of early T cell precursor leukaemia subset by flowcytometry in T cell acute lymphoblastic leukaemias and their follow up, HAEMATOCON 2016, 10–13 November 2016, Birla Auditorium, Jaipur, India
10. Sharma RK, Mahapatra M, Sazawal S, Seth T, Mishra P, Saxena R. Prognostic significance of end-induction day 29 minimal residual disease measured by 6 colour flow cytometry in Indian adult B-Lineage Acute Lymphoblastic Leukaemia patients. HAEMATOCON 2016, 10–13 November 2016, Birla Auditorium, Jaipur (Best Paper Award)
11. Nair RR, Chandra D, Mahapatra M, Seth T, Mishra P, Saxena R, Pati HP, Tyagi S. Relapsed myeloma—Old foe with a new face, Presenting as hypertensive emergency with lymphadenopathy, Myeloma 2016, 30 September–1 October 2016, PGI, Chandigarh (Best Paper Award)
12. Gupta A, Sazawal S, Mahapatra M, Saxena R. Does HLA DR predict treatment response in cytogenetically normal AML?, SGPGI – FCM Conference, February 2017, SGPGI, Lucknow, India
13. Mishra P, Mahapatra M, Seth T. Unusual sites of thrombosis: Epidemiology and outcome report, 62nd Scientific and Standardisation Committee Meeting of the International Society of Thrombosis and Haemostasis, 24–28 May 2016, Montpellier, France
14. Tyagi S. The detection of early T cell precursor leukaemia subset by flowcytometry in T-cell ALL and their follow-up, Royal College of Pathologists of Australia, 24–26 February 2017, Sydney, Australia

RESEARCH

Funded projects

Ongoing

1. Role of modulating factors on phenotype of sickle cell disease, R. Saxena, DST, 3 years, 2013–2016, Rs. 24.32 lakhs
2. Prothrombotic role of extracellular haemoglobin, Tulika Seth, DBT, 1 year, 2015–2016, Rs. 99.69 lakhs
3. Pathophysiology of thrombocytopenia in dengue infection, Tulika Seth, DBT, 2 years, 2015–17, Rs. 71.35 lakhs
4. Incidence of invasive fungal infection in patients undergoing chemotherapy for acute myeloid leukaemia—Impact of antifungal prophylaxis, A prospective multicentric, observational study in India, Tulika Seth, MERCK, CMC Vellore, 1 year, 2015–2016, Rs. 5.94 lakhs

5. Immune tolerance induction by Factor VIII concentrate containing Von Willebrand Factor in severe or moderate haemophilia, A patients with inhibitors, Tulika Seth, Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico, 2 years, 2015–2017, Rs. 3.29 lakhs and free drugs
6. Evaluate the role of tissue factor and tissue factor pathway inhibitor gene polymorphisms in the pathogenesis of DVT, Pravas Mishra, AIIMS, 2014–2017, Rs. 4.28 lakhs

Completed

1. Molecular profiling of acute myeloid leukaemia, R. Saxena, DBT, 4 years, 2013–2016, Rs. 8 lakhs
2. A comparison of the clinical and molecular features of chronic lymphocytic leukaemia (CLL) in Indian and Canadian populations, R. Saxena, Indo Shastri Grant, 2 years, 2013–2016, Rs. 6 lakhs
3. A study of the genetic profile of chronic immune thrombocytopenia purpura patients at a North India Tertiary Care Centre, Tulika Seth, CSIR, 2 years, 2014–2016, Rs. 25 lakhs
4. Aplastic anaemia and telomerase complex, Tulika Seth, AIIMS, 2 years, 2014–2016, Rs. 10 lakhs

Departmental projects

Ongoing

1. The adverse profile of crystalline amphotericin B
2. The usefulness of positive PNH clone as a tool to rule out inherited BM failure syndrome
3. To assess bone mineral density in haemophilia patients and effect of on demand prophylaxis vs replacement therapy on BMD and haemophilic arthropathy
4. Clinical profile of cancer associated venous thromboembolism: A retrospective study
5. Incidence of early molecular response in newly diagnosed patients in CML-CP and correlation with clinical parameters at presentation
6. Comparison of nilotinib vs imatinib in CML
7. Hyperglycemia in ALL
8. Traumatic lumbar puncture at diagnosis in acute lymphoblastic leukaemia: Risk factors and impact on outcome
9. Evaluation of a single tube five antibodies flow cytometric method including CD157 in the diagnosis of PNH
10. Labile plasma iron in Thalassemia
11. Tailored prophylaxis in severe haemophilia: A prospective interventional study in a tertiary care hospital in India
12. Detection of early T cell precursor leukaemia subset by flowcytometry in T cell acute lymphoblastic leukaemias and their follow up
13. Evaluation of 5-methylcytosin (5-mc) expression in myelodysplastic syndrome patients and its prognostic impact
14. Long acting factor prophylaxis in Haemophilia
15. Hyperglycemia: Effect on treatment outcome in acute lymphoblastic leukaemia
16. Traumatic lumbar puncture: Cause and effect in acute lymphoblastic leukaemia
17. Conventional amphotericin: Outcome variables
18. Minimal residual disease by flow cytometry in acute lymphoblastic leukaemia
19. Randomised control trial to evaluate safety and efficacy of intra vitreal injection of autologous bone marrow derived stem cells in acute cases of ischaemic central retinal vein occlusion
20. A population based prospective cohort study to unravel the causes of stroke and cognitive decline: A cross cultural perspective
21. Ocular GVHD in post allogeneic HSCT patients
22. HLA G in allogeneic HSCT patients
23. Effect of Telomerase MM
24. To study the association of Mycobacterium tuberculosis with pancytopenia
25. Standardisation of voriconazole levels for Paediatric Haematology Patients
26. Mitochondrial Mutations in chronic myeloid leukaemia patients
27. Outcome analysis of patients undergoing high dose cytarabine therapy in AML
28. Evaluation of surveillance cultures in patients undergoing induction chemotherapy and its outcome
29. Risk assessment and outcome of traumatic lumbar puncture in acute lymphoblastic leukaemia

30. Outcome of patients developing hyperglycemia during induction therapy for acute lymphoblastic leukaemia
31. Evaluation of 'AML Maturity Score' as a marker of prognosis in patients with acute myeloid leukaemia by quantitative immune-phenotyping by flow cytometry

Completed

1. Comparison of erythrocyte osmotic fragility by flow cytometry and conventional method in hereditary spherocytosis
2. Comparison of LAC Assays (aPTT-LA, KCT, dPT and dRVVT (screen)) in High Risk Pregnancy Clinics
3. Comparison of Myeloperoxidase detection by IHC, cytochemistry and flow cytometry in AML
4. To study the role of haematological variables(peripheral leucocytes, erythrocytes and red cell indices) as risk factors for deep vein thrombosis
5. Detection and quantification of T reg cells in donor graft by flowcytometry and its correlation with acute GVHD in stem cell transplant patients
6. Evaluation of 5-methylcytosin (5-mc) expression in myelodysplastic syndrome patients and its prognostic impact
7. Hepatic INR
8. Early T p ALL
9. Detection of early T cell precursor leukaemia subset by flowcytometry in T cell acute lymphoblastic leukaemias and their follow up
10. Evaluation of 5-methylcytosin (5-mc) expression in myelodysplastic syndrome patients and its prognostic impact

Collaborative projects

Ongoing

1. Epidemiology and prognostic utility of cellular components of haematological system in sepsis [Anaesthesia]
2. Minimal residual disease in multiple myeloma [Medical Oncology]
3. Study to determine the association between Pancytopenia and Tuberculosis [Medicine]
4. Prevalence of anaemia among community dwelling elderly persons in rural Ballabgarh, District: Faridabad, Haryana [Community Medicine]

Completed

1. Deep venous thrombosis and role of delteparin as prophylaxis in surgeries for pelvic malignancies [Surgical Oncology]
2. Haematological and coagulation abnormalities in severe malaria – A prospective observational study [Medicine]
3. Evaluation of inflammatory predictors of severity in DHF: A prospective case – control study [Medicine]
4. Effect of iron and folic acid tablet vs capsule formulation on treatment adherence and iron status among pregnant women: A randomised control trial [CCM]
5. Ocular GVHD [Ophthalmology]
6. Autologous stem cell for macular degeneration [Ophthalmology]
7. HLA-G and correlation with GVHD post allo transplantation [Transplant Immunology and Immunogenetics]
8. Aplastic anaemia and T cell subsets [Transplant Immunology and Immunogenetics]

PUBLICATIONS

Journals: 16

Chapters in books: 7

PATIENT CARE

Laboratories of the department have following state of the art facilities:

Bone marrow aspirate, bone marrow biopsies and peripheral smears; Immunohistochemistry; Molecular genetics; Hemolytic anaemia workup; Flow cytometry; Capillary electrophoresis for haemoglobinopathies; Coagulation workup for inherited and acquired bleeding disorders; Platelet aggregometry; Thrombophilia workup; Prenatal diagnosis of Hemophilia and haemoglobinopathies

Clinical services

(a) OPD runs all six days

1. Monday: Haemato-oncology
2. Tuesday: Transplant Clinic

3. Wednesday: Haemolytic Anaemias and ITP
4. Thursday: Coagulation and Bleeding Clinic
5. Friday: Bone Marrow Failure
6. Saturday: Leukaemia Survivor Clinic

(b) Inpatient care

1. Inpatients: C2, C6, D6, emergency ward, private wards
2. Stem Cell Transplant: 4 new allogeneic transplants per month
3. Haematology Day Care

(c) Community services

The department has been active in the area of thalassemia and haemophilia awareness at both community sensitization programmes, and public forums at AIIMS and with the thalassemia and Haemophilia Society. The new disability bill included inputs from the department faculty.

The department conducted ISHTM – AIIMS External Quality Assessment Programme for haemogram for 2000 labs across India under Dr R. Saxena as the coordinator.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor Renu Saxena received following awards: Shrimati Bela Devi Memorial Oration by East Delhi Physicians Association on 11 December 2016 at Delhi; Facilitated by West Bengal Society of Haematology for outstanding contributions in haematology in CME, August 2016, Kolkata; BC Roy Award for Eminent Medical Teacher, awarded by MCI for 2009 in 2016 July, Delhi. She was nominated as an expert in Thalassemia by WHO office of Maldives to provide technical support and training to medical professionals and counsellors for prevention of thalassaemia in Maldives; continued to be: Member of Expert Committee Meeting on INSPIRE fellowship, DST; Member of Programme Advisory Committee for Health Sciences DST; Member of Project Review Committee-ICMR; Member of Taskforce on Human Genetics and Genome Analysis-DBT; Member of New Drug Advisory Committee for Haematology and Oncology, DCGI; Member of Medical Device Advisory Committee, DCGI; Medical Advisor Haemophilic Federation of India; Expert Member, NABL (DST) Accreditation Committee for PT provider; Chairman—Ethics Committee, ICMR Campus 2; Member of Ethics Committee, IIT Delhi; Coordinator of Indian Society of Haematology and Transfusion Medicine – AIIMS EQAP Programme.

Professor H.P. Pati was nominated as a Member of Screening Committee on Congenital Malformation and Genetics for Inter-Sectoral Promotion and Guidance on Health Research, Department of Health Research, MOH [since July 2016]

Professor M. Mahapatra was Honorary Secretary of Indian Society of Haematology and Blood Transfusion (ISHBT); Nominated as an expert in Thalassemia by WHO office of Maldives to provide technical support and training to medical professionals and counsellors for prevention of thalassemia in Maldives; Nominated as an Expert in Immune thrombocytopenia from India by ISHBT to attend and present at “Asian Joint Symposium on Bleeding Disorders” at Yokohama, Japan in October 2016.

Professor Seema Tyagi continued to be: Associate Editor of Indian Journal of Haematology and Blood Transfusion; Editor for Haematology section for Scholars Report, an open access journal; Editorial Board Member of four International Journals and one National Journal; Chairperson for CME series in ‘Haemato-Oncopathology’ at AIIMS on 23–24 July 2016, New Delhi; appointed as an External Examiner for IInd Professional Examination at Maulana Azad Medical College, New Delhi, for one week from 15 to 21 December 2016.

Dr Tulika Seth was responsible for writing the major part of the programme – Prevention and Control of Haemoglobinopathies in India – Thalassemias, Sickle Cell disease and other variant Haemoglobins 2016 for MOH. An exchange visit of two weeks was conducted by Dr Tulika Seth with Tokai University in Japan through the DST-JSPS scheme to further scientific collaboration and develop projects of mutual benefit. After her visit, two senior scientists from Japan visited AIIMS as part of this programme.

Dr Pravas Mishra was chairperson for the following sessions: (i) Novel therapies in Hodgkin Lymphoma: Best of EHA Mumbai, India, 22–24 July 2016, Mumbai Haematology Group, Mumbai, India; (ii) Myeloma: Current therapy, Myeloma: State of the Art, 1 October 2016, Chandigarh, India.

VISITING SCIENTIST

1. Georgios Ampartzidis, Logistics Specialist for WFH Humanitarian Aid Department Especialista en logística–Ayuda Humanitaria, World Federation of Haemophilia, Fédération mondiale de l'hémophilie, Federación Mundial de Hemofilia, Montréal, Québec H3G 1T7 Canada, on 25 June 2016
2. Prof Dr Francesc Xavier Bosch i José is the Director of Cancer Epidemiology Research Programme (PREC), and the Chief of the International Affairs at Catalan Institute of Oncology, Barcelona, Spain on 26 May 2016
3. Prof Kevin Song from University of British Columbia, Vancouver, Canada, March 17
4. Dr Elias Jabbour, MD Anderson Centre, USA on 27 August 2016
5. Prof Gopinath N Shenoy from Mumbai on 9 July 2016
6. Prof Giuseppe Saglio from University of Turin, Turin, Italy on 18 March 2017
7. Dr T Shiina- Head of the Molecular Lab, 14 March 2017
8. Dr Neal Young and Dr G Franchini from NIH, USA on 24 January 2017

9.17. Hospital Administration

Professor and Head

Sidhartha Satpathy

Medical Superintendent, Dr R.P. Centre

Shakti Kumar Gupta

Medical Superintendent, Main Hospital

D.K. Sharma

Professors

I.B. Singh

Sanjay Arya

Aarti Vij

Associate Professors

Nirupam Madaan

Amit Lathwal

Anoop Daga

Mahesh R

Assistant Professors

Angel Rajan Singh

Vijaydeep Siddharth

Parmeshwar Kumar

Kanika Jain

Abdul Hakim

EDUCATION

The Hospital Administration Department is running a postgraduate degree programme for medical graduates, viz. MHA (Masters in Hospital Administration) which entered its 47th year after inception. From January 2016 batch, this course has been converted to MD (Hospital Administration). The Residency Programme in Hospital Administration focuses on 'hands on' training, where resident administrators are posted in the 'Administrative Control Room' of hospital, round the clock as 'Duty Officers', and coordinate all the hospital activities after duty hours. It is also the nerve centre of the hospital.

Faculty members conducted several training programmes for the doctors working in various organizations including Central, State Governments, Paramilitary Forces and in various PSUs such as IICM, Ranchi and also other management institutes.

Short and long term training

1. Two students of MD (HA) students from Sher-i-Kashmir Institute of Medical Sciences, Srinagar
2. Six MBA, Hospital Administration students from Mahatma Gandhi University (MGU), Kottayam, Kerala

Continuing Medical Education

Organised 14th Healthcare Executive Management Development Programme (HxMDP) held at Jaipur from 8–14 January 2017

Lectures delivered

Sidhartha Satpathy: 9

I.B. Singh: 1

Nirupam Madaan: 7

Mahesh R: 4

Vijaydeep Siddharth: 2

Shakti Kumar Gupta: 3

Sanjay Arya: 4

Amit Lathwal: 1

Angel Rajan Singh: 1

Abdul Hakim: 1

D.K. Sharma: 6

Aarti Vij: 6

Anoop Daga: 5

P. Kumar: 3

Sidhartha Satpathy: 9

1. Organisational behaviour lab, Healthcare Executive Management Programme for MS and CDMOs of UP Government Health Services, 4 May 2016, 18 July 2016 & 20 June 2016, SGPGI, Lucknow
2. Two lectures on outsourcing and negotiation along with panel discussion, CME on procurement procedures for Senior Medical Executives of Coal India Ltd organized by IICM, Ranchi, 28–30 September 2016, Vishakhapatnam
3. Five lectures on various chapters in NABH standards, terminal training cum 2nd contract programme QM and AHO, 16 November 2016, Academy of Hospital Administration, Noida, UP
4. Two lectures on legal and ethical issues in Medical and Hospital and Consumer Protection Act: Application in healthcare, 14th Healthcare Executive Management Development Programme (HxMDP), 12 January 2017, Jaipur
5. Five lectures including OB Lab, Training Programme on Hospital Management and Administration for Medical Superintendents, GDMOs of Coal India Ltd., 30 January 2017 to 1 February 2017, Indian Institute of Coal Management, Ranchi
6. Four lectures on management issues in clinical, ancillary, support and utility services in hospital, Terminal Training cum 2nd Contract Programme QM and AHO, Gujarat Government Special Batch, 8–9 February 2017, Ahmedabad, Gujarat
7. Medical and ethical issues in healthcare provisioning, International Conference on Current Trends in Public Health and Hospital Administration “MEDALLION–2017”, 18 February 2017, Kottayam, Kerala
8. BMW management rules, 2016, Hospital Management Programme for Hospital Administrator of Bhutan, 30 March 2017, IIHMR, Jaipur

Shakti Kumar Gupta: 3

1. Quality and patient safety: A Hospital Administrator’s Perspective, Current Trends in Public Health and Hospital Administration, Medallion 2017, 17–18 February 2017, Kottayam, Kerala
2. Biomedical equipment management in hospitals, 14th Healthcare Executive Management Development Programme (HxMDP), 8–14 January 2017, Jaipur, Rajasthan
3. Challenges before hospital administrators and changing role of hospitals, 14th Healthcare Executive Management Development Programme (HxMDP), 8–14 January, 2017, Jaipur, Rajasthan

D.K. Sharma: 6

1. Keynote address in inaugural session, ISCCM Nutrition Meeting, ICU nutrition, problem solving and approach as guest of honour, 4 June 2016, Pune
2. Case studies in hospital procurement, ‘CME on procurement’ for Sr. Medical Executives of Coal India Ltd. (CIL) by IICM, 26 September 2016, Visakhapatnam
3. Disciplinary Procedures and CCS (CCA) Rules, Healthcare Executive Management Development Programme (HEMDP), 28 September 2016, SGPGIMS, Lucknow
4. Chaired a scientific session, National Conference on Safe and Sustainable Hospital (SASH 2016) Armed Forces Medical, 11–13 November 2016, Armed Forces Medical College, Pune
5. Case studies in Hospital Administration, Healthcare Management Development Programmes (HxMDP), 10 January 2017, Jaipur, Rajasthan
6. Panel discussion on quality drug procurement, 2nd Healthcare Sabha organized by Express Healthcare, the Indian Express, 9–11 February 2017, Visakhapatnam

I.B. Singh: 1

1. Conflict management, CME-Personal Development Program, 3 February 2017, CMET, AIIMS, New Delhi

Sanjay Arya: 4

1. Empowering nursing leadership, Performance Appraisal and Staff Development, 26 April 2016, Dr RML Hospital, New Delhi
2. Quality improvement sensitization meeting for nurses, role of QI for enhancing patient safety, improving checklists, and reducing medication errors, 26 August 2016, AIIMS, New Delhi
3. Expert group meeting, development of patient safety implementation framework, MOHFW, Government of India in collaboration with WHO, 1 & 2 September 2016, New Delhi
4. Four lectures, Training programme on Hospital Management and Administration for Medical Superintendents, GDMOs of Coal India Ltd., 30 January 2017–1 February 2017, Indian Institute of Coal Management, Ranchi

Aarti Vij: 6

1. Eye banking, ORBO perspective, National consultation for application of mobile telephony in old age care, 26 August 2016, AIIMS, New Delhi
2. Issues in organ retrieval and banking in India, World Trauma Congress 2016, 20 August 2016, JPN Apex Trauma Centre, New Delhi
3. Unusual Medico, legal case studies, ISOT 2016, 8 October 2016, Chandigarh
4. Organ donation: Opportunities and challenges, Air Force organ donation initiative, 12 December 2016, Air Force Auditorium, New Delhi
5. Organ donation, Achieving National self-sufficiency, UCL, difficult dialogues, Is India's health a great challenge (Health Ethics), 12 February 2017, International Centre, Goa
6. Organ donation in India, 3rd Fort, Mohan Foundation
7. Training on transplant coordination, 16 April 2016, Meditorium, Gurgoan

Nirupam Madaan: 7

1. Procurement of medicines, CME in Contract Management, 20 May 2016, IICM, Ranchi
2. Two lectures, training program on Nursing Service Administration and Quality Management-I, 15 July 2016, AHA, Noida-Delhi, NCR
3. Procurement of medicines and hospital equipment, diploma in Contract Management, 26 August 2016, IICM, Delhi, Ranchi
4. Two lectures, CME on procurement procedures for Senior Medical Executives, 27 & 28 September 2016, IICM, Vishakapatnam
5. Procurement of medicines for hospitals, program on Contract Management, 20 January 2016, IICM, Ranchi
6. Two lectures on ethical and legal issues related to management of Nursing Care and Disaster Management: Role of nurses, Training program on Nursing Service Administration and Quality Management-I, II, III & IV, 22 February 2016, 15 July 2016, 21 September 2016 & 23 November 2016, AHA, Noida, Delhi, NCR
7. Three lectures, Training Programme on Hospital Management and Administration for Medical Superintendents GDMOs, 6–8 February 2017, IICM, Ranchi

Amit Lathwal: 1

1. Lecture, Hospital Management and Administration, Indian Institute of Coal Management, Ranchi, Jharkhand

Anoop Daga: 5

1. Hospital support services, (6 lectures), Management Development Programme on Hospital Administration for Medical Officers, February 2017, Indian Institute of Coal Management, Ranchi, (Jharkhand State), Ranchi, Jharkhand
2. Various topics of 'Quality in Hospital Support Services', Contact Programme of PGQM and AHO for Gujarat Government, 12–14 December 2016, Academy of Hospital Administration, NOIDA, Ahmedabad, Gujarat
3. Capacity building in infection control: Innovations and initiatives, ISHWMCON 2016, Indian Society of Hospital Waste Management (ISHWM) Conference, 6–7 October 2015, department of Hospital Administration, Kasturba Medical College, Manipal, Karnataka.

4. Practical issues and cases in infection control, personnel safety and capacity building in waste handling in healthcare settings, 'MDP on BWM & Best Practices for Implementation', 22 September 2016, Engineering Staff College of India, Hyderabad, Telangana.
5. Various topics 'Infection Control and Surveillance' training of trainers on Infection Management and Environment Plan (IMEP), 8–9 June 2016, Engineering Staff College of India, Hyderabad, Telangana.

Mahesh R: 4

1. Infection Prevention and Control, Expert group meeting on developing patient safety implementation framework for India, 1–2 September 2016, MOHFW in collaboration with WHO, New Delhi
2. Optimum Utilization of Public Health Resources, 6th All India Conference of Medical Service Centre, 15–16 October 2016, Pt BD Sharma PGIMS, Rohtak, Haryana
3. Six lectures on code of medical ethics, management of change, leadership in hospitals, quality issues in hospital, grievance redressal, Hospital Engineering Services, Special Programme on Hospital Management and Administration for Medical Superintendents, GDMO's of Coal India Ltd, 13–15 February 2017, Indian Institute of Coal Management, Ranchi, Jharkand
4. Four lectures on research methodology and project writing, planning and quality needs in OPD, accident and emergency services, IPD and Human Resource Management, Quality Management and Accreditation of Health Care Organization [QM&AHO] programme, 7–8 March 2017, Academy of Hospital Administration, Noida, Uttar Pradesh

Angel Rajan Singh: 1

1. Ambulance procurement, A case study, 14th Healthcare Executive Management Development Programme, 12 January 2017, Jaipur, India

P. Kumar: 3

1. Human resources management, WHO Preparatory Workshop for Developing Trainers Programme for Senior Hospital Managers, 5–6 June 2016, WHO office, Tehran, Iran
2. Lectures, WHO Capacity Building, Training of Trainers Programme for Senior Hospital Managers, 12–16 November 2016, Tehran, Iran
3. Human resources management, WHO Capacity Development Workshop for Hospital Managers, 21–22 April 2017, Khartoum, Sudan

Vijaydeep Siddharth: 2

1. Lectures, training programme on Hospital Management and Administration for Medical Superintendents GDMOs, Non-specialist of Coal India Ltd. at IICM, Ranchi, 9–11 February 2016, Indian Institute of Coal Management, Ranchi
2. Career opportunities in hospital administration, Student Leadership Mission 2017 life strategies, 20 March 2016, Lady Harding Medical College, New Delhi

Abdul Hakim: 1

1. Lectures, Training Programme on Hospital Management and Administration, for Medical Superintendents GDMOs, Non-specialist of Coal India Ltd. at IICM, Ranchi, 16–18 February 2017, Indian Institute of Coal Management, Ranchi

Oral papers/posters presented: 8

1. Kumar M, Vij A. Social work practice in organ donation and transplantation, ISPSW 2017, 11 February 2017, GMCH, Chandigarh
2. Kumar M, Vij A. Social work practice: Pscho, Social issues in Organ Transplantation, AIAMSWP, 28 January 2017, KGM University, Lucknow
3. Kumar M, Vij A. Hospital initiative towards Public Awareness and Education on Deceased Organ Donation and Transplantation, ISOT, 2016, 8 October 2016, Chandigarh
4. Kedar SA, Balamurgan M, KM N, RN B M, Vij A, Sawhney C, et al. Role of nurse coordinators in Organ Donor Detection and Management, World Trauma Congress 2016, 18 August 2016, AIIMS, New Delhi

5. NM, techno-vision 2035: Medical Sciences and Health Care, technology vision 2035: 15 July 2016, National Center for Science and Communication, Thiruvananthapuram, Kerala
6. NM, A.H Z. Networking of rural and urban healthcare delivery systems, Workshop on Medical Sciences and Healthcare Technology Roadmap, 29 September 2016, Oakridge International School, Gachibowli under the aegis of TIFAC, DST, Hyderabad, Telangana
7. V T, R M, Satpathy S. Nutrient and cost optimization in menu planning at the department of Dietetics in AIIMS using operational research techniques, Xth AAPI Global Healthcare Summit, International Research Competition, 28 December 2016, RNT Medical College, Udaipur, Rajasthan
8. Jain K, Makkar N, Satpathy S. Pre procurement study of the impact of using closed system drug transfer device technology, On environmental and drug contamination, while reconstituting chemotherapeutic agents in a Chemotherapy day care in an Apex Cancer center in North India, Xth AAPI Global Healthcare Summit, International Research Competition, 28 December 2016, RNT Medical College, Udaipur, Rajasthan

RESEARCH

Departmental projects

Ongoing

1. Study of utilization of OTs at main hospital, AIIMS
2. A study of the downtime of hospital equipment in the AMC/CMC period
3. A comparative study of hospital housekeeping practices in Central Government Tertiary Care Hospitals of New Delhi
4. An interventional study to assess the patient flow processes in select in-patient areas with a view to enhance patient experience at Dr R.P. Centre for Ophthalmic Sciences, AIIMS, New Delhi
5. A study on existing records management system in establishment of Medical Superintendent Office at AIIMS Hospital
6. To study the role of healthcare analysis in monitoring hospital indices at AIIMS, New Delhi
7. A study of medication errors in selected critical areas of Main Hospital, AIIMS, New Delhi
8. A study of organizational climate and organizational commitment among the health care providers at AIIMS
9. A study of costing of admitted patients in cardiology department admitted in Cardio-Thoracic Centre, AIIMS
10. Physical and chemical hazards identification and risk analysis for healthcare worker at AIIMS Hospital

Completed

1. Study the medical equipment procurement practices at AIIMS Main Hospital, extent of competition in the tenders; and factors which determine participation in bidding process
2. Cost analysis of in-patient care of senior citizens at AIIMS hospital
3. A study of professional quality of nurses and burn out in nurses at AIIMS hospital
4. A study of bed utilization at AIIMS, New Delhi
5. To study the existing workflow pattern of CT Scanners in the Department of Radiodiagnosis at AIIMS (Main Hospital) to implement Lean Six Sigma principles for operational efficiency

Collaborative projects

Ongoing

1. Research survey of extent of problems of spurious and Not of Standard Quality (NSQ) drugs in the country (IPC, National Institute of Biologicals, MoHFW, Government of India)
2. Evaluation of stress among MBBS students of a Tertiary Care Teaching Institution. (Psychiatry)
3. Intussusception in infants: Multisite hospital based surveillance in India (INCLEN trust)
4. Design of inventory system for surgical items at AIIMS (Indian Institute of Management, Lucknow)

Completed

1. A Study of knowledge and barriers for organ donation among adult rural Population of CRHSP, AIIMS Ballabgarh (CCM)
2. Study of the patient experiences among substance abusers in an in-patient ward in a public sector hospital in India (Psychiatry)

PUBLICATIONS

Journals: 19

Abstracts: 1

Chapters in books: 2

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor Sidhartha Satpathy participated as technical external expert of assessment committee for assessment of NTPC project hospitals for “Swarn Shakti” awards during this year; member of technical committee of Healthcare Sector Skills Council (HSSC) for development of occupational standards for 21 cadres of healthcare workers under the aegis of National Skill Development Corporation (NSDC); Contributed to development of AIIMS Bhubaneswar as mentor, and subject expert to assist selection committee for certain Group A posts; Member of building committee of National Brain Research Institute, providing oversight for development of auditorium, academic block and laboratories; Contributed as expert member of Academic Audit Committee of IIHMR University, for improvement of academics as mandated by UGC; Member of committee for rationalization of recruitment rules for Posts at upcoming CAPFIMS under the aegis of Ministry of Home Affairs, Government of India; Continued as editorial committee member of JAHA and IJRFHHA, and reviewer for National Medical Journal of India; Continued as member of hospital Bio medical Waste management and Infection Control Sectional Committee MHD-21 of BIS; Contributed as expert member in the development of integrated guidelines for public health laboratories under “Labs for Life” project initiated by NACO. Chaired a session and panel discussion on “Revised BMW Rules, 2016–Challenges to Overcome”, ISHWMCON, 2016, 2 & 3 December 2016, Manipal University, Manipal.

Professor Shakti Kumar Gupta got Guest of Honor for 34th Annual American Association of Physicians of Indian Origin (AAPIO) Convention from 30 June 2016 to 3 July 2016, Broadway, New York, USA. He was President for the International Journal of Research Foundation of Hospital and Healthcare Administration, an official publication of Research Foundation of Hospital and Healthcare Administration, India for the year 2016–2017. He participated as external examiner for MD (Medical Administration) Part II examination on 1–5 August 2016 at University of Colombo, Sri Lanka. He continues to be Member of delegation for establishment of Haemovigilance system and to conduct CME on Haemovigilance in Thimpu, Bhutan on 7–11 November 2016 and was Chief Guest for the Workshop on the lot release system of National Institute of Biologicals (NIB) and learn the lot release procedures of various “Vaccines and Biological” on 29 November 2016 at NIB, Noida. He was invited to attend the Meeting of Kazakhstan delegation at FICCI Federation House, Tan Sen Marg, New Delhi on 9 December 2016. He is also external expert for the standing selection committee of the PGIMER, Chandigarh for the selection to the post of Assistant Professors in the Department of Hospital Administration on 17 December 2016; Expert for the standing selection committee for the selection of Group A faculty posts of NEIGRIHMS, Shillong in the Department of Hospital Administration on 20 December 2016 at Indian Council of Medical Research (ICMR), Ansari Nagar, New Delhi; Member of medical experts in Joint House Committee constituted by Jammu and Kashmir Legislative Council on 30 January 2017; External examiner for setting question papers for Masters’ in Hospital Administration at SGPGIMS, Lucknow; Member of International forum, Patient safety and access initiative of India Foundation, at India Habitat Centre, on 1 & 2 March 2017; honored as member of Confederation of Indian Industry (CII), National Committee of Health for 2016–2017; honored as member of FICCI, National Committee of Health for the year 2016–2017.

Professor D.K. Sharma visited Gorakhpur (UP) as a member of the Central Team to inspect the site(s) for setting up of new AIIMS in Gorakhpur (UP) nominated by Ministry of Health and Family Welfare (PMSSY Division); Nagpur (Maharashtra) (as a member of the committee constituted by MoHFW, GoI) to check the status report of facilities offered by the Government of Maharashtra for operationalisation of new AIIMS at Nagpur; Guntur (Andhra Pradesh) (as a member of the committee constituted by MoHFW, GoI) to check the status report of facilities offered by the Government of Andhra Pradesh for operationalisation of new AIIMS at Guntur; Jharkhand (Deoghar) as a member of the Central Team to inspect the site(s) for setting up of new AIIMS in Jharkhand (Deoghar) nominated by Ministry of Health and Family Welfare (PMSSY Division); Sweden on an official visit as a member of the 5 member team constituted by MoHFW, Government of India to participate in the tertiary care collaboration Meeting with Sweden under the joint working group between India and Sweden. He was invited as member of the Central Team to inspect the site(s) for setting up of new AIIMS in Jammu and Kashmir nominated by Ministry of Health and Family Welfare (PMSSY Division), GoI; appointed as Vice Chairman at National Board of Examination, New Delhi; invited as Guest of Honour at the valedictory function of SGT University, Gurgaon to deliver valedictory address to the passing out MBBS students; Member of team constituted by MoHFW, Government of India on Indo-Sweden collaboration on tertiary care, 5–7 October 2016.

Professor I.B. Singh was appointed internal examiner for MHA final examination held in May 2017, AIIMS, vide memo no. F.11-1/M, 2017 Exam Secretary (28B), dated 7 March 2017; external examiner for PG degree examination held in 20–21 June 2016 for conduct of practicals, clinicals and orals in the speciality of Hospital Administration (MD) AT Kaminin Institute of Medical Sciences, Narketpally, under Dr. NTR University of Health Sciences, AP Vijay Wada-8; member secretary for the high level project monitoring committee for establishing National Institute of Neurosciences at Jhajjar (Haryana) campus of AIIMS, New Delhi vide memo no. F.28-1/2016, Estt (CNC) dated 23 February 2017; member secretary for the high level project monitoring committee for establishment of National Cardio Vascular Institute at Jhajjar (Haryana) campus of AIIMS, New Delhi.

Professor Aarti Vij is Independent (non-official part time) Director of Goa Antibiotic and Pharmaceuticals Ltd (GAPL) (Government of India Enterprises); Independent (non-official part time) Director of HLL Biotech Limited (Government of India Enterprises). She received certificate of appreciation from Dr RP Centre for Ophthalmology for outstanding contribution to National Eye Bank; initiated rotational posting of nursing officers in ORBO to facilitate screening and maintenance of potential brain dead donors and approach relatives of patients for tissue donation in cardiac death; 46 Nos. of awareness campus and IEC activities were organized for public education and awareness generation on organ and tissue donation; 12282 persons pledged for organ and tissue donation on motivation of ORBO; Collaboration with various organization to promote the noble cause of organ and tissue donation.

Dr Nirupam Madaan was honored by Technology Information Forecasting and Assessment Council (TIFAC), Department of Science and Technology, GoI, on 29 September 2016 at Oakridge International School, Gachibowli for contribution to the 'Technology Roadmap: 2035 for Medical Sciences and Healthcare'; shared the honor of receiving the 1st prize in Kaya Kalp from MOHFW with the entire AIIMS hospital; arranged CSR of Rs. 13.02 crore through the Rural Electrification Corporation of India for the renovation of CSSD at AIIMS; formulated EoI for the renovation of CSSD; developed DPRs for the National Center for Ageing; Manpower planning for the Infectious Disease Block; Nursing manpower planning for the Endocrinology Center; Digitization of laboratories through LIS, billing, kitchen registration for OPD transformation phase-I, implementation of e-health and CPRS modules; Outsourcing of manpower for DEOs, kitchen and cafeteria, MRD and pharmacists; Procurement of common M&E items for patient care; Establishment of sanitation control room and monitoring of activities for the prevention of dengue in the residential campus area; Re-organization of medical record service of Main Hospital for easy retrieval of data for operations and research.

Dr Anoop Daga was invited as session chair in 'International Conference on Advances in Healthcare Management Services' at Indian Institute of Management, Ahmedabad on 10 & 11 December 2016; is Associate editor, Journal of Academy of Hospital Administration (JAHA), Noida, India and Member, editorial board, International Journal of Research Foundation of Hospital and Healthcare Administration (IJRFHHA), New Delhi, India.

Dr Mahesh R contributed as principal member of Medical Equipment and Hospital Planning Division Council (MHDC), Bureau of Indian Standards; contributed as expert in the committee for development of Pack Warnings, MoHFW, GOI (Tobacco Control Division); contributed as member sub-committee for Development of Minimum Standards for Clinical Establishments, GOI, DGHS; contributed as member expert in the committee to study the healthcare facilities at Coal India Limited and its subsidiaries and suggestions for improvement.

Dr Angel Rajan Singh attended 14th Healthcare Executive Management Development Programme on 8–14 January 2017 at Jaipur, India; attended "Internal Auditor & Quality Management System (ISO 15189:2012) Certificate Course" on 27–30 January 2017 at JPNA Trauma Centre, AIIMS.

Dr P Kumar developed training of trainers module and handbook for Human Resources Management which has been used to train over 400 Hospital managers in Iran in a cascading model.

Dr Vijaydeep Siddharth attended NABH assessor course based on Pre-accreditation Entry Level Hospitals and SHCO standards and passed the ongoing assessments and written examination conducted during 3–5 October 2016 in New Delhi. This course was conducted by NABH for empanelling successful candidates as assessors for carrying out assessment of Health Care Organisation (HCO) against NABH Accreditation for Pre-accreditation Entry Level Hospitals and SHCO Standards 1st Edition, April 2014; successfully completed Internal Counsellor Programme on NABH standards in a Hospital, conducted by Quality Council of India on 22–24 July 2016 at Amritsar; was Jury member at AAPI International Research Paper Competition at Xth AAPI Global Healthcare Summit, Udaipur on 28 December 2016, organized by AAPI in collaboration with RNT Medical College, Udaipur; Rajasthan University of Health Sciences, Jaipur and AIIMS, New Delhi; Resource person in the induction programme for Sister Grade II Nurse organized by KL Wig Centre for Medical Education and Technology in July–September 2016 at AIIMS, New Delhi.

Dr Kanika Jain was awarded the first price for the research titled "Pre procurement study of the impact of using Closed system drug transfer device technology, on environmental and drug contamination, while reconstituting chemotherapeutic agents in a Chemotherapy day care in an Apex Cancer center in North India." at Xth AAPI Global Healthcare Summit, International Research Competition organized at RNT Medical College, Udaipur, Rajasthan held on the 28 December 2016.

Dr Abdul Hakim organized National Workshop on life and fire safety in healthcare facilities in January 2017 at AIIMS, New Delhi.

9.18. Laboratory Medicine

Professor and Head

A.K. Mukhopadhyay

Professors

M. Irshad

Sarman Singh

Additional Professor

Subhadra Sharma

Assistant Professor

Sudip Kumar Datta

Shyam Prakash

Raghavendra L. (Contract)

Scientists

Mrs Vandita Vasudev, S-III

HIGHLIGHTS

The Department of Laboratory Medicine serves as the ‘jugular vein’ of patient-care service at AIIMS Hospital. In this year of review, phlebotomy load of centralized blood collection center was increased by 50%. Second shift of phlebotomy was also initiated. There was similar increase in in-patient load. TAT (Turn Around Time) of investigations was reduced significantly. Hierarchical authentication of report was introduced in LIS and E-Hospital systems. The quality of reports had been improved significantly. The department organized Internal Auditor and Quality Management Systems Certificate course (4 days) as per ISO 15189-2012 in collaboration with Foundation for Quality (India), an organizational member of Quality Council of India and with NABET accreditation. The department started ward rounds by Laboratory Medicine residents with the Departments of Medicine and Pediatrics. New investigations like HbA1C, Hb variants, Vit A, E, D2, D3, Chromogranin and antiepileptic drug level also started.

In education, the model of Laboratory Medicine has been emulated nationally by Bangladesh to serve their country with comprehensive laboratory service to their rural and urban areas. This was done over four years of hard work between the Head of Laboratory Medicine and the counterpart in BSMMU of Bangladesh. Through CMET, the department started workshop on “Know your Lab” for all new-coming residents. Departmental Faculty continued to remain in editorial group or as reviewer of several national and international journals. Under the aegis of Indian Association of Medical Microbiology, one national conference on Zoonotic diseases was jointly conducted with veterinarians. National symposium on Tuberculosis on World TB Day was also organized. The department trained one MSc student from Dr B.R. Ambedkar University, Agra. Several PhD students submitted their thesis this year.

The faculty members drew intramural and extramural grants and published important research papers both within the paradigm and on emerging new paradigm with several National and International recognitions as mentioned in their respective section.

Dr Raghavendra L. joined the department as assistant professor in June 2016, on contract basis.

Clinical Biochemistry

The Clinical Biochemistry Division of Department of Laboratory Medicine is an established set-up with regular contribution to the academic, research and patient-care activities. With an annual test load of more than 60 lakhs tests, this division is running both internal and external quality assurance programme (RIQAS) to ensure quality results in patient service. Simultaneously, it is conducting teaching at UG/PG level with award of the degree of MD (Laboratory Medicine) and ever engaged in research with publications in high caliber and indexed journals both in the preceding and current years. Expansion of test profiles, which is long due, is expected to be achieved soon. It is providing training to students, coming from other institutions, in research and analytical procedures.

EDUCATION

A.K. Mukhopadhyay: Chief Supervisor of one MD and one PhD student, Co-supervisor of three PhD students and Doctoral committee members of eight PhD students.

M. Irshad: MD Thesis completed: 1; Summer Training: 2; UG/PG Seminars: 40

Sarman Singh: Guided 5 PhD and 1 MD students. Six MD students from Department of Pathology were also trained in the division.

Sudip Kumar Datta: Coordinator of departmental/inter-departmental academic activities: Seminars, case-discussions and practical teaching of post-graduates in Lab Medicine, Pathology and Biochemistry; UG lecture on “Sources of Error in Lab reports” for sixth semester; Classes for BSc Nursing students; Coordinated the training of newly joined academic residents from Department of Pediatrics on peripheral smear and fluid examination in Emergency Lab.

Shyam Prakash: Teaching Immunology to M Biotechnology students; Classes for Phlebotomist; Moderator of the journal club; Classes for MBBS student; Started technique orientation training program; Classes for Laboratory Technicians newly joined in institutes; Lectures for students of BSc Nursing.

Raghavendra L.: Teaching haematology to the residents of laboratory medicine, involved in Seminars, case-discussions and practical teaching of postgraduates in Lab Medicine, Pathology and Biochemistry; Along with Dr Subhadra Sharma took lecture classes for BSc Nursing students; Coordinated the training of newly joined academic residents from Department of Paediatrics on peripheral smear and fluid examination in Emergency Laboratory.

CMEs/Workshops/Symposia/Conferences Organized

1. National Conference on Scientific Updates on Zoonotic Disease Control; 6 July 2016, AIIMS, New Delhi
2. PG Assembly, 2016 “Preparing for the future”, 22–24 August 2016, AIIMS, New Delhi
3. Indian Association of Medical Microbiologists–Delhi Chapter and Hands on Workshop for Technical Staff for Quality Control in Serology; 9–12 September 2016, AIIMS, New Delhi
4. Symposium on Challenges in Diagnosis and Elimination of Tuberculosis, 24 March 2017, AIIMS, New Delhi
5. Indian Association of Medical Microbiologists–Delhi Chapter Quarterly Meeting, 25 March 2017, AIIMS, New Delhi

Lectures delivered

A.K. Mukhopadhyay: 7

Sarman Singh: 7

Sudip Kumar Datta: 4

Shyam Prakash: 5

Raghavendra L.: 2

A.K. Mukhopadhyay: 7

1. Key to mental health: How consciousness supports and looks after your ‘self’ ‘life’ and consciousness, National Seminar on Yoga and Mental Health, 20 & 21 June 2016, on International Yoga Day, Doctor Hari Singh Gour University, Saugar, M.P.
2. Consciousness: Contents, States, Level regarding...Synthesis from neuroscience and vedanta, Fourth International Conference, Science and scientist, 2016, 26–28 August 2016, Professor KB Gowda Memorial Auditorium, University of Bangalore, Bangalore
3. Epistasis in dementia and depression, 43rd National Conference of Association of Clinical Biochemists of India, 12–15 December 2016, T.M. Pai Convention Centre, KMC, Mangalore.
4. Transformation of the laboratory medicine. Emergence of the discipline of laboratory medicine phenomenon of epistasis in depression and dementia, (i) 3rd Annual Conference of Society of Clinical Pathologists, Bangladesh, (ii) Armed Forces Institute of Pathology, Dhaka. Bangabandhu Sheikh Mujib Medical University, Dhaka, 17 & 18 December 2016, Bangabandhu Sheikh Mujib Medical University, Dhaka, Bangladesh
5. Recognition in the “Cognition Conundrum”, Nalanda Dialogue, 2017, 27–29 January 2016, Nava Nalanda Mahavira Deemed University, Bihar, Nalanda
6. Cracking the hard problem of consciousness, Quantum Physics and Consciousness, 6 & 7 February 2017, Kolkata
7. Cracking the hard problem of consciousness. Is brain necessary? The problem of consciousness and the brain/ brahman dichotomy, 27 & 28 February 2017, Sri Mata Vaishno Devi University, Katra, Jammu

Sarman Singh: 7

1. Panel discussion, Tuberculosis, 6th Annual Conference of Clinical Infection Diseases Society, 26–28 August 2016, Varanasi
2. Leishmaniasis, International Medical Sciences Academy Conference (IMSACON-2016), 5–9 October 2016, Mauritius

3. Keynote lecture, National Workshop on Latest Techniques in Molecular Biology, Medical Biotechnology, Bioinformatics and Industrial Microbiology at Amity University, Gwalior, 12 October 2016, Gwalior
4. Toxoplasmosis, 10th Annual Conference of Tropical Parasitology, 4–6 November 2016, JIPMER, Puducherry
5. Guest lecture, Rajasthan Conclave, organized by DMRC, Jodhpur 12 & 13 November 2016, Jodhpur, India
6. Lecture, 40th National Conference of Medical Microbiologists (Microcon 2016) held at Chandigarh, 23–27 November 2016, Chandigarh, India
7. Leishmania research, National Conference of Indian Immunology Society, 16–18 February 2017, Vishakhapatnam

Sudip Kumar Datta: 4

1. Organochlorine pesticides load in chronic kidney disease patients: Role of glomerular filtration rate and polymorphisms of xenobiotic metabolising enzymes, 43rd Annual Conference of the Association of Clinical Biochemists of India (ACBICON) 2016, 12–15 December 2016, Manipal University, Mangaluru, Karnataka
2. A practical holistic approach for interpretations from Levey Jennings Chart: Beyond Westgard's rules, 24th Annual Conference of the Association of Medical Biochemists of India (AMBICON) 2016, 18–20 November 2016, Guwahati, Assam
3. Automated phlebotomy tube labeller, Technologist's session: Cost effective use of technology in e-healthcare (CEUTEH) 2016, 8–10 September 2016, AIIMS, New Delhi
4. Quality concepts in clinical biochemistry, Workshop on Quality Concepts and Sigma matrices at Pathcon, 2016 organized by Association of Practicing Pathologists, 17–18 December 2016, New Delhi

Shyam Prakash: 5

1. Introduction to laboratory sciences in research and medical institutions (Invited Lecture), CEUTH, 2016, 8–10 September 2016, AIIMS, New Delhi
2. Translational prospective of antioxidant in changing of lifestyle diseases: An enigma of metabolic syndrome, SAPCON 2016, 10 & 11 November 2016, Kathmandu University, Nepal, Kathmandu
3. Current perspective of growth differentiation factor, 15 in changing of lifestyle diseases: An approach for translational research, ACBICON 2016, 12–15 November 2016, Mangalore
4. Translational prospective of growth differentiation factor 15 as a target molecule in changing of lifestyle disease: An approach for metabolic syndrome, SFRR-I, 2017, 8–12 January 2017, Bhabha Atomic Research Centre (BARC), Mumbai
5. Translational prospective of growth differentiation factor, 15 as a target molecule in changing of lifestyle diseases: An approach for metabolic syndrome, Current updates in Biochemistry, 26 February 2016, Allahabad Medical College, Allahabad

Raghavendra L.: 2

1. Cost effective use of technology in medical health care for technologist in India, CEUTEH, 2016, 8–10 September 2016, AIIMS, New Delhi
2. CPD-better screening tool for detection of malaria?, HABX 2017, 10 & 11 February 2017, CMC, Vellore

Oral papers/posters presented: 7

1. Shekhar, Gupta P, Irshad M. Status of HCV genotypes in patients with different liver diseases using multiplex real time PCR, 43rd National Conference of Association of Clinical Biochemists of India (ACBICON 2016), 12–15 December 2016, Mangaluru (Karnataka), India
2. Mankotia DS, Joshi YK, Irshad M. A simple dot blot assay for detection of Torque Teno Virus infection, EASL–HCC Summit 2017, 2–5 February 2017, Geneva, Switzerland
3. Prakash S. Comparative evaluation of HCV RNA by real time PCR and in-house developed quantification method using hydroxyl naphthol blue by loop mediated isothermal amplification, 14th Asia Pacific Federation for Clinical Biochemistry and Laboratory Medicine, 26–29 November 2016, Taipei, Taiwan, Taipei
4. Priyatma, Saroj M, Bharti S, C Prakash NS. A novel portable micro PCR system does detection of HCV RNA, 14th Asia Pacific Federation for Clinical Biochemistry and Laboratory Medicine, 7–9 January 2016, College of Medicine and JNM Hospital, WB UHS, Kalyani, WB
5. Saroj M, Priyatma, Bharti S, Goyle A and Prakash S. Correlation of nutritional markers and antioxidant status in development of anemia, 14th Annual Meeting of Society of Free Radical Research India, 7–9 January 2016, College of Medicine and JNM Hospital, WB UHS, Kalyani, WB

6. Singh A, Verma A, Das P, Jindal G, Prakash S, Nayak B, Gupta SD, Kumar L, Ahuja V and Makharia GK. Non-invasive biomarkers for assessment of villous abnormalities in patients with celiac disease and other enteropathies: An alternative to mucosal biopsies, 14th Annual Meeting of Society of Free Radical Research India, 7–9 January 2016, College of Medicine and JNM Hospital, WB UHS, Kalyani, WB
7. Prakash S, Priyatma, Bharti S, Preeti T and Singh C. Assessment of dietary effects of erucic acid and glucosinolate rich mustard oil in low socioeconomic community of Delhi, 14th Annual Meeting of Society of Free Radical Research India, 7–9 January 2016, College of Medicine and JNM Hospital, WB UHS, Kalyani, WB

RESEARCH

Funded projects

Ongoing

1. Medicinal orchids of Arunachal Pradesh: Micro propagation: Phytochemical characterization and biological activity evaluation, Sarman Singh, DBT, 2013–2017, Rs. 12.85 Lakhs
2. Molecular epidemiology and drug resistance pattern of mycobacterium tuberculosis from north-east regions of India, Sarman Singh, DBT, 2014–2017, Rs. 31.51 Lakhs
3. Adhesive sensor for detection of tuberculosis from skin, Sarman Singh, Bill and Melinda Gates Foundation, USA, 2015–2017, Rs. 37.89 lakhs
4. An inexpensive method for development of in house assay for HCV RNA amplification by loop mediated isothermal amplification (LAMP), Shyam Prakash, DBT, 2013–2017, Rs. 28.0 Lakhs
5. Rapid diagnostic evaluation of micro PCR for hepatitis B virus DNA (HBVDNA) and HCV RNA quantitation, Shyam Prakash, BigTec Bangalore, 2013–2017, Rs. 20.0 lakhs
6. Evaluation of organochlorine pesticides levels before and after hemodialysis and after renal transplantation in chronic kidney disease patients: a pilot study, Sudip Kumar Datta, AIIMS, 2 years, 2015–2017, Rs. 6.40 lakhs

Completed

1. Cloning and expression of N-22 region of Torque Teno Virus (TTV) and develop EIA system for anti, TTV antibodies, M. Irshad, CSIR, 3 years, 2011–14, Rs. 19.92 lakhs
2. Side by side comparison and evaluation of Abbot real time MTB RIF/INH resistance with standard phenotypic and molecular methods, Sarman Singh, Abbot Health Care, 2015–2016, Rs. 15.54 lakhs
3. Kinetoplastid drug development: Strengthening the preclinical pipeline KINDReD, Sarman Singh, European Commission, 2013–2016, Rs. 2.0 crores
4. Batch Efficacy Testing for infectious diseases markers on Advia Centaur System, Sarman Singh, Siemens Ltd., 2015–17, Rs. 9.34 Lakhs

Departmental projects

Ongoing

1. Study of polymorphism in TNF-alpha (308G/A), IL-1beta (511 C/T), and IL-6 (174G/C) genes in patients of depression: Their association with clinical severity
2. Study of mutational and functional status of mitochondria in Parkinson's Disease
3. Emerging pattern in the complexity (On emerging new paradigm)
4. Systems Psyche: Its structure, operation and possible molecular links (On emerging new paradigm)
5. Cracking the hard problem of consciousness (On emerging new paradigm)
6. Connecting the Dots: Signal, Information, Knowledge Experience and Wisdom (On emerging new paradigm)
7. Multiplexing assays for hepatitis viruses (A-G)
8. Studies on the role of TTV in renal failure cases
9. Epidemiological studies on CRF in Indian communities
10. Cloning, sequencing and expression of TTV related polypeptides
11. Genotyping of TTV and HCV in Indian population
12. Cloning expression and purification of a highly antigenic recombinant antigen from *Toxoplasma gondii* and its evaluation for the diagnosis of human and animal toxoplasmosis
13. Raising mono and polyclonal antibodies against novel antigens of Mycobacterium tuberculosis and their diagnostic value in clinical samples
14. Development of new molecular test(s) for rapid diagnosis of India specific Pre-XDR/XDR-TB

15. To see the prevalence of microsporidia in stool samples of HIV sero-negative adults, pediatric patient with diarrhoea
16. Isolation and Characterization of Leishmania or Leishmania like parasite(s) from sero-positive goat
17. To study the performance of Xpert MTB/RIF in urine of patients with pulmonary and extra-pulmonary tuberculosis
18. Dysregulation of asymmetric dimethyl arginine and molecular expression of tight junctions (claudins) and programmed cell death ligand, 1 in gastric cancer
19. Monitoring of thiopurine drug metabolites and hematological indices in inflammatory bowel disease: An assessment of efficacy and outcome
20. A cross-sectional pathfinder study to assess the serum vitamin D level in patients undergoing non-surgical endodontic therapy and observe its potential association with periapical healing
21. Biomarker(s) for assessment of villous abnormalities in patients with celiac disease and other enteropathies
22. Effectiveness of intravenous iron sucrose in the treatment of moderate anemia among pregnant women, attending a sub district hospital in Haryana, North India
23. Study of platelet dysfunction in trauma patients requiring platelet transfusion
24. Molecular expression and interaction between growth differentiation factor, 15 (GDF-15), iron trafficking proteins, micronutrient antioxidants in Diabetes and Metabolic syndrome
25. Study of mild traumatic brain injury induced novel circulating brain protein SNTF as a rapid diagnostic and prognostic biomarker for brain dysfunction

Completed

1. Molecular epidemiology of *Mycobacterium tuberculosis* by spoligotyping and 24, Locus mycobacterial interspersed repetitive unit variable number tandem repeat typing from different geographical regions of India
2. Development of a Loop Mediated Isothermal Amplification (LAMP) Assay for rapid detection of *Mycobacterium tuberculosis* and NTMs from clinical samples
3. Pathophysiology paracellular permeability and tight junction and their regulation in the first-degree relatives of patients with celiac disease

Collaborative projects

Ongoing

1. Correlation between first trimester glucose screening and serum insulin levels with development of gestational diabetes mellitus in pregnancy (Endocrinology and Metabolism)
2. A multicentric study on Chronic Renal Failure (CRF) in Indian population (Nephrology)
3. Rapid diagnosis of pediatric pulmonary tuberculosis and Rifampicin resistance by Gene Xpert MTB/RIF assay using bronchoalveolar lavage (Dr RML Hospital, New Delhi)
4. Rapid diagnosis of mycobacterium tuberculosis by GeneXpert in gastric aspirate of children with clinically and radiologically diagnosed case of pulmonary tuberculosis (Dr RML Hospital, New Delhi)
5. Development and validation of rapid and accurate diagnostic test for tuberculosis (Biotechnology)
6. Assessment of risk factors, clinical profile and outcome of early versus late CMV infection in living renal allograft recipients in Indian context (Nephrology)
7. Pulmonary infections in renal transplant recipients: A prospective cohort observational study (Nephrology)
8. Assessment of risk factors, clinical profile and outcome of early versus late CMV infection in living renal allograft recipients, in Indian context (Nephrology)
9. A phase II/III randomized, double blind placebo controlled study to investigate the efficacy of probiotic VSL#3@ on chemotherapy induced diarrhea in cancer patient receiving fluoropyrimidine and Irinotecan (Medical Oncology)
10. Single arm open label trial to assess effectiveness of intravenous Ferric Carboxy Maltose (FCM) in improving haemoglobin level among pregnant women with moderate to severe anaemia attending a Sub District Hospital, Faridabad, Haryana (Community Medicine)
11. Comparative evaluation of endocrine disrupter chemicals (organochlorine, organophosphate, Biphenyl A, Phthalate) in polycystic ovary syndrome, type 2 diabetes mellitus and healthy reproductive age Indian women, and their correlation with dietary habits (vegetarian vs non vegetarian) and genetic variability (Multi-centric)

Completed

1. Assessment of post-trauma cytokine producing potential of monocytes for early diagnosis or organ dysfunction and sepsis (Laboratory Medicine, Trauma Centre)

PUBLICATIONS

Journals: 29

Abstracts: 25

Chapters in books: 4

PATIENT CARE

Started to provide clinical pathology and molecular immunology lab service in the department: for investigations such as HbA1c (by HPLC), antiepileptic drug profile (by HPLC) and Chromogranin services for routine the patient care and also developing the methods for vitamin A and E, vitamin D2 and D3 estimations.

Total Phlebotomy: 421,763

Grand Total of Investigations: 11,301,131

CENTRALISED BLOOD COLLECTION FACILITY

I. Phlebotomy:

Total number of Phlebotomy and Sample (Primary and Post Prandials): 421,763

II. Distribution of Blood Samples

A. To Department of Lab Medicine

Cl. Chemistry Section: 171158

Cl. Heamatology Section: 138923

Cl. Microbiology: 15356

B. To Laboratories Outside of Department of Lab Medicine

CNC: 20903

Department of Transfusion Medicine: 3308

Department of Microbiology: 9965

*Because of incomplete computerization, the data shown is summation of computerization as well as manual records

III. Investigations Performed

S. no.	Test	Number
1.	Bleeding Time, Clotting Time	5622
2.	Prothrombin Time	5133
3.	APTT	1125
4.	Erythrocyte Sedimentation Rate (ESR)	50430

Emergency Laboratory Service (round the clock)

Haematology Section

Test	Number	Test	Number
Hb	100211	PT	76384
TLC	100211	TT	—
PLT	100211	APTT	21451
D-DIMER	—	Blood C/S	8150
CSF Cells	3209	CSF C/S	2249
Urine	1340	Slide Stain	5010
H.D. Stool	—	MCHC	100211
MCV	100211	PCV	100211
MCH	100211	RBC	100211
Total			919481

Clinical Biochemistry Emergency Services

Test	Number		
Glucose	17,396	SGOT	1,018
Urea	2,01,497	SGPT	1,018
Creatinine	2,01,497	ALP	1,018
Electrolytes		Bilirubin	
i) Sodium	1,55,365	Total	1,497
ii) Potassium	1,55,365	Conj.	16
iii) Ionized Calcium	1,55,365		1,304
iv) Chloride	1,55,365		
T. Protein	1,018	CSF protein	9,620
Albumin	1,018	CSF glucose	9,620
Amylase	10,787	ABG with electrolytes	22,448
Total			12,50,435

Clinical Pathology and Immunology Section

New investigations started by the Department under the Clinical Pathology and molecular Immunology

Test	Number	Test	Number
HbA1c	1815	Antiepileptic drug profile	15
Serum chromogranin	288	Vitamin D2/D3	80
HB variants	63	Vitamin A and E	80

Other tests:

Test	Number		
Vitamin B12	332	CEA	96
Folic Acid	283	CA 19.9	86
Ferritin	281	CA 15.3	82
Adenosine deaminase assay (ADA)	1900	iPTH	140

Total tests: 3200

Haematology Section

S. no.	Test	OPD	Ward
1	Hb	134415	91777
2	TLC	134415	91777
3	PCV	134415	91777
4	DLC	134415	91777
5	ESR	5883	13781
6	P/s Morphology	26042	26310
7	PLT	134415	91777
8	Retic Count	144	371
9	Abs Eos. Count	134415	91777
10	ANC	134415	91777
11	MP	—	—
12	MCV	134415	91777
13	MCH	134415	91777
14	MCHC	134415	91777
15	RBC	134415	91777
16	RDW	134415	91777

17	MPV	134415	91777
18	PT	—	29611
19	APTT	—	8571
20	TT	—	2597
21	D-DIMER	—	502
22	Others (Machine startup and shutdown, calibration and maintenance, manual testing, Quality control sample, tests without UHID, on request test)	261510	183410
Total		2040974	1458254

Grand Total = 34,99,228

***Repeat test, trial test, Quality Control Sample, Internal Q.C. etc.**

Note: Hb, TLC, PCV, DLC, Platelet, MCV, MCHC, RBC are measured by single reagent, within the same time frame

Clinical Biochemistry Routine Services

Test	Blood	Urine	Fluid
Sugar	1,26,940	—	4,987
Urea	3,40,728	1,220	—
Creatinine	3,40,759	19,127	—
Calcium	3,12,960	19,127	—
Phosphate	3,12,960	19,127	—
Uric Acid	3,06,626	17,773	—
Na	3,17,489	19,745	—
K	3,17,489	19,745	—
SGOT	3,38,728	—	—
SGPT	3,38,728	—	—
Alk. Phosphatase	3,38,728	—	—
Bilirubin			
i) Total	3,38,728	—	—
ii) Conj.	2,72,948	—	—
T. Protein	3,38,728	—	5,031
Albumin	3,38,728		5,031
Cholesterol	52,143	—	—
Amylase	8,737	—	1,831
ACP	100	—	—
24h Albumin	—	18,886	4,987
Total	47,42,210	1,34,750	21,867
Grand Total	48,98,827		

Clinical Biochemistry Rare Investigations

Name of the tests	Number	Name of the tests	Number
HBsAg/HBV-DNA	50	HCV- RNA	500
IgM anti HBc	100	TTV-DNA	200
Anti HCV	100	CK	50
IgM Anti HEV	100	LDH	50
IgM Anti HAV	50	TG	100
LDLc	100	HDLc	100
TOTAL			1500

Microbiology Section

A. Routine investigations

1. Urine

Name of the tests	O.P.D	Ward	Total
Medical board	0	1290	1290
Routine	35584	30381	65965
Microscopic	35584	30381	65965
pH	35584	30381	65965
Specific gravity	35584	30381	65965
Acetone	35584	30381	65965
Bile pigment/salt	35584	30381	65965
Urobilinogen	35584	30381	65965
Blood	0	3	3
Bence Jones Protein	104	75	179
Chyluria	147	54	201
Porphobilinogen	3	0	3
Myoglobinuria	2	0	2
Haemoglobin	0	0	0
Urine Cultures	20314	0	20314
Strain identifications tests	17235	0	17235
Antibiotic Sensitivity	3460	0	3460
Subtotal	290353	214089	5,04,442

2. Stool Investigations

Wet mount saline	4989	3182	8171
Wet Iodine stain	4989	3182	8171
Occult blood in stool	2037	1353	3390
Fat globules	110	76	186
Special stains for stool Z-N stain, Modified Z-N stain, Trichrome and chromotope	312	203	515
Subtotal	12437	7996	20,433

3. Semen analysis

Routine	5489	—	5489
No. of Reactions	5489	—	5489
Motility	5489	—	5489
Count	3984	—	3984
Fructose	2237	—	2237
Morphology	2988	—	2988
Subtotal	25676		25,676

4. Sputum Analysis

Total samples received	2589	685	3274
ZN staining (Microscopy)	4965	928	5893
MTB Culture	434	18	452
Subtotal	7988	1631	9619

5. Urine AFB Analysis

Total samples received	1097	—	1097
ZN staining (Microscopy)	2180	—	2180
MTB Culture	0	—	0
Subtotal	3277	—	3277

B. Specialized Investigations

Immuno-Serological and Molecular Diagnosis Tests

6. TORCH

NAME OF THE TEST* (these tests remained suspended for most of the year)	Number
Toxoplasma gondii IgG	1104
Toxoplasma gondii IgM	1139
Rubella IgG	1126
Rubella IgM	1233
Cytomegalo virus IgG	1265
Cytomegalo virus IgM	1313
Herpes Simplex virus IgG	176
Herpes Simplex virus 2 IgG	176
Herpes Simplex virus (1+2) IgM	132
Rubella IgG avidity	24
Subtotal	7688

7. Viral Marker and HIV

HAV IgM	915
HBsAg	29927
HBc IgM	73
HBeAg	1079
Anti HBe	248
Anti HBs	383
Anti HCV antibody	27299
HEV IgM	424
HIV	25750
HBV DNA	31
HCV RNA	12
Subtotal	86141

8. Others

Measles IgG	120
Mumps IgG	120
Varicella IgG	131
Varicella IgM	48
EBV IgG	10
EBV IgM	19
Subtotal	448

9. Molecular Tests

Leishmania PCR	5
TB PCR	4000
CMV (RT PCR)	248
Subtotal	4253

10. Leishmania Serology

rkE-16 Serology	60
Microscopy for L.D	5
Leishmania Culture performed from clinical samples	5
Lab Strain Maintenance (In vitro)	1440
Lab Strain Maintenance in Hamster	24
Subtotal	1534

11. BD Influx Cell Sorter (Flow Cytometer)

Flow Cytometer Assays	582
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12. TB Laboratory

Total Number of samples received	1495
ZN staining:	2955
LJ medium inoculated	3820
ADA Test	191
BACTEC MGIT 960 inoculated	3482
BACTEC MGIT DST 960:	697
BACTEC MGIT DST 960: Second Line	188
Colorimetric Redox Indicator assay (CRI)	84
Line Probe assay (HAIN'S Test)	162
GeneXpert MTB/RIF	859
DNA Sequencing	4
Subtotal	13,937
Grand Total	6,78,030

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor AK Mukhopadhyay was awarded Honorary Life-Membership of Society of Clinical Pathologists, Bangladesh and became Member of Advisory Board of Institute of Global Harmony, Rajasathan; Floating Member, Governing Body, Dayalbagh Educational Institute, Dayalbagh, Agra; Advisor, Commission for Extended Science, UK-based global consortium for scientists; honored to be chosen as the member of Nominating Council for 2015 BBVA Foundation Frontiers of Knowledge Awards, Spain and was also honored to be chosen as the member of Nominating Council for Infosys Science Foundation Award, 2016.

Professor M. Irshad was awarded “Bharat Ratna Dr APJ Abdul Kalam Excellence Award” by India International Friendship Society (IIFS); was nominated as a Member of the Editorial Board of World Journal of Hepatology and Prof M. Irshad's biography was published under category of best citizens of India in several renowned global and Indian directories; attended the conference “Economic Growth and National Integration” organized by India International Friendship Society (IIFS) at New Delhi on 14 January 2017.

Professor Sarman Singh received Research Excellence Award on AIIMS Foundation day 2016; awarded senior Scientist Award of Indian Immunology Society, 2017; President, Indian Association of Medical Microbiology (Delhi Branch) and Society of Immunology and Immunopathology; elected member, Scientific Advisory Committee (SAC), JIPMER, Pondicherry and Chairman, SAC, Chettinad Medical University, Tamil Nadu; Member, Joint SAC of National JALMA Institute of Leprosy and other Mycobacterial Diseases (NJLI), Agra and National Institute of Research in Tuberculosis (NIRT), Chennai; President, Society of Immunology and Immunopathology (2014–2016); President, Association for Better Health and Society (ABHAS); Abstract reviewer for World AIDS Conference 2017 consecutively for the 9th year by the International AIDS Society; Chairman, Award Committee for best Hindi book writing of ICMR; Member, Task Force on Tuberculosis, DBT; Task Force for Scheduled Castes, Scheduled Tribes Population and Rural Development, DBT; Global Technical Committee of International Organization for Standardization (ISO), Geneva; Bureau of Indian Standards (BIS), New Delhi; CPCSEA (Ministry of Environment, Government of India) nominee for Institutional Animal Ethics Committees (IAEC), Jamia Hamdard University, New Delhi; VP, Patel Chest Institute, New Delhi and Rohtak University, Rohtak, Haryana; Member, Condemnation Board of Indian Council of Medical Research, New Delhi; Technical Evaluation Committee of Establishment of Model Rural Health Research Units (MRHRU) in the States Equipment purchase committee of ICMR; Core Committee Member of the Assessment Board for Promotion of ICMR Scientists under the Flexible Complementing Scheme for Scientists B to Scientist G; Post-Doctoral Fellowship Award Committee of ICMR; Expert committee of ICMR for reemployment of retired ICMR scientists and Technology Transfer and Patent Committee of ICMR; Member, editorial and review boards of following journals: The Open AIDS Journal, Journal of Infection in Developing Countries, Clinical Medicine: Dermatology, Lancet, JAMA, Clinical Infectious Diseases, Maternal & Child Health, Clinical and Experimental Immunology, FEMS Immunology, Journal of Medical Virology, Journal of Medical Microbiology, Journal of Infection, AIDS Care and Behaviour, Archives of Medical Research, Infectious Diseases in Clinical Practice, International Journal of Integrative Biology; Journal of Parasitology; Medical Science Monitor; International Journal of Genetics and Molecular Biology; International Journal of Medicine and Medical Sciences; International Journal of Integrative Biology; Expert Reviews in Molecular Medicine; Biomed Central, Infectious Diseases; Tropical Medicine

and Health; Evidence Based Complementary and Alternative Medicine; Molecular and Cellular Biochemistry (MCBI); Scandinavian Journal of Clinical and Laboratory Investigation; Tropical Medicine and International Health; PLoS Neglected Tropical Diseases; Annals of Clinical Microbiology and Antimicrobials; International Research Journal of Biotechnology; Current Science; Journal of Parasitic Diseases; Journal of Laboratory Medicine; Neurology India; Journal of Postgraduate Medicine; Indian Journal of Gastroenterology; Indian Journal of Leprosy; Indian Journal of Medical Research; Indian Journal of Experimental Biology; Indian Journal of Paediatrics; Indian Journal of Physiology and Pharmacology; Indian Journal of Medical Microbiology; Indian Journal of Animal Parasitology; Indian Journal of Vector Borne Diseases; Lung India; Tropical Parasitology; World Journal of Hepatology; presented work in European Commission meetings at Modena (Italy) and Brussels (Belgium), as expert; Organized one national level hands on training workshop on parasitic diseases under the aegis of Indian Association of Medical Microbiology, one national conference on Zoonotic diseases jointly with veterinarians and one national symposium on Tuberculosis on world TB day; Presented research findings at International Conference of European Society of Clinical Microbiology & Infection Disease (ECCMID) 8–14 April 2016, Amsterdam, Netherland; Presented project progress report during the European Commission project Consortium Meeting, 12–17 June 2016, Modena, Italy; Chaired the Brainstorming Meeting on MDR-TB in NER India, 19 & 20 August 2016, Guwahati.

Dr Sudip Kumar Datta was awarded Diploma in Hospital Management (via distance learning course) from National Institute of Health and Family Welfare, and became Assistant Editor, Journal of Laboratory Physicians; helped organize the **Internal Auditor and Quality Management Systems Certificate course** (4 days) as per ISO 15189, 2012 in collaboration with Foundation for Quality (India), an organizational member of Quality Council of India and with NABET accreditation; attended the (i) 24th Annual Conference of the Association of Medical Biochemists of India (AMBICON) 2016; 18–20 November 2016, Guwahati, Assam, (ii) 43rd Annual Conference of the Association of Clinical Biochemists of India (ACBICON) 2016, Manipal University, Mangalore from 12–15 December 2016, (iii) Basic Course in Medical and Health Professions' Education, AIIMS, New Delhi, 15–17 February 2017, (iv) 6th Annual CME of Clinical Biochemistry, 2017 on “Trace Elements—The Forgotten Essentials” at SGRH, New Delhi on 17 March 2017.

Dr Shyam Prakash was Member of project review Committee of the SERC division of DST and the Nutrition Division of ICMR.

Dr Raghavendra L. attended FISH Workshop and Cancer Genetics Symposium conducted at TMC, Kolkata on 21 & 22 October 2016 and Lab diagnosis of Autoimmune disorders at Pathcon, 2016 organized by Association of Practicing Pathologists, 17 & 18 December 2016.

9.19. Medicine		
Professor and Head		
S.K. Sharma (up to 30 November)		Rita Sood (from 1 December 2016)
Professors		
Naveet Wig		Ashutosh Biswas
Sanjeev Sinha		Naval Kishore Vikram
Associate Professors		
Manish Soneja	Piyush Ranjan	Neeraj Nischal
Assistant Professors		
Pankaj Jorwal	Arvind Kumar	Ranveer Singh Jadon
Animesh Ray		Upendra Baitha

HIGHLIGHTS

The Department of Medicine has been the soul of the services provided by the institution. Beside the routine services, it has a strong presence in the field of Infectious Diseases, Metabolic disorders, chest medicine and sleep disorders and a large number of medical problems requiring multi-disciplinary care. The department also has a long-term interest in all aspects of critical care medicine and is working towards development of management protocols.

EDUCATION

The department runs comprehensive undergraduate and postgraduate teaching programmes, which includes integrated lectures, seminars, journal club and bedside clinical case discussions. Currently 58 MD Students, 20 DM-Infectious Diseases (9 Junior Residents and 11 Senior Residents) and 21 senior residents are being trained in the department of medicine. It is striving to improve the clinical training of undergraduates and postgraduates with better alignment between the expected outcomes, learning opportunities and assessments. There is increasing focus on regular formative assessments and feedback to students. There are efforts to integrate the clinical skills training with communication skills and medical ethics.

CMEs/Workshops/Symposia/National and International Conferences

- National and international workshops on various issues in Medical Education, Basic Course Workshop for Medical and Health Professions' Education from 30 March 2015 to 1 April 2016, at AIIMS, New Delhi; Mentoring and feedback at Puducherry on 20 August 2016; WFME standards and accreditation of medical schools at Myanmar on 17 November 2016; and Changing educational environment to support learning professionalism at Karamsad, Gujarat on 23 November 2016.
- A dissemination workshop: INDEX-TB (Indian Extra-pulmonary TB) Guidelines on 9–10 August 2016 at AIIMS, New Delhi
- A Workshop on “Dengue Update, 2016” on 22 August 2016 at Conference Hall, AIIMS, Ansari Nagar, New Delhi
- A CME on chikungunya, dengue and malaria on 27 August 2016 at CMET, AIIMS, New Delhi
- A public lecture on chikungunya and dengue fever on 23 September 2016 at JLN Auditorium, AIIMS, New Delhi
- A guest lecture on the “Recent updates in the Bio-medical waste management” on 22 October 2016 at AIIMS, New Delhi
- A Symposium on infectious diseases 2017 in collaboration with University of Michigan (UM), USA on 30 January 2017 at AIIMS, New Delhi
- TB Symposium on World TB Day on 22 & 23 March 2017 in collaboration with Department of Microbiology

Lectures delivered

Rita Sood: 11	Ashutosh Biswas: 4	Sanjeev Sinha: 1	Naval Kishore Vikram: 2
Manish Soneja: 2	Piyush Ranjan: 1	Neeraj Nischal: 4	Pankaj Jorwal: 2
Animesh Ray: 2	Upendra Baitha: 1		

Rita Sood: 11

1. Lectures during basic course: (i) Systems approach to educational process; (ii) Teaching-learning process and adult learning; (iii) Active learning-principles; (iv) One minute Preceptor (OMP) model; (v) Assessment, General principles, Concepts of validity and reliability; (vi) Giving effective feedback-principles, Basic Course Workshop in Medical and Health professions' Education, 30 March 2016, 1 April 2016, AIIMS, New Delhi
2. Transformative education, Changing trends in health professions education (NC-CTHPE, 2016), 19 & 20 August 2016, Sri Balaji Vidyapeeth Deemed University, Puducherry
3. Addressing professionalism in undergraduate medical education, 12 International Conference on Medical Regulation IAMRA (International association of medical regulatory authorities), 20–23 September 2016, Melbourne, Australia
4. Transformative learning, 4th International SEARAME Conference, Optimizing Paradigm shifts in Health Professions Education, 16–18 November 2016, Yangon, Myanmar
5. Active and self-directed learning in medical education (chairperson), 4th SEARAME Conference, 17 November 2016, Yangon, Myanmar
6. Poster session, Teaching learning of professionalism at undergraduate level (moderator), NCHPE 2016, 23 November 2016, Karamsad, Gujarat
7. Antimicrobial stewardship: AIIMS perspective, AIIMS Michigan Symposium on Infectious diseases 2017, 30 January 2017, AIIMS, New Delhi
8. Dilemma of dealing with TB, International TB Day Symposium Detect-treat-prevent-TB, 23 March 2017, AIIMS, New Delhi
9. Panelist for panel discussion, Airborne infection control, International TB Day Symposium Detect-treat-prevent-TB, 23 March 2017, AIIMS, New Delhi
10. Clinical management of dengue (chairperson), Dengue Update, 22 August 2016, AIIMS, New Delhi

11. Anti-microbial resistance; Global and National perspective (chairperson), American Society of Microbiology Symposium, Antibiotic resistance: Renewed fears, 10 September 2016, New Delhi

Ashutosh Biswas: 4

1. Malaria, Total health programme, 1 May 2016, Delhi Doordarshan, Doordarshan Bhawan, Mandi House, New Delhi
2. National clinical guideline for management of dengue infection, Dengue Update and Workshop, 2016, 22 August 2016, AIIMS, New Delhi
3. Chikungunya and dengue fever, Public Lecture, 23 September 2016, AIIMS, New Delhi
4. Emerging challenges and threats in diagnosis and management of chikungunya, International Congress of Bangladesh Society of Medicine, 16–18 December 2016, Dhaka, Bangladesh

Sanjeev Sinha: 1

1. HIV and TB Co-infection, NAPCON, 2016, Mumbai

Naval Kishore Vikram: 2

1. Can interventions in childhood obesity prevent adult diabetes, 7 World Congress of Diabetes India, 23–26 February 2017, New Delhi
2. Exercise and diabetes with focus on sarcopenia: Recent concepts and guidelines, Professor J.S. Bajaj and Professor M.M.S. Ahuja Symposium: Recent Concepts in Diabetes, Obesity and Cardiovascular Diseases, 18 March 2017, Delhi

Manish Soneja: 2

1. Need of AIC for TB-International TB Day Symposium, 23 March 2017, AIIMS, New Delhi
2. Panel discussion: Hospital AIC measures, International TB Day Symposium, 23 March 2017, AIIMS, New Delhi

Piyush Ranjan: 1

1. Lifestyle, Related diseases, Guest Lecture, 31 March 2017, CISF Unit, IGI Airport, New Delhi

Neeraj Nischal: 4

1. The Art and Science of a Journal Club UP, APICON, 12 October 2016, MLN Medical College, Allahabad
2. INDEX-TB guidelines for management of extra pulmonary TB-RNTCP Zonal Task Force (South 2) Meeting, 1 December 2016, PIMS, Pondicherry
3. INDEX-TB guidelines for management of extra pulmonary TB-RNTCP Zonal Task Force (West) Meeting, 22 December 2016, GMH, Ahmadabad
4. INDEX-TB guidelines for management of extra pulmonary TB-RNTCP Zonal Task Force (East) Meeting, 5 March 2017, RIMS, Ranchi

Pankaj Jorwal: 2

1. INDEX-TB Guidelines for management of Extra Pulmonary TB-NATCON, 2016, 17 December 2016, PGIMER, Chandigarh
2. INDEX-TB Guidelines for management of Extra Pulmonary TB-RNTCP Zonal Task Force (North) Meeting, 25 & 26 February 2017, Shimla

Animesh Ray: 2

1. INOSA Guidelines, ACC, Sleep Medicine Workshop, 28 May 2016, VPCI, Delhi
2. Lung cancer screening, Postgraduate Review Course on Lung Cancer, 4 February 2017, Ghaziabad, UP

Upendra Baitha: 1

1. Vector borne diseases, India International Trade Fair, New Delhi, 20 November 2016, Family Welfare Pavilion Pragati Maidan, New Delhi

Oral papers/posters presented

1. Biswas A. Emerging challenges and threats in diagnosis and management of Chikungunya, International Congress of Bangladesh Society of Medicine, 16–18 December 2016, Dhaka, Bangladesh

2. Sinha S. Level of Vit D in BAL and Serum in HIV and TB Co-infection-ATS, May 2016, San Francisco, CA, USA
3. Biswas A, Kumar A, Singhla P. Emerging challenges and threats in diagnosis and management of chikungunya , 17th International Congress and Seminar 2016, 15 December 2016, Dhaka, Bangladesh
4. Mian A, Achintya D Singh, Memon SS, Nischal N, Sharma SK. 'Impact of air pollution during Diwali festival on emergency room visits for cardio-respiratory disorders', AAPI (American Association of Physicians of Indian Origin), 28 December 2016, RNT Medical College, Udaipur
5. Sharma R, Singh BK, Sharma SK, Jorwal P, Ramachandran R. "Cords" A presumptive way for the identification of Mycobacterium Tuberculosis comple, AAPI (American Association of Physician's of Indian Origin), 28 December 2016, RNT Medical College, Udaipur
6. Kumar A, Manohar S, Tom K, Biswas A, Wig N. The eye of a storm; A darker side of isolated CD4 deficiency, 72nd Annual Conference of Association of Physicians in India, 26–30 January 2017, Mumbai, India
7. Kumar A, Gupta N, Kuttly S, Wig N. Acquisition of mucormycosis on voriconazole therapy in a case of invasive aspergillosis with newly diagnosed diabetes and Koch's, 1st International Tropical Neurology Conference, Indian Academy of Neurologist, 25 March 2017, Mumbai

RESEARCH

Funded projects

Ongoing

1. Seroprevalence of dengue infection, Ashutosh Biswas, NVBDCP, M/o H and FW, 2 years, July 2016–June 2018, Rs. 20 lakhs
2. Study the pattern of HIV drug resistant mutations in HIV patients co-infected with active tuberculosis infection in India. Sinha S, NACO, 2014, December 2017, Rs. 56.5 lakhs
3. Nonalcoholic fatty liver disease: Associations with bone mineral density, vitamin D and adipokines, Naval K Vikram, DBT, March 2013–December 2017, Rs. 9 lakhs
4. Effect of electromagnetic radiations due to mobile phone use on sleep and neurocognitive functions: A molecular approach, Soneja M, DST (Department of Science and Technology), 3 years, 2015–2018, Rs. 65 lakhs
5. A study to evaluate the safety and efficacy of Saroglitazar 4 mg versus placebo in the treatment of HIV associated lipodystrophy, S.K Sharma/Neeraj Nischal, Zydus Cadila, 3 years, 2015–2018, Rs. 15 Lakhs
6. In sleep pattern, perceived stress and coping strategies at the end of first year among first year medical undergraduate students, Neeraj Nischal, AIIMS, 2 years, 2016–2018, Rs. 4.6 Lakhs
7. Pattern of invasive fungal infection among high risk patients in critical care settings at AIIMS, New Delhi, Pankaj Jorwal, AIIMS, 2 years, 2016–2018, Rs. 10 Lakhs

Completed

1. Evaluation of inflammatory predictors of severity in DHF: A prospective observational case, control study, Ashutosh Biswas, ICMR, 3 years, 2013–2016, Rs. 44.63 lakhs
2. Role of biomarkers in severe dengue fever, Ashutosh Biswas, AIIMS, 2 years, 2013–2015, Rs. 4.82 lakhs
3. Once daily dose of Nevirapine (400 mg) versus twice daily dose (200 mg) of Nevirapine, based highly active antiretroviral therapy regimens in antiretroviral-naïve patients with HIV and Tuberculosis infection in India, Sanjeev Sinha, NACO, 2012–2017, Rs. 48.5 Lakhs
4. Studies on the prevalence, risk factors and outcomes of cancers in HIV in India, (A collaborative UCLA, USA and AIIMS project), Sinha S, ICMR, 2013–2017, Rs. 38.57 lakhs

Departmental projects

Ongoing

1. Active surveillance and targeted intervention in an ICU and HIC practices and its impact on ventilator associated pneumonia
2. A study on clinical spectrum and outcome of hospitalized patients with acute febrile illness and new onset organ dysfunction presenting during monsoon season at a tertiary referral centre in India.
3. A study on factors determining the dose of topical lignocaine study used by "spray as you go" technique during broncho-alveolar lavage by a fibroptic bronchoscopy. ARDS in Medical ICU at AIIMS, New Delhi
4. Antibiotic resistance pattern in clinical isolates and its correlation with morbidity
5. Adherence to lifestyle modification advices in nonalcoholic fatty liver disease

6. Association of ectopic fat deposits with metabolic syndrome
7. Association of non-alcoholic fatty liver disease with bone mineral density, adiposity, and nutrient intake
8. Burden of dengue among adult population in Delhi/NCR
9. Clinical and socio-demographic correlates of the patients presenting with medically unexplained physical symptoms in medicine outpatient clinic at a Tertiary Care Teaching Hospital
10. Clinical, laboratory profile and outcome of patients with chikungunya fever: A prospective study from a Tertiary Care Hospital in Northern India
11. Comparison of CPR quality pre and post training through the usage of high quality CPR markers
12. Development and validation of questionnaire to assess knowledge, attitude and practice (KAP questionnaire) towards obesity among obese persons
13. Diagnostic yield of bronchoscopy and bronchoscopic procedures in sputum negative and sputum-scarce patients presenting with fever and miliary shadowing on chest imaging
14. Diagnosis of patients with oligoarthritis with special reference to brucellosis and lyme disease
15. Diagnostic utility of endobronchial ultrasound guided transbronchial needle aspiration (EBUS-TBNA) as a modality for mediastinal lymphadenopathy
16. Effect of implementation of protocol based nutrition therapy on outcomes in medical ICU
17. Erectile dysfunction in non-alcoholic fatty liver disease
18. Evaluation/utility of gene xpert and line probe assay (LPA) as compared to liquid culture for diagnosis of multi drug resistant (MDR) tuberculosis in sputum smear positive TB cases
19. Epidemiology of Systemic Fungal Infections in Medical Wards at AIIMS, New Delhi
20. Epidemiology of Invasive Fungal Infections in ICU at AIIMS, New Delhi
21. Evaluation of xpert/Mtb Rif in the diagnosis of Tubercular Lymphadenopathy
22. Effectiveness of implementation of standardized checklist on incidence of adverse outcomes during intra-hospital transport of critical ill patients in Medicine Department at AIIMS, New Delhi
23. Facilitating conduct of invasive diagnostic procedures of out-patient-department (OPD) patients
24. HIV Associated Neurocognitive Decline and Brain Metabolism
25. Hepatic left lobe volume as a sensitive index of metabolic improvement in patients with non-alcoholic fatty liver disease (NAFLD)
26. Incidence of respiratory syncytial virus infection in adults in the first year following hematopoietic stem cell transplant
27. Magnitude of psychiatric comorbidities in patients with rheumatoid arthritis
28. Magnitude of psychiatric comorbidity in patients with obesity in a Tertiary Care Centre
29. Metabolic Abnormalities and Sleep Disorders in Polycystic Ovary Syndrome
30. Nutritional and lifestyle risk factors associated with NAFLD (Non Alcoholic Fatty Liver Disease)
31. Outcome Implications of ADA/AACE guidelines based insulin protocol in the management of hyperglycemia in hospitalised patients at AIIMS
32. Outcome implications of standardized checklist and protocol on incidence of adverse events during intra-hospital transport of critically ill patients
33. Outcome of implementation of guidelines on artificial airway maintenance and tube care in mechanically ventilated patients in Medicine Department at AIIMS, New Delhi
34. Outcome of protocol-based weaning practices in medical ICU
35. Outcome of protocol based management of pain, agitation and delirium in mechanically ventilated patients in Medicine Department at AIIMS, New Delhi.
36. Prevalence of NAFLD in young adults (18–30 years) a Hospital-based pilot study
37. Prevention of relapse in Category I treated Pulmonary Tuberculosis Patients with and without vitamin d3 supplementation: A randomized double blind control clinical trial
38. Risk factors for dengue mortality in patients admitted in AIIMS
39. Role of cytokines in severe Dengue
40. Role of FDG-PET in monitoring of tubercular lymphadenopathy
41. Reference values for pulmonary function tests in healthy Indian adults
42. Reducing AIDS stigma among health providers in India

43. Risk factors associated with first line antiretroviral therapy failure amongst HIV infected patients presenting at Tertiary Care Centre in Northern India
44. Reference values for cardio-pulmonary exercise testing parameters in healthy Indian adults
45. Secondary Hemophagocytic Lympho Histiocytosis (HLH) in patients with sepsis
46. Significance of candiduria in catheterised patients
47. Sterile pyuria in patients admitted to Medical Wards: Incidence of Chlamydia Trachomatis, Ureaplasma urealyticum, Mycoplasma Hominis and Mycoplasma Genitalium
48. Study of autonomic functions in non-alcoholic fatty liver disease
49. Study of clinico-epidemiological profile of acute undifferentiated febrile illness patients at a Tertiary Care Centre
50. Study of the effect of implementation of 'Critical Pathways' on the quality of Management of Community Acquired Pneumonia
51. Study to determine the association between pancytopenia and tuberculosis
52. Study of leptospira and scrub typhus in patients admitted with acute undifferentiated febrile illnesses
53. Survival analysis of people living with HIV/AIDS with adult HIV progression model
54. To study prevalence of positive tuberculin test in cohort of rheumatoid arthritis patients and factors associated with its energy
55. The diagnostic value of 18 FDG-PET/CT in undiagnosed opportunistic infections/neoplasms among HIV/AIDS

Completed

1. Clinico-pathological and radiological profile of peripheral lymphadenopathy
2. Disability and family burden in rheumatoid arthritis
3. Evaluation of gene xpert (Xpert® TB/RIF) in sputum-smear negative and sputum-scarce patients with suspected tuberculosis using bronchoalveolar lavage sample
4. Fatty acid composition of abdominal subcutaneous adipose tissue compartments in NAFLD
5. Magnitude of psychiatric comorbidity in patients with obesity in a Tertiary Care Centre
6. Oral candida infections amongst patients living with HIV/AIDS
7. Pathogenetic markers in severe dengue infection
8. Study of autonomic functions in non-alcoholic fatty liver disease
9. Study of hematological and coagulation parameters in severe malaria
10. The effect of implementation of an antibiotic stewardship program in a medical ward of a Tertiary Care Hospital
11. To study the current practice of management of bacterial UTI

Collaborative projects

Ongoing

1. Association of various genotypes of *M. tuberculosis* with clinical, pathological manifestation and disease outcome of post-primary tuberculosis (Laboratory Medicine)
2. To study the genetic polymorphisms and correlations with cytokine and hormone levels of Macrophage Migration Inhibitory factor (MIF) Peroxisome Proliferator-Activated, Receptor-γ (PPARγ) Interleukin-6 (IL-6) C-reactive protein (CRP), Insulin receptor substrate (IRS) Insulin receptor substrate (IRS) 1 and Leptin receptor genes in Obstructive sleep apnea syndrome (OSAS) and non-alcoholic fatty liver disease (NAFLD) (Pulmonary Medicine and Sleep Disorders)
3. Role of acute lung injury biomarker gene polymorphisms in obstructive sleep apnea (Pulmonary Medicine and Sleep Disorders)
4. Obesity and metabolic syndrome: The role of nutrition, physical activity, and inflammation (Pulmonary Medicine and Sleep Disorders)
5. Effect of hyperglycemia on macrophage function in pathophysiology of pulmonary tuberculosis (Biochemistry)
6. Role of hyperglycemia on macrophage effector function in pulmonary tuberculosis (Biochemistry)
7. Ambispective study of clinical profile of snake bite patient at Tertiary Care Centre (AIIMS, New Delhi) (Emergency Medicine)
8. A multi centric, randomized, open label, parallel, phase-III study to evaluate pharmacokinetics, clinical efficacy, safety and pharmacokinetics of intravenous denosumab (60 mg Single Use Vial) in comparison to the reference listed drug prolia® (Denosumab, 60 mg Single Use Vial) in women with postmenopausal osteoporosis. (Rheumatology)

9. Development of cognitive retraining module for improving cognitive deficits of abstinent patients with alcohol dependence syndrome, cannabis dependence syndrome and opioid dependence syndrome in a Tertiary Care De-Addiction Centre of Northern India, (Psychiatry)
10. Molecular detection and characterization of *Rickettsia* among patients with acute febrile illness (Microbiology)

Completed

1. Childhood obesity in India: A multi-center study on its measurements and determinants (Endocrinology and Metabolism, and INCLIN)
2. Patterns of retinal vasculitis and their clinical and etiological profile—ultra wide field (UWF) study (Ophthalmology)

PUBLICATIONS

Journals: 38

Abstracts: 3

1. Kumar A, Mondal S, Sethi P, Manchanda S, Biswas A & Wig N. Spontaneous iliopsoas haematoma in a patient with dengue haemorrhagic fever (DHF): A case report, J Vector Borne Dis 54, March 2017, pp. 103–105
2. Achintya S, Ragesh R, Nischal N, Soneja M, Kakkar A, Sharma MC, et al. Tuberous Sclerosis with Disseminated Malignancy. Journal of the Association of Physicians of India. Vol. 64. November 2016. Page. 68–71.
3. Mittal A, Sharma S, Gupta VG, Ragesh R, Nischal N, Gogia A, Soneja M, et al. Carcinoma of Unknown Primary Presenting as Peripheral Symmetric Gangrene. Journal of the Association of Physicians of India. Vol. 65. February 2017. Page. 78–81.
4. Biswas A, Kumar A, Singla P. Emerging Challenges And Threats In Diagnosis And Management of Chikungunya. J Med. 2017 January 18, 54–55
5. Bairwa D, Kumar V, Vyas S, Das BK, Srivastava AK, Pandey RM, Sharma SK, Jagannathan NR, Sinha S. Case control study: magnetic resonance spectroscopy of brain in HIV infected patients. BMC Neurology. 2016;16:99, DOI: 10.1186/s12883-016-0628-x.
6. Gupta D, Mohanty S, Thakral D, Bagga A, Wig N, Mitra DK. Unusual Association of Hemophagocytic Lymphohistiocytosis in Systemic Lupus Erythematosus: Cases reported at Tertiary Care Centre. Am J Case Rep. 2016 Oct 13;17:739–744.
7. Gonmei Z, Siddhu A, Toteja GS, Dwivedi S, Vikram NK, Mohanty SS, Rath K. Dietary intake of macro and micro nutrients by elderly women residing in an urban slum of Delhi. Indian Journal of Applied Research 2017; 7(1): 771-773.
8. Jain S, Ray A, Soneja M, et al. Cavitating Lung Lesions with Encephalopathy in a Patient with Long Standing Sjogren's Syndrome: An Elusive Cause. J Assoc Physicians India. 2016 Oct;64(10):79–83.
9. Kumar MS, Singh A, Jaryal AK, Ranjan P, Deepak KK, Sharma S, Lakshmy R, Pandey RM, Vikram NK. Cardiovascular autonomic dysfunction in patients of non-alcoholic fatty liver disease. International Journal of Hepatology Volume 2016(2016), Article ID 5160754.
10. Kumari A, Sinha B, Ranjan P. Research protocol development: basic concepts for clinicians. Int J Res Med Sci 2017;5:1733–6.
11. Mohta S, Soneja M, Vyas S, Khot W. Tuberculosis and Guillain-Barre syndrome: A chance association? Intractable Rare Dis Res. 2017 Feb;6(1):55–57.
12. Malik MA, Sood R, Singh S, Wig N, Mohan A. Mycobacteremia in patients with disseminated and extrapulmonary tuberculosis. Intl J Contem. Medical Research 2016;3 (9): 2557–62.
13. Ojha A, Nandi D, Batra H, Singhal R, Annarapu GK, Bhattacharya S, Seth T, Dar L, Medigeshi GR, Vrati S, Vikram NK, Guchhait P. Platelet activation determines the severity of thrombocytopenia in dengue infection. Scientific Reports 2017;7:41697.
14. Panda PK, Mavidi SK, Wig N, Garg A, Nalwa A, Sharma MC. Intracranial Aspergillosis in an Immunocompetent Young Woman. Mycopathologia. 2017 Jan 4. doi: 10.1007/s11046-016-0106-4.
15. Panda PK, Wig N, Kumar S, Arava S. Invasive thymoma presenting as classic superior vena cava syndrome: a case of venous spread metastasis. BMJ 2016 Oct 26; 2016.
16. Panda PK, Jain S, Sood R, Yadav R, Vikram NK. Typical facial lesions, a window of suspicion for progressive disseminated histoplasmosis; a case of Asian phenotype. Case Reports in Infectious Diseases 2016; 2016:2865241.
17. Pawar S, Ganakumar V, Jha S, Ragesh R, Ray A, Kakkar A, Sharma MC. Pulmonary Cryptococcoma masquerading as Lung Cancer. J Assoc Physicians India 2016; 64: 66.
18. Panda PK, Jose T, Kakkanattu, Kumar A, Sethi P, Kumar K, Biswas A and Wig N. Mystifying Toxidrome: A Case of Heroin Body Packer Syndrome American Journal of Pharmacology and Toxicology; DOI: 10.3844/ofsp.10676, January 6, 2016.

19. Panda PK, Mohta S, Sharma SK, Ray A, Arava S, Vyas S. A case of pseudorheumatism with submasseteric abscess and HLH in a patient with visceral leishmaniasis: A diagnostic dilemma. *J Vector Borne Dis* 53, December 2016, pp. 387–390.
20. Ragesh R, Ray A, Mian A, Vyas S, Sharma SK. Cavitory Lung Lesions in a Difficult-To-Treat Asthma Patient. *J Assoc Physicians India* 2016;4.
21. Ray A, Gupta A. Esophageal pressure-guided positive end-expiratory pressure in acute respiratory distress syndrome: The jury is still out!. *Indian J Crit Care Med* 2016;20:377–8.
22. Ray A, Nangia V, Chatterji R, Bante N. Respiratory failure in a patient with treated thymoma: A blast from the past. *Egypt J Bronch* 2017; 11:168–170.
23. Ray A, Nangia V, Chatterji RS, Dalal N. Scrub typhus infection presenting as acute heart failure: A case report and systematic review of literature of cardiopulmonary involvement in scrub typhus infection. *Lung India* 2016;33: 439–43.
24. Ray A, Nangia V, Chatterji R, Dalal N. Bronchoscopy as a salvage therapy in mechanically ventilated status asthmaticus patient: A case report. *Egypt J Bronch* 2017;11:66–9.
25. Ray A. Excessive dynamic airway collapse and wheeze: Reasons for contemplation. *Lung India* 2016;33:698–9.
26. Ray A. Gorham's syndrome vs generalized lymphangiomatosis : A close call. *Ind J Radiol Imaging* 2017; 27:110.
27. Singh AD, Soneja M, Memon SS, Vyas S. Interesting case of base of skull mass infiltrating cavernous sinuses. *BMJ Case Rep.* 2016 Nov 16;2016.
28. Singh T, Modi JN, Kumar V, Dhaliwal U, Gupta P, Sood R. Admission to undergraduate and post graduate medical courses: Looking beyond single entrance examinations. *Indian Pediatrics* 2017; 54 : 231–38.
29. Soneja M, Achintya S, Nischal N, Ranjan P, Vyas S, Arava S, Sharma SK. Chronic Tubulo-interstitial Pyelonephritis with Retroperitoneal Fibrosis. *J Assoc Physicians India.* 2016 Jun;64(6):71.
30. Sharma SK, Gupta A, Biswas A, Sharma A, Malhotra A, Prasad KT, Vishnubhatla S, Ajmani S, Mishra H, Soneja M, Broor S. Aetiology, outcomes & predictors of mortality in acute respiratory distress syndrome from a tertiary care centre in north India. *Indian J Med Res.* 2016 Jun;143(6):782–792.
31. UE Mathew, A Ray, M Soneja, S Vyas, K Sanker, N Nischal, P Jorwal. Pyomyositis Complicated by Deep Venous Thrombosis-A Unique Case of Reverse Lemierre's Syndrome. *Journal of The Association of Physicians of India* 65, 87.
32. Verma P, Bhoi S, Baitha U, Sinha TP, Mishra PR. Gender-based assessment of survival in trauma-hemorrhagic shock: A retrospective analysis of Indian population. *Indian J Crit Care Med* 2017;21:218–223.
33. Vikram NK, Latifi AN, Misra A, Luthra K, Bhatt SP, Guleria R, Pandey RM. Waist-to-height ratio compared to standard obesity measures as predictor of cardiometabolic risk factors in Asian Indians in North India. *Met Syndr Relat Disord* 2016;14(10):492–499.
34. Vyas S, Bhalla AS, Ranjan P, Kumar S, Kumar U, Gupta AK. Rheumatoid Arthritis Revisited - Advanced Imaging Review. *Pol J Radiol.* 2016;81:629–635.
35. Yadav DP, Madhusudhan KS, Kedia S, Sharma R, Pratap Mouli V, Bopanna S, Dhingra R, Pradhan R, Goyal S, Sreenivas V, Vikram NK, Makharia G, Ahuja V. Development and validation of visceral fat quantification as a surrogate marker for differentiation of Crohn's disease and Intestinal tuberculosis. *J Gastroenterol Hepatol.* 2016 Aug 17. 32(2):420–426.

Abstracts

1. Sryma PB, Vikram NK, Wig N, Prakash S, Jagannathan NR, Kumar V, Lakshmy R, Sharma S, Pandey RM. NAFLD in Asian Indians: Querying the role of composition and volumes of subcutaneous adipose tissue compartments using 1H-MRS. *Obesity Facts* 2016;9(suppl 1):192.
2. Vikram NK, Rout G, Das CJ, Ranjan P, Lakshmy R, Sharma S, Pandey RM. Hepatic left lobe volume as an indicator of adiposity and related metabolic abnormalities in patients with NAFLD. *Obesity Facts* 2016;9(suppl 1):64.
3. Kumar MS, Singh A, Jaryal AK, Deepak KK, Lakshmy R, Prakash S, Sharma S, Pandey RM, Ranjan P, Vikram NK. Study of autonomic functions in patients of nonalcoholic fatty liver disease. *Obesity Facts* 2016;9(suppl 1):198.

PATIENT CARE

Medicine OPD is a direct non-referral clinic running 6 days a week. The department runs speciality clinics including Sleep Disorders Clinic (Monday 2 PM), Infectious Diseases Clinic (Monday 2 PM) and Chest Clinic (Friday 2 PM). The department also runs ART centre, DOTS centre and DOTS-Plus site under national programmes. The department has a Pulmonary Function Tests lab (MOPD room no 34) wherein, there is no waiting period and the investigations are done and reports given on the same day. Bronchoscopy lab is situated in DII ward and equipped with state-of the-art Endobronchial Ultrasound system. Sleep laboratory located in CII ward is equipped with polysomnography machines, ambulatory blood

pressure monitoring system, and equipment for non-invasive assessment of endothelial dysfunction. The Department of Medicine provides diagnostic facilities for tuberculosis to patients coming to the AIIMS hospital as well as those referred from 6 zones of Delhi (Chest Clinics) under the RNTCP (Revised National Tuberculosis Control Programme). The department has state-of-art biosafety level 3 (BSL-3) lab. Following is the data of patients in various clinics and laboratory investigations run by the department.

Medical OPD	1,65,506		
Infectious Disease Clinic	668		
Sleep Clinic	905		
Chest Clinic	2,514		
Antiretroviral (ART) Centre			
Pre-ART	879	ART	710
AIIMS DOTS Centre			
Total patients started on DOTS			
Cat I	59	Cat II	22
DOTS-Plus site			
Cat IV	7	Cat V	3
Laboratories:			
Sleep lab:			
Sleep studies	461	EZ Scan	47
Ambulatory monitoring of blood pressure	147		
Endothelial dysfunction studies	29		
PFT Lab:			
Pulmonary Function Test	5,452	6 Minute walk test	394
Number of Bronchoscopy done:			
Fibre-optic bronchoscopy	226	EBUS	44
ADA/ACE Lab:			
Adenosine deaminase tests	124	ACE tests	228
DOTS AND PMDT services:			
No. of samples for sputum smear	10,406	No. of samples for Solid culture	725
No. of samples for liquid culture	10,406	No. of samples for liquid DST	428
No. of samples for solid Drug Susceptibility test	62		
No. of samples for Line Probe Assay (LPA)	2,316		
No. of samples for Gene/Xpert	3,916		

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor Rita Sood continued to be member of Standing Selection Committee of AIIMS, Rishikesh; was invited as Member of Board of Management for Medical Education by Chairman, Charutar Arogya Mandal in June 2016. Attended 3rd Meeting of Board of Management for Medical Education on 22 November 2016 at Karamsad, Gujarat and to participate in APME Net (Asia-Pacific Medical Education Network), 3 Niigata Meeting on 31 July 2016 at Osaka Medical College, Japan; supported by Kyoto university. She chaired the SEARAME (South east Asian regional Association for medical education) executive committee Meeting on 16 November 2016 in Yangon, Myanmar; delivered inaugural and valedictory address as President during SEARAME Conference 16–18 November 2016, at Myanmar; attended IAMRA Conference at Melbourne and Executive Council Meeting of WFME (World Federation for Medical Education) from 19–23 September 2016 at Melbourne, Australia; was on editorial board of international journal ‘Advances in medical education and practice’; nominated Member of technical advisory committee on Vector borne disease cum technical working group of MOH and FW and invited by Australian medical council to be a member of Assessment accreditation board for assessment of a medical program in Sydney with off shore component in India.

Professor Naveet Wig is a member of the governing body of All India Institute of Ayurveda, Scientific Body of Indian Pharmacopoeia Commission and ICMR Technical Resource Group on HIV/AIDS and member of HIV/AIDS Project review committee (PRC) of ICMR.

Professor Ashutosh Biswas was awarded Fellowship (FCPS) in Medicine by Bangladesh College of Physicians and Surgeons (BCPS) and presented by the Hon’ble Sheikh Hasina, Prime Minister, Government of the People’s Republic of Bangladesh. He is Expert member of First International Asian-Latin American Workshop on Diagnosis, Clinical Management and Dengue Surveillance, organized by The Pan American Health Organization/World Health Organization, in joint collaboration with Technical Cooperation Programme of Singapore (SCP), Ministry of Foreign Affairs of the Republic of Singapore and Brazilian Ministry of Health Brasilia, Brazil. Expert member Training Workshop regarding Clinical Infectious Diseases and Antibiotic Stewardship Programme organized by Institute of Infectious Diseases and Epidemiology,

Tan Tock Seng Hospital, Singapore; also working as an expert with National Vector Borne Disease Control Programme (NVBDCP), Ministry of Health and Family Welfare, Govt. of India on evaluating different National Policies for prevention, control and management of Vector Borne Diseases; The Member Expert of Human Right Commission, Govt. of India responsible for giving expert opinion in case of custodial death for legal proceeding; Expert member of the 11th Scientific Advisory Committee (SAC) of Regional Medical Research Centre, ICMR, New Delhi; External Examiner of various National Universities/Medical Colleges, Expert member of selection board for combined Medical Service Examiner Union Public Service Commission (UPSC), New Delhi; Member Selection Committee for Selection of various posts of Scientists-B (Medical) and (Veterinary Sciences), ICMR; Expert member of selection board of the Faculty in IGIMS, Patna, Bihar; Secretary of Dengue Update and Workshop, organized in AIIMS, New Delhi; Member of Disease Prevention and Outbreak Cell, AIIMS; Special invitee by Delhi Doordarshan Kendra (DDK) for telecasting “Total Health” Show Program on Malaria (May 2016).

9.20. Microbiology

Professor and Head

Gita Satpathy

Professors

Rama Chaudhry

Arti Kapil

Lalit Dar

Bimal K Das

Bijay Ranjan Mirdha

Benu Dhawan

Immaculata Xess

Seema Sood

Additional Professor

Urvashi B Singh

Assistant Professors

Sarita Mohapatra

Aashish Choudhary

Gagandeep Singh

Hitender Gautam

Nishant Verma

Nishat Hussain Ahmed

Kiran Bala

Megha Brijwal

Tanu Sagar (Contract)

HIGHLIGHTS

The Department of Microbiology has always been involved in patient care, teaching, research and CME programmes. It has been actively involved in teaching undergraduate and postgraduate students enrolled in MBBS, MD, PhD and BSc (Nursing) courses. The DM (Infectious Disease) courses (3- and 6-years programmes) continued in collaboration with the Department of Medicine.

The department, which is an essential component of health care services, contributed majorly towards patient care. During this year it carried out a total of 2,90,831 diagnostic tests and played a prime role in hospital infection control.

The department made a significant contribution in terms of research with more than 90 publications in national and international journals. Several funded research projects started or continued during the period, many of which were in collaboration with other departments or institutes. Many award winning oral and poster presentations were made at national and international conferences.

The Virology Section provided diagnostic services and programmatic support during the **Chikungunya fever outbreak** from August to November 2016. For selected acute viremic phase samples, qualitative real time RT-PCR and virus isolation on C6/36 clone of *Aedes albopictus* cells was performed. RT-PCR followed by sequencing revealed that the chikungunya virus strain which caused the 2016 outbreak belonged to the same genotype that was circulating since 2006, i.e., East Central South African (ECSA) genotype. The virology laboratory was designated a Regional Reference Laboratory for HIV Viral Load Testing by NACO in 2016.

EDUCATION

UNDERGRADUATE TEACHING:

MBBS for Medical Microbiology

BSc (Nursing) - Medical Microbiology

POSTGRADUATE TEACHING:

PhD (Microbiology)

- Lectures - Once/week

- Journal Club - Once/week

MD (Microbiology)
DM (Infectious Diseases)

- Lecture - Once/week
- Tutorial - Twice/month
- Journal Club - Once/week
- Practical Exercise presentation - Twice/month

CME/Workshops/Symposia/National and International Conferences

1. American Society of Microbiology (ASM), Xth International Conference cum Workshop of Indian Association of Mycoplasmologists, AIIMS, New Delhi, 20–21 March 2017.
2. ASM Student chapter was organized at India International Centre, New Delhi, India on 11 February 2017.
3. ASM CME on 'Antibiotic Resistance: Renewed Fears' at India International Centre, New Delhi on 10 September 2016.
4. ASM CME on 'Emerging Infections in India' at AIIMS, New Delhi on 21 April 2016.
5. HIV EQAS Panel Distribution Workshop, 24 January 2017, Participants: AIIMS, New Delhi, PGIMER, Chandigarh and Govt. Medical College, Amritsar.
6. Symposium and CME entitled '*Detect-Treat-Prevent-TB*' on World TB Day (along with Department of Medicine) on 22–23 March 2017 at AIIMS, New Delhi
7. Workshop for Technicians from Delhi & NCR on "Processing of sputum samples, Smear, Solid & Liquid Culture, PCR & Reporting for TB" on 22 September 2016 at AIIMS, New Delhi Under IAMM, Delhi Chapter
8. Sensitization and Initiation of Airborne Infection Control at AIIMS, New Delhi

Lectures delivered

Gita Satpathy: 1

Lalit Dar: 2

Benu Dhawan: 2

Urvashi B Singh: 4

Hitender Gautam: 2

Rama Chaudhry: 2

Bimal Das: 3

Immaculata Xess: 2

Aashish Choudhary: 4

Arti Kapil: 5

BR Mirdha: 2

Seema Sood: 2

Gagandeep Singh: 3

Gita Satpathy: 1

1. Be smart with antibiotics: Antimicrobial resistance, National CME cum MICROCON NW 2016, 2 April 2016, Sr. Gurun Ram Dass Institute of Medical Sciences and Research, Amritsar

Rama Chaudhry: 2

1. Exploring Indian gut microbiota in inflammatory bowel disease and colon carcinoma, 2nd Probiotics Congress: Asia and 3rd Microbiome R&D and Business Collaboration Congress: Asia, 1–2 March 2017, Hong Kong
2. Probiotics in health: Emerging opportunities, 8th India Probiotic Symposium, 3–4 December 2016, Chennai

Arti Kapil: 5

1. Infections in Haemato-oncology ward at AIIMS, National Round Table Conference on Infection Control in Hemato-Oncology; 30 April–1 May 2016, JIPMER, Puducherry
2. Laboratory diagnosis of infections in the immuno-compromised patients: A syndromic approach, Challenges in management of the immuno-compromised host, IAMM Delhi Chapter, 23 April 2016, New Delhi
3. Convergence of minds: What to expect? Joint CME of IAMM & Indian Society of Critical Care Medicine, Delhi Chapter, 7 May 2016, New Delhi
4. Antimicrobial Resistance in India: Short-term training of anti-microbial resistance at National Institute of Infectious Diseases (NIID), 14–18 November 2016, Tokyo, Japan
5. Emergence of Carbapenem resistance in India, 40th Annual Conference of Indian Association of Medical Microbiologists, 23–27 November 2016, PGIMER, Chandigarh

Lalit Dar: 2

1. Dengue and chikungunya in Delhi: 1996-2016, 2nd AIIMS-FAM (Foundation De L' Academie De Medicine) Conference, 17–18 November 2016, French Academy of Medicine, Paris, France
2. Ten best international papers published on Virology during 2016, 40th Annual Conference of Indian Association of Medical Microbiologists, 27 November 2016, PGIMER, Chandigarh

Bimal Das: 3

1. Meningococcal meningitis in North India: Study of an endemic disease, 27th Annual Conference of North East Regional Chapter of Indian Association of Pathologists & Microbiologists (NERCON 2016), 10 September 2016, Agartala Government Medical College, Agartala
2. Antibiotic resistance, 49th Annual Conference of Indian Pharmacological Society, 2016 (IPSCON-2016), 21 October 2016, PGIMER, Chandigarh
3. Immunomodulation, 40th Annual Conference of Indian Association of Medical Microbiologists (MICROCON), 26 November 2016, PGIMER, Chandigarh

BR Mirdha: 2

1. Newer perspectives of Giardiasis, 2nd UP & UK Chapter of IATP, TROPACON (UP & UK Chapter) 2016, April 2016, Aligarh Muslim University, Aligarh
2. Filariasis: Update in diagnosis and management, 1st Chapter of IATP, TROPACON (Rajasthan Chapter), 2–3 September 2016, AIIMS, Jodhpur

Benu Dhawan: 2

1. Genital chlamydia trachomatis infections in India: Perspectives and advances, 40th National Conference of Indian Association for the Study of STD and AIDS, ASTICON 2016, 25–27 November 2016, AIIMS, Bhopal
2. Changing clinical spectrum of *Ureaplasma*, Xth Annual Conference cum Workshop of Indian Association of Mycoplasmae, 20–21 March 2017, AIIMS, New Delhi

Immaculata Xess: 2

1. Azole resistance in *Candida*, 40th National Conference of the Indian Association of Medical Microbiologists, 26–28 November 2016, PGIMER, Chandigarh
2. Antifungal susceptibility testing, IAMM, Assam Chapter, 1–2 September 2016, Assam Medical College, Dibrugarh

Seema Sood: 2

1. Antimicrobial susceptibilities for *Neisseria gonorrhoeae* in India, 19th IUSTI Asia Pacific Conference, 1–3 December 2016, Okayama, Japan
2. NAATs for gonorrhoea: When and where to use?, 40th National Conference of IASSTD & AIDS (ASTICON-2016), 25–27 November 2016, AIIMS, Bhopal

Urvashi B Singh: 4

1. Evolution of drug resistance in TB-ASM, CME on “Antibiotic Resistance: Renewed Fears”, 10 September 2016, New Delhi
2. Role of medical laboratory technicians (Processing of sputum, smear, culture, PCR & Reporting for TB), Workshop for Technicians from Delhi & NCR, IAMM, Delhi Chapter, 22 September 2016, AIIMS, New Delhi
3. Diagnostic innovations: Contribution to disease knowledge and management, World Tuberculosis Day Symposium, “Detect-Treat-Prevent-TB”, March 22, 2017, AIIMS, New Delhi
4. Recommendations for AIC for TB, World Tuberculosis Day Symposium “Detect-Treat-Prevent-TB”, 23 March 2017, AIIMS, New Delhi

Aashish Choudhary: 4

1. Viral hemorrhagic fever (VHF): Clinical perspectives, Emerging Infections in India, AIIMS and American Society of Microbiology (ASM), CME cum Workshop, 21 April 2016, AIIMS, New Delhi
2. Troubleshooting for conventional PCR, Molecular Microbiology Workshop, 13 September 2016, Tata Medical Centre, Kolkata
3. Clinical cases in infectious diseases, Molecular Microbiology Workshop, 14 September 2016, Tata Medical Centre, Kolkata
4. Standardization of real time PCR for human cytomegalovirus, Molecular Microbiology Workshop, 15 September 2016, Tata Medical Centre, Kolkata

Gagandeep Singh: 3

1. Emerging fungal infection and anti-fungal stewardship, ASM, AIIMS CME, 21 April 2016, AIIMS, New Delhi

2. Tinea infections: A microbiologist perspective, CME on Fungal Infections in Hospital Setting, 9 June 2016, PGIMS&R, ESI Hospital, New Delhi
3. Rare cases presentation in neglected diseases in India, 40th National Conference of the Indian Association of Medical Microbiologists, 26–28 November 2016, PGIMER, Chandigarh

Hitender Gautam: 2

1. Laboratory safety: Workshop for technicians on 'Processing of sputum samples, smear, solid & liquid culture, PCR & reporting for TB, IAMM, Delhi Chapter, 22 September 2016, AIIMS, New Delhi
2. Transmission based precautions for MDROs, National Workshop on Hospital Infection Control, 8 February 2017, JIPMER, Puducherry

Oral Papers/Posters Presented: 43

1. Mohapatra S, Agarwal R, Rath GP, Gupta D, Kapil A. Active surveillance of health care associated infection in neurosurgical patients, Euro Neuro, April 2016, Barcelona, Spain
2. Negi N, Singh R, Sharma A, Das BK, Vajpayee M. Cross reactive potential of HIV-1 subtype C infected Indian individuals against multiple HIV-1 Potential T-cell epitope Gag variants, Asia Pacific AIDS and Co-Infections Conference, 17–19 May 2016, Hong Kong, Hong Kong
3. Singh R, Mukherjee A, Negi N, Kabra SK, Lodha R, Das BK. Impact of HAART on activation and exhaustion of B cells subpopulations in Paediatric HIV infection, 21st International AIDS Conference (AIDS 2016), 18–22 July 2016, ICC, Durban, South Africa
4. Krishnan A, Kapil A, Broor S, Amarchand R, Kumar S, et al. Etiology of acute lower respiratory infections in children under, five years old in rural North India, Options IX, Organized by ISIRV, 24–28 August 2016, Chicago, USA
5. Sebastian S, Dhawan B, Malhotra R, Kapil A, Chaudhry R, Sreenivas V. A clinico-microbiological study of prosthetic joint infections in an Indian tertiary care hospital, Indian Association of Medical Microbiologists (IAMM), Delhi chapter, 20 August 2016, Gurgaon
6. Brijwal M, Dhawan B, Sebastian S, Rawre J, Kapil A. Clonal dissemination of linezolid resistant *staphylococcus haemolyticus* harbouring G2576T mutation with *cfr* gene in an Indian hospital, Indian Association of Medical Microbiologists (IAMM), Delhi Chapter, 20 August 2016, Gurgaon
7. Dhawan B, Makharia GK, Juyal D, Sebastian S, Bhatia R, Khanna N. *Chlamydia trachomatis* proctitis masquerading as carcinoma rectum, 6th Annual Conference of Infectious Diseases Society. CIDSCON, 2016, 26–28 August 2016, Banaras Hindu University, Varanasi
8. Samanta P, Bamola VD, Chaudhry R. Antibiotic susceptibility pattern of indigenous lactobacillus isolated from Indian population, ASM, AIIMS, UCMS CME on 'Antibiotic resistance: Renewed fears', 10 September 2016, New Delhi
9. Shende T, Mohapatra S, Sood S, Das BK, Kapil A. Comparative evaluation of in-vitro activity of minocycline by disk diffusion, agar dilution, and E-test against carbapenem-resistant *acinetobacter* species, ASM CME, September 2016, AIIMS, New Delhi
10. Mohapatra S, Kumar A, Kapil A, Das BK, Sood S, Bakhshi S, Mohapatra M. Ertapenem non-susceptibility is a good marker for carbapenem resistance, ASM CME, September 2016, AIIMS, New Delhi
11. Singh UB, Bhatnagar A, Gautam H, Pandey P, Maheshwari B, Prakash R, Sharma N, Verma SK. Improving MDR-TB treatment options: Identifying phenotypic and genotypic resistance to moxifloxacin and pyrazinamide, ASM CME on 'Antibiotic resistance: Renewed fears', 10 September 2016, New Delhi
12. Sebastian S, Dhawan B, Malhotra R, Kapil A, Chaudhry R, Sreenivas V. A clinico-microbiological study of prosthetic joint infections (PJI) in an Indian tertiary care hospital, ASM CME on antibiotic resistance: Renewed fears, 10 September 2016, India International Centre, New Delhi, New Delhi
13. Bahadur T, Chaudhry R, Bamola VD, Chutani AM. Next generation sequencing (NGS) shows variations in the human gut microbiota composition between obese and lean individuals in the Indian population, First international conference on Clinical Metagenomics, 13–14 October 2016, Campus Biotech, Geneva, Switzerland
14. Bahadur T, Bamola VD, Chutani AM, Mirdha BR, Das BK, Malhotra P, Chaudhry R. Linking gut microbiome with obesity, 8th Annual Conference of Indian Association of Medical Microbiologists, MICRO-D-CON 2016, 30 October 2016, New Delhi
15. Srigyan D, Mishra D, Ahmed NH, Sharma N, Chawla R, Satpathy G. Coagulase-negative staphylococci (CONS) in eye infections: Speciation and antimicrobial resistance status, 40th Annual Conference of Indian Association of Medical Microbiologists (MICROCON), 26 November 2016, PGIMER, Chandigarh

16. Mishra D, Satpathy G, Chawla R, Ahmed NH, Venketesh P, Kumar A. Use of broad, range PCR assay for diagnosis of endophthalmitis and its comparison against conventional and automated (BACTEC) culture (Oral presentation), 40th Annual Conference of Indian Association of Medical Microbiologists (MICROCON), 26 November 2016, PGIMER, Chandigarh
17. Samanta P, Bamola VD, Chaudhry R. Isolation and characterization of indigenous probiotic strains from Indian population, 40th Microcon (Annual Conference of Indian Association of Medical Microbiologists, 2016, 23–27 November 2016, PGIMER, Chandigarh
18. Gautam H, Rajat P, Lodha R, Kabra S, Jain R, Singh UB. Point of care: Urine lipoarabinomannan antigen detection for diagnosis of tuberculosis in pediatric population, IMED, 2016, 6th International Meeting on Emerging Diseases & Surveillance, Under International Society of Infectious Diseases, ISID, 4–7 November 2016, Vienna, Austria
19. Singh UB, Gautam H, Agrawal S. Cervical tuberculous lymphadenitis: Clinical profile and diagnostic modalities, MICROCON, 2016, 25–27 November 2016, PGIMER, Chandigarh
20. Singh UB, Gautam H, Pandey P, Prakash R, Maheshwari B. *Mycobacterium tuberculosis* lineage population responsible for extra-pulmonary tuberculosis in India, MICROCON, 2016, 25–27 November 2016, PGIMER, Chandigarh
21. Gautam H, Singh UB, Lodha R, Kabra SK, Prakash R, Jain R. Urinary lipoarabinomannan antigen detection in aid of diagnosis of pediatric tuberculosis, MICROCON, 2016, 25–27 November 2016, PGIMER, Chandigarh
22. Kapil A, Lodha R, Das BK, Sood S, Kabra SK. Emergence of antimicrobial resistance enteric fever in north India: Epidemiology and therapeutic options. 6th Congress of European Academy of Paediatric Societies (EPAS), 21–25 October 2016, International Conference Centre, Geneva, Switzerland
23. Sharma P, Kumar M, Dahiya S, Kaur P, Sood S, Das BK, Kapil A. Pefloxacin as a surrogate marker to determine susceptibility to quinolones drugs in *salmonella enterica* serovar typhi: Structural and molecular analysis, International Meeting on Emerging Diseases and Surveillance, 4–7 November 2016, Vienna, Austria
24. Sharma P, Dahiya S, Kumari B, Sood S, Das BK, Kapil A. Phylogenetic analysis of multilocus sequence types of typhoidal salmonellae over last two decades using eBURST algorithm. 40th Annual Conference of Indian Association of Medical Microbiologists (MICROCON), 23–27 November 2016, PGIMER, Chandigarh
25. Kumari B, Sharma P, Manral N, Dahiya S, Sood S, Das BK, Kapil A. Antimicrobial susceptibility to azithromycin in typhoidal salmonellae from a north Indian hospital, 40th Annual Conference of Indian Association of Medical Microbiologists (MICROCON), 23–27 November 2016, PGIMER, Chandigarh
26. Dahiya S, Malik R, Sharma P, Tiwari P, Pandey S, Lodha R, Sood S, Das BK, Kabra SK, Kapil A. Antibiotic prescription audit in patients presenting with fever in a paediatric OPD: A pilot study, 40th Annual Conference of Indian Association of Medical Microbiologists (MICROCON), 23–27 November 2016, PGIMER, Chandigarh
27. Kumar S, Das BK, Kapil A. Circulation of non-typeable *haemophilus influenzae* in children from a north Indian rural community, 40th Annual Conference of Indian Association of Medical Microbiologists (MICROCON), 23–27 November 2016, PGIMER, Chandigarh
28. Lall M, Choudhary A, Kumar P, Mathur P, Das BK, Namdeo D, Brijwal M, Bhatla N, Dar L. Comparison of INNO: Lipa and linear array for detection of HPV genotypes in cervical samples of HIV-positive women with hybrid capture-2 and its correlation with cytology (Best poster award), 8th Annual Conference of Indian Association of Medical Microbiologists, MICRO-D-CON 2016, 17–19 November 2016, New Delhi
29. Kundu N, Brijwal M, Choudhary A, Singh P, Gupta N, Dar L. Disseminated neonatal herpes simplex virus type 1 infection with multi-organ dysfunction masquerading as late, onset neonatal sepsis, MICRO-D-CON 2016, 17–19 November 2016, New Delhi
30. Khanna S, Kundu N, Brijwal M, Choudhary A, Bir R, Dar L. Resurgence of chikungunya fever in the Delhi region in 2016, 40th Annual Conference of Indian Association of Medical Microbiologists (MICROCON), 23–27 November 2016, PGIMER, Chandigarh
31. Bir R, Kundu N, Choudhary A, Dar L. Detection of anti-measles antibody in CSF by complement fixation test (CFT) in patients with suspected subacute sclerosing panencephalitis (SSPE) (Oral presentation), 40th MICROCON 2016, 23–27 November 2016, PGIMER, Chandigarh
32. Singh P, Kumari S, Verma N, Mirdha BR. Intestinal parasitosis and gender association in immunocompromised patients. Xth National Conference of the Indian Academy of Tropical Parasitology (IATP), TROPACON, 2016, 4–6 November 2016, JIPMER, Puducherry
33. Kumari S, Singh P, Verma N, Mirdha BR. Decreasing trend of malaria in a tertiary care centre. Xth National Conference of the Indian Academy of Tropical Parasitology (IATP), TROPACON, 2016, 4–6 November 2016, JIPMER, Puducherry

34. Arif N, Juyal D, Sebastian S, Khanna N, Dhawan B. *Chlamydia trachomatis* infection in an STI clinic: Need for extragenital screening, IVth National Conference of Hospital Infection Society India. HISICON, 2017, 9–11 February 2017, Guwahati Medical College, Guwahati
35. Dhawan B, Arif N, Juyal D, Sebastian S, Khanna N. *Chlamydia trachomatis* infection in an STI clinic in north India: Evidence for need of extragenital screening, 61st National Conference of Indian Public Health Association (IPHA) & First State conference of IPHA Rajasthan Branch, 24–26 February 2017, Rajasthan, Jaipur
36. Singh G, Dabas Y, Meena S, Sharma VK, Xess I. Emergence of drug resistant dermatophytic infections in the community: Study from a tertiary care centre in north India, IPHACON, February 2017, AIIMS, Jodhpur, 33, Shende T, Singh G, Xess I. Unusual case of recurrent scrotal ulcer, IAMM, Delhi Chapter, March 2017, AIIMS, New Delhi
37. Sood S, Mahajan N, Singh R, Agarwal Shende T, Kapil A, Kar HK, Sharma VK. Typing of gonococcal isolates by phenotypic and genotypic methods, 40th National Conference of IASSTD & AIDS (ASTICON-2016), 25–27 November 2016, AIIMS, Bhopal
38. Mahajan N, Sood S, Das BK, Kapil A, Sreenivas V, Kar HK & Sharma VK. Characterization of *penA*, *penB*, *mtr* and *ponA* genes in ceftriaxone susceptible (S) & decreased susceptibility (DS) isolates of *N. gonorrhoeae* in New Delhi, India, 19th IUSTI Asia Pacific Conference, 1–3 December 2016, Okayama, Japan
39. Mohapatra S, Kumar A, Kapil A, Bakhshi S, Mahapatra M. Incidence of rectal carriage of carbapenem, resistant *enterobacteriaceae* and their risk factors among patients with hematological malignancies, XIV National Conference Hospital Infection Society India (HISI), February 2017, Guwahati
40. Valavane A, Chaudhry R, Sreenath K, Choudhry M, Sagar T, Shende T, Varma M, Mohanty S, Kabra SK, Dey AB, Thakur B. Detection of *mycoplasma pneumoniae* and *legionella pneumophila* in patients having community acquired pneumonia: A study from New Delhi, India, New Delhi, ASM, X National conference cum workshop of Indian association of Mycoplasmologists, 20–21 March 2017, AIIMS, Delhi, New Delhi
41. Arvind V, Chaudhry R, Choudhary M, Kapil A, Lodha R, Kabra SK. Bacterial etiology of acute respiratory infections in infancy: A prospective study, ASM, X National Conference cum Workshop of Indian Association of Mycoplasmologists, 20–21 March 2017, AIIMS, New Delhi
42. Rawre J, Dhawan B, Sreenivas V, Khanna N, Chaudhry R. Prevalence and distribution of ureaplasma spp. and chlamydia trachomatis serovars in patients with urogenital infections in a tertiary care hospital in New Delhi, ASM, X national conference cum workshop of Indian association of Mycoplasmologists, 20–21 March 2017, AIIMS, New Delhi
43. Sebastian S, Dhawan B, Malhotra R, Kapil A, Chaudhry R, Sreenivas V. A clinico-microbiological study of prosthetic joint infections (PJI) in an Indian tertiary care hospital, ASM, X National Conference cum Workshop of Indian Association of Mycoplasmologists, 20–21 March 2017, AIIMS, New Delhi

RESEARCH

Funded projects

Ongoing

1. Evaluation of role of molecular detection vs conventional microbiological methods in rapid diagnosis of fungal keratitis and determination of antifungal sensitivity pattern of the isolated fungi, Gita Satpathy, ICMR, New Delhi, 2 years, 2016–2018, Rs. 11.6 lakhs
2. A study to assess the effect of a probiotic strains (*Bacillus clausii*) on gut microbiota and mucosal immunity in *inflammatory bowel disease* (Ulcerative colitis/Crohn's disease), Rama Chaudhry, Unique Biotech, 2 years, 2017–2019, 40,00,000
3. Characterization of bacteriocins produced by *lactobacillus* and assessment of their antimicrobial profile, Rama Chaudhry, AIIMS, 2 years, 2017–19, Rs. 5 lakhs
4. Nodal Center for National surveillance of Antimicrobial resistance, Arti Kapil, ICMR, 5 years, 2014–2019, Rs. 60 lakhs (per annum)
5. Defining ECOFF value for azythromycin susceptibility in *salmonella* enteric serovar typhi and paratyphi A, Arti Kapil, ICMR, 2 years, 2015–2017, Rs. 22 lakhs
6. HIV early infant diagnosis and viral load referral laboratory, Lalit Dar, National AIDS Control Organization (NACO), 2012 onwards, Rs. 10 lakhs per annum+reagent support
7. National vector borne disease control programme apex laboratory for dengue and chikungunya, Lalit Dar, National Vector Borne Disease Control Programme (NVBDCP), 2012 onwards, Rs. 3 lakhs per annum+reagent support
8. Enhancing bio-risk mitigation..... in viral respiratory infections, Lalit Dar, Centre for Disease Control (CDC), Atlanta (through NIV, Pune), 5 years, 2015–2020, Rs. 44.38 lakhs per annum

9. Quantitative real time PCR and genotyping for human cytomegalovirus (HCMV) in ulcerative colitis, Lalit Dar, ICMR, 3 years, 2014–2017, Rs. 7.08 lakhs
10. To establish a real time PCR based rapid assay for the detection of causative pathogens of acute bacterial meningitis, Bimal K Das, AIIMS, 3 years, 2015–2017, Rs. 4 lakhs
11. External quality assessment programme, HIV/AIDS, Bimal K Das, NACO, 2005 onwards, Rs. 12 lakhs
12. Flow Cytometer (CD4) ART Programme, HIV/AIDS, Bimal K Das, NACO, 2005 onwards, Rs. 40,000
13. Population genetics study of *pneumocystis jirovecii* in respiratory clinical specimens and its correlation with the clinical status of patients with *pneumocystis pneumonia* (PCP), BR Mirdha, SERB, 2 years, 2015–2017, Rs. 45 lakhs
14. Identification of *plasmodium falciparum* cytoadherence molecules in cerebral malaria. BR Mirdha, DBT, 2 years, 2017–2019, Rs. 85 lakhs
15. Early detection of *hemophilus ducreyi*, *treponema pallidum*, Herpes simplex virus type 1 & 2 from patients with genital ulcer disease by Multiplex PCR in a tertiary care hospital, Benu Dhawan, ICMR, 3 years, 2017–2020, Rs. 37.63 lakhs
16. Development of multiplex PCR assay for rapid detection of *aspergillus* sp. and mucormycetes from tissue and blood in patients with suspected invasive fungal infections, and application of melting curve analysis for species identification of mucormycosis, Immaculata Xess, AIIMS, 1 year, 2016–2017, Rs. 3.85 lakhs
17. Molecular analysis of *N. gonorrhoeae* isolates obtained from STD patients from across the country with in vitro decreased susceptibility to cephalosporins & macrolide resistance, Seema Sood, ICMR, 2 years, 2015–17, Rs. 2.95 lakhs
18. Nano-enabled biosensor for detection of *N. gonorrhoeae*, Seema Sood, DBT, 3 years, 2016–19, Rs. 50 lakhs
19. Crohn's disease in India: A multicenter study from a country where intestinal tuberculosis as well as Crohn's disease are endemic, Urvashi B Singh, DHR, 3 years, 2016–19, Rs. 5 crores
20. Validation of Indigenous Diagnostic kits for detection of TB and drug resistance in TB, Urvashi B Singh, ICMR, 3 years, 2014–17, Rs. 70 lakhs
21. Intestinal colonization and blood-stream infection due to carbapenem, resistant *enterobacteriaceae* in febrile neutropenic patients, Sarita Mohapatra, AIIMS, 2 years, 2016–17, Rs. 4 lakhs
22. Prevalence and molecular characterization of occult hepatitis C infection (OCI) in patients with cryptogenic liver disease, Aashish Choudhary, AIIMS, 2 years, 2015 onwards, Rs 3.45 lakhs per annum
23. Study of the association of *mycobacterium tuberculosis* with pancytopenia, Hitender Gautam, AIIMS, 1 year, 2016–2017, Rs. 4.5 lakhs
24. Prevalence of microsporidia and their molecular characterization, Nishant Verma, AIIMS, 1, 2015–16, Rs. 5 lakhs

Completed

1. Population genetic study of intestinal coccidia with special reference to *cryptosporidium* species and *enterocytozoon bienersi* and its correlation with transmission detection and disease risk in patients with diarrhoea, BR Mirdha, ICMR, 3 years, 2015–17, Rs. 21 lakhs
2. Antifungal susceptibility testing and genotyping of cryptococcal isolates from Delhi and other parts of India. Immaculata Xess, DBT, 3.5 years, 2012–16, Rs. 139.88 lakhs
3. Development of immunoblot assay for diagnosis of sub-clinical cryptococcosis in renal transplant patients, Immaculata Xess, DBT, 3.5 years, 2012–2016, Rs. 47 lakhs
4. A rapid test for simultaneous identification & detection of antimicrobial resistance at point of care for bacterial infections: *N. gonorrhoeae* as a prototype, Seema Sood, Grand Challenges, Canada, 2 years, 2013–15, Rs. 8 lakhs
5. Identification & evaluation of *mycobacterium tuberculosis* antigen as biomarkers in clinical samples from pulmonary and extra pulmonary tuberculosis patients, Urvashi B Singh, ICMR, 3 years, 2014–16, Rs. 50 lakhs
6. Evaluation of molecular methods (PCR, IHC) against conventional methods (histopathology, culture, AFB staining in endometrial samples) and laparoscopy, in detection of genital tuberculosis in infertile women, Urvashi B Singh, ICMR, 4 years, 2012–16, Rs. 50 lakhs
7. Utility of therapeutic drug monitoring of voriconazole levels in paediatric patients having haematologic malignancies with clinically suspected invasive fungal infections, Gagandeep Singh, AIIMS, 2 years, 2015–17, Rs. 3.35 lakhs
8. Evaluation of point-of-care urine lipoarabinomannan antigen detection for diagnosis of tuberculosis in children, Hitender Gautam, AIIMS, 1 years, 2015–16, Rs. 4.47 lakhs

Departmental projects

Ongoing

1. A study on alternate antimicrobial agents against Typhoidal *Salmonellae*
2. Incidence of Respiratory syncytial virus (RSV) infection in adults following haematopoietic stem cell transplant
3. Quantitative real time PCR and genotyping for cytomegalovirus in ulcerative colitis
4. Evaluation of the expression of NF- κ B and its association with frequency and functionality of T cells in HIV infected individuals
5. Phenotypic and Genotypic Characterization of Non-typeable *Haemophilus influenzae* (NTHi) from North India
6. HAART and Circulating peripheral blood T cell subpopulations in HIV infected children
7. Characterization of *streptococcus pneumoniae* isolates from nasopharynx of normal healthy individual
8. Standardization of real time PCR for the detection of bacteria causing acute bacterial meningitis and correlation with humoral and cell mediated immunity
9. Magnitude of Prosthetic Joint Infections and role of amplification based DNA analysis for identifying microbial profile of prosthetic joint infection in a tertiary care hospital
10. Linezolid use and resistance in an intensive care unit of tertiary care hospital
11. Occurrence of *Chlamydia trachomatis*, *Ureaplasma urealyticum*, *Mycoplasma hominis* and *Mycoplasma genitalium* in patients with sterile pyuria
12. Real time PCR for diagnosis of invasive fungal infections
13. Therapeutic drug monitoring of Voriconazole in paediatric hematologic malignancy patients
14. Prevalence of moulds and nocardial infections in patient admitted to pulmonary ward and ICU
15. Molecular characterization of *N. gonorrhoeae* strains with decreased susceptibility to extended spectrum cephalosporins
16. High-resolution melting (HRM) curve analysis for detection of decreased susceptibility to extended spectrum cephalosporins in *N.gonorrhoeae*
17. A Pilot study to determine *N. gonorrhoeae*, *C. trachomatis* co-infection rates in symptomatic patients attending STI clinics
18. Development of an aptamer based detection system for *N. gonorrhoeae*
19. Role of aptamer technology in detection of bacterial vaginosis (BV) associated bacteria
20. Detection of *N. gonorrhoeae* in genital and extra genital sites in men who have sex with men
21. Characterization of the role of polyclonal tuberculosis in the emergence of Drug Resistance and Relapse
22. Identification & Evaluation of Differentially Expressed Protein as Biomarker in Urine of Extra – Pulmonary Tuberculosis Patients
23. Diagnostic yield of bronchoscopy and bronchoscopic procedures in sputum-negative and sputum-scarce patients presenting with fever and miliary shadowing on chest imaging
24. Role of *mycobacterium tuberculosis* in the etiopathogenesis of sarcoidosis
25. Study to determine the association between pancytopenia and Tuberculosis
26. Microbiological follow up and genotypic investigation of close contacts of MDR-TB patients
27. Small molecule bio-signatures in diagnosis of childhood intra-thoracic tuberculosis
28. Prevalence of intestinal colonization and blood-stream infection due to carbapenem-resistant *Enterobacteriaceae* in haematological malignancy patients
29. Molecular detection of occult hepatitis C infection (OCI) using ultracentrifuged plasma in patients with cryptogenic liver disease
30. To identify prognostic markers for Category II pulmonary tuberculosis patients
31. Detection and Molecular Characterization of Microsporidia in Inflammatory Bowel Disease

Completed

1. A molecular study on DNA viruses in genital secretions of HIV seropositive women
2. Evaluation of Clinical and Pharmacological parameters as risk factors for relapse and treatment failures in Pulmonary Tuberculosis patients on Category II regimen

3. A study on treatment of Genital Tuberculosis-Randomized Controlled Trial of either discontinuation at 6 months or continuation till 9 months after initial response to 6 months RNTCP category I treatment
4. To evaluate the utility of new rapid diagnostic modalities [Gene-Xpert and Urinary Lipoarabinomannan (LAM)] in the diagnosis of genital tuberculosis in infertile couples- A cross-sectional study

Collaborative projects

Ongoing

1. A clinical study on the investigation of caries risk in children with cleft lip and/or palate (CL/P) and non-cleft controls (CDER)
2. Assessment of microflora of dental caries in Indian children using anaerobic culture and molecular techniques (CDER)
3. In-vitro efficacy and safety evaluation of novel mucoadhesive povidone iodine and the silver nanoparticle based local drug delivery system for treatment of periodontitis (CDER)
4. Epidemiological study of respiratory pathogens in acute respiratory infections among children and elderly in India (Centre for Disease Control, Atlanta and Centre for Community Medicine)
5. A multi-centric observation study to examine replicative fitness and pathogenic properties of the emerging new viral strains of HIV-1 in India, AIIMS, New Delhi (YRG Centre for AIDS Research, Chennai; NARI, Pune; Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore)
6. Invasive fungal infections in ICU (Medicine)
7. Epidemiology of chronic dermatophytosis (Dermatology)
8. Utility of isotretinoin with or without terbinafine in patients with chronic dermatophytosis (Dermatology)
9. Infections in post renal transplant patients (Nephrology)
10. Comparison of endotracheal tube and subglottic suction drainage with standard endotracheal tube in the incidence of airway colonization and VAP (Pulmonary Medicine)
11. Predictors of Ventilator associated pneumonia in patients of acute exacerbation with COPD and its impact on short term & 3 months outcome (Pulmonary Medicine)
12. Elucidating Role of microRNA in the pathogenesis of active generalized vitiligo and in pigment regulation (Dermatology)
13. To study the dynamic relationship of airway colonization and Endotracheal Tube Biofilm with Ventilator Associated Pneumonia (Pulmonary Medicine)
14. To study the antimicrobial prescribing practices in critically ill patients in Pulmonary Medicine ICU (Pulmonary Medicine)

Completed

1. Analysis of human gastrointestinal microbial diversity by molecular methods and application of metagenomic for isolation of novel bacteriocin (The Energy Research Institute)
2. Multicenter observational study on epidemiology, treatment and outcome of mucormycosis in India (Infectious disease, Vedanta Institute of Medical Sciences)
3. Prospective cross sectional case-control study to identify the risk factors associated with chronic dermatophytosis of skin (Dermatology)
4. Zygomycetes and mucormycosis: Epidemiology, taxonomy and molecular biology (Microbiology, PGIMER, Chandigarh)
5. Fomite contamination and its correlation with VAP/HAP occurrence in the ICU: A prospective study (Pulmonary Medicine)
6. Development and manufacture of a cost-effective glucose biosensor for clinical diagnostics (Biotechnology, Delhi Technological University)

PUBLICATIONS

Journals: 89

Abstracts: 3

Chapters in Books: 3

Books: 1

PATIENT CARE

The Department of Microbiology carried out a total of **2,90,831 tests** during the year.

Name of test/investigation	No. of tests performed	Name of test/investigation	No. of tests performed
BACTERIOLOGY LABORATORY		VIROLOGY LABORATORY	
Pus samples culture and identification	22,845	Influenza real time multiplex RT-PCR	462
Urine samples culture and identification	37,560	HSV 1&2 DNA PCR (CSF, GUD, Ocular etc.)	493
Blood samples culture and identification	27,733	HCMV DNA PCR (Urine, Colonic biopsy etc.)	723
Sputum/throat swab/tracheal swab culture and identification	20,283	HIV-1 total nucleic acid RT-PCR (Early Infant Diagnosis)	2,434
		HIV-1 RNA RT-PCR (viral load) (NACO)	1,272
CSF samples culture and identification	9,257	Cell culture (Influenza, Dengue, HSV 1&2)	107
Stool samples culture and identification	1,780	HCMV pp65 antigenemia (Immunofluorescence)	85
Antimicrobial susceptibility testing		Dengue NS1 antigen (ELISA)	5,766
Pus/Exudates/Tissue	3,876	Anti-Dengue IgM (ELISA)	6,997
Urine	2,936	Anti-Chikungunya IgM (ELISA)	6,761
Blood	1,840	Anti-Japanese Encephalitis IgM (ELISA)	4
Respiratory samples	2,857	Complement fixation test (CFT)- for SSPE diagnosis	129
CSF/Sterile samples	486	Tzanck smear (for HSV 1&2, VZV)	15
Stool	70	Total	25,382
Total	1,31,523		
Hospital Infection Control (HIC)		HIV	
Surveillance cultures	20,840	HIV serology testing	3,097
CSSD Monitoring	2,572	CD4 counts (Flowcytometry)	7,076
Water samples	1,016	HIV Western Blot	3
		HCV viral load- DBS	7,692
Total	24,428	Total	17,868
Anaerobic, Special pathogens and Mycoplasma		Mycology and ICP	
Anaerobic culture (Bile, pus, drain, blood, etc)	1,176	Respiratory samples (BAL, Tracheal aspirate, Sputum)	4,502
<i>C. difficile</i> stool culture	329	Urine	2,002
<i>C. difficile</i> ELISA (Toxin A & B)	327	CSF	1,192
<i>C. difficile</i> PCR & typing	37	Miscellaneous (Plates, Swabs, Catheter tips)	1,507
Campylobacter stool culture	6	Pus	687
<i>Bartonella</i> spp. culture	4	Tissue/Biopsy	589
Anti- <i>Bartonella</i> IgM (IFA)	4	Nail/Hair/Skin scrapings	459
<i>Bartonella</i> spp. PCR	0	Blood/Bone Marrow/BACTEC culture	1,839
Leptospira culture	6		
Anti-Leptospira IgM (ELISA)	345	Cryptococcal antigen detection	1,087
Urine dark ground microscopy for Leptospira	330	Aspergillus antibody	187

Plasma dark ground microscopy for <i>Leptospira</i>	336	Galactomanan antigen	4,463
Anti- <i>Legionella pneumophila</i> IgM (ELISA)	210	<i>Histoplasma</i> antibody	131
<i>Legionella pneumophila</i> Urine Antigen	40	<i>Histoplasma</i> PCR	3
<i>Legionella</i> culture	140	Cryptococcus PCR	5
<i>Legionella</i> environmental sampling	45	Pan fungal PCR	18
<i>Legionella pneumophila</i> PCR	137	Blood/Yeast MIC	27
Scrub typhus IgM ELISA	224	Dermatophytes MIC	60
Scrub typhus IFA	170	Miscellaneous (Phaeoid fungi)	1
ICT for Scrub typhus	224	Total	18,759
Scrub typhus PCR	89		
Anti- <i>Mycoplasma pneumoniae</i> IgM ELISA	204	PARASITOLOGY LABORATORY	
<i>Mycoplasma pneumoniae</i> culture	196	Intestinal parasitosis	
<i>Mycoplasma pneumoniae</i> PCR	74	Stool examination- Ova/Parasites (wet mount/concentration)	1,926
<i>Chlamydia trachomatis</i> PCR	198		
<i>Mycoplasma hominis</i> culture	336	Coccidian parasites-modified acid-fast staining	1,926
<i>Mycoplasma hominis</i> PCR	364	Tissue specimens (homogenates)	0
<i>Mycoplasma genitalium</i> PCR	94	In-vitro culture	55
<i>Ureaplasma urealyticum</i> culture	336	Malaria	
<i>Ureaplasma urealyticum</i> PCR	364	Giemsa staining	4,075
Anti- <i>Chlamydia pneumoniae</i> IgM (ELISA)	204	Acridine orange (AO) fluorescent staining	4,075
<i>Chlamydia trachomatis</i> PCR (genital specimen)	376	Quantitative buffy coat (QBC)	3,233
Strains for inter laboratory comparison of anaerobes	3	Malaria HRP-II Antigen detection assay	2,834
Total	6,928	Leishmaniasis (Kala azar)	
		Giemsa staining	38
SEXUALLY TRANSMITTED DISEASES (STD) LABORATORY		Acridine orange (AO) fluorescent staining	38
High vaginal swabs (HVS)	336	Quantitative buffy coat (QBC)	45
Semen	924	Kala-azar serology (rk-39)	771
Expressed prostatic secretions (EPS)	80	Filariasis	
Urethral discharge	37	Direct examination & concentration of blood	143
Cervical discharge	161	Thin & Thick Smear	143
Vaginal discharge	17	Acridine orange (AO) fluorescent staining	143
		QBC for filariasis	143
Antimicrobial susceptibility testing		Filarial antigen	53
High vaginal swabs (HVS)	78	Investigation for <i>Pneumocystis jirovecii</i> infection (PCP)	340
Semen	90	Cerebrospinal fluid examination for Free Living Amoebae (FLA)	110
Expressed prostatic secretions (EPS)	13	Parasitic serology	
Urethral discharge	4	Amoebic serology of anti-amoebic IgG antibodies by ELISA	112
Total	1,740	Hydatid disease serology (ELISA/IHA)	127

		Toxoplasmosis serology for IgG antibodies by ELISA	13
TUBERCULOSIS LABORATORY		Miscellaneous	
Smear for Ziehl-Neelsen (ZN) staining	10,734	Examination of aspirates (Sputum. Pus etc.)	144
Lowenstein-Jensen (LJ) medium - Culture & Sensitivity	7,200	Worm specimen for identification	12
Drug sensitivity on solid media	544	Arthropod specimen for identification	6
MGIT 960 rapid culture	2,597	Total	20,505
Anti-tubercular drug sensitivity on MGIT	269		
		SEROLOGY LABORATORY	
PCR for <i>Mycobacterium tuberculosis</i>	4,792	Widal test	4,509
Genxpert MTB/RIF	4,397	VDRL test	8,151
ADA test	325	TPHA	91
Total	30,858	ASLO	89
GRAND TOTAL	2,90,831	Total	12,840

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor Rama Chaudhry was appointed as member of ASM Ambassador Leadership Circle (ALC) for 2017-2019; ASM International Ambassador 2016-18; awarded Dr Rama Kant Memorial Award for paper entitled “Valavane A, Chaudhry R, K Sreenath, Choudhry M, Sagar T, Shende T, Varma M, Mohanty S, Kabra SK, Dey AB, Thakur B. Detection of *Mycoplasma pneumoniae* and *Legionella pneumophila* Arvind et al., New Delhi in ASM - X Annual conference cum Workshop by Indian Association of Mycoplasmologists. 20 –21 March 2017; Awarded Snehalata Memorial Award for best oral presentation entitled “Prevalence and distribution of *Ureaplasma* spp. And *Chlamydia trachomatis* serovars in patients with Urogenital infections in tertiary care hospital, New Delhi in ASM - X Annual conference cum Workshop by Indian Association of Mycoplasmologists. Rawre J, Dhawan B, Sreenivas V, Khanna N, Chaudhry R. 20–21 March 2017 as Co-author.

Professor B.K. Das was awarded Fellowship of Royal College of Physicians Edinburgh (FRCP Edin), UK in September 2016.

Professor Benu Dhawan received IJSTD award for the best letter to the Editor. “Co-infections with *Ureaplasma parvum* and Herpes simplex virus in an acquired immunodeficiency syndrome patient. *Indian J STD AIDS*. 2015 Jan-Jun: 36 (1): 111–112. Saigal K, Rawre J, Khanna N, *Dhawan B. 26 November 2016; awarded Best e-poster entitled “*Chlamydia trachomatis* infection in an STI clinic in North India: Evidence for Need of Extragenital Screening.” IPHACON 2017, 61st Annual National Conference of Indian Public Health Association (IPHA) & First State Conference of IPHA Rajasthan Branch 24–26 Feb 2017; awarded Snehalata Memorial Award for best oral presentation entitled “Prevalence and distribution of *Ureaplasma* spp. and *Chlamydia trachomatis* serovars in patients with Urogenital infections in tertiary care hospital, New Delhi in X Annual Conference and Workshop by Indian Association of Mycoplasmologists. Rawre J, Dhawan B, Sreenivas V, Khanna N, Chaudhry R. 20–21 March 2017.

Professor Seema Sood received IUSTI-IASSTD & AIDS Scholarship, 2016

Dr Urvashi B. Singh received S.S. Kelkar Memorial Prize-2016 with Gold Medal at National Conference of Indian Association of Medical Microbiologists, IAMM, MICROCON-2016 at PGIMER, Chandigarh 25–27 November 2016 at Indian Association of Medical Microbiology, IAMM National Conference, 2016

Dr Sarita Mohapatra was elected member of National Academy of Medical Sciences (MAMS)

VISITING SCIENTISTS

1. Gyanu Lamichhane, Johns Hopkins University, Baltimore, MD, USA. Lecture on “Designing new drug combinations for TB &NTM” on World TB Day, 22–23 March 2017 at AIIMS, New Delhi
2. Tamar Gabunia, Senior Technical Advisor, Centre for Innovations and Technology, University Research Co. LLC. Lecture on “Novel approaches to administrative and environmental infection control strategies in health care settings” on World TB Day, 22–23 March 2017 at AIIMS, New Delhi

9.21. Nephrology

Professor and Head

Sanjay K. Agarwal

Professors

Dipankar M. Bhowmik

Sandeep Mahajan

Assistant Professors

Soumita K. Bagchi

Raj K. Yadav

Yogesh Chhabra

Vikraman G.

(Contract, up to 16 November 2016)

(Contract, from 23 January 2017)

HIGHLIGHTS

The Nephrology Department has been regularly doing ABO-incompatible Renal Transplant in the institute during this period at a very affordable cost. The department is continuing immunosuppressive drug monitoring and infection in renal transplant. The monitoring is free of cost for all renal transplant patients. The department is providing hemodialysis to nearly 80 patients per week at a very low cost and free-of-cost for patients who are below the poverty line. The department is running a bio-repository of samples for potential research in renal sciences for patients of primary glomerular disease and chronic kidney disease. Department faculty is involved in almost all government policy making bodies related to chronic kidney disease, dialysis and renal transplantation. Dr. SK Agarwal is technical advisor to National Organ and Tissue Transplant Organization (NOTTO) and officer in charge of National Organ and Tissue Transplant Registry (NOTTR).

EDUCATION

Long-term training

The department runs DM Nephrology, a three-year degree course for post MD (Medicine and Pediatric) candidates, selected by AIIMS based on merit through an all India entrance examination. Five candidates were admitted to DM nephrology course during this period. Postgraduates from the department of internal medicine, geriatric medicine and emergency medicine, urology and anesthesia and critical care medicine are posted on rotational basis for a short period of one to two months. Residents from department of pediatric and pathology regularly come for the training courses in nephropathology. At present the department has three non-academic junior residents for six months each.

Short-term training

The department has provided short-term training for following:

1. Residents from the division of Pediatric Nephrology and pathology come for Nephro-pathology conference on regular basis.

CME/Workshops/Symposia/National/International Conference

1. **‘World Kidney Day-2016’** and public awareness regarding kidney diseases was organized in collaboration with RML Hospital, at RML Hospital, New Delhi, 8–9 March 2016.
2. **‘Renal Transplant Conclave 2016’**, 21–23 October 2016. This was a unique meeting in which experts from five major renal transplant centres in India came on a common platform to share experience of renal transplant in India. Approximately 12,000 renal transplant patient’s data were shared among faculty and delegates. Delegates were a mix of PGs, practicing Nephrologist, undergraduate students of medicine and of different branches of medicine like, internal medicine, nephrology, paediatrics, pathology etc. There was a sizeable number of pathologists, more from the ISN-Pathology course registered candidates. Almost 200 delegates, including the faculty attended this meeting. Delegates were from different parts of India.

Lectures delivered

S.K. Agarwal: 8

Dipankar Bhowmik: 14

Sandeep Mahajan: 8

Soumita Bagchi: 4

R.K. Yadav: 3

S.K. Agarwal: 8

1. Management of chronic kidney disease, AsPNA Training Course In Pediatric Nephrology, 1–3 April 2016, AIIMS, New Delhi
2. Viral infection related glomerular disease, 23rd Annual Conference of North Zone ISN, 3–5 February 2017, SGPGI, Lucknow

3. Borderline changes: Indian perspective, 3rd International Renal Pathology Conference, 10–12 February 2017, AIIMS, New Delhi
4. Renal transplant a case based approach, Scholar Connect Nephrology PG Course, 24–25 September 2016, SGPGI, Lucknow
5. Management of AKI in developing world, ADQI Consensus Meeting, 27–30 September 2016, Hyderabad
6. Kidney disease in HIV: Renal transplant in HIV, 7 January 2017, Hyderabad
7. SLED vs. CRRT: Critical care and infection in liver disease, 24–26 January 2017, ILBS, New Delhi
8. Pattern and outcome of AKI in developing countries, 22nd International CRRT-2017, 7–10 March 2017, San Diego, USA
9. Management of HCV in RRT, Annual Dialysis Conference, 2017. 11–14 March 2017, Long Beach, USA

Dipankar Bhowmik: 14

1. Asymptomatic hyperuricemia, ISN, North Zone, 1 April 2016, Parwanoo, HP
2. CPC Clinical discussant, ISN, North Zone, 2 April 2016, Parwanoo, HP
3. Management of a government PD programme, PD Scientia, 19 June 2016, Delhi
4. Renovascular hypertension, Nephrology CME, 30 July 2016, ESIC Medical College, Hyderabad
5. Case presentation, Indian Academy Nephrology Annual Conference, 30 July 2016, Guwahati
6. Culture negative CAPD peritonitis, Indian Academy Nephrology Annual Conference, 30 July 2016, Guwahati
7. Deceased donor allocation policies, Indian Academy Nephrology Annual Conference, 30 July 2016, Guwahati
8. Drug dosing in renal impairment, Indian Academy Nephrology Annual Conference, 30 July 2016, Guwahati
9. Drugs in renal replacement therapy, Critical Care Conference, 18 November 2016, New Delhi
10. Novel oral anticoagulant agent in CKD – when? and how?, Indian Society of Nephrology East Zone, 2 December 2016, Doars, WB
11. Pre-transplantation evaluation of neurogenic bladder, Indian Society of Nephrology, Annual Conference, 15 December 2016, Mumbai
12. Newer hemodialysis membranes, Workshop on Endovascular Hemodialysis Access, 23 December 2016, ESIC Medical College, Hyderabad
13. Complicated UTI-APICON, 29 January 2017, Mumbai
14. Prebiotics and vitamins in CKD-5D-ISN of nephrology (north zone), 4 February 2017, SGPGI, Lucknow

Sandeep Mahajan: 8

1. Newer phosphate binders, ISN-North Zone, 3 April 2016, Parwanoo, HP
2. APD: Patient selection, deciding on the initial prescription and prescription management based on patient characteristics, 18–19 June 2016, Delhi
3. Management of lupus nephritis in pregnancy, Neph-Immune, 16 October 2016, Delhi
4. Kidney donors with chronic viral infections, ISNCON 2016, 17 December 2016, Mumbai
5. Prescription of CRRT, 25th Annual Conference of Indian Society of Critical Care Medicine, 1 February 2017, Kochi
6. Essentials of peritoneal dialysis, World Kidney Day, 8 March 2017, AIIMS Delhi
7. Metabolic syndrome & kidney, World Kidney Day, 9 March 2017, Delhi
8. International guidelines for eGFR for kidney donors and its validity in the Indian scenario, Asian Perspectives on organ donation & Transplantation, 19 March 2017, Chennai

Soumita Bagchi: 4

1. Dialysate prescription in a cirrhotic patients with acute kidney injury, National Conference on Critical Care and Infections in Liver Diseases, 25 January 2017, Delhi
2. Image guided renal biopsy: Procedure and handling, Annual Conference of Indian Society of Renal Pathology, 9 February 2017, AIIMS, Delhi
3. Conservative management of CKD, World Kidney Day, 8 March 2017, AIIMS Delhi
4. Hemodialysis, Emergency Nursing Update, 27 March 2017, AIIMS Delhi

R.K. Yadav: 3

1. Hypertension and kidney, Hypertension and kidney, 6 August 2016, New Delhi
2. Hemodialysis, Symposium on Kidney Diseases, 8 March 2017, AIIMS New Delhi
3. Risk factors of kidney disease, Kidney Disease, 9 March 2017, New Delhi

Oral papers/posters presented: 3

1. Mahajan S, Yadav S, Chhabra YK. Effect of renal transplantation on carotid intimal medial thickness and left ventricular mass index: A longitudinal study, American Society of Nephrology Kidney Week 2016, 17 November 2016, Chicago, USA
2. Bagchi S, Subbiah AK, Bhowmik D, Mahajan S, Yadav RK, Singh G, Dinda A, Agarwal SK. Low dose rituximab therapy in resistant idiopathic membranous nephropathy, American Society of Nephrology Kidney Week 2016, 19 November 2016, Chicago, USA
3. Subbiah AK, Bagchi S, Bhowmik D, Mahajan S, Yadav RK, Chhabra Y, Agarwal SK. Dengue fever among renal allograft recipients: A case series during 2015 outbreak-Indian Society of Nephrology Annual Conference-2016, December 14–16 2016, Mumbai

RESEARCH**Funded projects*****Ongoing***

1. Multicentric study to find out prevalence of chronic kidney disease in adults in urban Indian population, S.K. Agarwal, ICMR, New Delhi, 4 years 2012–2016, Rs. 90 lakhs
2. Prospective cohort study to find circulating levels of anti-phospholipase A2 receptor (PLA2R) antibodies and its correlation with idiopathic membranous nephropathy (IMGN). S.K. Agarwal, ICMR, New Delhi, 3 years, 2017–2020, Rs. 31 lakhs
3. Pattern of CYP3A5 and MDR-1 single nucleotide polymorphism and its impact on individualization of tacrolimus based immunosuppression in living renal allograft recipient. R.K. Yadav, AIIMS, 2 years, 2016–2018, Rs. 4.05 lakhs.

Completed

1. Prospective monitoring of BK virus replication in the first year following renal transplantation in Indian patients, Soumita Bagchi, AIIMS, 2 years, 2014–2016, Rs. 6.2 lakhs

Departmental projects***Ongoing***

1. Clinicopathological correlation of HBV and HCV infection in patients on renal replacement therapy
2. Study of cognitive function in patients with chronic kidney disease and the effect of renal transplantation
3. Long term outcome of renal donors
4. Impact of CsA and Tacrolimus on outcome of living related renal transplantation
5. To delineate the pattern of biopsy proven renal disease in a tertiary care hospital in India
6. Retrospective study for evaluating the Oxford classification of IgA nephropathy in the Indian population
7. Pulmonary infections in renal transplant recipients: Prospective cohort observational study
8. Rituximab use in idiopathic membranous nephropathy (IMN): A retrospective study
9. Clinical presentation and outcome of dengue in renal transplant recipients: A retrospective analysis
10. Assessment of arterial stiffness and autonomic function before and after renal transplantation
11. Long term outcome of renal donors
12. To study the outcomes of percutaneous hemodialysis catheters in tertiary care nephrology centre

Completed

1. Proteinuria in renal transplant recipient and histopathological correlation
2. Assessment of risk factor, clinical profile and outcome of early versus late CMV infection in living related renal allograft recipient in Indian context
3. Spectrum of acute kidney injury and its short and long-term outcome in a tertiary care hospital in India

4. Prospective study of urinary tract infection in renal allograft recipients
5. Evaluation of progression of carotid artery intimal medial thickness in chronic kidney disease patients not on dialysis and its correlation with endothelial dysfunction and biochemical parameters
6. The profile and risk factors of infections requiring hospitalisation in the first year after renal transplantation
7. Retrospective study for evaluating the Oxford classification of IgA nephropathy in the Indian population
8. Retrospective study for evaluating the profile of biopsy proven kidney disease in elderly patients in India
9. Retrospective study for evaluating the clinical profile and treatment response and outcome of adult patients with primary FSGS
10. To delineate the pattern of biopsy proven renal disease in a tertiary care hospital in India
11. Assessment of arterial stiffness and autonomic function before and after renal transplantation
12. A study to assess the hemodialysis stressors and coping strategies among patients undergoing hemodialysis in hemodialysis unit AIIMS, New Delhi

Collaborative projects

Ongoing

1. Detection and genotyping of human cytomegalovirus from neonates and renal transplant recipients (Microbiology)
2. Molecular detection and characterization of pneumocystis jiroveci in respiratory samples from the patients both immunocompromised as well immunocompetent with suspected interstitial pneumonia and other chronic lung diseases (Microbiology)
3. To study the prevalence of UL 97 gene mutation in ganciclovir non-responders vis a vis responders in Indian renal transplant patients (Laboratory Medicine)
4. A prospective study comparing outcomes and quality of life after laparoscopic donor nephrectomy versus open donor nephrectomy (Surgery)
5. Study of population genetics of clinical strains of pneumocystis Jiroveci and its clinico-epidemiological correlation (Microbiology)
6. The effect of rate of fluid hydration on early graft function during live related renal transplantation (Anaesthesia)
7. Identification of biomarkers that predict response to treatment in lupus nephritis (Medicine)
8. Identification of prognostic marker in patients of multiple myeloma with immunoglobulin light chain induced renal failure (Medical Oncology)
9. Post-Transplant diabetes mellitus, A prospective observational study (Pharmacology)
10. Evaluation of the effect of renal transplantation on organochlorine pesticides levels in chronic kidney disease (stage 5D) patients (Laboratory Medicine)
11. To evaluate urinary sodium and potassium as disease activity markers in Inflammatory Bowel Disease (IBD) (Gastroenterology)
12. Evaluation of plasma and urine neutrophil gelatinase-associated lipocalin (NGAL) as an early marker in predicting acute kidney injury (AKI) in trauma patients in surgical intensive care unit (Anesthesia)
13. Development of immunoblot assay for diagnosis of subclinical Cryptococcus (Microbiology)
14. Antifungal susceptibility testing and genotyping of cryptococcal isolates from Delhi and other parts of India (Microbiology)

Completed

1. The effect of rate of fluid hydration on early graft function during live related renal transplantation (Anaesthesia)
2. To evaluate urinary sodium and potassium as disease activity markers in Inflammatory Bowel Disease (IBD) (Gastroenterology)
3. Identification of prognostic marker in patients of multiple myeloma with immunoglobulin light chain induced renal failure (Medical Oncology)

PUBLICATIONS

Journals: 20

Books: 1

PATIENT CARE

In addition to providing general nephrology care for all nephrology related illnesses, department provides state-of-the-art renal replacement therapy; hemodialysis, CAPD and renal transplant at very low cost to any patient of end stage renal disease. Department provides swap transplant and ABO incompatible renal transplant. Department also provides immunosuppressive drug monitoring free of cost. During hemodialysis, ultrapure water is provided to machine to provide safe hemodialysis to patients.

S. no.	Area			
1	Haemodialysis related			
	HD New Patients	1073	Emergency HD Patients	736
	Total HD	11392	Plasmapheresis	116
	Jugular/Subclavian catheterisation	329	Femoral Vein catheterisation	730
	AV Fistula	788	AV Shunts	1
	Permacath Insertion	67		
2	ICU Related		CRRT/SLED	222
3	Peritoneal Dialysis			
	Acute PD	81	CAPD	26
4	Indoor Related			
	Kidney Biopsy	706	Liver Biopsy	2
	Indoor short admission	858	Indoor regular admission	1428
	Indoor Death / male	78/51	Nephrology consultation	4734
	Ultrasound	703		
5	Day Care Treatment			
	Pulse methylprednisolone	64	IV Cyclophosphamide	48
	IV iron	311	Other Miscellaneous therapies	435
6	Renal Transplant			
	Evaluation of LRRT	481	Living RT done	135
	Evaluation of Cadaver recipient	104	Cadaver RT done	19
7	Renal Lab related			
	Blood sampling	86361	TIBC	10242
	Biochemistry (Urea, Cr, Na, K)	86361	UIBC	10242
	Urine osmolality	288	T Saturation	10242
	24 hr urine testing	13709	Serum Ferritin	3409
	Hemogram for RT Patients	10150	Tac Level	4389
	CO2	22597	Vit-D & PTH	803
	Serum iron	10267	Urine PO4	14
8	OPD Related			
	Renal clinic new patient	8923	RT new cases	135
	Renal clinic old patient	34222	RT old cases	10391
	Renal clinic Total Patients	43145	RT Clinic Total Patients	10511
	RT counselling clinic (3 days/week)	472		

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor S.K. Agarwal was invited to be member of editorial board of international journal “Kidney Disorder and Clinical Practice”; Expert for a study on “National Estimation of Blood Requirement in the country” being initiated by NACO in association with Christian Medical Association of India and Center for Disease Control and Prevention India, April 2016; appointed as **Editor Indian Journal of Nephrology** for 2016-2018; invited to Chair an expert group for making Guidelines for Prevention of Kidney Diseases for MOHFW, GOI, 2016; elected by the ISN-Advancing Clinical Trial (ACT) as ISN-ACT Committee member for 2 years starting on 1 June 2016; Invitation for Board of Study (BOS); Member for Dialysis Management at Texila American University; Editorial board member of international journal “Nephrology and Renovascular

Disease”; led a central team sent by MOHFW, Government of India to visit Srikakulam district in Andhra Pradesh to have first hand assessment of increasing incidence of chronic kidney disease in the affected area during 19 to 22 January 2017; member of “Expert Group” constituted for Kidney Diseases under Grant-in-aid (GIA) scheme of Inter-Sectoral Convergence and Coordination for Promotion and Guidance on Health Research formed by Department of Health Research.

Professor Sandeep Mahajan was member of the National PD Guidelines Committee, North Zonal Executive of the Peritoneal Dialysis Society of India; Country lead for India (Nephrology) by the New York University School of Medicine for the NIH/NHLBI funded ISCHEMIA-CKD trial; Member, Editorial Board of Journal of Nephrology research, IHJ Case Reports; on National Expert Panel of the Certificate Course in Management of Hypertension by Public Health Foundation of India; appointed Member of the Scientific Committee of Indian Society of Nephrology; appointed Program Chair for the Post Graduate Medical Program (Nephrology) for the Texila American University; attended Super-Specialty Medical Camps at Nagrota (Himachal Pradesh) from 26 to 27 July 2016 and at Morena (MP) from 9 to 11 February 2017.

VISITING SCIENTISTS

1. **Dr Amit Govil**, Associate Professor of Department of Medicine, University of Cincinnati, USA, visited Department of Nephrology and gave a guest lecture on “Allocation Policy of Organ Distribution” on 5 April 2016.
2. **Dr Anil Agarwal** from Ohio State University, USA, visited Department of Nephrology and delivered a talk on “Central Vein Stenosis” on 1 February 2017.

9.22. Nuclear Magnetic Resonance

Professor and Head

N.R. Jagannathan

Professors

Rama Jayasundar

S. Senthil Kumaran

Associate Professors

Uma Sharma

Virendra Kumar

Scientists

Sujeet Kumar Mewar

Pawan Kumar

HIGHLIGHTS

Professor N.R. Jagannathan was elected Vice-President of the Indian National Science Academy (INSA) for a period of 3 years from 1 January 2017. He received the prestigious S.K. Mitra Birth Centenary Gold Medal Award for significant and lifetime contribution to the development of Science and Technology in the country by the Indian Science Congress Association in January 2017 at Tirupati from the Prime Minister of India. The department celebrated its 25th (Silver Jubilee) Department Day with a 3-day conference on ‘Recent Advances in MRI and MRS’ with over 20 speakers from USA, Germany, UK, Switzerland and Singapore and over 200 participants.

EDUCATION

Postgraduate

The faculty and scientists participated and delivered lectures for course titled ‘*Structural Biology and NMR Technology*’ and ‘*Molecular Medicine*’ of MBiotech programme of the Department of Biotechnology. The faculty participated in the theory and demonstration of the course on ‘Higher mental functions: Techniques (fMRI) and methodologies’, for the Postgraduate training programme of the Department of Physiology.

Short/Long Term Training

Eight persons from medical and science disciplines from various Institutes and Universities from India and BSc Radiography students, AIIMS, underwent training in MRI, fMRI and MRS techniques.

Continuing Medical Education

The faculty participated in and delivered several lectures in continuing medical education programmes, symposia, workshops and conferences during the year.

Lectures delivered

N.R. Jagannathan: 7

Rama Jayasundar: 15

S. Senthil Kumaran: 7

Uma Sharma: 1

N.R. Jagannathan: 7

1. Neuroimaging in cognitive research: Basics of MRI and MRS and its role in cognitive research, 14 October 2016, INMAS, Delhi
2. MRI coupled with in vivo MR spectroscopy in clinical medicine: Role of NMR spectroscopy in structural biology, Metabolomics and Drug Discovery, 21 November 2016, ICGEB, New Delhi
3. Potential of MR imaging (MRI) and MR spectroscopy (MRS) in clinical medicine, Workshop on medical image analysis at the 10th Indian Conference On Computer Vision, Graphics and Image Processing, 19 December 2016, IIT-Guwahati.
4. MR spectroscopy, the nuances and technical challenges, International Symposium on Urologic Imaging and Intervention 2017, 29 January 2017, AIIMS, New Delhi
5. Role of NMR in Medicine, XXI Quality Improvement Program, 6 February 2017, Delhi Institute of Pharmaceutical Science & Research, Delhi
6. NMR in biological research with special reference to Magnetic Resonance Imaging (MRI) in medicine (Key note Address), National Science Day Celebrations, 29 February 2017, Uttrachanal College (PG) Biomedical Sciences & Hospital, Dehradun
7. MRI in India (Chief Guest Address), International Conference on Magnetic Resonance Imaging (ICWMRI) 2017, 2 March 2017, SAMEER, IITB Mumbai

Rama Jayasundar: 15

1. Traditional system of medicine, 61st Professional Course for Foreign Diplomats; 26 April 2016, Foreign Service Institute, Ministry of External affairs, New Delhi
2. Scientific research in ayurveda, Meeting on traditional systems of medicine, Ministry of External affair, Govt. of India, 30 April 2016, New Delhi
3. Integrative research and medicine for better healthcare, 2nd Rashtriya Adhiveshan Meeting, 11 June 2016, People's University Campus, Bhopal
4. Traditional system of medicine, 62nd Professional Course for Foreign Diplomats, 12 August 2016, Foreign Service Institute, Ministry of External Affairs, New Delhi
5. Innovative applications of NMR in Ayurveda, 3rd International Congress on Ayurveda, 17 September 2016, Milan, Italy
6. Traditional system of medicine: Ayurveda, 10th Special Course for ASEAN Diplomats, Ministry of External Affairs, Govt. of India, 10 October 2016, Foreign Service Institute, Ministry of External Affairs, New Delhi
7. Ayurveda and unmet needs in women's health: issues, challenges and opportunities, National Conference on Women Health and Ayurveda, 11 November 2016, University of Kolkata, Kolkata
8. Research methodologies for Ayurveda: What NMR can do?, National Conference on Women health and Ayurveda, 18 November 2016, University of Kolkata, Kolkata
9. Research in Ayurveda: Choosing the right questions and methodologies, 7th World Ayurveda Congress, 3 December 2016, Kolkata
10. Scientific rationale of Ayurveda, International Ayurveda Conclave (VAJRA-2016), 13 January 2017, Thrissur
11. Science of Indian medicine and research methodologies for ayurveda, Conference of Ancient Science and Technology: Restrospections and Aspirations (ASTRA-2017), 18 January 2017, Haribhai V Desai College, Pune
12. NMR and Ayurveda pharmacology, AICTE sponsored XXI Quality Improvement Program, 2 February 2017, Delhi Institute of Pharmaceutical Sciences and Research, New Delhi
13. Traditional system of medicine: Ayurveda, Special Course for Foreign Diplomats, Ministry of External Affairs, Govt. of India, 9 February 2017, Foreign Service Institute, Ministry of External Affairs, New Delhi
14. Science of Ayurveda, Special lecture for officials, Ministry of External Affairs, Govt. of India, 14 February 2017, Foreign Service Institute, Ministry of External Affairs, New Delhi
15. Research methodologies for Ayurveda, International conference on scientific validation of traditional knowledge –II (SVTK-II), 24 February 2017, Indian Institute of Technology (IIT), Roorkee

S. Senthil Kumaran: 7

1. FMRI in Clinical Application, Workshop on Recent Technological Advances and Intervention for Psychiatric Disorders, 2 April 2016, AIIMS, New Delhi
2. Medical imaging basics and image formation in MRI, Functional MRI and its applications (Keynote address), National Workshop on Recent Advances in Engineering and Medical Imaging Techniques, 12 April 2016, Malaviya National Institute of Technology, Jaipur
3. Functional MRI in neurology, National Conference on Advances in Neuroimaging and Applications in Cognitive disorders, 4 May 2016, National Brain Research Centre, Manesar
4. NMR in clinical applications and exploring diseased brain with fMRI, Refresher Course in Physics, The Centre for Professional Development in Higher Education (CPDHE), UGC-HRDC, 20 October 2016, University of Delhi, Delhi
5. MRI and fMRI: Novelty in clinical applications, Symposium on Next Generation Health Innovation, 24 December 2016, Pt. J.N.M. Medical College, Raipur
6. Looking at creativity using fMRI, International Conference on Creativity and Cognition, 21 January 2017, NIMHANS, Bangalore
7. Urinary metabolomic profiling in idiopathic Parkinson's disease, 7th Asia Pacific NMR Symposium combined with the 23rd Annual meeting of the National Magnetic Resonance Society (NMRS) of India, 17 February 2017, IISc, Bangalore

Uma Sharma: 1

1. Applications of metabolomics in human diseases, CEP course on Applications of Metabolomics in Biomedical Sciences, 23–25 November 2016, Institute of Nuclear Medicine and Allied Sciences, Delhi

Oral papers/posters presented: 38

1. Potential role of NMR for taste ranking in plants, 57th Experimental NMR conference (ENC), 11 April 2016, Pittsburg, USA
2. Can NMR be used for pharmacological screening of polyherbal ayurvedic formulations? 57th Experimental NMR conference (ENC), 11 April 2016, Pittsburg, USA
3. Determination of polarity based sensorial descriptors of nutraceutical plants using ¹H NMR, 57th Experimental NMR conference (ENC), 11 April 2016, Pittsburg, USA
4. Identification of anti-HIV1 NMR phytomarkers using bioactivity guided studies in select medicinal plants, 57th Experimental NMR conference (ENC), 11 April 2016, Pittsburg, USA
5. High resolution ¹H NMR based metabolomics study of serum in Parkinson's disease, 24th Annual Meeting of the International Society for Magnetic Resonance in Medicine (ISMRM), 7–13 May 2016, Singapore
6. Role of pre-biopsy multiparametric MR in prostate cancer, Quantitative Imaging Network meeting, 11–12 April 2016, National Institutes of Health (NIH), Bethesda, USA
7. Chemosensory analysis of medicinal plants by NMR phytometabolomics, 24th Annual Meeting of the International Society for Magnetic Resonance in Medicine (ISMRM), 7–13 May 2016, Singapore
8. MR based body composition analysis correlates ayurvedic phenotyping, 24th Annual Meeting of the International Society for Magnetic Resonance in Medicine (ISMRM), 7–13 May 2016, Singapore
9. Potential of diffusion weighted imaging in determining the pathological response of breast cancer patients, 2nd Annual ISMRM Indian Chapter Meeting, 1–2 May 2016, Bangalore
10. ¹H NMR, Based metabolomics study of saliva samples in patients with Parkinson's disease, 24th Annual Meeting of the International Society for Magnetic Resonance in Medicine (ISMRM), 7–13 May 2016, Singapore
11. Assessment of changes in metabolic profile of small intestinal mucosal biopsy of celiac disease patients after gluten-free diet: An in-vitro Proton NMR Spectroscopy study (Power-Pitch Oral), 24th Annual Meeting of the International Society for Magnetic Resonance in Medicine (ISMRM), 7–13 May 2016, Singapore
12. Influence of gender and age on the metabolic profile of blood plasma in celiac disease using proton NMR spectroscopy (Power-Pitch Oral), 24th Annual Meeting of the International Society for Magnetic Resonance in Medicine (ISMRM), 7–19 May 2016, Singapore
13. Specificity and sensitivity of early predictive urinary metabolic biomarker of radiation injury: a ¹H NMR based metabolomic study (Power-Pitch Oral), 24th Annual Meeting of the International Society for Magnetic Resonance in Medicine (ISMRM), 7–13 May 2016, Singapore

14. Effect of neoadjuvant chemotherapy on in-vivo MRS determined tCho and membranous and cytoplasmic beta catenin expression in breast cancer patients, 24th Annual Meeting of the International Society for Magnetic Resonance in Medicine (ISMRM), 7–13 May 2016, Singapore
15. The potential of apparent diffusion coefficient in differentiating various sub-types of breast tumors and its association with hormonal status, 24th Annual Meeting of the International Society for Magnetic Resonance in Medicine (ISMRM), 7–13 May 2016, Singapore
16. A proton magnetic resonance study to investigate dietary influences on blood plasma of patients with celiac disease, 24th Annual Meeting of the International Society for Magnetic Resonance in Medicine (ISMRM), 7–13 May 2016, Singapore
17. Evaluation of the tCho and β -catenin concentration with different molecular biomarkers in breast cancer patients, 24th Annual Meeting of the International Society for Magnetic Resonance in Medicine (ISMRM), 7–13 May 2016, Singapore
18. Potential of NMR metabolomics of small intestinal mucosa in assessing marsh grade in patients with celiac disease, 24th Annual Meeting of the International Society for Magnetic Resonance in Medicine (ISMRM), 7–13 May 2016, Singapore
19. Increased glutamate in frontal lobe of HIV infected patients with CNS involvement: 3T MRS study, 24th Annual Meeting of the International Society for Magnetic Resonance in Medicine (ISMRM), 7–13 May 2016, Singapore
20. ¹H NMR-based metabolomics study of saliva samples in patients with Parkinson's disease, 24th Annual Meeting of the International Society for Magnetic Resonance in Medicine (ISMRM), 7–13 May 2016, Singapore
21. High resolution ¹H NMR-based metabolomics study of serum in Parkinson's disease, 24th Annual Meeting of the International Society for Magnetic Resonance in Medicine (ISMRM), 7–13 May 2016, Singapore
22. NMR based metabolomic study of serum in diabetic retinopathy, 24th Annual Meeting of the International Society for Magnetic Resonance in Medicine (ISMRM), 7–13 May 2016, Singapore
23. NAFLD in Asian Indians: Querying the role of composition and volumes of subcutaneous adipose tissue compartments using ¹H MRS, European obesity summit, 1–4 June 2016, Gothenburg, Sweden
24. Role of fMRI in epilepsy, One-day workshop on Neuroimaging, 12 July 2016, NBRC, Manesar
25. Effect of neoadjuvant chemotherapy on tCho levels and the expression of β -catenin and cyclinD1 in breast cancer (Oral), 2016 World Molecular Imaging Congress, 7–10 September 2016, New York, USA
26. NMR based analysis of combinatorial effects of chemotherapy drug and polyherbal formulation, 2016 World Molecular Imaging Conference, 7–10 September 2016, New York, USA
27. Differential association of MR evaluated abdominal, subcutaneous and visceral adipose tissue with mass index and lipid profile, 2016 World Molecular Imaging Conference, 7–10 September 2016, New York, USA
28. Innovative applications of NMR in Ayurveda, 3rd International Congress on Ayurveda, 17 September 2016, Milan, Italy
29. Does education play a role in language reorganization after surgery in drug refractory temporal lobe epilepsy: An fMRI based study?, ECON (Epilepsy Conference), February 2017, Patna
30. NMR based metabolomics approach to probe biomarker/s for celiac disease-Conference on recent advances in MRI and MRS, 21–23 March 2017, Indian National Science Academy, New Delhi
31. A pilot study of in-bore MR guided prostate biopsy, Recent advances in MRI and MRS, 21–23 March 2017, Indian National Science Academy, New Delhi
32. Metabolomics study of blood plasma of prostate cancer using NMR spectroscopy, Recent advances in MRI and MRS, 21–23 March 2017, Indian National Science Academy, New Delhi
33. An attempt to identify biomarkers in Parkinson disease by metabolomics approach, 58th Experimental NMR Conference (ENC), 26–31 March 2017, Asilomar, USA
34. NMR analysis of blood plasma metbolome of Parkinson's disease and control subjects, 58th Experimental NMR Conference (ENC), 26–31 March 2017, Asilomar, USA
35. NMR analysis of the human saliva and urine metabolome in Parkinson's patients, Conference on Recent Advances in MRI and MRS, 21–23 March 2017, INSA, New Delhi
36. fMRI study of the stroop color, Word Task-Conference on Recent Advances in MRI and MRS, 21–23 March 2017, INSA, New Delhi
37. A pilot study of in-bore MR, guided prostate biopsy, Conference on Recent Advances in MRI and MRS, 21–23 March 2017, INSA, New Delhi
38. Combined utility of MRS, DWI and DCE-MRI in breast cancer diagnosis, Conference on Recent Advances in MRI and MRS, 21–23 March 2017, INSA, New Delhi

RESEARCH

Funded projects

Ongoing

1. Funds for improvement of S&T infrastructure in Universities and Higher Educational Institutions (FIST), N.R. Jagannathan, DST, 5 years, 2014–19, Rs. 147 lakhs
2. Magnetic Resonance (MR) Multi-parametric Approach to the Study of Breast Cancer and its Correlation with Molecular Markers, N.R. Jagannathan, DST, 3 years, 2013–16, Rs. 53.7 lakhs
3. Spectroscopic analysis of medicinal plants for standardization and quality assessment, Rama Jayasundar, National Medicinal Plant Board (NMPB), Department of AYUSH, 3 years, 2014–17, Rs. 48.96 lakhs
4. NMR phytometabolomics and studies of chemosensory signature to address the fundamental question of '*rasa*' in ayurvedic pharmacology, Rama Jayasundar, Science and Engineering Research Board (SERB), Department of Science and Technology (DST), Govt. of India, 3 years, 2017–20, Rs. 74.76 lakhs
5. Elucidating the pathobiology of classical ayurvedic interventions in post stroke recovery using Magnetic Resonance and other techniques based structural, functional and chemical biomarkers, Rama Jayasundar, Science and Engineering Research Board (SERB), DST, 3 years, 2017–20, Rs. 79.0 lakhs
6. Morphological, functional, biochemical and behavioral evaluation post-emf radiation, S. Senthil Kumaran, DST, 3 years, 2015–17, Rs. 49.50 lakhs

Completed

1. Spectroscopic analysis of medicinal plants from an ayurvedic perspective to aid in new standardization and quality assessment parameters, Rama Jayasundar, National Medicinal Plant Board (NMPB), Department of AYUSH, 4.5 years, 2011–16, Rs. 96.9 lakhs
2. In vitro assessment of anti-HIV potential and phytometabolomics of select medicinal plants, Rama Jayasundar, AIIMS, New Delhi, 2 years, 2014–16, Rs. 9.50 lakhs
3. Functional and neurobiological analysis in visually impaired subjects, Senthil Kumaran, DST-Cognitive Science Initiative, 3 years, 2014–16, Rs. 34.02 lakhs
4. Post stroke neuroplastic potential during spontaneous recovery for motor processing, S. Senthil Kumaran, AIIMS, 3 years, 2014–16, Rs. 4.75 lakhs

Departmental projects

Ongoing

1. Magnetic Resonance (MR) Multi-parametric Approach to the Study of Breast Cancer and its Correlation with Molecular Markers
2. Role of MR guided biopsy in detection of prostate cancer
3. Metabolomics study of celiac disease by NMR spectroscopy
4. NMR spectroscopic analysis of ayurvedic polyherbal formulations
5. NMR spectroscopic analysis of medicinal plants
6. NMR spectroscopic analysis of select medicinal plants from an ayurvedic perspective
7. Role of Magnetic Resonance in assessing therapeutic efficacy of ayurvedic treatments in stroke
8. NMR phytometabolomics and in vitro assessment of anti-HIV potential of select medicinal plants
9. Neurocognitive and visual pathway alteration associated with perception and semantic tasks in visually impaired subjects, using functional magnetic resonance imaging
10. Neuro-psychological and neurobiological basis of bilingual developmental dyslexia studied pre- and post-therapy by cognitive behaviour and functional magnetic resonance imaging (fMRI)
11. Identification of biomarkers in Parkinson's disease using NMR
12. Metabolomic profile of healthy neonates
13. Evaluation of fumaric acid esters (FAEs) in experimental model of stroke in rats.
14. Neuroprotective study of nano carrier based Berberine chloride in middle cerebral artery occlusion model of transient focal cerebral ischemia in rats.
15. Evaluation of dihydromyricetin in experimental model of stroke and post stroke seizure susceptibility in rats.
16. Molecular and biochemical characterization of hepatic glycogenoses type I and III
17. Metabolomics study of prostate cancer by using NMR spectroscopy

Completed

1. Neurochemical Correlates of Cognitive Functions in Euthymic Patients with Bipolar I Disorder
2. MR based body composition analysis
3. NMR spectroscopic analysis and pharmacological evaluation of select ayurvedic formulations
4. In vitro assessment of anti-HIV potential of aqueous extracts of select medicinal plants
5. Neurocognitive and visual pathway alteration associated with perception and semantic tasks in visually impaired subjects, using functional magnetic resonance imaging (fMRI)

Collaborative projects

Ongoing

1. Neuroimaging and cerebral metabolite changes in children undergoing treatment for acute lymphoblastic leukemia: a pilot study (Paediatrics)
2. HIV associated neurocognitive decline and brain metabolism (Medicine)
3. Chemical exchange saturation transfer MRI for molecular imaging of prostate cancer (IIT Delhi)
4. Neuroprotective study of lercanidipine and citalopram in experimental model of stroke in rats (Pharmacology)
5. NMR spectroscopic analysis of ayurvedic polyherbal formulations (Ocular Pharmacology and Pharmacy)
6. NMR spectroscopic analysis of medicinal plants (Ocular Pharmacology and Pharmacy)
7. NMR spectroscopic analysis of select medicinal plants from an ayurvedic perspective (Ocular Pharmacology and Pharmacy)
8. Role of Magnetic Resonance in assessing therapeutic efficacy of ayurvedic treatments in stroke (Neurology, Neuroradiology)
9. In vitro assessment of anti-HIV potential and NMR spectroscopic phytometabolomics of select medicinal plants (Biochemistry, Ocular Pharmacology and Pharmacy)
10. Neuro-imaging Hyposmia in Movement Disorder (Neurology)
11. Neuromapping of functional deficits associated with Parkinsonian disorders (Neurology)
12. Predicting functional outcome after acute stroke: evaluation of a module of clinic-radiological parameters and growth factors in Asian Indians (Neurology)
13. Study of paracrine mechanisms of autologous mononuclear stem cells in chronic ischemic stroke using biofunctional markers (Neurology)
14. Neuroimaging and cerebral metabolite changes in children undergoing treatment for acute lymphoblastic leukemia: a pilot study (Paediatrics)
15. Small molecule Bio-signatures in Diagnosis of Tuberculosis (Microbiology)
16. Engineered Multifunctional Nanomaterials for Multimodal Imaging (Sastra University, Thanjavur)
17. Measuring organ cross talk in acute-on chronic liver failure (ACLF) through metabolomics - a pilot study (Biochemistry)
18. Role of multiparametric MRI, diffusion tensor imaging and quantitative shear wave elastography in evaluation of prostate cancer (Radiodiagnosis)

Completed

1. Role of MRS in CNS involvement in HIV population in India (Medicine)
2. To study the pathogenesis of non-alcoholic fatty liver disease (NAFLD) in Indian population (Gastroenterology)
3. Body composition analysis and phenotyping (Anatomy)
4. NMR spectroscopic analysis and pharmacological evaluation of select ayurvedic formulations (Ocular Pharmacology and Pharmacy)
5. In vitro assessment of anti-HIV potential of aqueous extracts of select medicinal plants (Biochemistry, Ocular Pharmacology and Pharmacy)
6. Neurochemical Correlates of Cognitive Functions in Euthymic Patients with Bipolar I Disorder (Psychiatry)
7. NMR Metabolomics study of Oral cancer and Diabetic retinopathy (IIT, Kharagpur)

PUBLICATIONS

Journals: 14

Chapters in books: 1

PATIENT CARE

The department has three whole body MRI scanners (one 1.5 Tesla and two 3.0 Tesla scanners) for patient care and research. The department provides more than twelve hours per day of patient care MRI services. The number of patients scanned during the year were:

Clinical Diagnostic MRI Scan: 6617 patients

Research: 380 patients and subjects

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor N.R. Jagannathan was elected as Vice-President of the Indian National Science Academy (INSA); Received prestigious S.K. Mitra Birth Centenary Gold Medal Award for significant and lifetime contribution to development of Science and Technology in the country by the Indian Science Congress Association; Chairperson, INSA committee for International Union of Pure and Applied Biophysics (IUPAB); J.C. Bose National Fellow of DST, Government of India; President, Indian Chapter of International Society for Magnetic Resonance in Medicine (ISMRM), USA and Vice-President, Molecular Imaging Society of India (MISI); Associate Member, Quantitative Imaging Network (QIN), National Cancer Institute (NCI), National Institutes of Health (NIH), USA; Co-organizer of Scientific Sessions on Infectious Disease–Preclinical Cell and Tissue Level Studies at 2016 World Molecular Imaging Congress (2016 WMIC), New York, USA, September 2016; Convener, Conference on Recent advances in MRI and MRS under aegis of ISMRM, New Delhi, 21–23 March 2017; DST nominated member of the Facility Management Committee (FMC), Sophisticated Analytical Instruments Facility, Indian Institute of Technology, Madras, Chennai; Chairperson, National Steering Committee (NSC) for Indigenous Magnetic Resonance Imaging (IMRI)—A National Mission, Department of Electronics and Information Technology, Ministry of Communication and Information Technology; Member, Science Advisory Committee (SAC), Center of Biomedical Research (CBMR), SGPGI Campus, Lucknow; Member, Task Force on Cognitive Science Research Initiative (CSRI) of DST; Member, Progress Review Group (PRG), ICMR, and Management Advisory Committee of 800 MHz NMR Facility, Indian Institute of Science, Bangalore. Member, Fund for Improvement of S&T Infrastructure in Higher Educational Institutions (FIST) DST; Member, Progress Review of IRPHA project of DST for IIT, Chennai; Chairperson, IIPME of Medical Electronics Evaluation and Advisory Group (MEAG), BIRAC, Government of India; Member, Young Investigators Awards (YIA) Committee, ISMRM, USA; Member, Editorial board: (i) *MAGMA (Magnetic Resonance Materials in Physics, Biology and Medicine)*, (Springer); (ii) *Magnetic Resonance Insights* (Libertas Academica, USA); (iii) Deputy Editor of *Neuroscience Imaging*; (iv) *NMR Biomedicine* (John Wiley & Sons); (v) *Magnetic Resonance Imaging* (Elsevier); (vi) *Biomedical Spectroscopy & Imaging* (IOC Press, Netherlands); (vii) *Biophysical Reviews* (Springer); Distinguished Reviewer, Journal of Magnetic Resonance Imaging (Wiley International), 2016; Member, Steering committee, Asian Biophysics Association (ABA) and Steering Committee, Sophisticated Instruments Facilities of DST; Coordinator, Expert panel on Biomedical Devices and Bioengineering, Life Sciences Research Board, DRDO; Member, Scientific Advisory Committee, Biosciences and Bioengineering Group, IIT Indore; Member, Science Advisory Council, National Brain Research center (NBRC), Manesar, Haryana; Past President, Indian Biophysical Society (IBS); Fellow of Indian Academy of Sciences (FASc), Bangalore; Fellow of National Academy of Sciences (FNASc), Allahabad; Fellow of National Medical Academy of Sciences (FAMS), Delhi; Fellow of ISMRM, USA and Fellow (FNA), Indian National Science Academy (INSA).

Professor Rama Jayasundar was member of international research consortium by NIH, USA-sponsored South East Asia Center for Complementary and Integrative Health in India; and of the advisory board of International Scientific Research Group on Ayurveda, Germany and a member of Cambridge Commonwealth Trust, UK.

Professor S. Senthil Kumaran is reviewer for Journal Magnetic Resonance Imaging, Journal of Parkinson's Disease, Journal of Medical Physics, Journal of BioSciences, Biomedical Engineering Biomedizinische Technik and Contrast Media and Molecular Imaging and for projects submitted to DBT and DST.

Dr Uma Sharma is a reviewer for J Magnetic Resonance Imaging (Wiley International); for International Wiley Journals, NMR Biomedicine and J Magn. Reson. Imaging, Biochem Biophys Reports, World J Gastroenterology, European J Pharmacology; Executive Council Member, Indian Biophysical Society.

Dr Virendra Kumar was awarded the membership of the National Academy of Medical Sciences (NAMS) and E. K. Zavoisky Award from International Society for Magnetic Resonance in Medicine.

9.23. Nuclear Medicine

Professor and Head

C.S. Bal

Professors

Rakesh Kumar

Chetan D Patel (CNC)

Associate Professors

Madhavi Tripathi

Anil K. Pandey (Medical Physics)

Assistant Professors

Nishikant A. Damle

Shamim A. Shamim

HIGHLIGHTS

The Nuclear Medicine department has three SPECT/CT, two single head and one dual head gamma cameras, an uptake probe with well counter and a well equipped radiopharmacy laboratory. There are also two PET/CT scanners in the department. In the last year the department took upon itself an initiative to reduce the waiting list of all investigations. The department is running a daily OPD for Radionuclide Therapy and all five consultants in the department run the OPD. Many points raised by the regulatory authority (AERB) that had not been complied with before, were rectified and compliance report was sent to the AERB. A phenomenal increase in the number of scans done was achieved. All investigations in Nuclear Medicine at AIIMS are done at very nominal charges. Thus the poor and middle class patients can greatly benefit since these investigations are available at very few centres across the country and that too at high costs.

Nuclear Medicine in Cardiothoracic Centre (CTC) routinely performs Diagnostic Nuclear Cardiological Procedures. The unit is also actively involved in teaching and research work. Nuclear Medicine Postgraduates and Nuclear Medicine Technology students are trained on rotational basis in Nuclear Cardiology Procedures. The department established normal values of Cardiac Synchrony using both Radionuclide Ventriculography and Myocardial Perfusion SPECT in Indian population. The unit is involved in International Multicentre Research Project titled 'Value of intraventricular synchronism assessment by Gated SPECT Myocardial Perfusion Imaging (MPI) in the management of heart failure patients submitted to Cardiac Resynchronisation Therapy', funded by International Atomic Energy Agency, Vienna, Austria. This unit has been collaborating with other departments in funded projects, two of which are funded by ICMR, one by International Atomic Energy Agency and one funded by National Heart, Lung and Blood Institute (NHLBI), USA.

EDUCATION

Currently the department has 16 MD students, 16 MSc students, 5 PhD students and is actively involved in daily academic activities as well as research work. We are happy to announce that the department has started DM course in Therapeutic Nuclear Medicine first time in the country.

The faculty of the department participated in and delivered 48 lectures in continuing medical education programmes, workshops, symposia and annual conferences during the year.

CMEs/Workshop/Symposia/National and international conferences (organised by the department)

1. Neurological Applications of PET & SPECT: Epilepsy and dementia, 25 October 2016, AIIMS, Delhi
2. Indian Thyroid Society Annual Conference, 26–27 February 2017, India Habitat Centre, New Delhi

Lectures delivered

C.S. Bal: 7

Rakesh Kumar: 7

Chetan D Patel: 3

Anil K Pandey: 3

Madhavi Tripathi: 5

Nishikant A. Damle: 3

C.S. Bal: 7

1. Recent advances in PRRT in neuroendocrine tumours, SNM Meeting, 11–15 June 2016, San Diego, California
2. Recent ATA guidelines for management of thyroid cancers, ANMPI, 17 September 2016, Aurangabad, Maharashtra
3. One Day National Symposium on Thyroid Cancer, RML Hospital, 24 September 2016, Lucknow
4. Dynamic risk stratification on DTC, IFHNOS, 12–15 October 2016, New Delhi

5. Post-therapeutic dosimetry of ^{177}Lu -DKFZ-PSMA-617 in treatment of patients with castration resistant prostate cancer, 48th Annual Conference of the Society of Nuclear Medicine India, 17–20 November 2016, Ahmedabad, Gujarat
6. Initial treatment: remnant ablation, ITSCON 2017, 24–26 February 2017, India Habitat Centre, New Delhi
7. Differentiated Thyroid Carcinoma (DTC): Role of iodine isotopes (Focusing on relapse and metastatic carcinoma), Thyrocon Conference, 4 March 2017, AIIMS, Jodhpur

Rakesh Kumar: 7

1. PET/CT in lymphoma, Panel discussion, ACOS, 9 April 2016, Delhi
2. PET/CT guided biopsy, British Society Nuclear Medicine, 18 April 2016, Birmingham, UK
3. PET/CT in tuberculosis-key note by India, ASNAF, 6 May 2016, Shanghai, China
4. PET/CT in infection, 11th International Conf. on RPs Therapy, 11 November 2016, Cochin, Kerala
5. Rapid fire quiz, 48th Annual Conference of SNM, 17 November 2016, Ahmedabad, Gujarat
6. PET/CT in uro-oncology, ISUII 2017, 29 January 2017, AIIMS, New Delhi
7. Nuclear medicine in pediatric surgery, Pediatric surgery update-2017, 25 February 2017, AIIMS, New Delhi

Chetan D Patel: 3

1. Approaches of reducing radiation dose in myocardial perfusion SPECT, 48th Annual Conference of Society of Nuclear Medicine, 17–20 November 2016, Ahmedabad Management Association (AMA), Ahmedabad
2. Role of nuclear medicine techniques in the assessment of cardiac dyssynchrony, 1st World Congress on Cardiac Imaging & Clinical Cardiology, 23–26 February 2017, Mumbai
3. Assessment of cardiac dyssynchrony: Nuclear medicine techniques, CME Programme of Pan–African e-Network Project, 8 September 2016, Telemedicine Facility, AIIMS, Delhi

Anil K Pandey: 4

1. Development and verification of a digital image enhancement method for $^{99\text{m}}\text{Tc}$ -mdp bone imaging, International Conference on Radiation Biology 2016, 9–11 November 2016, Centre for Environmental Nuclear Research, Directorate of Research, SRM University, Chennai
2. Digital image processing in nuclear medicine, 48th Annual Conference of the Society of Nuclear Medicine India (SNMICON 2016), 17–20 November 2016, Ahmedabad Management Association (AMA), Ahmedabad
3. Texture analysis in nuclear medicine, 1st Annual Conference of Nuclear Medicine Physicist Association of India (NMPAI 2017), 25–26 February 2017, Kolkata

Madhavi Tripathi: 5

1. Metabolic phenotype on F-18 FDG PET/CT and sleep architecture in mild cognitive impairment, SNMMI 2016 Annual Meeting, 11–15 June 2016, San Diego, California
2. Positron emission tomography in cognitive disorders: Metabolic signatures and imaging pathology in vivo, Advances in neuroimaging and applications in cognitive disorders (ANACoD), National Brain Research Centre, 3 May 2016, Manesar, Gurgaon
3. Amyloid imaging, brain & mind, Asian School of Continuing Medical Education, 27 August 2016, Chennai
4. Tau imaging: AIIMS experience, 14th Annual Conference of the Association of Nuclear Medicine Physicians of India (ANMPI), 17 September 2016, Aurangabad
5. Radio-theranostics in prostate cancer, CME Programme of Pan-African e-Network Project, 13 October 2016, Telemed, AIIMS

Nishikant A. Damle: 3

1. Advances in parathyroid imaging, 14th Annual Conference of Association of Nuclear Medicine Physicians of India, 16–18 September 2016, Aurangabad
2. ^{177}Lu -PSMA therapy in prostate cancer, 14th Annual Conference of Association of Nuclear Medicine Physicians of India, 16–18 September 2016, Aurangabad
3. Medullary thyroid cancer, SNMICON 2016, 20 November 2016, Ahmedabad, Gujarat

Oral papers presented: 15

1. Rakesh Kumar, FDG PET/CT evaluation of the contralateral breast in patients with recently diagnosed breast cancer, European Society of Nuclear Medicine, 15–19 October 2016, Barcelona, Spain

2. Rakesh Kumar, PET/CT in vasculitis for diagnosis and treatment response evaluation, IMIC, 10–14 October 2016, IAEA, Vienna, Austria
3. Anil K Pandey, Role of suprathreshold stochastic resonance technique in the detection of abdomino-pelvic tumour on 18F-FDG PET/CT scan, International Conference on Radiation Biology 2016, 9–11 November, 2016, Centre for Environmental Nuclear Research, Directorate of Research, SRM University, Chennai
4. Anil K Pandey, Development and verification of a Computer Programme that reconstructs image from multiple parallel projections using Filtered Back Projection Technique, 48th Annual Conference of the Society of Nuclear Medicine India (SNMICON 2016), 17–20 November 2016, Ahmedabad Management Association (AMA), Ahmedabad
5. Anil K Pandey, Development and Validation of Suprathreshold Stochastic Resonance based Image Processing Method for Detection of Abdomino-Pelvic Tumour on PET/CT Scans, 48th Annual Conference of the Society of Nuclear Medicine India (SNMICON 2016), 17–20 November 2016, Ahmedabad Management Association (AMA), Ahmedabad
6. Anil K Pandey, Comparison of fusion of PET and CT images using techniques of Alpha-Blending and Principal Component Analysis (2nd Best Oral Paper Presentation Award), 1st Annual Conference of Nuclear Medicine Physicist Association of India (NMPAI 2017), 25–26 February 2017, Kolkata, West Bengal
7. Madhavi Tripathi, Comparison of F18-Fluorocholine PET/CT and 4D CT in the preoperative localization of eutopic and ectopic parathyroid adenoma-initial results, SNMMI 2016 Annual Meeting, 11–15 June 2016, San Diego, California
8. Madhavi Tripathi, Role of FDG PET/CT in staging early carcinoma cervix, SNMMI 2016 Annual Meeting, 11–15 June 2016, San Diego, California
9. Madhavi Tripathi, Prospective comparison of 18F-Fluorocholine PET/CT, dDa phase 99m Tc-sestamibi imaging with early SPECT/CT and ultrasonography in the preoperative localization of parathyroid adenoma, SNMMI 2016 Annual Meeting, 11–15 June 2016, San Diego, California
10. Madhavi Tripathi, Post-therapeutic dosimetry of Lu-177-DKFZ-PSMA-617 in treatment of patients with castration resistant prostate cancer, SNMMI 2016 Annual Meeting, 11–15 June 2016, San Diego, California
11. Madhavi Tripathi, Role of F-18 FDG PET/CT in the management of patients with primary breast lymphoma, SNMMI 2016 Annual Meeting, 11–15 June 2016, San Diego, California
12. Madhavi Tripathi, F-18 FDG PET patterns in Autoimmune Encephalitis, SNMMI 2016, 17–20 November 2016, Ahmedabad, Gujarat
13. Madhavi Tripathi, Tc-99m TRODAT in the evaluation of clinically uncertain Parkinsonian Syndrome, SNMMI 2016, 17–20 November 2016, Ahmedabad, Gujarat
14. Madhavi Tripathi, Nuclear imaging in dementia, CME on Neurological Applications of PET & SPECT: Epilepsy and Dementia, 25 October 2016, AIIMS, Delhi
15. Nishikant A Damle, Preliminary evaluation of synthesis and quality control results for 68Ga-labeled exendin using an automated module, SNMMI 2016, 17–20 November 2016, Ahmedabad, Gujarat

RESEARCH

Funded projects

Ongoing

1. Value of intraventricular synchronism assessment by Gated SPECT myocardial perfusion imaging (MPI) in the management of heart failure patients submitted to cardiac resynchronization therapy, Chetan D. Patel, International Atomic Energy Agency (IAEA), Vienna, 4 years, 2013–17, Rs. 14 Lakhs
2. Study of the changes in sleep architecture, Melatonin levels and metabolic abnormalities on F-18 Fluorodeoxyglucose Positron Emission Tomography (FDG-PET) in persons with Mild Cognitive Impairment (MCI) progressing to Alzheimers type Dementia (AD), Madhavi Tripathi, DST, 3 years, 2013–16, Rs. 54.42 Lakhs
3. Standardisation of 18F-FDG PET/CT interpretation criteria for early response evaluation in Pediatric Lymphoma, C.S. Bal, IAEA, Vienna, 4 years, 2014–18, Euro 96000
4. Dosimetry of ¹⁷⁷Lu-PSMA-617 in castration resistant prostate cancer patients, C.S. Bal, ICMR, 3 years, 2017–20, Rs. 9.64 Lakhs

Completed

1. Use of Sentinel Lymphnode Detection in Breast, Head & Neck Cancers, C.S. Bal, IAEA, Vienna, 4 years, 2012–16, Euro 6000 per year
2. To develop 68Ga-Labelled Rituximab for the Diagnosis of B-Cell Non-Hodgkin's Lymphoma patients, C.S. Bal, IAEA, Vienna, 3 years, 2012–15, Euro 6000 per year

3. Re-establishment of normal radioactive iodine uptake reference range in the area of universal salt iodization in the Indian Population, C.S. Bal, AIIMS, 2 years, 2013–15, Rs. 4.95 Lakhs
4. ⁶⁸Ga-Labelled PSMA PET/CT in the evaluation of Prostate Cancer Patients, C.S. Bal, AIIMS, New Delhi, 1 year, 2015–16, Rs. 4.95 Lakhs

Departmental projects

Ongoing

1. Evaluation of F-18 FDOPA in detection of Myocardial Sympathetic Denervation in patients with Advanced Parkinson's disease
2. Role of Ga⁶⁸-DOTANOC PET/CT in Cardiac Sarcoidosis; Comparison with Cardiac MRI
3. Optimization of reconstruction parameters in Ordered Subset Expectation Maximization (OSEM) and comparison with images reconstructed using filtered back projection in ^{99m}Tc-SESTAMIBI myocardial perfusion imaging
4. Comparison of pulmonary perfusion after Fontan procedure using Tc^{99m} MAA lung perfusion scan: Extracardiac TCPC vs lateral tunnel TCPC
5. To study the role of vascular function and pain sensitivity in microvascular angina
6. Normalized Mutual Information based methods and its influence on PET and CT image registration
7. Role of Gaussian and Butterworth Filter in Noise Removal from Nuclear Medicine Images
8. Optimisation of reconstruction parameters in Ordered Subset Expectation Maximization and Comparison with Filtered Back Projection reconstructed images in Tc^{99m}-MIBI myocardial perfusion SPECT
9. Interim treatment response evaluation of non-small cell lung cancer after four cycles of chemotherapy using texture analysis on F18-FDG PET/CT study
10. Role of texture analysis of baseline F18-FDG PET/CT as predictor of survival in non-small cell lung cancer
11. Standardisation of Dynamic F-18 FDG protocol and comparison of whole body FDG PET with diffusion weighted MRI for early treatment response evaluation in lung cancer
12. Comparison of synthesis procedure and properties of Re-188 lipiodol & Re-188 SSS lipiodol
13. Clinico-radio-pathological evaluation of different possible primary sites in cases of FNAC proven squamous cell carcinoma in secondary cervical lymph node with unknown primary site
14. Labeling procedure of methylene blue with ⁶⁸Ga and optimization of imaging time for lymphatic disorders imaging

Completed

1. Tumour segmentation on F-18 FDG PET/CT images in patients with solid tumour malignancies using the Watershed Algorithm
2. Detection of asymptomatic myocardial ischemia in patients with type 2 diabetes mellitus
3. Pediatric Hodgkin Lymphoma: Biology and outcome
4. Comparison of Myocardial perfusion abnormalities detected by stress adenosine Tc^{99m} MIBI myocardial perfusion SPECT and Coronary flow reserve on adenosine stress echocardiography for the screening of patients after arterial switch operation for transposition of great arteries with regressed ventricle
5. Role of Suprathreshold Stochastic Resonance Technique in the detection of abdomino-pelvic tumour on 18F-FDG PET/CT scan
6. Development and validation of Filtered Back Projection (FBP) Algorithm for Research Purposes
7. Development of 18F-FDG-PET/CT database of lung masses and computation of their feature vector
8. Tumour segmentation on F-18 FDG PET/CT images in patients with solid tumour malignancies using the Watershed Algorithm

Collaborative projects

Ongoing

1. International Study of Comparative Health Effectiveness with Medical and Invasive Approaches. (ISCHEMIA TRIAL) (Cardiology)
2. Prevalence of symptomatic and asymptomatic coronary artery disease in patients with ischemic stroke and TIA (Neurology, Cardiology)

PUBLICATIONS

Journals: 70

Abstracts: 18

Chapters in books: 2

PATIENT CARE

Radionuclide Investigation

Diagnostic		
1.	Thyroid Scan	354
2.	I-131 WB Scanning (Diagnostic)	816
3.	Bone Scan	2792
4.	Renal Dynamic Scan	3784
5.	Renal Cortical Scan	1308
6.	GFR	1850
7.	DRCG	1952
8.	HIDA scan	317
9.	GET (Gastric Emptying Time)	27
10.	Blood Pool	97
11.	Gastro Esophageal Reflux	546
12.	SPECT-CT	1439
13.	Parathyroid Scan	139
14.	Lymphoscintigraphy	398
15.	Sentinel Lymphnode	36
16.	MIBG Scan (Diagnostic)	246
17.	GHA	2
18.	Liver Spleen	10
19.	MAG-3	64
20.	Meckle's scan	48
21.	Parathyroid	139
22.	TRODAT Scan	331
23.	SPECT-CT	1439
24.	Thyroid Cancer	918
25.	Thyroidtoxicosis	241
26.	RAIU	1350
Therapeutic		
27.	I-131 WB Scanning (Therapy)	691
28.	MIBG Scan (Therapeutic)	7
29.	Lutetium 177	348
Positron Emission Tomography (PET)		
30.	18F FDG	4950
31.	Ga68 PSMA	342
32.	Ga68 Dota Noc	471
33.	F18 Choline	81
34.	Ga68 DATA	29
35.	68Ga Exendine	12
36.	F18 DOPA	41
37.	F18 TAU	53
38.	Fluoride	80
39.	18F FES	13
40.	Cardiac PET	81
41.	Myocardial Perfusion Study	1683
42.	RNV Study	719
43.	Misc. (V/Q Scan, 1st Pass)	162

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Dr Anil K. Pandey won the 2nd Best Oral Paper Presentation Award on “Comparison of fusion of PET and CT images using techniques of Alpha-Blending and Principal Component Analysis” in 1st Annual Conference of Nuclear Medicine Physicist Association of India (NMPAI 2017), Kolkata.

9.24. Obstetrics and Gynaecology

Professor and Head

Alka Kriplani

Professors

Sunesh Kumar

Dipika Dekka

Neerja Bhatla

K.K. Roy

Neena Malhotra

Vatsla Dadhwal

Nutan Agarwal

J.B. Sharma

Neeta Singh

Associate Professors

Aparna Sharma

Garima Kachhawa

Reeta Mahey

PV Anamail

Assistant Professors

Vidushi Kulshrestha

Seema Singhal

Rajesh Kumari

Jyoti Meena

Juhi Bharati

Scientist

Rohini Sehgal (G.III)

HIGHLIGHTS

The Obstetrics and Gynaecology Department continues to organize monthly meetings for postgraduate training since 2001. The training component includes clinical and surgical skills, development of protocols and guidelines, case presentations and discussions. Invited faculties from various academic and teaching institutions of Delhi as well as international faculty contribute towards training of postgraduates. The department offers short and long term training in various super specialty subjects like 'Gynae Endoscopy Surgery', 'High Risk Pregnancy', 'Gynae Oncology Ultrasonography' and 'Infertility'.

The Post-Partum Programme (PPP) is a mandatory centre hospital based approach to family welfare programme by providing a package of RCH and family welfare services in the vicinity of the hospital as well as in the field practice areas. It is run as an integrated multidisciplinary exercise where the department of Obstetrics and Gynaecology coordinates with departments of Pediatrics, Community Medicine, Surgery and Anesthesiology.

EDUCATION

Undergraduate, Postgraduate, Paramedical

Delhi Post Graduate Medical Education Forum (Department of Obstetrics and Gynaecology) organizes monthly meetings for postgraduate training since 2001. These are to supplement training of postgraduates in clinical and surgical skills, problem oriented approach to Obstetrics and Gynaecology, protocols and guidelines, case presentations and discussions. Invited faculties from various academic and teaching institutions of Delhi as well as international faculty contribute towards training of postgraduates.

Department started the following initiatives for postgraduates:

1. Six monthly examinations for postgraduates with a systematic course structure and feedback system
2. Coordination with Association of Obstetricians and Gynaecologists of Delhi to send exam going postgraduates for regular teaching and training updates

Super specialty courses

From the academic year 2016–2017 onwards super speciality courses such as Fellowship (Fetal Medicine), MCh (Gynae Oncology), Fellowship (Uro gynae) and DM (Reproductive Medicine) were started. In each course one doctor had been admitted.

Short Term Training

The department offers short term training in various super specialty subjects like 'Gynae Endoscopic Surgery', 'High Risk Pregnancy', 'Gynae Oncology', 'Ultrasonography' and 'Infertility'. Following Doctors were trained in different disciplines.

1. Dr Sushma Nigam, Bhopal, MP, 4 January–3 April 2016, Laparoscopic Surgery
2. Dr Viyayata, Sonapat, Haryana, 1 February–30 April 2016, Gynaecology Oncology

3. Dr Mohammed Saeed Shaker, Dubai, 21 April–18 May 2016, Observer
4. Ms Dev Kumari Rai Shrestha, Nepal, 2 May–13 June 2016, Observer
5. Dr Asmita M. Rathore, New Delhi, 7 May–17 July 2016, Foetal Medicine
6. Dr Ritu Mittal, New Delhi, 11 July–6 August 2016, Laparoscopy and other endoscopic procedures
7. Dr Argha Mallya, Tripura, 1 November–31 December 2016, General Obstetrics and Gynaecology
8. Dr Sharmistha Sarkar, Tripura, 1 November–31 December 2016, General Obstetrics and Gynaecology
9. Dr Pagan James, South Sudan, 6–20 March 2017, Observer
10. Dr Aka Gabriel Matuv, South Sudan, 6–20 March 2017, Observer
11. Ms. Agnes Juan Joseph, South Sudan, 6–20 March 2017, Observer
12. Dr Vandana Goel, New Delhi, 2–20 February 2017, Foetal Medicine
13. Dr Simar Kaur, New Delhi, 1–30 March 2017, Obstetrics and Gynaecology, Foetal Medicine

Long Term Training

1. Dr (Lt. Col). Mohd. Rasheed, Army Medical Corps, New Delhi, 4 April 2016 to 1 April 2017, Maternal Foetal Medicine

CMEs/Workshops/Symposia/National and International Conferences

1. GOAL Conference 2016, Controversies to Consensus in Obstetrics and Gynaecology, 9 & 10 April 2016, Udaipur, Rajasthan
2. WHI Workshops, 26th Course, 23–28 May 2016, AIIMS, New Delhi
3. Workshop on Endometriosis, 5 August 2016, AIIMS, New Delhi
4. ENDOFERT, Live Endoscopy Workshop, 6 August 2016, AIIMS, New Delhi
5. ENDOFERT, CME, 6 August 2016, AIIMS, New Delhi
6. 1st AIIMS Cadaveric Workshop on Gynae Endoscopy (Endo Cad, 2016), 8 August 2016, AIIMS, New Delhi
7. IFFS Pre-Conference Live Endoscopy Workshop, 21 August 2016, AIIMS, New Delhi
8. Urogynaecology Workshop, 17 December 2016, AIIMS, New Delhi
9. Regional Training of Trainers' Workshop for Quality Improvement in maternal, newborn health, WH, 6–8 February 2017, AIIMS, New Delhi
10. Expert Group Meeting to develop standard treatment protocols (STPs) for management of essential obstetric conditions based on WHO guidelines for use at small hospitals, 7 & 8 March 2017, AIIMS, New Delhi
11. WHI Workshops: 27th Course, 20–25 March 2017, AIIMS, New Delhi
12. The Vth AIIMS Foetal Medicine Workshop, 4–7 April 2016, Delhi
13. Workshop on Foetal Intervention: Annual Congress of the Society of Foetal Medicine, 9–11 September 2016, Kolkata

Lectures delivered

Alka Kriplani: 54

Neerja Bhatla: 42

Vatsla Dadhwal: 11

Neeta Singh: 4

Reeta Mahey: 8

Seema Singhal: 29

Sunesh Kumar: 6

Kallol Kumar Roy: 30

Nutan Agarwal: 13

Aparna Sharma: 40

P. Vanamail: 3

Rajesh Kumari: 2

Dipika Deka: 16

Neena Malhotra: 20

J.B. Sharma: 10

Garima Kachhawa: 14

Vidushi Kulshrestha: 17

Jyoti Meena: 7

Alka Kriplani: 54

1. Caesarean Myomectomy, North Zone Yuva FOGSI, Ghaziabad Obs and Gynae Society (GOGS), 2 April 2016, Ghaziabad, Hapur
2. Role of FOGSI in provision of quality family planning services, National Family Planning Summit 2016, Family Planning Division, Ministry of Health and Family Welfare, 6 April 2016, Delhi
3. Abnormal Uterine Bleeding, Clinical Scenario, GOAL, 2016 (Gynaecology and Obstetrics Advanced Learning), FOGSI and ICOG, 9 April 2016, Delhi
4. Caesarean Myomectomy, Keynote address, Surgical Advances in Obgyn and Reproductive Medicine, Desire for Excellence (SMART OBGYN 2016), Mumbai Obstetrics and Gynaecological Society (MOGS) in association with

The South Asia Federation of Obstetrics and Gynaecology (SAFOG), (FOGSI–Urogynaecology Committee and Medical Education Committee) and AICCRCOG West Zone, 16 April 2016, Mumbai

5. Evidence based management of recurrent pregnancy loss, International Conference on High Risk Pregnancy and Labour, The Bengal Obstetric and Gynaecological Society (BOGS) under the Aegis of The Federation of Obstetric and Gynaecological Societies of India (FOGSI), 23 April 2016, Kolkata
6. FOGSI AUB Guidelines, Management of Abnormal Uterine Bleeding in Reproductive period, Evidence based recommendations for Indian women, AUB Summit, 8 May 2016, Delhi
7. Abnormal uterine bleeding, Panel Moderator, AUB Summit, 8 May 2016, Delhi
8. Caesarean Myomectomy, (MOGS), South Zone Yuva FOGSI 2016, Madurai Obstetrics and Gynaecological Society, 21 May 2016, Madurai
9. Operative Endoscopy in Infertility, 26th WHI Training course in MAS, 23 May 2016, AIIMS, Delhi
10. Evolution of TLH, 26th WHI Training Course in MAS, 26 May 2016, AIIMS, Delhi
11. Recurrent Pregnancy Loss, Evidence based management, CME, Jaipur Obs and Gyn Society (JOGS), 28 May 2016, Jaipur
12. Master Class on SILS LESS and Robotics, 12th AAGL International Congress on The Ultimate Advances in Minimal Invasive Gynaecological Surgery, Indian Association of Gynecological Endoscopists (IAGE), 3 June 2016, Mumbai
13. Training in MIS (Panel Moderator), 12th AAGL International Congress on The Ultimate Advances in Minimal Invasive Gynaecological Surgery, Indian Association of Gynecological Endoscopists (IAGE), 4 June 2016, Mumbai
14. Endoscopic Surgery in BOH, 12th AAGL International Congress on The Ultimate Advances in Minimal Invasive Gynaecological Surgery, Indian Association of Gynecological Endoscopists (IAGE), 5 June 2016, Mumbai
15. Laparoscopic Myomectomy, Various techniques of enucleation and closure, FOGSI FIGO, 2016 Conference on Best Practices, Breakthrough and Current Dilemmas in OBGYN, Pune Obst and Gynae Society (POGS), 24 June 2016, Pune
16. Reluctance to vaccinate, Breaking down the myths (Panelist), FOGSI FIGO, 2016 Conference on Best Practices, Breakthrough and Current Dilemmas in OBGYN, Pune Obst and Gynae Society (POGS), 24 June 2016; Pune
17. Wrap up and certification, FOGSI FIGO, 2016 Conference on Best Practices, Breakthrough and Current Dilemmas in OBGYN, Pune Obst and Gynae Society (POGS), 24 June 2016, Pune
18. Congenital Malformations of genital tract: Diagnosis to intervention, FOGSI FIGO, 2016 Conference on Best Practices, Breakthrough and Current Dilemmas in OBGYN, Pune Obst and Gynae Society (POGS), 25 June 2016, Pune
19. Congenital malformations of genital tract, Diagnosis to intervention, 49th Annual Scientific Congress of the Sri Lanka College of Obstetricians and Gynaecologists (SLCOG), 3 July 2016, Colombo, Sri Lanka
20. Role of Endoscopy in Infertility: Fertility enhancing endoscopy surgery, FABCON, 2016, Jaipur Obstetrics and Gynaecology Society (JOGS), 8 July 2016, Jaipur
21. Fertility enhancing endoscopy surgery (Panel Moderator), FABCON, 2016, Jaipur Obstetrics and Gynaecology Society (JOGS), 8 July 2016, Jaipur
22. AUB-GCPR Indian perspective, FABCON, 2016, Organized by Jaipur Obstetrics and Gynaecology Society (JOGS), 9 July 2016, Jaipur
23. Minimal Invasive Surgery in Gynaecological Oncology, FOGSI Gynae Oncology Conference 2016, Organized by FOGSI Oncology Committee in association with Royal College of Obstetricians and Gynaecologists (RCOG) West Zone and Panaji Obstetric and Gynaecological Society (POGS), 30 July 2016, Goa
24. Role of FOGSI (Panelist), FOGSI Gynae Oncology Conference 2016, Organized by FOGSI Oncology Committee in association with Royal College of Obstetricians and Gynaecologists (RCOG) West Zone and Panaji Obstetric and Gynaecological Society (POGS), 30 July 2016, Goa
25. Adenomyosis, current concepts in management, Precongress Workshop of ENDOFERT, 2016, Annual Conference of DGES (Delhi Gynaecological Endoscopists Society), Department of Obs and Gyn, AIIMS and DGES under aegis of Gynae Endocrine Society of India (GESI) in association with Endometriosis Committee, Endoscopy Committee and Uro-Gynaecology Committee of FOGSI, 5 August 2016, Delhi
26. Laparoscopy in Gynae Oncology, ENDOFERT, 2016 Annual Conference of DGES (Delhi Gynaecological Endoscopists Society), Organized by Department of Obs and Gyn, AIIMS and DGES under aegis of Gynae Endocrine Society of India (GESI) in association with Endometriosis Committee, Endoscopy Committee and Uro-Gynaecology Committee of FOGSI, 7 August 2016, Delhi
27. Recurrent Pregnancy Loss, Evidence based Management, Gynaecology and Endocrinology (GE) SUMMIT 2016, organized by Asian Society of Continuing Medical Education, 13 August 2016, Delhi

28. Abnormal Uterine Bleeding, Clinical Scenario 2016, (Panel Moderator) at GOAL, 2016, organized by ICOG and FOGSI, 20 August 2016, Udaipur
29. AUB, Evidence Based Management, ICOG-FOGSI National Conference on Fertility Regulation and Women's Health, organized by ICOG-FOGSI in association with OGS, 27 August 2016, Hyderabad
30. Fertility Enhancing Endoscopic Surgery (Panel Moderator), 22nd IFFS World Congress, Organized by International Federation of Fertility Societies (IFFS) jointly hosted by Indian Society for Assisted Reproduction and the Indian Fertility Society; 23 September 2016, Greater Noida
31. Contraception Epidemiology, 22nd IFFS World Congress, Organized by International Federation of Fertility Societies (IFFS) jointly hosted by Indian Society for Assisted Reproduction and the Indian Fertility Society, Greater Noida, 24 September 2016
32. Fertility Enhancing Endoscopy, Panel Moderator, American Society for Reproductive Medicine (ASRM 2016), 17 October 2016, Lake City, USA
33. Preconception Care, Good Clinical Practice Recommendations, Webinar, FOGSI, 16 November 2016, Delhi
34. Caesarean Myomectomy, World Conference on Conception 2 Delivery, organized by Mumbai Obstetrics and Gynaecological Society (MOGS) and FOGSI Committees, 19 November 2016, Mumbai
35. Laparoscopic management of nulliparous and vault prolapse, Urogynaec, 2016 Conference, Organized by FOGSI and Gandhinagar Obs Gyn Society, 2 & 4 December 2016, Ahmedabad
36. Genital Tract Malformations: diagnosis to intervention, Fertilvision, 2016, 12th Annual National Conference of Indian Fertility Society, organized by IFS (International Fertility Society), 10 December 2016, Lucknow
37. Laparoscopic management of nulliparous and vault prolapse, Urogynaec, 2016 Conference, Organized by FOGSI and Gandhinagar Obs Gyn Society, 3 December 2016, Ahmedabad
38. Genital Tract malformations: diagnosis to intervention, Fertilvision, 2016, 12th Annual National Conference of Indian Fertility Society, IFS (International Fertility Society); 10 December 2016, Lucknow
39. Congenital Malformations of the Genital Tract, Diagnosis to Intervention, Annual Conference of BOGSCON-42, The Bengal Obstetric and Gynaecological Society (BOGS), 7 January 2017, Kolkata
40. Fertility enhancing endoscopic surgeries, International Conference on Reproductive Health with Emphasis on Strategies for Infertility, Assisted Reproduction and Family Planning and the 27th Annual Meeting of the Indian Society for the Study of Reproduction and Fertility (ISSRF), 2017 Conference, 23 January 2017, ICMR, Delhi
41. Hyperlactinemia, Endocrinology Committee Workshop, 60th All India Congress of Obstetrics and Gynaecology (AICOG), FOGSI and Ahmedabad Obstetrics and Gynaecological Society (AOGS), 26 January 2017
42. Good Clinical Practice Recommendations (GCPR): Diagnosis and Management of AUB (Sponsored), 60th All India Congress of Obstetrics and Gynaecology (AICOG), FOGSI and Ahmedabad Obstetrics and Gynaecological Society (AOGS), 27 January 2017, Ahmedabad
43. Laparoscopy in Gynaecological Oncology, 60th All India Congress of Obstetrics and Gynaecology (AICOG), FOGSI and Ahmedabad Obstetrics and Gynaecological Society (AOGS), 28 January 2017, Ahmedabad
44. Congenital Malformations of Genital tract, Diagnosis to Intervention, 39th All Kerala Conference of Obstetrics and Gynaecology (AKCOG), 2017, Calicut Obstetric and Gynaecological Society (COGS), 11 February 2017, Calicut, Kerala
45. Recurrent Pregnancy Loss, Evidence based Management, 39th All Kerala Conference of Obstetrics and Gynaecology (AKCOG), 2017, Calicut Obstetric and Gynaecological Society (COGS), 11 February 2017, Calicut, Kerala
46. How endoscopy can influence result of infertility ART: case vignettes Panel Moderator, FERTICON, 2017, Department of Obstetrics and Gynaecology, AIIMS, New Delhi and Gynae Endocrine Society of India (GESI), 26 February 2017, New Delhi
47. Robotics in OBGY/General lecture on technology advancement in the field of healthcare, Adrenaline Medical Conference (AMCON), 11 March 2017, Ahmedabad
48. Congenital malformations of genital tract: Diagnosis to Intervention, YUKTI-2017 Conference, Obstetrics and Gynaecology Society of Hyderabad (OGSH), 19 March 2017, Hyderabad
49. Operative Endoscopy in Infertility, 27th WHI Training course in MAS, Department Ob Gyn, AIIMS; 20 March 2017, Delhi
50. Evolution of TLH, at 27th WHI Training course in MAS, Department Ob Gyn, AIIMS, 25 March 2017, Delhi
51. Managing iron deficiency anaemia, Society of Endometriosis and Uterine Disorders (SEUD) Congress 2017, 7 April 2017, Singapore
52. How Endoscopy Can Influence Results of Infertility/ART: Case Vignettes (Panel Moderator, 22nd Annual Congress ISAR, 2017, Indian Society for Assisted Reproduction in collaboration with its Haryana State Chapter, 21 April 2017, Gurugram

53. Operative Endoscopy in Infertility, 28th WHI Training course in MAS, Department Ob Gyn, AIIMS, 20 March 2017, Delhi
54. Evolution of TLH, 28th WHI Training course in MAS, Department Ob Gyn, AIIMS, 23 March 2017, Delhi

Sunesh Kumar: 6

1. Surgical anatomy of the omentum, total omentectomy, 2nd Cadaver Dissection Workshop and CME in Gynae Oncology (CaDGO), 23 April, 2016, Trauma Centre, AIIMS, New Delhi
2. Laparoscopy, pt. positioning pneumoperitoneum safe first entry, selection of accessory ports indications/contradictions, Training Course in Minimally Invasive Gynaecology, 24 May 2016, AIIMS, New Delhi
3. Endometriosis and Malignancies, Annual Conference of Delhi Gynaecological Endoscopists Society (DGES) END 2016, 5 August 2016, AIIMS, New Delhi
4. Forceps and Ventouse Application and Heart Disease: RHD+MS during Pregnancy, PG-UPDATE 2016, AOGD, 14 August 2016, AIIMS, New Delhi
5. Forceps and Ventouse, Principles and Application, 19th Postgraduate Practical Course, 16 October 2016, MAMC and Lok Nayak Hospital, New Delhi
6. Laparoscopy, pt. positioning pneumoperitoneum safe first entry, selection of accessory ports indications/contradictions, Training Course in “Minimally invasive Gynaecology”, 25 March 2017, AIIMS, New Delhi

Dipika Deka: 16

1. Optimizing prenatal care in high risk pregnancy (guidelines), International Conference on High Risk Pregnancy and Labour (HRPL 2016), The Bengal Obstetric and Gynaecological Society (BOGS), The Federation of Obstetric and Gynaecological Societies of India (FOGSI), 24 April 2016, Kolkata
2. Recurrent pregnancy loss, Conference of Muzaffarpur Obst. and Gynae. Society, Muzaffarpur, 14–16 May 2016, Ayushman Hospital, Muzaffarpur
3. Moderator: panel discussion on reducing cesarean section rate and minimizing complications associated with caesarean section, Conference of Muzaffarpur Obst. and Gynae. Society, Muzaffarpur, 14–16 May 2016, Ayushman Hospital, Muzaffarpur
4. Deciding termination of pregnancy for Fetal Anomaly and Fetal Therapy, ICOG CME Dibrugarh Obstetrics and Gynaecological Society, 20–23 May 2016, Dibrugarh
5. Intersex, Department of Obstetrics and Gynae, Bharati Vidyapeeth University Medical College in Association with ISOPARB, 7 June 2016, Bharati Vidyapeeth University Medical College, Pune
6. Panel discussion on cesarean section, Symposium on High Risk Pregnancy, Department of Obstetrics and Gynae, Bharati Vidyapeeth University Medical College in Association with ISOPARB, 7 June 2016, Bharati Vidyapeeth University Medical College, Pune
7. Panel discussion, CME cum Workshop on Prenatal Diagnosis and Therapy ‘Born Healthy’, Indian Society of Perinatology and Reproductive Biology, Assam Chapter, 16 & 17 July 2016, Down Town Hospital, Guwahati
8. Prenatal diagnostic tests for haemoglobinopathies, Programme on Anemia During Pregnancy, Association of Obstetricians and Gynaecologists of Delhi (AOGD), 30 July 2016, New Delhi
9. Fetal transfusion—Tips and tricks, CME on Recent Advances in Fetal Diagnosis and Therapy, Subcommittee of Fetal Medicine, AOGD, 11 August 2016, Max Super Speciality Hospital, Saket, New Delhi
10. CVS, Amniocentesis, or Cordocentesis: Which Procedure and Why, Annual Congress of the Society of Fetal Medicine, Fetal Med 2016, 10 September 2016, Kolkata
11. Prenatal diagnosis and genetic counseling, PBL session, 15 October 2016, MAMC Hospital, New Delhi
12. Advances in fetal medicine, 23rd Annual Conference of NARCHI, Delhi Branch, 22 October 2016, LHMC Hospital, New Delhi
13. Intra uterine diagnostic procedures, Max Medicon 2017, Department of Obst. and Gynae, Max Super Speciality Hospital, 22 January 2017, Delhi
14. Fetal medicine and case presentation, CME in Obst and Gynae, 11 & 12 February 2017, Guwahati Medical College, Guwahati
15. Managing FGR, Second MAMC Maternal Fetal Medicine Workshop Fetal Growth Restriction, 18 February 2017, Department of Obstetrics and Gynaecology, MAMC, New Delhi
16. Moderated panel discussion with case presentation, Fetal Therapy: What can be done in India: Indian Experience, Annual Congress of the Society of Fetal Medicine, Fetal Med 2016, 9–11 September 2016, Kolkata

1. Current status of HPV Vaccine, 11th Annual Conference of the Indian Society of Colposcopy and Cervical Pathology (ISCCP, 2016), 2 & 3 April 2016, AIIMS, Jodhpur
2. HPV Vaccination: Latest evidence on safety and efficacy, Leadership Training in Colposcopy and Advocacy for Cervical Cancer Control, 4 & 5 April 2016, New Delhi
3. Clarifying the Facts: Vaccination and Screening, Leadership Training in Colposcopy and Advocacy for Cervical Cancer Control, 4 & 5 April 2016, New Delhi
4. Diagnosis and Management of precancerous lesions of Cervix, 12th International Conference of Asian Clinical Oncology Society (ACOS), 8–10 April 2016, New Delhi
5. Vaccination in Ca Cervix: What all you want to know, 3rd Goal Conference on ‘Controversies to Consensus in Obstetrics and Gynecology’, 9 & 10 April, 2016, AIIMS, New Delhi
6. Cervical Cancer Screening and Current Guidelines in India, CME, Workshop on Cancer Cervix and Colposcopy, Jabalpur Obstetrics and Gynaecological Society, 12 June 2016, Jabalpur
7. HPV Vaccination Update, CME, Workshop on Cancer Cervix and Colposcopy, Jabalpur Obstetrics and Gynaecological Society, 12 June 2016, Jabalpur
8. HPV testing dilemmas in diagnosis, CME, Workshop on Cancer Cervix and Colposcopy, Jabalpur Obstetrics and Gynaecological Society, 12 June 2016, Jabalpur
9. Reluctance to vaccinate, Breaking down the myths, FOGSI, FIGO 2016 Conference on Best Practices, Breakthrough and Current Dilemmas in OBGYN, 24–26 June 2016, Pune
10. HPV infection in HIV Positive women: Start with those at highest risk, FOGSI, FIGO 2016 Conference on Best Practices, Breakthrough and Current Dilemmas in OBGYN, 24–26 June 2016, Pune
11. The Indian HPV scenario: From bench to bedside and beyond, FOGSI, FIGO 2016 Conference on Best Practices, Breakthrough and Current Dilemmas in OBGYN, 24–26 June 2016, Pune
12. Emerging surgical trends in ovarian cancer, International Cancer Congress 2016, 9 & 10 July 2016, Nagpur
13. Elimination of cervical cancer in India: The next frontier, FOGSI Gynae Oncology Conference 2016, 29–31 July 2016, Kala Academy; Panaji, Goa
14. Keynote Address: HPV Vaccination, Current Status and Future Prospects, FOGSI Gynae Oncology Conference 2016, 29–31 July 2016, Kala Academy, Panaji, Goa
15. Laparoscopic ovarian transposition for fertility preservation, Annual Conference of Delhi Gynaecological Endoscopists Society (DGES) “ENDOFERT, 2016 and Pre Conference Workshop”, 5–7 August 2016, AIIMS, New Delhi
16. Spectrum of HPV disease burden and its management in India, Asia Oceania Research Organisation on Genital Infections and Neoplasia, AOGIN 2016, 12–14 August 2016, Singapore
17. Cancer—Myths and Facts, ICOG, FOGSI National Conference on Fertility Regulation and Women’s Health, 27–28 August 2016, Hyderabad International Convention Centre, Hyderabad
18. Emerging surgical trends in ovarian cancer, Annual CME of AGOI UP Chapter on Ovarian Cancer, 3 September 2016, Agra
19. Ovarian cancer—How to detect early? Annual CME of AGOI UP Chapter on Ovarian Cancer, 3 September 2016, Agra
20. HPV vaccination—Recent advances, preventive gynae oncology and beyond, 10 & 11 September 2016, Sant Parmanand Hospital, Delhi
21. Live demonstration on LEEP, Improving Women’s Health through Prevention of Cervical Cancer, FOGSI PSI Cervical Cancer Workshop, 13 October 2016, New Delhi
22. Cervical cancer screening methods—Making the right choice, Improving Women’s Health through Prevention of Cervical Cancer, FOGSI PSI Cervical Cancer Workshop, 13 October 2016, New Delhi
23. Management of abnormal Pap smear, AOGIN 2016 National Annual Conference, 14–16 October 2016, Patna
24. Video demonstration on radical hysterectomy, AOGIN 2016 National Annual Conference, 14–16 October 2016, Patna
25. The varied spectrum of cervical cancer in Asia, 16th Biennial Meeting of the International Gynecologic Cancer Society, 29–31 October 2016, Lisbon, Portugal
26. Cervical Cancer, prevention, screening, early diagnosis today and tomorrow, 16th Biennial Meeting of the International Gynecologic Cancer Society, 29–31 October 2016, Lisbon, Portugal
27. HPV Vaccination Fact Sheet: Evidence Laid Threadbare, 38th Annual Conference of Association of Obstetricians and Gynaecologists of India (AOGD 2016), 11–14 November 2016, New Delhi

28. Management of pre-invasive cervical lesions, 25th National Conference of Association of Gynecologic Oncologists of India, AGOICON 2016, 2–4 December 2016, Gurgaon
29. Chair the session in Surgical Video Workshop, 25th National Conference of Association of Gynecologic Oncologists of India, AGOICON 2016, 2–4 December 2016, Gurgaon
30. Chair the session FIGO, 25th National Conference of Association of Gynecologic Oncologists of India, AGOICON 2016, 2–4 December 2016, Gurgaon
31. Cervical cancer screening and prevention, AGOI, Amrita 2016 Colposcopy Workshop and Conference on Preventive Gynaecological Oncology, 17 December 2016, Amrita Institute of Medical Sciences, Kochi
32. Participate in Demonstrator Colposcopy Workshop, AGOI, Amrita 2016 Colposcopy Workshop and Conference on Preventive Gynaecological Oncology, 17 December 2016, Amrita Institute of Medical Sciences, Kochi
33. HPV and CIN, IFCPC Online Course, 24 January 2017
34. Advanced Ovarian Cancer Surgery V/S Neoadjuvants: The Debate continues, 60th All India Congress of Obstetrics and Gynaecology, AICOG 2017, 25–29 January 2017, Ahmedabad
35. Anatomical landmarks pertaining to lap radical Hysterectomy, 3rd Cadaver Workshop and CME in Gynaecological Oncology (CaDGO 2017), 11 & 12 February 2017, AIIMS, New Delhi
36. Tips and tricks of LEEP: Video presentation, FOGSI FIGO Pratishruti Workshop on “Cervical Cancer Screening and Prevention” at the 22nd National Conference of Indian Menopause Society and International Conference on SAFOMS, IMSCON 2017, 17 February 2017, Raipur
37. Hormone replacement therapy after gynaecological malignancies, International Gynae Cancer Congress, 18 & 19 February 2017, Dharamshila Hospital and Research Centre, New Delhi
38. HPV vaccine is safe and efficacious, 15th Conference on “Evidence based management of cancers in India, EBM 2017”, 24–26 February 2017, Tata Memorial Centre, Mumbai
39. HPV vaccine: Challenges and solutions, Indian Society of Colposcopy and Cervical Pathology (ISCCP, 2017), 3–5 March 2017, MAMC, New Delhi
40. Screening tests for cervical cancer: Time for a new paradigm, FOGSI FIGO Pratishruti Workshop on Cervical Cancer Screening and Prevention, Dr Shastrakar VD CME and Yuva NOGS Oration, 19 March 2017, Nagpur
41. HPV vaccination—Where are we now, FOGSI FIGO Pratishruti Workshop on Cervical Cancer Screening and Prevention, Dr V.D. Shastrakar CME and Yuva NOGS Oration, 19 March 2017, Nagpur
42. Tips and tricks of LEEP: Video, FOGSI FIGO Pratishruti Workshop on Cervical Cancer Screening and Prevention, Dr V.D. Shastrakar CME and Yuva NOGS Oration, 19 March 2017, Nagpur

Kallol Kumar Roy: 30

1. Knowing the sex of the fetus—High Risk Pregnancy, Labour 2016, The Bengal Obstetric and Gynaecological Society (BOGS), 22–24 April 2016, Kolkata
2. Hysteroscopy: Diagnostic and Operative, Our experiences, Training Course in Minimally Invasive Gynaecology, 23–28 May 2016, AIIMS, New Delhi
3. FGR-AOGD PG, UPDATE, 14 August 2016, New Delhi
4. Decision making in IUGR, MEDHA-FOGSI ICOG PG CME, 2016 for Post Graduate Students of Obstetrics and Gynaecology, 3 & 4 September 2016, Queen Mary Hospital, Department of Obstetrics and Gynaecology, K.G. Medical University, Lucknow
5. Endometriosis, MEDHA-FOGSI ICOG PG CME, 2016 for Post Graduate Students of Obstetrics and Gynaecology, 3 & 4 September, 2016, Queen Mary Hospital, Department of Obstetrics and Gynaecology, K.G. Medical University, Lucknow
6. Place of endoscopic surgery in fertility preservation, NARCHICON 2016 the 13th World Congress and 21st Indian Conference of National Association of Reproductive and Child Health of India, 24 & 25 September 2016, Jaipur
7. Laparoscopic VVF Repair, Indian Association of Gynaecological Endoscopists (IAGE), BAGE, 2016, 9–11 September 2016, Bhubaneswar, Odisha
8. Asherman Syndrome, 23rd Annual Conference of National Association of Reproductive & Child Health of India (NARCHI) Delhi, 22 & 23 October 2016, Swarn Jayanti Auditorium, Lady Hardinge Medical College, Delhi
9. ABORTION, DGO class room programme, National Association for Reproductive and Child Health of India (Narchi), 10 December 2016, Birla Industrial and Technological Museum (BITM), Kolkata
10. Ante partum Haemorrhage, DGO class room programme, National Association for Reproductive and Child Health of India (Narchi), 10 December 2016, Birla Industrial and Technological Museum (BITM), Kolkata

11. Genital Fistula, DGO class room programme, National Association for Reproductive and Child Health of India (Narchi), 10 December 2016, Birla Industrial and Technological Museum (BITM), Kolkata
12. Prenatal screening, DGO class room programme, National Association for Reproductive and Child Health of India (Narchi), 10 December 2016, Birla Industrial and Technological Museum (BITM), Kolkata
13. Amenorrhoea, DGO class room programme, National Association for Reproductive and Child Health of India (Narchi), 10 December 2016, Birla Industrial and Technological Museum (BITM), Kolkata
14. Coagulation failure, DGO class room programme, National Association for Reproductive and Child Health of India (Narchi), 10 December 2016, Birla Industrial and Technological Museum (BITM), Kolkata
15. Gestational diabetes, DGO class room programme, National Association for Reproductive and Child Health of India (Narchi), 10 December 2016, Birla Industrial and Technological Museum (BITM), Kolkata
16. Genital TB, DGO class room programme, National Association for Reproductive and Child Health of India (Narchi), 10 December 2016, Birla Industrial and Technological Museum (BITM), Kolkata
17. Multifetal gestation, DGO class room programme, National Association for Reproductive and Child Health of India (Narchi), 10 December 2016, Birla Industrial and Technological Museum (BITM), Kolkata
18. Abnormal uterine bleeding, DGO class room programme, National Association for Reproductive and Child Health of India (Narchi), 10 December 2016, Birla Industrial and Technological Museum (BITM), Kolkata
19. Endometriosis, DGO class room programme, National Association for Reproductive and Child Health of India (Narchi), 10 December 2016, Birla Industrial and Technological Museum (BITM), Kolkata
20. Reducing Complications in Hysteroscopy, The Bengal Obstetric and Gynaecological Society (BOGS), BOGSCON 42, 5 & 6 January 2017, Kolkata
21. Fertility enhancing surgeries, CME on Infertility and Assisted Reproduction, IVF Centre, Department of Obs/ Gynae, MAMC, 5 February 2017, MAMC, Delhi
22. Early pregnancy bleeding, DGO class room programme, National Association for Reproductive and Child Health of India (Narchi), 25 February 2017, Birla Industrial and Technological Museum (BITM), Kolkata
23. Ectopic pregnancy, DGO class room programme, National Association for Reproductive and Child Health of India (Narchi), 25 February 2017, Birla Industrial and Technological Museum (BITM), Kolkata
24. Primary and secondary infertility, DGO class room programme, National Association for Reproductive and Child Health of India (Narchi), 25 February 2017, Birla Industrial and Technological Museum (BITM), Kolkata
25. Contraception, DGO class room programme, National Association for Reproductive and Child Health of India (Narchi), 25 February 2017, Birla Industrial and Technological Museum (BITM), Kolkata
26. Methods of termination of pregnancy, DGO class room programme, National Association for Reproductive and Child Health of India (Narchi), 25 February 2017, Birla Industrial and Technological Museum (BITM), Kolkata
27. PCOS and Hirsutisms, DGO class room programme, National Association for Reproductive and Child Health of India (Narchi), 25 February 2017, Birla Industrial and Technological Museum (BITM), Kolkata
28. Antibiotic prophylaxis in obstetrics and gynaecology, DGO class room programme, National Association for Reproductive and Child Health of India (Narchi), 25 February 2017, Birla Industrial and Technological Museum (BITM), Kolkata
29. Surgical Treatment in Stage 3 & 4, ENDOGYN 2017, 3–5 March 2017, Kolkata
30. Hysteroscopy: Diagnostic and Operative, Our experiences, Training Course in Minimally invasive Gynaecology, 20–25 March 2017, AIIMS, New Delhi

Neena Malhotra: 20

1. Ovarian Reserve Markers—What's New? Controversies to Consensus in Obstetrics and Gynecology, 3rd GOAL Conference, 9 April 2016, New Delhi
2. Ten secrets of intra uterine insemination, 3rd Conference on Current Practices and Recent Advances in ART, 30 April 2016, Goa
3. Endometriosis and IVF, ENDOFERT 2016, Endoscopy and Fertility, Basic and advanced, 5 August 2016, New Delhi
4. Evaluation of female infertility, Controversies to Consensus in Obstetrics and Gynecology, 4th GOAL Conference, 20 August 2016, Udaipur
5. Endometriosis and ART, INFERTICON, CME on Infertility and Art, Greater Chapter of Indian Fertility Society, 11 September 2016, Chandigarh
6. Ovary—Genesis to ageing, Pre-congress Workshop on Poor Ovarian Reserve of the 22nd World Congress of International Federation of Fertility Societies, IFFS, 23 September 2016, Greater Noida

7. Management of Poor Responders in IVF, CME on female infertility, Centennial Celebration of BHU, 16 October 2016, BHU, Varanasi
8. Management of menstrual irregularities and hyperandrogenemia in PCOS, Pre-Conference Symposium on “Reproductive and Metabolic Endocrinology of Women” at the 46th Annual Conference of Endocrine Society of India (ESICON), 20 October 2016, Delhi
9. ESHRE/ASRM Consensus on infertility treatment related to PCOS-MACROM, 5th Annual Maharashtra State Chapter of Indian Society of Assisted Reproduction, 5 November 2016, Pune
10. Clomiphene with gonadotropins for ovulation induction, MACROM, 5th Annual Maharashtra State Chapter of Indian Society of Assisted Reproduction, 5 November 2016, Pune
11. Advanced sperm function tests—Clinical applications and relevance, Pre-Conference Workshop on Advanced ART, 38th Annual Conference of AOGD, 11 November 2016, Delhi AOGD, Delhi
12. Uterine factors in infertility, Pre-Conference Workshop on Basic Infertility, 38th Annual Conference of AOGD, 11 November 2016, New Delhi
13. Overview of fertility preservation options in cancer patients, Silver Jubilee Conference of the Association of Gynecologic Oncologists of India, AGOICON, 2 December 2016, Gurugram
14. Recurrent miscarriages—Role and cost, effectiveness of investigations. Is Empirical treatment justified in future pregnancy? 16th International Conference on Current Concepts in Managing Obstetrics, Gynecology and Sub-fertility in an Era of Ever Changing Technology, 3 December 2016, Madras Medical Mission, Chennai
15. Role of Hysteroscopy in ART, 12th Annual National Conference of Indian Fertility Society, IFS, 10 December 2016, Lucknow
16. Assessment of ovarian reserve in younger women, FOCUS 2016, 18 December 2016, Vishakhapatnam
17. Thin and Obese Infertile, FOCUS 2016, 18 December 2016, Vishakhapatnam
18. Stimulation protocols in IVF, CME in MAMC, 5 February 2017, Delhi
19. Sperm function tests, Clinical applications and relevance, IUI Workshop, Indian Fertility Society, 10 February 2017, Gurugram
20. Routine laparoscopy and hysteroscopy—What do you achieve, Conference on Low cost IVF, Organized by Indian Fertility Society, 11 February 2017, New Delhi

Vatsla Dadhwal: 11

1. Chorionic villus sampling and cordocentesis, Fourth FOGSI, FIGO-2016 Conference on Breakthrough and Current Dilemmas in Obst and Gynae, 24–26 June 2016, Pune
2. Antepartum fetal health assessment, Born Healthy, 16 & 17 July 2016, Downtown Hospital, Guwahati
3. Double trouble—How to follow twin pregnancy intervention therapy for foetus, FOGSI Conference on Saving Mothers, Prevent the Preventable, 21–23 October 2016, MLN Medical College, Allahabad
4. Fetal sampling techniques, Video based, Third International Conference on Birth Defects (ICBD, 2016) and Third National Conference of the Society for Indian Academy of Medical Genetics (SIAMG); Reproductive and Fetal Genomics Workshop, 10 December 2016, AIIMS, New Delhi
5. Lasers for fetal therapy, Delivering care of the fetus: The unborn patient, 10 July 2016, Army Hospital (R&R), New Delhi
6. Fertility and pregnancy in thalassemia major and intermedia, “8th National Thalassemia Conference”, 18 December 2016, JLN Auditorium, AIIMS, New Delhi
7. Medical management of fetal growth restriction—Myths vs Evidence, Role of Integrated Antepartum Tests, 18th Annual CME of GOGS Best Practices and Research in Obst. and Gynae, 18 December 2016, Ghaziabad
8. Reduction in monochorionic multi fetal pregnancy: Bipolar Cord Coagulation, Society of Fetal Medicine Third Quarterly Meet (2016–2017), 28 February 2017, Apollo Hospital, New Delhi
9. Correlating pathophysiology with Doppler in fetal growth restriction, MAMC-MFM Workshop on Fetal Growth Restriction, 18 February 2017, MAMC, New Delhi
10. Dilemmas in the management of dichorionic and monochorionic twins, Calcutta
11. Management of pregnancy in HIV positive women, CME Program on PAN, African e-network Project, 6 May 2016, AIIMS, New Delhi

Nutan Agarwal: 13

1. Diabetes during pregnancy—How to diagnose? RSSDI, 23 & 24 April 2016, UP
2. Expert comments on “Cardiotocography”, Reproductive Endocrinology Committee on AOGD, Delhi Gynae Forum (North), 12 July 2016, Fortis Hospital, Shalimar Bagh

- Public lecture on PCOS—When to suspect? Who needs screening and evaluation? Diamond Jubilee Celebration AIIMS, 15 July 2016, AIIMS, New Delhi
- Management guidelines for AUB according to PALM, COEIN classification, HLL Life Care Limited, 20 August 2016, Vasant Vihar
- AUB guidelines in Indian perspective, Monthly Clinical Meet of Ghaziabad Obs. and Gyn. Society, 13 October 2016, Ghaziabad
- Conducted the CPC, University College of Medical Sciences, 25 November 2016, New Delhi
- Management of fetal anaemia, Workshop on fetal intervention: Diagnosis and Therapy, Fetal Medicine, 9 September 2016, Kolkata
- Chorioammonitis—Its implications, Neonate at International Conference at Perinatology, 10 September 2016, Gurgaon
- Diabetes on pregnancy, CME in GDM, 19 November 2016, Lady Hardinge Medical College, New Delhi
- Current perspectives on diagnosis of GDM, 46th Annual Conference of Endocrine Society of India (ESICON), Pre-Conference Symposium on “Reproductive and Metabolic Endocrinology of Women, 20 October 2016, New Delhi
- Fetal sampling how and when, Reproductive and Fetal Genomic Workshop, Third ICBD 2016, 10 December 2016, AIIMS, New Delhi
- Pregnancy care, Delhi Doordarshan, 9 February 2017, New Delhi
- Diabetes during pregnancy; diagnosis and management, Coal India Medical Conference, Ranchi, 20–22 February 2017, Ranchi

J.B. Sharma: 10

- Recurrent pregnancy loss, Deliver Lecture, 5 March 2017, Jammu
- Operative obst. complications, 60th All India Congress of Obst. and Gynae, 28 & 29 January 2017, Ahmedabad
- Current thinking in diagnosis and management of female genital tuberculosis, 27th Annual Meeting ISSRF, 25 January 2017, AIIMS; New Delhi
- DGO (Obst. and Gynae), External Examiner, 9 November 2016, Lucknow
- MD (Obst. and Gynae), External Examiner, 18 October 2016, LHMC Hospital, New Delhi
- Laproscope in urogynaecology, UPHAI Conference, 11 September 2016, Chennai, Tamil Nadu
- MRCOG Part I–II-Examiner, 5 & 6 September 2016, Apollo Hospital, New Delhi
- Chairperson, AICC RCOG 30th Annual Conference, 3 September 2016, Chennai, Tamil Nadu
- Chair STREAM 6, Global Health, RCOG World Congress, 20–22 June 2016, Birmingham, UK, London
- MD (Obst. and Gynae), External Examiner, 4 June 2016, Jaipur

Neeta Singh: 4

- Organizer, International Conference on Advances in Human Reproduction Organized by Department of Obstetrics and Gynaecology, AIIMS, 26 & 27 February 2016, AIIMS
- Role of hysteroscopy in infertility, 6th Congress of the Asia Pacific Initiative on Reproduction, 10 April 2016, Jakarta, Indonesia
- Complications in IVF, CUPART Conference, 30 April 2016, Goa
- Moderated a panel discussion on difficult stimulations in IVF, FOGSI and IFS, 7 May 2016, New Delhi

Aparna Sharma: 40

- Debate on subclinical hypothyroidism in pregnancy, GOAL, 9 April 2016, New Delhi
- Panel moderator on Rh isoimmunisation, North Zone Yuva FOGSI, 4 April 2016, Ghaziabad
- Panelist on sending a cardiology consult, ISACON, 9 April 2016, J.L.N. Auditorium, AIIMS, Delhi
- Adolescent endometriosis, GCPR on endometriosis, 29 April 2016, New Delhi
- Hands on training, Raining Course on Minimally Invasive Gynecology, 23–28 May 2017, AIIMS, New Delhi
- Facilitator, Workshop for Improving Quality of Hospital Care for Maternal and Newborn Health, 10–12 May 2016, New Delhi
- Fetal defect, Video diagnosis, Workup, Monitoring, Genetics: A Few Interesting Fetal Journeys, Foruth FOGSI, FIGO Conference on Best Practices, Breakthroughs and Current Dilemmas in Obstetrics and Gynecology, 24 June 2016, Pune
- Co-Moderator for panel on Optimising care of healthy and sick fetus, Foruth FOGSI, FIGO Conference on Best Practices, Breakthroughs and Current Dilemmas in Obstetrics and Gynecology, 24 June 2016, Pune

9. Facilitator, Quality Improvement Workshop by Canadian Faculty supported by EPIQ, Canada, 15 & 16 June 2016, AIIMS, New Delhi
10. Faculty at CME and Live Workshop, CME and Live Workshop on “Born Healthy”, 16 & 17 July 2016, Guwahati
11. Panelist in panel on fetal interventions, CME on Born Healthy, 16 & 17 July 2016, Guwahati
12. Microarray, Quarterly Meet of Society of Fetal Medicine, 10 July 2016, R and R Hospital, New Delhi
13. Debate on Alternatives to Blood Transfusion, AOGD CME on Anemia, 30 July 2016, New Delhi
14. Faculty, Capacity Building Workshop and Symposium on Quality Improvement, 2 & 3 August 2016, AIIMS, New Delhi
15. Robotics in gynecology, ENDOFERT 2016, Annual Conference of Delhi Gynecological Endoscopists Society, 5–7 August, AIIMS, New Delhi
16. Counselling women with epilepsy, AOGD PG Update, 13 August 2016, New Delhi
17. Debate on subclinical hypothyroidism in pregnancy, GOAL, 20 August 2016, Udaipur
18. Diagnosing fetal anemia, Precongress Workshop of the Annual Conference of Society of Fetal Medicine, 9 September 2016, Kolkata
19. Panelist on “Symposium on Twins”, Annual Conference of Society of Fetal Medicine; 9 September 2016, Kolkata
20. Panelist on “Fetal Intervention”, Annual Conference of Society of Fetal Medicine, 9 September 2016, Kolkata
21. Which Ultrasound When, Annual Conference of Society of Fetal Medicine, 10 September 2016, Kolkata
22. Preconceptional Care, Converge Meeting, 10 September 2016, Sohna
23. Screening for Aneuploidies, Telemedicine Facility, 9 October 2016, AIIMS, New Delhi
24. Fetal Invasive Procedures, Fetal Ultrasound Program, 8 October 2016, Ludhiana
25. NIPT, 23rd Annual Conference of NARCH, 22 October 2016, LHMC, New Delhi
26. Panelist on Fetal Surveillance, Annual Conference of NARCHI, 22 October 2016, LHMC, New Delhi
27. Preconceptional Care, FOGSI Conference for Saving Mothers, 23 October 2016, Allahabad
28. Webinar on PCC, 16 November 2016, New Delhi
29. Panelist on Inverting the Pyramid of Care, Annual Conference of AOGD, 11 December 2016, New Delhi
30. Fetal aneuploidy screening, CME on Fetal Medicine, 2 December 2016, Sharda Medical College, Greater Noida
31. Invasive procedures for prenatal diagnosis, International Conference on Birth Defects, Post Congress Workshop, 10 December 2016, AIIMS, New Delhi
32. IUGR, Can we prevent it? Annual Conference of Ghaziabad Obstetrics and Gynecologists, 18 December 2016, Ghaziabad
33. Polyhydramnios Checklist for Obstetricians, Annual Conference of Ghaziabad Obstetrics and Gynecologists, 18 December 2016, Ghaziabad
34. Growth scan in fetal growth restriction, Maternal Fetal Medicine Workshop: Fetal Growth Restriction, 18 February 2017, MAMC, New Delhi
35. Radiofrequency ablation, SFM’s 3rd Quarterly Meet, 26 February 2017, Indraprastha Apollo Hospitals, New Delhi
36. Maternal biochemical screening of aneuploidies, CME by Transhendon Gynaecologist Welfare Association, 1 March 2017, Ghaziabad
37. Fever in pregnancy and postpartum, WHO STPs in Essential Obstetric Conditions, 7 & 8 March 2017, AIIMS, New Delhi
38. Anemia in pregnancy, Expert Group Meeting on FOGSI GCPR on Iron Deficiency Anemia in Pregnancy, 24 March 2017, AIIMS, New Delhi
39. Care in pregnancy and postpartum, Phone in Program on AADHA AAKASH, 23 March 2017, AAKASHWANI, New Delhi
40. Scope of fetal endoscopy, 27th WHI Endoscopy Training Program, 23 March 2017, AIIMS, New Delhi

Garima Kachhawa: 14

1. Management of IDA in pregnancy, North Zone Yuva FOGSI, 2 April 2016, Ghaziabad
2. Subclinical hypothyroidism in pregnancy: Should be treated, GOAL: Gynaecology Obstetrics Advanced Learning, 9 & 10 April 2016, New Delhi
3. Lactation in difficult situations, LEAF 2016 CME organized by the Alwar Obstetrics and Gynaecology Society and FOGSI, 22 April 2016, Alwar, Rajasthan

4. Laparoscopic management of ectopic pregnancy, 26th WHI Training Course in MAS, 23 May 2016, Endoscopy Training ROOM, AIIMS, New Delhi
5. Management of hirsutism, FABCON, 8–10 July 2016, M G Hospital, Jaipur
6. Injectable progestins, National Conference on Endometriosis (ENDOMETCON TRICHY, 2016), 23 & 24 July 2016, Trichy
7. Newer drugs in endometriosis, ENDOFERT, Annual Conference of DGES, 5–7 August 2016, JLN Auditorium, AIIMS, New Delhi
8. Atosiban in preterm labour, Gynae Adcon, 4 September 2016, New Delhi
9. Endometriosis recent advances in management, CME on Endometriosis management, 1 October 2016, Yamuna Nagar
10. Screening and management of APLA, National Conference on Saving Mothers (SAVMA, 2016), 23 October 2016, MLN Medical College, Allahabad
11. Meconium stained liquor, Conference on Management of Labour, 18–20 November 2016, Mumbai
12. PCOS: Demystifying Insulin Resistance, 60th All India Congress of Obstetrics and Gynaecology Organized by FOGSI, 25–29 January 2017, Gujarat University Convention and Exhibition Centre, Ahmedabad
13. Laparoscopic Management of Ectopic Pregnancy, 27th WHI Training course in MAS, 20 March 2017, Endoscopy Training ROOM, OT Complex 9th Floor AIIMS, New Delhi
14. Management of IDA in pregnancy, North Zone Yuva FOGSI, 2 April 2016, Ghaziabad

Reeta Mahey: 8

1. Social egg freezing, Current Update (Panelist), CUPART 2016, 29 April–1 May 2016, Goa
2. Complications of endoscopy, ENDOFERT 2016, 4–6 August 2016, JLN Auditorium, New Delhi
3. Abnormal uterine bleeding, Co-moderator, 4th GOAL Conference, 20 & 21 August 2016, Udaipur
4. Management of OHSS, IFFS World Congress, 21–25 September 2016, Greater Noida
5. Social egg freezing, Update in Gynaecology, 20 November 2016, DMC Hospital, Ludhiana
6. Oocyte pick up, Low Cost IVF, 11 & 12 February 2017, Gurugram
7. Injectable iron therapy, Expert Group Meeting on FOGSI GCPR on IDA in pregnancy, 24 March 2017, Committee Room, AIIMS, New Delhi
8. How endoscopy affects infertility, ISAR 2017, 21–23 April 2017, Gurugram

P. Vanamail: 3

1. Statistical inference, type of errors, power of a test, statistical significance vs clinical significance, PG Workshop on Research Methods, writing and communication, 28 July 2016, AIIMS, New Delhi
2. Basics of bio-statistics, Workshop on Research, Ethics and publication for Nurses, 3 September 2016, AIIMS, TRAUMA Centre, New Delhi
3. Statistical inference, type of errors, power of a test, statistical significance vs clinical significance, PG Workshop on Research Methods, Writing and Communication, 29 September 2016, AIIMS, New Delhi

Vidushi Kulshrestha: 17

1. Abnormal Uterine Bleeding (panel), GOAL Conference, 2016 on Controversies to Consensus in Obstetrics and Gynaecology, Organised by FOGSI and ICOGICOG, 9–10 April 2016, New Delhi
2. National guidelines on diagnosis and management of gestational diabetes mellitus, screening and referral, State Maternal Health Workshop Organized by RMNCH, A Project, USAID and Haryana National Health Mission, 4 May 2016, Panchkula
3. National guidelines on deworming and calcium supplementation in pregnancy, State Maternal Health Workshop Organized by RMNCH, A project, USAID and Haryana National Health Mission, 4 May 2016, Panchkula
4. Abnormal uterine bleeding, (panel), Insight AUB, Indian Perspective 2016, Organised by FOGSI and ICOG, 8 May 2016, AIIMS, Delhi
5. Complications of hysteroscopy, 26th Training Course in Minimally Invasive Gynaecology, organized by AIIMS and WHI, 26 May 2016, Delhi
6. Abnormal uterine bleeding: FOGSI, Good Clinical Practices Recommendations, FOGSI FIGO, 2016 Conference on Best Practices, Breakthroughs and Current Dilemmas in Obstetrics and Gynaecology, 25 June 2016, Westin, Pune
7. Dilemmas in diagnosing and managing preeclampsia (panelist), FOGSI FIGO, 2016 Conference on Best Practices, Breakthroughs and Current Dilemmas in Obstetrics and Gynaecology, 26 June 2016, Westin, Pune

8. Diagnostic dilemmas in genital tuberculosis, FOGSI President National congress FABCON 2016, 9 July 2016, Jaipur
9. Biomarkers in endometriosis, Precongress Workshop on Endometriosis, ENDOFERT, 2016, Annual Conference of DGES, 5 August 2016, AIIMS, New Delhi
10. Ormeloxifene in gynae practice, ENDOFERT 2016 Annual Conference of DGES, 6 August 2016, AIIMS, New Delhi
11. Early onset IUGR, SAVMA, 2016, Conference on Saving Mothers Organized by Allahabad Obs and Gynae Society, 21–23 October 2016, Medical College, Allahabad
12. Recent advances in medical management of endometriosis, CME Organized by Alwar Obs Gyn Society, 20 November 2016, Alwar
13. UTI in pregnancy, CME Organized by Alwar Obs Gyn Society, 20 November 2016, Alwar
14. Colour Doppler—Its interpretation, CME on Fetal Medicine, organized by Sharda Medical College, 2 December 2016, Sharda Medical College, Greater NOIDA
15. Recent advances in gestational diabetes (panelist), 60th AICOG, organized by FOGSI and Ahmedabad Obs Gyn Society, 27–29 January 2017, Gujarat Convention Centre, Ahmedabad
16. Energy sources in endoscopy, 27th Training Course in Minimally Invasive Gynaecology, organized by AIIMS and WHI, 20–25 March 2017, AIIMS, Delhi
17. Complications of hysteroscopy, 27th Training Course in Minimally Invasive Gynaecology, organized by AIIMS and WHI, 20–25 March 2017, AIIMS, Delhi

Seema Singhal: 29

1. Cadaver dissection Workshop and CME in Gynae Oncology (CaDGO 2016) organized by Department of Obstetrics and Gynaecology, AIIMS, 23 & 24 April 2016, cadaver Research and training facility CTRF, JPNATC, AIIMS
2. Cadaver dissection Workshop and CME in Gynae Oncology (CaDGO 2017) organized by Department of Obstetrics and Gynaecology AIIMS, 11 & 12 February 2016, Anatomy dissection Hall, AIIMS
3. Expert group member, Expert group Meeting to develop standard treatment protocols for management of essential obstetric conditions based on WHO guidelines for use at small hospitals, 7 & 8 March 2017, AIIMS
4. Expert group member, Regional TOT Workshop for improving quality of hospital care for maternal and new born health, 6–8 February 2017, AIIMS
5. Debate: Managing pre term labour: universal cervical length screening Against the motion, GOAL 2016 Controversies in Obstetrics and Gynaecology, 9 April 2016, Delhi
6. HPV burden and prevention strategies in India, Immunization technical support unit(ITSU) India MOHFW GOI PHFI, 28 April 2016, National Institute of Health and family welfare (NIHFW), Delhi
7. Retroperitoneal Anatomy including Vascular Anatomy and Ureter, Cadaver Dissection Workshop and CME in Gynae Oncology, 23 April 2016, Cadver training and research facility (CTRF) JPNATC AIIMS, Delhi
8. Genetics testing, What a general gynaecologist should know, Pre-Conference masterclass in Gynae oncology for the clinicians FOGSI FIGO Conference 2016, 24 June 2016, Pune
9. Adenomyosis LNG intrauterine system, FOGSI FIGO 2016, 25 June 2016, Pune
10. Identification of Problem, Forming a team and Formulation of Aim statement, UNICEF sponsored Workshop for capacity building for Quality Improvement, 4 July 2016, Kolkata
11. Golden Hour, Risk identification, initial steps in management (Fluid resuscitation and oxytocics), PPH drill (Obstetric drill) Ian Donald Inter university school of medical ultrasound, 9 August 2016, Delhi
12. Critical care: Basics of a obstetric ICU, PPH drill (Obstetric drill) Ian Donald Inter University School of Medical Ultrasound, 9 August 2016, Delhi
13. Opportunistic salpingectomy, ENDOFERT 2016, 7 August 2016, JLN Auditorium AIIMS, Delhi
14. Laparoscopic anatomy, ENDOCAD 2016, 1st Cadaveric Dissection Course in Gynae Endoscopy at AIIMS, 8 August 2016, Anatomy Dissection Hall, AIIMS, Delhi
15. Pre conception care: Infections, Expert Group Meeting GCPR in Pre Conception Care, 31 May 2016, AIIMS, Delhi
16. Sudden obstetric collapse Spot D/D and immediate resuscitation, Intensive Care Clinical Microbiology and Infectious Disease Course (ICCMID Course), under aegis of Indian Society of Critical Care Medicine ISCCM, 10 September 2016, Indian Habitat Centre, New Delhi
17. Drug interactions with hormonal contraceptives, CME on Hormonal Contraception Update, Lesser Known Facts, 22 November 2016, Max Saket, Delhi

18. Prevention of IDA, Expert Group Meeting on FOGSI GCPR on IDA in Pregnancy, 24 March 2017, AIIMS, Delhi
19. Management of postpartum haemorrhage, Expert Group Meeting to Develop Standard Treatment Protocols for Management of Essential Obstetric Conditions Based on WHO Guidelines for Use at Small Hospitals, 7 March 2017, AIIMS, Delhi
20. Bleeding in early pregnancy, Expert Group Meeting to Develop Standard Treatment Protocols for Management of Essential Obstetric Conditions Based on WHO Guidelines for Use at Small Hospitals, 7 March 2017, AIIMS, Delhi
21. Identification of problem, Forming a team and Formulation of Aim statement, Regional TOT Workshop for Improving Quality of Hospital Care for Maternal and Newborn Health AIIMS, New Delhi, 6 February 2017, AIIMS, Delhi
22. Delivery of fetus in second stage caesarean: Head First, 23rd Annual Conference of NARCHI, Delhi Branch, 22 October 2016, Swarn Jayanti Auditorium, Lady Hardinge Medical College, Delhi
23. Understanding the basics—Effect of chemotherapy and radiotherapy, Pre-Congress Course 4 at 22nd IFFS World Congress, 22 September 2016, Greater Noida, UP
24. Managing pre term labour: Universal cervical length screening against the motion, GOAL 2016, 22 August 2016, Udaipur
25. GTN Case presentation, Moderator for panel Discussion, 19 February 2017, India Habitat Centre, Delhi
26. Panel discussion on HPV vaccine, 12th Annual Conference of ISCCP, 5 March 2017, Maulana Azad Medical College, Delhi
27. Panel discussion on hormonal therapy in endometrial cancer, AGOICON-2016, Silver Jubilee Conference of the Association of Gynaecologic Oncologists of India, 3 December 2016, Gurgaon
28. Panel discussion—Controversies in management of endometrial cancer, 12th International Conference of Asian Clinical Oncology Society (ACOS, 2016), 8 April 2016, Delhi
29. Clinical Dilemmas—Case based interactive panel session, FOGSI GYN ONCO 2016 Annual Conference of FOGSI Oncology Committee, 29 July 2016, Kala Academy Panaji, Goa

Rajesh Kumari: 2

1. A novel medical therapy for uterine fibroids, GOGS CME Gurgaon, 9 July 2016, Gurgaon
2. Hands on training on pelvi trainer: Introduction to laparoscopy, Minimally Invasive Gynaecology, 24–29 March 2016, Endoscopy training room, OT complex, 9th floor, AIIMS, New Delhi

Jyoti Meena: 7

1. Panel discussion on “Special situations and their management”, 11th National Conference of Indian Society of Colposcopy and Cervical Pathology, 3 April 2016, AIIMS, Jodhpur
2. Energy sources in gynae oncology surgeries, Cadaveric dissection in Gynae oncology (CaDGO) 2016, 24 April 2016, CTRF JPNATC, Delhi
3. Energy sources in laparoscopy, WHI 23–28 May 2016)-25 May 2016, AIIMS, Delhi
4. Medical management of endometriosis with Dienogest, CME on Medical Management of Fibroid and Endometriosis Organized by Society of Obstetrics and Gynaecology Ambala, 20 July 2016, Ambala
5. Management of PPH, Pan Africa CME Telemedicine, 15 December 2016, AIIMS, Delhi
6. Management of preinvasive lesions of cervix, “The Silver Jubilee Conference”, of Association of Gynecologic Oncologists of India (AGOICON), 3 February 2017, Gurgaon
7. Cushing’s in pregnancy, CCR, 7 March 2017, AIIMS, Delhi

Oral papers/posters presented: 57

1. Kriplani A. Pregnancy rate after endometrial scratching in couples with unexplained infertility in ovulation induction and IUI cycles—A randomised controlled trial (Poster presentation), American Society for Reproductive Medicine (ASRM 2016), 15–19 October 2016, Salt Lake City, USA
2. Kriplani A. Laparoscopic Myomectomy in cervical fibroid, tips and tricks (Video presentation), American Society for Reproductive Medicine (ASRM 2016), 15–19 October 2016, Salt Lake City, USA
3. Reeta M, Kriplani A.* Pregnancy rate after endometrial scratching in couples with unexplained infertility in oblation induction and IUI cycles, A randomized controlled trial, CUPART 2016, A Conference on Current Practices and Recent Advances in ART, organized by ISAR and Panji Obs. and Gyn. Society, 29 April–1 May 2016, Goa
4. Kulshrestha V, Saini V, Kachhawa G, Kumari R, Mahey R, Sharma JB, Bhatla N, Kriplani A. Pregnancy complicated by aplastic anemia—A challenge, FOGSI FIGO, 2016 Conference on Best Practices, Breakthrough and Current Dilemmas in OBGYN, Organized by Pune Obst and Gynae Society (POGS), Pune, June 2016, Pune (**2nd prize for Best E-Poster**)

5. Kachhawa G, Kriplani A, Mahey R, Khadgawat R, Kulshetra V, Wangdi T.* Laparoscopy gonectomy in patients with DSD (Disorder of Sex Differentiation), ENDOFERT, 2016 Annual Conference of DGES (Delhi Gynaecological Endoscopists Society), Organized by Obst. and Gynae, AIIMS and DGES, 5–8 August 2016, AIIMS, New Delhi **(1st prize in Poster presentation)**
6. Kriplani A. Opening of Pandora Box in a case of bad obstetrics history, ENDOFERT, 2016 Annual Conference of DGES (Delhi Gynaecological Endoscopists Society), Organized by Obst. and Gynae, AIIMS and DGES, 5–8 August 2016, AIIMS, New Delhi
7. Kriplani A, Karthik SDS. Complications Following Laparoscopic meshplasty' differentiation ENDOFERT, 2016 Annual Conference of DGES (Delhi Gynaecological Endoscopists Society), Organized by Obst. and Gynae, AIIMS and DGES, 5–8 August 2016, AIIMS, New Delhi **(3rd prize in oral presentation)**
8. Goel T, Kumari R, Kulshrestha V, Kachhawa G, Sharma JB, Kriplani A.* Facial nerve palsy: A rare complication of Aplastic Anemia in post partum period, ENDOFERT, 2016 Annual Conference of DGES (Delhi Gynaecological Endoscopists Society), Organized by Obst. and Gynae, AIIMS and DGES, 5–8 August 2016, AIIMS, New Delhi **(Consolation prize in oral presentation)**
9. Kriplani A. Dermoid with rare presentation, ENDOFERT, 2016 Annual Conference of DGES (Delhi Gynaecological Endoscopists Society), Organized by Obst. and Gynae, AIIMS and DGES, 5–8 August 2016, AIIMS, New Delhi
10. Kriplani A.* Pregnancy complicated by neurosurgical co-morbidities, SAVMA, 2016 Conference on Saving Mothers, organized by Allahabad Obs Gyn Society, 21–23 October 2016, Allahabad
11. Karthik SDS, Kriplani A, Mahey R, Kachhawa G. Complications following laparoscopic mesh procedures in genital prolapse: case series, 60th All India Congress of Obstetrics and Gynaecology (AICOG), Hosted by FOGSI and Ahmedabad Obstetrics and Gynaecological Society (AOGS), 25–29 January 2017, Ahmedabad **(Mrs. Siuli Rudra Sinha award (1st Prize) for the year 2017)**
12. Kriplani A. The expression of human Epididymis protein 4 in ovarian carcinoma and correlation with prognosis, 60th All India Congress of Obstetrics and Gynaecology (AICOG), Hosted by FOGSI and Ahmedabad Obstetrics and Gynaecological Society (AOGS), 25–29 January 2017, Ahmedabad
13. Kriplani A. Clinico, Hormonal profile and Gonadectomy in patients with disorders of sexual development, 60th All India Congress of Obstetrics and Gynaecology (AICOG), Hosted by FOGSI and Ahmedabad Obstetrics and Gynaecological Society (AOGS), 25–29 January 2017, Ahmedabad, **(Mrs. Indumati Jhaveri award)**
14. Kriplani A. To evaluate the role of endometrial scratching in couples with unexplained infertility in OVI IUI cycles, 60th All India Congress of Obstetrics and Gynaecology (AICOG), Hosted by FOGSI and Ahmedabad Obstetrics and Gynaecological Society (AOGS), 25–29 January 2017, Ahmedabad
15. Kriplani A. A Physician Nightmare: Empty Follicle Syndrome, 60th All India Congress of Obstetrics and Gynaecology (AICOG), Hosted by FOGSI and Ahmedabad Obstetrics and Gynaecological Society (AOGS), 25–29 January 2017, Ahmedabad
16. Kriplani A. Does endometrial scratching helps in implantation in previous failed IVF, ET cycles, 60th All India Congress of Obstetrics and Gynaecology (AICOG), Hosted by FOGSI and Ahmedabad Obstetrics and Gynaecological Society (AOGS), 25–29 January 2017, Ahmedabad
17. Girish B, Kachhawa G, Kriplani A, Duttagupta S, Mathur S. To study ovarian reserve after Laparoscopic Endometriotic Cystectomy and to Correlate the effect of post cystectomy ovarian suppression with Fertility Outcome: A randomised controlled trial, 60th All India Congress of Obstetrics and Gynaecology (AICOG), Hosted by FOGSI and Ahmedabad Obstetrics and Gynaecological Society (AOGS), 25–29 January 2017, Ahmedabad
18. Kriplani A. Maternal and perinatal outcome of hyperglycaemia during pregnancy: A five years perspective, 60th All India Congress of Obstetrics and Gynaecology (AICOG), Hosted by FOGSI and Ahmedabad Obstetrics and Gynaecological Society (AOGS), 25–29 January 2017, Ahmedabad
19. Rohitha C, Meena J, Kumar S, Roy KK, Singhal S. Clinico, pathological profile of ovarian masses in young females, 60th All India Congress of Obstetrics and Gynaecology (AICOG), Hosted by FOGSI and Ahmedabad Obstetrics and Gynaecological Society (AOGS), 25–29 January 2017, Ahmedabad
20. Meena J, Ligampally A, Kumar S, Roy KK, Singh N, Singhal S. Clinico, pathological profile of women undergoing surgery for cervical cancer, AOGININDIA 2016 (7th National Conference of Asia Oceania Research Organisation on Genital Infections and Neoplasia, India), 15 October 2016, Patna
21. Singhal S, Gupta D, Kumar S, Roy KK, Singh N, Meena J, Joshi M. A sinister saga of abdominal menstruation: A rare presentation of pelvic cutaneous fistula, AOGD Month Meeting, 15 October, 2016, AIIMS, New Delhi
22. Meena J, Kumar L, Kumar S, Bhatla N, Singhal S, Shekhar B. Gestational trophoblastic neoplasia: A 5 years study at tertiary care center, "The Silver Jubilee Conference", of Association of Gynecologic Oncologists of India (AGOICON 2016), 3 December 2016, Gurgaon

23. Girish B, Kumar S, Singhal S, Meena J. Chronic uterine inversion with malignancy mimicking carcinoma cervix: A case report, “The Silver Jubilee Conference”, of Association of Gynecologic Oncologists of India (AGOICON 2016), 3 December 2016, Gurgaon
24. Rohitha C, Kumar S, Roy KK, Meena J, Singhal S, Bharti J. Evaluation of ovarian masses in young females, “The Silver Jubilee Conference”, of Association of Gynecologic Oncologists of India (AGOICON 2016), 3 December 2016, Gurgaon
25. Khoiwal K, Dadhwal V, Sharma A, Deka D, Sarkar P, Vanamail P. Pregnancy outcome in HIV positive women in a tertiary care centre in India, XXV European Congress of Perinatal Medicine, 15–18 June 2016, Maastricht, Netherland
26. Mann M, Chauhan SS, Kumar S, Bhatla N, Bakhshi S, Gupta R, Iqbal S, Kumar L. PJ34 mediated PARP-1 enzymatic activity inhibition in cervical cancer modulates the cellular response to cisplatin, AACR Annual Meeting, 16–20 April 2016, New Orleans, Louisiana
27. Iyer VK, Kujur M, Ahmed A, Mathur SR, Bhatla N. Conventional cervical smear followed by Hybrid Capture-II on slide scrapings for single screen and treat strategy, A prospective study of 1011 patients, 19th International Congress of Cytology, 29 May–1 June 2016, Yokohama, Japan
28. Ranga R, Rai S, Mathur S, Kriplani A, Agarwal N, Mahey R, Vashist S, Kachhawa G, Vanamail P, Bhatla N. Comparison of strength of association of Reid’s Colposcopic index vs. Swede score with histology, Asia Oceania Research Organisation on Genital Infections and Neoplasia, AOGIN 2016, 12–14 August 2016, Singapore
29. Vashist S, Mathur S, Rai S, Kumari A, Kriplani A, Singh P, Sankaranarayanan R, Bhatla N. Compliance with re-screening and awareness of cervical cancer: Results a 5 year study in Delhi, India, Asia Oceania Research Organisation on Genital Infections and Neoplasia, AOGIN 2016, 12–14 August 2016, Singapore
30. Singhal S, Kumar S, Bhatla N, Roy KK, Singh N, Meena J. Current status of knowledge, attitude, practice about cervical cancer screening among Indian urban women, Asia Oceania Research Organisation on Genital Infections and Neoplasia, AOGIN 2016, 12–14 August 2016, Singapore
31. Boddu A, Mathur S, Wig N, Vashist S, Malik R, Mahey R et al. Prevalence of Human Papillomavirus (HPV) infection and abnormal cervical cytology in HIV infected women, Asia Oceania Research Organisation on Genital Infections and Neoplasia, AOGIN 2016, 12–14 August 2016, Singapore
32. Arora P, Dhingra R, Bhatla N, Sharma A. VEGF and SFLT-1 Polymorphisms in preeclampsia, International Federation of Placenta Associations, 13–16 September 2016, Portland, Oregon
33. Singhal S, Bhatla N. Understanding the basics, effect of chemotherapy and radiotherapy, 22nd IFFS World Congress, 21–25 September 2016, Greater Noida, New Delhi
34. Bhatla N, Boddu A, Rai S, Mahey R, Malik R, Mathur S, et al. Ensuring cervical cancer screening of all HIV affected women: An important initiative in under resourced countries without a Universal Cervical Cancer Screening Programme, 16th Biennial Meeting of the International Gynecologic Cancer Society, 29–31 October 2016, Lisbon, Portugal
35. Lall M, Choudhary A, Kumar P, Mathur S, Das B, Namdeo D, Brijwal M, Bhatla N, Dar L. Comparison of INNO, Lipa and Linear Array for detection of HPV genotypes in cervical samples of HIV-Positive women positive by hybrid capture 2 and correlation with cytology, 8th Annual Conference of the Indian Association of Medical Microbiologists, Delhi Chapter (Micro-D-Con 2016), 17–19 November 2016, India Habitat Centre New Delhi, **(Best Free Poster Award 2016)**
36. Muwonge R, Bhatla N, Prabhu PR, Pawlita M, Nene BM, Esmy OP et al. Comparison of age, specific immunogenicity levels after one, two, and three doses of quadrivalent HPV vaccine in girls in India, 31st International Papillomavirus Conference, HPV 2017, 28 February–4 March 2017, Cape Town, South Africa
37. Bhatla N, Boddu A, Rai S, Mahey R, Malik R, Mathur S, Kriplani A, Agarwal N, Vashist S. Tackling the Double Burden of HPV with HIV, Indian Society of Colposcopy and Cervical Pathology (ISCCP, 2017), 3–5 March 2017, MAMC, New Delhi
38. Dadhwal V, Deka D, Shetty S, et al. Laparoscopic management of rudimentary horn hrmatometra: A case series, “12th AAGL International Congress on Minimally Invasive Gynecology in Partnership with the Indian Association of Gynaecological Endoscopists”, 2–5 June 2016, Mumbai
39. Dadhwal V, Sharma KA, Deka D. Prenatal diagnosis and management of anemia in a large placental choriangioma, 26th World Congress on Ultrasound in Obstetrics and Gynecology, 25–28 September 2016, Rome
40. Dadhwal V, Deka D, Sharma KA, et al. Doppler velocimetry for timing first and subsequent transfusions in fetuses with anemia due to Rh-isoimmunization, 26th World Congress on Ultrasound in Obstetrics and Gynecology, 25–28 September 2016, Rome
41. Malhotra N, Vignarajan CP, Noor N.* Salpingectomy versus proximal tubal occlusion for hydrosalpinges prior to in-vitro-fertilization (IVF)—Is there a difference in ovarian reserve or response to gonadotropins? RCOG World Congress 2016, 22 June 2016, Birmingham, UK

42. Malhotra N. Laparoscopic removal of true broad ligament fibroid, Revisiting Bonney Technique, 45th Annual Conference of AAGL (American Association of Gynecological Laparoscopists), Global Congress on Minimally Invasive Gynecology, 17 November 2016, Orlando, USA
43. Malhotra N, Dadhwal V, Sharma KA, Deka D. Laparoscopic Gonadectomy in Swyer's syndrome, 45th Annual Conference of AAGL (American Association of Gynecological Laparoscopists), Global Congress on Minimally Invasive Gynecology, 17 November 2016, Orlando, USA
44. Khoiwal K, Dadhwal V, Sharma KA, et al. Pregnancy outcome in women with HIV infection from a tertiary care centre of India, 19th International Conference on Obstetrics and Gynecology, 16–17 February 2017, London
45. Khoiwal K, Dadhwal V, Sharma KA. Episiotomy scar endometriosis: A case report, South zone YUVA FOGSI, 20–22 May 2016, Kodaikanal
46. Agarwal N, Sharma KA, Deka D. Laparoscopic Hysterectomy in müllerian anomalies with functional uterus, Ultimate Advances in Minimally Invasive Surgeries, 12th AAGL, 2–5 June 2016, Mumbai
47. Sharma JB. A randomized controlled trial comparing six months versus nine months of directly observed treatment short course intermittent anti-tuberculous therapy for female genital tuberculosis with infertility, RCOG World Congress, 20–22 June 2016, Birmingham, UK
48. Sharma JB. Vitamin D levels in women with Stress Urinary Incontinence, RCOG World Congress, 20–22 June 2016, Birmingham, UK
49. Kachhawa G, Raj P, Kulshrestha V, Anita G, Jaryal AK, Kriplani A, Bhatla N, Agarwal N, Deepak KK. Correlation of sFlt1 and PlGF levels in early pregnancy with the development of pre-eclampsia: A prospective Cohort study, 60th All India Congress of Obstetrics and Gynaecology, 27 January 2017, Gujarat Convention Centre, Ahmedabad
50. Singhal S, Kumar S, Mathur M, Gupta G, Meena J. Pre-operative thrombocytosis as a prognostic indicator in carcinoma ovary, FOGSI Gynae Onco Conference 2016, Widening Horizons, 30 July 2016, Kala Academy Panaji, Goa
51. Singhal S, Kumar S, Mathur S, Kumar L, Sharma DN, Shekhar B, Gupta D. Significance of pre-operative thrombocytosis in patients with endometrial and ovarian malignancy: Our experience, AGOICON 2016, The Silver Jubilee Conference of Association of Gynaecologic Oncologists of India 2016, 4 December 2016, Gurgaon
52. Kumari R, Swati, Sharma JB, Kriplani A. Vaginal leiomyoma, An unusual presentation, Urogynae 2016, 4 December 2016, Ahmedabad
53. Kumari R, Dalal V. Maternal and perinatal outcome of hyperglycaemia during pregnancy: A five year perspective, 60th AICOG, 25–29 January 2017, Ahmedabad
54. Dr Sehgal R, Dr Kriplani A. Continuation rates of intrauterine contraceptive device (IUCD) with respect to time of insertion in a tertiary hospital, 60th All India Congress of Obstetrics and Gynaecology, 27 January 2017, Gujarat University Convention Center, Ahmedabad
55. Kulshrestha V, Sethi A, Kachhawa G, Kumari R, Singh MM, Sinha S, Kriplani A*. Neurosurgical disorders in pregnancy, SAVMA, 2016, Conference on Saving Mothers, Organized by Allahabad Obs Gyn Society, 23 November 2016, Allahabad Medical College, Allahabad **(2nd prize for oral presentation)**
56. Agarwal N. Cytokines and hentraxin three levels in women with unexplained recurrent pregnancy loss and effect of oral micronized progesterone therapy on these levels and its relation to the pregnancy outcome, 60th All India Congress of Obstetrics and Gynaecology (AICOG), Hosted by FOGSI and Ahmedabad Obstetrics and Gynaecological Society (AOGS), Ahmedabad **(FOGSI-CORION AWARD)**
57. Sharma JB. Best Scientific Research Work in Obstetrics and Gynaecology in the senior category on “Six month Versus Nine Months Anti-Tuberculous Therapy for female Genital Tuberculosis: A Randomized Controlled Trial”, 60th All India Congress of Obstetrics and Gynaecology (AICOG), Hosted by FOGSI and Ahmedabad Obstetrics and Gynaecological Society (AOGS) Ahmedabad, **FOGSI-CORION AWARD (1st runner up)**

RESEARCH

Funded projects

Ongoing

1. Human Reproduction Research Centre, Alka Kriplani, ICMR, Long term: 1987, continuing (Annually as per requirement)
2. Phase III clinical trial of SMB T Cu 380 Ag in three Sizes/Models: Mini, Normal and Maxi, Alka Kriplani, SMB Corporation of India, Mumbai, 1 year, 2015–2017, Rs 5 lakhs
3. Effectiveness and safety of 2 vs 3 doses of HPV vaccine in preventing cervical cancer: An Indian multi-centre randomized trial, Neerja Bhatla, WHO-IARC, 8 years, 2009–2017, Rs 151.36 lakhs

4. Evaluation of quantitative detection of HR-HPV oncogene over-expression as an emerging novel biomarker for cervical cancer screening, Neerja Bhatla, Cure Health Diagnostics, 3 years, 2014–2017, Rs 35 lakhs
5. The expression of human epididymis protein 4 (HE4) in ovarian carcinoma and correlation with prognosis, Neerja Bhatla, ICMR, 1 year, 2016–2017, Rs 3.19 lakhs
6. Prevalence of vitamin B12 Deficiency among Indian Women with Polycystic ovary Syndrome (PCOS) and the impact of Vitamin B12 Supplementation on the efficacy of Conventional drugs in the Management of Women with PCOS, Vatsla Dadhwal, DBT, 3 years, 2015–2018, Rs 49.75 lakhs
7. Hypoxia adaptation and pregnancy outcome study (HAPS) an investigation of the influence of hypoxia on birth weight, Vatsla Dadhwal, Wellcome Trust and University College London, 2017–2018, Rs 23 lakhs
8. A Randomized open label comparative study of safety and efficacy of Metformin and subcutaneous insulin in Asian women with Gestational Diabetes, Neeta Singh, ICMR
9. Impact of local endometrial trauma on the outcome of IVF in women with previous failed implantation: Exploring the Genome wide transcriptomic basis, Neeta Singh, AIIMS
10. A randomized double blind controlled trial to investigate the effects of Vitamin D supplementation on maternal and new-born baby's vitamin D status in Asian-Indian Subjects, Garima Kachhawa, ICMR, 3 years, 2013–2016, Rs 45 lakhs
11. To evaluate the ROS levels in semen samples and effect of FERTISURE-M on ROS levels and IVF outcome in infertile men undergoing in vitro fertilization, A randomized double blind placebo controlled study, Reeta Mahey, AIIMS, 2 years, 2016–2018, Rs 9.4 lakhs
12. AMH in Indian women, Neena Malhotra, 2 years
13. Assessment of disease severity in patients with epithelial ovarian cancer by EMT related protein expression and micro RNA 200a,b,c, Seema Singhal, AIIMS, 2 years, 2015–2017, Rs 4 lakhs
14. Prevalence of cytological lesion and HPV type in vulval lesion on visual inspection and colposcopy, Rajesh Kumari, AIIMS, 2 years, 2016–2017, Rs 4 lakhs
15. Placental growth factor as a predictive and prognostic marker for development of pre-eclampsia in high risk patients, Jyoti Meena, AIIMS, 2 years, 2015–2017, Rs 4 lakhs
16. Role of genital Chlamydia trachomatis infection in infertile women, Vidushi Kulshrestha, AIIMS, 2016
17. Quality improvement project, Use of 'Printed Investigation sheet' in admitted antenatal patients, Vidushi Kulshrestha, AIIMS, 2017
18. Evaluation of molecular methods (PCR, immunohistochemistry) against conventional methods (histopathology, culture, AFB staining in endometrial samples) and laparoscopy in detection of genital tuberculosis in infertile women, Neena Malhotra, ICMR, 3 years, 9 months, 2013–2016, Rs 108 lakhs
19. Effect of oral probiotic supplementation during pregnancy and lactation in modulating immune response in breast milk, fetus, and neonate-a randomized double blind controlled trial, Neena Malhotra, CD Pharma, 2 years 6 months, 2015–2017, Rs 33.85 lakhs
20. Age specific normograms of anti-Mullerian hormone and antral follicle counts in infertile and fertile Indian women, Neena Malhotra, CSR from RECPDCL, 2 years, 2016–2017, Rs 49.93 lakhs
21. Effects of non-ionizing electro magnetic field (EMF) on human health, J.B. Sharma, ICMR, 5 years, 2009–2017, Rs 47 lakhs
22. To study the efficacy and safety of Diosmin (900 mg) given along with Traneximic acid (500 mg) and Mefenamic acid (250 mg) in reducing menstrual blood loss in patients of Abnormal Uterine bleeding, J.B. Sharma, Wallter Bushnel, 18 months, 2016–2017, Rs 17 lakhs
23. Evaluation of Gene Xpert as compared to conventional methods in diagnosis of genital TB among infertile women, J.B. Sharma, Ministry of Health and Family Welfare (MOHFW), 3 years, 2016–2018, Rs 28 lakhs

Completed

1. Perception of reversible and permanent contraception in India (POPI), Alka Kriplani, University of New Mexico Health Sciences Center, Albuquerque, New Mexico, USA, 1 year, 2015–2016, Rs 3.89 lakhs
2. Depressive and anxiety disorders in the postpartum period: prevalence, psycho-social correlates and effect on mother-infant bonding, Vatsla Dadhwal, ICMR, 3 years, 2014–2016, Rs 46.29 lakhs

Departmental projects

Ongoing

1. Effect of administration of intravenous intralipid on implantation rate in women with implantation failure after IVF/ICSI: A randomized control trial

2. To correlate serum Micro RNAs, MiR 20a and MiR 205 levels with clinico-pathologic characteristics in patients of epithelial ovarian cancer
3. Role of transdermal testosterone gel pretreatment in poor responders on IVF outcome, A prospective randomized controlled trial with active control
4. Molecular basis of cationic anti-microbial peptide on human placental cytotrophoblast cells
5. Luteal phase low molecular weight heparin in women with previous failed IVF bar ICSI cycle
6. Evaluation of serum HE-4 and CA-125 in women with carcinoma endometriosis
7. To study the feasibility of prenatal diagnosis of fetal structural malformations at the 11–13⁺ weeks scan
8. A study of the acceptability and feasibility of opportunistic cervical cancer screening in pregnancy by conventional Pap smear and HPV DNA testing
9. A Comparative study of prevalence of human papillomavirus infection and precancerous lesions of Vulva and Cervix in HIV positive and HIV negative women
10. Association of placental volume and vascularisation indices in first trimester with birth weight
11. To compare the efficacy, safety and cost effectivity of intravenous ferric carboxymaltose vs iron sucrose complex in the management of anaemia in pregnancy
12. To compare the hormonal and metabolic outcomes in Metformin plus Myoinositol vs Metformin alone and fertility outcome in PCOS women undergoing OVI and IUI
13. To evaluate the efficacy of Cabergoline as compared to GnRH agonist in women with Endometriosis: A prospective randomised controlled trial
14. Study of association between insulin sensitivity and cardio-vascular risk factors in lean versus overweight subjects with polycystic ovarian syndrome
15. To compare the efficacy of ulipristal acetate versus GnRH agonist in women with symptomatic uterine myoma and post treatment follow up: A prospective randomized control study
16. To compare the metabolic and hormonal effects of metformin vs metformin plus myoinositol in pcos women undergoing ovulation induction + iui cycles and infertility outcome
17. Incidence of paraaortic and pelvic lymph node metastasis in patients undergoing primary debulking for epithelial ovarian cancers
18. Evaluation of laparoscopic ovarian drilling by monopolar drilling needle vs harmonic scalpel in cases of clomiphene citrate resistant polycystic ovarian syndrome
19. Efficacy and safety of Diosmin (900 mg) given along with traneximic acid (500 mg) and mefenamic acid (250 mg) in reducing menstrual blood loss in patients of abnormal uterine bleeding: A prospective randomized double blind comparative study
20. A Randomised controlled study of Burch Colposuspension versus inside-out TVT–O and outside, in Transobturator Vaginal tape Procedure in women with urodynamic proven Stress Urinary Incontinence
21. Rapid point of care detection of HPV associated malignancies.
22. The serum levels of leptin and adiponectin in endometrial carcinoma and their association with histological grade, Myometrial Invasion, Metastasis
23. Evaluation of laparoscopic ovarian drilling by monopolar drilling needle vs harmonic scalpel in cases of clomiphene citrate resistant polycystic ovarian syndrome
24. Assessment of tubal patency with selective chromo-pertubation at office hysteroscopy compared with modified mini laparoscopy in infertile women
25. Correlation of first trimester metabolic markers with development of gestational diabetes mellitus in obese/ overweight compared to non-obese Asian Indian women
26. A prospective randomised comparative clinical trial of hysteroscopic septal resection using conventional resectoscope versus mini resectoscope
27. A randomized control trial comparing the effects of metformin versusmyoinositol in improving art outcome in women with PCOS undergoing in-vitro-fertilization cycle
28. A validation of endometriosis fertility index (EPI) for non-ART pregnancy in women with endometriosis associated infertility: A prospective study
29. A comparative study of solifenacin and tolterodenein the treatment of over active bladder syndrome
30. A pilot study comparing 5 mm telescope and 2.9 mm telescope in chronic pelvic pain
31. Vit-D level in patients with SUI and role of its supplementation
32. To study the role of 3D endometrial volume and 2D endometrial thickness in IVF patients

33. Prospective randomized comparative study using thunderbeat technology, Harmonic Ace and Ligasure Device During Total Laparoscopic Hysterectomy for the Treatment of Benign Diseases of the Uterus—A Pilot Study
34. Prevalence and prognostic significance of Herzner in Ca endometrium
35. A pilot study comparing minilaparoscopy (5 mm) versus modified minilaparoscopy (2.9 mm) for the management of chronic pelvic

Departmental projects

Completed

1. A comparative evaluation of HPV E6/E7 mRNA assay and high risk HPV DNA test for the diagnosis of high grade cervical intraepithelial neoplasia
2. A comparative study of Burch Colpo suspension and trans obturator vaginal tape procedure in women with stress urinary incontinence
3. A comparative study of the treatment of gestational diabetes mellitus by metformin vs insulin: A randomized control trial
4. A prospective comparative study of mifepristone followed by Misoprostol or ethacridine lactate and oxytocin for second trimester abortion
5. A randomized controlled trial comparing follicular flushing and direct aspiration in poor responders undergoing In-Vitro-Fertilization (IVF)
6. Assessment of lower segment cesarean scar by transvaginal ultrasound and MRI
7. Association of maternal pre pregnancy BMI, gestational weight gain, Nutrition and Metabolic markers with Neonatal Adiposity
8. Bed rest versus no bed rest following embryo transfer in IVF/ICSI patients
9. Co-relation of Doppler velocimetry in various blood vessels with fetal anaemia in women with Rh-immunized pregnancy
10. Effect of intrauterine perfusion of granulocyte colony stimulating factor on endometrial thickness, pregnancy rate and implantation rate in woman undergoing in vitro fertilization: A randomized controlled trial
11. Evaluation of Enterleukin-6 and VEGF levels in ascitic fluid of patients with epithelial ovarian cancer
12. Evaluation of laparoscopic ovarian drilling by monopolar drilling needle vs harmonic scalpel in cases of clomiphene citrate resistant polycystic ovarian syndrome
13. Expression of biomarkers in endometrial hyperplasia and carcinoma
14. Incidence of paraaortic and pelvic lymph node metastasis in patients undergoing primary debulking for epithelial ovarian cancers
15. Interventional study on the effect of antitubercular treatment on endometrium, fallopian tubes and ovaries in genital tuberculosis
16. Prospective randomized comparative study of hysteroscopic myomectomy using unipolar system and bipolar system
17. Randomized prospective study comparing use of thunderbeat, harmonic ace and ligasure in total laparoscopic hysterectomy
18. Role of MRI in evaluation and quantification of vault prolapse in women with previous hysterectomy
19. Role of MRI in evaluation of vault prolapse and its relationships with POPQ classification and operative finding and operative finding
20. The serum levels of leptin and adiponectin in endometrial carcinoma and their association with histological grade, myometrial invasion, metastasis
21. To evaluate the pregnancy rate after endometrial scratching in couples with unexplained infertility in ovulation induction and IUI cycles
22. To evaluate the role of endometrial scratching in the outcome of in vitro fertilization cycles (IVF-ET)
23. To study the role of 3D endometrial volume and 2D endometrial thickness in predicting outcome in IVF patients
24. Vitamin D level in women with stress urinary incontinence and effect of vitamin D supplementation

Collaborative projects

Ongoing

1. Placental growth factor as a predictive and prognostic marker for development of pre-eclampsia in high risk patients
2. Establishing guidelines for fetal counselling for surgical congenital anomalies (Pediatric Surgery)
3. Evaluation of immunological and pro-thrombotic/pro-inflammatory alteration in anti-phospholipid antibody mediated and idiopathic recurrent miscarriage in women and role Coenzyme Q10 in its modulation (Biochemistry)

4. Role of sperm molecular factors in recurrent pregnancy loss (Anatomy)
5. Inter institutional program for Maternal, neonatal and infant sciences—A translational approach to studying preterm birth (Pediatrics)
6. A population based prospective cohort study to unravel the causes of stroke and cognitive decline: A cross cultural perspective (Indo-Netherlands Project: Neurology)
7. To investigate the role of PARP-1 in cisplatin resistance in cervical cancer (Medical Oncology, IRCH)
8. Role of hydrogen sulphide in migration of human trophoblast cells and its impact on placentation: An in-vitro study (Anatomy)
9. Organization of the myenteric plexus in midgut, hindgut and ileocecal valve at various gestational ages in humans (Anatomy)
10. Study of bone mass in Asian Indian newborn subjects—A hospital-based study (Endocrinology and Metabolism)
11. A randomized, open-label, two-arm, multicenter study comparing the efficacy, safety and tolerability of Oral Dydrogesterone 30 mg daily versus Crinone 8% intravaginal progesterone gel 90 mg daily for Luteal Support in In-Vitro Fertilization (LOTUS II) (Abott Pharmaceuticals)
12. A Phase III, randomized, open-label, multiple-dose, parallel-group study to evaluate the efficacy, safety, pharmacokinetics and immunogenicity of recombinant human FSH of Cadila healthcare limited, India as compared to Gonadotropin Releasing Hormone (GnRH) Agonist Administered Subcutaneously in Female Patients Undergoing Assisted Reproductive Technology (Zydus Pharmaceuticals)
13. Molecular basis of estrogenism in endometriosis (Physiology)
14. Study of genome-wide transcriptional landscape of ovarian endometriosis (Physiology)

Completed

1. CORONIS, International Study of Caesarean Section Surgical Technique—A Randomized Control Trial (Oxford University, London)
2. Identification of human chromosome 21-Derived miRNA in maternal circulation for non invasive prenatal diagnosis of down syndrome (Genetic Unit)
3. Depressive and anxiety disorders in the postpartum period: prevalence, psycho-social correlates and effect on mother-infant bonding (Center for Community Medicine)
4. Evaluation of vascular functions, baroreflex sensitivity and biochemical factors to investigate Pre eclampsia (Physiology)
5. To study the relationship between polycystic ovarian syndrome, obstructive sleep apnea syndrome and insulin resistance (Medicine)
6. BCL-2 and RAB25 proteins in endometrial tissues of patients with endometriosis (Physiology)
7. Morphological study of developing human cochlear nucleus (Anatomy)
8. Molecular basis of estrogenism in endometriosis (Physiology)

PUBLICATIONS

Journals: 72

Abstracts: 18

Chapters in books: 23

Books: 3

PATIENT CARE

Colposcopy 520

1. Organized Cervical Cancer Screening Camp for EHS beneficiaries at Gynae OPD, AIIMS, 17 January 2017 and 23 January 2017
2. Organized Cervical Cancer Screening Camp at Swami Vivekanand Basti, Chanakya Puri, New Delhi with the support of Kalyanmayee, New Delhi, 8 March 2017

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor Alka Kriplani received GOAL Mentor Award for contributions towards Obstetrics and Gynaecology at GOAL 2016, Udaipur, 20–21 August 2016; Dr APJ Abdul Kalam's D.G.F. Ratna Award at Gynae Adcon, Indian Medical Association (IMA) East, Delhi, 4 September 2016; Indira Gandhi Gold Medal Award 2016 at National Unity Conference for Education, Health and Economic Development, Global Economic Progress and Research Association, Bangalore, 19 November 2016; President FOGSI (Federation of Obstetrics and Gynaecological Societies of India), 2016; Honorary Member, Metabolic Syndrome, Pre-diabetes and PCOS Society (MP-PCOS), 2016; Co-opted Member, Indian Medical Association Standing Committee for Family Welfare (Maternal and Child Welfare); GOGS Oration on Caesarean Myomectomy,

North Zone Yuva FOGSI 2016, Ghaziabad Obs and Gynae Society (GOGS), Ghaziabad, 2 April 2016; MOGS Oration on Caesarean Myomectomy, South Zone Yuva FOGSI 2016, Madurai Obstetrics and Gynaecological Society (MOGS), Madurai, 21 May 2016; MOGS, Dr Bhanuben Nanavati Golden Jubilee Oration on Endoscopic Surgery in BOH, 12th AAGL International Congress on The Ultimate Advances in Minimal Invasive Gynaecological Surgery, Indian Association of Gynecological Endoscopists (IAGE), Mumbai, 5 June 2016; Oration on Congenital Malformations of genital tract: Diagnosis to intervention at FOGSI FIGO, 2016 Conference on Best Practices, Breakthrough and Current Dilemmas in OBGYN, Pune Obst and Gynae Society (POGS), Pune, 25 June 2016; Dr P. Dissanayake Endowment Lecture, Congenital malformations of genital tract, Diagnosis to intervention, 49th Annual Scientific Congress of the Sri Lanka College of Obstetricians and Gynaecologists (SLCOG), Colombo, Sri Lanka, 3 July 2016; JOGS Oration on AUB, GCPR Indian perspective, FABCON 2016, Jaipur Obstetrics and Gynaecology Society (JOGS), Jaipur, 9 July 2016; Oration on Minimal Invasive Surgery in Gynaecological Oncology, FOGSI Gynae Oncology Conference 2016, FOGSI Oncology Committee in association with Royal College of Obstetricians and Gynaecologists (RCOG) West Zone and Panaji Obstetric and Gynaecological Society (POGS), Goa, 30 July 2016; Oration on AUB-Evidence Based Management at ICOG-FOGSI National Conference on Fertility Regulation and Women's Health, ICOG-FOGSI in association with OGS, Hyderabad, 27 August 2016; Dr DC Dutta Memorial Oration on Congenital Malformations of the Genital Tract, Diagnosis to Intervention, Annual Conference of BOGSCON-42, The Bengal Obstetric and Gynaecological Society (BOGS), Kolkata, 7 January 2017; Dr (Mrs) Mridula Kamboj Memorial Oration on Fertility enhancing endoscopic surgeries, International Conference on Reproductive Health with Emphasis on Strategies for Infertility, Assisted Reproduction and Family Planning and the 27th Annual Meeting of the Indian Society for the Study of Reproduction and Fertility (ISSRF), 2017 Conference, ICMR, Delhi, 23 January 2017; Dr EK Varghese Memorial Oration on Congenital Malformations of Genital tract, Diagnosis to Intervention, 39th All Kerala Conference of Obstetrics and Gynaecology (AKCOG), 2017, Calicut Obstetric and Gynaecological Society (COGS), Calicut, Kerala, 11 February 2017; OGS oration: Congenital malformations of genital tract: Diagnosis to Intervention, YUKTI, 2017 Conference, Obstetrics and Gynaecology Society of Hyderabad (OGSH), Hyderabad, 19 March 2017; **Chief Guest:** (i) Pre-Congress Workshop on PPH Drill, Preventing and Managing PPH in Conference on Midlife Preventing The Preventable, organized by FOGSI, Gurgaon, 29 April 2016, (ii) Conference on Midlife Preventing the Preventable, organized by FOGSI, Gurgaon, 1 May 2016, (iii) G-FIT (Glenmark FOGSI Infertility Tutorials) in association with FOGSI Infertility, Delhi, 12 June 2016, (iv) Gynae Adcon, organized by Indian Medical Association (IMA) East, Delhi, 4 September 2016, (v) CG Saraiya CME, 60th All India Congress of Obstetrics and Gynaecology (AICOG), Hosted by FOGSI and Ahmedabad Obstetrics and Gynaecological Society (AOGS), Ahmedabad, 26 January 2017, (vi) Infertility Committee Workshop, 60th All India Congress of Obstetrics and Gynaecology (AICOG), Hosted by FOGSI and Ahmedabad Obstetrics and Gynaecological Society (AOGS), Ahmedabad, 26 January 2017, (vii) Endometriosis Committee Workshop, 60th All India Congress of Obstetrics and Gynaecology (AICOG), Hosted by FOGSI and Ahmedabad Obstetrics and Gynaecological Society (AOGS), Ahmedabad, 26 January 2017; Guest of Honour at North Zone AICC RCOG Annual Conference 2016, organized by RCOG North Zone India in association with Institutes of Obs and Gynae and Fetal Medicine, Indraprastha Apollo Hospitals, AOGD (Association of Obstetricians and Gynaecologists Delhi) and Department of Obs and Gynae, Maulana Azad Medical College, Delhi, 9 September 2016 and South Zone Yuva FOGSI 2016, organized by Madurai Obstetrics and Gynaecological Society (MOGS), Madurai, 21 May 2016.

Professor Sunesh Kumar was peer reviewer of European Journal of Obstetric, Gynaecology and Reproductive Medicine; Member, Interview Board for post of Medical Officer, Union Public Selection Commission (UPSC), New Delhi; Member, Selection Committee for selection of Faculty in Gynae at PGI, Chandigarh and PGIMER, Rohtak; Member, ICMR Group on Research in Reproductive Medicine; Member, ICMR Research Advisory Committee for Model Rural Health Research Unit (MRHRU), Rajasthan; Member, Bureau of Indian Standard, Ministry of Consumer Affairs, Food and Public Distribution, Govt. of India; Member, DBT Sub-Group Committee for finalizing the REACH Scheme for Biotechnology based Programme for Women; Member, Technical Specification/Selection Committee at AIIMS, New Delhi.

Professor Dipika Deka was visiting professor and external expert in Fetal Medicine at JIPMER, Puducherry, 18–21 December 2016; Organizing Chairperson, the Vth AIIMS Fetal Medicine Workshop, 4–7 April 2016, Delhi; Organizing Chairperson, Workshop on Fetal Intervention: Annual Congress of the Society of Fetal Medicine, FetalMed 2016, 9–11 September 2016, Kolkata. Chaired Sam W Dhar Oration, 27thNEOGSCON 2016, under the aegis of FOGSI, at Shillong Obst and Gynae Society, 11–13 November 2016, Shillong Convention Centre, Shillong; Remained a part of DD News, Panel discussion on Pre pregnancy care, Healthy India, 14 Aug 2016; DD News, Naya Savera, 7 September 2016: Thalassemia testing in pregnancy (Hindi); DD News, Breakfast Show, 8 September 2016: Thalassemia testing in pregnancy (English); Participated in Panel discussion at Public lecture on “Child with Birth Defect: Mother, Family and Society”, Organized by Department of Pediatrics, 7 December 2016, JLN Auditorium, AIIMS.

Professor Neerja Bhatla was Organizing Chairperson, Leadership Training in Colposcopy and Advocacy for Cervical Cancer Control (CME Gynae Oncology) organized in collaboration with International Agency for Research on Cancer (IARC, WHO) and International Federation of Cervical Pathology and Colposcopy (IFCPC), 4–5 April 2016, New Delhi; Organizing Chairperson, 2nd Cadaver Dissection and Training in Gyn Oncology (CaDGO 2016), 23–24 April 2016, New

Delhi; Organizing Secretary, Pre-Conference International Workshop on Gynae Oncology, FOGSI-FIGO 2016 Conference on Best Practices, Breakthrough and Current Dilemmas in OBGYN, 24–26 June 2016, Pune; Organizing Chairperson, 1st FOGSI Gynae Oncology Conference 2016, 29–31 July 2016, Goa; Organizing Chairperson, 3rd Cadaver Workshop and CME in Gynaecologic Oncology (CaDGO 2017), 11–12 February 2017, New Delhi; Organizing Chairperson, Symposium on Ovarian Cancer and HIPEC, 11 February 2017, New Delhi; Organizing Chairperson, FOGSI FIGO Pratishruti Workshop Series for Cervical Cancer Prevention, National TOT for Course Development, 5 February 2017, Mumbai; Part of Development of a mobile application on FIGO Staging System and management of Gynae Cancers in collaboration with FIGO and International Atomic Energy Agency (IAEA), Vienna, Austria; Reviewed abstracts for the 16th Biennial Meeting of the International Gynecologic Cancer Society, Lisbon, Portugal, 28–31 October, 2016; Continued to be Technical Expert Group on HPV vaccination, Directorate of Health and Family Welfare, Punjab, Chandigarh, 2016; Technical Advisory Group (TAG) Meeting to review Linear Growth Study, conducted by DBT, BIRAC and WHO, 2016; Co-opted member for HPV Vaccination Programme by State Technical Advisory Group on Immunization (STAGI), Delhi; Participated in development of online training course in Colposcopy in collaboration with International Federation of Cervical Pathology and Colposcopy (IFCPC); Member, Committee to frame the outlines, framework, protocol of a Nationwide screening programme for Common Cancer viz Breast, Oral and Cervical Cancer, Ministry of Health and Family Welfare; Member, NTAGI Standing Technical Sub-Committee for inclusion of HPV vaccine in National Immunisation Program; Member, Committee for development of FOGSI Good Clinical Practice Recommendations (GCPR) on Endometriosis; Part of Presidential Oration: Control of HPV-related diseases and Cervical Cancer in Asia-Oceania in the last 15 years, Biennial Conference of Asia Oceania research organisation on Genital Infections and Neoplasia, AOGIN 2016, Conrad Centennial, Singapore, 12–14 August 2016; Dr VD Shastrakar Oration, Nagpur Obst and Gynae Society: Screening tests for cervical cancer: Time for a new paradigm, Nagpur, 19 March 2017; Executive Member, Delhi Gynaecological Endoscopists Society, 2014–2016; President, Asia Oceania research organization on Genital Infections and Neoplasia (AOGIN), 2014–2016; Member, Scientific Committee of International Federation for Cervical Pathology and Colposcopy (IFCPC), 2014–2017; Board Member, International Federation for Cervical Pathology and Colposcopy (IFCPC), 2014–2017; Chairperson, Oncology and Trophoblastic Tumors Committee, FOGSI, 2014–2017; Member, Scientific Committee of International Gynecologic Cancer Society (IGCS), 2016–2017; Chairperson, Gynae Oncology Committee, International Federation of Gynaecology and Obstetrics (FIGO), 2015–2018; Part of Evaluation of an HPV Antibody Biomarker based on Multimodal Spectroscopy Platform for Cervical Cancer Screening: A Pilot study, Collaborative Research with University of Michigan; A side-by-side comparison of a transvaginal colposcope to standard of care visual inspection in a 100 patient pilot study on women undergoing cervical cancer screening, Duke University, North Carolina, USA; Interview to CNN 18 on World Cancer Day: Know more about Cervical Cancer, 4 February 2017.

Professor K.K. Roy was External Examiner for final Fellowship examination (EFCPS-Part-II-Clinical Viva Voce) of Bangladesh College of Physician and Surgeons (BCPS) in obstetrics and gynecology, 30 July to 3 August 2016 at Dhaka, Bangladesh; Organizing Secretary, Women's Health Initiative training course in Minimally Invasive Gynaecology, 23–28 May 2016, Obstetrics and Gynaecology Department, AIIMS, New Delhi; Chairperson, CME: Endoscopic Video Session in Association with DGES, 19 March 2017, Delhi.

Professor Neena Malhotra was elevated as a Fellow (FRCOG) by the Royal College of Obstetricians and Gynecologists, London (September, 2016); Reviewer of Final exit MBBS exams for the University of Malaya, Kuala Lumpur (June, 2016).

Professor Nutan Agarwal received Corion Award Senior Category 2016 for best research work from FOGSI on research entitled, Cytokines and pentraxin3 levels in women with unexplained recurrent pregnancy loss and effect of oral micronized progesterone therapy on these levels and its relation to the pregnancy outcome; First prize for best paper entitled, “USG guided Intraamniotic instillation of surfactant before preterm delivery for prevention of neonatal respiratory syndrome” at International Conference on Perinatology, 10–11 September 2016, Gurgaon.

Professor J.B. Sharma received the Dr B.C. Roy National Award for 2015 in the category of ‘To Give Aid or Assistance to Research Project’ for performing original research work on 15 October 2016; Labhsetwar Award, 2017 of ISSRF for original research work in female genital tuberculosis, during 27th Annual Meeting of the ISSRF along with an International Conference on Reproductive Health with Emphasis on Strategies for Infertility, Assisted Reproduction and Family Planning (ISSRF, 2017), 23–25 January 2017, AIIMS, New Delhi; DMA Vishisht Chikitsa Rattan Award for distinguished service in Obstetrics and Gynaecology by Delhi Medical Association, 10 July 2016.

Dr Garima Kachhawa was awarded Best Paper in poster presentation on Laparoscopic Gonadectomy in Patients with Disorders of Sexual Differentiation, at ENDOFERT 2016 Annual Conference of Delhi Gynaecological Endoscopists Society, Department of Obstetrics and Gynaecology, AIIMS, New Delhi, 5–8 August 2016; Reviewer for MD (Obstetrics and Gynaecology) thesis from B.P. Koirala Institute of Medical Science, Dharan, Nepal and Journal of Obstetrics and Gynaecology of India (JOGI) and Journal of Human Reproduction Sciences; Member, Technical Evaluation Committee for “Congenital malformation and genetics, Maternal Health, Child Health, Low Child Sex Ratio and other Gender and Health problems related to women” areas under Grant-in-Aid (GIA) Scheme of Department of Health Research, New Delhi; Member, Local

Coordination/Expert Committee for conducting Clinical Research through ICMR; Participated in Health Camp in village Nandra, Tehsil Raniganj, District Parpatgarh, 12–14 November 2016.

Dr Reeta Mahey was awarded Best paper on Pregnancy rate after endometrial scratching in couples with unexplained infertility in oblation induction and IUI cycles, A Randomized controlled trial, CUPART 2016, Conference on Current Practices and Recent Advances in ART, organized by ISAR and Panaji Obs. And Gyn. Society, Goa, April 2016; Visiting Observer, 28 February–6 March 2017 at Assisted Conception Unit, Guys Hospital, London; received Young Gynaecologist Award in AOFOG Conference, 15–18 June 2017 (Asia Oceania Federation of Obstetricians and Gynaecologists).

Dr P. Vanamail received the Best Publication Award (Prof Sukatmae) in the field of Nutrition, Annual Conference of Indian Society for Medical Statistics (ISMS), ISI, Kolkata, December 2016; Reviewer for PLOS ONE, IJMR, Journal of Obstetrics and Gynaecology, Clinical Investigative Medicine.

Dr Vidushi Kulshrestha was awarded Second Prize for Best E-Poster on ‘Pregnancy complicated by aplastic anemia—A challenge’, at FOGSI FIGO, 2016 Conference on Best Practices, Breakthroughs and Current Dilemmas in Obstetrics and Gynaecology, Pune, 25–26 June 2016; Second Prize for best oral presentation on ‘Neurosurgical Disorders in Pregnancy’, SAVMA, 2016 Conference on saving mothers, organized by Allahabad Obs. Gyn. Society, Allahabad, 23 October 2016; Faculty, Medical Board, AIIMS for new entrants for MBBS, BSc Nursing, Optometry, Medical Technology in radiography courses. (2014 onwards); Coordinator, Framing of FOGSI-AUB Guidelines for ‘Management of Abnormal Uterine Bleeding in reproductive period, Evidence based recommendations for Indian women’ in collaboration with GESI. Guidelines were released on 8 May 2016; Faculty, Expert Committee Meeting for finalizing guidelines on Comprehensive Abortion Care (CAC), organized by Maternal Health Division of MoHFW, GOI, Delhi, 15 March 2017; Faculty, Live Gynae Endoscopy Workshop, at FOGSI President National Congress FABCON 2016, Jaipur, 8 July 2016.

9.25. Orthopaedics

Professor and Head

Rajesh Malhotra

Professors

Hira Lal Nag
Shah Alam Khan

Ravi Mittal
Vijay Kumar

Chandra Shekhar Yadav

Associate Professor

Bhavuk Garg

Assistant Professors

Vijay Digge

Vivek Shankar

Vikrant Manhas

EDUCATION

CMEs/Workshop/Symposia/National and International Conferences

1. CME, advanced technologies in knee replacement, AIIMS, New Delhi, 14 April 2016
2. Current concepts in arthroplasty 2016, Orthopedic Research Society and Department of Orthopedics, JPNA Trauma Centre, AIIMS, New Delhi 20–21 August 2016
3. Univation Navigation Workshop, CCA 2016, AIIMS, New Delhi, 19 August 2016
4. Oxford Partial Knee Replacement Workshop, CCA 2016, AIIMS, New Delhi, 19 August 2016
5. Workshop on “Latest Splinting and Casting Techniques”, AIIMS, 26 July 2016
6. First Univation (Unicondylar Knee System) Live Surgery Workshop, AIIMS, 8 August 2016
7. Symposium of bone substitutes, Department of Orthopedics, AIIMS, New Delhi, 3 February 2017
8. Cadaver Navigated TKR, Department of Orthopedics at JPNA Trauma Centre, AIIMS, New Delhi, 5 February 2017
9. 5th AIIMS Arthroplasty Update in Association with ISKSAA Cadaver Workshop, 19–20 November 2016, AIIMS, New Delhi
10. 9th AIIMS Cadaver Arthroplasty Course, 25–26 February 2017, AIIMS, New Delhi

Lectures delivered

Rajesh Malhotra: 69

C.S. Yadav: 58

Bhavuk Garg: 23

H.L. Nag: 12

Shah Alam Khan: 8

Vijay Kumar D: 5

Ravi Mittal: 19

Vijay Kumar: 14

Vivek Shankar: 1

Rajesh Malhotra: 69

1. Take down of fused hips: When can you go wrong?, 10th Annual Conference of Indian Society of Hip and Knee Surgeons (ISHKS), 8–10 April 2016, Chennai
2. Uni compartments knee replacement & its role in Indian scenario, Ortho Academicia 2016, 15–17 April 2016, Gurgaon, New Delhi
3. Surgical management of osteoporotic fractures, NAMS-PGI Symposium on Osteoporosis, 23 April 2016, Chandigarh
4. Trochanteric flip and safe surgical dislocation of hip, Trauma Conclave, Lower Limb Fractures under aegis of Trauma Society of India, 1 May 2016, New Delhi
5. Causes of distal femoral LCP failures, Trauma Conclave, Lower Limb Fractures under aegis of Trauma Society of India, 1 May 2016, New Delhi
6. Difficult cases and navigation, 1st Sakra Indo Japanese Knee Course 2016, 7–8 May 2016, Bangalore
7. Total knee replacement in valgus knee, 1st Sakra Indo Japanese Knee Course 2016, 7–8 May 2016, Bangalore
8. Patient specific preoperative jigs (Intraoperative Guides) for total knee replacement, 1st Sakra Indo Japanese Knee Course 2016, 7–8 May 2016, Bangalore
9. Swollen knee: Adult & elderly, CME, The Knee, 22 May 2016, Patna Medical College & Hospital (PMCH), Patna
10. Kinematics of normal knee joint, CME, The Knee, 22 May 2016, Patna Medical College & Hospital (PMCH), Patna
11. TKA for flexion deformity, 12th International Conference of Skeletal Deformities Correction of the Egyptian Orthopaedic Association, 25–27 May 2016, Cairo, Egypt
12. TKA for varus deformity, 12th International Conference of Skeletal Deformities Correction of the Egyptian Orthopaedic Association, 25–27 May 2016, Cairo, Egypt
13. TKA for extraarticular deformity, 12th International Conference of Skeletal Deformities Correction of the Egyptian Orthopaedic Association, 25–27 May 2016, Cairo, Egypt
14. THA for proximal femoral deformities, 12th International Conference of Skeletal Deformities Correction of the Egyptian Orthopaedic Association, 25–27 May 2016, Cairo, Egypt
15. THA for bony ankylosis of the hip, 12th International Conference of Skeletal Deformities Correction of the Egyptian Orthopaedic Association, 25–27 May 2016, Cairo, Egypt
16. Common orthopaedic problems in men: Diagnosis and management, Prasar Bharti, All India Radio, 14 June 2016, New Delhi
17. Orthopaedic problems in women: Diagnosis and management, Prasar Bharti, All India Radio, 14 June 2016, New Delhi
18. Yoga and wellbeing, Public Lecture, 19 June 2016, AIIMS, New Delhi
19. Surgical technique—CR Knee, Delhi Arthroplasty Course, 24 July 2016, Sports Injury Centre, New Delhi
20. *Intraoperative complications—My experience!, Delhi Arthroplasty Course, 24 July 2016, Sports Injury Centre, New Delhi
21. Accelerometer based navigation: The latest in knee navigation technology, Combined Meeting of the (18th) Thai Hip & Knee Society (THKS) & (8th) Asia Pacific Organization of Knee Arthroplasty (APOKA), 11–13 August 2016, Bangkok, Thailand
22. Importance of primary acetabular fixation and cup fixation materials, Combined Meeting of the (18th) Thai Hip & Knee Society (THKS) & (8th) Asia Pacific Organization of Knee Arthroplasty (APOKA), 11–13 August 2016, Bangkok, Thailand
23. Acetabular fractures: The role of arthroplasty, Combined Meeting of the (18th) Thai Hip & Knee Society (THKS) & (8th) Asia Pacific Organization of Knee Arthroplasty (APOKA), 11–13 August 2016, Bangkok, Thailand
24. An algorithm for right implant selection in hips, Combined Meeting of the (18th) Thai Hip & Knee Society (THKS) & (8th) Asia Pacific Organization of Knee Arthroplasty (APOKA), 11–13 August 2016, Bangkok, Thailand
25. Total Hip arthroplasty for Acetabular Fracture, Pre Conference Workshop-III World Trauma Congress–2016, 17 August 2016, JPNA Trauma Centre, New Delhi
26. Principle of unicondylar knee replacement, Univation Navigated Partial Knee Replacement Workshop during CCA 2016, 19 August 2016, AIIMS, New Delhi

27. Design feature of univication partial knee replacement, Univication Navigated Partial Knee Replacement Workshop during CCA 2016, 19 August 2016, AIIMS, New Delhi
28. Surgical principles and techniques of UKR, Oxford Partial Knee Replacement Workshop during CCA 2016, 19 August 2016, AIIMS, New Delhi
29. Indian perspective of UKR, Oxford Partial Knee Replacement Workshop during CCA 2016, 19 August 2016, AIIMS, New Delhi
30. My Journey of 25 years on Road to Perfect Total Knee Arthroplasty, TKA Symposium, 11 September 2016, Kota
31. Converting austin-Moore/hemiarthroplasty into Total Hip Arthroplasty, CONTAS 2016, 18 September 2016, New Delhi
32. Upper tibial osteotomy converted to knee replacement, CONTAS 2016, 18 September 2016, New Delhi
33. Management of proximal femoral deficiencies in revision scenario, 4th International Conference of Geriatric Orthopaedic Society of India (GOSICON), 22–25 September 2016, Bhubaneswar
34. Peri-prosthetic fractures and their management, 4th International Conference of Geriatric Orthopaedic Society of India (GOSICON), 22–25 September 2016, Bhubaneswar
35. Tips & tricks in TKR to correct FFD, 4th International Conference of Geriatric Orthopaedic Society of India (GOSICON), 22–25 September 2016, Bhubaneswar
36. Physical injuries, PG Instructional Course DOA, 1 October 2016, PGIMER, RML, New Delhi
37. The unexpected fracture, 12th Annual Conference of ISBMR, 2 October 2016, Mumbai
38. Nanotechnology and orthopedics, National Conference on Emerging Biomaterials, 19 October 2016, Coimbatore
39. Recurrent dislocations in THR: Management Strategies, 3rd UPOA Arthroplasty Course, 22–23 October 2016, Lucknow
40. TKR post HTO: Changing from a girlfriend to a wife, 3rd UPOA Arthroplasty Course, 22–23 October 2016, Lucknow
41. Pre & Peri-operative planning for optimizing a THR: Fail to plan & you plan to fail, 3rd UPOA Arthroplasty Course, 22–23 October 2016, Lucknow
42. Managing bone defects in TKR: Vision leads to innovation, 3rd UPOA Arthroplasty Course, 22–23 October 2016, Lucknow
43. Bacterial adherence and bacterial tendency of biofilm formation of different bacteria to various Bio-materials, Annual Conference of Indian Arthroplasty Association (IAACON), 4–6 November 2016, New Delhi
44. Management of proximal femoral bone defects in revision THA, Annual Conference of Indian Arthroplasty Association (IAACON), 4–6 November 2016, New Delhi
45. Knee replacement: Why; when and why not?, Indian Ageing Congress, 9–11 November 2016, AIIMS, New Delhi
46. Role of Steroids in TB spine, 24th Annual Conference of the Indian Academy of Neurology, 10–13 November 2016, Kolkata
47. Predisposing factors in PJI, PJI Symposium, 20 November 2016, Mumbai
48. Work up of patient with UTI, PJI Symposium, 20 November 2016, Mumbai
49. Wound closure, Drains and post-operative antibiotic prophylaxis- New techniques to prevent PJI, PJI Symposium, 20 November 2016, Mumbai
50. Joint replacement in patients with previous septic arthritis, PJI Symposium, 20 November 2016, Mumbai
51. Management of fungal and mycobacterial infections, Management of infection by enterococcus, PJI Symposium, 20 November 2016, Mumbai
52. Synovial fluid restoration therapy: Yesterday, today & tomorrow, ISKSAA Global Summit 2016, 20–23 November 2016, New Delhi
53. Arthroplasty in hip dysplasia, 61st Annual National Conference of the Indian Orthopaedic Association–IOACON 2016, 13 December 2016, Kochi
54. How to set up a bone bank in India?, 61st Annual National Conference of the Indian Orthopaedic Association–IOACON 2016, 13 December 2016, Kochi
55. Cemented vs Cementless THA, 61st Annual National Conference of the Indian Orthopaedic Association–IOACON 2016, 13 December 2016, Kochi
56. Arthroplasty after failed trochanteric fracture fixation: Is it for the beginners?, 61st Annual National Conference of the Indian Orthopaedic Association–IOACON 2016, 13 December 2016, Kochi
57. Hip preserving surgeries for early avascular necrosis of femoral head, 2nd AAOS-IOA Conclave, 16 December 2016, Kochi

58. What I have learnt in last 20 yrs in TKR, 29th Rajasthan State Annual Orthopedic Conference, ROSACON-17, 6–8 January 2017, Jodhpur
59. Basics of THR & TKR, 4th International and 21st B. Mukhopadhyaya. P. G. Instructional Course, 12 January 2017, Indore
60. Latest advances of management of osteoporosis, 36th Annual National Conference of the Kerala Orthopaedic Association–KOACON 2017, 27–29 January 2017, Kerala
61. Tips & tricks of navigated TKR, Cadaver Navigated TKR, 5 February 2017, JPNA Trauma Centre, AIIMS
62. Managing massive bone loss in total knee replacement, 8th Joint Replacement state of art (JRSOA), 11–12 February 2017, New Delhi
63. Will new technology stand the test of time—Customized Implant, 8th Joint Replacement state of art (JRSOA), 11–12 February 2017, New Delhi
64. Porous acetabular components : Indications, Technique & Results, 8th Joint Replacement state of art (JRSOA), 11–12 February 2017, New Delhi
65. Role of unicondyle TKA in modern day practice, ORTHONAVIC, 18 February 2017, Orthopaedics Society & Guntur Medical College, Guntur
66. THR in failed hip fracture, ORTHONAVIC, 18 February 2017, Orthopaedics Society & Guntur Medical College, Guntur
67. Correction of fixed flexion deformity knee in TKR, Conference of Academy of Orthopaedics and Trauma, 3–4 March 2017, Goa
68. Ideal alignment in total knee arthroplasty and how to achieve it, ISIC Ortho biomechanics workshop, 18 March 2017, Indian Spinal Injuries Centre, New Delhi
69. Knee arthritis in young patient: Dilemma of arthroplasty surgeon, The Eastern India Initiative for Orthopedic Training, 23–25 March 2017, NRS Medical College, Kolkata
70. *Principles of TKR, The Eastern India Initiative for Orthopedic Training, 23–25 March 2017, NRS Medical College, Kolkata

H.L. Nag: 12

1. Basic knee arthroscopy, Bihar Orthopaedic Association Meet, 23 May 2016, Patna
2. All—Inside ACL reconstruction, Bihar Orthopaedic Association Meet, 24 May 2016, Patna Medical College, Patna
3. Arthroscopic treatment of stiff knee, Bihar Orthopaedic Association Meet, 24 May 2016, Patna Medical College, Patna
4. Rotator cuff repair treatment options, Arthroscopic Shoulder Cadaveric Workshop, 15 July 2016, Sri Ramachandra Deemed Medical University and Medical Centre, Chennai
5. What I wish I knew when I first started rotator cuff repair—Expert tips and tricks, Arthroscopic Shoulder Cadaveric Workshop, 15 July 2016, Sri Ramachandra Deemed Medical University and Medical Centre, Chennai
6. Arthroscopic all—inside ACL reconstruction, MAMC Arthroscopy and Arthroplasty Update, 3 September 2016, Maulana Azad Medical College, New Delhi
7. Step by step arthroscopic bankart repair, 4 September 2016, Maulana Azad Medical College, New Delhi
8. Arthroscopic all—Inside ACL reconstruction, Regional CME, 23 September 2016, IGIMS, Patna
9. Intra articular fracture management with arthroscopy, DOA PG Instructional Course 2016 Trauma Update, 10 October 2016, PGIMER RML Hospital, New Delhi
10. Arthroscopic all—Inside ACL reconstruction, 35th MP IOACON 2016, 14–16 October 2016, Jabalpur
11. Arthroscopic all—Inside ACL reconstruction, 29th Annual Conference of ROSACON-2017, 6 January 2017, Jodhpur
12. How do I decide the bone loss is significant in my clinical practice in instability, 13th Sports Medicine and Arthroscopy Workshop, 26 March 2017, Sir Ganga Ram Hospital, New Delhi

Ravi Mittal: 19

1. Brostrom's procedure, National CME on foot and ankle, 10 July 2016, AIIMS, Raipur
2. Subtalar fusion, National CME on foot and ankle, 10 July 2016, AIIMS, Raipur
3. U-shaped massive rotator cuff tears, AIIMS Technique, 5th MAMC Arthroscopy and Arthroplasty Conference, 3–4 September 2016, MAMC, Delhi
4. Tibial inlay PCL reconstruction, 5th MAMC Arthroscopy and Arthroplasty Conference, 3–4 September 2016, MAMC, Delhi

5. Complications of elbow arthroscopy, ISKSSA, 22 November 2016, Delhi
6. Neglected posterior dislocation shoulder, Annual Conference of Egyptian Orthopaedic Conference, 28 November to 2 December 2016, Cairo
7. Latarjet procedure, Annual Conference of Egyptian Orthopaedic Conference, 28 November to 2 December 2016, Cairo
8. How do I do inside out meniscus repair, ASONCON, 4–6 December 2016, Kathmandu
9. Basis of meniscus repair, ASONCON, 4–6 December 2016, Kathmandu
10. When do I do ACL reconstruction—acute/late, ASONCON, 4–6 December 2016, Kathmandu
11. Type 3 AC joint dislocation, IOACON, 14 December 2016, Kochi
12. Planning for HTO, IOACON, 14 December 2016, Kochi
13. Calcaneum Malunion, Annual Conference of Chattisgarh Orthopaedic Association, 14 January 2017, Raigarh
14. Malunion of calcaneum, Arab Health 2017, 30 January to 2 February 2017, Convention Centre, Dubai
15. Stiff elbow, Arab Health 2017, 30 January to 2 February 2017, Convention Centre, Dubai
16. Neglected posterior shoulder dislocation, Arab Health 2017, 30 January to 2 February 2017, Convention Centre, Dubai
17. Neglected posterior shoulder dislocation, NZIOACON, 11 February 2017, DMC, Ludhiana
18. Neglected posterior shoulder dislocation, Annual Conference of Nepal Orthopaedic Association, 15–17 February 2017, Kathmandu
19. Double row vs. single row repair—Are we moving backward towards single row, SMAW, 26 March 2017, SGRH, Delhi

C.S. Yadav: 58

1. Longevity of TKA, role of cementing, Concept of Longevity in TKA conference, Manipal Hospital, Jaipur on 9 April 2016
2. CAS & PSI in TKA, ortho academia 2016, Sohana HR on 16 April 2016
3. TKA in varus, valgus & flexion deformities, Basic Knee Arthroplasty Course, Sir Ganga Ram Hospital on 23 April 2016.
4. How, why & when hip fails, Revision Hip Course, Himalayan Institute Hospital Trust, Dehradun, Uttaranchal on 24 April 2016
5. Basics of primary TKA, Annual UOACON-2016, Uttaranchal Chapter of IOA, Rudrapur on 30 April–1 May 2016
6. Basics of primary uncemented THA, Annual UOACON-2016, Uttaranchal Chapter of IOA, Rudrapur on 30 April–1 May 2016
7. Cementing techniques in TKA, Cawnpore Arthroplasty Course, Kanpur on 14 May 2016
8. CAS & PSI Whether Hype or Hope, Trivandrum Arthroplasty Course, Trivandrum, Kerala on 28–29 May 2016
9. Peri prosthetic fracture in TKA, Trivandrum Arthroplasty Course, Trivandrum, Kerala on 28–29 May 2016
10. Management of Peri prosthetic fracture in TKA, 3rd Masters course on Knee & Hip Arthroplasty, Vapi, Gujarat on 2–3 July 2016
11. Management of DDH/CDH, 3rd Masters course on Knee & Hip Arthroplasty, Vapi, Gujarat on 2–3 July 2016
12. CAS & PSI whether hype or hope, 2nd Annual Current Trends in Hip & Knee Arthroplasty on 9 July 2016 at Coimbatore, TN under aegis of Tamil Nadu Orthopaedics Association
13. Septic / Aseptic loosening periprosthetic fractures in TKA, 2nd Annual Current Trends in Hip & Knee Arthroplasty on 9 July 2016 at Coimbatore, TN under aegis of Tamil Nadu Orthopaedics Association
14. What I do & don't as an arthroplasty surgeon, Current Trends in Knee & Hip Arthroplasty Coimbatore, TN on 9th July 2016
15. Can we reduce dislocation in THA, Current Trends in Knee & Hip Arthroplasty, Coimbatore, TN on 9 July 2016
16. THA in fracture IT, Workshop on THA, Jodhpur Government SN Medical College, Jodhpur, Rajasthan, 23 July 2016
17. THA in dysplastic hip, Workshop on THA, Jodhpur Government SN Medical college, Jodhpur, Rajasthan, 23 July 2016
18. THA in active TB of hip, Workshop on THA, Jodhpur Government SN Medical College, Jodhpur, Rajasthan, 23 July 2016
19. Instability after THA, Workshop on THA, Jodhpur Government SN Medical College, Jodhpur, Rajasthan, 23 July 2016

20. What I do & don't as an arthroplasty surgeon, Workshop on THA organized by Jodhpur Government SN Medical College, Jodhpur, Rajasthan on 23 July 2016
21. Flexion contracture and its challenges in TKA, Workshop on My First TKA, Safdarjung Hospital, Delhi on 24 July 2016
22. Stiff knee and its challenges in TKA, Workshop on My First TKA, Safdarjung Hospital, Delhi on 24 July 2016
23. Osteoarthritis of knee and TKA, by Dehradun Orthopaedics Club, Dehradun, 29 July 2016
24. Osteoarthritis of knee, CME Programme for Pan African Countries, AIIMS, 3 August 2016
25. Management of tibial bone defect in TKA, 17 Annual Scientific Meet of Asia Pacific Arthroplasty Society, Penang, Malaysia, 25–28 August 2016
26. Why hip fails, Madras Orthopaedics Society, Chennai on 24–25 September 2016
27. My experience with triathlon knee, Advance in Technology Masters Meet, Rajkot, Gujarat on 2 October 2016
28. What I don't do as an arthroplasty surgeon, Advance in Technology Masters Meet, Rajkot, Gujarat on 2 October 2016
29. How to do triathlon TKA (video presentation), Advance in Technology Masters Meet, Rajkot, Gujarat on 2 October 2016
30. Management of tibial bone defect in revision TKA, Elite Arthroplasty Course 2016, Chandigarh on 8–9 October 2016
31. Overview of arthritis and arthroplasty, Arthritis Day Meet, JLN Auditorium, AIIMS, Delhi on 15 October 2016
32. Simultaneous TKA: Is it safe & effective, UP Arthroplasty Course in Association with Asia Pacific Orthopaedic Association Workshop, Lucknow, UP on 22–23 Oct 2016
33. Industrial influence in arthroplasty: Are we being taken for ride, UP Arthroplasty Course in Association with Asia Pacific Orthopaedic Association Workshop, Lucknow, UP on 22–23 October 2016
34. Minimizing infection in arthroplasty: Perioperative check list, UP Arthroplasty Course in Association with Asia Pacific Orthopaedic Association Workshop, Lucknow, UP on 22–23 October 2016
35. My experience with triathlon knee, IAACON 2016, Delhi on 4–6 November 2016
36. CAS & PSI: Hype or hope, IAACON 2016, Delhi on 4–6 November 2016
37. Who is real villain in arthroplasty: Surgeons and patient are being taken for ride, 5th AIIMS Arthroplasty Update in Association with ISKSAA, AIIMS, Delhi on 19–20 November 2016
38. What has revolutionized my arthroplasty practice, ISKSAA 2016, Delhi on 20–23 November 2016
39. CAS & PSI: Hype or hope, ISKSAA 2016, Delhi on 20–23 November 2016
40. Role of arthroplasty in fracture in upper end of femur, DOACON 2016, Delhi on 25–26 November 2016
41. Overview of arthritis and arthroplasty, 5th International Conference of Physical Therapy, JLN Auditorium, AIIMS, Delhi on 8–12 December 2016
42. THA after fracture acetabulum, Preconference Workshop, IOACON 2016, Kochi on 14–15 December 2016
43. How to reduce dislocation through posterior approach, Preconference Workshop, IOACON 2016, Kochi on 14–15 December 2016
44. Cemented stem: Indian perspective, Preconference Workshop, IOACON 2016, Kochi on 14–15 December 2016
45. Extensor apparatus injuries in TKA, IOACON 2016, Kochi on 14–15 December 2016
46. Bilateral Simultaneous TKA: A rationale approach, Indore Orthopaedic Society, Indore on 21 January 2017
47. Revision TKA: Basic Principles, Indore Orthopaedic Society, Indore on 21 January 2017
48. THA in active TB hip, 13th Middle East Orthopaedic Association Conference, Dubai, UAE on 30 January–2 February 2017
49. THA in ankylosed hip remains a surgical challenge, 13th Middle East Orthopaedic Association Conference, Dubai, UAE on 30 January–2 February 2017
50. Preoperative planning in Varus knee: Guide for beginners, Preconference Workshop, NZIOACON 2017, DMC, Ludhiana, Punjab on 10th–12 February 2016
51. CR Knee my choice: A debate, Preconference Workshop, NZIOACON 2017, DMC, Ludhiana, Punjab on 10th–12 February 2016
52. Navigation System: Current evidence, Preconference Workshop, NZIOACON 2017, DMC, Ludhiana, Punjab on 10th–12 February 2016
53. Managing intraop complications in revision surgery, Preconference Workshop, NZIOACON 2017, DMC, Ludhiana, Punjab on 10th–12 February 2016

54. Tibial bone defects in TKA, NZIOACON 2017, DMC, Ludhiana, Punjab on 10th–12 February 2016
55. Cementing techniques in arthroplasty, ORTHOCON 2017, Kathmandu on 15–17 February 2017
56. Keynote address on life style disease of musculoskeletal system, Coal India Medical Conference, Ranchi, Jharkhand on 20–22 February 2017
57. Basics of TKA, Coal India Medical Conference, Ranchi, Jharkhand on 20–22 February 2017
58. Basics of THA, Coal India Medical Conference, Ranchi, Jharkhand on 20–22 February 2017
59. Simultaneous or staged TKA: A rationale approach, 9th AIIMS Cadaver Arthroplasty Course 2017, AIIMS, Delhi, 25–26 February 2016
60. LLD in THA, Ortho Academecia, Goa, 3–4 March 2017

Shah Alam Khan: 8

1. What not to do in bone tumors, 3rd Quarterly Meeting of the East Delhi Division of Indian Orthopaedic Association, 11 September 2016, New Delhi
2. Surgery in cerebral palsy: Principles, indications and techniques, Cerebral Palsy Symposium, 2016, 16 October 2016, Department of Orthopaedics, Safdarjung Hospital, New Delhi
3. Reconstruction in limb salvage for malignant bone tumors, Osteosarcoma Update-2016, 12–13 November 2016, Rajiv Gandhi Cancer Hospital & Research Institute, New Delhi
4. Physiotherapy following bone tumor surgery, International Conference of Physical Therapy, 2016, 2–3 November 2016, JLN Auditorium, AIIMS, New Delhi
5. Reconstruction options in paediatric sarcomas, Annual Pediatric Orthopedic Society of India Meeting, 2017, 27–30 January 2017, Nagpur
6. Injection sclerotherapy in aneurysmal bone cysts, Annual Pediatric Orthopedic Society of India Meeting, 2017, 27–30 January 2017, Nagpur
7. Musculoskeletal tuberculosis: A General Overview, Asia Pacific Orthopaedic Association Meeting on Infection and Trauma, 2017, 28–30 March 2017, Kuala Lumpur
8. Pink pulseless hand in supracondylar fractures in children, Asia Pacific Orthopaedic Association Meeting on Infection and Trauma, 2017, 28–30 March 2017, Kuala Lumpur

Vijay Kumar: 14

1. Combined UKR with ACL repair, Combined 3rd ISAKOS Knee Course & 6th Pune Knee Course, 22–23 April 2016, Pune
2. Indications for Oxford partial knee, Combined 3rd ISAKOS Knee Course & 6th Pune Knee Course, 22–23 April 2016, Pune
3. Joint replacement in Indian patients: Issues with current implant systems, Biomedical Implants for Orthopaedics: Leveraging Efficacy through Alliance Programs (BIO-LEAP 2016)”, 21–22 April 2016, Kolkata
4. X-ray assessment and radiolucencies, Oxford Partial Knee Replacement Workshop during CCA 2016, 19 August 2016, AIIMS, New Delhi
5. Anteromedial osteoarthritis, Oxford Partial Knee Replacement Workshop during CCA 2016, 19 August 2016, AIIMS, New Delhi
6. How much constrain is good enough?—Increased constrained vs hinged, Awadh Advanced Arthroplasty Update 2016, 3–4 September 2016, Lucknow, U.P
7. Removal of implant and spacer application, Awadh Advanced Arthroplasty Update 2016, 3–4 September 2016, Lucknow, UP
8. NV complications during TKR- Risk Factors and Prevention, Awadh Advanced Arthroplasty Update 2016, 3–4 September 2016, Lucknow, UP
9. Newer techniques for valgus correction: Exposure, pie crusting and lateral advancement osteotomy, Awadh Advanced Arthroplasty Update 2016, 3–4 September 2016, Lucknow, UP
10. Tapered modular stem: Techniques of insertion and complications, Awadh Advanced Arthroplasty Update 2016, 3–4 September 2016, Lucknow, UP
11. Exposure and implant removal in revision TKR, 4th Masters Course, 14–16 October 2016, Vapi, Gujarat
12. Meniscus repair: Surgical aspects, ISKSAA GLOBAL SUMMIT 2016, 22–23 November 2016, New Delhi
13. Patella in total knee replacement, ISKSAA GLOBAL SUMMIT 2016, 22–23 November 2016, New Delhi
14. Suture anchors, CTRF AIIMS Cadaveric Shoulder Arthroscopy, 10–11 December, 2016, JPNA Trauma Centre, AIIMS, New Delhi

Bhavuk Garg: 23

1. Distal femoral fractures, Lower extremity trauma conclave, 1 May 2016, Delhi
2. Pilon fractures, Lower extremity trauma conclave, 1 May 2016, Delhi
3. Most cited papers from India in spine surgery, Spine Week, 16–20 May 2016, Singapore
4. Cubitus valgus, Egypt Deformity Congress, 25–27 May 2016, Cairo, Egypt
5. Congenital anomalies of upper limb, Egypt Deformity Congress, 25–27 May 2016, Cairo, Egypt
6. Spinal osteotomies in rigid kyphotic deformities, Egypt Deformity Congress, 25–27 May 2016, Cairo, Egypt
7. Pedicle screws complications and management, DOA Spine Cadaveric Course, 10 July 2016, MAMC, Delhi
8. Management of acute fractures distal radius, Mid-ROSA CON, 24 July 2016, Bharatpur, Rajasthan
9. C arm for spine surgery, DOA MSK Imaging, 7 August 2016, Delhi
10. Role of 3D printing in complex spinal deformity correction, MISSICON, 16 October 2016, Delhi
11. I wish, future of MIS in spine surgery, MISSICON, 14–16 October 2016, Delhi
12. Incredible trauma care in Incredible India, All India Medical Society Meeting, 16 October 2016, PGIMS, Rohtak
13. Role of X-rays, dynamic films, CT and MRI for cervical spine in polytrauma, Pre IOACON K T Dholakia CME, 14 December 2016, Kochi
14. Locking plates principles, DOA Basic Fracture Fixation Course, 4 December 2016, Delhi
15. Variable angle locking concepts, GOACON, 3–5 February 2017, Jamnagar, Gujarat
16. Computer assisted surgery/navigation in orthopedic trauma, GOACON, 3–5 February 2017, Jamnagar, Gujarat
17. Failure of Audit/preop planning, GOACON, 3–5 February 2017, Jamnagar, Gujarat
18. TB spine mimickers, GOACON, 3–5 February 2017, Jamnagar, Gujarat
19. 3D printing in spinal deformity correction, GOACON, 3–5 February 2017, Jamnagar, Gujarat
20. Technology and innovation in orthopedic surgery, GOACON, 3–5 February 2017, Jamnagar, Gujarat
21. TB spine mimickers, DOA quarterly meet, 18 February 2017, Sir Ganga Ram Hospital, New Delhi
22. Spinal osteotomies, CTRF Advanced Spine Course, 18–19 March 2017, AIIMS, New Delhi
23. Hemi vertebrae excision+ posterior instrumentation, CTRF Advanced Spine Course, 18–19 March 2017, AIIMS, New Delhi

Vijay Kumar D: 5

1. Relevant shoulder anatomy with respect to shoulder arthroscopy, Cadaveric Shoulder Arthroscopy Course, 10–11 December, 2016, AIIMS, New Delhi
2. Instrument needed for shoulder arthroscopy, Cadaveric Shoulder Arthroscopy Course, 10–11 December, 2016, AIIMS, New Delhi
3. Bone donation and bone harvesting, Deceased Organ and Tissue Donation, 25 January 2017, AIIMS, New Delhi
4. Bone donation and bone harvesting, Deceased Organ and Tissue Donation, 22 February 2017, AIIMS, New Delhi
5. Bone donation and bone harvesting, Deceased Organ and Tissue Donation, 3 May 2017, AIIMS, New Delhi

Vivek Shankar: 1

1. Examination of Shoulder, Cadaveric Shoulder Arthroscopy course, 10–11 December, 2016, AIIMS, New Delhi

Oral papers/posters presented: 33

1. Sharma S, Malhotra R, Sood M, Gautam D, Batra S. Effect of preoperative modifiable psychological and behavioral factors on patient perceived pain and stiffness following total knee arthroplasty in South Asian population, EFORT 2016, 1–3 June 2016, Geneva, Switzerland
2. Wahal N, Malhotra R, Kumar V, Pandit H, Nayak M, Batra S, Pegg EC. In vivo sagittal plane kinematic analysis of Asian knees after oxford Unicompartmental Knee Arthroplasty (UKA) and its relation with functional outcome and sex of patient, EFORT 2016, 1–3 June 2016, Geneva, Switzerland
3. Sharma S, Malhotra R, Sood M, Gautam D, Batra S, Kumar V. Effect of preoperative modifiable psychological and behavioral factors on pain and functional outcome following total knee Arthroplasty in south Asian population, EFORT 2016, 1–3 June 2016, Geneva, Switzerland
4. Batra S, Sharma S, Malhotra R, Sood M, Kumar V, Gautam D. The effect of preoperative kinesiophobia on patient satisfaction at one year following total knee arthroplasty in south Asian population, EFORT 2016, 1–3 June 2016, Geneva, Switzerland

5. Sharma S, Malhotra R, Sood M, Gautam D, Batra S, Wahal N. The effect of pain catastrophizing on patient satisfaction at one year following total knee arthroplasty in South Asian population., EFORT 2016, 1–3 June 2016, Geneva, Switzerland
6. Wahal N, Malhotra R, Kumar V, Pandit H, Menon S, Gautam D, Batra S. Incidence of constitutional tibia vara in Asian population and its role in causing osteo, Arthritis of the Knee Joint, EFORT 2016, 1–3 June 2016, Geneva, Switzerland
7. Kumar V, Malhotra R, Mahajan S. Primary hemiarthroplasty for unstable intertrochanteric fracture in elderly, XXXVII SICOT Orthopaedic World Congress, 8–10 September 2016, Rome, Italy
8. Kumar V, Rajkumar S, Malhotra R, Srivastava D. A randomised control study comparing navigation assisted and conventional total knee replacement, XXXVII SICOT Orthopaedic World Congress, 8–10 September 2016, Rome, Italy
9. Nayak M, Malhotra R, Kumar V, Mellon S, Pandit H, Hamilton T, Kanogia G, Wahal N, Batra S. Demographic profile of Indian patient with knee osteoarthritis, XXXVII SICOT Orthopaedic World Congress, 8–10 September 2016, Rome, Italy
10. Nayak M, Malhotra R, Kumar V, Pandit H, Mellon S, Wahal N, Batra S, Kanogia G. Prevalence of constitutional tibial bowing in Indian population and its role in causing knee pain, XXXVII SICOT Orthopaedic World Congress, 8–10 September 2016, Rome, Italy
11. Kumar V, Malhotra R, Singla A, Shankar V, Sharma S. Unilateral Dvt after unicompartmental knee replacement due to may thurner syndrome, XXXVII SICOT Orthopaedic World Congress, 8–10 September 2016, Rome, Italy
12. Kumar V, Malhotra R, Mahajan S. Primary hemiarthroplasty for unstable intertrochanteric fracture in elderly, XXXVII SICOT Orthopaedic World Congress, 8–10 September 2016, Rome, Italy
13. Wahal N, Malhotra R, Gautam D. Conservative treatment of tubercular peri prosthetic infection in a patient with ankylosing spondylitis, XXXVII SICOT Orthopaedic World Congress, 8–10 September 2016, Rome, Italy
14. Kumar V, Malhotra R, Sharma S, Sood M. Effect of preoperative modifiable psychological and behaviora factors on postoperative surgeon assessed knee scores following total knee arthroplasty, (AAOS) Annual Meeting of the American Academy of Orthopaedic Surgeons, 14–18 March 2017, San Diego, California
15. Gautam D, Kumar V, Malhotra R, Sharma S. Pain catastrophizing as predictor of poor outcome following total knee outcome: A new cut-off score, (AAOS) Annual Meeting of the American Academy of Orthopaedic Surgeons, 14–18 March 2017, San Diego, California
16. Khan SA, Rastogi S, Bakhshi S, Poudel RR, Kumar VS, Functional outcome & failure patterns in endoprotehtic replacement for osteosarcomas of the distal femur, 11th Annual Conference of the Asia Pacific Musculoskeletal Tumor Society, 2016, 21–23 April 2016, Singapore
17. Khan SA, Rastogi S, Bakhshi S, Poudel RR, Kumar VS. Biological reconstruction in pelvic sarcomas, 11th Annual Conference of the Asia Pacific Musculoskeletal Tumor Society, 2016, 21–23 April 2016, Singapore
18. Wahal N, Malhotra R, Kumar V, Pandit H, pegg EC, Nayak M, Batra S. In vivo sagittal plane kinematic analysis of Asian knees after oxford Unicompartmental Knee Arthroplasty (UKA) and its relation with functional outcome and sex of patient, 17th EFORT Congress, 1–3 June 2016, Geneva, Switzerland
19. Wahal N, Malhotra R, Kumar V, Pandit H, Menon S, Gautam D, Batra S, Incidence of constitutional tibia vara in Asian population and its role in causing osteo-arthritis of the knee joint, 17th EFORT Congress, 1–3 June 2016, Geneva, Switzerland
20. Batra S, Sharma S, Malhotra R, Sood M, Kumar V, Gautam D. The effect of preoperative kinesiophobia on patient satisfaction at one year following total knee arthroplasty in south Asian population, 17th EFORT Congress, 1–3 June 2016, Geneva, Switzerland
21. Sharma S, Malhotra R, Sood M, Gautam D, Batra S, Kumar V. Effect of preoperative modifiable psychological and behavioral factors on pain and functional outcome following total knee arthroplasty in south Asian population, 17th EFORT Congress, 1–3 June 2016, Geneva, Switzerland
22. Kumar V, Rajkumar S, Malhotra R, Srivastava D. A randomised control study comparing navigation assisted and conventional total knee replacement presented E-Poster, 37th SICOT Orthopaedic World Congress, 8–10 September 2016, Rome, Italy
23. Kumar V, Malhotra R, Mahajan S. Primary hemiarthroplasty for unstable intertrochanteric fracture in elderly, 37th SICOT Orthopaedic World Congress, 8–10 September 2016, Rome, Italy
24. Nayak M, Malhotra R, Kumar V, Mellon SJ, Pandit H, Hamilton T, Kanogia G, Wahal N, Batra S. Demographic profile of Indian patient with knee osteoarthritis, 37th SICOT Orthopaedic World Congress, 8–10 September 2016, Rome, Italy

25. Nayak M, Malhotra R, Kumar V, Pandit H, Mellon SJ, Wahal N, Batra S, Kanogia G. Prevalence of constitutional tibial bowing in Indian population and its role in causing knee pain, 37th SICOT Orthopaedic World Congress, 8–10 September 2016, Rome, Italy
26. Kumar V, Malhotra R, Singla A, Shankar V, Sharma S, Sharma S. Unilateral Dvt after unicompartmental knee replacement due to may thurner syndrome, 37th SICOT Orthopaedic World Congress, 8–10 September 2016, Rome, Italy
27. Nayak M, Kumar V, Malhotra R, Pandit H, Srivastava DN. Anthropometric measurement in the Indian knee, IOACON 2016, 12–17 December 2016, Kochi
28. Gautam D, Kumar V, Malhotra R, Sharma S. Pain catastrophizing as predictor of poor outcome following total knee outcome: A new cut-off score, AAOS, 14–18 March 2017, San Diego, California
29. Kumar V, Malhotra R, Sharma S, Sood M. Effect of preoperative modifiable psychological and behaviora factors on postoperative surgeon assessed knee scores following total knee arthroplasty, AAOS, 14–18 March 2017, San Diego, California
30. Garg B. Spinal osteotomies for rigid kyphotic spinal deformities, Spine week, 16–20 May 2016, Singapore
31. Batra S, Garg B. Safety and efficacy of cervical pedicle screws, DOACON, 25–27 November 2016, New Delhi
32. *Batra S, Garg B. 3D printing for spinal deformities, MIDCON, 2–3 July 2016, India Habitat centre, Delhi
33. Mahmood A, Garg B. ALL incompetency in posterior approach to lumbar spine surgery, DOACON, 25–27 November 2016, New Delhi

RESEARCH

Funded projects

Ongoing

1. A multi-centre, prospective, controlled post market clinical follow-up study (PMCFS) to monitor the survival and performance of the Delta Motion Cup System in subjects requiring a total hip replacement, Rajesh Malhotra, Johnson & Johnson Medical India, 3 years, 26 November 2012–25 November 2015, Rs. 35.50 Lakhs
2. Medication use patterns, treatment satisfaction, and inadequate control of osteoporosis study (MUSIC): An Asia Pacific study of postmenopausal women treated for osteoporosis in clinical practice”, Approved for funding by Merck for 1 year, Rajesh Malhotra, MERCK, 2 years, 25 February 2014–14 April 2016, Rs. 3.30 Lakhs
3. CV185-158: Phase IV, open-label, multi-center study to evaluate the safety of Apixaban in Indian subjects undergoing elective total knee replacement or total hip replacement surgery, Rajesh Malhotra, Bristol-Myers Squibb India Pvt. Ltd, 3 years, 27 May 2015–26 May 2018, Rs. 3.30 Lakhs
4. Comparison of yearly zoledronic acid versus weekly alendronate in preference, Convenience, compliance, persistence and bone turnover markers in Indian postmenopausal Osteoporotic Women, Rajesh Malhotra, ICMR, 3 years, 01 June 2015–31 May 2018, Rs. 39.15 Lakhs
5. International orthopaedic multicentre study in fracture care, Ravi Mittal for AIIMS New Delhi, George Institute for Global Health, 3 years, 2016–2018, Rs. 2.5 lakhs
6. Efficacy of short term 6 months vs 9 months treatment of ATT in extra spinal ostioarticular tuberculosis., CS Yadav, Department of Biotechnology & Science, 3–4 years, 2013–2017, 60 Lakhs
7. Safety, suitability and clinical effectiveness of Unicom part mental knee replacement in the Indian population, Vijay Kumar, DST and UKIERI, 2 years, 23 September 2014–22 March 2017, Rs. 35 Lakhs
8. Comparison of bgone scan changes during and after treatment with Alendronate and Teriparatide for the treatment of osteoporosis, Bhavuk Garg, ICMR, 3 years, 2015–2018, Rs 39.15 lakhs
9. To develop computer assisted patient specific osteotomy and drill guides for spinal deformities with the help of volumetric CT scan and 3D reconstruction models, Bhavuk Garg, DBT, 3 years, 2013–2016, Rs. 50 lakhs
10. Comparisons of cytokines, matrix metalloproteinase and bone markers between normal, pulmonary, osteomyelitis and spine tuberculosis subjects, Bhavuk Garg, AIIMS, 2 years, 2016–2018, Rs. 9.99 lakhs

Completed

1. Management of adhesive capsulitis of shoulder.
2. Clinical and electrophysiological assessment of injury to infra-patellar branch(es) of saphenous nerve during ACL reconstruction using oblique incision for hamstring graft harvest: Prospective study
3. Clinico-radiological evaluation of anterolateral ligament of knee in ACL injury patients
4. VEGF expression in children with Perthes Disease, Prof. Shah Alam Khan, AIIMS, 2 years, 2014–2016, Rs. 18000
5. Does thumb opposition recovers following carpal tunnel release, Bhavuk Garg, AIIMS, 3 years, 2014–2015, Rs. 3 lakhs

6. Biomechanical investigation of extracorporeal irradiation therapy in malignant bone tumors
7. Correlation between serum biomarkers, dynamic MRI and histopathology in paediatric osteosarcomas
8. Medications use patterns, treatment satisfaction, and inadequate control of osteoporosis study (MUSIC-OS): An international study of postmenopausal women treated for osteoporosis in clinical practice
9. To study the bacterial adherence and bacterial tendency of bio-film formation of different bacteria to various bio-materials

Departmental projects

Ongoing

1. A prospective randomized clinical trial to compare clinical, fluoroscopic and radiological outcome between medial pivot and posterial stabilized knee
2. A prospective randomized clinical trial to compare clinical, fluoroscopic and radiological outcome between medial pivot and lateral pivot knee
3. Retrospective and prospective study to evaluate clinical and radiological outcome of total hip arthroplasty in patients of age equal to or less than 35 years
4. Retrospective study assessing clinical and radiological outcome in patients who have undergone THR with metal on metal articulation vs metal on polyethylene articulation
5. MRI evaluation of chronic ankle pain
6. MRI evaluation of chronic elbow pain
7. Total intravenous anaesthesia vs sub arachnid block in unilateral TKA: A comparison of recovery profile and time to readiness for discharge
8. Magnitude of prosthetic joint infection and role of amplification boned DNA analysis for identifying microbial profile of prosthetic joint infection in a tertiary care hospital
9. A Prospective randomised study to compare large console, image less computer assisted navigation vs accelerometer based portable navigation technique of total knee replacement
10. Effectiveness of bundled intervention in surgical site infections among patients undergoing clean orthopedic surgeries with hardware implants: A randomized controlled trial
11. A prospective study comparing PET scan and dynamic MRI in assessment of the graft revascularization and healing in arthroscopic anterior cruciate ligament reconstruction
12. Computed tomography analysis of distal femoral and proximal tibial morphology in Indian patients with osteoarthritis of knee
13. Study of p53, Ki 67 labelling index, CXCL12 Chemokine and its receptors CXCR4 and CXCR7 in Ewing Sarcoma
14. Assessment of clinical and radiological outcomes in Indian patients who have undergone total hip arthroplasty with metal on metal articulation vs metal on polyethylene articulation
15. Comparative analysis of metabolic and coagulation profile in AIS and congenital scoliosis
16. Prospective randomized study to compare computer assisted navigation vs accelerometer based navigation technique of total knee replacement.
17. Quantification of the amount of PCL retained in cruciate retaining TKA and its effect on functional outcome.

Completed

1. Management of adhesive capsulitis of shoulder.
2. Clinical and electrophysiological assessment of injury to infra-patellar branch(es) of saphenous nerve during ACL reconstruction using oblique incision for hamstring graft harvest: Prospective study.
3. Clinico-radiological evaluation of anterolateral ligament of knee in ACL injury patients
4. Biomechanical investigation of extracorporeal irradiation therapy in malignant bone tumors
5. Correlation between serum biomarkers, dynamic MRI and histopathology in paediatric osteosarcomas
6. Does thumb opposition recovers following carpal tunnel release
7. Medications use patterns, treatment satisfaction, and inadequate control of osteoporosis study (MUSIC-OS): An international study of postmenopausal women treated for osteoporosis in clinical practice
8. To study the bacterial adherence and bacterial tendency of bio-film formation of different bacteria to various bio-materials
9. Evaluation of tunnel widening and Bony Bridge between femoral and tibial tunnels in patients treated with double bundle ACL. Reconstruction for ACL Tear. Using multi-detector CT scan and their correlation with the knee stability and functional outcome

10. Evaluation of a novel clinical test for diagnosis of tear of posterior horn of medial meniscus of knee with the help of magnetic resonance imaging
11. Retro-prospective analysis of “partial” bundle anterior cruciate ligament tear–Diagnosis and management with ACL augmentation.
12. Comparison of immediate pain control and early functional recovery in patients undergoing shoulder arthroscopic procedures between general anesthesia and general anesthesia with interscalene brachial plexus block–A randomised control trial
13. A retrospective and prospective study to evaluate clinical and radiological outcome of total hip arthroplasty in patients of age less than or equal to 35 years

Collaborative projects

Ongoing

1. Association of PAI-1 promoter sequence variations in Idiopathic Avascular Necrosis of head of femur (Anatomy)
2. Impact of Yoga and meditation on epigenetic profile in Rheumatoid Arthritis (Anatomy)
3. Patient specific stress analysis in Congenital Dislocation of the Hip, (IIT, Delhi)
4. The PARITY trial (McMaster University, Canada)
5. Safety, suitability and clinical effectiveness of unicompartmental knee replacement in the Indian population, (UKIERI-DST)
6. MR evaluation of chronic ankle pain (Radiodiagnosis)
7. Elucidating the link between osteoblastic differentiation of human bone marrow derived mesenchymal stem cells and their tumorigenic potential Research (Biochemistry)
8. MR evaluation of chronic elbow pain (Radiodiagnosis)
9. Advanced imaging and image guided interventions in chronic back pain (Radiodiagnosis)
10. Transforaminal epidural injection of local anaesthetic and Dorsal root ganglion pulsed radiofrequency treatment in lumbosacral radicular pain–A randomized, triple-blind, active-control trial (Anaesthesia)
11. Prospective comparison of clinical and urodynamic parameters in patients of spinal tuberculosis before and after spinal surgical intervention (Urology)
12. Role of Versican and its signaling in multiple myeloma (Biochemistry)
13. Effectiveness of bundled intervention in surgical site infections among patients undergoing clean orthopedic surgery with hardware implants: A randomized controlled trial (Microbiology)
14. Quantification of tendon injuries using high frequency ultrasonography in upper limb injuries (Radiology)

Completed

1. Efficacy & safety of *Lowsonia intermis*, *Colchicum luteum*, *Terminella chebula* in experimental models of arthritis
2. A study to establish the role of T-helper 17 (Th-17) cells in Asian Indian arthritis patients
3. Efficacy & safety of *Gloriosa superba*, *Berberis aristata*, *Cissus quadrangularis* in experimental models of arthritis rats
4. Establishing a national level repository of clinical samples and mycobacterial isolates.

PUBLICATIONS

Journals: 39

Chapters in books: 12

Books: 1

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor Rajesh Malhotra was awarded “AIIMS Excellence Research Award 2016” for paper entitled: “A prospective randomized study to compare the systemic emboli in computer assisted navigation vs conventional surgical technique of total knee replacement” under Clinical and Research Category, during AIIMS Diamond Jubilee Foundation Day Celebration, 25 September 2016, AIIMS, New Delhi; awarded BC Roy National Award for 2014 as an Eminent Medical Teacher, 28 March 2017; awarded DST/UKIERI award for collaboration on “Understanding differences in the patterns of osteoarthritis in Indian and Western population: Impact on symptoms, treatment options and their outcome”; Vice President, Indian Orthopedic Association, 2016-2017; Special invitee, Board of Global Fragility Fracture Network (FFN Global); Invited as Member, American Association of Hip and Knee Surgeons (AAHKS); Expert for ONE KNEE VISION global project to innovate and design better knee replacement implants and instruments to benefit patients requiring knee replacement in India and globally; Member, Multidisciplinary panel to contribute to a social initiative related to women’s health under International Menopause Society (IMS); Expert member for Global Burden of Diseases (GBD), India Musculoskeletal Disorders Expert Group; Examiner for IIT for MTech thesis (Evaluation) titled “Impact Analysis of Knee Joint Complex During Car-Pedestrian Crashes”; Examiner for Postgraduate and Postdoctoral Examinations (Diplomate of National Board),

St. John's Medical College, Bangalore, 26–28 October 2016; External Examiner, MS (Ortho), 28 November 2016, Govt. Medical College, Amritsar; Expert, Selection of Professor in Rajasthan University of Health Sciences, Jaipur, 22 December 2016; Expert for Selection of Assistant Professor in Safdarjung Hospital, New Delhi, 16 March 2017; Member, Editorial Board: Neurology India; Reviewer for National Medical Journal of India, Indian Journal of Orthopedics, Indian Journal of Pediatrics, Indian Pediatrics, Journal of Bone and Joint Surgery (British), Journal of Pediatric Health (UK), Clinical Anatomy, Journal of Medical Case Reports, International Journal of Medical Reports (IJMR), International Journal of Medical Practice and Reviews (MPR), World Journal of Endocrine Surgery (WJOES), British Journal of Medicine and Medical Research, Journal of Bone & Joint Research (JBJR), The Knee, International Journal of Biochemistry and Biotechnology, Bioinorganic Chemistry and Applications, BioMed Central Journal, Journal of Hand and Microsurgery, Journal of Orthopaedic Education, BMC Musculoskeletal Disorders, Postgraduate Medicine; Reviewer for Grant Applications submitted to ICMR, DBT and DST; Reviewer for Applications for funding submitted to National Institute of Health Research and Research for Patient Benefit Program (NIHR & RFPB) of NHS, UK; Editorial Board Member for the SM Musculoskeletal Disorders (SMMD), an International Peer Reviewed Open Access Journal; Reviewer for the Journal of Knee Surgery; Member for DBT Committee (DSMB) "Task Force on 'Stem Cell Research and Regenerative Medicine'"; Expert for DBT Committee of "Task Force on 'Stem Cell Research and Regenerative Medicine'; Member of Expert Group for Department of Biotechnology (DBT) Task Force on Bio Engineering Projects; Chairman in ICMR Task Force on Cancer Management of the sub-committee on guidelines for Soft Tissue Sarcoma and Osteosarcoma; Chairman Subcommittee - Fragility Fracture Network (FFN); Special invitee, Board of Global Fragility Fracture Network (FFN Global); Convener Orthopaedic Initiative of ISBMR (Indian Society of Bone Mineral Research); Convenor "TRAUMA CONCLAVE- Lower Extremity" organized at New Delhi on 1 May 2016 under aegis of Trauma Society of India.

Professor H.L. Nag was Honorary consultant for Sports Authority of India (SAI); appointed Member, Hospital Management Board; nominated Member, Technical Specification Selection Committee of Surgical Items; External Examiner for MS, and MBBS Examination; Vice President, Orthopaedic Research Society, AIIMS; Member, store purchase committee, AIIMS; Faculty In-Charge, Examination centre, Udaipur, for LDC Tests, AIIMS; Member, Doctoral Committee for PhD of Ms. Surabhi, Department of Anatomy, for impact of Yoga and Meditation on AP Epigenetic profile in rheumatoid arthritis; Subject Expert for Technical evaluation Committee Meeting and price evaluation committee meeting for Dept of Orthopaedics, Indira Gandhi Institute of Medical Sciences, Patna; Member, Selection Committee for interview for recruitment to the posts of Scientists I in Department of Pharmacology, GrA, (PB3), AIIMS; Faculty In-charge of Physiotherapy Unit; Member, Selection Committee, for selection of contractual faculty in Dept of Orthopaedics, LHMC and associated Hospital; External Expert, Standing Selection Committee, for selection of Professor, Dept of Orthopaedics, IGIMS, Patna; Subject Expert for selection of Faculty (Asst/ Assoc/ Professors) for Kalpana Chawla Government Medical College, Karnal, PGIMER Rohtak; Expert, Inspections of examination centres at Silliguri and Purnea for MBBS Entrance Examination; Subject Expert, Selection Board of ESIC for Selection of Specialist Grade II for Delhi and Haryana State; Subject Expert, J&K Public Service Commission Jammu, for Selection of Medical Officers; Member, Selection Board, for Selection of Senior Residents, Dean's office, AIIMS.

Professor Ravi Mittal took part in Mahurkar oration at annual conference of Chattisgarh Orthopaedic Association at Raigarh on 14 January 2017 - High Tibial Osteotomy; was Member of core committee of RNTBC; External examiner for MS orth examination at Guwahati medical college on 12 May 2016; Treasurer of Orthopaedics Research Society AIIMS; Convener of shoulder arthroplasty workshop of ISKSSA at AIIMS on 20 November 2016; Member of the selection committee for selection of senior residents at AIIMS on 29 July 2016; Member of the academic board of Jamia Hamdard medical college November 2016; Subject expert in standing selection committee of AIIMS Bhopal on 7 March 2017; Professor in charge of the department stores since June 2016.

Professor C. S. Yadav received Dr B C Roy National Award, Eminent Medical Teacher for year 2015; BMJ Award South Asia 2016: How to find best team in South Asian Healthcare. Our work of Knee & Hip Joint Replacement was appreciated in BMJ 2016 published 21 October 2016; Guest of Honour at Coal India Medical Conference, Ranchi, Jharkhand on 20th 22nd February 2017; Either Chaired session or acted as an Panellist in majority of conferences, CMEs, Symposia where I delivered guest lectures; Did Live demonstration surgery many conferences, CMEs, Symposia where I delivered guest lectures; was Invited as an expert over issues of arthritis and arthroplasty by Electronic & Print media; Course Director for 3rd Masters Course in Knee & Hip Arthroplasty, 2–3 July, 2016, Vapi, Gujarat; Course Chairmen for workshop on THA organized by Jodhpur Government S N Medical college, 23 July 2016, Jodhpur, Rajasthan; Workshop TKA, Coal India Medical Conference, 20–22 February 2017, Ranchi, Jharkhand.

Dr Bhavuk Garg was Member, International Education committee, North American Spine society; Became candidate fellow of scoliosis Research Society; Member of Scientific committee of Association of spine surgeons of India (ASSI) (August 2013- till date); Member, Executive committee, Indian Society for Surgery of Hand.

Dr. Vijay Kumar D organized first ever AIIMS Cadaveric Shoulder Arthroscopy Course Under the Chairmanship of Prof R Malhotra with guidance from Prof. Ravi Mittal; organized AIIMS Cadaveric Navigated TKR Course Under the Chairmanship of Prof R Malhotra; attended Pune Knee Course as a delegate on 21st and 22 April 2017; attended as a delegate Symposium on Kinematic alignment in Total Knee Arthroplasty at AIIMS on 7th April, 2017; attended as a delegate for 8th Joint Replacement State of the Art Meeting (JRSEA 2017) on 7-9th April 2017 and Indian Arthroscopy Association Annual Conference (IASCON) held at Kolkata in November 2016.

VISITING SCIENTIST

1. Dr Vijay Goel, USA, Toledo University

9.26. Otorhinolaryngology

Professor and Head
Suresh Chandra Sharma

Professors

Alok Thakar

Rakesh Kumar

Associate Professors

Kapil Sikka

Chirom Amit Singh

Assistant Professors

Rajeev Kumar
Arvind Kairo

Prem Sagar
Shuchita Singh

David Victor Kumar Irugu
Hitesh Verma

HIGHLIGHTS

The Otorhinolaryngology department continued its activities to impart quality education to its own students and also to delegates and observers. The department conducted seven major and minor workshops in the year, including the IFHNOS 2016. IFHNOS was one of the largest global gatherings in the field of head and neck oncology and was attended by over 700 delegates from all over the world. The department welcomed its first batch of MCh Head and Neck Surgery and also the first batch of fellowship in Skull Base Surgery.

EDUCATION

The formal lecture schedule for the MBBS students are held in the 6th and 8th semesters and consist of one hour lecture. The undergraduate students are posted in the ENT department (OPD and Ward) for a total period of two months on rotation basis. Here they learn the basic ENT examination, become familiarised with diagnosing the common ENT diseases and learning the elementary management, including communication skills.

The clinical training consists of

1. Two classes on introduction to the clinical aspects of ENT including proper examination of ear, nose and throat.
2. Bed side teaching and case discussion on common ENT conditions like CSOM, deviated nasal septum, nasal polyps, cancer larynx, etc.
3. Orientation to commonly used ENT instruments and X-Rays in ENT practice.
4. Exposure to commonly done OPD procedures like nasal packing, ear packing, cautery, etc.
5. Exposure to selective operative procedures like tracheostomy, tonsillectomy, septoplasty, nasal polypectomy, etc.
6. Preventive Otology and head & neck cancer.

At the end of the Otorhinolaryngology posting, the students will be able to:

1. Examine and diagnosis common problems of ear, nose, and throat.
2. Suggest common investigative procedures and their interpretation to diagnose and manage the patient.
3. Treat the common ENT and head & neck problems at primary care centre, while treating the patient.
4. Train to perform various minor surgical procedures like ear syringing nasal packing and biopsy procedure.
5. Have awareness of preventive otology and head & neck cancer for public guidance.

For postgraduates, major goals are patient care, teaching, research ability and team work.

PG student will have to do presentation of seminars/papers, research writing, acquire clinical decision making ability and management expertise. Postgraduate students perform major and minor surgical procedures under supervision of a faculty member/a senior resident. They are trained to perform major and minor operations independently. During the training, they are posted in orientation programme including exposure to Audiology Section and Vestibular Laboratory, learn bedside history taking in ward, OT exposures, casualty, ICU requirement and their visit to related disciplines such as Neurosurgery/ Anaesthesia, They also take care of indoor (Medical; preoperative and postoperative) patients, attend operation theatre and emergency operations, assist ward rounds and visit other wards with senior colleagues to attend calls/consultations from other department, participate in the teaching sessions in wards for bedside clinical aspects, in speciality clinics in the afternoon in seminar/journal club and do the emergency duties as per Roster of the department. The postgraduate students also have to do thesis under guidance of faculty.

The department welcomed its first batch of MCh Head and Neck Surgery and also first batch of fellowship in Skull Base Surgery. The fellows and MCh Residents have been allocated duties in the respective specialties in OPD and OT, and the also attend academic activities jointly with departments of radiation oncology, medical oncology, pathology, neurosurgery etc.

The department also organises workshops and conferences for benefits of national and international delegates from time to time on various recent topics of interest. The department also welcomes delegates for observership from India and abroad, and hosts them to observe departmental activities, specialty clinics, seminars and operative procedures.

Long Term Training:

1. Lt Col Md. Bashir Ahmed, Head of the Department and classified Specialist in ENT and Head Neck Surgery, Combined Military Hospital, Jessore Cantonment, Bangladesh, 1 year.
2. Dr Lt Col Anandita Gupta, Deptt. of ENT, Military Hospital, Gaya, Bihar

Short Term Training:

1. Dr Isha Sinha, Senior Resident, S.N. Medical College, Agra, 1 month
2. Dr Suresh Kumar, Deptt of ENT, Dr Rajendra Prasad Govt. Medical College, Kangra, Tanda, Himachal Pradesh, 2 weeks
3. Dr Avani Jain, Senior Resident, Department of ENT, MAMC and Lok Nayak Hospital, New Delhi, 3 months (as part of CIGI Fellowship)

Elective Training:

Mr Chirag Bharatbhai Patel, Auckland University of Medical School, Auckland, New Zealand, 2 weeks

Department had observers from Department of Industrial Design, School of Planning and Architecture, New Delhi, Students from Centre for Biomedical Engineering, IIT Delhi and Students of Audiology and Speech Pathology, AYJ Institute of Speech and Hearing Disabilities, Noida.

CMEs/Workshops/Symposia/National and International Conferences

1. Third AIIMS Rhinoplasty and Facial Plastic Workshop, 19–21 February 2017 at AIIMS, New Delhi, India
2. Sound4All: Doctor-Engineer interface on audiology devices and equipments on 17 December 2016 at AIIMS, New Delhi, India
3. AIIMS Laryngology update. 14–16 December 2016, at AIIMS, New Delhi, India
4. Seventh Temporal Bone Dissection Course, 24–26 November at AIIMS, New Delhi, India
5. Second Head and Neck Cadaveric hands on Workshop, 16–17 November 2016, at CTRF AIIMS, New Delhi, India
6. IFHNOS 2016 and 16th Annual Conference of Federation of Head and Neck Oncology Society 12–15 October 2016, New Delhi, India
7. First Head and Neck Cadaveric hands on Workshop 16–17 July 2016 at CTRF AIIMS, New Delhi, India
8. Second AIIMS Rhinoplasty and Facial Plastic Workshop, 22–24 April 2017 at AIIMS, New Delhi, India
9. Sixth Temporal Bone Dissection Course, 7–9 April at AIIMS, New Delhi, India

Lectures delivered

S.C. Sharma: 4	Alok Thakar: 22	Rakesh Kumar: 13
Kapil Sikka: 19	Chirom Amit Singh: 12	Rajeev Kumar: 9
Prem Sagar: 7	David Victor Kumar: 4	Hitesh Verma: 14
Shuchita Singh: 6	Arvind Kumar Kairo: 4	

S.C. Sharma: 4

1. Management of petrous apex cholesteatoma, SKULLBASECON-2016, 8–11 September 2016, SMS Medical College, Jaipur, India

2. Management of congenital cholesteatoma of Parotid Tumour, RAJAOICON-2016, 22 October 2016, Udaipur, India
3. 4 decades of changing face of ENT, 15 November 2016, Mahatma Gandhi University of Medical Sciences & Technology, Jaipur, India
4. Exclusive petrous apex cholesteatoma, Haryana State AOICON-2016, 12–13 November 2016, Government Medical College & Hospital, Chandigarh, India

Alok Thakar: 22

1. NES Award Oration, 36th Annual Conference of the Neuro-otological & Equilibriometric Society of India, 6–8 January 2017, AIIMS, Bhubneshwar, India
2. Oral cancer, AOICON 2017, 69th Annual Conference of the Association of Otolaryngologists of India, 3–5 February 2017, Kolkata, India
3. Tracheoesophageal prosthesis, World Phonocon 2017, Joint Meeting of International Association of Phonosurgeons and Association of Phonosurgeons of India, 17–19 February 2017, Gurgaon, India
4. Emerging role of robotic surgery in head and neck cancer, Indo Global Summit on Head and Neck Oncology (IGSHNO), 24–26 February 2017, Bhagwan Mahaveer Cancer Hospital & Research Centre, Jaipur, India
5. Oral cancer, 40th Annual Conference of the Association of Otolaryngologists of India, Delhi State Chapter, 4–5 March 2017
6. 2nd Naresh Bhatia Oration, Minimally invasive transoral oncosurgery, AOI Lucknow Annual Conference, 5 March 2017, Lucknow, India
7. Surgery for vertigo-silver jubilee otology course, 18–19 March 2017, Sir Ganga Ram Hospital, New Delhi, India
8. Optic canal decompression, 3rd Annual Conference of Neuro-Endoscopy Society of India, 15–17 April 2017, New Delhi, India
9. Video presentation: Pectoralis major myocutaneous flap, 10th National Workshop on Head-Neck Surgery, Shaheed Suhrawardy Medical College, 7–9 May 2016, Dhaka, India
10. Central Skull Base-Skull Base Surgery Workshop, 5–7 July 2016, Jodhpur, India
11. Management of truly premalignant lesions, 4th Head and Neck Cancer Forum on Oral Cancer, 7–9 July 2016, Jalandhar, India
12. Speech Rehabilitation, AIIMS–Head-Neck Cadaveric Dissection Workshop, AIIMS, 16–17 July 2016, Delhi, India
13. Optic nerve decompression and CSF rhinorrhea repair: Surgical technique, Neuro Endoscopy Workshop, Neurotrauma, 11–14 August 2016, Delhi, India
14. Remote access thyroidectomy, 1st National Congress on Management of Cancers of Thyroid, 20–21 August 2016
15. EXIT procedure for Congenital Upper Airway Obstruction Panelist – Tumour Boards in the Head-Neck, 3rd Annual Conference of the Indian Academy of Otolaryngology and Head-Neck Surgery, 27 September 2016, Kolkata, India
16. Cancer Larynx Symposium, 5th National and 2nd SAARC Conference of Laryngology and Voice Association, 30 September–2 October 2016, Ahmedabad, India
17. Endoscopic treatments for cancer larynx panelist - Function Preservation in Cancer Larynx Symposium, IFHNOS Global Tour, 12–15 October 2016, New Delhi, India
18. Dr C Das Oration, Minimizing recurrences in juvenile angiofibroma, Panelist–Laryngo-Tracheal Stenosis – NEBAOICON (Annual Conference of the North-East Br. Assoc. of Otolaryngologists of India), 4–6 November 2016, Jorhat, India
19. Panelist–Nanotechnology in Imaging and diagnostics Nanobiotech 2016, Nanotechnology in Imaging and Diagnostics Nanobiotech 2016, 24–26 November 2016, New Delhi, India
20. Supraglottis and hypopharyngeal cancer–Laser and TORS, 3rd TMC Head-Neck Laser Course, 3–4 December 2016, Tata Memorial Hospital, Mumbai, India
21. Cricothyroid approximation, AIIMS Laryngology and Airway Update, 14–16 December 2016, AIIMS, New Delhi, India
22. Introduction to Sound4All, Sound4All Workshop, AIIMS, New Delhi, 17 December 2016, AIIMS, New Delhi, India

Rakesh Kumar: 13

1. Moderator, Panel on rhinoplasty: Difficult and revision cases–2nd Facial Plastics and Rhinoplasty Workshop, 22–24 April 2016, AIIMS, New Delhi, India
2. Panelist on Lasers and Difficult Cases/ Situations in Laryngology, ENT Live Workshop, 30 April–1 May 2016, Medanta Hospital, Gurgaon, India

3. Parotidectomy and Thyroidectomy: Cadaveric demonstration of surgical steps, First Head and Neck Hands on Dissection Workshop, 16–17 July 2016, CTRF, AIIMS, New Delhi, India
4. Rhinoplasty in cleft lip, 4th International Rhinoplasty Workshop, 17–18 September 2016, Care Hospital, Hyderabad, India
5. How to deal with unhappy patient in facial plastics, 4th International Rhinoplasty Workshop, 17–18 September 2016, Care Hospital, Hyderabad, India
6. Rhinoplasty outcome in Indian patients, Annual Conference of European Academy of Facial Plastic Surgery, 23–25 September 2016, London, UK
7. Moderator, moving the goalpost with early laryngeal cancer, IFHNOS 2016 and 16th Annual Conference of Federation of Head and Neck Oncology, 12–15 October 2016, New Delhi, India
8. Parotidectomy: Surgical steps and preventing complications, Second Head and Neck Hands on Dissection Workshop, 16–17 November 2016, CTRF, AIIMS, New Delhi, India
9. Type 1 Thyroplasty: Indications & Surgical Technique – AIIMS Laryngology Update, 14–16 December 2016, AIIMS, New Delhi, India
10. Demonstrated live surgeries– Vocal polyp, laser cordectomy etc. – AIIMS Laryngology update, 14–16 December 2016, AIIMS, New Delhi, India
11. Endoscopic vs conventional lateral skull base surgery cross fire moderator, 36th Annual Conference of Neuro-otological and Equilibriometric Society of India, 6–8 January 2017, AIIMS, Bhubaneswar, India
12. Round table meeting on hearing implants and expanded indication: Panelist, 36th Annual Conference of Neuro-otological and Equilibriometric Society of India, 6–8 January 2017, AIIMS, Bhubaneswar, India
13. Cochlear implant: Avoiding failures, AOI Delhi Branch, 4–5 March 2017, RR Hospital, New Delhi, India

Kapil Sikka: 19

1. Cochlear implantation: Present and future, 9th PAOICON, 9th Annual Conference of Association of Otolaryngologists of India, Punjab Chapter, 25–26 March 2017, Bathinda, India
2. Moderator, Panel on Vestibular Disorders–creating protocols for management, 36th Annual Conference of Neuro-otological and Equilibriometric Society of India, 6–8 January 2017, AIIMS, Bhubaneswar, India
3. Debate: Management of idiopathic facial nerve palsy: Conservative vs surgical decompression–In favour of conservative management, 36th Annual Conference of Neuro-otological and Equilibriometric Society of India, 6–8 January 2017, AIIMS, Bhubaneswar, India
4. Recent advances in management of recurrent respiratory papillomatosis, AIIMS Laryngology update, 14–16 December 2016, AIIMS, New Delhi, India
5. Introduction to Sound4All, Sound4All Workshop, A doctor-engineer interface on audiology devices and equipments, 17 December 2017, AIIMS, New Delhi, India
6. Thyroidectomy: Surgical steps and preventing complications, Second Head and Neck Hands on Dissection Workshop, 16–17 November 2017, CTRF, AIIMS, New Delhi, India
7. Erythroplakia and leukoplakia management, CME on premalignant disorders of oral cavity, 6–11 2016, AIIMS, Rishikesh, India
8. Moderator, Moving the goalposts with early laryngeal cancer, IFHNOS 2016 and 16th Annual Conference of Federation of Head and Neck Oncology, 12–15 October 2016, New Delhi, India
9. Critical analysis of factors impacting outcomes of CI, 14th Annual Conference of Cochlear Implant Group of India, 7–9 October 2016, Kochi, India
10. Skull Base Osteomyelitis: How do I manage it?, 18th Annual Conference of Skull Base Surgery Society of India, 8–11 September 2016, SMS Medical College, Jaipur, India
11. Crossfire, endoscopic vs open approaches for juvenile angiofibroma, 3rd Workshop on Skull Base Surgery, 4–7 August 2016, AIIMS, Jodhpur, India
12. Panelist, Panel discussion on unilateral vocal fold paralysis, 1st SGRH Symposium on Voice Disorders, 24 July 2016, Sir Gangaram Hospital, New Delhi, India
13. Panelist, Panel discussion on nutritional management of head and neck cancer patients, Workshop on Cancer Nutrition, Managing nutrition in cancer patients, 16 July 2016, New Delhi, India
14. Thyroidectomy: Surgical steps and preventing complications– First Head and Neck Hands on Dissection Workshop, 16–17 July 2016, CTRF, AIIMS, New Delhi, India
15. Panelist, panel discussion on residual/recurrent disease, 4th Head and Neck Cancer Forum on Oral Cancer, 9–10 July 2016, Patel Hospital, Jalandhar, India

16. Obstructive sleep apnea, Best practice guidelines, Coblation Surgery Workshop, 22 May 2016, SPS Hospitals, Ludhiana, India
17. Panelist in panel on cochlear implants, ENT Live Workshop, 29–30 April 2016, Medanta Hospital, Gurgaon, India
18. Panelist, Panel discussion on head and neck trauma and facial deformity, 2nd Facial Plastics and Rhinoplasty Workshop, 22–24 April 2016, AIIMS, New Delhi, India
19. Moderator, surgical session and panelist, panel discussion on facial nerve, 8th Annual Conference of Association of Otolaryngologists of India, Punjab Chapter, 16–17 April 2016, IMA Auditorium, Chandigarh, India

Chirom Amit Singh: 12

1. Panelist, Panel discussion on head and neck trauma and facial deformity, 2nd Facial Plastics and Rhinoplasty Workshop, 22–24 April 2016, AIIMS, New Delhi, India
2. Basic endoscopic anatomy of nose/paranasal sinuses, neurosurgery endoscopy, 23 June 2016, CTRF, AIIMS, New Delhi, India
3. Endoscopic CSF rhinorrhea repair–Neurosurgery endoscopy, 23 June 2016, CTRF, AIIMS, New Delhi, India
4. Basic surgical technique laryngectomy, First Head and Neck Hands on Dissection Workshop, 16–17 July 2016, CTRF, AIIMS, New Delhi, India
5. Dynamic reanimation of chronic facial nerve palsy, AOI Delhi Branch Monthly Clinical Meet, 22 July 2016, AIIMS, New Delhi, India
6. Endoscopic excision of JNA-SKULLBASE CON 2016, 8–11 September 2016, SMS Medical College and Hospital, Jaipur, Rajasthan, India
7. Panelist, head and neck reconstruction, IFHNOS 2016 and 16th Annual Conference of Federation of Head and Neck Oncology, 12–15 October 2016, New Delhi, India
8. Optic nerve decompression, Neurosurgery endoscopy, 13 November 2016, CTRF, AIIMS, New Delhi, India
9. Cadaveric demonstration of optic nerve decompression: Neurosurgery endoscopy, 13 November 2016, CTRF, AIIMS, New Delhi, India
10. Basic surgical technique laryngectomy, First Head and Neck Hands on Dissection Workshop, 16–17 November 2016, CTRF, AIIMS-New Delhi, India
11. Anatomy of local flap in facial plastic surgery, 3rd Facial Plastics and Rhinoplasty Workshop 2017, 19–21 February 2017, AIIMS, New Delhi
12. Panelist, Oral cavity malignancies including reconstruction, 40th Annual Conference of the AOI, Delhi Branch, 4–5 March 2017, Research & Referral Hospital, New Delhi.

Rajeev Kumar: 9

1. Oral commissure reconstruction: A novel technique, 2nd Facial Plastics and Rhinoplasty Workshop 2016, 22–24 April 2016, AIIMS, New Delhi, India
2. Surgical technique of neck dissection, 1st Head and Neck Cadaveric Workshop 2016, 16–17 July 2016, CTRF, AIIMS, New Delhi, India
3. Recurrent respiratory papillomatosis– AOI Delhi Branch Monthly Clinical Meet, 22 July 2016, AIIMS, New Delhi, India
4. Endoscopic excision of JNA-SKULLBASE CON 2016, 8–11 September 2016, SMS Medical College & Hospital, Jaipur, Rajasthan, India
5. Bilateral abductor cord palsy, AIIMS Laryngology & Airway update-2016, 14–16 December 2016, AIIMS, New Delhi, India
6. Common central causes of vertigo you must know, NES 2017, 6–8 January 2017, AIIMS, Bhubaneswar, Odisha, India
7. Moderator, Management of temporal bone carcinoma, NES 2017, 6–8 January 2017, AIIMS, Bhubaneswar, Odisha, India
8. Powered tools are the future for adenoid resections, 40th Annual Conference of the AOI, Delhi Branch, 4–5 March 2017, Research & Referral Hospital, New Delhi, India
9. Canal wall down mastoidectomy-OTORIDE 2017, 17–19 March 2017, Siddham ENT Hospital, Jaipur, Rajasthan, India

Prem Sagar: 7

1. Aesthetic facial analysis, 2nd Facial Plastics and Rhinoplasty Workshop 2016, 22–24 April 2016, AIIMS, New Delhi, India
2. Differentiated thyroid cancer: Current relevant guidelines, 1st Head and Neck Cadaveric Workshop 2016, 16–17 July 2016, CTRF, AIIMS, New Delhi, India
3. All palsies are not Bell's, AOI Delhi Branch Monthly Clinical Meet, 22 July 2016, AIIMS New Delhi, India
4. Current relevant guidelines on thyroid cancer, 2nd Head & Neck Cadaver Dissection Course, 16 November 2016, JPNA Trauma Centre, New Delhi, India
5. Pathophysiology of common vestibular disorders, NES 2017, 6–8 January 2017, AIIMS, Bhubaneswar, Odisha, India
6. Facial analysis: Aesthetic prospective, 3rd Facial Plastics and Rhinoplasty Workshop-2017, 19–21 February 2017, AIIMS, New Delhi, India
7. Evidence based management of acute vertigo, 40th Annual Conference of the AOI, Delhi Branch, 45 March 2017, Research and Referral Hospital, New Delhi, India

David Victor Kumar: 4

1. Drilling tips in temporal bone dissection, TEMPO-2016, 20–30 April 2016, Dr Pinnamaneni Siddhartha Institute of Medical Sciences & Research Foundation, Vijayawada, Andhra Pradesh, India
2. Surface anatomy of temporal bone, Hands on Temporal Bone Dissection Course, 2016, 24–26 November 2016, AIIMS, New Delhi, India
3. Injection laryngoplasty materials & techniques, AIIMS laryngology and Airway Update-2016, 14–16 December 2016, AIIMS, New Delhi, India
4. Management of crooked nose, 3rd AIIMS Facial Plastics and Rhinoplasty Workshop 2017, 19–21 February 2017, AIIMS, New Delhi, India

Hitesh Verma: 14

1. Drilling tips, Temporal Bone Workshop, 7–9 April 2016, AIIMS, New Delhi
2. Choosing right neck operation, Cadaveric Head and Neck dissection Course, 16–17 July 2016, CTRF, Trauma Centre AIIMS, New Delhi, India
3. Choosing right neck operation, Cadaveric Head and Neck Dissection Course, 16–17 November 2016, CTRF, Trauma Centre, AIIMS, New Delhi, India
4. Primary speno, Petro-clival tuberculosis, SKULLBASECON 2016, 8–11 September 2016, Jaipur, India
5. Acute laryngotracheal trauma, AIIMS Laryngology and Airway Update 2016, 14–16 December 2016, AIIMS, New Delhi, India
6. Panel discussion, Complication of fess, Haryana AOICON, 12–13 November 2016, GMCH, Chandigarh, India
7. CSOM, ENT update, 3–4 December 2016, MAMC, New Delhi, India
8. Lid loading for facial rehabilitation, 3rd Facial Plastic and Rhinoplasty Workshop, 19–21 February 2017, AIIMS, New Delhi, India
9. Hemithyroidectomy video presentation, IGSHNO, 24–26 February 2017, Jaipur, India
10. NACT in head and neck tumours, IGSHNO, 24–26 February 2017, Jaipur, India
11. Skull base management: Panel discussion, IGSHNO, 24–26 February 2017, Jaipur, India
12. Anatomy & pathophysiology of CSF rhinorrhoea, Delhi AOI, 5–6 March 2017, RR Hospital, New Delhi, India
13. CSF rhinorrhoea panel discussion, Delhi AOI, 5–6 March 2017, RR Hospital, New Delhi, India
14. Reverse stapedotomy, Otoride, 17–19 March 2017, Jaipur, India

Shuchita Singh: 6

1. Types of neck dissection, Cadaveric Head and Neck Dissection Course, 16–17 July 2017, CTRF, Trauma Centre, AIIMS, New Delhi, India
2. Types of neck dissection, Cadaveric Head and Neck Dissection Course, 16–17 November, CTRF, Trauma Centre, AIIMS, New Delhi, India
3. Benign vocal fold lesions and their management, AIIMS Laryngology and Airway Update 2016, 14–16 December 2016, AIIMS, New Delhi, India
4. Facial hypoglossal anastomosis, 3rd Facial Plastic and Rhinoplasty Workshop, 19–21 February 2017, AIIMS, New Delhi, India

5. Candidacy of cochlear implant, Cochlear Cruise, 18–19 February 2017, S.P. Medical College, Bikaner, India
6. Techniques of cochlear implant: Panel discussion, Cochlear Cruise, 18–19 February 2017, S.P. Medical College, Bikaner, India

Arvind Kumar Kairo: 4

1. Temporal bone anatomy, Temporal Bone Workshop, 7–9 April 2017, AIIMS, New Delhi, India
2. Instrumentation and pre op consideration in facial plastic, 2nd Facial Plastic and Rhinoplasty Workshop, 22 April 2017, AIIMS, New Delhi, India
3. Role of photodynamic therapy in Laryngology, AIIMS laryngology and airway update 2016, 14–16 December 2017, AIIMS, New Delhi, India
4. Photography, 3rd Facial Plastic and Rhinoplasty Workshop, 19–21 February 2017, AIIMS, New Delhi, India

Oral papers/posters presented: 35

1. Hitesh Verma, Alok Thakar. Primary speno-petro-clival tuberculosis, All India Rhinology Conference, 12–14 August 2016, Jaipur, India
2. David Victor Kumar Irugu. Evaluation of causes for revision rhinoplasty & difficulties in redo surgeries—my experience, RHINOCON-2016, 12–14 August 2016, Hyderabad, India
3. David Victor Kumar Irugu. Comparative study of early verses delayed facial nerve decompression in traumatic longitudinal fracture, A retrospective study, AOI TS & South Con-2016, 7–9 October 2016, Hyderabad, India
4. Smriti Panda, Alok Thakar, Suresh C Sharma, Oncological and functional outcomes after transoral robotic surgery in oropharyngeal malignancies, IFHNOS & FHNO 2016, 12–15 October 2016, New Delhi, India
5. Smriti Panda, Alok Thakar, Kapil Sikka, The Sternocleidomastoid Flap Revisited, IFHNOS & FHNO 2016, 12–15 October 2016, New Delhi, India
6. Smriti Panda, Alok Thakar, Kapil Sikka, Application of transoral robotic surgery in posteriorly located carcinoma tongue, IFHNOS & FHNO 2016, 12–15 October 2016, New Delhi, India
7. Smriti Panda, Kapil Sikka, Alok Thakar. Long term outcomes following cochlear implantation and audit of prognostic factors, AOICON 2017, 2–5 February 2017, Science City Convention Centre, Kolkata, India
8. Smriti Panda, Suresh C. Sharma. Surgical outcomes and challenges in massive petrous apex cholesteatomas, AOICON 2017, 2–5 February 2017, Science City Convention Centre, Kolkata, India
9. Smriti Panda, Kapil Sikka, Alok Thakar. Long term outcomes following cochlear implantation and audit of prognostic factors, AOI Delhi State Branch 2017, 4–5 March 2017, R & R Hospital, New Delhi
10. Smriti Panda, Suresh C Sharma, Surgical outcomes and challenges in massive petrous apex cholesteatomas, AOI Delhi State Branch 2017, 4–5 March 2017, R & R Hospital, New Delhi, India
11. Ramya Thota. Study of serum survivin levels in oral submucous fibrosis and squamous cell carcinoma, IFHNOS & FHNO 2016, 12–15 October 2016, New Delhi, India
12. Suresh K. Trismus release in oral submucous fibrosis by retromolar trigone and buccal mucosa directed CO2 laser epithelial and subepithelial releasing incisions, IFHNOS & FHNO 2016, 12–15 October 2016, New Delhi, India
13. Pirabu Sakthivel. Role of narrow band imaging in the early diagnosis of laryngeal lesions with photo documentation, A pilot study, IFHNOS & FHNO 2016, 12–15 October 2016, New Delhi, India
14. Shikha Rani Patel. Skull base osteomyelitis and outcomes, ISOCON, 19 November 2016, Calicut, India
15. Anup Singh. Misplaced coil in sphenoid sinus, AOI Delhi State Branch 2017, 4–5 March 2017, R & R Hospital, New Delhi, India
16. Amborish Nath. Role of SPECT CT and lymphoscintigraphy in mapping lymphatic drainage of paranasal sinuses, IFHNOS & FHNO 2016, 12–15 October 2016, New Delhi, India
17. Sanjoy Singh. To assess the outcome in prelingual bilateral sensorineural hearing loss cases undergoing cochlear implantation via cochleostomy vs round window insertion of electrodes, AOI Delhi State Branch 2017, 4–5 March 2017, R & R Hospital, New Delhi, India
18. Karan Agarwal. Evaluation of estrogen beta receptor in JNA and its correlation with clinicoradiological findings, World Congress for Endoscopic Surgery of Skull Base and Brain, 15–17 May 2016, Chicago, USA
19. Prateek Sharma. Experience with laser stapedotomy, NES 2017, January 2017, Bhubaneswar, India
20. Prateek Sharma. Comparison of laser vs conventional stapedotomy, AOI Delhi State Branch 2017, 4–5 March 2017, R & R Hospital, New Delhi, India
21. Prem Sagar, Pirabu Saktivel, Rajeev Kumar, Sinonasal Hemangiopericytoma: Indolent tumour with malignant potential, RHINOCON 2016, 29th Annual Conference of All India Rhinology Society & Pre Conference Workshop on Endoscopic Sinus Surgery + Rhinoplasty, 12–14 August 2016, Hyderabad, India. **Best Poster (1st prize)**

22. Prem Sagar, Devaraja K. Video on Endoscopic endonasal surgery for bilateral choanal atresia, RHINOCON 2016, 29th Annual Conference of All India Rhinology Society & Pre Conference Workshop on Endoscopic Sinus Surgery+Rhinoplasty, 12–14 August 2016, Hyderabad, India
23. Rajeev Kumar, Prem Sagar. Orbital complications secondary to acute sinusitis, Comparative study between paediatric and adult population, RHINOCON 2016, 29th Annual Conference of All India Rhinology Society & Pre Conference Workshop on Endoscopic Sinus Surgery + Rhinoplasty, 12–14 August 2016, Hyderabad, India
24. Shilpi Budhiraja, Prem Sagar, Rajeev Kumar, Gaurav Khanna. Mammary Analogue Secretory Carcinoma of Salivary Gland Origin: A New Entity-IFHNOS 2016 and FHNO2016, 12–15 October 2016, New Delhi, India
25. Madan P Gupta, Rajeev Kumar, Prem Sagar, Rakesh Kumar. Verucous lesions of oral cavity: Management issues-IFHNOS 2016 and FHNO2016, 12–15 October 2016, New Delhi, India
26. Prem Sagar. Temporal bone dissection competition, ISOCON 2016, Annual Conference of the Indian Society of Otology, 18–20 November 2016, Calicut, Kerala, India
27. Prem Sagar. Video on ‘Intact Canal Wall Mastoidectomy with Scutumplasty’, ISOCON 2016, Annual Conference of the Indian Society of Otology, 18–20 November 2016, Calicut, Kerala, India
28. Shilpi Budhiraja, Prem Sagar, Rajeev Kumar, Rijendra Yogal, Elective Mastoid Surgeries: Postoperative Outcome Analysis, ISOCON 2016, Annual Conference of the Indian Society of Otology, 18–20 November 2016, Calicut, Kerala, India
29. Anup Singh, Rajeev Kumar, Prem Sagar, Chitranjan Behera, Rakesh Kumar, SC Sharma. Anatomical variations of round window niche in human cadaveric temporal bones and its relevance to cochlear implant electrodes insertion, ISOCON 2016, Annual Conference of the Indian Society of Otology, 18–20 November 2016, Calicut, Kerala, India **Best Poster (1st prize)**
30. Rajeev Kumar, Anup Singh, Prem Sagar, Chitranjan Behera, Rakesh Kumar, SC Sharma. Anatomical variations of round window niche in human cadaveric temporal bones and its relevance to cochlear implant electrodes insertion, AOICON 2017, Kolkata, 2–5 February 2017, Science City Convention Centre, Kolkata, India
31. Rajeev Kumar, Ashwin Chandran, Smriti Panda, Prem Sagar. Comparative study evaluating survival of advanced gingiva-buccal complex cancers patients with regard to skin versus mandible involvement, AOICON 2017, Kolkata, 2–5 February 2017, Science City Convention Centre, Kolkata, India
32. Prem Sagar, Shilpi Budhiraja, Rajeev Kumar. Postoperative outcome of elective mastoid surgery in paediatric vs adult patients, 40th Annual Conference of the AOI, Delhi Branch, 4–5 March 2017, Research & Referral Hospital, New Delhi, India **Best Paper (first prize)** in Junior Consultant Paper Presentation
33. Anup Singh, Rajeev Kumar, Prem Sagar, Chitranjan Behera, Rakesh Kumar, SC Sharma. Anatomical variations of round window niche in human cadaveric temporal bones and its relevance to cochlear implant electrodes insertion, 40th Annual Conference of the AOI, Delhi Branch, 4–5 March 2017, Research and Referral Hospital, New Delhi, India **Best Poster (1st prize)**
34. Rajeev Kumar, Devaraja K. Video on “Cobalation Adenoidectomy”, RHINOCON 2016, 29th Annual Conference of All India Rhinology Society & Pre Conference Workshop on Endoscopic Sinus Surgery + Rhinoplasty, 12–14 August 2016, Hyderabad.
35. Rajeev Kumar. Video on “Cochlear implantation by posterior tympanotomy approach”, ISOCON 2016, Annual conference of the Indian Society of Otology, 1820 November2016, Calicut, Kerala, India

RESEARCH

Funded projects

Ongoing

1. Development of indocyanine-green loaded cytokeratin targeted calcium phosphate nanoparticulate system for sentinel lymph node mapping in head & neck cancer, Alok Thakar, DBT, 3 years, 2014–16, Rs. 45 lakhs (approx.)
2. Prevalence and etiology of hearing impairment, National Task Force Project (coordinating centre), Alok Thakar, ICMR, 4 years, 2015–19, Rs. 60 lakhs (approx.)
3. Prevalence of human papilloma virus in head-neck squamous cell carcinoma (AIIMS site), Alok Thakar, Head Neck Cooperative Oncology Group (HNCOG), 2 years, 2015–17
4. Effects of non-ionizing electromagnetic field on human health: Effects on auditory and vestibular system, Rakesh Kumar, ICMR, 3.5 years (extended), Rs. 90 lakhs
5. Sound4All: Re-engineering High-end Audiometric Devices for Robust and Affordable Audiological Testing, Kapil Sikka, Indo German Science and Technology Centre (IGSTC), 3 years, 2016–19, Rs. 36.8 lakhs
6. Anatomical variations of round window niche in human cadaveric temporal bones and its relevance to cochlear implant electrodes insertion, Rajeev Kumar, AIIMS, 1 year 2015–16, Rs. 3.5 lakhs

7. Evaluation of level of Vascular Endothelial Growth Factor – in cases of Recurrent Respiratory Papillomatosis, Hitesh Verma, AIIMS, 2 years, 2016–18
8. Clinical and biochemical evaluation for depression in patients with recently diagnosed head and neck cancer, Prem Sagar, AIIMS, 2 years, 2016–2018, Rs. 5 lakhs
9. Salivary Micro-RNA: Their utility as bio-marker during molecular changes in tobacco users vs. tobacco non-users, Shuchita Singh, AIIMS, 2 years, 2016–18
10. A pilot comparative study on expressional level difference of 'psoriasin' between different squamous ear diseases in patients undergoing mastoid surgeries, Arvind Kumar Kairo, AIIMS, 1 year, 2016-17, Rs. 5 lakhs

Completed

1. An evaluation of different endoscopic approaches to inner ear, Chirom Amit Singh, AIIMS, 2 years, 2013–15, Rs. 4.78 lakhs
2. An evaluation of the surgical trauma to intracochlear structures after insertion of intracochlear electrode arrays and comparison of surgical trauma by round window and antero-inferior cochleostomy techniques, Kapil Sikka, AIIMS, 2 years, 2013–15, Rs. 4.8 lakhs
3. Double-blind, randomised, placebo controlled trial to evaluate the efficacy of adjuvant treatment with homeopathic medication Thuja (arbor vitae) in decreasing severity and decreasing postsurgical recurrence in recurrent respiratory papillomatosis, Alok Thakar, ICMR, 3.5 years, 2012–15, Rs. 55 lakhs (approx.)

Departmental projects

Ongoing

1. Evaluation of EGFR expression in cholesteatoma sac in different types of pneumatisation of temporal
2. Study of paediatric tracheostomy and impact on quality of life of child and caregivers
3. Comparing outcomes in patients of CSOM undergoing CWD with or without cavity obliteration / canal wall reconstruction
4. Evaluation of unknown head and neck primaries metastatic to cervical nodes.
5. Evaluation of expression of CD 68 immunopositive tumour associated macrophages and its relationship with CD 34 immunopositive microvascular density in oral squamous cell carcinoma
6. Prospective study into the patterns of nicotine dependence and perioperative complication in newly diagnosed cases of head and neck squamous cell carcinoma
7. Assessment of depth of invasion in oral cavity squamous cell carcinoma (T1-T3) by palpation, radiology and their correlation to histopathological depth of invasion
8. Single sided deafness, A study to assess disease related morbidity and patient acceptance of treatment option
9. Detection and quantification of circulating tumour cells in oral cavity squamous cell carcinoma
10. Comparison of effect of embolisation on JNA excision
11. Immunohistochemical characteristic and surgical outcomes of oral submucous fibrosis

Completed

1. Auditory and vestibular evaluation in stapes surgery in otosclerosis
2. Short term and long term results of pediatrics cochlear implantation in patients after cochlear implant surgery
3. Clinico-radiological-histopathological correlation of mandibular involvement in squamous cell carcinoma of oral cavity
4. To evaluate the role of surgical treatment of upper airway in improving compliance /response to CPAP treatment in patient with OSAS and intolerance or inadequate compliance to CPAP
5. To compare co2 laser verses conventional technique in otosclerosis patients
6. In vivo exploration of lymphatic drainage pathway of sinonasal tumours by lymphoscintigraphy
7. Study of serum surviving levels in case of oral submucosal fibrosis and squamous cell carcinoma
8. To assess the outcome in prelingual b/l profound SNHL patient undergoing cochlear implant surgery via cochleostomy vs round window insertion of electrodes
9. Single sided deafness. A study to assess disease related morbidity and patient acceptance of treatment option

Collaborative projects

Ongoing

1. Studies on P13K/AKT signalling and anti-tumour effects of its targeted disruption in oral cancer (Biotechnology)
2. Interdisciplinary variations in the spectrum of oral mucosal lesions (Dermatology)
3. Pilot study on comparison of efficacy and usability of indigenous handheld suction assembly for paediatric tracheostomised patients with the existing suction devices (Paediatrics)
4. Developing suctioning machine for cleaning tracheostomy tubes (IIT Delhi)

PUBLICATIONS

Journals: 35

Abstracts: 4

Chapters in Books: 6

PATIENT CARE

Apart from OPD, Operation theatre and minor OT services, the department runs a rehabilitation unit of audiology and speech pathology and specialty clinics in Audiology and Skull Base with cochlear implant, rhinology, vertigo, voice and swallowing, and twice a week, head and neck cancer clinic. The department also provides rural services at CRHSP Ballabgarh and Outreach OPD, Jhajjar. The statistics are as follows:

Number of patients operated

Main OT

Major Cases: 2747

Minor Cases: 1877

Minor OT OPD procedures: 19538

Number of patients seen in OPD

New patients: 63326

Old registration: 82788

Total Number of patients seen in RUAS

New Patients: 4022

Old registrations: 3629

Total number of ward admissions: 1579 (in ENT ward); 5373 (Total ENT Admissions)

No. of cases in specialty clinics

Sr. no.	Clinic	New cases	Old cases	Total
1.	Vertigo	214	245	459
2.	Audiology and Skull base	250	103	353
3.	Cochlear Implant	231	297	528
4.	Voice	493	126	619
5.	Rhinology	304	127	431
6.	Head and Neck Cancer	1284	4941	6225
7.	Radiology Conference	931	—	623

Community service clinics

Twice weekly clinics in community hospital in Ballabhgarh with once a week operating facilities.

Weekly clinics in primary health centre in Gurgaon

Weekly clinics in community hospital in IIT Delhi

The department is providing daily OPD services at Outreach OPD Jhajjar.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor S.C. Sharma was Fellow (Member of University Senate), Punjab University, Chandigarh; Member, Institute Body, Standing Purchase Committee and Standing Estate Committee of PGIMER, Chandigarh; Honorary Advisor (Deafness), Under the National Programme for Prevention and Control of Deafness (NPPCD) in the Ministry of Health and Family Welfare, Govt. of India, New Delhi; Member, Technical Steering Committee, National Programme for Prevention and Control of Deafness (NPPCD) in the Ministry of Health & Family Welfare, Govt. of India, New Delhi; Professor, Incharge, Computer Facility, AIIMS, New Delhi; Member, Authorisation Committee under the Transplantation of Human Organs Act, 1994, AIIMS, New Delhi; Member, "Healthcare Transformation Cell", AIIMS, New Delhi; Subject Expert Committee for sleep disorders, cognitive dysfunction & ENT projects under the possible impact of EMF Radiation Exposure from Mobile Towers and Handsets on Life and related R&D initiatives, Science and Engineering Research Board,

Government of India, Vasant Kunj, New Delhi; Chairman, 'Ear, Nose and Throat Surgery Instruments' Sectional Committee of Bureau of Indian Standards (MHD04).

Professor Alok Thakar served as Hony. Consultant to the Armed Forces Medical Services; NES Guest Oration (2017), Neuro-otological and Equilibrimetric Society of India; Prof Naresh Bhatia Oration (2017), Lucknow Branch of Association of Otolaryngologists of India; Prof C. Das Oration (2016) North-Eastern Branch of Association of Otolaryngologists of India; Nilkanth & Saroj Apte Oration (2016), Laryngology and Voice Association; Guest Lecture 2016, Base Hospital Delhi; Executive Committee Member, Asia Pacific Society of Thyroid Surgery (2015–19); Organising Chairperson, IFHNOS Delhi 2016.

Professor Rakesh Kumar was Executive Member of NES, India for 2016–17; President Elect NES India for 2017–18; Invited as guest Faculty by European Academy of Facial Plastic Surgery to present a paper at its Annual Meeting at London (UK) in September, 2016; Treasurer, IFHNOS 2016 Conference, New Delhi, India; Chairperson, Scientific Exhibition Committee, IFHNOS Conference 2016, New Delhi; Chairman, 3rd AIIMS Facial Plastics and Rhinoplasty Workshop, February 2017; Co-chairman, 2nd AIIMS Facial Plastics and Rhinoplasty Workshop April 2016; Chaired a session on Neurophysiological aspects of TMS and TDCS–National Workshop on “Recent Technological Advances and Intervention for Psychiatric Disorders”, 2 April 2016, AIIMS, New Delhi; Chaired a session on talks on basic facial plastics on 20 February 2017 at 8 AM, 3rd AIIMS Facial Plastics and Rhinoplasty 2017, 19–21 February 2017, AIIMS, New Delhi, India; Chaired a session on Textile Technology, 3rd World Trauma Congress, 19 August 2016, Vigyan Bhavan, New Delhi; Chaired a session on perfect cure: Cochlear implants, how they act? Sound4All Workshop, A doctor-engineer interface on audiology devices and equipments, 17 December 2017, AIIMS-New Delhi, India; was Judge-Mukat Saharia Award Papers, AOI Delhi Branch, 4–5 March 2017, R R Hospital, New Delhi.

Dr Kapil Sikka was Editorial Board Member and Assistant Editor, Indian J of Otology; Reviewer, Indian J Otology, Indian J Otolaryngology, Head and Neck Surgery, Indian J Paediatrics; Elected as Executive Member of Cochlear Implant Group of India; Joint Secretary, Association of Otolaryngologists of India, Delhi State Branch; Conferred the prestigious FHNO fellowship for 2015–16 by the Federation of Head and Neck Oncology (FHNO). Availed the fellowship at prestigious Tata Memorial Hospital; Members of the EPTB (Extra Pulmonary Tubercular Guidelines) Guidelines Core Group for drafting 'INDEX TB Guidelines'; Organising Secretary, IFHNOS 2016; Conducted Sound4All Workshop on Doctor Engineer Interface on Audiometric Devices.

Dr Chirom Amit Singh was Organizing secretary, IFHNOS 2016; Organizing secretary, AIIMS laryngology & Airway Update 2016; Conducted Sound4All workshop on doctor engineer interface on audiometric devices.

Dr Hitesh Verma was Treasurer, AIIMS laryngology & Airway Update 2016; Editorial Board Member, International Research Journal of India; Core Committee Member, IFHNOS 2016.

VISITING SCIENTIST

1. Professor Kyung Tae visited in January 2016 and demonstrated Robotic Thyroid Surgery

9.27. Paediatrics

Professor and Head

Vinod K. Paul

Professors

Ashok K. Deorari (Neonatology)
 Arvind Bagga (Nephrology)
 Sushil K. Kabra (Pulmonology, Intensive Care, Tuberculosis)
 Madhulika Kabra (Genetics)
 Pankaj Hari (Nephrology)
 Ramesh Aggarwal (Neonatology)
 Vandana Jain (Endocrinology)
 Rachna Seth (Oncology)
 Rakesh Lodha (Pulmonology, Intensive Care, Tuberculosis)
 Sheffali Gulati (Neurology)

Assistant Professors

Rajni Sharma (Endocrinology)
 Rohan Malik (Gastroenterology)
 Neerja Gupta (Genetics)
 M. Jeeva Sankar (Neonatology)
 Anu Sachdeva (Neonatology)
 Aditi Sinha (Nephrology)
 Biswaroop Chakrabarty (Neurology)
 Prashant Kumar Jauhari (Neurology)
 Jagdish Prasad Meena (Oncology)
 Aditiya Kumar Gupta (Oncology)
 Kana Ram Jat (Pulmonology, Intensive Care, Tuberculosis)
 Jhuma Sankar (Pulmonology, Intensive Care, Tuberculosis)
 Narender Kumar Bagri (Rheumatology)

Aman preet (Neonatology)

Assistant Professor (Contract)

Scientists

Madhumita Roy Choudhary
 Shivaram Shastri (Contract)

Rashmi Shukla (Contract)
 G.P. Das (Medical)

Clinical Psychologist

Savita Sapra

Dietician

Anuja Agarwala

Physiotherapist

Sumita Gupta

Biochemist

Pallavi Mishra

Technical Officer

Sadhna Arora

Medical Social Service Officer

D. Yadav

HIGHLIGHTS

The Paediatrics Department started a new DM program in Medical Genetics. We now have a total of five DM courses, the only department at AIIMS with this distinction.

- MD seats have increased by five this year making a total of 37 seats.
- The department launched an Antimicrobial Stewardship Program across all divisions. A department-wide Antibiotic Policy was developed after systematic consultations and review. The policy is available on a specially created mobile App made available to all concerned. A system to track antibiotic usage, pathogen profile and antibiotic resistance has been established.
- The Department of Pediatrics continued to be the Institute's prime mover in Quality Improvement (QI) program now spread to 12 departments.

- The Department was rated the best pediatrics department in India for the 10th consecutive time by the popular magazine, 'The Week'.
- The Department organized the maiden national conference of the Pediatric Research and Education Society of India (January 2017).
- The division of Pediatric Gastroenterology conducted several procedures that were not previously available for children at AIIMS; namely, endoscopic cystogastrostomy, endoscopic glue injections, PEG tubes, neonatal esophageal stricture dilatation, balloon retrograde venous obliteration among others. It established specialized interventions for pediatric hepatic vascular diseases.
- The divisions of Genetics and Neonatology are running the 'Birth Defects Surveillance' program and WHO SEAR birth defects database.
- The division of Genetics organized the third international conference on Birth defects and the third National conference of the Society of Indian Academy of Medical Genetics (SIAMG) in December 2016. The conference had an RCP-CPD 18 hours accreditation from UK.
- The division of Neonatology is partnering with PGI and GMCH, Chandigarh, and the Public Health Foundation of India to improve the quality of care of preterm neonates being treated in special newborn care units (SNCU) in four states of the country. The major objective of this activity is to reduce the incidence of retinopathy of prematurity (ROP) in preterm neonates by implementing evidence based practices. The work is funded by Queen Elizabeth Diamond Jubilee Trust, UK.
- The division of Neonatology has also created a Training Tool on QI, which will be used globally for QoC programs on maternal and newborn health. A mobile app based diagnostic tool for autism has been developed which can be easily downloaded from google play store and Apple play store (<https://play.google.com/store/apps/details?id=app.autism.sanyakhurana.diagnostictoolforautismspectrumdisorder&hl=en>), (<https://itunes.apple.com.in/app/autism-spectrum-disorder-diagnostic-tool/id1151524697?mt=8>)
- The Child Neurology Division microsite "m.pedneuroaiims.org" has been updated and additional educational materials for clinicians and parents in both Hindi and English have been uploaded. An interactive platform for parents and health care professionals has also been developed.
- A mobile based diagnostic tool for autism, website www.pedneuroaiims.org with tools and educational materials for clinicians and parents on various Neurodevelopmental Disorders was developed and launched, which also has an interactive web platform for parents and health care professionals.
- A board for disability assessment and certification as per GOI disability certification guidelines has been constituted in the Child Neurology Division. The first disability certificate for autism was issued on 28 April 2016 at AIIMS by the Secretary, Ministry of Social Justice and Empowerment. In the last year, 50 disability certificates for patients with autism and 30 certificates for patients with other disabilities have been issued.
- In collaboration with the National Trust, the Child Neurology Division, organized the 1st and 2nd National Workshop for Training Master Trainers in Autism Tools (INDT ASD and ISAA) from 31 August–2 September 2016 and 9–11 February 2017.
- First International Pediatric Nephrology Association and Asian Pediatric Nephrology Association Junior Master Class was organized by the division of Pediatric Nephrology on 1 & 2 April 2016.
- The department prepared detailed plans for faculty and other staff as well as machinery and equipment for the expanded facilities at the upcoming Mother and Child Block.

EDUCATION

MD Program: The Department has a large junior residency program with 37 seats. There are daily teaching sessions and regular system of theory and practical assessment.

DM programs: Five DM programs are ongoing including Neonatology, Neurology, Nephrology, Pulmonology and Intensive Care and Medical Genetics. Each program includes structure teaching activities on 3–5 sessions each week.

PhD program: The Department is running a vibrant PhD program in multiple divisions. PhD scholars have a regular teaching program including journal clubs.

MBBS program: Departmental faculty is involved in bedside teaching of MBBS students during their posting in Pediatrics (OPD and wards) along with lectures and integrated seminars.

Senior Residency Program: Specialty based senior residency program was further strengthened and awards of excellence conferred.

The Department conducted special bi-annual symposia on Antibiotic Stewardship Program and Quality Improvement (QI) for all residents and faculty.

ENDOCRINOLOGY

- 2nd AIIMS-LHMC CME on Pediatric Endocrinology on 23 July 2016.

GENETICS

- Indo-USA Symposium: Fragile X syndrome and Autism: Advances in Diagnosis, Management and Therapy 26 February, 2017.

NEONATOLOGY

- Seminars for seventh semester on standard treatment protocols for management of Sick neonates using wall charts, simulators, tablets, case studies and Quality improvement using posters, small group interactions in the eight semesters.
- Neonatal resuscitation and Ventilation Workshops for postgraduates.
- QI sensitisation workshops on 26 August 2016, and on 8 May 2017.
- NICU design symposium on 20 March 2017 for Neonatology and Pediatrics residents, Hospital administration residents. Faculty and students from School of Planning and Architecture, New Delhi also actively participated.
- The division of Neonatology is: a. using e-learning approaches for disseminating Evidence Based Practices on Newborn Health for healthcare professionals, b. partnering with WHO, India country office for Training of Trainers (TOT) for nursing professionals for facility based newborn nursing from (March–September 2016), and c. collaborating with WHO, CC for Human Reproduction at AIIMS in reviewing and finalising the contents of ‘Pocket book on maternal and newborn care’.
- The division of Neonatology also facilitated training on ‘Essential newborn care and Quality of Improvement for Maternal and Newborn Health’, 25–29 September 2016 in Maldives for nurses and physicians. We also facilitated many workshops for Improving Quality of Hospital Care for Maternal and Newborn Health in India.
- The division of neonatology is leading a three-month coaching course on Quality improvement (QI) for 30 Faculty from AIIMS New Delhi, Jodhpur, Raipur and Rishikesh.
- Division of neonatology has been instrumental in developing online courses (these include ‘*Sick newborn care course*’ (3 months), ‘*Newborn nursing and quality improvement course*’ (10 weeks), and ‘*CPAP course*’ (8 weeks) with collaboration from neonatologists from different institutions of India and SEAR region. This platform has trained about 3000 doctors (12 sick newborn courses) and 1500 nurses (previous 4 courses and updated 3rd ENCC course) from different countries in the SEAR in sick newborn care, CPAP, and essential newborn care till date.
- Dr A.K. Deorari conducted following education and training programs:
 - Training of Master Trainers for nursing professionals on Facility Based Newborn Nursing with Quality Improvement at PGIMER, Chandigarh, 30 & 31 May & 1 June 2016 & 8–10 August 2016 at Goa Medical College, Bambolim, Goa.
 - Quality Improvement Workshop for Royal Government of Bhutan, Khesar Gyalpo University of Medical Sciences of Bhutan from 30 April & 1 May 2016.
 - Workshop for AAP, USA on Helping Babies Breathe Field testing 2nd Edition, AIIMS, 11 & 12 June 2016.
 - Quality Improvement workshop along with Canadian Faculty supported by EPIQ, Canada, 15 & 16 June 2016, AIIMS, New Delhi.
 - Quality Improvement Workshop for other 6 AIIMS and PGIMER Chandigarh, JIPMER, NIMHANS as part of Diamond Jubilee Celebrations of AIIMS, 2 & 3 August 2016 in partnership with IHI Cambridge and USAID-ASSIST.
 - Workshop for Faculty on “How to develop contents, resources and manage and create the E-learning platform” on 24 August 2016 at CMET, AIIMS, New Delhi.
 - Quality Improvement Sensitization Meeting for Nurses, 26 August 2016 at Conference Hall, AIIMS, New Delhi.
 - QI Workshop for Resident Doctors of Pediatrics, Hospital Administration, Obstetrics and Gynaecology departments, 8 October 2016 at AIIMS, New Delhi.
- Dr Anu Sachdeva conducted following reviews of ROP educational package of interventions based on formative research and theory of change for development of self-reading resource materials and digital content:
 - Thermoregulation, Optimal use of CPAP and Surfactant and Good Nutrition; 28–30 November, AIIMS
 - Developmentally supportive care and optimal oxygen administration 13–15 December, AIIMS
 - KMC, Delivery room resuscitation and less exposure to blood products; 19–21 December, AIIMS
 - Good nutrition, less systemic infection and Follow up related to ROP; 16–18 February 2017, AIIMS
 - Final review meeting for educational package for improving survival of preterm neonates without retinopathy of prematurity (deliverables include: webinars, videos, self-reading text, assessment tools like OSCE, MCQ and simulation exercises) on 6 & 7 April 2017, AIIMS

NEUROLOGY

- CME for health care professionals on “Diagnosis and Therapeutics of Autism” on 28 April 2016, AIIMS.
- Two post graduate educational developmental symposiums were organized:
 - Developmental assessment symposium on 17 December 2016
 - Neurological examination symposium on 18 & 25 March 2017

NEPHROLOGY

- Consensus Meeting on Management of Hemolytic Uremic Syndrome: 31 March 2017. The meeting, intended to arrive at consensus on management, was attended by nationwide experts, research collaborators and industry representatives.
- Conducted a training workshop in Myanmar for birth defect surveillance in 7–11 November 2016.

ONCOLOGY

- Workshop on Oncology, Hematology (Module 1) 26 November 2016, AIIMS

PULMONOLOGY, INTENSIVE CARE, TUBERCULOSIS

- AIIMS Pediatric Pulmonology and Intensive Care course: Chronic Respiratory Care Module V, 23 & 24 April 2016.
- Regular Pediatric Advances Life Support (PALS) workshops were held.

TRAINEES

A total of 41 short term/long term trainees (Indian 19, foreign 22) were trained in various divisions of department. General 8, Endocrinology 3, Genetics 13, Child Psychology 5, Child Nephrology 5, Child Neurology 3, Pediatric GE 1, Pediatric Pulmonology 3, and Endocrinology 3.

PATIENT EDUCATION

1. The World Kidney Day with the theme ‘Kidney Disease and Obesity. Healthy Lifestyle for Healthy Kidneys’ was celebrated jointly by departments of Nephrology, AIIMS and Dr Ram Manohar Lohia Hospital, and Division of Pediatric Nephrology, AIIMS during the week of 7–12 March 2017. Dr Arvind Bagga, Dr P Hari, Dr Aditi Sinha and Dr P Khandelwal participated in these programs. Activities included panel discussion, public lecture, CMEs for nursing students and physicians, symposium to create awareness among school children and college students, lectures for postgraduate students, display of posters to create awareness about kidney diseases and release of educational booklets for parents of children with kidney diseases.
2. Patient and parent education and interaction on ‘Kidney Diseases in Children’ was organized in the Pediatric outpatient clinic on 9 March 2017.
3. Parent awareness programme on “Autism awareness: Together We Can, Lets Continue Our March Forward” was organized by Child Neurology division on 28 April 2016.
4. Pediatric Oncology division organized a patient education program on childhood cancer, on 8 December 2016.
5. Interactive discussion with parents and patients and NGO partners: Parent of survivor patient meets parents of children newly diagnosed with cancer, 1st Friday/every month.
6. Division of Pediatric Endocrinology organized a public lecture on childhood obesity at the Ministry of Health and Family Welfare pavilion during the India International Trade Fair at Pragati Maidan on 24 November 2016.
7. Type 1 Diabetes Education and Patient Interaction Programs were conducted on 17 December 2016 & 1 April 2017.

Lectures delivered

Vandana Jain: 7
Madhulika Kabra: 7
Madhumita: 1
Ramesh Agarwal: 10
Amanpreet Sethi: 1
Aditi Sinha: 11
Prashant Jauhari: 2
S.K. Kabra: 33
Jhuma Sankar: 3
Sumita Gupta, Senior Physiotherapist: 1

Rajni Sharma: 6
Neerja Gupta: 6
Vinod Paul: 8
M. Jeeva Sankar: 18
Arvind Bagga: 11
Sheffali Gulati: 15
Rachna Seth: 8
Rakesh Lodha: 15
Narender Kr. Bagri: 1

Rohan Malik: 4
Savita Sapra: 7
A.K. Deorari: 18
Anu Sachdeva: 13
Pankaj Hari: 7
Biswaroop Chakrabarty: 2
Jagdish P Meena: 1
Kana Ram Jat: 14
Dhaneshwar Yadav, MSSO: 3

Vandana Jain: 7

1. Precocious and delayed puberty, 2nd AIIMS LHMC CME on Pediatric Endocrinology, 23 July 2016, LHMC, Delhi
2. Approach to childhood obesity, 2 AIIMS LHMC CME on Pediatric Endocrinology, 23 July 2016, LHMC, Delhi
3. GH therapy in SGA and ISS, Pediatric Endocrine Update, 24 July 2016, Super Specialty Pediatric Hospital and Postgraduate Teaching Institute, Noida
4. Hypoglycemia in newborns, Preconference Workshop at MAHANECON 'Hormones, Electrolytes and Sugar Issues in NICU', 30 September 2016, Jupiter Hospital, Thane
5. Infections and immunization in children with diabetes, ISPAE 2016, Sugars and Beyond, 15 October 2016, Nashik
6. Neonatal Hyperglycemia, Pre-conference Symposium on Neonatal Endocrinology at ESICON 2016, 20 October 2016, Delhi
7. Diagnosis and management of disorders of sex development, 10th Pediatric Surgery Update 2017, 26 February 2017, MAMC, Delhi

Rajni Sharma: 6

1. Refractory Rickets, 2nd AIIMS LHMC Pediatric Endocrine CME, 23 July 2017, LHMC, New Delhi
2. Disorders of stature: Who requires detailed investigation, Pediatric Endocrinology CME, 24 July 2017, SSPGPHI, Noida
3. Endocrine disorders in Thalassemia: Panel discussion, 6th International Thalassemia Conference, 24 September New Delhi
4. Vitamin D: Superpill, Apollo Hospital Pediatric CME, Apollo Hospital, New Delhi
5. Short Stature: Case-based interaction, SGPGI Diabetes and Endocrinology CME, 18 March 2017, SGPGI, Lucknow
6. Approach to disorders of Puberty, SGPGI Diabetes and Endocrinology CME, 18 March 2017, SGPGI, Lucknow

Rohan Malik: 4

1. Interferon in hepatitis B: An enhanced role in children, South Asian Association for the Study of Liver Disease (SAASL), 16 September 2016, Christian Medical College, Vellore
2. Evaluation of Occult Gastrointestinal bleeding in children, Annual Conference of the Bangladesh Society for Pediatric Gastroenterology and Nutrition, 19 March 2017, Bangabandhu Sheikh Mujib Medical University, Dhaka, Bangladesh
3. Evaluation of Upper Gastrointestinal Bleeding in children, Update on Pediatric Gastroenterology, 1 May 2017, School of Liver and Digestive Sciences, Institute of Post graduate Medical Education and Research, Kolkata
4. Evaluation of an infant with cholestasis, Update on Pediatric Gastroenterology, 1 May 2017, School of Liver and Digestive Sciences, Institute of Post graduate Medical Education and Research, Kolkata

Madhulika Kabra: 7

1. Lysosomal storage disorders: Indian experience, 2nd South Asia LSD Symposium, 24 & 25 September 2016, USI, Delhi, Delhi
2. Newborn Screening, Fourteenth ICMR Course in Medical Genetics and Genetic Counseling, 28 July 2016, SGPGIMS, Lucknow
3. Approach to Neurodegenerative disorders, Fourteenth ICMR Course in Medical Genetics and Genetic Counseling, 28 July 2016, SGPGIMS, Lucknow
4. MPS I, Indian Experience, 4th National Conference of the Indian Society of Inborn Errors of Metabolism (ISIEM), 10–12 February 2017, The Accord Metropolitan, Chennai
5. Quality of data issues in SEAR, NBBB, Regional Network Meeting to review progress on newborn, Birth defects database, 9–11 August 2016, Jakarta, Indonesia
6. "Microarray and Next Generation Sequencing (NGS)" in the session "Advances in Fetal Medicine, 23rd Annual Conference of NARCHI, Delhi Branch, 22 October 2016, SJ Auditorium LHMC, New Delhi, New Delhi
7. Clinical Genetics in Lung Diseases, RESPICON 2016, 22 November 2016, India Habitat Center, New Delhi

Neerja Gupta: 6

1. Genetic basis for prenatal diagnosis: The why before the how? Vth AIIMS Fetal Medicine Workshop from 4–7 April 2016 to 5 April 2016, AIIMS, Delhi
2. Lysosomal storage disorders, Fourteenth ICMR Course in Medical Genetics and Genetic Counseling, 27 July 2016, SGPGIMS, Lucknow

3. Down syndrome—Management and prevention, Fourteenth ICMR Course in Medical Genetics and Genetic Counseling, 27 July 2016, SGPGIMS, Lucknow
4. “Infantile Pompe: Treatment outcomes in India”, 2nd South Asia LSD Symposium, 24 & 25 September, USI, Delhi
5. Inborn errors of Metabolism, When to suspect? How to investigate? Pediatric Conference of North India, 3 & 4 December 2016, India Habitat Centre, Delhi
6. Infantile onset Pompe disease, 4th National Conference of the Indian Society of Inborn Errors of Metabolism (ISIEM), 10–12 February 2017, The Accord Metropolitan, Chennai

Savita Sapra: 7

1. Workshop on Psychological Management of Childhood Disorders, Indian Association of Clinical Psychologists, 26–29 January 2017, Kovai Vidyashram, Coimbatore
2. Overall management of a child with Down Syndrome, World Down Syndrome Day, 20 March 2017, Chandigarh
3. Socio culturally sensitive management of Indian children with Autism Spectrum Disorder, Autism Day, 30 March 2017, Hindi Bahawan, New Delhi
4. Live program good evening: A talk show on children with intellectual disability, Delhi Doordarshan, 25 April 2017, Delhi Doordarshan Studio, New Delhi
5. Training cum clarification session on DASII, Public Health Foundation, India, 28 December 2017, Hauz Khas Office of Public Health Foundation, India, New Delhi
6. National Symposium on “Challenges of Autism Spectrum Disorders—A Platform for Autism Awareness”, National Symposium on “Challenges of Autism Spectrum Disorders—A Platform for Autism Awareness”, 29 November 2016, Bharathi Women’s College, Chennai
7. National level 3 day Training Workshop, the National Trust a statutory body under department for the welfare of Persons with Disabilities (Divyangjan), Ministry of Social Justice and Empowerment, working for the welfare of persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities, 31 June 2016, 2 September 2016, Vigyan Bhawan, New Delhi

Madhumita: 1

1. Importance of Genomics in Medicine, Real life Applications, 64th Orientation Programme at UGC-HRDC, 17 February 2017, Salt Lake Campus, Jadavpur University, Kolkata

Vinod Paul: 8

1. Are we losing battle against pathogens, Bill and Melinda Gates Foundation, New Delhi, May 2016
2. Thinking of a Future Primary Care System, Punjab Health Governance Commission Meeting, Chandigarh, June 2016
3. Challenges in providing healthcare in India, Meeting of the Australian Medical Association, New Delhi, September 2016
4. Appropriate antibiotic prescribing in the era of antimicrobial resistance, HIM Pedicon, Dharamshala, October 2016
5. The dreaded menace of antimicrobial resistance, Annual Meeting of NNF Tamilnadu, Tuticorn, October 2016
6. Towards Universal Population and Service Coverage, Punjab Health Summit, Chandigarh, November 2016
7. Probiotics in Neonates, Yakult Symposium, Chennai, November 2016
8. Transforming primary health care, Lal Bahadur Shastri Academy of Administration, Musssorie, March 2017

A.K. Deorari: 18

1. Resource Faculty, ENAP Metrics Design Workshop for Facility based Testing for Coverage Metrics by London School of Hygiene and Tropical Medicine (LSHTM), 20 & 21 April 2016, Old Windsor, UK
2. Facilitator, Essential Care for Every Baby and Essential Care for Small Babies.
3. Guest Faculty for Symposium, Talk on Internet Facilitates Education in Newborn Care.
4. Smarter Approach to newborn care education, International Pediatric Association (IPA 2016) and 28th International Congress of Pediatrics, 16–22 August 2016, Vancouver, Canada
5. Facilitated workshop on ENC and Quality Improvement, Support training on Essential Newborn Care and QI for MNH by WHO SEARO, 25–29 September 2016, Kurumba Island, Maldives
6. Innovative ways of Learning at IHI, Cambridge, USAID, ASSIST Project Quality Review Meeting on improving health care at Washington, 25–29 October 2016, Bethesda, IHI, Boston, USA

7. Quality Improvement initiatives in SEARO Region, Two Consultation Meetings on ‘the frame-work and standards for improving paediatric quality of care’ and ‘conducting paediatric death audits in health facilities in low and middle income countries’, 5–8 December 2016, Geneva, Switzerland
8. Participated in group meeting, Launch meeting of the Network to Improve Quality of Care for Maternal, Newborn and Child Health, 14–16 February 2017, Lilongwe, Malawi
9. Use of Technology for Education, Human Milk Banking Technical Advisory Group Meeting at the PATH Office in Geneva, 21 & 22 March 2017, Geneva, Switzerland
10. Facilitated two day QI Workshop, Regional Workshop for Improving Quality of Hospital care for Maternal and Newborn Health by WHO Regional Office for South-East Asia (SEARO), 10–13 May 2016, New Delhi
11. Facilitated the workshop, Quality Improvement Workshop as Facilitator by Neonatal Society of West Bengal, 4–6 July 2016, Kolkata
12. Education Tool development workshop, Workshop “Retinopathy of Prematurity by improving the special care Neonatal Unit”, 29 & 30 August 2016, Manesar, Gurgaon
13. Learning session for Govt of West Bengal, Follow up meeting of QI Workshop, 2 September 2016, Swasthya Bhavan, Kolkata
14. Learning on QI from India, Video conferencing for Annual Program Review, SCSL, 20 October 2016, Access Health International, Gachibowli, Hyderabad
15. Quality Improvement in Healthcare, Paradigm shift in practice of Neonatology, Workshop by IAP Neonatology Chapter, IAP Ranchi Branch, 23 October 2016, Ranchi, Jharkhand
16. Quality Improvement in Newborn Health, 27th Annual Conference of IAP Maharashtra State, Mahapedicon 2016, 18–20 November 2016, Aurangabad
17. Facilitated workshop for District Hospitals along with Medical Colleges, Workshop on “District Hospital Improvement Faculty Based Care” as Facilitator, 13 & 14 January 2017, IPGIMER, Kolkata
18. Sensitization towards equality Improvement in Health-Care to Faculty, 6 March 2017, AIIMS, Rishikesh, Rishikesh

Ramesh Agarwal: 10

1. Panel discussion on Therapeutic hypothermia, Preside Meeting, 14 & 15 January 2017, AIIMS, New Delhi
2. Neonatal ventilation, Physiological principles, Ventilation Workshop, 16–19 January 2017, AIIMS, New Delhi
3. Therapeutic hypothermia in asphyxiated neonates, IAP NEOCON, 12 & 13 November 2016, Bhilai, Ranchi
4. Beating the bugs: *Choosing right antibiotics*, Raj Neocon, 5 & 6 November 2016, Jaipur, Jaipur
5. KMC: AIIMS experience, Society for applied studies, 22 September 2016, SAS Delhi, Delhi
6. WHO-CC, AIIMS, Contributions and Activities, 7 & 8 June 2016, Delhi
7. Ensuring intact survival of sick and small sick babies—A journey, AIIMS experience, NDI, ICMR Meeting, 22 June 2016, ICMR, Delhi
8. MDR in neonates in India, DNDI Meeting, 2 & 3 August 2016, WHO Headquarters, Geneva
9. Neonate with distress: Is ventilation always required? IAP, East Delhi, 11 September 2016, East Delhi, Delhi
10. Hypoglycemia in neonates, ESICON, October 2016, Delhi

M Jeeva Sankar: 18

1. How to write a Scientific Project, Long-term Training Program on Research Methodology, 14 May 2016, Regional Research Institute of Unani Medicine, Department of AYUSH, MoHFW, India, Delhi
2. Randomized Controlled Trial (RCT), Workshop on Research Methodology for Postgraduate students, 26 July 2016, AIIMS, New Delhi
3. Clinical trial (Parallel/Cross over; Superiority, Equivalence, Non-Inferiority), Workshop on ‘Research Methodology’, 30 August 2016, ICGB, New Delhi
4. Case Control Study: Design and conduct, Young Clinicians’ Program, Indian Society of Gastroenterology, 2–4 September 2016, Hyderabad
5. Systematic review and meta-analysis, Young Clinicians’ Program, Indian Society of Gastroenterology, 2–4 September 2016, Hyderabad
6. Understanding of Kaplan Meier curve, Young Clinicians’ Program, Indian Society of Gastroenterology, 2–4 September 2016, Hyderabad
7. Clinical trial (Parallel/Cross over; Superiority, Equivalence, Non-Inferiority), Workshop on Research Methodology for Postgraduate students, 27 September 2016, AIIMS, New Delhi

8. Interventional studies, including randomized controlled trials, Workshop on 'Study design and data analysis', 22 & 23 October 2016, AIIMS, New Delhi
9. Survival analysis, Workshop on 'Study design and data analysis', 22 & 23 October 2016, AIIMS, New Delhi
10. Sample size, Workshop on 'Study design and data analysis', 22 & 23 October 2016, AIIMS, New Delhi
11. CO₂ elimination, Workshop on Neonatal Ventilation, 16–19 January 2017, AIIMS, New Delhi
12. Newer modes of ventilation, Workshop on Neonatal Ventilation, 16–19 January 2017, AIIMS, New Delhi
13. Management of sepsis in surgical neonates, 10th Pediatric Surgery Update 2017, 23 February 2017, MAMC, New Delhi
14. Oxygenation and CO₂ elimination, Workshop on Neonatal Ventilation, 25 & 26 February 2017, Chennai
15. Newer modes of ventilation, Workshop on Neonatal Ventilation, 25 & 26 February 2017, Chennai
16. The scourge of multi-drug resistance: Prevention and treatment, Advances in Neonatology and Pediatrics (ANP) Conference, 4 & 5 March 2017, Hyderabad
17. Randomized Controlled Trial (RCT), Workshop on Research Methodology for Postgraduate students, 15 March 2017, AIIMS, New Delhi
18. Using GRADE, NNF Clinical Practice Guidelines, First meeting for revision 2017, 24 & 25 March 2017, New Delhi

Anu Sachdeva: 13

1. Total Parenteral Nutrition, Support Training on Essential Newborn Care and Quality of Improvement for Maternal and Newborn Health, 25–29 September 2016, Male, Maldives
2. Standard treatment protocols and Facility based newborn care, Co-facilitator to support training on Essential newborn care, 25 & 26 September 2016, Male, Maldives
3. Quality improvement (PDSA cycles), Co-facilitator to support training on Quality of Improvement for maternal and newborn health, 28 & 29 September 2016, Kurumba Islands, Maldives
4. Persistent Pulmonary Hypertension, Ventilation Workshop, 18 January 2017, CMET, AIIMS, New Delhi
5. Neonatal Neurological examination, Clinical Evaluation in Pediatric Neurology, 6 August 2016, LHMC, New Delhi, Delhi
6. "How to develop contents, resources and manage and create the E-learning platform", Workshop for AIIMS Faculty and Residents, 24 August 2016, CMET, AIIMS, Delhi
7. E Learning for health care professionals, Cost effective use of technology in E health care at AIIMS, New Delhi, 8–10 September 2016, AIIMS, New Delhi
8. STP for neonatal jaundice and Neonatal seizures, STP for small hospitals, 14 October 2016, AIIMS, New Delhi
9. Neurosonogram of a neonates, Advances in Neonatology, 8–10 April 2016, Gangaram Hospital, New Delhi
10. Co-facilitated two day QI Workshop, Regional Workshop for Improving Quality of Hospital Care for Maternal and Newborn Health by WHO Regional Office for South-East Asia (SEARO), 10–13 May 2016, New Delhi
11. Co-facilitated the workshop, Quality Improvement Workshop as Facilitator by Neonatal Society of West Bengal, 4–6 July 2016, Kolkata
12. Co-facilitated education Tool development workshop, Workshop "Retinopathy of Prematurity by improving the special care Neonatal Unit", 29 & 30 August 2016, Manesar, Gurgaon
13. Co-facilitated workshop for District Hospitals along with Medical Colleges, Workshop on "District Hospital Improvement Faculty Based Care" as co-facilitator, 13 & 14 January 2017, IPGIMER, Kolkata

Amanpreet Sethi: 1

1. Quality improvement, Identifying the problem, forming a team and setting an aim statement, Quality Improvement Workshop for Junior Residents, 16 April, AIIMS, New Delhi

Arvind Bagga: 11

1. Renal tubular acidosis, IPNA AsPNA Junior Master Class, 1 April 2016, All India Institute of Medical Sciences, New Delhi, India
2. Hemolytic uremic syndromes, IPNA AsPNA Junior Master Class, 1 April 2016, All India Institute of Medical Sciences, New Delhi, India
3. Fluids in a sick child, Indian Pediatric Dialysis Course, 7 May 2016, Auditorium, Medanta, The Medicity, Gurgaon
4. Managing AKI in developing countries, Co-Chair, Acute Dialysis Quality Initiative Consensus Conference, 27–30 September 2016, Hyderabad

5. Management of nephrotic syndrome, Dr BR Nammalwar Oration, 2 October 2016, IAP, TNSC House, Halls Road, Egmore, Chennai
6. Evaluation of tubular diseases, Annual Pediatric Nephrology Meeting, 2 October 2016, IAP, TNSC House, Halls Road, Egmore, Chennai
7. Atypical haemolytic uremic syndrome, Annual Conference of the Indian Academy of Nephrology, 4–6 November 2016, Department of Nephrology, Guwahati Medical College, Guwahati
8. Oration: Acute kidney injury, Oration, 31 Annual Conference of Assam State Branch, IAP 2016, 2–4 December 2017, Assam Medical College, Dibrugarh
9. Five major papers that have changed my practice in last 5-years, Annual Conference of the Indian Society of Pediatric Nephrology, 10 December 2016, Cuttack
10. Rituximab for nephrotic syndrome, Annual Conference of the Indian Society of Pediatric Nephrology, 11 December 2016, Cuttack
11. Atypical hemolytic uremic syndrome, First Update on Lupus and Glomerulonephritis, 18 February 2017, PGI, Chandigarh

Pankaj Hari: 7

1. Crescentic glomerulonephritis: Advances in pathogenesis and management, IPNA AsPNA Junior Master Class, 1 April 2016, All India Institute of Medical Sciences, New Delhi, India
2. Urinary tract infections and vesicoureteric reflux: Evidence based management, IPNA, As PNA Junior Class, 3 April 2016, All India Institute of Medical Sciences, New Delhi, India
3. Supportive care of CKD, Indian Pediatric Dialysis Course, 8 May 2016, Medanta, The Medicity, Gurgaon
4. Workforce and education needs around the globe: Opportunity and challenges, 17th Congress of the International Pediatric Nephrology Association, 22 September 2016, Iguacu, Brazil
5. Nephrotic Syndrome: When steroid fails, Pediatric Conference of North India, 3 December 2016, India Habitat Center, New Delhi
6. Lupus Nephritis—Current Management, Annual Conference of the Indian Society of Pediatric Nephrology, 11 December 2016, Cuttack, Odisha
7. Complement blockade, Consensus meeting on diagnosis and management of HUS, 31 March 2017, All India Institute of Medical Sciences, New Delhi

Aditi Sinha: 11

1. Steroid sensitive nephrotic syndrome, First IPNA As, PNA Junior Master Class, 1 April 2016, All India Institute of Medical Sciences, New Delhi
2. Peritoneal dialysis—Tenckhoff catheter insertion, Indian Pediatric Dialysis Course, 7 May 2016, Auditorium, Medanta, The Medicity, Gurgaon
3. Antenatal hydronephrosis: ISPN guidelines, Update on Pediatric Hydronephrosis, 10 September 2016, Kolkata
4. Randomized controlled trials, 17th Congress of the International Pediatric Nephrology Association, 21 September 2016, Iguacu, Brazil
5. Approach to renal tubular disorders in children, CME in Pediatric Nephrology, 32nd Indian Society of Nephrology, West Zone Conference, 30 September 2016, Brilliant Convention Center, Indore
6. Hemolytic uremic syndrome, Tele-Guest-Lecture, 14 October 2016, AIIMS, Bhopal (by teleconference), Bhopal
7. Pathophysiology and prevention of disease progression in chronic kidney disease, Third International Pediatric Nephrology Association and European Society Pediatric Nephrology Junior Master Class, 28 October 2016, Irish College, Leuven, Leuven, Belgium
8. Antenatal hydronephrosis, Annual Conference of the Indian Society of Pediatric Nephrology, 10 December 2016, Cuttack
9. Therapy of hemolytic uremic syndrome, Kalawati Saran Children's Hospital CME 2017, 25 February 2017, Swarna Jayanti Auditorium, Lady Hardinge Medical College, New Delhi
10. Steroid resistant nephrotic syndrome, CME in Pediatric Nephrology, 26 March 2017, Max Superspecialty Hospitals, Shalimar Bagh, New Delhi
11. Pediatric chronic kidney disease, World Kidney Day: Awareness Program for Patients and Parents, 9 March 2017, Dr Ram Manohar Lohia Hospital, New Delhi

Sheffali Gulati: 15

1. 'Behavioral problems in differently abled children' and 'Attentional disorders: Medical and behavioral approach', National Neonatology Forum, HP Chapter, 23 April 2016, Indira Gandhi Medical College, Shimla, Delhi
2. Invited as a key note address on Nationwide Music Therapy Seminar Project 2016 (Gurgaon), NADA Centre for Music Therapy, Chennai (REGD.), 24 April 2016, Oakwood, Estate Phase II, DLF City, Gurgaon, Haryana
3. Ketogenic Diet Therapy: The Future, 11th Asian and Oceanian Epilepsy Congress (AOEC), 14 May 2016, Hong Kong
4. Switching of epilepsy care from adolescent to teenage, Epilepsy knowledge exchange CME on "Epilepsy in women and related complications", 26 June 2016, Number One, Mansingh Road, New Delhi
5. Pediatric head injuries, Neurological Association, Neurotrauma 2016, 12–14 August 2016, AIIMS, New Delhi
6. "Converging Resources, Health, Education and Welfare in the Early Detection, Identification and Intervention for Children with Disabilities, Six years and Under-A Viability." Madhuram Narayanan Centre for Exceptional Children, 17 November 2016, Chennai, India
7. Plenary Session II: Early Assessment and Interventions, The Indian Child Abuse Neglect and Child Labour (ICANCL) groups, Indian Academy of Pediatrics (IAP) Delhi, Bal Umang Drishya Sanstha (BUDS) and Department of Human Development and Childhood Studies, Institute of Home Economics, University of Delhi, 18 November 2016, Conference Hall 2, AIIMS, New Delhi
8. Autism, Gut Microbiota and Probiotics, The National Training Programme on "Probiotics: The Therapeutics of 21st Century", 21 November 2016, Karnal, Haryana
9. Holistic Management of Neurodevelopment Disorders: Physiotherapy Perspectives, 5th International Conference of Physical Therapy, AIIMS 2016, 11 December 2016, J.L. Auditorium, AIIMS, New Delhi
10. Developmental Neural Disorders in Children, Brain Science and Technology: Tools and Techniques to understand the human brain, Indian Institute of Technology, Delhi, 15 December 2016, Lecture Hall Complex, IIT, Delhi
11. Craniofacial deformities: Spectrum, classification and clinical features, 1st AIIMS Pediatric Neurosurgery Operative Workshop (Pediatric News), 19 January 2017, Seminar Hall, CN Centre, AIIMS, New Delhi
12. 'Immune mediated and inflammatory disorders: Autoimmune Encephalitis', 8th National Conference of the Association of Child Neurology, Child Neurocon 2017, 4 & 5 February 2017, New Delhi
13. Autism for National Trust Movie, 13 February 2017, AIIMS, New Delhi
14. Conducted CGR on "Converging research, education and advocacy: From Grassroots to E-way and Beyond", Child Neurology Division, Department of Pediatrics, 14 February 2017, Conference Hall, AIIMS, New Delhi
15. 'AED in Special Group—Neonate and Early Childhood', Indian Epilepsy Association (Bihar Chapter) and Neurology Department (IGIMS) Patna, 18 February 2017, Patna

Biswaroop Chakrabarty: 2

1. Pediatric Epilepsy Workshop: Epileptic encephalopathies, Main Conference: Acute Encephalitis Syndrome, 23 & 24 September 2016, Choithram Hospital, Indore
2. Approach to chronic ataxia—Acute flaccid paralysis, Role of genetic investigations in Epilepsy, Association of Child Neurology Annual Conference, 2 & 3 February 2017, New Delhi

Prashant Jauhari 2

1. Evidence based Management of Autism Spectrum Disorder, National Workshop for Training Master Trainers in Autism Tools INDT ASD and ISAA, 9–11 February 2017, Vigyan Bhavan, New Delhi
2. Approach to a child with Cerebral Palsy, Association of Child Neurology Annual Conference, 2 & 3 February 2017, New Delhi

Rachna Seth: 8

1. Late effects in childhood cancers, 12th International Conference of the Asian Clinical Oncology Society (ACOS), 8 April 2016, New Delhi
2. Childhood cancer survivorship study and panel discussion, 12th International Conference of the Asian Clinical Oncology Society (ACOS), 9 April 2016, New Delhi
3. Pancytopenia, The 20th Annual Conference of the PHO Chapter of IAP, 2016, 4–6 November 2016, Tata Memorial Hospital, Mumbai
4. Langerhans cell histiocytosis, 57th Annual Conference of the Indian Society of Haematology and Blood Transfusion (ISHBT), Haematocon, 2016, 10–13 November 2016, Birla Planetarium, Jaipur

5. Pediatric Oncology services at pediatrics department, 6th Annual India Pediatric Oncology Initiative Meeting, 12 & 13 November 2016, New Delhi
6. Mediastinal mass: Approach, 54th National Conference of Indian Academy of Pediatrics (PEDICON 2017), 18–22 January 2017, Gayathri Vihar, Palace Ground, Bangalore
7. Prevalence of malnutrition in Indian children with malignancies—A retrospective study, 8th SIOP-PODC Nutrition Workshop Nutrition in Children with Cancer, 18–19 February 2017, PGIMER, Chandigarh
8. Late effect in Childhood Cancer Survivors, P-late effects on childhood cancer, 1 March 2017, CANKIDS Day Care center, New Delhi

Jagdish P Meena: 1

1. Nutritional management in acute pancreatitis in children with malignancy, 8th SIOP-PODC Nutrition Workshop, 19 February 2017, Advanced Pediatric Centre, PGIMER, Chandigarh

S.K. Kabra: 33

1. Management of cough in clinical practice, Spring CME “Choiti” organized by Hubli Pediatric Academy, 10 April 2016, Chinsura, Asthma Training Module, ATM Workshop Organized by Department of Pediatrics, 15 April 2016, LT 1, AIIMS, New Delhi
2. Cystic Fibrosis, Organized, First Dr Arvind Taneja Oration, 3rd Annual Pediatrics Meet, 17 April 2016, Max Hospital Saket, Delhi
3. Cystic Fibrosis: Genetics, Diagnosis and Management, AIIMS Pediatric Pulmonology and Intensive Care Course Module V, Organized by Department of Pediatrics, AIIMS, 23 & 24 April 2016, LT 1, AIIMS, New Delhi
4. Counselling of parents having children with chronic lung diseases, AIIMS Pediatric Pulmonology and Intensive Care Course Module V, Organized by Department of Pediatrics, 23 & 24 April 2016, LT 1, AIIMS, New Delhi
5. Cystic fibrosis, IAP Mid Term CME on Pediatric Pulmonology, Respiratory Chapter, 22 May 2016, Jorhat, Assam
6. What is new in childhood asthma relevant to our clinical practice?, Awesome Pulmonology, Organized by Respiratory Chapter (Rajasthan Branch), 17 July 2016, Jaipur
7. New IAP, RNTCP guidelines made easy, Awesome Pulmonology, Organized by Respiratory Chapter (Rajasthan branch), 17 July 2016, Jaipur
8. Long term management of asthma: Drugs and devices, Asthma Training Module and Trainers of Training, Organized by IAP Respiratory Chapter, 23 & 24 July 2016, Mumbai
9. Managing acute attack of asthma, Asthma Training Module and Trainers of Training, Organized by IAP Respiratory Chapter, 23 & 24 July 2016, Mumbai
10. Demonstration of Spirometer and PEFR, Asthma Training Module and Trainers of Training, Organized by IAP Respiratory Chapter, 23 & 24 July 2016, Mumbai
11. Chest infections in immunodeficiency: From pediatricians view point, AIIMS, Pediatric Chest Radiology, Organized by Department of Radiodiagnosis, 30 & 31 July 2016, Board Room, AIIMS, New Delhi
12. Spectrum of clinical presentation and diagnosis of cystic fibrosis, 46 MP PEDICON 2016 and MP RESPICON 2016, Organized by IAP MP and IAP Respiratory Chapter, 24 & 25 September 2016, Indore
13. Pneumonia control—Key to Reduction of U5 mortality, 46 MP PEDICON 2016 and MP RESPICON 2016, Organized by IAP MP and IAP Respiratory Chapter, 24 & 25 September 2016, Indore
14. Recent RNTCP pediatric guideline, CME, Organized by IAP, 16 October 2016, Hadoti Branch, Kota
15. Acute lung infections in normal and immunocompromized children, Pre-conference Crash Course, 5th Singapore Pediatric and Perinatal Annual Conference in Conjunction with 2nd Asia Pacific Pediatric Pulmonology Society Conference, 20–23 October 2016, Singapore
16. Tuberculosis in children, Crash Course, 5th Singapore Pediatric and Perinatal Annual Conference in Conjunction with 2nd Asia Pacific Pediatric Pulmonology Society Conference, 20–23 October 2016, Singapore
17. Faculty in advance workshop on bronchoscopy, 5th Singapore Pediatric and Perinatal Annual Conference in Conjunction with 2nd Asia Pacific Pediatric Pulmonology Society Conference, 20–23 October 2016, Singapore
18. Cystic fibrosis: Current management guidelines, 5th Singapore Pediatric and Perinatal Annual Conference in Conjunction with 2nd Asia Pacific Pediatric Pulmonology Society, 20–23 October 2016, Singapore
19. Pulmonary tuberculosis: Recent WHO guideline, 5th Singapore Pediatric and Perinatal Annual Conference in Conjunction with 2nd Asia Pacific Pediatric Pulmonology Society Conference, 20–23 October 2016, Singapore
20. “Atypical Wheeze in children” during workshop on “Learning from Case Library”, 28th Annual Conference of IAP, Respiratory Chapter, Organized by West Delhi Branch IAP, Pediatric Respiratory Society (Delhi), 18–24 November 2016, India Habitat Center, New Delhi

21. Cystic fibrosis, Not our disease or not our diagnosis! 28th Annual Conference of IAP, Respiratory Chapter, Organized by West Delhi Branch IAP, Pediatric Respiratory Society (Delhi), 18–24 November 2016, India Habitat Center, New Delhi
22. Paediatric pulmonary review: How are these relevant to change our practice? 28th Annual Conference of IAP, Respiratory Chapter, Organized by West Delhi Branch IAP, Pediatric Respiratory Society (Delhi), 18–24 November 2016, India Habitat Center, New Delhi
23. Expert Corner Discussion: Pneumonia and other respiratory infections, 28th Annual Conference of IAP, Respiratory Chapter, Organized by West Delhi Branch IAP, Pediatric Respiratory Society (Delhi), 18–24 November 2016, India Habitat Center, New Delhi
24. Where are we in childhood TB diagnosis: Current status, 28th Annual Conference of IAP, Respiratory Chapter, Organized by West Delhi Branch IAP, Pediatric Respiratory Society (Delhi), 18–24 November 2016, India Habitat Center, New Delhi
25. Radiology Quiz: Interactive session, 28th Annual Conference of IAP, Respiratory Chapter, Organized by West Delhi Branch IAP, Pediatric Respiratory Society (Delhi), 18–24 November 2016, India Habitat Center, New Delhi
26. EBUS: Newer technique, Advance Workshop on Advance Pulmonary Investigations, 28th Annual Conference of IAP, Respiratory Chapter, Organized by West Delhi Branch IAP, Pediatric Respiratory Society (Delhi), 18–24 November 2016, India Habitat Center, New Delhi
27. “Newer pediatric TB guidelines” in session on TB in extremes of age, Organized by Department of Pulmonology, 16–18 December 2016, PGIMER, Chandigarh
28. Meet the Expert Session on What is New in Ped, and Child Asthma (21 January 2017), Lecture on “New Therapeutics for therapy resistant asthma” in PEDICON 2017, Organized by Indian Academy of Pediatrics, 18–22 January 2017, Palace Ground, Bengaluru
29. Interpretation of pulmonary functions, 3rd International Pediatric Pulmonology Conference, 26–29 January 2017, Abu Dhabi
30. New techniques of performing pulmonary function tests, 3rd International Pediatric Pulmonology Conference, 26–29 January 2017, Abu Dhabi
31. Newer diagnostic tests for childhood tuberculosis, 3rd International Pediatric Pulmonology Conference, 26–29 January 2017, Abu Dhabi
32. Pediatric infectious diseases in India, Symposium on Infectious Diseases 2017, Organized by Department of Medicine and University of Michigan, USA, 30 January 2016, AIIMS, New Delhi
33. Pneumonia in children, 3rd annual CME “PCCM-CME 2017”, Organized by Department of Pulmonary and Critical Care Medicine, 26 March 2017, PGIMS, Rohtak

Rakesh Lodha: 15

1. Language and style, results, references (3), Workshop on “Thesis writing and research methodology”, 7–9 April 2016, New Delhi
2. Crystalloids vs colloids, 8th World Congress on Pediatric Intensive and Critical Care, 5–8 June 2016, Convention Center, Toronto
3. How do we define shock? 8th World Congress on Pediatric Intensive and Critical Care, 5–8 June 2016, Convention Center, Toronto
4. Quality of care in resource limited hospital, 8th World Congress on Pediatric Intensive and Critical Care, 5–8 June 2016, Convention Center, Toronto
5. Results, Workshop on “Thesis writing and research methodology”, 21–23 July 2016, Hyderabad
6. Basic statistics, Workshop on “Thesis writing and research methodology”, 21–23 July 2016, Hyderabad
7. Language and style, results, references (3), Workshop on “Writing a Research Paper”, 5 & 6 August 2016, Indira Gandhi Institute of Medical Sciences, Patna, Bihar
8. Language and style, results, references (3), Workshop on “Art and Science of Writing a Paper”, 24 & 25 September 2016, Apollo Hospital, Delhi
9. Study design, Workshop on “Research Methodology”, Lady Hardinge Medical College and Kalawati Saran Children’s Hospital, Delhi, 16–18 September 2016, Delhi
10. Acute respiratory distress syndrome, 3rd National Pediatric Critical Care CME and Dr Mehta Endowment Oration, 2016, 11 September 2016 (Sunday), Chennai
11. Role of vaccines in child health, Seminar “New Vaccines—why, which, when”, National Institute of Health and Family Welfare (NIHFW), New Delhi, 20 & 21 October 2016, New Delhi

12. Gut in Sepsis, 18th National Conference of Pediatric Critical Care (NCPCC 2016), 11–13 November 2016, Mumbai
13. Managing acute severe asthma, “RESPICON 2016”, 18–20 November 2016, India Habitat Center, New Delhi
14. Acute asthma, “RESPICON 2016 Preconference Workshop”, Program for Asthma Training Module ATM (2016 revision), 18 November 2016, Shri Balaji Action Hospital, Delhi
15. Language and style, results, references (3), Workshop on “Art and Science of Writing a Paper”, 23 & 24 December 2016, Amritsar

Kana Ram Jat: 14

1. Management of cystic fibrosis, Cystic Fibrosis Parent Education Program, 3 April 2016, AIIMS, New Delhi, Delhi
2. Asthma Diagnosis, Asthma Training Module, 15 April 2016, AIIMS, New Delhi, Delhi
3. Primary Ciliary Dyskinesia, AIIMS Pediatric Pulmonology and Intensive Care Course Module 5: Chronic Respiratory Disorders, 23 & 24 April 2016, AIIMS, New Delhi, Delhi
4. Basic life support in infants, Indian Academy of Pediatrics, Basic Life Support (BLS) Course, 1 May 2016, AIIMS, New Delhi, Delhi
5. Co-morbidities in asthma, Asthma Training Module, 7 August 2016, Fortis Hospital, Gurgaon, Gurgaon
6. Essentials of thesis planning, execution, data analysis and writing, Respicon 2016: PG Workshop on Respiratory Clinical Skills, Radiology and Research, 18 November 2016, Maharaja Agrasen Hospital, New Delhi, Delhi
7. Basics of respiratory investigations and their interpretation, ABG, PFT, Respicon 2016, PG Workshop on Respiratory Clinical Skills, Radiology and Research, 18 November 2016, Maharaja Agrasen Hospital, New Delhi, Delhi
8. Post infectious bronchiolitis obliterans, Respicon 2016: National Conference of Respiratory Chapter of IAP, 19 November 2016, India Habitat Centre, New Delhi, Delhi
9. Flexible bronchoscopy—Tips and tricks, Respicon 2016: Workshop on Advance Therapeutics in Pediatric Pulmonology, 23 November 2016, AIIMS, New Delhi, Delhi
10. Diagnosis and management of tuberculosis, Tele-medicine Lecture, 26 September 2016, AIIMS, New Delhi, Delhi
11. Basic life support for child, Indian Academy of Pediatrics, Basic Life Support (BLS) Provider Course, 26 February 2017, AIIMS, New Delhi, Delhi
12. How do I become successful instructor? Indian Academy of Pediatrics, Basic Life Support (BLS) Instructor Course, 26 February 2017, AIIMS, New Delhi, Delhi
13. Basic life support in infants, Indian Academy of Pediatrics, Basic Life Support (BLS) Provider Course, 19 March 2017, MAMC, New Delhi, Delhi
14. Indian BLS course, IAP PALS initiative, Indian Academy of Pediatrics, Basic Life Support (BLS) Instructor Course, 19 March 2017, MAMC, New Delhi, Delhi

Jhuma Sankar: 3

1. New research idea presentation, PALISI Spring Meeting, 2017 (through teleconference), 16–19 March 2017, Utah Salt Lake City, USA
2. Chest pain in children, NAPEM 2017, 19–22 February 2017, Auditorium, Apollo Hospital, Hyderabad
3. BLS in children, BLS Course, September 2016 and March 2017, AIIMS, New Delhi

Narender Kr. Bagri: 1

1. Bone and joint tuberculosis, Workshop on Basics of Childhood Tuberculosis Preconference Workshop Respicon 2016, 18 November 2016, LRS Institute of TB and Respiratory Diseases, Delhi

Dhaneshwar Yadav, MSSO: 3

1. Participated in “Social Development and Social Work Profession: Issues and Challenges”, 22–24 October 2016, Kashividypith University, Varanasi
2. How to get fund from governmental as well as non governmental sources for childhood cancer patients, Childhood Cancer Patients Education Programme, 7 December 2016, Lt-I AIIMS, New Delhi
3. How to mobilize financial assistances for cancer patients, Public Lecture and Panel Discussion on Cancer Awareness Programme, 8 February 2017, Jawaharlal Nehru Auditorium, AIIMS, New Delhi

Sumita Gupta, Senior Physiotherapist: 1

1. Airway clearance techniques without devices, Airway Clearance Techniques Workshop RESPICON, 22 November 2016, AIIMS, New Delhi

Oral papers/posters presented: 102

1. Malik R. Rumination Syndrome in Indian children, World Congress of Pediatric Gastroenterology, 5 October 2016, International Convention Centre, Montreal, Canada
2. Phani P, Malik R. Hennekam Syndrome, Annual Conference of ISPGHAN, 17 November 2016, Kolkata, WB
3. Langeh N, Verma G, Kabra M, Sharma A, Neerja Gupta N. Coffin—Lowry syndrome, Report of Mutations in RSK2 Gene in Two Indian Families, 3rd International Conference on Birth Defects and 3rd National Conference of the Society for Indian Academy of Medical Genetics, 7–10 December 2016, AIIMS, New Delhi
4. Sudarshan S, Mishra A, Gupta N, Sapra S, Shukla R, Kabra M. Coexistence of balanced translocation and point mutation in NSUN2 gene as the cause of intellectual disability in the same family: A case report, 3rd International Conference on Birth Defects and 3rd National Conference of the Society for Indian Academy of Medical Genetics, 7–10 December 2016, AIIMS, New Delhi, **Best oral paper award**
5. Mishra P, Gupta N, Srivastava R, Singh V, Perveen S, Bisaria V et al. Deciphering contribution of Lysosomal storage disorders and chromosomal abnormalities in the etiology of non-immune hydrops: 10 years experience, 3rd International Conference on Birth Defects and 3rd National Conference of the Society for Indian Academy of Medical Genetics, 7–10 December 2016, AIIMS, New Delhi, **Best oral paper award**
6. Mishra A, Devi S, Saxena R, Gupta N, Kabra M, Roy Chowdhury M. “Incidence of Primary mutations of LHON in North-Indian Population”, 3rd International Conference on Birth Defects and 3rd National Conference of the Society for Indian Academy of Medical Genetics, 7–10 December 2016, AIIMS, New Delhi
7. Roy Chowdhury M, Sudarshan S, Kumar A, Gupta N, Sethuraman G, Sapra S et al. Molecular and clinical spectrum in 80 Indian patients with Tuberous Sclerosis Complex, International Tuberous Sclerosis Complex Research Conference “Navigating TSC: Science to Therapies”, 3–5 November 2016, Lisbon, Portugal
8. Mishra P, Gupta N, Dhadwal V, Kabra M. Prenatal Diagnosis of Lysosomal Storage Disorders: 5 Years Experience from Northern India, 4th National Conference of the Indian Society of Inborn Errors of Metabolism (ISIEM), 10–12 February 2017, The Accord Metropolitan, Chennai
9. Perveen S, Gupta N, Mishra P, Kabra M. Biotinidase levels as a biomarker in Indian patients with hepatic glycogen storage disease, 4th National Conference of the Indian Society of Inborn Errors of Metabolism (ISIEM), 10–12 February 2017, The Accord Metropolitan, Chennai
10. Mishra A, Devi S, Saxena R, Gupta N, Kabra M, Roy Chowdhury M. “Possibility of a synergistic interaction of Primary LHON mutation and a Polymorphism in North Indian Population”, 6th Annual Conference of Society for Mitochondrial Research and Medicine, India. International Conference on Mitochondria in Health and Disease, 10 & 11 February 2017, Convention Centre, JNU, New Delhi
11. Sankar A, Kabra M, Shukla R. Utility of STR Haplotyping in Indian Ataxia Telangiectasia Patients, 42nd Annual Meeting of the Indian Society of Human Genetics, 2–4 March 2017, IISc, Bangalore
12. Mishra A, Sudarshan S, Shankar A, Gupta N, Kabra M, Shukla R. Double Balanced Translocation, A Report of Two Families, 42nd Annual Meeting of the Indian Society of Human Genetics, 2–4 March 2017, IISc, Bangalore
13. Shukla R, Haghayegh SZ, Nakamura K, Sankar A, Kabra M, Gatti RA. Haplotype analysis and mutation characterisation in Indian ataxia telangiectasia patients, Ataxia Telangiectasia Workshop (ATW) 2017, 20–24 March 2017, IFOM, Milan, Milan, Italy
14. Sivanandan S, Sankar MJ, Deorari A. Quality improvement initiative to prevent admission hypothermia among preterm neonates, National Neonatology Forum (NNF) Annual Conference, NEOCON 2016, December 2016, Brilliant Convention Centre, Indore
15. Priyadarshi M, Sankar MJ, Gupta N, Agarwal R, Paul VK, Deorari AK. Efficacy of daily supplementation of 800 IU vitamin D on vitamin D status at six months of age in term healthy infants, 28th International congress of Pediatrics, Vancouver, 17–22 August 2016, Vancouver Convention centre, Vancouver
16. Pandit D, Thukral A, Sankar AJ, Gupta N, Agarwal R, Paul VK, Deorari AK. Vitamin D status at 3 months of age in term infants on daily supplementation of 400 IU of Vitamin D, 28th International congress of Pediatrics, Vancouver, 17–22 August 2016, Vancouver Convention Centre, Vancouver
17. Shridhar G, Nishanth S, Akanksha, Thukral A, Sankar MJ, Agarwal R, Jaryal A, Deorari A, Paul VK. Pharyngeal Pressure in Preterm Infants receiving Nasal Continuous Positive Airway Pressure, NEOCON 2016, December 2016, Brilliant Convention Centre, Indore
18. Pandit D, Thukral A, Sankar MJ, Gupta N, Agarwal R, Paul VK, Deorari AK. Vitamin D status at 3 months of age in term infants on daily supplementation of 400 IU of Vitamin D, 28th International Congress of Pediatrics, Vancouver, 17–22 August, Vancouver Convention Centre, Vancouver
19. Shridhar G, Nishanth S, Akanksha, Thukral A, Sankar MJ, Agarwal R, Jaryal A, Deorari A, Paul VK. Pharyngeal pressure in preterm infants receiving nasal continuous positive airway pressure, NEOCON 2016, 8–11 December 2016, Brilliant Convention Centre, Indore

20. Efficacy of low dose daily vs. alternate day prednisolone in frequently relapsing nephrotic syndrome: Open label RCT (oral)*, 17th Congress of the International Pediatric Nephrology Association, 24 September 2016, Brazil
21. Rituximab modulates T and B, cell subsets and urinary CD80 excretion in steroid dependent nephrotic syndrome (oral)*, 17th Congress of the International Pediatric Nephrology Association, 24 September 2016, Brazil
22. Targeted exome sequencing in patients with atypical HUS and negative anti-FH antibodies reveals multiple variations (oral), 17th Congress of the International Pediatric Nephrology Association, 23 September 2016, Brazil
23. Levamisole increases the time to relapse in children with steroid-sensitive idiopathic nephrotic syndrome: Results of a multi-center, double-blind, placebo-controlled, randomized clinical trial (oral), 17th Congress of the International Pediatric Nephrology Association, 23 September 2016, Brazil
24. Antiproteinuric effect of oral calcitriol in chronic proteinuric nephropathies: An open label RCT, 17th Congress of the International Pediatric Nephrology Association, 24 September 2016, Brazil
25. Effect of atorvastatin on lipid profile and carotid intima media thickness in children with refractory nephrotic syndrome: Randomized double blind, placebo controlled, trial (oral), 17th Congress of the International Pediatric Nephrology Association, 24 September 2016, Brazil
26. Genetic discovery in vesicoureteral reflux (VUR) using exome sequencing: A pilot study (oral), 17th Congress of the International Pediatric Nephrology Association, 24 September 2016, Brazil
27. Urinary CD80, serum urokinase type plasminogen activator receptor and serum angiopoietin like four do not distinguish steroid sensitive from resistant nephrotic syndrome, 17th Congress of the International Pediatric Nephrology Association, 24 September 2016, Brazil
28. Efficacy of cyclophosphamide in calcineurin inhibitor dependent steroid resistant nephrotic syndrome. 17th Congress of the International Pediatric Nephrology Association, 24 September 2016, Brazil
29. Randomized controlled trial to compare efficacy of 3 months versus 6 months therapy with prednisolone for the first episode of idiopathic nephrotic syndrome in children less than 4 years old, 17th Congress of the International Pediatric Nephrology Association, 24 September 2016, Brazil
30. Multicenter cohort of a typical hemolytic uremic syndrome (aHUS) in Indian children, 17th Congress of the International Pediatric Nephrology Association, 24 September 2016, Brazil
31. Antiproteinuric effect of oral calcitriol in chronic proteinuric nephropathies: An open label randomized controlled trial, 17th Congress of the International Pediatric Nephrology Association, 24 September 2016, Brazil
32. Clinical profile of acute allograft dysfunction in pediatric renal transplant recipients from a tertiary care center in North India, 17th Congress of the International Pediatric Nephrology Association, 24 September 2016, Brazil
33. Antiproteinuric effect of oral calcitriol in chronic proteinuric nephropathies: An open label randomized controlled trial (oral), 28th National Conference of Indian Society of Paediatric Nephrology, 11 December 2016, Cuttack, Odisha
34. Efficacy of oral cyclophosphamide in maintaining remission in steroid sensitive nephrotic syndrome, 28th National Conference of Indian Society of Paediatric Nephrology, 11 December 2016, Cuttack, Odisha
35. Efficacy of oral cyclophosphamide in calcineurin inhibitor dependent steroid resistant nephrotic syndrome, 28th National Conference of Indian Society of Paediatric Nephrology, 11 December 2016, Cuttack, Odisha
36. Gulati S, Chakrabarty B, Sondhi V, Dubey R, Saini L, Patel H, Jauhari P. Pediatric autoimmune encephalitis: A retrospective cohort study, 14th International Child Neurology Congress 2016, 1–5 May 2016, Amsterdam RAI Convention Centre, Amsterdam
37. Saini L, Chakrabarty B, Dubey R, Manokaran RK, Kaushik JS, Kumar A, Jauhari P, Gulati S. Basal ganglia stroke precipitated by trivial trauma, 14th International Child Neurology Congress 2016, 1–5 May 2016, Amsterdam RAI Convention Centre, Amsterdam
38. Gulati S, Patel H, Chakrabarty B, Gupta N, Gupta A, Jana M, Gupta YK, Pandey RM, Jain V. Effect on serum vitamin D levels and bone mineral density in children aged 3–14 years with newly diagnosed epilepsy on 6 months of Valproate monotherapy, a longitudinal study, 14th International Child Neurology Congress 2016, 1–5 May 2016, Amsterdam RAI Convention Centre, Amsterdam
39. Gulati S, Patel H, Chakrabarty B, Dubey R, Arora NK, Paul VK, Pandey RM. Development and validation of modified INCLIN diagnostic instruments for epilepsy and neuromotor impairments in children aged up to 18 years, 14th International Child Neurology Congress 2016, 1–5 May 2016, Amsterdam RAI Convention Centre, Amsterdam
40. Sondhi V, Chakrabarty B, Kumar A, Farmaniya R, Madaan P, Jauhari, Gulati S. A mutation positive case of recurrent acute necrotising encephalopathy of childhood, 14th International Child Neurology Congress 2016, 1–5 May 2016, Amsterdam RAI Convention Centre, Amsterdam
41. Gulati S, Kumar A, Jariyal AK, Chakrabarty B, Gupta N, Kabra M, Sapra S, Deepak KK, Pandey RM, Gupta A. Cardiovascular autonomic dysfunction in children with Rett syndrome: A cross sectional study, 14th International Child Neurology Congress 2016, 1–5 May 2016, Amsterdam RAI Convention Centre, Amsterdam

42. Gulati S, Israni A, Chakrabarty B, Kumar A, Kumaran S, Paul VK, Sapra S, Pandey RM, Saini L, Sharma S. Providing insights into the mechanism of action of CIMT: An fMRI based study, 14th International Child Neurology Congress 2016, 1–5 May 2016, Amsterdam RAI Convention Centre, Amsterdam
43. Israni A, Gulati S, Chakrabarty B, Kumar A, Kumaran S, Paul VK, Sapra S, Pandey RM, Saini L, Sharma S. Validation and Indian Adaptation of the adapted ASQ-3 (Ages and Stages Questionnaire) as a developmental screening tool as compared to reference standard tool (DASII) in at risk Indian children 2 to 24 months of age, 14th International Child Neurology Congress 2016, 1–5 May 2016, Amsterdam RAI Convention Centre, Amsterdam
44. Dogra AS, Gulati S, Kumar A, Chakrabarty B, Paul VK. Role of ultrasound skeletal muscle in assessment of hypotonic children: A pilot study, 14th International Child Neurology Congress 2016, 1–5 May 2016, Amsterdam RAI Convention Centre, Amsterdam
45. Kaushik J, Gulati S, Chakrabarty B, Dubey R, Kumar A, Pandey RM, Gupta AK. Comparison of detection of epileptiform abnormalities in early versus late EEG among children with first unprovoked seizure: A longitudinal study, 11 Asian and Oceanian Epilepsy Congress, 13–16 May 2016, Hong Kong Convention and Exhibition Centre, Hong Kong
46. Kumar V, Gulati S, Chakrabarty B, Kumar A, Pandey RM, Gupta YK, Kabra M. Comparison of radiological outcome of 7 days versus 28 days albendazole therapy along with steroid in patients with parenchymal neurocysticercosis with lesion load less than 5: A randomized control trial, 11th Asian and Oceanian Epilepsy Congress, 13–16 May 2016, Hong Kong Convention and Exhibition Centre, Hong Kong
47. Patel H, Gulati S, Chakrabarty B, Gupta N, Gupta A, Jana M, Gupta YK, Pandey RM, Jain V. Effect of Serum Vitamin D levels and bone mineral density in children aged from 3 to 14 years with newly diagnosed epilepsy on 6 months of valproate monotherapy: A longitudinal study, 12th European Congress on Epileptology, 11–15 September 2016, Prague Congress Centre, Prague
48. Gulati S, Patel H, Chakrabarty B, Dubey R, Arora NK, Paul VK, Pandey RM. Development and validation of modified INCLEN diagnostic instrument for epilepsy in children aged up to 18 years, 12th European Congress on Epileptology, 11–15 September 2016, Prague Congress Centre, Prague
49. Dubey R, Gulati S, Kumar A, Chakrabarty B, Patel H, Pandey RM. Single calcified neurocysticercosis lesion as a true Pediatric epilepsy substrate in endemic regions: A prevalence and clinic-electro-encephalographic-anatomical correlation study, 12th European Congress on Epileptology, 11–15 September 2016, Prague Congress Centre, Prague
50. Gulati S. Serum trace element levels in children with epilepsy: An observational study, 12th European Congress on Epileptology, 11–15 September 2016, Prague Congress Centre, Prague
51. Shamsudheen KV, Kumar R, Sabharwal A, Verma A, Dhochak N, Mishra A, Scaria V, Gupta N, Gulati S, Kabra M, Sivasubbu S. “Nuclear, Mitochondrial cross-talk: Implications in mitochondrial function and disease pathophysiology”, Received 1st Prize in poster presentation, Third International Conference on Birth defects and Third National Conference of the Society of Indian Academy of Medical Genetics, 7–10 December 2016, AIIMS, New Delhi
52. Farmania R, Gupta N, Chakrabarty B, Jauhari P, Kumar A, Kabra M, Gulati S. The clinical and radiological profile of genetically proven cases of Aicardi-Goutieres Syndrome, Third International Conference on Birth defects and Third National Conference of the Society of Indian Academy of Medical Genetics, 7–10 December 2016, AIIMS, New Delhi
53. Farmania R, Jauhari P, Chakrabarty B, Gulati S. Chronic Meningitis with persistent hypoglycorrachia: An unusual presentation of Lyme’s disease Received 1st Prize in infectious disease category, poster presentation, VIIIth National Child Neurology Conference Child Neurology Conference 2017, 3–5 February, 2017, New Delhi
54. Manokaran R, Jauhari P, Chakrabarty B, Gupta N, Kumar A, Gulati S. Cerebral venous sinus thrombosis in a child with Lesch, Nyhan syndrome received 1st prize in rare disease category, poster presentation, VIIIth National Child Neurology Conference, Child Neurology Conference 2017, 3–5 February 2017, New Delhi
55. Madaan P, Jauhari P, Chakrabarty B, Gulati S. IVIG for severe pediatric GBS: Is single dose adequate? VIIIth National Child Neurology Conference, Child Neurology Conference 2017, 3–5 February 2017, New Delhi
56. Farmania R, Patel H, Dubey R, Chakrabarty B, Gulati S. Salbutamol responsive COLQ related congenital myasthenia syndrome in girl twins, VIIIth National Child Neurology Conference, Child Neurology Conference 2017, 3–5 February 2017, New Delhi
57. Shamsudheen KV, Kumar R, Sabharwal A, Verma A, Dhochak N, Mishra A, Scaria V, Gupta N, Gulati S, Kabra M, Sivasubbu S. “Nuclear, mitochondrial cross-talk: Implications in mitochondrial function and disease pathophysiology” received 1st Prize in poster presentation, 6th International Conference on “Mitochondria in Health and Disease” of society for mitochondrial research and medicine, India (SMRM), 10 & 11 February 2017, Jawaharlal Nehru University (JNU), New Delhi

58. Sondhi V, Manokaran R, Madaan P, Panda P, Jauhari P, Chakrabarty B, NM Shruti, Gulati S. Eyelid myoclonia with absences (Jeavons syndrome): An under-recognized epileptic syndrome Platform presentation, 18th Joint Annual Conference Indian Epilepsy Association and Indian Epilepsy Society, ECON 2017, 17–19 February 2017, Patna
59. Madaan P, Jauhari P, Chakrabarty B, Sondhi V, Gupta A, Panda P, Gulati S. A Quinidine and ketogenic diet non responsive novel KCNT1 mutation in an Indian Infant with MMPSI, 18th Joint Annual Conference Indian Epilepsy Association and Indian Epilepsy Society; ECON 2017, 17–19 February 2017, Patna
60. Seth R, Singh A, Guru V, Chawla B, Pathy S. Long term follow up of retinoblastoma survivors: Experience from a Tertiary Center in India, SIOP 2016, 18–22 October, The Convention Center, Dublin
61. Pathak N, Seth R, Amitabh, Thomas T, Singh B (Oral Presentation). Overview of pediatric acute myeloid leukemia: AIIMS experience, 19th Annual Conference of Pediatric Hematology and Oncology Chapter, 19–22 November 2015, Pune
62. Pathak N, Seth R, Amitabh, Thomas T, Singh B. Childhood acute myeloid leukemia: An overview, 47th Congress of the International Society of Pediatric Oncology (SIOP 2015), 8–11 October 2015, Cape Town, South Africa
63. Pathak N, Seth R. DNA Methylation patterns of CIP/KIP cell cycle controlling genes in pediatric acute lymphoblastic leukemia patients: AIIMS experience, 48th Congress of the International Society of Paediatric Oncology (SIOP 2016), 19–22 October 2016, Dublin
64. Pathak N, Seth R, Mishra A. Expression of B lymphocyte antigen in pediatric B-cell precursor acute lymphoblastic leukemia: AIIMS experience, 20th Annual Conference of Pediatric Hematology and Oncology Chapter, 4–6 November 2016, Mumbai
65. Pathak N, Seth R, Mishra A. DNA Methylation patterns of CDK interacting protein/Kinase inhibitory protein family of genes in pediatric acute lymphoblastic leukemia patients: AIIMS experience, 57th Annual Conference of the Indian Society of Haematology and Blood Transfusion (ISHTM), 10–13 November 2016, Jaipur
66. Manisha, Seth R. Association of prognostic parameters with cytogenetic and molecular markers at presentation in Indian children with hyperleukocytic acute lymphoblastic leukemia, 12th International Conference of the Asian Clinical Oncology Society ACOS (DELHI), 9 April 2016, New Delhi
67. Manisha, Seth R. Cyclin dependant kinase inhibitor 2A/B gene deletions in childhood acute lymphoblastic leukemia: A preliminary study, Mid-term CME, PHO chapter (Hyderabad), 10 July 2016, Rainbow Children's Hospital, Hyderabad
68. Manisha, Seth R. Juvenile myelomonocytic leukemia: Profile and outcome at a Tertiary Care Centre in India, Mid-term CME (Hyderabad), 10 July 2016, Rainbow Children's Hospital, Hyderabad
69. Manisha, Seth R. Association of prognostic parameters with cytogenetic and molecular markers at presentation in Indian children with high risk acute lymphoblastic leukemia, SIOP (Ireland), 5 September 2016, Convention Center, Ireland
70. Manisha, Seth R. Clin dependant kinase inhibitor 2A/B and IKZF1 gene deletions in childhood acute lymphoblastic leukemia, e-poster, PHOCON, 5 November 2016, Tata Memorial Hospital, Mumbai
71. Manisha, Seth R. Is coexisting cytomegalovirus infection and juvenile myelomonocytic leukemia associated with poor prognostic outcome? PHOCON, 5 November 2016, Tata Memorial Hospital, Mumbai
72. Manisha, Seth R. Is cyclin dependant kinase Inhibitor 2A gene deletions associated with poor predictive outcome in childhood acute lymphoblastic leukemia? ISMPOCON (DELHI), 5 November 2016, Delhi
73. Purkayastha K¹, Kapil A², Seth R.¹ Understanding the role of procalcitonin (PCT) in febrile neutropenic episodes of children undergoing treatment for cancers: A Tertiary, SIOP 2016, 2016, Convention Center, Ireland
74. Purkayastha K¹, Seth S, Seth R¹. Childhood cancer survivorship: Evidence for management of late effect, SIOP 2016, 2016, Convention Center, Ireland
75. Meena JP, Seth R, Chakrabarty B, Gulati S, Agrawala S, Naranje P. Neuroblastoma presenting as opsoclonus, myoclonus: A series of six cases and review of literature, Midterm CME pediatric Hemato, Oncology, 9 & 10 July 2016, Hyderabad
76. Dowman L, Mukherjee A, Kumar P, Aggarwal A, Lodha R, Kabra SK. Role of impulse oscillometry in assessing exacerbation and asthma control in children, 5th Singapore Pediatric and Perinatal Annual Conference in Conjunction with 2nd Asia Pacific Pediatric Pulmonology Society Conference, 20–23 October 2016, Singapore
77. Singh A, Lodha R, Shastri S, Sethuraman G, Sreedevi KN, Kabra M, Kabra SK. Aquagenic wrinkling of skin as a screening test for cystic fibrosis, 5th Singapore Pediatric and Perinatal Annual Conference in Conjunction with 2nd Asia Pacific Pediatric Pulmonology Society Conference (Judged to be 3rd Best Presentation), 20–23 October 2016, Singapore

78. Gupta S, Mukherjee A, Deepak KK, Khadgawat R, Kabra M, Lodha R, Kabra SK. Effects of exercise intervention program on bone mineral accretion in children and adolescents with cystic fibrosis, 5th Singapore Pediatric and Perinatal Annual Conference in Conjunction with 2nd Asia Pacific Pediatric Pulmonology Society Conference, 20–23 October 2016, Singapore
79. Kumar P, Mukherjee A, Shivani RS, Sethi TP, Jat KR, Lodha R, Kabra SK. Changes in infant pulmonary function test indices from birth to two years of age: A birth Cohort study from India, 5th Singapore Pediatric and Perinatal Annual Conference in Conjunction with 2nd Asia Pacific Pediatric Pulmonology Society Conference, 20–23 October 2016, Singapore
80. Mukherjee A, Jat KR, Kumar P, Shivani R, Jose B, Kalaivani M, Lodha R, Kabra SK. Serum IgE levels and wheezing in young children: Results from a birth cohort study, 5th Singapore Pediatric and Perinatal Annual Conference in Conjunction with 2nd Asia Pacific Pediatric Pulmonology Society Conference, 20–23 October 2016, Singapore
81. Mukherjee A, Mishra V, Medigeshi G, Singh V, Grewal HMS, Lodha R, Kabra SK and Delhi Pediatric TB Study Group. Serial plasma cytokine levels in childhood tuberculosis: Potential biomarkers for predicting therapeutic Outcome, 5th Singapore Pediatric and Perinatal Annual Conference in Conjunction with 2nd Asia Pacific Pediatric Pulmonology Society Conference (Judged as second best oral presentation), 20–23 October 2016, Singapore
82. Jain R, Yadav CP, Mukherjee A, Agrawal A, Lodha R, Kabra SK. Effect of long term inhaled budesonide on height in children with persistent asthma, Poster presentation in 28th Annual Conference of IAP respiratory chapter (RESPICON 2016) organized by West Delhi IAP Branch and Pediatric Respiratory Society (Delhi), 18–24 November 2016, India Habitat Center, New Delhi
83. Mukherjee A, Singh V, Grewal Harleen MS, Singh S, Lodha R, Kabra SK and Delhi Pediatric TB Study Group. Predictors of clinico-radiological outcome in children with probable intrathoracic tuberculosis, Poster presentation in 28th Annual Conference of IAP Respiratory Chapter (RESPICON 2016) Organized by West Delhi IAP branch and pediatric respiratory society (Delhi), 18–24 November 2016, India Habitat Center, New Delhi
84. Kumar A, Jat KR, Srinivas M, Lodha R, Kabra SK. Plastic bronchitis: Successful management with nebulised N-acetylcysteine, poster presentation in 28th Annual Conference of IAP Respiratory Chapter (RESPICON 2016) Organized by West Delhi IAP Branch and Pediatric Respiratory Society (Delhi), 18–24 November 2016, India Habitat Center, New Delhi
85. Puri P, Mukherjee A, Lodha R, Kabra SK. Profile of children and utilization of non-invasive tests for diagnosis of interstitial lung disease (ILD) in a Tertiary Care Hospital in India (Awarded second best poster presentation), Poster presentation in 28th Annual Conference of IAP Respiratory Chapter (RESPICON 2016) Organized by West Delhi IAP Branch and Pediatric Respiratory Society (Delhi), 18–24 November 2016, India Habitat Center, New Delhi
86. Bagri NK, Jana Dr M, Lodha R, Kabra SK. Efficacy of oral zinc supplementation in radiologically proven pneumonia: Secondary analysis of a randomized controlled trial, poster presentation in 28th Annual Conference of IAP Respiratory Chapter (RESPICON 2016) Organized by West Delhi IAP Branch and Pediatric Respiratory Society (Delhi), 18–24 November 2016, India Habitat Center, New Delhi
87. Gupta S, Sankar J, Lodha R, Kabra SK. Comparison of outcomes using pediatric acute respiratory distress syndrome (PARDS) Definition and the Berlin definition in children, Poster presentation in 28th Annual Conference of IAP Respiratory Chapter (RESPICON 2016) Organized by West Delhi IAP Branch and Pediatric Respiratory Society (Delhi), 18–24 November 2016, India Habitat Center, New Delhi
88. Saini I, Lodha R, Mukherjee A, Kabra SK. Performance of fever in the diagnosis of community acquired pneumonia: A systematic review, Poster Presentation in 28th Annual Conference of IAP Respiratory Chapter (RESPICON 2016) Organized by West Delhi IAP Branch and Pediatric Respiratory Society (Delhi), 18–24 November 2016, India Habitat Center, New Delhi
89. Chattopadhyay A, Sankar J, Lodha R, Kabra SK. Factors influencing mortality in critically ill children on HFOV, Poster Presentation in 28th Annual Conference of IAP Respiratory Chapter (RESPICON 2016) Organized by West Delhi IAP Branch and Pediatric Respiratory Society (Delhi), 18–24 November 2016, India Habitat Center, New Delhi
90. Saini I, Mukherjee A, Singh UB, Singla M, Jat KR¹, Lodha R, Kabra SK. Diagnostic yield of gene xpert MTB/RIF in bronchoalveolar lavage in children with probable pulmonary tuberculosis oral presentation in session on young investigators (Awarded second best paper in category of young investigators), Poster Presentation in 28th Annual Conference of IAP Respiratory Chapter (RESPICON 2016) Organized by West Delhi IAP Branch and Pediatric Respiratory Society (Delhi), 18–24 November 2016, India Habitat Center, New Delhi
91. Dawman L, Mukherjee A, Agrawal A, Lodha R, Kabra SK. Role of impulse oscillometry in assessing asthma control in children, Oral presentation in session on young investigators, Poster Presentation in 28th Annual Conference of IAP Respiratory Chapter (RESPICON 2016) Organized by West Delhi IAP Branch and Pediatric Respiratory Society (Delhi), 18–24 November 2016, India Habitat Center, New Delhi

92. Gulla KM, Arvind B, Medigeshi G, Mukherjee A, Jat KR, Sankar J, Lodha R and Kabra SK. Course of illness after viral infection in Indian children with cystic fibrosis, Poster Presentation in 28th Annual Conference of IAP Respiratory Chapter (RESPICON 2016) Organized by West Delhi IAP Branch and Pediatric Respiratory Society (Delhi), 18–24 November 2016, India Habitat Center, New Delhi
93. Silva De SSC, Mukherjee A, Jat KR, Lodha R, Kabra SK. Pulmonary hemorrhage: Etiology, clinical profile and outcome of 38 children (Awarded second best paper in category of residents), Poster Presentation in 28th Annual Conference of IAP Respiratory Chapter (RESPICON 2016) Organized by West Delhi IAP Branch and Pediatric Respiratory Society (Delhi), India Habitat Center, New Delhi, 18–24 November 2016
94. Gunathilaka PKG, Mukherjee A, Jat KR, Lodha R, Kabra SK. Clinical Profile and Outcome of Paediatric Sarcoidosis, Poster Presentation in 28th Annual Conference of IAP Respiratory Chapter (RESPICON 2016) Organized by West Delhi IAP Branch and Pediatric Respiratory Society (Delhi), 18–24 November 2016, India Habitat Center, New Delhi
95. Jitendra R, Shinde¹*, Kar M¹*, Singla M², Chandele A³, Kabra S², Lodha R² and Guruprasad R, Medigeshi¹. Isolation and characterization of dengue virus isolates from pediatric patients from New Delhi, Virology Meeting at THSTI, Faridabad
96. Sankar J. Fluid bolus over 5–10 minutes versus 15–20 minutes in children with septic shock, RCT, EAPS 2016, October 2016, Geneva, Switzerland, Oral presentation
97. Sankar J. Severe vitamin D deficiency at admission and after 72 hours of ICU stay in children with fluid refractory septic shock, a prospective observational study, EAPS 2016, October 2016, Geneva, Switzerland, Oral presentation
98. Sankar J. Decreasing the time to recognition and administration of first fluid bolus in children with septic shock, a quality improvement project, EAPS 2016, October 2016, Geneva, Switzerland, Oral presentation
99. Sankar J. Effect of pre-hospital transport factors on shock index, serum lactate and mortality in children with septic shock, EAPS 2016, October 2016, Geneva, Switzerland, Oral presentation
100. Bagri NK, Saini I, et al. Juvenile Dermatomyositis: Outcome* and predictors of remission, National Conference of Pediatric Rheumatology Society, 26–28 August 2016, NIMHANS Auditorium, Bengaluru
101. Bagri NK, Raj D, et al. Juvenile Systemic Sclerosis: Experience from a tertiary care center, National Conference of Pediatric Rheumatology Society, 26–28 August 2016, NIMHANS Auditorium, Bengaluru
102. Dawman L, Bagri NK, et al. Neonatal lupus with macrophage activation syndrome: A case report, National Conference of Pediatric Rheumatology Society, 26–28 August 2016, NIMHANS Auditorium, Bengaluru

RESEARCH

Funded projects

Ongoing

1. Efficacy of a family based comprehensive yoga program for weight reduction among overweight children and adolescents: An RCT, Vandana Jain, Ministry of Ayush, 3 years, 2015–2018, Rs 51.6 lakhs
2. Improving diagnosis and management of inherited rare disorders of sex development in India, Vandana Jain, ICMR, 2 years, 2017–2019, Rs. 47.0 lakhs
3. Optimizing insulin and diet regimes for children with type 1 diabetes in low resource settings, Vandana Jain, Department of Health Research, 2.5 years, 2017–2020, Rs. 25.0 lakhs
4. Hypoxia adaptation and pregnancy outcome study, Vinod Paul/Vandana Jain, Wellcome Trust, 1.5 years, 2016–2018, Rs. 43 lakhs
5. BMD in patients with congenital adrenal hyperplasia, Rajni Sharma, AIIMS, 2 years, 2016–2018, Rs. 2.5 lakhs
6. Evaluation of thrombophilic factors and defects in fibrinolysis in children with hepatic venous outflow tract obstruction in children, Rohan Malik, AIIMS, 1 year, 2016–2017, Rs. 5 lakhs
7. Multi centric collaborative study of the clinical biochemical and molecular characterization of lysosomal storage disorders in India: The research initiative for Research in Lysosomal Storage Disorders, Madhulika Kabra, DHR, 3 years, 2015–2018, Rs. 50 lakhs
8. Quality assurance of SEARnet, NBB database for newborn and birth defects, Madhulika Kabra/Neerja Gupta, WHO, 1 year, 2016–2017, Rs. 12 lakhs
9. Prenatal screening initiative by dried blood spots: Role for triaging and resource utilization, Neerja Gupta/Madhulika Kabra, DBT, 3 years, 2016–2019, Rs. 17.86 lakhs
10. Minimally invasive autopsy (MIA) in the evaluation of fetal malformations and still births, A feasibility study for the development of a standard protocol for still birth evaluation, Neerja Gupta/Madhulika Kabra, ICMR, 3 years, 2017–2020, Rs. 29.59 lakhs

11. Identifying the spectrum of mutations in Indian ataxia telangiectasia patients, Rashmi Shukla, DBT, 3 years, 2014–2017, Rs. 34.87 lakhs
12. Effectiveness of socio-culturally sensitive indigenously developed module administered by parent as compared to professionals for Indian children with autism spectrum disorder aged 18 months to 6 years, Savita Sapra, ICMR, 3 years, 2014–2017, Rs. 26.96 lakhs
13. Training of trainers (ToTs) for nursing professionals on facility based newborn nursing, A.K. Deorari, WHO, 6 months, 2015–2016, Rs. 13.78 lakhs
14. Reducing retinopathy of prematurity by improving the quality of neonatal care in special care neonatal units, A.K. Deorari, PHFI, 3.5 years, 2015–2018, Rs. 114.03 lakhs
15. Quality improvement initiative for sick newborn care in special newborn care unit (SNCUs) using ONTOP platform, A.K. Deorari, Access Health International, A.P. and CIFF, 2 years, 2015–2017, Rs. 6.72 lakhs
16. Development of e-learning package on quality improvement at health facilities based on the regional QI training package, A.K. Deorari, WHO, 1 year, 2017, Rs. 10.50 lakhs
17. Efficacy and safety of an innovative and affordable goat lung surfactant in preterm neonates, Ramesh Agarwal, Wellcome Trust, 3 years, 2015–2018, Rs. 10 crores
18. Understanding disease biology and diagnosis of bacterial sepsis in hospitalized neonates: A multi-centre study, Ramesh Agarwal/Krishnamohan Atmakuri, DBT, 2 years, 2015–2017, Rs. 8.37 crores would be paid directly to CDSA as pass through cost of sites and CRO cost).
19. International study on atypical hemolytic uremic syndrome, Arvind Bagga, CEFIPRA (DST), 3 years, 2016–2019, Rs. 12.25 lakhs
20. Pediatric renal biology program: Research on nephrotic syndrome, Arvind Bagga, DBT, 5 years, 2016–2021, Rs. 800 lakhs
21. Randomized, multi-centric, open label, parallel group trial to compare the efficacy of 6-months versus 3-months therapy with prednisolone for the first episode of idiopathic nephrotic syndrome in children younger than 4 years, Arvind Bagga, DBT, 5 years, 2016–2018, Included in above
22. Serum and urinary microRNAs as biomarkers of renal histology and response to therapy in children with steroid resistant nephrotic syndrome, Arvind Bagga, DBT, 5 years, 2016–2018
23. Autoantibody associated alternative complement pathway dysregulation in nephrotic syndrome secondary to membranoproliferative glomerulonephritis, Pankaj Hari, DBT, 3 years, 2016–2018
24. Proposal for ICMR advanced centre for research in pediatric kidney diseases, Arvind Bagga, ICMR, 5 years, 2017–2022, Rs. 16 crores
25. Randomized open labeled controlled trial to compare the efficacy and safety of levamisole versus long term alternate days steroids made daily during infection, in patients with frequently relapsing steroid sensitive nephrotic syndrome, Arvind Bagga, ICMR, 5 years, 2017–2022, Included in above
26. Open label, randomized, controlled trial to compare the efficacy of daily therapy with low dose prednisolone vs. standard therapy on alternate days in patients with frequently relapsing or steroid dependent nephrotic syndrome, Arvind Bagga, ICMR, 5 years, 2017–2022
27. Establishing a biorepository and registry for patients with hemolytic uremic syndrome, Arvind Bagga, ICMR, 5 years, 2017–2022
28. Whole exome sequencing in patients with non,diarrheal and non-autoimmune form of hemolytic uremic syndrome, Arvind Bagga, ICMR, 5 years, 2017–2022
29. Pilot study of genetic variations among Indian children with vesicoureteral reflux, Pankaj Hari, ICMR, 5 years, 2017–2022
30. Formulating and disseminating evidence-based guidelines for diagnosis and therapy of childhood renal illnesses, Arvind Bagga, ICMR, 5 years, 2017–2022
31. Blood heavy metal levels and quantitative EEG correlates in children with autism, Sheffali Gulati, ICMR, 3 years, 2014–2017, Rs. 49.04 lakhs
32. Randomized placebo controlled trial of calproate and levocarnitine in children with spinal muscular atrophy aged 2–15 years, Sheffali Gulati, AIIMS, 3 years, 2012–2017, Rs. 10 lakhs
33. Multi center randomized double blind placebo controlled trial to evaluate the effects of intra erythrocyte dexamethasone sodium phosphate on neurological symptoms in patients with Ataxia Telangiectasia, Sheffali Gulati, EryDel, S.p.A, Italy, Rs. 72 lakhs
34. A randomized, double blind placebo controlled six month study to evaluate the efficacy, safety and tolerability of Sarizotan in patients with Rett syndrome with respiratory symptoms, Sheffali Gulati, Neuron Pharmaceuticals, Italy, Rs. 42 lakhs

35. Validation and Indian Adaptation of the adapted ASQ-3 (Ages and Stages Questionnaire) as a developmental screening tool as compared to reference standard tool (DASII, Developmental Assessment Scale for Indian Infants) in at risk Indian children 2–24 months of age, Sheffali Gulati, ICMR, Rs. 19.01 lakhs
36. Serum matrix metalloproteinase, 9: a potential biomarker for predicting calcification and epilepsy in Neurocysticercosis; a longitudinal observational study, Biswaroop Chakrabarty, IRG, 2 years, Rs. 5 lakhs
37. “Chemo to Cure (C TO C)” study of cancer survivorship, Rachna Seth, Jiv Daya Foundation, 6 years, 2012–2018, Rs. 25 lakhs
38. Molecular alterations in childhood acute lymphoblastic leukemia (ALL): Role of cytokine receptor, like F actor-2 (*CRLF2*) rearrangements and Janus kinase (JAK) mutation, Rachna Seth, ICMR, 3 years, 2015–2018, Rs. 36 lakhs
39. A collaborative, multicentre, national study for newly diagnosed patients with acute lymphoblastic leukaemia site, Rachna Seth, National Cancer Grid and ICMR, 5 years, 2017–2022, Funds jointly received for Pediatrics and IRCH (Dr Sameer Bakhshi) as both are site PIs
40. Prevalence and clinical outcome of respiratory viral infections among children with cancer and febrile neutropenia, Jagdish Prasad Meena, AIIMS, 1 year, 2016, Rs. 5 lakhs
41. Identification of correlates of disease severity in pediatric dengue patients in Delhi, SK Kabra, R Lodha, DBT, 3 years, May 2012, Rs. 46.42 lakhs
42. To develop Acute Respiratory Infection Treatment Units (ATUs) and assess their utility in improving healthcare and research in pneumonia related morbidity and mortality in India, SK Kabra, R Lodha, INCLEN (Bill Gates Malinda Foundation), Rs. 196.62 lakhs
43. Biomarker discovery in asthma using an integrated, omics approach, Rakesh Lodha, CSIR, IGIB, 2009–2017 Rs. 2.1 crores
44. Why acute respiratory infections during infancy lead to chronic airway diseases during childhood: differential role of smaller airways and immune imbalance, SK Kabra, DBT, 5 years, 2012–2017, Rs 1.24 crores
45. Dengue virus infection in India, SK Kabra, Rakesh Lodha, NIH, USA, 5 years, 2015–2019, Rs. 1 crore
46. Efficacy and safety of vitamin D supplementation in asthmatic children who are vitamin D deficient: a randomized controlled trial (ESDAC trial), Kana Ram Jat, ICMR, 2 years, 2017–2019, Rs. 25.98 lakhs
47. Prevalence of allergic broncho-pulmonary aspergillosis in children with poorly controlled asthma and association with polymorphisms of surfactant protein A2, Mannan-binding lectin, toll-like receptor 9 and cystic fibrosis transmembrane conductance regulator genes, Kana Ram Jat, AIIMS, 2 years, 2015–2017, Rs 5.5 lakhs
48. Balanced solution versus normal saline in initial fluid resuscitation in septic shock, Jhuma Sankar, DST, 3 years, 2017–2019, Rs. 71 lakhs
49. Honey versus standard treatment for bed sores in critically ill children, Jhuma Sankar, Pediatric Critical Care Research Grant, HARD grant, 1 year, 2017–2018, Rs. 6.5 lakhs
50. Intermittent versus continuous ScvO₂ monitoring in children with septic shock, Jhuma Sankar, AIIMS, 2 years, 2015–2017, Rs. 8 lakhs
51. Predicting response to methotrexate in children with juvenile idiopathic arthritis: Role of biomarkers, Bagri NK, AIIMS, 2 years, 2016–2018, Rs. 8 lakhs

Completed

1. Centre for advanced research in newborn health, Vinod K Paul/Ashok Deorari, ICMR, 5 years, 2010–2015, Rs. 12 crores
2. Improving the quality of childbirth and neonatal care in primary health centers in two districts in Haryana, India, Ramesh Agarwal, WHO, Geneva, 2 years, 2014–2016, USD 25,000
3. Randomized controlled trial to compare the efficacy and safety of mycophenolate mofetil versus levamisole in children with Frequently relapsing nephrotic syndrome, Arvind Bagga, ICMR, 3.5 years, 2012–2016, Rs. 28.08 lakhs
4. Research on nephrotic syndrome, Arvind Bagga, UKIERI, 3.5 years, 2012–2016, Rs 27.68 lakhs
5. Why acute respiratory infections during infancy lead to chronic airway diseases during childhood: differential role of smaller airways and immune imbalance, SK Kabra, R Lodha, DBT, 3 years, 2012–2015, Rs. 124.38 lakhs
6. Role of gain in fat mass in early infancy on programming of adiposity and biochemical markers associated with cardiometabolic risk, Vandana Jain, DBT, 4 years, 2012–2016, Rs. 75 lakhs
7. Prevalence of *SHOX* and *IGFALS* mutations and their correlation with endocrine parameters in children with idiopathic short stature, Vandana Jain, AIIMS, 1 year, 2015–2016, Rs. 5 lakhs

8. To detect the toxicity of methotrexate (MTX) and its metabolite (MTXPG) in-house as an indication clinical toxicities in children undergoing treatment for childhood acute lymphoblastic leukemia/lymphoma, Rachna Seth, DBT Glue grant, 1 year, 2015, Rs. 20,000
9. To determine the role of procalcitonin (PCT) as a diagnostic and prognostic biomarker for febrile neutropenic episodes in children undergoing treatment for childhood cancers, Rachna Seth, AIIMS, 2 years, 2014–2016, Rs. 3 lakhs

Departmental projects

Ongoing

1. A Comparative study to assess the care giving burden
2. A multidisciplinary approach combining molecular profiling, metabolite screening and neuro-pathological evaluation in Indian patients with mitochondrial disorders
3. A phase 2 double arm randomized trial comparing conventional radiotherapy alone Vs hypofractionated radiotherapy with concurrent and adjuvant temozolomide in patients with diffuse intrinsic pontine glioma
4. A phase 2 open label multicenter multi cohort single arm study to investigate the safety and efficacy of Sofosbuvir + Ribavirin in adolescents and children with HCV genotype 2 and 3 infection
5. A pilot study of the genetic variation among Indian children with vesicoureteral reflux
6. A randomized controlled study: Efficacy of short prednisolone treatment for relapse in children with steroid sensitive nephrotic syndrome
7. Assessment of bone marrow involvement in pediatric Hodgkin Lymphoma using 18F FDG PET/CT and its comparison with blind bone marrow biopsy
8. Association of IKZF-1 gene alterations and Cytokine Receptor Like Factor 2 (CRLF2) expression with prognostic markers at presentation and response to induction chemotherapy in Indian children with Acute Lymphoblastic Leukemia (ALL)
9. Clinical and Electroencephalographic spectrum of Encephalopathy with Status Epilepticus in sleep (E-SES) in Indian children
10. Clinical and laboratory profile of inflammatory bowel disease in children in India: A multicentric study
11. Clinico-epidemiological profile and neurocognitive outcomes in children aged 6–16 years with traumatic brain injury
12. Clinico-radiologic and EEG correlation in children with Lissencephaly
13. Comparing therapeutic endpoints of septic shock resuscitation to guide fluid therapy
14. Comparison of intravenous propofol and fentanyl for conscious sedation for pediatric bronchoscopy: A Randomised Control Trial
15. Comparison of umbilical cord milking with delayed cord clamping in late preterm and term neonates: Randomized control trial
16. Correlation of IKZF-1, JAK1 and JAK2 mutations and Cytokine Receptor, Like Factor 2 (CRLF-2) expression as predictive indicators of clinical outcome in Indian children with Acute Lymphoblastic Leukemia (ALL)
17. Decreasing time to recognition and administration of first first dose of antibiotics in children with septic shock
18. Defining Small for Gestation neonates: Comparison of composite outcome of neonatal mortality and/or adverse neonatal outcomes at different weight at birth cut offs on AIIMS/NNPD/Lubchenco/Fenton's and Intergrowth 21 growth charts.
19. Delayed cord clamping in Rh isoimmunised infants: A randomised controlled trial
20. Dexmedetomidine versus midazolam for sedation in mechanically ventilated children: A randomized control trial.
21. Early detection of sepsis in paediatric intensive care units through integration of clinical and big data
22. Effect of enalapril on proteinuria in children with primary renal tubular disorder and reflux nephropathy: an observational study
23. Efficacy of Ketogenic Diet, Modified Atkins Diet and Low Glycemic Index Diet among children with drug resistant epilepsy: A randomized Non-inferiority trial
24. Efficacy, safety and tolerability of modified atkins diet in adolescents and adults with drug resistance epilepsy: A Randomized Controlled Trial
25. Electron microscopic study of ciliary abnormality in clinically suspected cases of primary ciliary dyskinesia
26. Establishment of cut off values for various Impulse oscillometry parameters for detection of exercise induced bronchoconstriction in children with asthma aged from 6 to 15 years.

27. Evaluation of Osteopontin as a biomarker and its relationship with phenotypic severity score in Enzyme naive children with Gaucher disease
28. Evaluation of physical activity and its determinants in preschool aged children
29. Exploring the Genetic basis of idiopathic short stature in children: Prevalence of SHOX, GHR and IGFALS mutations
30. Functional characterization of anti-factor H autoantibodies in patients with hemolytic uremic syndrome
31. Functional outcomes in children with septic shock
32. Genetic basis of congenital nephrotic syndrome and correlation with clinical phenotype
33. Gonadal function in children with nephrotic syndrome treated with oral cyclophosphamide
34. Growth pattern and clinical profile of children with 21 hydroxylase deficiency congenital adrenal hyperplasia
35. Health related quality of life of children (aged from 3 to 12 years) with autism spectrum disorder (fulfilling DSM-5 criteria)
36. Incidence and risk factors of acute kidney injury in children with nephrotic syndrome
37. Incidence of polyneuropathy in critically ill mechanically ventilated children
38. Long-term outcomes of patients with anti-complement factor H associated atypical hemolytic uremic syndrome
39. Low dose fentanyl infusion versus oral dextrose for pain management during laser treatment for retinopathy of prematurity (ROP)—An open label randomized control trial
40. Metabolic abnormalities in children with asthma
41. Molecular and Biochemical Characterization of Hepatic Glycogenoses Type I and III
42. Molecular and immunological characterization of chikungunya viruses associated with acute-febrile illness in India
43. Molecular genetic studies in Indian families with autosomal recessive nonsyndromic hearing loss
44. Mutation analysis and association of biomarkers in patients with mucopolysaccharidosis type I, II and III
45. Mutational Spectrum in Tuberous Sclerosis Complex in Indian patients.
46. Neurobehavioral profile of human immunodeficiency virus (HIV) infected children aged 1–10 years: A cross sectional study
47. Neurocognitive and psychosocial outcomes in survivor children of acute lymphoblastic leukemia
48. *NOTCH1* in Childhood Acute lymphoblastic leukemia: Mutation profile, Gene expression, role in leukemogenesis, and correlation with clinical outcome
49. One-TSB versus two-TSB values below the recommended cut off for discontinuation of phototherapy in late preterm and term neonates with non-haemolytic jaundice: A non inferiority trial
50. Physical Growth and its determinants in Indian children with Down Syndrome from 3 months to 5 years of age
51. Polyneuropathy in critically ill mechanically ventilated children
52. Post discharge morbidities following hospital birth in neonates of ≤ 32 weeks or ≤ 1500 g birth weight at AIIMS, burden, reasons, risk factors and cost of care: A prospective cohort study
53. Prevalence and risk factors for Gastroesophageal reflux in mechanically ventilated children
54. Prevalence and risk factors of allergic bronchopulmonary aspergillosis in children with poorly controlled asthma
55. Prevalence of low bone mineral density in HIV infected children.
56. Prevalence of sleep disordered breathing in asthmatic children.
57. Prevalence of smooth muscle dysfunction in children with Dystrophinopathy
58. Prevalence of thyroid disorders in children with newly diagnosed celiac disease and effect of gluten withdrawal: A Prospective Study of North India
59. Prevalence of tuberculosis infection in newly diagnosed children of acute leukemia
60. Pulmonary function test in dystrophinopathy patients aged from 5 to 18 years on oral steroid therapy for at least 6 months
61. Quality improvement study to reduce incidence of breast feeding problems at discharge in postnatal mothers who delivered term gestation
62. Quality initiative on implementation of golden hour bundle to improve outcomes of inborn preterm neonates ≤ 32 weeks gestation
63. Quality initiative study to avoid hyperoxia through staff education and use of oxygen saturation histograms
64. Respiratory morbidities, growth, and neurodevelopmental outcomes of preterm neonates (< 32 weeks) with bronchopulmonary dysplasia (bpd): A prospective cohort study

65. Risk factors for mortality in children with severe dehydration
66. Role of prophylactic vitamin K in neonates on prolonged antibiotic therapy—A randomized controlled trial
67. Role of soluble urokinase plasminogen activator receptor (suPAR) and urinary CD80 in predicting the course of disease and histology in patients with nephrotic syndrome
68. Short term outcomes of Term and late preterm neonates born to mothers with Gestational Diabetes
69. Sleep abnormalities and Polysomnographic profile in children with drug resistant epilepsy
70. Telephone based follow-up of children with epilepsy aged 4 months to 18 years: Comparison of accuracy between a specialty nurse and a DM Pediatric Neurology resident to identify critical clinical events requiring face to face evaluation
71. The effect of structured weight bearing exercise program on BMD in children with cerebral palsy
72. To compare the efficacy of nebulized lignocaine and locally instilled lignocaine, directly through the bronchoscope, as a topical anaesthetic agent in paediatric flexible bronchoscopy done under conscious sedation. An open labeled randomized controlled trial
73. To study the effect of highly active antiretroviral therapy on B cell sub-populations in HIV infected children
74. To study the mutation spectrum and its correlation with histopathology, neuroimaging and biochemical metabolites in Indian patients with mitochondrial disorders
75. Urinary Metabolomic profile of healthy term neonates at postnatal age 24–72 hours
76. Use of 'My Whole Child; Child Health and Development Interactive System', a web based platform for holistic evaluation and management of Indian children and adolescents up to 18 years of age; a tertiary centre pilot study
77. Utility of USG guided indices for predicting fluid responsiveness in children
78. Validation of END-IT score in children aged 1 month to 14 years with convulsive status epilepticus
79. Validation of new point of care test for celiac disease at a tertiary care center of North India
80. Validation of the renal angina index to improve the prediction of acute kidney injury in critically ill children

Completed

1. Exploring the genetic basis of idiopathic short stature in children: Prevalence of *SHOX*, *GHR* and *IGFALS* mutations
2. Molecular genetic studies in Indian families with autosomal recessive non syndromic hearing loss
3. Mutation analysis and association of biomarkers in patients with mucopolysaccharidosis type I, II & III
4. Mutation spectrum in TSC gene in Indian patients with tuberous sclerosis
5. Prevalence of sleep disordered breathing among Indian children with Down syndrome, A cross sectional study
6. Gonadal function in children with nephrotic syndrome treated with oral cyclophosphamide
7. Role of soluble urokinase plasminogen activator receptor (suPAR) and urinary CD80 in predicting the course of disease and histology in patients with nephrotic syndrome
8. Validation of the renal angina index to improve the prediction of acute kidney injury in critically ill children
9. Effect of enalapril on proteinuria in children with primary renal tubular disorder and reflux nephropathy: an observational study
10. Sleep abnormalities and Polysomnographic profile in children with drug resistant epilepsy
11. Prevalence of smooth muscle dysfunction in children with Dystrophinopathy
12. Pulmonary function test in dystrophinopathy patients aged from 5 to 18 years on oral steroid therapy for atleast 6 months
13. Effects of exercise intervention program on bone mineral accretion in children and adolescents with cystic fibrosis

Collaborative projects

Ongoing

1. ICMR young diabetics registry (Endocrinology and Metabolism)
2. Prevalence, regional phenotypic variation, comorbidities and risk factors in Indian women with polycystic ovary syndrome (PCOS) and their response to therapeutic modalities: A multicenter study across India (Endocrinology and Metabolism)
3. Inter-institutional program for maternal, neonatal and infant sciences (THSTI, Faridabad)
4. Child sexual abuse: Development of a multidimensional scale and psychological trauma intervention (Psychiatry)
5. To study the effect of parental origin of X chromosome on clinical features and biochemical profile in patients with turner syndrome (Endocrinology and metabolism)

6. Correlation of hepatic artery resistive index with portal pressure and serum nitric oxide levels in patients with extra hepatic portal vein obstruction (Paediatric surgery)
7. Role of shear wave elastography in diagnosis, prognosis and follow-up of neonatal/infantile cholestatic liver diseases (Radiology)
8. Imaging and intervention in chronic pediatric bidd chiari syndrome (Radiology)
9. Prenatal screening initiative by dried blood spots: Role for triaging and resource utilization (Maulana Azad Medical College)
10. Study of thrombospondin-1 polymorphisms in Asian Indians in corneal allograft rejection (RP Centre for Ophthalmic Sciences)
11. Study of single nucleotide polymorphism in TNF- α , TNFAIP3, TNIP1, TRAF3IP2, IL-17, IL-23R, IL-12B and HLA-C genes in Indian psoriasis patients and their association with clinical characteristics (Dermatology)
12. Pattern of CYP3A5 and MDR-1 single nucleotide polymorphism and its impact on individualization of tacrolimus based immunosuppression in living renal allograft recipient (Nephrology)
13. Understanding disease biology and diagnosis of bacterial sepsis in hospitalized neonates: A multi-centre study (THSTI, Faridabad and NCBS, Bengaluru)
14. Efficacy and safety of an innovative and affordable goat lung surfactant in preterm neonates (Multicentric, Wellcome Trust foundation)
15. International study on atypical hemolytic uremic syndrome (Laboratoire d'immunologie, Hospital Europe' en Georges Pompidou, Paris, France)
16. Effect of weighted compression vest on hyperactivity of children aged from 6 to 9 years diagnosed autism by DSM-5 (IIT Delhi)
17. Comparative analysis of predominant gut micro flora and their metabolites in autistic versus normal children for probiotic interventions (Dairy Microbiology, National Dairy Research Institute, Karnal)
18. Impact of advanced paternal age and poor lifestyle on sperm epigenome: Possible etiology in autism spectrum disorder (Anatomy)
19. The pathways to cure for autism spectrum disorders (Public Health Foundation of India)
20. Understanding and improving the nonverbal biomarkers of object perception in autistic subjects (IIT Delhi)
21. Imaging of infantile brachial plexopathy (Radiology)
22. Cortical sources and connectivity in Autism spectrum disorder: A QEEG study (Physiology)
23. Aspergillosis in immunocompromised patients: Epidemiology and drug resistance (Microbiology)
24. Molecular biology of early immature T-cell acute lymphoblastic leukemia (Lab Oncology)
25. Real time PCR assay for the diagnosis of invasive fungal infections (Microbiology)
26. To characterize humoral and cell mediated immune memory against dengue/chikungunya viruses in anonymous healthy blood bank donors and to assess whether the cell mediated immune memory strictly co-exists with humoral immune memory against dengue/chikungunya viruses (ICGEB, New Delhi)
27. Generation and characterization of human recombinant single chain variant fragments (scFv) against envelope glycoprotein of subtype-C HIV-1 from pediatric patients (Biochemistry)
28. Point prevalence of platelet transfusions in critically ill children (P3 T investigators, Weil Cornell Medicine, USA and PALISI group)

Completed

1. Genetic mutations in Indian patients with gonadal dysgenesis and 46, XY karyotype, (Endocrinology and Metabolism)
2. Developing long term partnership for translational health research in child health between the Department of Pediatrics, AIIMS and Pediatric Biology Centre, THSTI-THSTI, Faridabad
3. A Randomized double blind controlled trial to investigate the effects of Vitamin D supplementation on maternal and newborn baby's vitamin D status in Asian Indian subjects (Endocrinology and Metabolism)
4. Role of immunohistochemistry and immunofluorescence antigen mapping in the diagnosis of inherited epidermolysis bullosa and co-relation of these techniques with DNA based mutation analysis (Dermatology)
5. Centre for Advanced Research in Newborn Health, (Pediatrics and Microbiology at Safdarjung hospital, Maulana Azad Medical College, and Chacha Nehru Bal Chikitsalya, Delhi)
6. Improving the quality of childbirth and neonatal care in Primary Health Centres in two districts in Haryana, India (Pediatrics, Government Medical College, Chandigarh, and SWACH, Haryana)

7. Research on nephrotic syndrome (University of Bristol, Bristol, UK, University of Michigan Medical School, Ann Arbor, MI, USA)
8. Effectiveness of structured teaching program on first aid measures for convulsion in improving the knowledge of caregivers (College of Nursing)
9. A randomized Controlled Trial of early vs late surgery in childhood intractable epilepsy patients in India (Neurology)
10. Health related quality of life in children with epilepsy; child and parental perceptions, knowledge and attitudes (College of Nursing)
11. To determine the role of procalcitonin (PCT) as a diagnostic and prognostic biomarker for febrile neutropenic episodes in children undergoing treatment for childhood cancers (Microbiology)
12. To detect the toxicity of Methotrexate (MTX) and its metabolite (MTXPG) in-house as an indication of clinical toxicities in children undergoing treatment for childhood acute lymphoblastic leukemia/lymphoma (Ocular pharmacology)
13. Evaluation of safety and efficacy of multimodal treatment modalities in advanced retinoblastoma (Ophthalmology)

PUBLICATIONS

Journals: 141

Chapters in books: 25

Books: 4

PATIENT CARE

Outpatient Services

Department of Paediatrics provides general OPD services daily in Paediatrics OPD. Over 1 lakh outpatient consultations took place in this year. There are 15 superspeciality clinics run by the Department.

Name of service	New cases	Old cases	Total attendance
Paediatric General OPD	38086	142634	180720
Pediatric Neurology Clinic	1064	4211	5275
Paediatric Myopathy Clinic	376	1319	1695
Pediatric Gastroenterology Hepatology and Nutrition (PGC)	550	1878	2428
Paediatric Well Baby Clinic	457	102	559
Paediatric High Risk Neonatology Clinic (HRC)	222	1113	1335
Pediatric Nephrology Clinic (RMC)	600	6440	7040
Paediatric Chest Clinic (PCC)	515	5893	6408
Paediatric Tuberculosis Clinic	358	2595	2953
Paediatric Rheumatology Clinic	250	1107	1357
Paediatric Genetics and Birth Defects Clinic	1768	2642	4410
Paediatric Oncology Clinic	206	2217	2423
Pediatric Cancer Survivors' Clinic	134	880	1014
Pediatric Endocrine and Metabolism Clinic(PEC)	261	1265	1526
Child Development Clinic (CDC)	970	1615	2585
Neurocysticercosis clinic (NCC)	292	1767	2059
Autism Clinic	187	354	541
Child Psychology OPD	1824	1311	3135
Grand Total	48120	179343	227463

In addition, Cystic fibrosis and Paediatric HIV services were provided in Paediatric Chest Clinic. Kangaroo Mother Care unit, follow-up services of normal and at-risk neonates.

Physiotherapy Services were provided to the patients in Neurology Clinic, Myopathy clinic Genetics clinics, High risk, Endo, Development clinic, paediatric Chest Clinic, Rheumatology clinic and OPD services.

Total physiotherapy sessions provided during 2016–2017

= 4500

INDOOR SERVICES

- Indoor services include admission facilities in general wards, day care facility, neonatal units (NICUs A and B), Kangaroo Mother Care unit and Pediatric Intensive care facility.
- The Department operationalized an 8-bedded **High Dependency Unit** in children ward to cater to child patients with life-support and other special needs. A special training program for the nurses of the HDU was held.
- Children requiring short procedures or interventions are admitted for a day in the Day Care Unit situated in the C5 ward.

Total indoor admissions

Long admissions in Paediatric wards:	2808
Admission in day care facility:	15071
Patient admitted in PICU:	288
Admissions in NICU A+B:	687+154 = 841

PEDIATRIC ENDOCRINOLOGY DIVISION

- Pediatric Endocrinology Clinic:* Approximately 4000 children with various endocrine disorders are seen annually in the division of pediatric endocrinology. The common endocrine disorders in children that we manage include Growth Hormone Deficiency, Congenital or acquired hypopituitarism, Hypothyroidism, Type 1 Diabetes Mellitus, Rickets, Pubertal disorders, adrenal insufficiency and excess, Vitamin D and Parathormone deficiency and excess and obesity and metabolic syndrome.
- Special facilities available for diabetic children:* Education and counselling by trained diabetes educator, psychological counselling by Dr Renu Sharma, clinical psychologist, point of care HbA1c and urinary microalbumin, Continuous Glucose Monitoring (CGM), demonstration and trial of insulin pump, Ambulatory BP monitoring (ABPM), and free insulin for non-affording patients, weekly helpline, telephonic support by diabetes nurse educator
- Children with obesity:* Metabolic work-up, body fat and lean mass analysis, dietary counselling, physical activity classes with Integral Health Clinic, Genetic mutation analysis for monogenic diabetes in collaboration with Addenbrooke's Hospital, Cambridge
- Pediatric Endocrinology Lab:* The following hormonal assays are being done in Department of Pediatrics: Growth Hormone, 25 Hydroxyvitamin D, PTH, Free T3, Free T4, Cortisol and Insulin, using Roche Cobas e411 ECLIA equipment.
- Day Care facility:* Short admission for dynamic hormonal assays like GH stimulation test, GnRHa Stimulation test, HCG stimulation, ACTH Stimulation test, water deprivation and vasopressin challenge test, Dexamethasone suppression test and many others.

GASTROENTEROLOGY

- Diagnostic and therapeutic pediatric endoscopy services twice a week
- Pediatric Gastroenterology clinic once week
- Anti TTG, EMA and immunocard test for celiac disease

GENETICS

Clinical genetics services

First Monday of Genetic clinic caters to patients with Down syndrome.

Third Monday of Genetic clinic caters to patients with Inborn errors of metabolism.

Clinics

Genetic clinics			Total number of patients
	Children		
Monday Genetics and Birth Defects Clinic	Old	846	1768
	New	922	
Monday Tuesday and Fridays	Antenatal cases/adults		2642
	Old	200	
	New	2442	
	Total		4410

Child Psychologist OPD			
General OPD	Old	1311	3135
	New	1824	
Autism Clinic:	Old	354	541
	New	187	
Genetic Clinic	Old	723	962
	New	239	

Cytogenetics Lab facility

Peripheral blood cultures	548
Cord blood cultures	20
Amniotic fluid cultures	337
Chorionic villi cultures	37
QF-PCR	358

Molecular lab

Routine tests carried out:

1. Beta Thalassemia (β Thal) mutation analysis carried out in 106 families
Prenatal diagnosis for β Thal offered to 81 families
2. Spinal muscular atrophy (SMA) mutation analysis carried out in 125 cases
Prenatal diagnosis for SMA offered to 26 families
3. Duchene muscular dystrophy (DMD) mutation analysis carried out in 286 families
Prenatal diagnosis for DMD offered to 38 families
4. Hemophilia A linkage analysis carried out in 15 families
Prenatal diagnosis for Hemophilia A offered to 5 families
5. Fragile X screening carried out in 162 families
Prenatal diagnosis for fragile X offered to 2 families
6. Cystic fibrosis molecular analysis carried out in 113 cases
Prenatal diagnosis for cystic fibrosis offered to 2 families
7. Achondroplasia mutation analysis carried out in 21 cases
Prenatal diagnosis for achondroplasia offered to 1 family
8. Non-syndromic hearing loss (Connexin 26) screening carried out in 24 cases
Prenatal diagnosis for Connexin 26 offered to 2 families
9. Sex Chromatin related abnormalities in 60 cases

Tests carried out on Research basis:

1. Screening for small micro-deletion syndromes carried out in – 19 cases
Prenatal diagnosis for small micro-deletion syndromes offered to – 2 families
2. Megalencephalic leukoencephalopathy (MLC) mutation analysis carried out in – 10 cases
3. Gaucher syndrome mutation analysis carried out in – 15 cases
Prenatal diagnosis for Gaucher syndrome offered to – 6 families
4. Mitochondrial mutation analysis carried out in – 70 cases
5. Tuberous Sclerosis (TSC) mutation analysis carried out in – 21 families
Prenatal diagnosis for TSC offered to – 4 families
6. MPS I, II & III mutation analysis carried out in – 30
7. GSD Type I & III mutation analysis carried out in – 8 cases
Prenatal diagnosis for GSDI offered to – 1 family

Biochemical Lab

Enzyme Assays for Inborn Error of Metabolism:

Total no.

Patients for metabolic Enzyme Assays: 507

S. no	Enzyme assay	Disorder	No. of pts.
1	Arylsulfate A	Met Metachromatic-leukodystrophy	43
2	β – Glucosidase	Gaucher Disease	53
3	MPS-II		26
4	Galactose-6- Sulphate Sulphatase	Morquio A (MPS-IVA)	13
5	Gangliosidosis	GM1 Gangliosidosis and Morquio B(MPS-IV B)	29 & 5
6	Arylsulphatase-B	MPS-VI	10
7	β -Glucuronidase	Maroteaux-Lamy Syndrome (MPS VII)	1
8	Biotinidase		107
9	GALT	Galactosemia	99
10	Hexosaminidase A	Tay-Sachs	24
11	Plasma Hex-A	Mucopolidosis	11
12	Plasma – ASA	Mucopolidosis	11
13	Chitotriosidase (Plasma)		78
14	CCL18		16
15	β -Galactocerebrosidase (Krabbes)	Krabbes	38
16	Palmiloyl-protein-thioesterase (INCL)	INCL	5
17	Sphingo myelinase	Neimenn pick disease	48
18	α -Glucosidase	Pompe	8
19	α -Galactosidase	Fabry	4
20	α -Fucosidase	Fucosidosis	1
21	α -N-Acetylglucosaminidase	Sanfilippo B (MPS III B)	13
22	Acetyl-CoA: α -Glucosaminide N-Acetyltransferase	Sanfilippo C (MPS III C)	8
23	N-Acetylglucosamine-6-sulphate sulphatase	Sanfilippo D (MPS III D)	2
24	CVS(NIH)	Non-immune Hydrops	23
25	CVS(KRB)		1
26	CVS(GM1)		2
27	CVS(MPS-II)		1
28	CVS(NPD)		1
29	CVS(Gaucher)		6

NEONATOLOGY

1. The Division of Neonatology provides Level 3 NICU care to extremely preterm babies and babies with major congenital malformations. There is provision of invasive blood pressure monitoring, targeted neonatal echocardiography and ultrasonography, high frequency ventilation, inhaled nitric oxide, total parenteral nutrition, otoacoustic emission (OAE) based hearing screen, therapeutic hypothermia using state of art cooling equipment.
2. **Laboratory facilities:** There is provision of arterial blood gas analysis, point of care glucose estimation, packed cell volume, bilirubin and gram staining and slide examination.

3. **Special clinic** (High risk clinic): The Division of Neonatology provides comprehensive follow up care to all the high-risk babies on every Wednesday.
4. The Division of Neonatology along with the Departments of ENT, Pediatric Surgery and Obstetrics and Gynaecology did Ex-Utero Intrapartum Treatment (EXIT) procedure in one neonate with Congenital High Airway Obstruction Syndrome (CHAOS).
5. The Division of Neonatology also provides support to Rajendra Prasad Eye Centre (RPC) Pediatric High Dependency Unit catering to post-op care and Laser procedures for Retinopathy of prematurity of extramural babies.

NEPHROLOGY

Nephrology clinic attendance 7040

Special tests and procedures

Kidney transplants in children	6
Hemodialysis	1327
Acute peritoneal dialysis (including automated peritoneal dialysis)	123
Continuous ambulatory peritoneal dialysis	13
Plasmapheresis sessions	564
Continuous renal replacement therapy	11
Temporary hemodialysis catheter placement (internal jugular, femoral)	265
Renal biopsies	194
ELISA for complement factor H	251
ELISA for antibodies to complement factor H	521
Surface CD46 expression	33

ONCOLOGY

Pediatric Oncology Clinic

Every Monday new as well as old patients with childhood cancers are seen in Pediatric Oncology clinic. The average number of children seen in the Oncology clinic is around 60–85/ clinic. About 350–400 new patients with various forms of childhood cancers are enrolled per year. Commonest cancers seen at our center includes acute leukemia and Retinoblastoma followed by Lymphoma.

Majority services are provided via outpatient/clinic consultation and state of art Day care facility. Patient details are recorded in a data base maintained by a US based foundation (Jiv Daya Foundation). Multimodal therapy is provided with specialty inputs from various departments (Pediatric Surgery, Radiation Oncology, Lab Oncology, Pathology, Radiology, Nuclear Medicine, Ophthalmology)

Pediatric Cancer Survivor Clinic

This is an after cancer treatment care clinic. We have enrolled more than 850 children in the PCSC. Last year 110 children completed treatment and were registered at the clinic. These children are assessed for their growth, any late effects of chemotherapy, for complications of transfusions, appearance of second malignancies or relapse. Their growth (weight and height) is recorded on age and sex specific growth charts. They undergo a detailed clinical evaluation. They are subject to various investigations and examinations like echocardiography, thyroid function, growth hormone, bone densitometry, viral markers, hormonal/reproductive function assessment at puberty, IQ and behavioral assessment where required. We have registered more than 1000 pediatric cancer survivors in our clinic.

Day Care, Laboratory services and other services

1. Bone marrow examination, CSF examination, Flowcytometry to ascertain lineage is done for patients of acute leukemia.
2. Karyotyping and molecular studies for acute leukemia is available.
3. MRD estimation for acute lymphoblastic leukemia.
4. Hemogram facility via 5 part analyzer is placed in the critical care laboratory to facilitate timely and accurate reports (round the clock).
5. Coagulation analysis and other biochemical tests.
6. State of art Day care facility for child cancer patients.
 - i. Diagnostics
 - ii. Chemotherapy
 - iii. Blood component therapy
 - iv. Antibiotic administration

7. Phone helpline is available for our child cancer patients
8. Tele consultation facility is available for our child cancer patients on 1st and 4th Friday of every month.
9. E mail helpline is available for our patients
10. Other services provided at the division for Pediatric oncology include:
 - Financial support to these patients through the Rashtriya Arogya Nidhi, Prime Ministers relief fund, by providing medications with the help of NGOs like CANKIDS, CPAA and Indian Cancer Society
 - Patient education programs are organized once every 6 months where the doctors, social worker, nurses, dietician, parents of children undergoing treatment and representatives from the NGO participate.

Community services

Organize patient education and awareness program for child cancer programs. Organized public lecture and exhibition on childhood cancers.

Participated as panelists and speaker for Doordarshan and All India Radio on the occasion of International Childhood Cancer Day

Facilitation of financial assistance from government and nongovernment organization to families with a child cancer patient.

(b) Community services/camps etc: Dr Aditya Gupta was part of the medical team of AIIMS that organized a health camp in Prataphgarh, Uttar Pradesh in November 2016.

RHEUMATOLOGY

Pediatric rheumatology clinic once a week.

Procedures: Joint aspirations, skin biopsy, synovial biopsy etc.

IACS (Intra-articular Corticosteroids), administration of Biological agents in various Rheumatological disorders

CHILD PSYCHOLOGY SERVICES

The figures in parenthesis represent the number of patient seen.

- D.Q./I.Q. assessment (2053)
- Behavioral Problems (462)
 - Temper Tantrums
 - Bed wetting
 - Aggressive behavior
 - Abusive behavior
 - Hyperactivity
 - Habit disorders
 - Conduct disorders
- Attention Deficit Hyperactivity Disorder (57)
- Pseudo seizures, Conversion reactions (210)
- Functional problems (427)
 - Headache
 - Vomiting
 - Abdominal Pain
 - Chest Pain
 - Giddiness
 - Breathlessness
 - Ataxia
 - Aphasia
 - Pseudo hearing loss
 - Hyper ventilation
 - Sexually abused
- Learning Disability
- Ward Consultation (50–55)
- Referrals from other hospitals and department

PULMONOLOGY, INTENSIVE CARE, TUBERCULOSIS

Specialised tests/investigations

1. Spirometry	6020
2. Impulse oscillometry	4225
3. Infant PFTs	510
4. Exercise testing	50
5. Bronchoscopies and EBUS	306
6. Sweat test	631
7. Total IgE	241
8. Specific IgE	50
9. Critical Care Lab Osmomat 030-D	493
10. MS9-5H Hemoplan	5-MS-Card
11. ACL-700	3
12. ABG	26360

PHYSIOTHERAPY SERVICES

Routine and specialized physiotherapy services in outpatient and inpatient areas. Cardio-pulmonary respiratory physiotherapy both in the Pediatric and the Neonatal ICU. Integrated care in specialized clinics including Child Development, Genetics, High Risk, Neurology, Chest, Rheumatology and Myopathy clinics.

MEDICAL SOCIAL SERVICES

- Counselling and psychotherapy of parents of chronically ill children.
- Mobilisation of Financial Assistances from National Illness Assistance Funds (Ministry of Health and Family Welfare), Prime Minister National Relief Fund, Chief Minister's Relief Fund, MP Local Area Development Fund, Ladli Yojana under Delhi Government, Institutes Poor Funds, NGOs under CSR (corporate social responsibility).
- Rehabilitation of unknown babies and unattended children through involvement of police, child welfare committees and welfare homes for children.
- Networking with government and non-governmental social agencies for meeting the various miscellaneous needs of poor patient e.g. arranging for cremation of bodies of poor patients, deportation of bodies of poor patients to their native place and referral work.
- Arrangement and facilitation of accommodation needs of poor patients who come from various parts of country.
- Issuing railway concession to cancer patients, T.B. patients, kidney patients, disabled patients and hemophilia patients.
- Formation of support group of parents of chronically ill children for the purpose of strengthening their will power to cope up with their grief and to have help from each other in order to sort out their common problems and needs.
- Exemption of various investigation charges of poor patient on the basis of BPL card, income certificate, recommendation of Member of Parliament and genuine assessment and evaluation poverty.
- Supervising of training and internship to social work students who come from various social work departments of different universities of the country.

Activities	Number of patients benefited in approximation
• Information and guidance given to patients.	3515
• Counselling and psychotherapy.	1900
• Issuing railway concessions.	1100
• Helping in having accommodation.	250
• Exemption of charges of various investigations.	2700
• Mobilization of financial assistance to poor patient.	720
• Rehabilitation of unknown/Abandoned babies ¹	00
• Supervision of social work trainees.	01
• Miscellaneous needs of poor patient e.g. arranging cremation, deportation of dead bodies to their native places.	5

CMRF-20	20		4537500	
DAN-1	1		104000	
ESI-7	7		1552000	
HPF-18	18		79050	
ICS-10	10		830000	
PMRF-4	4		600000	
RAN-30	30		7751000	
			15453550	
TOTAL	90			
	Chief Minister Relief Fund (CMRF)			4537500
	Delhi Arogya Nidhi (DAN)			104000
	Employees State Insurance (ESI)			1552000
	Hospital Poor Fund (HPF)			79050
	Indian Cancer Society (ICS)			830000
	Prime Minister Relief Fund (PMRF)			600000
	Rashtriya Arogya Nidhi (RAN)			7751000
			Total Rs.	15453550

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Prof Vinod Paul was Chair, Academic and Selection Committees, AIIMS, Raipur; Co-chair, Himachal Pradesh State Commission on Health; Chair, Technical Resource Group on Child Health, MoHFW; Chair, Technical Committee, Mid-Day Meal Program, Ministry of HRD; Chair, Technical Advisory Group (TAG) on Women's and Children's Health, WHO SEAR; Member, Governing Council, National Board of Examinations; Member, Board of the Baba Farid University of Health Sciences, Punjab; Member, Task Group on Health, Punjab Governance Reform Commission; Member, Independent Accountability Panel for the UNSG's Global Strategy for Women's, Children's and Adolescents' Health nominated by the UN Secretary General; Member, Regional Director's Technical Advisory Committee (TAC), WHO SEAR; Chair, Data Safety Monitoring Board, WHO sponsored study on Emollients for Newborns to prevent sepsis by Community Empowerment Lab, Lucknow; Temporary Advisor, Technical consultation on Review of Inputs and Methods for Estimates of Causes of Maternal and Neonatal Deaths and Stillbirths, August 2016, Geneva; Coordinated the production of the monograph 'Remarkable Progress, New Horizons and Renewed Commitment.' WHO/SEAR, New Delhi 2016; Chairman: a. the ICMR-PHFI India Global Burden of Disease Group on Maternal and Child Health, b. the STAG of the Social Innovation Program for Affordable and Relevant to Social Health (SPARSH) of the BIRAC/DBT, and c. the WHO/BMGF study on emollients in neonatal health; Member of the ICMR Scientific Advisory Group on a. Communicable Diseases, b. Desert Medicine Research Centre at Jodhpur and c. Reproductive and Child Health research; Member, Executive Board of the National Health Systems Resources Centre; Member, Core group on National Nutrition Mission and of the National Shadow Codex Committee (Department of Women and Child Development); Member, National Technical Advisory Group on Immunization (NTAGI)

Professor A.K. Deorari was Chairman, UG Teaching Schedule Committee at AIIMS, New Delhi 2015–2017; Advisor (Publication) of the Journal Committee of Indian Pediatrics from 1 January 2017; Team Leader, Quality Improvement/Assurance at AIIMS, New Delhi since August 2015; Programme Co-Director for GOI Task Force on Retinopathy of Prematurity 2015–2018; Member, National Technical Advisory Group on Newborn Health, Government of India 2014–2017; Member Every Newborn Action Plan Metrics Group, London School Tropical Medicine & Hygiene & WHO 2015–2016; Member, NHSRC for framing National Guidelines in Neonatology 2015–2016.

Professor Arvind Bagga was Scientific Chair, XVII Congress of International Pediatric Nephrology Association, Iguazu, Brazil, September 2016; Awarded Fellowship of the Indian Society of Nephrology, FISN, 2016; Expert of the Kidney Disease Improving Global Outcomes (KDIGO) on 'Thrombotic microangiopathy', Managing Editor, Indian Pediatrics; Editor, Pediatric Research; Member, Editorial Board: Pediatric Nephrology; Indian Journal of Pediatrics; Pediatrics and Child Health; World J Pediatrics; Member, Pediatric Review Group, Indian Council of Medical Research; Chairman, Expert Committee of MCI on DM Pediatric Nephrology; Research Advisory Committee: DBT and AIIMS; Orations: Chennai Kidney Foundation; East Zone PEDICON.

Professor S.K. Kabra was Chairperson Scientific Committee: 28th Annual Conference of IAP Respiratory Chapter; Editor in Chief, Indian Journal of Pediatrics

Professor Madhulika Kabra was Chairperson, TRG of Rashtriya Bal Swasthya Karyakram MOHFW; Member, State level High powered interdisciplinary committee on Rare Diseases (Delhi Government); Member, Central Government Committee on Rare Diseases; Member, District Advisory Committee of New Delhi District under the Pre-Conception and Pre-Natal Diagnostic Techniques; Member, ICMR Expert Group on rare diseases.

Professor Pankaj Hari was member Editorial Board, Indian Journal of Trauma and Emergency Pediatrics, Journal of Progress in Pediatric Urology, International Journal of Nephrology Urology

Professor Sheffali Gulati delivered Dr S. Janaki Memorial Oration and was awarded a Gold Medal at the 56th Annual Conference of National Academy of Medical Sciences NAMSCON, 2016 Raipur, AIIMS; Awarded Fellowship of National Academy of Medical Sciences (FAMS); Nominated member of the NOC Expert Committee of CARA (Central Adoption Resource Authority) in March 2017; Elected Executive Board Member of Child Neurology Chapter of IAP; Chairperson of the subcommittee on Developmental disorders of Ministry of Social Justice and Empowerment for developing guidelines for certification of disabilities as per recent legislation; Chairperson entitled: “Liver Transplant in Urea Cycle Defects and Organic Acidurias, Cure Vs Treatment”, 3rd International Liver Symposium, 3 April 2016, The Leela, Ambience Mall, Gurgaon, Haryana; Member of the expert committee for evaluation and assessment of the proposal submitted by the college teachers for availing travel grant assistance to attend International Conferences abroad, University Grant Commission, Bahadur Shah Zafar Marg, New Delhi

Professor Rakesh Lodha was Associate Editor, Indian Pediatrics; Section Editor, Indian Journal of Pediatrics; Associate Editor, Systematic Reviews (BMC group journal); Expert for “Expert group meeting on the use of antibiotics in children with defined infections.”, 14–16 December 2016 at John Knox Centre, near WHO/HQ in Geneva; Member, TRG on Pediatric HIV, NACO; Member of PRG, ICMR; Member, Ethics Committee, CSIR-IGIB; Global and national collaborator to the ‘Global Burden of Diseases, Injuries and Risk Factors Study (GBD)’, the largest effort to measure epidemiological levels and trends of disease burden worldwide, for Health Metrics and Evaluation (IHME) at the University of Washington

Professor Rachna Seth was Nominated member, Editorial Board. Indian Pediatrics; Nominated member to Indian College of Pediatrics; Member of committee to work for Health package for pediatric cancers RSBY (Rashtriya Swasthya Bima Yojna); Member of the subcommittee to formulate guidelines for hematological diseases. Right of Persons with Disabilities Act, 2016; received 1st prize for poster entitled “Cyclin Dependent Kinase Inhibitor 2A/B gene deletions in childhood Acute Lymphoblastic Leukemia: A preliminary study” in Midterm PHOCON on 10 July 2016, PhD Scholar (Pediatric Oncology, Dr Manisha Agarwal); 1st prize for poster entitled “Cyclin Dependent Kinase Inhibitor 2A/B and IKZF1 gene deletions in childhood Acute Lymphoblastic Leukemia” PHOCON Mumbai, 2016, PhD Scholar (Pediatric Oncology, Dr Manisha Agarwal).

Professor Vandana Jain was Chairperson of NOC committee of Central Adoption Resource Agency (CARA), an autonomous body under the Ministry of Women and Child Development, Government of India; Member, Writing committee of International Society for Pediatric and Adolescent Diabetes (ISPAD) for ‘Guidelines on Management of Diabetes in Pre-schoolers’; Invited to participate in the Pediatric Endocrine Society (PES) global consensus project on neonatal diabetes

Professor Ramesh Agarwal was Associate Editor, Seminars in Fetal and Neonatal Medicine; Expert member, Subject Expert Committee (Vaccines) of CDSCO for approval of vaccines manufacturing and marketing in India; Expert on Global Antibiotic Research and Development Partnership (GARDP); Developing new antibiotic treatments, promoting responsible use, and ensuring access for all, A joint WHO/DNDi initiative incubated by DNDi in support of the Global Action Plan for Antimicrobial Resistance.

Dr Aditi Sinha was Joint Secretary, Indian Society of Pediatric Nephrology; Council Member, International Pediatric Nephrology Association; Reviewer for Pediatric Nephrology, Indian Pediatrics, Indian Journal of Nephrology, Indian Journal of Pediatrics

Dr M. Jeeva Sankar was Member, ‘First Level Screening Committee’ under Grant-in-aid scheme of Department of Health Research, MoHFW, for reviewing research proposals on Child Health; Member, Centre Core Committee (C3) for Maternal and Child Health program of Knowledge Integration and Translational (KnIT) Platform, supported by BIRAC, DBT; Global and national collaborator to the ‘Global Burden of Diseases, Injuries, and Risk Factors Study (GBD)’, the largest effort to measure epidemiological levels and trends of disease burden worldwide, for Health Metrics and Evaluation (IHME), University of Washington; Member, Expert Consultation Group on ‘STG Development Manual’ that facilitates development of Standard Treatment Guidelines for MoHFW; Member, Steering Group of IPISTOSS (Immediate Parent Infant Skin-to-skin Study), a multi-country study to be funded by Bill and Melinda Gates Foundation; Member, Steering Group, ICMR Task Force study on ‘Neonatal sepsis in the community’; Member, Editorial Group of ‘NNE, Clinical Practice Guidelines 2017’, involved in hand-holding two groups of neonatologists and actively guide/support them along and help develop the two guidelines

Dr Neerja Gupta was Member of the ICMR Expert Group on rare diseases

Dr Biswaroop Chakrabarty was Elected as Associate member of Paediatric Research and Education Society of India (PRESiDE).

Dr K.R. Jat was Editorial member of Asian Journal of Clinical Pediatrics and Neonatology, and Frontier in child health and development; Reviewer for following journals: Cochrane Collaboration, Pediatrics, Pediatric Pulmonology, Indian Pediatrics, Pediatric Allergy, Immunology, and Pulmonology, Indian Journal of Pediatrics, Respiratory care, Journal of AIDS and HIV Research (JAHR), Indian J of Critical Care Medicine (IJCCM), Bulletin of WHO, and BMC Pediatrics

Dr Jhuma Sankar was awarded a Research project on Honey versus Standard therapy for pressure ulcers through a competitive process for 'Pediatric Critical Care Research Grant' 2017 (USD 10,000 dollars). The study findings will be presented in World Congress on pediatric critical care in 2018).

Dr Anu Sachdeva was Member of Specialty Group on Neonatology, for development of Standard Treatment Guidelines on Neonatal Jaundice for MoHFW, Member of guideline group for NNF Evidence Based Clinical Practice Guidelines for Screening, prevention and management of hyperbilirubinaemia

Dr Rajni Sharma was Elected Joint Secretary of Indian Society for Pediatric and Adolescent Endocrinology (ISPAE); Member, writing committee of Guidelines for screening of congenital hypothyroidism in India of the Indian Society for Pediatric and Adolescent Endocrinology (ISPAE)

Dr Prashant Jauhari elected as Associate member of Paediatric Research and Education Society of India (PRESiDE).

Dr Aditya K. Gupta awarded membership to Children Oncology Group

Dr Sumita Gupta awarded PhD from AIIMS

Mr D. Yadav was Child Nodal officer for Protections and Promotion of child rights for all children sent or referred by Child Welfare Committee, Child Welfare Board, National Commission for Protection of Child Rights, Delhi Commission for Protection Child Rights, Courts Child Help lines and Various NGOs; Member Secretary of constituted Standing Committee to regulate media reporting and disclosure of details relating to children and to implement guidelines regarding protection of Child Rights in Compliance of Orders of Delhi High Court; Participated In Half Day Workshop for Skill Development Titled As "Excel In Excel", Excel In Excel, 21 February 2017, CMET, AIIMS, New Delhi; Participated In Half Day Workshop For Skill Development Titled As "Values In Health Care", "Values In Health Care", 11 April 2017, CMET, AIIMS, New Delhi; Participated In Half Day Workshop For Skill Development Titled as "Developing Psycho-Social and Interpersonal Skill", as "Developing Psycho-Social and Interpersonal Skill", 20 April 2017, CMET, AIIMS, New Delhi

VISITING SCIENTISTS

Endocrinology

1. Prof Mehul Dattani, Clinical Lead, Department of Endocrinology, Great Ormond Street Hospital and UCL Hospitals delivered a lecture on Growth Hormone deficiency, 18 October 2016, AIIMS.

Genetics

1. Dr Piranit Nik Kantaputra, Department of Orthodontics and Pediatric Dentistry, Faculty of Dentistry, Chiang Mai University, Thailand
2. Dr Chitra Sarkar, Canada.
3. Dr Ashok Vellodi, GOSH, UK.

Neonatology

1. Douglas D. McMillan, MD, FRCPC, Professor and Head, Division of Neonatal-Perinatal Medicine, IWK Health Centre, Dalhousie University, Halifax, Canada
2. Dr Nalini Singhal, Professor, Department of Paediatrics; Iberta Children's Hospital, Neonatology, Calgary, Canada

Nephrology

1. Professor Kjell Tullus, Division of Nephrology, Great Ormond Street Hospital for Children, London, United Kingdom

Oncology

1. Dr Melissa Hudson, Director, Division of Cancer Survivorship and After Completion of Therapy Clinic, Department of Oncology, St. Jude Children's Research Hospital, Memphis.

9.28. Paediatric Surgery

Professor and Head

D.K. Gupta

Professors

Veereshwar Bhatnagar
Sandeep Agarwala

Minu Bajpai
M. Srinivas (on deputation)

Associate Professor

Shilpa Sharma

Assistant Professors

Vishesh Jain
Prabudh Goel

Anjan Dhua
Devendra Yadav

Dr M. Srinivas is on deputation for three years to ESI Hospital and Medical College, Hyderabad.

HIGHLIGHTS

The Paediatric Surgery Department offers State-of-the-art patient care, not only in general paediatric surgery, but also in the field of neonatal surgery, urology including intersex disorders, thoracic surgery, oncology, gastrointestinal surgery and neurosurgery in children up to 14 years of age.

The department faculty is also actively involved in various intramural and extramural research projects pertaining to congenital malformations and cancer in the field of molecular biology and the stem cell research. The department being on the forefront in patient care, research, teaching and training, receives a large number of requests from India and overseas to visit the department and seek training in paediatric surgery and its sub-specialties.

The department faculty has been regularly receiving national and international recognitions, awards, honours and medals for their academic excellence and scientific contributions. Most notably of these has been Professor D.K. Gupta being elected as the President of the World Federation of Association of Pediatric Surgeons representing 134 countries for three years (2014–2016). This is a unique and rare honour for AIIMS, India and Asia.

The department is poised for expansion with the faculty, space and the staff in the upcoming maternal and child health center at AIIMS, developing all sub-specialties and caring for children with serious malformations, advanced cancers, trauma and others.

EDUCATION

Teaching of undergraduate medical and nursing students: Lectures and seminars are held for the undergraduate students on topics related to Paediatric Surgery, Postgraduate teaching and training of MCh Paediatric Surgery trainees, inclusive of seminars, journal clubs case discussions, thesis presentations and teaching rounds.

Trainees on rotation: MCh trainees in Neurosurgery, DM trainees in Neonatology, MS trainees in General Surgery. Training in the ward of BSc and the MSc Nursing students.

Short term training provided to:

Dr Mohd Jafer Lawren—Afghanistan, from 7 March 2016 to 6 August 2016

Dr Lt Col Abu Daud Mod Sariful Islam—Chittagong Medical College & Hospital, Chittagong, Bangladesh, from 9 January 2016 to 30 June 2016

Dr Rajnish Kumar—Dr RML, Delhi, from 16 August to 15 September 2016

Dr Subhash Chandra Bhartiya—Dr RML, Delhi, from 16 September to 15 October 2016

Dr Laxmi Narayan Sahoo—Obstet & Gynae Deptt, AIIMS, 24–31 August 2016

Lectures delivered

D.K. Gupta: 27

Shilpa Sharma: 11

Vishesh Jain: 2

D.K. Gupta: 27

Minu Bajpai: 3

Anjan Dhua: 1

Sandeep Agarwala: 19

Prabudh Goel: 1

1. Surgery for difficult esophageal atresia and TEF, update on neonatal surgery 20–21 May 2016, Children Hospital, Shanghai, China
2. Management of difficult anorectal malformations, Update on Neonatal Surgery 20–21 May 2016, Children Hospital, Shanghai, China
3. Surgical techniques of esophageal replacement, 33rd Japanese Society of Pediatric Surgery, Asian Association of Pediatric Surgeons and the World Federation of Association of Pediatric Surgeons, 22–24 May 2016, Fukoka, Japan
4. Surgical strategies in pediatric oncology, 10th SIOP Asia Congress, 25–28 May 2016, Presidential Building of the Russian Academy of Science, Moscow, Russia
5. Esophageal replacement in children, International Conference of Pediatric Surgery, 5–8 June 2016, Minia, Egypt
6. Rare variants of anorectal malformation in children, 23rd International Congress Meeting of the Pediatric Colorectal Club, 11–13 June 2016, Prague
7. Global child health challenges, Surgical needs, 28th International Congress of Pediatrics, 17–22 August 2016, Vancouver, Canada
8. Surgical anatomy of the esophagus, Ibero-American Congress of Pediatric Surgery and Pre Congress Courses, 22–26 August 2016, Lima, Peru
9. Recent developments in the management strategies of esophageal problems, Ibero, American Congress of Pediatric Surgery and Pre Congress Courses, 22–26 August 2016, Lima, Peru
10. Congenital pouch colon in children, Ibero-American Congress of Pediatric Surgery and Pre Congress Courses, 22–26 August 2016, Lima, Peru
11. Sex assignment in intersexuality in children, Ibero, American Congress of Pediatric Surgery and Pre Congress Courses, 22–26 August 2016, Lima, Peru
12. Complications following surgery for anorectal malformation, Ibero, American Congress of Pediatric Surgery and Pre Congress Courses, 22–26 August 2016, Lima, Peru
13. Problem of malrotation in children, Ibero, American Congress of Pediatric Surgery and Pre Congress Courses, 22–26 August 2016, Lima, Peru
14. Proximal hypospadias in children, 42nd Annual Conference of Indian Association of Pediatric Surgeons, 28 September–2 October 2016, Agra, India
15. Introduction on how to bridge the wide gap TEF/OA, 5th World Congress of Pediatric Surgery, 8–11 October 2016, Washington, USA
16. Esophageal replacement in newborns for long gap OA and TEF, 5th World Congress of Pediatric Surgery, 8–11 October 2016, Washington, USA
17. Surgical techniques of replacement of esophagus in children, Pediatric Surgical Conference, 13–15 October 2016, Texas Tech Health Sciences Centre, Lubbock, Texas
18. Management of long gap TEF and OA, 4th National Conference of Pediatric Surgery, 11–13 November 2016, Plovdiv, Bulgaria
19. Options for esophageal replacement in children, 4th National Conference of Pediatric Surgery, 11–13 November 2016, Plovdiv, Bulgaria
20. Surgery for trauma in children, Conference of Trauma in Emergency Medicine, 19 November 2016, Sofia, Bulgaria
21. Management of difficult TEF and OA, Symposium on Neonatal Surgery, 22–25 November 2016, University of Bologna, Bologna, Italy
22. Global child health challenges, West Bengal Association of Pediatric Surgeons, 10 December 2016, Kolkata
23. DSD in children, 3rd International APSB Congress and 6th FAPSS Conference, 11–12 December 2016, BSMMU University, Dhaka, Bangladesh
24. Hydrometrocolpos, 3rd International APSB Congress and 6th FAPSS Conference, 11–12 December 2016, BSMMU University, Dhaka, Bangladesh
25. Medical and surgical management of VUR in children, CME Program of Association of Pediatric Surgeons of Bangladesh, 29–31 March 2016, Chittagong Research Institute of Child Surgery, Chittagong, Dhakha

26. Treatment of hydrometrocolpos, CME Program of Association of Pediatric Surgeons of Bangladesh, 29–31 March 2016, Chittagong Research Institute of Child Surgery, Chittagong, Dhakha
27. Surgery for anorectal malformation, CME Program of Association of Pediatric Surgeons of Bangladesh, 29–31 March 2016, Chittagong Research Institute of Child Surgery, Chittagong, Dhakha

Minu Bajpai: 3

1. CAKUT Evaluation & management, Ninth Annual Training Course supported by the ISPN, IPNA and AIIMS, 1–2 April 2017, AIIMS, New Delhi, Chandigarh
2. Management of VUR, Pediatric Urology CME, 9 March 2017, Govt. Medical College, Cuttack, Cuttack
3. Series of Talks and Video lectures on PUV, VUR, bladder exstrophy, neurogenic bladder, bladder augmentation, second deccan course in Paediatric Urology, 20–22 January 2017, Goa

Sandeep Agarwala: 19

1. Guest Lecture: Liver surgeries—Beyond standard resections. Workshop on Pediatric Solid Tumors, 22–24 April 2016, Tata Memorial Hospital, Mumbai.
2. Panel discussion on soft tissue sarcomas, Workshop on Pediatric Solid Tumors, 22–24 April 2016, Tata Memorial Hospital, Mumbai.
3. Panel discussion on Wilms tumor, Workshop on Pediatric Solid Tumors, 22–24 April, 2016, Tata Memorial Hospital, Mumbai.
4. Role of Pediatric Surgery in Pediatric Oncology, 53rd Annual Congress of Japanese Society of Pediatric Surgeons and the 24th Congress of Asian Association of Pediatric Surgeons, 24–26 May 2016, Fukuoka, Japan
5. Surgeons perspective on neonatal respiratory distress: Critical information from imaging, during Pediatric Chest Imaging Conference, 30–31 July 2016, AIIMS, New Delhi
6. Group on pediatric solid tumors, expert consensus on whom not to treat, 35th Conference of Indian Cooperative Oncology Network (ICON), 9–11 September 2016, Tata Memorial Hospital, Mumbai
7. Nephron sparing surgery in Wilms Tumors, IAPSCON 2016, 28 September–2 October 2016, Agra
8. Gonadal germ cell tumors—Current concepts and defining surgical staging, Annual Conference of the Pediatric Hematology Oncology Chapter of Indian Academy of Pediatrics, PHOCON 2016, and the Annual Conference of the Subsection of Surgical Oncology (SOS) of IAPS, 4–6 November 2016, Tata Memorial Hospital, Mumbai.
9. Panel Discussion on Germ Cell tumors: Tumor Board, Annual Conference of the Pediatric Hematology Oncology Chapter of Indian Academy of Pediatrics, PHOCON 2016, and the Annual Conference of the Subsection of Surgical Oncology (SOS) of IAPS, 4–6 November 2016, Tata Memorial Hospital, Mumbai.
10. Moderator for panel discussion on Wilms Tumor, Annual Conference of the Pediatric Hematology Oncology Chapter of Indian Academy of Pediatrics, PHOCON 2016, and the Annual Conference of the Subsection of Surgical Oncology (SOS) of IAPS, 4–6 November 2016, Tata Memorial Hospital, Mumbai.
11. Wilms Tumors: Surgical aspects in Indian context, Annual Conference of the Pediatric Hematology Oncology chapter of Indian Academy of Pediatrics, PHOCON 2016, and the Annual Conference of the Subsection of Surgical Oncology (SOS) of IAPS, 4–6 November 2016, Tata Memorial Hospital, Mumbai.
12. Panel discussion on Wilms Tumor, Annual Conference of the Pediatric Hematology Oncology chapter of Indian Academy of Pediatrics, PHOCON 2016, and the Annual Conference of the Subsection of Surgical Oncology (SOS) of IAPS, 4–6 November 2016, Tata Memorial Hospital, Mumbai.
13. Presentation for INPOG for renal and Wilms Tumors group, Annual Conference of the Pediatric Hematology Oncology Chapter of Indian Academy of Pediatrics, PHOCON 2016, and the Annual Conference of the Subsection of Surgical Oncology (SOS) of IAPS, 4–6 November 2016, Tata Memorial Hospital, Mumbai.
14. Thoracic tumors in children, masterclass in Pediatric Surgical Oncology, 1–4 February 2017, JIPMER, Auditorium, Puducherry
15. GU-RMS in children, masterclass in Pediatric Surgical Oncology, 1–4 February 2017, JIPMER, Auditorium, Puducherry
16. Hepatoblastoma RCN, study of SIOPEL, masterclass in Pediatric Surgical Oncology, 1–4 February 2017, JIPMER, Auditorium, Puducherry
17. Demonstration of operative videos on renal tumors, liver tumors, neuroblastoma, sacrococcygeal teratoma, ovarian tumor and chest wall ewing's tumor in Master class in pediatric surgical oncology, 1–4 February 2017, JIPMER, Auditorium, Puducherry
18. Tumor board for case discussions, Masterclass in Pediatric Surgical Oncology, 1–4 February 2017, JIPMER, Auditorium, Puducherry

19. Public lecture and panel discussion “Child with Birth defect, Mother, Family and Society”, Public Lecture Series, AIIMS, 7 December 2016, Jawahar Lal Auditorium, AIIMS, New Delhi

Shilpa Sharma: 11

1. Pediatric oncologic crisis: A challenging brawl! 10th SIOP Asia Congress 2016, 25–28 May 2016, Presidential Building of the Russian Academy of Science, Moscow
2. Abdominal and pelvic trauma, ATLS Provider Course, 16 February 2017, PGIMER, Dr RML Hospital, New Delhi
3. Surgical skills station, ATLS Provider Course, 16 February 2017, PGIMER, Dr RML Hospital, New Delhi
4. Interactive lecture microteaching sessions, ATLS Instructor Course, 27 February 2017, All India Institute of Medical Sciences, New Delhi
5. Initial assessment teaching demonstration, ATLS Instructor Course, 28 February 2017 AIIMS, New Delhi
6. Musculoskeletal trauma assessment and management, ATLS Instructor Course, 28 February 2017, AIIMS, New Delhi
7. Initial assessment, ATLS Instructor Course, 28 February 2017, AIIMS, New Delhi
8. Initial assessment and management demonstration, ATLS Provider Course, 2 March 2017, AIIMS, New Delhi
9. Thoracic trauma, ATLS Provider Course, 2 March 2017, AIIMS, New Delhi
10. X-ray identification of thoracic trauma, ATLS Provider Course, 2 March 2017, AIIMS, New Delhi
11. Initial assessment skills station, ATLS Provider Course, 4 March 2017, AIIMS, New Delhi

Anjan Dhua: 1

1. The costly oops! Surgical diagnosis not to miss, Pediatric Conference of North India, 3 December 2016, India Habitat Centre, Delhi

Prabudh Goel: 1

1. Renal Tumors in Children—An Update, 2nd Deccan Course in Pediatric Urology, 22 January 2017, Goa

Vishesh Jain: 2

1. Foreign body bronchus, 3rd International APSB Congress and 6th FAPSS Conference, 11 December 2016, BSMMU University, Dhaka, Bangladesh
2. Rigid bronchoscopy in children, 12th PESICON, 2017, 17 February 2017, Vishakapatnam

Oral papers/posters presented: 45

1. Mittal D, Agarwala S, Bakhshi S, Srinivas M, Bajpai M, Bhatnagar V, Gupta DK. Clear cell sarcoma of Kidney (CCSK): A single center experience of therapeutic outcomes. 53rd Annual Congress of Japanese Society of Pediatric Surgeons & 24th Congress of Asian Association of Pediatric Surgeons, 24–26 May 2016, Fukuoka, Japan.
2. Wari MN, Iyer VK, Agarwala S, Chattapadhyay PP, Bakhshi S, Sharma A, Dinda AK, Gupta SD, Mathur S, Sreenivas V, Loss of heterozygosity at 11p13, 11p15 and its correlation with histopathology and outcome in Wilms Tumor, 53rd Annual Congress of Japanese Society of Pediatric Surgeons & 24th Congress of Asian Association of Pediatric Surgeons, 24–26 May 2016, Fukuoka, Japan.
3. Wari MN, Iyer VK, Agarwala S, Chattapadhyay PP, Bakhshi S, Sharma A, Dinda AK, Gupta SD, Mathur S, Sreenivas V, Ahmed A, Vallonthaiel AG, Glypican 3 as a novel marker of prognosis in Wilms tumor 53rd Annual Congress of Japanese Society of Pediatric Surgeons & 24th Congress of Asian Association of Pediatric Surgeons, 24–26 May 2016, Fukuoka, Japan.
4. Ahmad A, Agarwala S, Iyer VK. MicroRNA (miRNA) expression analysis of whole genome of Wilms Tumours 53rd Annual Congress of Japanese Society of Pediatric Surgeons & 24th Congress of Asian Association of Pediatric Surgeons 24–26 May 2016, Fukuoka, Japan.
5. Sharma S, Gupta DK, Scrutinizing early perioperative outcome of Primary Posterior sagittal anorectoplasty for Anorectal malformation without diversion, 23rd International Meeting of the Pediatric Colorectal Club, 12 June 2016, Prague, Czech Republic
6. Mitra A, Agarwala S, Rao DN, Bakhshi S, Dinda AK, Bajpai M, Bhatnagar V, Srinivas M, Tyagi A, Talukdar A. Defining the role of T-regulatory cells and cytokines in tumor microenvironment in Wilms Tumor, 17th European Congress of European Pediatric Surgery Association 15–18 June 2016, Università Delgi Studi, Milano, Italy.

7. Dey S, Gundapaneni S, Agarwala S, Srinivas M, Bhatnagar V. First year following discharge after surgery for esophageal atresia, 17th European Congress of European Pediatric Surgery Association, 15–18 June 2016, Università DelgiStudi, Milano, Italy.
8. Sharma S, Gupta DK. Diversities of H-type anorectal malformations, a rare variant of the krickenbeck classification, 29th International Symposium on Pediatric Surgical Research, 8–10 September 2016, University Hospital Frankfurt, Frankfurt
9. Gupta A, Sharma S, Jain V, Agarwala S, Srinivas M, Bajpai M, Bhatnagar V, Gupta DK. Validity of waterston classification in babies with esophageal atresia and tracheo, esophageal fistula, 29th International Symposium on Pediatric Surgical Research, 8–10 September 2016, University Hospital Frankfurt, Frankfurt
10. Patcharu R, Sharma S, Jain S, Yadav DK, Bal CS*, Gupta DK. Pyeloplasty performed for antenatally diagnosed asymptomatic unilateral hydronephrosis dueto pelvi ureteric junction obstruction shows significant postoperative renal function recovery, 29th International Symposium on Pediatric Surgical Research, 8–10 September 2016, University Hospital Frankfurt, Frankfurt
11. Gupta A, Jain V, Sharma S, Yadav D, Gupta DK. Congenital diaphragmatic hernia with hepatopulmonary fusion, a rare and lethal association, 42nd IAPSCON 2016, from 29th September to 2nd October 2016, Agra
12. Gupta A, Jain V, Sharma S, Yadav D, Gupta DK. Outcomes of Surgery for Hypospadias: Correlation with Age, Severity and Surgical Strategy employed, 42nd IAPSCON 2016, from 29th September to 2nd October 2016, Agra
13. Ranjan A, Sharma S, Jain V, Yadav DK, Gupta DK. Multilocular cystic Nephroma: A rare cystic variant tumor of the Kidney, 42nd IAPSCON 2016, from 29th September to 2nd October 2016, Agra
14. Ranjan A, Sharma S, Jain V, Yadav DK, Gupta DK. Treatment of Complete pouch colon by Pouch Coloplasty and Concomitant primary pull through, 42nd IAPSCON 2016, from 29th September to 2nd October 2016, Agra
15. Sharma K, Jain V, Yadav DK, Sharma S, Gupta DK. Changing trends in presentation of children with Posterior urethral valve and their prognosis, A comparative study, 42nd IAPSCON 2016, from 29th September to 2nd October 2016, Agra
16. Mittal D, Bhatnagar V, Agarwala S, Srinivas M, Jana M, Gupta AK, Das N, Singh M.K. Pre-operative hepatic artery resistive index is a non-invasive predictive indicator of prognosis in biliary atresia, 42nd Annual Conference of Indian Association of Pediatric Surgeons UC Chakravorty Award session, from 29th September to 2nd October 2016, Agra.
17. Gupta A, Dhua AK, Agarwala S, Bhatnagar V. Pelvi, ureteric junction obstruction with abnormal crossing vessel: a ten years' experience, 42nd Annual Conference of Indian Association of Pediatric Surgeons. From 29th September to 2nd October 2016, Agra. **Best paper award**
18. Dey S, Agarwala S, Srinivas M. Bhatnagar V. Effect of factors on the one year survival after discharge in patients with esophageal atresia with or without trachea-esophageal fistula, 42nd Annual Conference of Indian Association of Pediatric Surgeons from 29th September to 2nd October 2016, Agra.
19. Sengar M, Gupta CR, Jain V, Mohta A. Isolated Incontinent Female Epispadias: incorporating Bladder neck reconstruction in repair, our experience with six cases-42nd IAPSCON 2016 from 29th September to 2nd October 2016, Agra
20. Sharma S, Bahnot R, Deka D, Bajpai M, Gupta DK. Impact of Fetal Counselling on Outcome of Antenatal Congenital Surgical Anomalies, WOFAPS 2016, 8–12 October 2016, Washington DC
21. Sharma S, Sinha A, Gupta DK. Evaluation of the surgical fate following antenatally detected hydronephrosis due to pelvi-ureteric junction obstruction, WOFAPS 2016, 8–12 October 2016, Washington D.C.
22. Sharma S, Gupta DK. How long should one follow up children following Pyeloplasty, for congenital pelviureteric junction obstruction? WOFAPS 2016, 8–12 October 2016, Washington DC
23. Vithana H, Banerjee DB, Sharma S, Tsang T. Outcome of Stoma Reversal in babies with Necrotising Enterocolitis: Early vs Late closure, WOFAPS 2016, 8–12 October 2016, Washington DC
24. Gupta A, Sharma S, Goel P, Agarwala S, Bajpai M, Srinivas M, Bhatnagar V, Gupta DK, Factors determining mortality in children with esophageal atresia, WOFAPS 2016, 8–12 October 2016, Washington DC
25. Varshney A, Sharma S, Jain V, Gupta DK. Vesicoureteral reflux: Efficacy of medical vs surgical management, WOFAPS 2016, 8–12 October 2016, Washington DC
26. Patcharu R, Sharma S, Jain V, Gupta DK. Outcome of unilateral pyeloplasty as a function of age at surgery and differential renal function at time of surgery, WOFAPS 2016, 8–12 October 2016, Washington DC
27. Banerjee S, Patcharu R, Sharma S, Gupta DK Surgical safety practices in pediatric surgery operating room in a tertiary care hospital: Role of the scrub nurse, WOFAPS 2016, 8–12 October 2016, Washington DC
28. Vithana H, Banerjee DB, Sharma S, Tsang T. Outcome of Stoma Reversal in babies with Necrotising Enterocolitis Early vs Late closure, WOFAPS 2016, 8–12 October 2016, Washington DC

29. Yadav DK, Samie AU, Acharya SK, Bagga D. Does careful application of Pediatric Appendicitis Score (PAS) and emergency ultrasonography affect the outcome of suspected cases appendicitis in Indian children? WOFSAAPS 2016, 8–11 October 2016, Washington DC
30. Agarwala S, Srinivas M, Bakhshi S, Jana M, Bhatnagar V. Long term outcome of children with wilms tumor having inferior venacaval thrombus (IVC-TH). 48th Annual Conference of the International Society of Pediatric Oncology (SIOP), 19–22 October Convention Centre Dublin, Ireland
31. Dhua A, Agarwala S, Bhatnagar V. Problem case of a renal mass presented in the Problem cases Tumor Board of IPSO 48th Annual Conference of the International Society of Pediatric Oncology (SIOP), 19–22 October 2016, Convention Centre, Dublin, Ireland
32. Kumar K, Agarwala S, Bhatnagar V, Bajpai M, Urodynamic abnormalities in follow-up patients of sacrococcygeal teratomas 48th Annual Conference of the International Society of Pediatric Oncology (SIOP), 19–22 October Convention Centre, Dublin, Ireland
33. Gupta A, Agarwala S, Dhua A, Srinivas M, Bhatnagar V. Isosexual precocious puberty in girls due to juvenile granulosa cell tumor of the ovary, 48th Annual Conference of the International Society of Pediatric Oncology (SIOP), 19–22 October Convention Centre, Dublin, Ireland
34. Khanna V, Agarwala S, Panda SS, Bakhshi S, Jana M, Gupta AK, Srinivas M, Bajpai M, Bhatnagar V, Gupta DK. Outcome of pulmonary metastasectomy in pediatric solid tumors, 48th Annual Conference of the International Society of Pediatric Oncology (SIOP), 19–22 October Convention Centre, Dublin, Ireland
35. Dhua A, Agarwala S, Bakhshi S, Jana M, Srinivas M, Bhatnagar V. Irinotecan as salvage therapy for recurrent hepatoblastoma, 48th Annual Conference of the International Society of Pediatric Oncology (SIOP), 19–22 October Convention Centre, Dublin, Ireland
36. Soni D, Agarwala S. Problem case of a renal mass presented in the Problem cases Tumor Board of IPSO, 48th Annual Conference of the International Society of Pediatric Oncology (SIOP), 19–22 October Convention Centre, Dublin, Ireland
37. Mitra A, Agarwala S, Bakhshi S, Biwas B, Srinivas M, Bajpai M, Jana M, Bhatnagar V, Gupta DK. Evaluating urologic outcomes in survivors of rhabdomyosarcoma bladder Prostate: 14 years of experience from a Tertiary Care Center, 48th Annual Conference of the International Society of Pediatric Oncology (SIOP), 19–22 October Convention Centre, Dublin, Ireland
38. Cayrol J, Sullivan M, Angela TL, Malogolowkin M, Oneil A, Rangaswami A, Aronson D, Weeda V, Veintemilla G, Davidson A, Czauderna P, Agarwala S. SIOP, PODC adapted treatment recommendation for hepatoblastoma in low-middle income settings, 48th Annual Conference of the International Society of Pediatric Oncology (SIOP), 19–22 October Convention Centre, Dublin, Ireland
39. Bakhshi S, Agarwala S et al. Progressive pediatric solid tumors other than bone sarcomas benefit from metronomic chemotherapy A subgroup analysis from a double blind Placebo controlled randomized study, 48th Annual Conference of the International Society of Pediatric Oncology (SIOP), 19–22 October Convention Centre, Dublin, Ireland
40. Agarwala S, Dhua AK. Problem case, 48th Congress of the International Society of Pediatric Oncology (SIOP), 19 October 2016, Convention Centre, Dublin
41. Soni D, Agarwala S, Bakhshi S, Biwas B, Bisoi AK, Srinivas M, Bajpai M, Jana M, Bhatnagar V, Gupta DK. Long term outcome of children with wilms tumor having inferior venacaval thrombus (IVC-TH), 48th Congress of the International Society of Pediatric Oncology (SIOP), 19 October 2016, Convention Centre, Dublin
42. Murali D, Goel P, Sharma R, Rajeshwari S, Bajpai M. Laparoscopic Removal of Bilateral Pheochromocytoma Virtues of Approach, Annual Conference of Delhi Chapter of IAPS, 12–13 November 2016, Kalawati Saran Children's Hospital, Lady Hardinge Medical College, Delhi
43. Gupta A, Goel P, Bajpai M. Santulli's type Urinary Diversion Dual Salvage in a Refluxing System, Annual Conference of Delhi Chapter of IAPS, 12–13 November 2016, Kalawati Saran Children's Hospital, Lady Hardinge Medical College, Delhi. **Best paper award**
44. Sharma K, Goel P, Khanna P, Bajpai M. Laparoscopic Management of Intra-Abdominal Tumors, Feasible or Not? Annual Conference of Delhi Chapter of IAPS, 12–13 November 2016, Kalawati Saran Children's Hospital, Lady Hardinge Medical College, Delhi. **Third prize in oral presentation**
45. Sharma S, Subramanian A, Albert V, Gupta DK. Estimation of early circulating peripheral hematopoietic progenitor cells (hpc) following trauma, 29th International Symposium on Pediatric Surgical Research, 8–10 September, 2016. University Hospital Frankfurt, Frankfurt

RESEARCH

Funded projects

Ongoing

1. Establishing guidelines for fetal counselling for surgical congenital anomalies, Shilpa Sharma, DBT, 3 years, 2014–17, Rs. 39.76 lakhs
2. Effect of curcumin and its combination with piperine in experimentally induced liver fibrosis in rats, A comparative analysis, Shilpa Sharma, AIIMS, 2 years, 2016–2018, Rs. 5 lakhs
3. Reference range of serum alpha feto protein in children below three years of age, Devendra Kumar Yadav, AIIMS, 2015–2017, Rs. 2.3 lakhs
4. Role of cortical transit time on MAG3 scintigraphy in children with PUJ obstruction, Vishesh Jain, AIIMS, 2015–17, Rs. 1.65 lakhs
5. Role of plasma renin activity in predicting renal damage in patients with neurogenic bladder and its correlation with existing parameters of renal damage, Prabudh Goel, AIIMS, 2016–2018, Rs. 4.8 lakhs
6. To study the association of ACE I/D & AT type II receptor gene polymorphism in the aetiopathogenesis of congenital hydronephrosis with respect to RAS (renin angiotensin system) activation & clinical response, M Bajpai, CSIR, 2013–16
7. A study on the role of afferent signaling mechanisms in the urothelium and their relationship with local inhibitory effects of disease modifying agents with respect to neuromorbidity of urinary incontinence, M Bajpai, DBT, 2013–2016
8. A study on the role of afferent signaling mechanisms in the urothelium and their relationship with local inhibitory effects of disease modifying agents with respect to neuromorbidity of urinary incontinence, M Bajpai, DBT, 2013–2016

Completed

1. Exploring global methylation patterns in wilms tumor, A pilot study, S. Agarwala, AIIMS, 2 years, 2015–2016, Rs. 5 lakhs
2. Role of bone marrow mononuclear cells and renal stem cells in renal preservation in obstructive renopathy. An experimental study in mice. Shilpa Sharma, AIIMS, 2 years, 2013–2015, Rs. 5 lakhs

Departmental projects

Ongoing

1. Comparison of high spermatic vessel ligation, low spermatic vessel ligation of rat testis
2. Evaluation of interstitial cells of cajal, like cells (ICC-LC) and histopathology in congenital pelviureteric junction obstruction and their correlation with intraoperative findings
3. Button battery ingestion in children, our experience in the recent past
4. Prospective comparative cohort study of operated cases of choledochal cyst undergone hepaticoduodenostomy and hepaticojejunostomy
5. Assessment of long term postoperative outcomes of anorectal function in patients with anorectal malformations, using anorectal manometry
6. Long term outcome of neuroblastoma: Search for prognostic factors in a developing country, An ambispective study
7. Assessment of renal function in children with unilateral non-syndromic wilms' tumor, an ambispective control study.
8. Detecting Vesicoureteral reflux in children using electrical impedance tomography, a non-invasive medical device
9. Long term outcome of hypospadias repair.
10. Evaluation of renal function, renal tracts and bladder function in patients with posterior urethral valves and their correlation with age at valve fulguration.
11. Long term outcome of esophageal replacement
12. Retrospective study of the factors that affect the long-term outcome of operated cases of hypospadias
13. A prospective study of the short term outcomes of operated cases of distal penile hypospadias in terms of immediate and early complications.
14. Evaluation of a modified technique utilizing the principles on Byar's and Braca's advancement of prepuce in the staged management of proximal hypospadias.
15. Evaluation of a modified technique utilizing the principles of costal cartilage excision and providing support with an autologous free rib graft in chest wall deformities.

16. Factors for on table assessment of poorly functioning hydronephrotic kidneys (<10% function) leading to pyeloplasty or nephrectomy.
17. Vitamin D and parathormone levels in patients with neurogenic bladder and its correlation with existing parameters of renal damage.
18. Normative assessment of pediatric penile length in Indian population
19. MR evaluation of intrahepatic biliary ductular architecture in patients of EHBA after Kasai's portoenterostomy
20. Correlation of hepatic artery resistive index with portal pressure and serum nitric oxide levels in patients with EHPVO

Completed

1. An audit on presentation and outcome of patients having biliary atresia
2. Assessment of long term urological outcomes in children with sacrococcygeal teratoma.
3. Do anatomical landmarks in a hypospadiac glans match with those of a normal glans?
4. Assessment of long term urological outcomes in children with sacrococcygeal teratoma
5. Do anatomical landmarks in a hypospadiac glans match with a normal glans?

Collaborative projects

Ongoing

1. Role of cortical transit time on MAG3 scintigraphy in children with PUJ obstruction (Nuclear Medicine)
2. To assess the chromosomal variations and its functional relevance vis-à-vis Hypospadias patients through genotyping and transcriptomics array (Advanced Molecular Science Research Center, KGMU, Lucknow)
3. Association between Hypospadias and variants in genes related to sex hormone biosynthesis and metabolism, embryonic development and phospholipase D signaling pathway (Advanced Molecular Science Research Center, KGMU, Lucknow)
4. Reference range of serum alpha fetoprotein in Indian children below three years of age (Reproductive Biology)
5. Hypospadias outcome with long term database (HOLD) (University of McMaster, Toronto, Canada)
6. Role of shear wave elastography in diagnosis, prognostication and follow up of neonatal/infantile cholestatic liver disease (Radiology)
7. Correlation of hepatic artery resistive index with portal pressure and serum nitric oxide levels in patients with extrahepatic portal vein obstruction (Radiology, Biochemistry)
8. MR evaluation of intrahepatic biliary ductular architecture in patients of biliary atresia after Kasai's portoenterostomy (Radiology)
9. A descriptive study to assess the developmental status of children operated for EA and TEF along with care giver's stress, their quality of life and coping abilities at AIIMS (College of Nursing)
10. Application of diffusion MRI in detection of multifocal hepatoblastoma and role on VEGF in multifocal and metastatic hepatoblastomas (Radiodiagnosis, Pathology)
11. Detection of beta catenin gene mutations in hepatoblastoma (Laboratory Oncology, Pathology)
12. Role of Notch and Wnt signaling pathways in hepatoblastoma (Pathology)

Completed

1. Knowledge, stress and coping abilities of parents of children below 18 years having congenital adrenal hyperplasia (College of Nursing)
2. Primary definitive procedure versus conventional three staged procedure for management of low anorectal malformations in females: A randomized clinical trial (Biostatistics)
3. The ratio of preoperative and postoperative levels of serum bilirubin and alkaline phosphatase as simple markers to predict early outcome post Kasai's portoenterostomy (Pathology)
4. To study the evaluation of appendicular stump after appendectomy using various energy sources in rats (Pathology)
5. To study the evaluation of neuronal markers in the colon of patients with persistent constipation following pull through for hirschsprung's disease (Pathology)
6. To estimate renal reserve in different grades of vesicoureteric reflux (Nuclear Medicine)
7. Exploring global methylation pattern in wilm's tumor. A pilot study (Laboratory Oncology, Pathology)
8. Comparative evaluation of F18-FDG PET/CT vs conventional imaging for staging of pediatric rhabdomyosarcomas (Nuclear Medicine)

9. Role of initial percutaneous nephrostomy in very poorly functioning pelviureteric junction obstruction, nuclear medicine (Radiodiagnosis)
10. To estimate renal reserve in children with different grades of vesicoureteric reflux (Nuclear Medicine)
11. To study the effectiveness of video assisted teaching on knowledge and practice of clean intermittent catheterization in children (College of Nursing)
12. Bladder exstrophy epispadias complex: A study on histomorphology of detrusor with respect to bladder growth as related to upper and lower urinary tract outcomes (Pathology, Nuclear Medicine, Radiology)

PUBLICATIONS

Journals: 29

Abstracts: 8

PATIENT CARE

Out Patient Department: Daily

Various specialty clinics run by the Department and faculty:

Monday:	Hydrocephalus Clinic (Afternoon)
Tuesday:	Antenatal Diagnosis and follow up (Forenoon)
Wednesday:	Pediatric Urology Clinic (Afternoon) Craniosynostosis Clinic (Afternoon)
Thursday:	GI Hepatobiliary (Forenoon) Pediatric Urology, Follow up Clinic (Afternoon) IRCH: Pediatric Solid Tumor Clinic (Afternoon) Pediatric Solid Tumor Clinic (Main OPD)
Friday:	Pediatric Thoracic Surgery Clinic (Forenoon) Pediatric Urology Clinic (Afternoon)
Saturday:	Pediatric Urology, Intersex and Hypospadias (Forenoon)

Facilities available

- Intensive care unit for neonatal surgical patients
- High dependency area for Pediatric Surgical patients
- Computer based Urodynamic and uroflowmetry study
- Computer based Anorectal manometry
- Computer based Esophageal manometry
- 24 hours pH monitoring for Gastroesophageal reflux
- Impedence Manometry for Gastroesophageal reflux

Community services

- Weekly outpatient clinic and operative session at CRHSP, Ballabgarh

Attendance in OPD and Specialty clinics

	New cases	Old cases	Total
General OPD	8393	14606	22999
Hydrocephalus clinic	9	97	106
Pediatric urology clinic (W/T/F)	339	3455	3794
Intersex clinic (DSD)	23	110	133
Pediatric Solid tumour clinic (IRCH)	147	1555	1702
Tumour clinic	74	659	733
Craniosynostosis clinic	Nil		
CRHSP, Ballabgarh	1658 (01.0616 – 31.0317)		

Admissions

AB5 ward: 2306 (1342 Long admissions and 964 short admissions)

AB5/ICU: 158

Surgical Procedures

Main OT	Major procedures:	1584	Minor procedures:	623
OPD procedures	Total:	854	Biopsies in OPD:	71
CRHSP, Ballabgarh	Minor cases:	159	OPD procedures:	357

Special Investigations

Urodynamic study:	323	Uroflowmetry:	613
Anorectal manometry:	77	Esophageal manometry:	3

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor D.K. Gupta during 3rd Annual Conference of Association of Pediatric Surgeons of Bangladesh and 6th FAPSS Conference Bangabandhu Sheikh Mujibur Rahman Medical University, Dhaka, 11–12 December 2016: (i) delivered inaugural function speech as President of SAARC Association of Pediatric Surgeons and President World Federation of Association of Pediatric Surgeons; (ii) Chaired sessions on neonatal surgery and Pediatric Urology; (iii) Judge to evaluate best scientific paper; (iv) delivered valedictory address; (v) Clinical round at NS-ICU, Department of Pediatric Surgery; Visiting Professor, Department of Pediatric Surgery, Plovdiv University Bulgaria, 15–18 November 2016; at Ibero-American Congress of Ped Surgery & Pre Congress Courses. Lima, Peru, 22–26 August 2016: (i) conducted pre-congress Course on Esophagus, 21–22 August 2016; (ii) participated as President, WOFAPS in Business Board meeting of Presidents of various Associations of South America; (iii) Guest speaker at inaugural and valedictory functions; (iv) international faculty to participate in Panel discussions during scientific sessions; (v) Executive Board of the Ibero-American Association of Pediatric Surgery, South America, instituted “Devendra Gupta Gold Medal” in honor of high international standing and scientific contributions made academically to the congress in Lima; at the 5th World Congress of Pediatric Surgery, Washington DC, USA 8–11 October 2016 as the President of the World Federation of Association of Pediatric Surgeons: (i) delivered Presidential inaugural address, (ii) Delivered welcome address during the welcome reception of the world Congress, (iii) chaired Executive Board meeting of World Federation of Association of Pediatric Surgeons, (iv) chaired scientific session—related to clinical and research free papers, (v) moderated session on “How to Bridge the gap in children of esophageal atresia and trachea esophageal fistula in newborns”; (vi) attended Publication Committee meeting as member Scientific Committee to select manuscripts for publication in Pediatric Surgery International Journal, (vii) Chaired Meeting of Council of delegates—attended by the Presidents of different Pediatric Surgical Associations across the world, (viii) addressed Presidents of various associations during Presidential Reception of WOFAPS, (ix) addressed invitees at National Children Hospital, Washington DC, on the impact of world Congress of Pediatric surgery, and future progress of Pediatric Surgery; Visiting Professor, University of Texas, Texas Tech Health Sciences Center, Lubbock Texas USA, 13–15 October 2016: participate in postgraduate teaching clinics, and Departmental Trauma Conference, moderated interactive teaching session of the Department of Surgery; at International Symposium of Pediatric Surgical Research (ISPSR-2016), 8–10 September 2016, University of Frankfurt, Germany: was guest faculty and member scientific committee of international symposium, chaired scientific session; at Annual meeting of the College of Surgeons of Sri Lanka held in Colombo from 17–20 August 2016. as Chief Guest and President of the World Federation of Associations of Pediatric Surgeons (WOFAPS) during the convocation and the Inauguration ceremony; Visiting Professor, University of Cairo, Maadi Hospital, Cairo Egypt, 8–10 June 2016, delivered guest lectures, conducted pediatric surgery clinics, ward rounds and operative sessions; Chaired session on Hirschsprung’s disease at University of Minia, International Conference of Pediatric Surgery, Egypt, 5–8 June 2016; 23rd International meeting of Pediatric Colorectal Club, Prague, 11–13 June 2016: Chaired scientific session on ARM; 33rd European Congress of association of pediatric Surgeons, Milan, 15–18 June 2016, As President of WOFAPS, Presentation of WOFAPS, Life Time achievement award to Prof Michael Hollworth, the Professor and head, Dept. of Pediatric surgery, University of Graz, Austria; Visiting Professor to Children Hospital, Shanghai, China, during opening of New Children Hospital, Shanghai, for case discussions, ward rounds and interaction with faculty, 20–21 May 2016; 33rd Japanese Society of Pediatric Surgery, Asian Association of Pediatric surgeons and the World federation of Association of Pediatric Surgeons, 22–24 May, 2016, Fukuoka, Japan, as Guest of Honour; International Guest faculty and Guest of Honour during the SIOP Asia Congress in Moscow Russia, 25–28 May 2016; Chief Guest to Inaugurate Chittagong Research Institute of Child Surgery, (CRICS), and CME Program, Chittagong Club, Bangladesh, 29–31 March, 2017; Guest of Honour, 42nd Annual Conference of Indian Association of Pediatric Surgeons, Agra, 28 September–2 October 2016, Agra; Conferred Medal and Citation during Annual Conference of West Bengal Association of Pediatric Surgeons, Kolkata, 10 December 2016; Chief Guest during the Function held by Vishva Hindu Parishad to distribute medical appliances to the handicapped persons, New Delhi, 5 February 2017

Professor V. Bhatnagar was Chairperson, Adjudication Committee for intussusception, Rota Virus Trial-Phase III, DST, Govt. of India. 2014–2016; Chairperson, Adjudication Committee for rare side effects, Rota Virus Trial, DST, Govt. of India.

2016 to date; Member, Technical Advisory Group, The Inclen Trust International for Multisite Hospital Based Intussusception and AEFI Surveillance Program in India, 2017; Member, Health learning research and practice. Med know Editorial Meet, New Delhi, 2016; Live demonstration of repair of classical bladder exstrophy in a boy. 42nd Annual Conference of Indian Association of Pediatric Surgeons, Agra, 29 September–2 October 2016; Member Board of Studies, Department of Pediatric Surgery, Sanjay Gandhi Post Graduate Institute of Medical Sciences, Lucknow, since February 2011; Governing Council Member, Chacha Nehru Bal Chikitsalaya, New Delhi since 2012; Editorial Board Member, Indian Journal of Pediatrics since 2004; Member, Editorial Board, Journal of Indian Association of Pediatric Surgeons since 1996; Advisory Panel Member, National Academy of Medical Sciences since 2008

Professor Minu Bajpai was Chairman, Cafeteria Management Committee; Member: O.T. Management OT (Users) committee convened under the Chairmanship of Prof. S. C. Sharma, Head of ENT & Faculty In-Charge, Main OT to discuss various issues specifically pertaining to Infection Control Practices in Main OT; Member: Technical Specification/Selection Committee to review the review the selection/remarks to evaluate pre-qualification document, see the representation for further decision and to modify/amend existing specification; Member: Redevelopment of Residential Colonies at West Ansari Nagar & Ayur Vigyan Nagar Campuses of AIIMS, New Delhi – 1st meeting of Empowered Committee; Member: Technical Specification/Selection Committee; Faculty: Introductory briefing meeting for the Health Secretary & 213th meeting of the Standing Finance Committee; Faculty: To Discuss scientific programme and other related issues for the 2nd AIIMS-French Academy of Medicine which will be held at Toulouse, France; Chairman: Purchase of Digital Flat Panel under cauch Fluroscopy System under buy back basis for the Department of Radio-Diagnosis (Main) under two bid systems; Chairman: ACR review committee meeting in respect of Scientist cadre.

Professor Sandeep Agarwala was Nominated Executive Board Member for Asian Association of Pediatric Surgeons; Section Editor for the Indian Journal of Pediatrics; Chairperson of the Surgical Oncology Section of the Indian Association of Pediatric Surgeons; Vice Chairman of the Resource Challenged Nations study group of SIOPEL; Co-Chairman 60th Annual Report Committee of AIIMS; Co-Chairman Faculty coordination committee for Pulse 2016, AIIMS; Secretary AIIMSONIANS- The alumni association of AIIMS; Member of Committee to consider PhD reforms at AIIMS; Member, Committee to frame guidelines of seats/posts of JR(MD/MS/MHA) and SR (DM/MCh) and SR (Non-DM/MCh) at AIIMS; Member OT Management Committee, AIIMS; Member AIIMS archives committee; Member, Suture selection committee, AIIMS; Member standing committee to regulate media reporting and disclosure of details relating to children; Member Committee for Diamond Jubilee celebrations of AIIMS; Member, Committee for selection of Shri Mohan Lal Wig Medal for Clinical Research; Course Instructor for Surgical Oncology Course, Conducted by International Society of Pediatric Surgical Oncology (IPSO), and the European Board of Examination, and European society of pediatric Surgery prior to annual congress of the European society of pediatric Surgery; Course Instructor for Master class in Pediatric Surgical Oncology, Conducted by International Society of Pediatric Surgical Oncology (IPSO), and the European Board of Examination, and European society of pediatric Surgery

Dr Shilpa Sharma was Secretary of Research Section of Indian Association of Pediatric Surgery 2015–2017; Editorial board member of Pediatric Surgery International; Executive Council member of the International Society of Hypospadias and DSD 2013–17; Executive Committee member of World Federation of Association of Pediatric Surgeons (WOFAPS) 2016–2019. (representative from Asia)

Dr Vishesh Jain visiting faculty to Department of Pediatric Surgery, University of Plovdiv, Bulgaria in November 2016

VISITING SCIENTIST

1. Prof. Tahmina Banu, Chittagong Medical College Hospital, Bangladesh
2. Dr Sumit Dave, London
3. Dr Azad Mathur, Norwich, UK
4. Dr Alastair JW Millar
5. Hon'ble Dr. Asha Seth, Canada
6. Dr Arun Seth, Canada
7. Dr Prem Puri, Ireland
8. Dr Warburton, USA

9.29. Pathology

Professor and Head

Subrat K. Panda

Professors

Chitra Sarkar

A.K. Karak

M.C. Sharma

Vaishali Suri

Manoj K. Singh

Ruma Ray

Venkateswaran K. Iyer

S. Datta Gupta

A.K. Dinda

Sandeep R. Mathur

Associate Professors

Sudheer Arava

Deepali Jain

Geetika Singh

Prasenjit Das

Asit Ranjan Mridha

Assistant Professors

Rajni Yadav

Saumya Ranjan Mallick

Seema Kaushal

Adarsh Barwad

Shipra Aggarwal

Prashant Ramtake

Aanchal Kakkar

Group A Officers

Himender Singh Tomar

Shankar Ram Arya

HIGHLIGHTS

In the financial year 2016–17, we have introduced several facilities in the **Pathology** department

- i. Slide Scanner
- ii. Digital PCR
- iii. Tissue Microarray

In research we have faculty members working on Virtual Education and Skill Development, Molecular Virology of Hepatitis, Intestinal Inflammatory Diseases, Nano Technology, Lung Cancers, Lymphomas, Gliomas and their molecular characterisation and metabolic syndromes.

Hepatitis E Virus (HEV) egress and successful completion of its transcriptome, long non-coding RNA and MicroRNA analysis has been done. In addition, a new model for metabolic syndrome using transcriptomics and metabolomics is developed.

We have started giving integrated diagnosis of brain tumours incorporating molecular markers as per WHO 2016 classification.

In lung cancer molecular testing is performed through research projects, and during the last year approximately 250 patients of lung cancer has been tested for EGFR mutation and ALK rearrangement.

FISH karyotyping for refractory diffuse large B cell lymphoma for double hit and triple hit status is started as a part of research project. Epstein Barr Virus *in situ* Hybridisation is also started for difficult cases of Hodgkin lymphomas.

Two new faculty members have joined the department and the upgrading of surgical pathology, cytopathology and teaching methodology are in progress.

EDUCATION

Postgraduate

MD students: 26

Senior Residents: 19

PhD students: 6

Short term training

1. Dr Lt Col Pragya Sharma has completed Long-term training for 24 months from 1 April 2015 to 31 March 2017.
2. Dr Lt Col Samresh Kumar is undergoing Long-term training for 24 months since 29 August 2016.

3. Dr Lt Col Prerna Guleria is undergoing Long-term training for 24 months since 13 December 2016.
4. Dr Sant Prakash has completed short-term training from 5 December 2016 to 4 January 2017.
5. Dr Song Chol Son, Dr Il Chol Kim, Dr Chon Gun Hang and Dr Royong Gon Om underwent short term training for 8 weeks from Korea w.e.f. 8 September 2016 to 30 October 2016.

CMEs/Workshop/Symposia/National and International Conferences

- The department organised the 3rd International Renal Pathology Conference during 10–12 February 2017 which was the apex world event of Renal Pathology Society (RPS) attended by leading experts and delegates from 25 countries.
- We also organised “Nanobiotech 2016”, the first Annual Conference and Workshop of Indian Society of Nanomedicine during 24–26 November 2016.
- CME in Dermatopathology, organised by Dermatopathology Society of India, Department of Pathology at Juniper Hall, India Habitat Centre, Lodhi Estate, and AIIMS, New Delhi, from 18 February 2017 to 19 February 2017.

Lectures delivered

Chitra Sarkar: 26

Ruma Ray: 2

V.K. Iyer: 9

Saumya Ranjan Mallick: 3

Adarsh Wamanrao Barwad: 2

Deepali Jain: 6

Manoj K. Singh: 5

Amit Kumar Dinda: 9

Sudheer Kumar A: 7

Geetika Singh: 5

Seema Kaushal: 3

Sandeep Mathur: 12

S. Datta Gupta: 24

Mehar C. Sharma: 9

Shipra Agarwal: 2

Prasenjit Das: 11

Asit Ranjan Mridha: 3

Vaishali Suri: 5

Chitra Sarkar: 26

1. Revised classification of CNS embryonal tumours (other than medulloblastomas), ISNOCON, 1–3 April 2016, Hyderabad, India
2. Minimal pathology reporting in Indian context, ISNOCON, 1–3 April 2016, Hyderabad, India
3. Molecular pathology in diagnosis and prognostication of CNS tumours, ACOS, 10 April 2016, Delhi, India
4. Molecular subtypes of medulloblastoma, CME in Neuro-Oncology, 25 June 2016, Mumbai, India
5. Minimal pathology reporting, CME in Neuro-Oncology, 25 June 2016, Mumbai, India
6. Diffuse adult gliomas: Approach to diagnosis as per updated 2016 WHO classification, Neuro-Oncology Update, 4–5 September 2016, PGIMER, Kolkata, India
7. Embryonal tumours, WHO 2016: Concepts and classification, Neuro-Oncology Update, 4–5 September 2016, PGIMER, Kolkata, India
8. Genetics of paediatric low grade gliomas, Neuro-Oncology Update, 4–5 September 2016, PGIMER, Kolkata, India
9. Current histomolecular approach to diagnosis of adult and paediatric gliomas: Clinical implications, CME on Brain Tumours, 17 September 2016, Rainbow Hospital, Agra, India
10. Introduction to the updated 2016 WHO classification of CNS tumours, CME on Brain Tumours, 17 September 2016, Rainbow Hospital, Agra, India
11. Revised classification of medulloblastomas and integrated approach to their diagnosis and clinical management, CME on Brain Tumours, 17 September 2016, Rainbow Hospital, Agra, India
12. Updated WHO classification of medulloblastomas: How to implement in routine clinical practice, Annual Conference of ISPN, 1–4 October 2016, NIMHANS, Bangalore, India
13. Exploiting molecular biology for diagnosis and management of gliomas (Keynote address), Annual Conference of Neurosciences Society of India, 19–21 October 2016, NBRC, Manesar, India
14. Approach to diagnosis of CNS tumours with clear cell morphology, November 2016, CME in Neuropathology, 5 November 2016, AIIMS, Bhubaneswar, India
15. Introduction to WHO 2016 classification and revised approach to diagnosis of gliomas, CME in Neuropathology, 5 November 2016, AIIMS, Bhubaneswar, India
16. WHO 2016 classification of embryonal tumours and approach to their diagnosis, CME in Neuropathology, 5 November 2016, AIIMS, Bhubaneswar, India
17. Pathology of drug resistant epilepsy, Neurovision, 6 November 2016, Bhubaneswar, India
18. Impact of WHO 2016 integrated classification of gliomas in clinical practice, Neurovision, 6 November 2016, Bhubaneswar, India

19. Updated WHO 2016 classification of medulloblastoma, Clinical relevance and implementation in routine practice, CME in Neuropathology, 6 November 2016, Bhubaneswar, India
20. Updated WHO 2016 classification of CNS tumours with special reference to gliomas, Delhi Chapter of IAPM, 26 November 2016, SJ Hospital, Delhi, India
21. Revised classification of medulloblastomas and integrated approach to the diagnosis, Pre-conference CME, APCON 2016, 30 November 2016, Sawai Man Singh Medical College, Jaipur, India
22. Medulloblastoma and other embryonal tumours, Annual Conference of NSI, 15–18 December 2016, Chennai, India
23. Gliomas: Updated classification and molecular markers, DNAICON, 4–5 February 2017, India Habitat Centre, New Delhi, India
24. WHO 2016 classification of gliomas: An approach to diagnosis, International Conference on Frontiers in Molecular Diagnostics and Pathology of Human Diseases, Molecular Pathology Association of India, 10–11 February 2017, KIIT University, Bhubaneswar, India
25. Recent WHO classification of gliomas and molecular biology of gliomas, Annual Conference of NSSI, 16–17 February 2017, PGI, Chandigarh, India
26. ISNO guidelines for adult diffuse gliomas (keynote address), Annual Conference of ISNO, 10–12 March 2017, NIMHANS, Bangalore, India

Manoj K. Singh: 5

1. The NPTEL – Medicine Workshop, IIT, Madras, 23 June 2016, IIT, Madras, India
2. Annual Meeting of the Dermatopathology of India, 11–13 November 2016, Department of Histopathology, PGIMER, Chandigarh, India
3. 65th Annual Conference of IAPM and Annual Conference of IAP-ID (APCON-2016), 1–4 December 2016, Department of Pathology, SMS Medical College, Jaipur, India
4. CME in Dermatopathology, Dermatopathology Society of India, 18–19 February 2017, Juniper Hall, India Habitat Centre, Lodhi Estate and AIIMS, New Delhi, India
5. Clinicon-2017, 2nd Annual Conference of Association of Clinical Dermatologists of India (ACDI), 18–19 March 2017, Jaipur, India

S. Datta Gupta: 25

1. The very basics of IBD histology in endoscopic biopsies, Inflammatory Bowel Disease Summit 2016: Optimizing Management of Inflammatory Bowel Disease, 22 April 2016, Hyderabad, India
2. Diagnostic difficulties in IBD: How to read a pathologist's report, Inflammatory Bowel Disease Summit 2016: Optimising Management of Inflammatory Bowel Disease, 22 April 2016, Hyderabad, India
3. Case based study: First presentation of IBD: Reducing the time to diagnosis, Inflammatory Bowel Disease Summit 2016: Optimising Management of Inflammatory Bowel Disease, 23 April 2016, Hyderabad, India.
4. Interpretation of GI biopsies: Introduction, Pre-Conference CME cum Slide Seminar on GI Pathology Odisha APCON 2016, 10 September 2016, Ispat General Hospital (IGH), Rourkela, India
5. Basics of IBD histology, Pre-Conference CME cum Slide Seminar on GI Pathology, Odisha APCON 2016, 10 September 2016, Ispat General Hospital (IGH), Rourkela, India
6. Slide Seminar on GI Biopsies, Pre-Conference CME cum Slide Seminar on GI Pathology: Odisha APCON 2016, 10 September 2016, Ispat General Hospital (IGH), Rourkela, India
7. Celiac disease: Indian perspective, Odisha Chapter Orator: 44th Annual Meet of Odisha Chapter of IAPM: Odisha APCON 2016, 11 September 2016, Ispat General Hospital (IGH), Rourkela, India
8. Introduction to interpretation of liver biopsies, Dr RN Ghosh Memorial CME 2016: 24th Annual Conference of West Bengal Chapter of IAPM, 17 September 2016, NRS Medical College, Kolkata, India
9. Pathology of chronic hepatitis: Grading and staging, Dr RN Ghosh Memorial CME 2016: 24th Annual Conference of West Bengal Chapter of IAPM, 17 September 2016, NRS Medical College, Kolkata, India
10. Histopathology of cholestasis in adults: An approach to histopathological diagnosis, Dr RN Ghosh Memorial CME 2016: 24th Annual Conference of West Bengal Chapter of IAPM, 17 September 2016, NRS Medical College, Kolkata, India
11. Inherited/metabolic liver disease, Dr RN Ghosh Memorial CME 2016: 24th Annual Conference of West Bengal Chapter of IAPM, 17 September 2016, NRS Medical College, Kolkata, India
12. Non-Alcoholic fatty liver disease: An overview, Dr RN Ghosh Memorial CME 2016: 24th Annual Conference of West Bengal Chapter of IAPM, 17 September 2016, NRS Medical College, Kolkata, India

13. Liver fibrosis, Dr RN Ghosh Memorial CME 2016: 24th Annual Conference of West Bengal Chapter of IAPM, 17 September 2016, NRS Medical College, Kolkata, India
14. Some neoplastic diseases: Just for viewing, Dr RN Ghosh Memorial CME 2016: 24th Annual Conference of West Bengal Chapter of IAPM, 17 September 2016, NRS Medical College, Kolkata, India
15. Heart and Science of Pathology, Dr S.N. De Memorial Oration: 24th Annual Conference of West Bengal Chapter of IAPM, 18 September 2016, NRS Medical College, Kolkata, India
16. The very basics of IBD histology in endoscopic biopsies, 37th Annual Conference of Maharashtra Chapter of IAPM: MAPCON 2016, 24 September 2016, D.Y. Patil University School of Medicine, Navi Mumbai, India
17. Circulating tumour cells, International Federation Head Neck Oncologic Societies Global Tour 2016 and 16th Annual National Conference of Foundation for Head and Neck Societies: IHFNOS Delhi 2016 and FHNO 2016, 15 October 2016, New Delhi, India
18. Endometrial dating, Calipath 2016, 21 October 2016, Government Medical College, Kozhikode, India
19. Approach to non-neoplastic lesions of the liver, Calipath 2016, 21 October 2016, Government Medical College, Kozhikode, India
20. Slide Seminar on non-neoplastic lesions of the liver: Calipath 2016, 22 October 2016, Government Medical College, Kozhikode, India
21. Celiac disease: Some lessons learnt, Dr B. K. Aikat Memorial Oration: 65th Annual Conference of IAPM: APCON 2016, 02 December 2016, BM Birla Auditorium, BM Birla Science and Research Centre, Jaipur, India
22. Algorithmic approach to the diagnosis of pancreatic cysts, 65th Annual Conference of IAPM: APCON 2016, 2 December 2016, BM Birla Auditorium, BM Birla Science and Research Centre, Jaipur, India
23. Non-neoplastic lesions of GI tract-pathology PG teaching series, 17 December 2016, All India Institute of Medical Sciences, New Delhi, India
24. Pathology from cells to molecules: A historical perspective from a histopathologist, Prof Thangavelu Memorial Oration: POMP 2017 and 9th Annual CME in Pathology, Kerala Chapter IAPM, 12 February 2017, Government Medical College, Kozhikode, India

Ruma Ray: 2

1. Pathology of cardiac transplant, Indian Society of Organ Transplantation 2016, 4–6 October 2016, PGI-Chandigarh, India
2. Cardiac tumours: Moderator, APCON 2016, 1–4 December 2016, Birla Auditorium, Jaipur, India

Amit Kumar Dinda: 9

1. The molecular diagnostic scenario in India – A view from the coalface, 3rd Diagnostics and the Developing World Conference, 24 January, Brunel University, London, UK
2. Tubulo-Interstitial diseases, 3rd International Renal Pathology Conference, 11 February, AIIMS-Delhi
3. Nano drug delivery system, So many publications and so few drugs, 2nd International Conference on Recent Advances in Nanoscience and Nanotechnology, 19 December, Jawaharlal Nehru University, Delhi, India
4. Regulatory compliance: A challenge for translation of research, Workshop on Innovation Management and Product Commercialisation, 3 March, Institute of Advanced Study in Science and Technology (IASST), Guwahati, India
5. Nanotechnology and vaccine development: The current scenario, Nano India 2017, 15 March, IIT, Delhi, India
6. Regulatory issues in cancer nanomedicine, System Oncology 2017, 10 March, Cochin, India
7. Nanotoxicity and human health: The challenges ahead, National Symposium on “Impact of Emerging Toxic Chemicals on Humans, Plants, Diseases and Sustainable Development” (IETC2016), 27 November, Jamia Hamdard University, Delhi, India
8. Nanomedicine in therapy: The current scenario, 49th Annual Conference of Indian Pharmacological Society, 21 October, PGIMER, Chandigarh, India
9. Nanotechnology interventions in oncology, CME of the International Federation of Head-Neck Societies (IFHNOS), 15 October, Delhi, India

Mehar C. Sharma: 9

1. Study of clinical features, hormonal immuno expression and loss of ATRX/DAXX expression in pancreatic neuroendocrine tumours, IXth ACPN Conference Vth SACH and IXth ACPN Conference, 22–25 March 2017, Kathmandu, Nepal
2. Revised WHO classification of central nervous tumours, CME Programme of PAN e-Network Project Telemedicine, 31 August 2016, AIIMS

3. Revised 2016 classification of lymphoma, CME on Recent Updates in Lymphoma Diagnosis and Management, 11 September 2016, Patna, Bihar
4. Molecular markers of CNS tumours and their impact on revised 2016 WHO classification, The VIII Congress of the Association of Clinical Pathologist of Nepal (ACPN) and the 4th Congress of the SAARC Academy of Cytopathology and Histopathology, 15–18 September 2016, Dharan, Nepal
5. Approach to muscular dystrophies, 65th Annual Conference of IAPM and Annual Conference OF IAP-ID, 30 November–4 December 2016, Sawai Man Singh Medical College, Jaipur, India
6. *CIIOF95-RELA* fusions in supratentorial ependymomas correlate with upregulated NF-κB signalling, VEGF and nestin expression, 11th European Congress of Neuropathology, 6–9 July 2016, Bordeaux, France
7. Slide Seminar: Interesting Case Presentation, 11th European Congress of Neuropathology, 6–9 July 2016, Bordeaux, France
8. Consensus classification and recent advances in ependymomas, 9th Annual Conference of Indian Society of Neurooncology, 10–12 March 2017, NIMHANS, Bangalore, India
9. Molecular biology and genetics of ependymomas, 5th Annual Conference of Neurological Surgeon Society of India, 31 March–2 April 2016, Srinagar, J&K

V.K. Iyer: 9

1. Case presentation: Low grade lymphoma and related lymphoproliferative disorders, 19th International Congress of Cytology, 28 May–1 June 2016, Yokohama, Japan
2. Correlation between cytology and histopathology in CIN-FOGSI, Gynae Oncology Conference, 29–31 July, Goa, India
3. Fine needle aspiration cytology of unusual benign lymphadenopathies mimicking lymphoma and lymphoproliferative disorders, 19th International Congress of Cytology (Symposium), 28 May–1 June 2016, Yokohama, Japan
4. Molecular diagnostics on liquid based cytology of lung cancer, 3rd Oncology Conference, 1 September 2015, ABU DHABI
5. FNAC of paediatric liver tumours, Symposium, IAC, 46th IAC Conference Cytocon 2016, 18–21 November 2016, GMC, Nagpur, India
6. Biopsy and fine needle aspiration diagnosis of paediatric solid tumours (with molecular methods), Paedopath 2016, 21 December 2016, Chennai, India
7. Conventional cervical smear cytology, Diagnosis of benign and precancerous lesions along with problems and pitfalls, 2nd Workshop of Delhi Chapter of Indian Academy of Cytologists, 4 February 2017, LHMC, New Delhi, India
8. Morphologic markers of SIL and HPV and their role in cervical cancer screening, ISCCP Conference, 3–5 March 2017, MAMC, New Delhi, India
9. Technical and morphological aspects of cervical cancer screening using thinprep® liquid based cytology, 11th Annual State Cytology Conference (IAC West Bengal Chapter), 18–19 February 2017, North Bengal Medical College, Siliguri, WB, India

Sudheer Kumar A: 7

1. CPC case based on autopsy pathology, 14th Annual Meeting of International Society for Heart Research (IndianSection), 27–29 January 2017, IGIB, New Delhi, India
2. Vascular lesions of the skin, CME in Dermatopathology, 18–19 February 2017, India Habitat Centre, New Delhi, India
3. Cardiac transplant vasculopathy, APCON 2016, 1–4 December 2016, Birla Auditorium, Jaipur, India
4. Necrobiotic granulomas of the skin, Lecture-APCON 2016, 1–4 December 2016, Birla Auditorium, Jaipur, India
5. Cardiac tumour, Lecture-APCON 2016, 1–4 December 2016, Birla Auditorium, Jaipur, India
6. Dermatopathology quiz and lecture, Annual Meeting Dermatopathology Society of India, 11–13 November 2016, PGI, Chandigarh, India
7. Tumour and tumour like lesions of the heart lecture and poster presentation, SACH and ACPN Conference, 23–25 March 2017, Kathmandu, Nepal

Shipra Agarwal: 2

1. Approach to lymphoid lesions of the skin, 1st Pathology PG Teaching Series (dermatopathology), 10 September 2016, AIIMS, New Delhi

2. Melanotic skin lesions, Glass slide viewing session, Annual Conference of Dermatopathology Society of India, 11–13 November 2016, PGIMER, Chandigarh, India

Saumya Ranjan Mallick: 3

1. Case presentation, 57th Annual Conference of Indian Society of haematology and blood transfusion, 10 November 2016, Birla Auditorium, Jaipur, India
2. Lecture-Invited talk, 1 July 2016, AIIMS, Bhubaneswar, India
3. Lecture, PG Teaching Course, 7 January, AIIMS, New Delhi, India

Geetika Singh: 5

1. Immunofluorescence and masked antigens: A changing scenario, XIIth Annual Conference of IS RTP and 3rd International Renal Pathology Conference, 9 February 2017, AIIMS, New Delhi, India
2. Interesting native biopsy, XIIth Annual Conference of IS RTP and 3rd International Renal Pathology Conference, 9 February 2017, AIIMS, New Delhi, India
3. Pathology of drug toxicity in graft biopsies, Annual Conference of the Indian Society of Organ Transplantation, 7 October 2017, PGIMER, Chandigarh, India
4. Update on glomerular disease, Pathology and beyond, Pan African e-Network Project, 3 October 2017, AIIMS, New Delhi, India
5. Interesting native biopsy, IS RTPCON 2016, 10 July 2016, KIIT-Bhubhaneshwar, India

Prasenjit Das: 11

1. Handling of radiology guided samples, CT guided interventions, April 2016, AIIMS, New Delhi, India
2. Approach for diagnosing vascular liver diseases, CME in Liver Pathology, 27 May 2016, SKIMS, Srinagar, India
3. Slide seminar in liver diseases, CME in Liver Pathology, 27 May 2016, SKIMS, Srinagar, India
4. Role of liver biopsy in 2016, MAXCON in Liver Diseases, July 2016, Max Superspecialty Hospital, Vaishali, India
5. Approach for diagnosing small intestinal endoscopic biopsies, GI Pathology CME, September 2016, APCON Odisha Chapter, IGH, Rourkella, Odisha, India
6. SPEN and other rare cystic lesions of pancreas, APCON, December 2016, Annual Conf. of Indian Assoc. of Pathologists and Microbiologists, Jaipur, India
7. Plenary paper presentation, titled 'Improved light microscopic and morphometric classification systems for assessment of treatment naïve and follow-up duodenal biopsies of celiac disease in Indian adult patients' during APCON 2016, December 2016, APCON, Jaipur, India
8. Teaching slide seminar on GI and liver pathology, Gastroenterology Young Masters' Programme 2017, January 2017, AIIMS, New Delhi, India
9. 'Paediatric malabsorption syndrome', Paediatric Pathology CME, 31 January 2017, CNBC Hospital, New Delhi, India
10. Speaker on celiac disease classification, Joint SACH and ACPN Conference, 24 March 2017, SACH and ACPN, Kathmandu, Nepal
11. Panelist of non-cirrhotic portal fibrosis, Annual Conference of SAASLD, July 2016, South Asia Association of Study of Liver Diseases, CMC Vellore, India

Adarsh Wamanrao Barwad: 2

1. Cherubism, Vth SACH and IXth ACPN Conference, 23–25 March 2017, Kathmandu, Nepal
2. The spectrum of graft nephrectomies: AIIMS experience, 3rd International Renal Pathology Conference, 10–12 February 2017, AIIMS, New Delhi, India

Seema Kaushal: 3

1. Pathology of bladder carcinoma, International Symposium on Bladder Carcinoma, 13 November 2016, AIIMS, New Delhi, India
2. Interesting case presentation, CME on Update in Uropathology, 4 February 2017, CMC, Vellore, India
3. Guidelines for processing and reporting radical prostatectomy specimen, Update in Biopsy Technique, Molecular diagnostics and immuno-pathology of prostatic carcinoma, 26 March 2017, Medanta Institute of Kidney and Urology, Medicity, Gurgaon, India

Asit Ranjan Mridha: 3

1. Diagnostic challenges in cystic and non-neoplastic tumour-like bone lesions, 4th North Bengal Indian Medical Association Doctors Conference, Uttaran, 3–4 December 2016, Shikiahora Green Valley, Alipurduar, West Bengal
2. Diagnostic challenges in benign and non-neoplastic bone lesions: Presentation of two cases, Vth SACH and IXth ACPN Conference, 23–25 March 2017, Kathmandu, Nepal
3. A novel bone drilling technique to put an end to the thermal osteonecrosis, Vth SACH and IXth ACPN Conference, 23–25 March 2017, Kathmandu, Nepal

Deepali Jain: 6

1. Cytology of head and neck soft tissue tumours, 19th International Congress Cytology 2016, May 2016, Pacifico Yokohama, Yokohama, Japan
2. Predictive biomarker in immunotherapy: Is it ready for the use in clinic? Symposium on Immunotherapy in Oncology, September 2016, IRCH, AIIMS, New Delhi, India
3. Panel discussion: EGFR tyrosine kinase inhibitors in NSCLC: ‘First line and beyond...’, Best of World Congress on Lung Cancer 2016, 25 December 2016, Delhi, India
4. Recent updates in lung cancer pathology with emphasis on predictive biomarkers: Applications and challenges in routine practices, Seminars in Surgical Pathology Series, 1 March 2017, University of Massachusetts, Worcester Boston, USA
5. PD-L1 and Lung cancer: Indian scenario, IASLC Pathology Committee Meeting, 3 March 2017, San Antonio, San Antonio TX, USA
6. Tissue is the issue optimising biopsy and cyto-pathological specimens in diagnosis of lung cancer, National Conference on Lung Cancer (NCLC 2017), 18–19 March 2017, Jaipur, India

Sandeep Mathur: 12

1. Liquid based cytology vs conventional cytology, 12th National Conference of Indian Society of Colposcopy and Cervical Pathology, 3 March 2017, MAMC, New Delhi, India
2. Immunohistochemical markers in cervical preneoplastic lesions, AOGIN, 14 October 2016, Patna, India
3. Cytopathology of adipocytic and myxoid tumours, 46th Annual Conference of the Indian Academy of Cytologists, 18 November 2016, Chitnavis Centre Nagpur, Nagpur, India
4. Liquid based cytology, IVth Hands-on Workshop on Cervical Cancer Screening, 24 January 2017, NICPR, Noida, India
4. Endometrial malignancies premalignant to malignant, AGOICON, 2016, 2 December 2016, Gurugram, India
5. Slide Seminar, Gyn. pathology, AGOICON, 2016, 2 December 2016, Gurugram, India
6. Pathology and genetics of endometrial carcinoma, ACOS, 2016, 8 April 2016, New Delhi, India
7. Liquid based cytology, IVth Hands on Workshop on Cervical Cancer Screening, 27 April 2016, NICPR, Noida, India
8. Liquid based cytology, IVth Hands on Workshop on Cervical Cancer Screening, 28 September 2016, NICPR, Noida, India
9. Panel discussion in breast cancer, AIIMS Endosurgery 2017, 18 March 2017, AIIMS, New Delhi, India
10. CPC in urology, International Symposium on Urologic Imaging and Intervention, 29 January 2017, AIIMS, New Delhi, India
11. Breast pathology for surgeons, AIIMS Breast Course, 4 March 2016, AIIMS, New Delhi, India
12. Cytology of head and neck lesions, Interesting case presentations, 19th International Congress of Cytology, Yokohama, Japan, 30 May 2016, Convention Centre Yokohama, Japan

Vaishali Suri: 5

1. Gliomas: WHO 2016 modification of classification, 24th Annual Conference of Indian Association of Pathologists and Microbiologists, UP Chapter, 22–23 October 2016, MLB Medical College, Jhansi, India
2. Recent advances in WHO 2016 “classification of adult and paediatric gliomas”, Pre-Conference CME APCON 2016: An Update on Neurooncopathology including Muscle Biopsy, 29 November 2016, Sawai Man Singh Medical College, Jaipur, India
3. Molecular characteristics of paediatric meningiomas, 65th Annual Conference of Neurological Society of India, 15–18 December 2016, Chennai, India
4. DNA sequencing, 9th Annual Conference of Indian Society of Neurooncology, 10–12 March 2017, NIMHANS, Bengaluru, India.

5. Molecular markers in routine reporting of gliomas: Necessary or not, 2nd Annual Conference of Neuropathology Society of India, 21–23 April 2017, NIMHANS, Bengaluru, India

Oral papers/posters presented: 70

1. Damle N, Devasenathipathy K, Behera A, Tripathi M, Agarwal S, Taywade S, et al. Comparison of 18F-Fluorocholine PET/CT and 4D CT in the preoperative localisation of eutopic and ectopic parathyroid adenomas-initial results, Society of Nuclear Medicine and Molecular Imaging (SNMMI) Meeting 2016, 11–15 June 2016, San Diego Convention Centre, San Diego
2. Behera A, Damle N, Bal C, Tripathi M, Agarwal S, Khadgawat R, et al. Prospective comparison of 18F-Fluorocholine PET/CT, Dual phase 99mTc-sestamibi imaging with early SPECT/CT and ultrasonography in the preoperative localisation of parathyroid adenoma, Society of Nuclear Medicine and Molecular Imaging (SNMMI) Meeting 2016, 11–15 June 2016, San Diego Convention Centre, San Diego
3. Batool S, Nambirajan A, Jain D, Nakra T, Agarwal S, Mathur SR, et al. Tall cell variant of papillary carcinoma of thyroid: Cytological diagnosis of an underdiagnosed entity, Vth Annual Conference of Indian Academy of Cytologists, Delhi Chapter, 24 September 2016, PGIMER, Dr RML Hospital, New Delhi, India
4. Kaur K, Agrawal S, Rajeshwari M, Jain D, Mathur SR, Iyer VK. Melanotic neuroectodermal tumour of infancy: An enigmatic tumour with unique cytomorphology, Vth Annual Conference of Indian Academy of Cytologists, Delhi Chapter, 24 September 2016, PGIMER, Dr RML Hospital, New Delhi, India
5. Phulware RH, Mathur SR, Jain D, Mallik SR, Mridha AR, Agarwal S, et al. Cytomorphological diagnosis of langerhans cell histiocytosis: A study of 47 cases, Vth Annual Conference of Indian Academy of Cytologists, Delhi Chapter, 24 September 2016, PGIMER Dr RML Hospital, New Delhi, India
6. Roy M, Gupta P, Agarwal S, Sharma MC, Karak AK, Khurana ML, et al. Pheochromocytoma/paraganglioma: Histopathological features as clue to the underlying germline mutation in these genetically heterogeneous tumours, 46th Annual Conference of Endocrine Society of India, 21–23 October 2016, New Delhi, India
7. Agarwal S, Sharma MC, Karak AK, Chumber S, Bal CS, Damle NA, et al. BRAF mutation may predict higher risk of incomplete response to radioactive iodine ablation in papillary thyroid carcinoma, 46th Annual Conference of Endocrine Society of India, 21–23 October 2016, New Delhi, India
8. Irshad K, Jyotsna V, Chosdol K, Agarwal S, Pal S. Mutational status of Yin Yang 1 gene in rare sporadic insulinomas: The Indian scenario with a review, The European Cancer Congress 2017 (ECCO2017), 27–30 January 2017, RAI Amsterdam, The Netherlands
9. Nadeem K, Agarwal S, Mallick SR, Srivastava A. Angiomated Fibrous Histiocytoma: A clinical and amp, Histomorphological diagnostic challenge, Report of a case, 32nd Annual Conference, APCON Delhi Chapter (DAPCON 2017), 26 March 2017, Lady Hardinge Medical College, New Delhi, India
10. Anju GS, Khanna G, Mondal P, Agarwal S, Das P, Sharma MC, Clear cell sarcoma-like tumour of the gastrointestinal tract: A series of two cases, 32nd Annual Conference, APCON Delhi Chapter (DAPCON 2017), 26 March 2017, Lady Hardinge Medical College, New Delhi, India
11. Das P, Gahlot GPS, Rawat R,..., Datta Gupta S, Makharia G. Plenary paper presentation, titled 'Improved light microscopic and morphometric classification systems for assessment of treatment naïve and follow-up duodenal biopsies of celiac disease in Indian adult patients' during APCON 2016, December 2016, Jaipur, India
12. Das P, Gahlot GP, Mehta R, Makharia A, Verma AK, Sreenivas V, et al. Patients with mild enteropathy have apoptotic injury of enterocytes similar to that in advanced enteropathy in celiac disease, Digestive disease week, 22 May 2016, DDW, San Diego, USA
13. Yadav R, Kakkar A, Sharma A, Malik PS, Sharma MC, Clinicopathological features, hormone immunoexpression and loss of ATRX and DAXX expression in pancreatic neuroendocrine tumours, ACOS 2016, 8–10 April 2016, Ashok Diplomatic Enclave, New Delhi, India
14. Roy M, Yadav R, Agarwala S, Mathur SR, Iyer VK. Cytomorphological evaluation and sub-categorisation of hepatoblastoma, ICC 2016, 28 May–1 June 2016, Yokohama, Japan
15. Ramteke P, Yadav R, Vallonthaiel AG, Mathur SR, Iyer VK, Cytomorphological study of salivary duct carcinoma, Delhi Chapter of IAC 2016, 24 September 2016, RML, New Delhi, India
16. Pradeep I, Yadav R, Mathur SR, Iyer VK. Cytomorphology of myoepithelioma of salivary glands: A series of 5 cases, Delhi Chapter of IAC 2016, 24 September 2016, RML, New Delhi, India
17. Gopinathan VR, Yadav R, Longchar M, Mathur SR, Iyer VK. Role of Liquid based cytology and Cell Block as compared to smear cytology in diagnosis of gall bladder cancer, Delhi Chapter of IAC 2016, 24 September 2016, RML, New Delhi, India
18. Khanna G, Yadav R, Roy M, Agarwala S, Mathur SR, Iyer VK. A cytomorphological study of hepatoblastoma with histological correlation, Delhi Chapter of IAC 2016, 24 September 2016, RML-, New Delhi, India

19. Kaushal S, AG Vallonthaiel, SR Mathur, Iyer VK. Adequacy and accuracy of parotid gland fine needle aspiration cytology with histopathology correlation: A five year study from a tertiary care centre of India, International Conference of Cytology, 30 May 2016, Yokohama, Japan
20. Mathur SR, Roy M, Jain D, Kaushal S, Seth A, Iyer VK. Application of the paris system of urine cytology: An institutional experience, International Conference of Cytology, 30 May 2016, Yokohama-Japan
21. Tiwari P, Kumar L, Kaushal S, Singh G, Jasrotia S, Seth A, Dinda A. Comparison of tissue vs plasma vascular endothelial growth factor as biomarker of disease burden in prostate cancer, European Urology Conference-2016, Munich, Germany
22. Narwal A, Kaur K, Longchar M, Kaushal S, Jain D, Mathur SR, Iyer VK. Pulmonary nocardiosis diagnosed on cytopathology: A report of two cases, Delhi Chapter, IAC-September 2016, RML, New Delhi, India
23. Hemlata, Kaur K, Roy M, Mondal P, Kaushal S, Mathur SR. Composite tumour cervix: A rare combination of small cell and squamous cell carcinoma, Delhi Chapter, IAPM-March 2017, LHMC, New Delhi, India
24. Narwal A, Ramteke P, Barwad A, Phulware R, Das P, AR Mridha, Kaushal S. Mucinous tubular and spindle cell carcinoma of kidney: Morphological and immunohistochemical profile of a rare renal tumour from a tertiary care centre in India-Delhi Chapter, IAPM-March 2017, LHMC-New Delhi, India
25. Dutta R, Kakkar A, Kaushal S, Sharma MC. Congenital mesoblastic nephroma: Analysis of clinicopathological features, Delhi Chapter, IAPM-March 2017, LHMC-New Delhi, India
26. Gupta V, Pandey PM, Mridha AR, Gupta RK. Effects of various parameters on the temperature distribution in conventional and diamond coated hollow tool bone drilling: A comparative study, Advances in Materials and Processing Technologies Conference (AMPT 2016), 8–11 November 2016, Kuala Lumpur, Malaysia
27. Mridha AR. Diagnostic challenges in cystic and non-neoplastic tumour-like bone lesions, 4th North Bengal Indian Medical Association Doctors Conference, Uttaran, 3–4 December 2016, Shikijahora Green Valley, Alipurduar, West Bengal
28. Mridha AR. Diagnostic challenges in benign and non-neoplastic bone lesions: Presentation of two cases, Vth SACH and IXth ACPN Conference, 23–25 March 2017, Kathmandu, Nepal
29. Mridha AR, Gupta V, Pandey PM, Gupta RK. A novel bone drilling technique to put an end to the thermal osteonecrosis, Vth SACH and IXth ACPN Conference, 23–25 March 2017, Kathmandu, Nepal
30. Sarangi J, Saumyaranjan Mallick, Ajay Gogia², Atul Sharma, Sameer Bashi, Jagdish Prasad,³ Mehar Chand Sharma. Lymphoid alignments of the waldeyer's ring: Experience at a tertiary care center, Annual Conference of Indian Association of Pathology and Microbiology, Delhi Chapter, 17 May 2015, Lady Hardinge Medical College, New Delhi, India
31. Jain D, Vallonthaiel AG, Kumar V, Iyer VK, Kumar S, Madan K. c-Myb over-expression in adenoid cystic carcinoma of tracheobronchial tree, 19th International Congress Cytology 2016, May 2016, Pacifico Yokohama, Yokohama, Japan
32. Longchar M, Ahmed A, Jain D, Mathur S, Iyer VK. Fine needle aspiration cytology of parasitic cysts, 19th International Congress Cytology 2016, May 2016, Pacifico Yokohama-Yokohama Japan
33. Jain D, Kumar R, Singh V, Malik P, Madan K, Farooq M. Detection of oncogenic drivers in pleural effusions and archived FNA smears of pulmonary adenocarcinoma, 17th World Congress on Lung Cancer, December 2016, Vienna, Austria
34. Jain D, Vallonthaiel AG, Pramanik R. p40 in metastatic pulmonary trophoblastic tumour: Potential diagnostic pitfall with pulmonary squamous cell carcinoma, 17th World Congress on Lung Cancer, December 2016, Vienna, Austria
35. Kaur K, Jain D, Rastogi S, Kumar S, Madan K. Primary pulmonary sarcomas: An entity lost in misdiagnosis, 17th World Congress on Lung Cancer, December 2016, Vienna, Austria
36. Kumar V, Kumar S, Malik P, Deo S, Jain D, Shukla N. Predictive factors of outcome in locally advanced nscle patients treated with neo-adjuvant chemotherapy in resource-constrained settings, 17th World Congress on Lung Cancer, December 2016, Vienna Austria
37. Jakhetiya A, Kumar V, Deo S, Shukla N, Pandey D, Malik P, Jain D, Kumar S. Recurrence patterns in lung cancer patients treated with protocol based multimodality treatment at a tertiary care cancer center in India, 17th World Congress on Lung Cancer, December 2016, Vienna Austria
38. Kumar V, Kumar S, Deo S, Kumar R, Malik P, ..., Jain D, et al. Mediastinal lymphnodes staging by pet ct for resectable non-small cell lung cancer in a tuberculosis endemic country, 17th World Congress on Lung Cancer, December 2016, Vienna Austria
39. Jakhetiya A, Garg P, Deo S, Shukla N, Pandey D, ..., Jain D, et al. Surgical experience of primary salivary gland tumours of lung: Experience from tertiary care cancer center in North India, 17th World Congress on Lung Cancer, December 2016, Vienna Austria

40. Jain D, Singh V, Malik P, Kumar S. Programmed death ligand-1 and tumour infiltrating immune cells in non-small cell lung carcinoma, A Report from India, United States and Canadian Academy of Pathology 2017, 4–10 March, San Antonio Texas, USA
41. Jain D, Rajeshwari M, Xess I, Sharma MC. Acid fastness of histoplasma in surgical pathology practice: Can Ziehl Neelsen stain be an additional histochemical stain for Fungi? United States and Canadian Academy of Pathology 2017, 4–10 March, San Antonio Texas, USA
42. Mukhopadhyay S, Arrossi AV, Soda M, Singh C, Fukuoka J, et al. Ultrasensitive ALK (D5F3) immunohistochemistry in inflammatory myofibroblastic tumour of the lung and trachea: A multi-institution series of 34 Cases, United States and Canadian Academy of Pathology 2017, 4–10 March, San Antonio Texas, USA
43. Mathur SR, S Kaushal, D. Jain, Roy M, Seth A, V.K. Iyer. Application of the paris system of urine cytology: An institutional experience, 19th International Congress of Cytology, Yokohama, Japan, 31 May 2016, Convention Centre Yokohama, Japan
44. Sharma A, Kaur K, Kakkar A, Bharwad A, Rastogi S, Sharma MC, et al. Desmoplastic small round cell tumours: A series of twenty fourcases-DAPCON -March 2017, LHMC, New Delhi, India
45. Sulaiman M, Khanna G, Mathur S, Arava S, Singh M, Jain D, et al. Cystic hypersecretory hyperplasia of the breast, Rare case report-DAPCON, March 2017, LHMC, New Delhi, India
46. Gurung N, Kaur K, Rajeshwari M, Sharma MC, Kumar S, Bhatla N, et al. Uterine tumour resembling ovarian sex cord tumour (UTROSCT): A rare tumour with unique morphology, DAPCON, March 2017, LHMC, New Delhi, India
47. Kumar A, Suri V, Sarkar C, Sharma MC. BRAF and RKT alterations in oligodendrogliomas: Correlation with mapk/mTOR pathway activation and clinicopathological characteristics, 8th Annual Conference of ISNOCON, 1–3 April 2016, Hyderabad, India
48. Malgulwar PB, Sharma MC, Sarkar C, Suri V. Synergistic association of C11 or p95, RELA/NF-kB and Notch1 in transcriptional regulation of the Snail and Slug genes during Epithelial-to-Mesenchymal Transitions (EMTs) in Ependymomas, 8th Annual Conference of ISNOCON, 1–3 April 2016, Hyderabad, India
49. Sharma V, Sarkar C, Sharma MC, Suri V. Genome wide analysis of EZH2 mediated H3K27me3 target gene profile using CHIP, Seq highlights differences between low and high grade astrocytic tumours as well as identifies SLC25A23 as a novel prognostic marker glioblastoma, **Award for best presentation**, 8th of Indian Society on Neuro-oncology (ISNO annual conference) held on 1–3 April 2016, Hyderabad, India
50. Malgulwar PB, Sharma MC, Sarkar C, Suri V. Gain of FAL1, An oncogenic long noncoding RNA mapping to chromosome 1q is associated with dysregulated BMI1/p21 axis and an adverse event in intracranial ependymomas, 9th Annual Conference of Indian Society of Neurooncology, 10–12 March 2017, NIMHANS-Bengaluru, India
51. Sharma V, Sarkar C, Sharma MC, Suri V. Global deregulation of polycomb repressive proteins in astrocytic tumours, 9th Annual Conference of Indian Society of Neurooncology, 10–12 March 2017, NIMHANS-Bengaluru, India
52. Kumar A, Suri V, Sarkar C, Sharma MC. Concomitant downregulation of miR-379/miR-656 cluster and MEG3 at 14q32.2 by epigenetic mechanisms in oligodendroglioma, 9th Annual Conference of Indian Society of Neurooncology, 10–12 March 2017, NIMHANS, Bengaluru, India
53. Kaur K, Sarkar C, Sharma MC, Suri V. Adult medulloblastomas: A clinicopathological and molecular genetic study highlighting differences from their pediatric counterparts, Dr V. Ramalingaswami Award, 32nd Annual Conference of DAPCON 2017, 26 March 2017, Lady Hardinge Medical College, New Delhi, India; **Best Poster Award**
54. Khanna G, Suri VS, Sarkar C, Sharma MC. Epithelioid Glioblastoma: A recently described rare entity: Series of seven cases, **Third prize for poster**, 32nd Annual Conference of DAPCON 2017, 26 March 2017, Lady Hardinge Medical College, New Delhi, India
55. Sinha K, Sarkar C, Sharma MC, Suri V. Diagnostic revision of grade II and grade II astrocytomas using molecular markers, A study of 138 cases using WHO 2016 classification, 2nd Annual Conference of Neuropathology Society of India, 21–23 April 2017, NIMHANS, Bengaluru, India
56. Kaur K, Suri V, Sarkar C, Sharma MC. H3K27M mutations in midline gliomas from children and young adults, 2nd Annual Conference of Neuropathology Society of India, 21–23 April 2017, NIMHANS-Bengaluru, India
57. Dinda AK, Bhat M, Srivastava S, Sarath K. Modulation of antigen cross presentation by novel nanoadjuvant for humoral and cell mediated immunity, NanoDDS, 16 September 2016, Johns Hopkins School of Medicine, Baltimore
58. Nambirajan A, Jain D, Jangra K, Singh V, Madan K, Bhatia H, Mathur, S, Iyer VK. Role of cytology specimens in subtyping of pulmonary adenocarcinoma patterns and molecular analysis: A comparative study with matched small biopsies, Delhi Chapter, Indian Academy of Cytologists, September 2016, Dr RML Hospital, New Delhi, India; **Best oral paper award**
59. Khetan K, Pradeep I, Jain D, Mathur S, Iyer VK. Fine needle aspiration cytology of head and neck soft tissue sarcomas, Delhi Chapter, Indian Academy of Cytologists, September 2016, Dr RML Hospital, New Delhi, India

60. Rajeshwari M, Nambirajan A, Mridha A, Jain D. Cytological diagnosis of a rare thyroid tumour, Delhi Chapter, Indian Academy of Cytologists, September 2016, Dr RML Hospital, New Delhi, India
61. Anju GS, Nambirajan A, Gurung N, Mathur S, Jain D, Iyer VK. Cytological diagnosis of cerebrotendinous xanthomatosis in 2 siblings presenting with bilateral ankle swellings and neurological decline, Delhi Chapter, Indian Academy of Cytologists, September 2016, Dr RML Hospital, New Delhi, India
62. Nakra T, Nambirajan A, Jangra K, Garg A, Jain D. Extramedullary myeloid sarcoma diagnosed on pleural effusion, Delhi Chapter, Indian Academy of Cytologists, September 2016, Dr RML Hospital, New Delhi, India
63. Singh A, Verma AK, Das P, Jindal G, Shyam Prakash, Nayak PB, Datta Gupta S, Lalit Kumar, Ahuja V, Makharia GK. Noninvasive biomarkers for assessment of villous abnormalities in patients with celiac disease and other enteropathies, 57th Annual Conference of Indian Society of Gastroenterology (ISGCON 2016), 17 December 2016, New Delhi, India
64. Hasan Md R, Datta Gupta S, Ralhan R, Chauhan S, Saraya A. Fascin –I is a potential tissue biomarker in esophageal squamous cell carcinoma, 57th Annual Conference of Indian Society of Gastroenterology (ISGCON 2016), 17 December 2016, New Delhi, India
65. Kheta K, Sharma P, Nakra T, Yadav R, Panwar R, Madhusudhan KS, Dash NR, Pal S, Sahni P, Datta Gupta S, Das P. Pancreatic heterotopia in extra-hepatic choledochal cyst wall: A mere association or an etiopathological link? 37th Annual Conference of Delhi Chapter of IAPM (DAPCON 2016), 26 March 2017, Lady Hardinge Medical College, New Delhi, India
66. Nakra T, Yadav DP, Yadav R, Pal S, Gupta DK, Datta Gupta S, Das P. Duplication of myenteric plexus, An extremely rare cause of intestinal pseudo obstruction: Experience of two cases, 37th Annual Conference of Delhi Chapter of IAPM (DAPCON 2016), 26 March 2017, Lady Hardinge Medical College, New Delhi, India
67. K. Hemanth, Singh G, Barwad A, Bagchi S, Agarwal SK, Bagga A, Dinda AK. Prevalence of glomerular anti PLA2R staining in Indian patients of membranous nephropathy, 3rd International Renal Pathology Conference, 10 February 2017, AIIMS, New Delhi, India
68. Singh SK, Singh G, Singh L, Nalwa A, Kumar R, Dinda AK. Utility of C4d in subclassification of Membranoproliferative glomerulonephritis, 3rd International Renal Pathology Conference, 10 February 2017, AIIMS, New Delhi, India
69. Nalwa A, Singh L, Singh G, Dinda AK. Utility of C4d in subclassifying proliferative glomerulonephritis, ISRTPCON2016, 10 July 2016, KIIT-Bhubhaneshwar, India
70. Iyer VK, Kujur M, Ahmed A, Mathur SR, Bhatla N. Conventional cervical smear followed by hybrid capture – II on slide scrapings for single screen and treat strategy, A prospective study of 1011 patients, 9th International Congress of Cytology, 28 May–1 June 2016, Yokohama, Japan

Paper awarded the **First Prize in Young Investigator's Award Session**, 57th Annual Conference of Indian Society of Gastroenterology (ISGCON 2016), New Delhi, 15–18 November 2016

RESEARCH

Funded projects

Ongoing

1. Role of viral protease and host endogenous protease in Hepatitis E Virus (HEV) life cycle, S.K. Panda, DST, 3 years, 2015–2018, Rs. 58.63 lakhs
2. Screening of miRNA/long non coding RNA as potential prognostic/diagnostic biomarker for Hepatitis E, S.K. Panda, DBT, 2016–2019, Rs. 60.14 lakhs
3. J. C. Bose Fellowship, S.K. Panda, DST, 2007–2019/ 2022), Rs. 121.05 lakhs
4. Role of fibrillin 1 gene mutation and TGF beta in thoracic aortic aneurysms of non marfanoid individuals, Sudheer, AIIMS, 2 years, 2016–17, Rs. 10 lakhs
5. To evaluate the association between immunohistochemical expression of cell cycle regulatory molecule (p53, rb, p16, p14) and epigenetic regulator (EZH2) in primary diffuse large B cell lymphoma, Saumyaranjan Mallick, AIIMS, 2 years, 2015–16, Rs. 9.7 lakhs
6. To evaluate the role of cmyc, bcl2, bcl6 and Epstein Barr virus on survival in patients with refractory/relapsed primary diffuse large B cell lymphoma: An ambispective study, Saumyaranjan Mallick, DST, 3 years, 2016–19, Rs. 30 lakhs
7. To evaluate the role of microenvironment clonality assay and 9p24 alteration in diagnosis and prognostication of refractory Hodgkin's lymphoma, Saumyaranjan Mallick, DST, 3 years, 2017–20, Rs. 35 lakhs

8. Molecular characterization of microscopic preneoplastic lesions of colon, Exploring the prospect of future cancer screening, P Das, DBT, 3 years, 2015–2018, Rs. 25 lakhs
9. Demonstration of colocalisation of IgA and IgG anti-tissue transglutaminase 2 can diagnose intestinal and extra-intestinal celiac disease as effectively as the serological diagnostic modalities, P Das, AIIMS, 2 years, 2015–16, Rs. 5+5 Lakhs
10. Crohn's disease in India: A multicentre study from a country where intestinal tuberculosis as well as Johne's disease is endemic, P. Das, ICMR, 3 years, 2016–18, Rs. 30 lakhs (for nodal pathology centre only)
11. Study of cellular signalling networks in hepatoblastoma, Rajni Yadav, AIIMS, 2 years, 2015–17, Rs. 4.85 lakhs
12. Analysis of NPHS1, NPHS2, WT1, ACTN4 and INF2 in non syndromic focal segmental glomerulosclerosis, Adarsh Barwad, AIIMS, 2 years, 2016–18, Rs. 10 lakhs
13. Study of miR200c and EMT markers (ZEB1, ZEB2 and Twist) in bladder urothelial carcinoma, Seema Kaushal, AIIMS, 2 years, 2015–17, Rs. 4.8 lakhs per year
14. Identification of EGFR mutation, ALK gene rearrangement, KRAS mutation, and FGFR1 mutation in molecular subtyping of lung cancer, Deepali Jain, ICMR, 2 years, 2015–17, Rs. 20 lakhs
15. Detection and comparison of EGFR mutations in matched tumour tissues and sera of patients with pulmonary adenocarcinoma, Deepali Jain, DBT, 3 years, 2014–17, Rs. 25 lakhs
16. A comprehensive analysis of mammalian target of rapamycin (mTOR) and mitogen activated protein (MAP) kinase signalling pathways in non-small cell lung carcinoma, Deepali Jain, Lady Tata Memorial Trust, 3 years, 2015–18, Rs. 15 lakhs
17. Immunophenotypic profile of tumour infiltrating cells of the immune system & expression of PDL1 in triple negative/Her-2 neu positive breast cancer patients and their correlation with response to neoadjuvant chemotherapy, Sandeep R Mathur, DST, 3 years, 2017–20, Rs. 21 lakhs
18. Stratification of breast cancer in young females by molecular subtypes and androgen receptor status: A clinicopathological study, Sandeep R. Mathur, AIIMS, 2 years, 2014–16, Rs. 4.9 lakhs
19. Unravelling glioma development and progression through whole exome sequencing, Chitra Sarkar, DBT, 4 years, 2013–17, Rs. 99 lakhs
20. A multi-centric study to develop comprehensive molecular genetic panels for glioblastoma personalized therapy, Chitra Sarkar, DBT, 5 years, 2016–21, Rs. 50 lakhs
21. J.C. Bose Research Fellowship, Chitra Sarkar, DST, 5 years, 2016–20, Rs. 10 lakhs per year
22. Establishment of rapid and economical methods for molecular subgrouping and risk stratification of medulloblastomas for routine clinical practice in developing countries, Vaishali Suri, AIIMS, 2 years, 2016–18, Rs. 10 lakhs
23. Unravelling the functional relevance of snail paralogs in the pathogenesis of paediatric ependymoma, M.C. Sharma, DST, 3 years, 2017–20, Rs. 42 lakhs
24. Nanoparticle based siRNA delivery for in vivo silencing of oxidized, LDL receptor (LOX-1) on monocyte/macrophage cells by specific siRNA and its impact on the plasma level of proinflammatory cytokines. A study in animal model. A.K. Dinda, DBT, 3 years, 2013–16, Rs. 35.66 lakhs
25. Development of cost effective nanoparticle based drug delivery system of amphotericin B for treatment against visceral leishmaniasis: Phase I preclinical study, A.K. Dinda, DBT, 2 years 2015–17, Rs. 89.65 lakhs
26. Development of novel nanoparticle based hepatitis B (HBV) vaccine with enhanced antigen presentation and prolonged immunity: Phase I preclinical study, A.K. Dinda, DBT, 2 years, 2016–18, Rs. 92.60 lakhs
27. Development of nanoparticulate antitubercular drug delivery system for macrophage receptor specific targeting through oral and respiratory route: Phase I study, A.K. Dinda, ICMR, 3 years, 2015–17, Rs. 49.73 lakhs
28. Hepatic cytokine expression, hepatocyte proliferation, progenitor cell activation in chronic hepatitis, S. Datta Gupta, AIIMS, 2 years, 2013–15, Rs. 5 lakhs
29. Design and Development of E-courses in Health & Medicine Sciences for Virtual Teaching, Manoj K Singh, Centre for Development of Advanced Computer (C-DAC), 3 years, 2013–2017, Rs. 118.17 lakhs
30. The Virtual Skills Laboratory, Manoj K Singh, DEITY, 2 years, 2014–2017, Rs. 262.5 lakhs
31. Investigation into the utility of Fibroblast Specific Protein 1 (Fsp1) as a surrogate marker for podocyte effacement in renal biopsies, Geetika Singh, AIIMS, 1 year, 2016–17, Rs. 4.98 lakhs
32. Pilot study on application of MUC expression and WHO 2010 classification of gallbladder carcinoma on fine needle aspiration cytology using cell blocks and evaluation of prognostic markers, V.K. Iyer, AIIMS, 2 years, 2015, Rs. 5 lakhs
33. ICMR Task force study on female genital tuberculosis: Evaluation of molecular methods (PCR, immunohistochemistry) against conventional methods (histopathology, culture, AFB staining in endometrial samples) and laparoscopy in detection of genital tuberculosis in infertile women, V.K. Iyer, ICMR, 3 years, 2014, Rs. 32 lakhs (for pathology)

Completed

1. Evaluation of BRAF (V600E) mutation and MAPK/ERK pathway activation markers in papillary carcinoma of thyroid as potential diagnostic, Prognostic and therapeutic indicators, Shipra Agarwal, AIIMS, 2 years, 2015–17, Rs. 10 lakhs
2. Development of objective light microscopic and morphometric criteria for diagnosis and follow-up of Celiac disease in Indian patients, P. Das, AIIMS, 2 years, 2013–2016, Rs. 10 lakhs
3. Immunohistochemical analysis of CXCR4, SDF-1, CXCR7 antigens, its correlation with p53 immunopositivity and Ki67 labelling index (LI) in Ewing sarcoma and its prognostic implication, Asit Ranjan Mridha, AIIMS, New Delhi, 2 years, 2013–16, Rs. 5 lakhs
4. Analysis of PD, L1 expression in non-small cell carcinoma: Implication for optional immune targeted therapy, Deepali Jain, AIIMS, 2 years, 2015–17, Rs. 8 lakhs
5. Development of Immunoassays for Intracellular domain of Epithelial Cell Adhesion Molecule (Ep-ICD) and related proteins as markers for aggressive Breast and Ovarian Cancers, Indo-Canadian Project with Mount Sinai Hospital, Ontario, Canada, DBT, 3 years, 2014–16, Rs. 40 lakhs
6. A Clinicopathological and Molecular Genetic study of Polycomb Repressive Complexes in Gliomas, Chitra Sarkar, ICMR, 4 years, 2012–16, Rs. 50 lakhs (approx)
7. Genomic and functional approaches to decipher the role of a large imprinted miRNA cluster in glioblastoma multiforme, Chitra Sarkar, DBT, 4 years, 2012–16, Rs. 50 lakhs (approx.)
8. Cell Sheet Engineering for assembling Human Corneal Construct, A.K. Dinda, IIT Delhi, 5 years, 2011–15, Rs. 100 lakhs
9. Development of Cost Effective Nanoparticle based Drug Delivery System of Amphotericin B for treatment against Visceral Leishmaniasis, A.K. Dinda, DBT, 3 years, 2012–15, Rs. 89 lakhs
10. Development of novel nanoparticle based hepatitis B (HBV) vaccine with enhanced antigen presentation and prolonged immunity, A.K. Dinda, DBT, 3 years, 2013–16, Rs. 91.36 lakhs
11. Association of BK polyoma virus and urothelial carcinoma: A study in the Indian population, Geetika Singh, AIIMS, 1 year, 2012–14, Rs. 4.93 lakhs

Departmental projects

Ongoing

1. A study to assess the efficacy of cultured plucked hair follicle outer root sheath cell melanocytes for transplantation in stable vitiligo
2. Immunohistochemical characteristics and surgical outcomes of oral sub mucous fibrosis
3. Role of BRAF V600E and TERT promoter mutations in predicting aggressiveness of papillary thyroid carcinoma
4. Role of 18F choline PET-CT in the localization of hyperfunctioning parathyroid tissue in patients with primary hyperparathyroidism
5. Quality of life and cost-effectiveness of care in patients undergoing total thyroidectomy (with radio-ablation of residual thyroid) for localized differentiated thyroid cancer: A randomised, controlled trial
6. Pilot study on day care thyroidectomy surgery
7. Clinicopathological profile of primary double / Triple expressor lymphoma
8. Role of MUC1, MUC5A, MUC4 and Reg4 in pancreatic and cholangiocarcinomas
9. Role of SPARC, hENT1, RRM1, ERCC1 in stromal remodelling of desmoplastic Gastroenteropancreatic tumours: A potential agent for targeted therapy
10. Mucosal Schwann cell hamartoma in gall bladder: A novel finding (compiled our report on this unreported entity amongst last 5 years cases)
11. Impact of genotypic diversity of H pylori and gastric mucosal inflammation: A comparative study between patients of North India and Ladakh
12. Detection of methylation phenotype and mRNA expression profiles of aberrant crypts, in comparison to colon carcinoma and controls
13. Assessment of impact of computer assisted image analysis of liver biopsies in non-alcoholic steatohepatitis over ultrasound fat estimation and fibroscan values
14. Risk determination of Barrett mucosa for development of esophageal carcinoma
15. Role of NOTCH and WNT signalling pathway in Hepatoblastoma
16. Analysis of NPHS1, NPHS2, WT1, ACTN4 and INF2 in non syndromic focal segmental glomerulosclerosis

17. Assessment of depth of invasion in oral cavity squamous cell carcinoma (T1-T3) by clinical palpation and radiology and their correlation to histopathological depth of invasion.
18. Study of epithelial mesenchymal transition markers in primary bladder urothelial carcinoma
19. Subtyping of primary muscle invasive bladder carcinoma into basal and luminal types on the basis of immunohistochemical markers
20. Molecular basis of estrogenism in endometriosis
21. Study of p53 immunoexpression and Ki67 LI in patients with advanced soft tissue sarcoma
22. Analysis of EGFR downstream signalling pathways in NSCLC and elucidating the mechanisms of EGFR TKI resistance
23. Immunohistochemical characterisation and HPV association of sinonasal carcinomas
24. Stratification of breast cancer in young females by molecular subtypes
25. miRNA profiling in oligodendrogliomas
26. Epilepsy associated tumours – study of genetic alterations and micro RNA profiling
27. Alterations in BRAF and PI3K/MTOR pathway in oligodendrogliomas
28. A study of EMT in meningiomas and its correlation with WNT/b catenin pathway
29. Adult medulloblastomas – molecular subtyping and clinicopathological correlation
30. Alterations in BRAF and PI3K/MTOR pathway in oligodendrogliomas
31. Study of IL-6 in hodgkins lymphoma
32. Study of immunohistochemical and molecular analysis of CNS PNET
33. Study of NF-2 and MTOR pathway in spinal ependymoma
34. Development of targeted nanodrug delivery system for Rheumatoid Arthritis
35. Targeted nanoparticle based drug delivery system for the treatment of Kalazar
36. Development of low cost functionalized biocompatible polymeric wound dressing
37. Study of PlA2R-2 immunohistochemistry on renal biopsy of Membranous Glomerulonephritis
38. Study of iron homeostasis in chronic kidney disease
39. Evaluation of neuronal markers in the colon of patients with persistent constipation following pull through for Hirschprung's disease
40. Membranous nephropathy: A study of immunofluorescence, electron microscopy and PLA2R profile with clinical correlation
41. An immunohistochemical and ultrastructural study of glomerular capillary endothelial injury in cellular rejection
42. Immunohistochemical evaluation of endometrial infiltrating cells and implantation markers in infertile patients undergoing endometrial aspiration for female genital tuberculosis
43. Programmed death ligand-1 (PDL-1) and its association with T Regulatory cells in non-small cell lung carcinoma: Use Of cytology specimens

Completed

1. Comparative study of Virtual and Conventional Autopsy in the phenotypic characterization of stillbirths
2. Common driver mutations in lung adenocarcinoma in India: An immunohistochemical analysis
3. Expression of Matrix Metalloproteinase-2, Matrix Metalloproteinase-9, Tissue Inhibitor Metalloproteinase-1, Tissue Inhibitor Metalloproteinase-2, Collagen I and IV Expression in Thoracic Aortic Aneurysms
4. A comparative study of efficacy and composition of various cell populations of extracted hair follicle outer root sheath cell suspension prepared using a single enzyme (trypsin) and multiple enzymes (trypsin, collagenase and dispase) for transplantation in vitiligo
5. Hpv16, 18 E6 protein expression and EGFR mutation in oral squamous cell carcinoma and verrucous carcinoma
6. APC and KRAS gene mutation in Aberrant crypt foci, in comparison to colon carcinoma and control mucosa
7. Development of objective light microscopic and morphometric criteria for diagnosis and follow-up of celiac disease in Indian patients, as principal investigator
8. Comparison of morphological and immunohistochemical markers to accurately grade dysplasia in Barrett's Esophagus
9. Application of Paris System: An institutional experience
10. Pediatric Meningiomas: A study of clinicopathological features, hormonal profile and genetic alterations

11. Adult medulloblastomas - molecular subtyping and clinicopathological correlation
12. Study of RELA fusions in ependymoma
13. Study of nucleophosmin in ependymoma
14. Study of Hamartin- tuberin, Wnt/B Catenin, M-TOR signalling and stem cell markers in focal cortical dysplasia
15. Study of radio enhancing capability of gold nanoparticle
15. Exploring the role of adipose tissue ABCA1 in determining serum HDL cholesterol

Collaborative projects

Ongoing

1. Thymidylate synthetase/Folate receptor alpha in advanced NSCLC (Medical Oncology)
2. PDL1 and epigenetics in lung cancer (Medical Oncology)
3. Plasma EGFR mutation in pulmonary adenocarcinoma (Pulmonary Medicine and Sleep Disorders)
4. Comparison of 1% vs 2% lignocaine for diagnostic flexible bronchoscopy, randomised clinical trial (Pulmonary Medicine and Sleep Disorders)
5. Performance characteristics of radial probe endobronchial ultrasound (RP-EBUS) for the diagnosis of peripheral pulmonary lesions (Pulmonary medicine and sleep disorders)
6. Open label randomized control trial to compare efficacy and safety of pemetrexed plus carboplatin followed by maintenance pemetrexed vs paclitaxel plus carboplatin followed by maintenance pemetrexed in patients with stage IIIB or IV non-squamous non-small-cell lung cancer (Medical Oncology)
7. Dual energy CT and MR evaluation of thymic lesions (Radiodiagnosis)
8. Standardizing surgico, Pathological evaluation of oral squamous cell carcinomas specimens –A prospective study (Surgical Oncology)
9. Finding the correlation of toll like receptors (TLRs) with inflammation in patients with chronic heart failure (Cardiology)
10. Comparative evaluation of MicroRNA profiling and cytokine profiling analysis in patients with pulmonary sarcoidosis and mediastinal tuberculosis (Pulmonary medicine)
11. Development of a new formulation and packaging for reducing adverse effects and injection pain of Mycobacterium vaccine and its clinical trial in recalcitrant anogenital and extra-genital (common) warts (Dermatology)
12. Autologous non cultured dermal cell suspension transplantation in treatment of facial volume loss (Dermatology)
13. Study of Sesamol in Bleomycin induced pulmonary toxicity in rat (Pharmacology)
14. Exploring the phenotypic and functional role of $\gamma\delta$ T cell subsets along with pattern recognition receptors (PRRs) in the immunopathogenesis of Pemphigus Vulgaris (Pharmacology)
15. A phase III open label randomised trial of lenalidomide plus rituximab vs bendamustine plus rituximab in follicular lymphoma (Medical Oncology)
16. Role of Dual Energy Computed Tomography in the Evaluation of Liver Fibrosis in patients of Chronic Liver Diseases (Radiology)
17. Evaluation of interstitial cells of cajal- like cells (ICC-LC) and histopathology in congenital pelviureteric junction obstruction and their correlation with intraoperative findings (Paediatric Surgery)
18. Expression and significance of notch signalling-associated proteins, Notch 1, Notch 2 and Hes 1 in esophageal squamous cell carcinoma: A retrospective study (Medical Oncology)
19. Molecular biomarkers in advanced carcinoma of Gall Bladder treated with Gemcitabine, Platinum Doublet: Role of RRM1, RRM2, hENT1 and ERCC1 (Medical Oncology)
20. Role of Shear Wave Elastography in Diagnosis, Prognostication and Follow up of Neonatal/Infantile Cholestatic Liver Diseases (Radiology)
21. To evaluate whether a predictive microRNA signature from TCGA acts as a biomarker in Indian colorectal cancer (CRC) patients (Medical Oncology)
22. Biomarkers for assessment of villous abnormality in patients with celiac disease and other enteropathies (Gastroenterology)
23. Study of miRNA-182 and miRNA-187 as potential biomarkers in prostate cancer patients and its correlation with serum PSA, Gleason score and staging of prostate cancer (Urology)
24. Circulating microRNAs as biomarkers for testicular germ cell tumours: A pilot study (Reproductive Biology)
25. Identification of Glucose related protein 78(GRP78) as a biomarker for tumour behaviour in patients of renal cell carcinoma (Urology)

26. Human Papillomavirus status in Penile carcinoma in Indian patients: Incidence, type distribution and correlation with Clinico-Pathological Staging (Urology)
27. Retrospective analysis of Testicular Germ Cell tumours at IRCH, AIIMS (Medical Oncology)
28. Evaluation of anti-urolithiatic activity of herbal extracts in animal model (National Innovation Foundation, Ahmedabad)
29. Molecular basis of estrogenism in endometriosis (Physiology, Biochemistry, Gynaecology)
30. A Comparative Evaluation of HPV E6/E7 mRNA Assay and High Risk HPV DNA Test for the Diagnosis of High Grade Cervical Intraepithelial Neoplasia (Gynaecology and Obstetrics)
31. Bio Statistical Aspects of Prognostic Factors including Molecular Parameters in Breast Cancer Patients: An Epidemiological Appraisal (BRA-IRCH)
32. Optical Characterization of Breast Cancer (Surgery)
33. Role of Shearwave Elastography and Multiparametric MRI in the assessment of endometrial pathology (Radiodiagnosis)
34. Molecular classification of breast cancer using FDG PET CT, MRI and NMR: A pilot study, Surgery
35. Bio statistical aspects of Prognostic Factors including Molecular Parameters in Breast Cancer Patients: An Epidemiological Appraisal (Radiotherapy)
36. Role of sono-elastography in the assessment of uterine pathology (Radiodiagnosis)
37. Role of shear wave elastography and multiparametric MRI in the assessment of endometrial pathology (Radiodiagnosis)
38. Regulation of FAT1 gene expression in Gliomas (Biochemistry)
39. Centre of Excellence in Epilepsy with special reference to “Difficult to treat Epilepsy” (Neurosurgery)
40. Artificial skin (bio-inspired bi-layer polymeric hybrid scaffold) for burn injuries in trauma care (Centre for Biomedical Engineering, IIT)
41. Sculpturing corneal constructs using micropatterned surface and decellularized cornea (Textile Engineering, IIT Delhi, Stem Cell Facility, R.P. Centre)
42. To study the efficacy of nanoformulation of antiepileptic drugs in various animal models of seizure (Pharmacology)
43. Concurrent vs sequential neoadjuvant chemoradiotherapy followed by surgery in patients with locally advanced, resectable carcinoma gallbladder: A pilot study (GI Surgery, Medical Oncology, Radiation Oncology)
44. Identification of unique morphologically identifiable preneoplastic lesions in colon mucosa during colorectal carcinogenesis (GI Surgery, Surgery)
45. Detection of altered protein expression in microscopic preneoplastic mucosal lesions of the colon (GI Surgery, Surgery)
46. A study on the role of miRNAs modulating signal transduction in Pancreatic Cancer (Gastroenterology and HNU, Biochemistry)
47. Association of various genotypes of M Tuberculosis with clinical, pathological manifestation and disease outcome of Post-Primary Tuberculosis (Laboratory Medicine, Medicine, LRS Institute of TB and Respiratory Diseases)
48. Biomarker for assessment of villous abnormalities in patients with celiac disease and other enteropathies (Gastroenterology and HNU)
49. Understanding the pathophysiology of endometriosis by protein profiling and correlation with stress (Physiology, Obstetrics and Gynaecology, Reproductive Biology, Biostatistics)
50. Exploration of origins of Juvenile Nasal Angiofibroma (JNA) by histological evaluation of fetal development of “pterygo-palatine fossa-ptyergoid canal complex” and assessment of first branchial arch remnant vidian artery in cases with JNA (ENT, Anatomy Radiodiagnosis, Obstetrics and Gynaecology)
51. The ratio of preoperative and postoperative serum bilirubin and alkaline phosphatase as simple markers to predict early outcome post Kasai portoenterostomy (Paediatric Surgery)
52. Study of Clinical and Histopathological Features of Acute on Chronic Hepatitis (Gastroenterology and HNU)
53. Histopathology of Non-cirrhotic Portal Fibrosis (NCPF) and Extrahepatic Portal Venous Obstruction (EHPVO) (Gastroenterology and HNU, GI Surgery)
54. Comparison of Histological and Fibroscan scoring of liver fibrosis (Gastroenterology and HNU)
55. Histopathology of Celiac disease in symptomatic and asymptomatic cases and family members (Gastroenterology and HNU)
56. Impact of Laparoscopic Sleeve Gastrectomy (Bariatric Surgery) on Non Alcoholic Fatty Liver Disease (NAFLD) in morbid obesity (Surgery, Gastroenterology and HNU)

57. Predictive biomarkers for response to neoadjuvant chemoradiotherapy in locally advanced rectal cancer (Radiation Oncology, Surgical Oncology)
58. Correlation of Metabonomics and Enzyme Activity Profile of Intestinal Mucosa in Celiac Disease using NMR Spectroscopy and Immunohistochemistry (Nuclear Magnetic Resonance, Gastroenterology and HNU)
59. Liver biopsy in Acute and Chronic liver disease (Gastroenterology and HNU)
60. Characterizing causes of non-motility after colectomy for Hirschsprung's disease (Pediatric Surgery)
61. A study to investigate multi-system involvement in patients with celiac disease using in vitro NMR spectroscopy (Nuclear Magnetic Resonance, Gastroenterology and HNU)
62. Molecular expression of tight junctions and disruption of mucosal epithelial cell polarity in progression of gastric cancer (Laboratory Medicine, Gastrointestinal Surgery, Gastroenterology and HNU)
63. MR guided biopsy in detection of Prostate Cancer, Nuclear Magnetic Resonance (Urology, Radiodiagnosis IRCH)
64. Metabolomics study of Prostate Cancer by using NMR Spectroscopy (Nuclear Magnetic Resonance, Urology, Radiodiagnosis IRCH)
65. Clinical, Radiological and Histopathological involvement of the mandible in oral squamous cell carcinoma (ENT, Radiodiagnosis)
66. Clinico-Radio-Pathological evaluation of different possible sites in cases of FNAC proven Squamous Cell Carcinoma in Secondary Cervical Lymph Node with unknown Primary (ENT, Nuclear Medicine)
67. Multiparametric MRI Ga68 PSME PET scan in evaluation of High Risk Prostate Carcinoma (Radiodiagnosis, Nuclear Medicine, Urology, Biostatistics, Gastroenterology)
68. Molecular and Biochemical Characterisation of Hepatic Glycogenesis Type I a and III (Genetics, Paediatrics, Nuclear Magnetic Resonance)
69. Detection and quantification of circulating tumour cells in Oral Squamous Cell Carcinoma (ENT, Stem Cell Facility)
70. Role of bone marrow mononuclear cells and renal stem cells in renal preservation in obstructive renopathy: An experimental study in mice (Paediatric Surgery, Trauma Centre)

Completed

1. Diagnostic utility of EBUS-TBNA vs conventional TBNA with rapid on site evaluation in the diagnosis of sarcoidosis: A randomised study (Pulmonary Medicine and Sleep Disorders)
2. Estimation of diagnostic yield of bronchoscopy and bronchoscopic procedures in patients presenting with fever and miliary shadowing in chest imaging (Medicine)
3. Evaluation of gene expert performance in Tuberculosis (Medicine)
4. Estimation of whole body radiation exposure to nuclear medicine personnel during synthesis of ¹⁷⁷ Lutetium, Labelled radiopharmaceuticals (Nuclear Medicine)
5. Comparison of 4D CT, 4D MRI and Fluorocholine PET in the Localisation of Parathyroid Lesions in Patients with Primary Hyperparathyroidism (HPT) (Nuclear Medicine)
6. Clinico-pathological features of paediatric non Hodgkin lymphoma (Medical Oncology)
7. Assessment of prevalence of eosinophilic esophagitis in patients with dyspepsia (Gastroenterology)
8. Selective M1 macrophage polarisation in granuloma, positive and granuloma, negative Crohn's disease, In comparison to intestinal Tuberculosis: A Novel Observation (Gastroenterology)
9. Study of p53 immunoexpression and Ki67 LI in patients with advanced soft tissue sarcoma (Physiology, Biochemistry, Gynaecology)
10. Assessment of depth of invasion in oral cavity squamous cell carcinoma (T1-T3) by clinical palpation and radiology and their correlation to histopathological depth of invasion (ENT, Radiology)
11. Exploring the role of adipose tissue ABCA1 in determining serum HDL cholesterol (Biochemistry, Surgery)
12. To evaluate the expression of ERCC and β 3 tubulin by immunohistochemistry on baseline tumour tissue of all patients and correlate with outcome (Medical Oncology)
13. Imaging and molecular characterization of differentiated thyroid cancer (Nuclear Medicine)
14. Role of CE, MRI of breast and MR guided breast biopsy for preoperative evaluation of patients diagnosed with breast cancer and selected for breast conservation surgery (Radiodiagnosis)
15. Prediction of tumour neo-angiogenesis and grade by imaging based biomarkers using diffusion weighted MRI and dual energy perfusion CT in advanced renal cell carcinoma (Radiology)
16. Effect of Indian almond and sweet almond in diabetes induced nephropathy and cataract in rats (Pharmacology, VP Chest institute)

PUBLICATIONS**Journals: 183****Abstracts: 30****Chapters in books: 8****PATIENT CARE****Laboratory services****Surgical pathology laboratory**

Specimens processed	51,971	Special stains	35,000
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Cytopathology laboratory

Total specimens	24,398	FNAC (out patient)	9,837
Exfoliatives routine	9,925	Cervical smears (PAP)	4,636
Immunocytochemistry	912	Autopsies performed	24
Electron microscopy	1,519		

Immunohistochemistry laboratory

Diagnostic	39,970	Research	1,635
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Neuropathology lab

Total Specimen	2331	Frozen Section	262
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Immunohistochemistry

Routine	7,296	Research	600
Muscle	2,640	Total muscle received	362
Muscle Enzyme-histochemistry	1,430		
Fluorescence in situ hybridization			
Diagnostic	85	Routine	112

EM facility

Total muscle sample	362	Total nerve sample	67
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Tissue culture lab

H &E Staining	8,081	Special Stains	308
Immunohistochemistry	1,534	Frozen Sections	4,606
Unstained	3,207	Coated slices	23,270

Renal pathology services

Urine sediment analysis	1,020	Immunofluorescence of kidney biopsy	888
Electron microscopy of kidney biopsy	882		

Cardiac pathology services**Specimens**

Routine:	495	Research:	136
Immunohistochemistry:	271 slides	H & E stain:	69 slides
Special stains:	189 slides	Cutting of blocks (unstained sections):	356 slides
Manual processing of post-transplant biopsies: 21 cases			

AWARDS, HONOURS AND SIGNIFICANT EVENTS**Resident Awards**

1. **Vikas Sharma** was awarded President's Annual Award for best presentation in Basic Neuro-Oncology group for his paper entitled "Genome wide analysis of EZH2 mediated H3K27me3 target gene profile using ChIP-seq highlights differences between low and high grade astrocytic tumours as well as identifies SLC25A23 as a novel prognostic marker in glioblastoma" at 8th Annual Conference of Indian Society on Neuro-oncology (ISNO) held at Hyderabad 1-3 April 2016.

2. **Kaveet Kaur** got Dr V Ramalingaswami award for paper entitled “Adult medulloblastomas: A clinicopathological and molecular genetic study highlighting differences from their pediatric counterparts” at 32nd Annual Conference of DAPCON 2017 held on 26 March, organised by Department of Pathology, Lady Hardinge Medical College, New Delhi, India.
3. **Kalpna Sinha** got Dr H.D.Tandon Award for Best Poster Presentation at 32nd Annual Conference of DAPCON 2017 held on 26 March, organised by Department of Pathology, Lady Hardinge Medical College, New Delhi, India
4. **Gaurav Khanna** got third prize for the poster entitled “Epithelioid Glioblastoma - a recently described rare entity: Series of seven cases” at 32nd Annual Conference of DAPCON 2017 held on 26 March, organised by Department of Pathology, Lady Hardinge Medical College, New Delhi, India.
5. **Dr Nadeem K**, pursuing MD thesis under guidance of Dr Shipra Agarwal got the ICMR Medical Postgraduate Award (including financial assistance of Rs 25,000/-) at National Level for his thesis entitled “Role of Braf V600E and Tert Promoter Mutations in Predicting Aggressiveness of Papillary Thyroid Carcinoma”.
6. Best Poster Prize at ACOS 2016 (Asian Clinical Oncology Society) for poster entitled “Clinicopathological features, hormone immunoreexpression and loss of ATRX and DAXX expression in pancreatic neuroendocrine tumours” in Delhi, India.

Dr Chitra Sarkar was Vice President of the International Society of Neuropathology; Secretary, Neuropathology Society of India; Selection committee member for Ranbaxy Awards; Member of sectional committee (Health Sciences) of INSA; Chairperson, AIIMS Intramural research committee (Basic Sciences); Member, Editorial Board of journal Neuropathology (published from Japan); Member, Assessment Committee for scientists’ promotions of ICMR; Member, Governing Body and Scientific Advisory Committee of National Brain Research Centre, Manesar; Member, Scientific Advisory Committee of Institute of Pathology, New Delhi; Co-chairperson, Human Ethics Committee of National Institute of Immunology, New Delhi; Member, Human Ethics Committee, Dr. Ambedkar Centre of Biomedical Research, New Delhi; Member, Task Force of Neurosciences, Department of Biotechnology, Govt. of India; Co-author of the following chapters in the updated WHO classification of tumours of the Central Nervous System to be published in May 2016: (i) CNS embryonal tumour, NOS, (ii) Embryonal tumour with multilayered rosettes, C19 MC-altered and NOS.

Professor S. Datta Gupta continues as Dean (Examinations); elected as Fellow of the National Academy of Medical Sciences; elected President of the Indian Association of Pathologists and Microbiologists for the year 2016; continues as Associate Editor of the Indian Journal of Pathology and Microbiology; continues as Member of the Editorial Board of the Indian Journal of Laboratory Physicians, Indian Journal of Dermatopathology and Diagnostic Dermatology and Indian Journal of Chest Diseases; delivered Odisha Chapter Oration, 44th Annual Meet of Odisha Chapter of IAPM (Odisha APCON 2016), 11 September 2016, Rourkela, Odisha; delivered Dr S.N. De Memorial Oration, 24th Annual Conference of West Bengal Chapter of IAPM, 18 September 2016, Kolkata; delivered Dr B.K. Aikat Memorial Oration (Presidential Oration), 65th Annual Conference of IAPM (APCON 2016), 2 December 2016, Jaipur; delivered Prof Thangavelu Memorial Oration at the POMP 2017 and 9th Annual CME in Pathology, Kerala Chapter IAPM, 12 February 2017, Kozhikode; moderated Dr RN Ghosh Memorial CME 2016, 24th Annual Conference of West Bengal Chapter of IAPM, 17 September 2016, Kolkata; Paper by Singh A, Verma AK, Das P, Jindal G, Shyam Prakash, Nayak PB, Datta Gupta S, Lalit Kumar, Ahuja V, Makharia GK. Noninvasive biomarkers for assessment of villous abnormalities in patients with celiac disease and other enteropathies awarded the **First Prize in Young Investigator Award Session** at the 57th Annual conference of Indian Society of Gastroenterology (ISGCON 2016) held at New Delhi from 15–18 November 2016

Dr A.K. Dinda nominated as the General Secretary of Indian Society of Nanomedicine, Member of Technical evaluation committee for Inter-Sectoral Convergence and Coordination for Promotion and Guidance of Health Research under DHR, Research Advisory Council of Indian Institute of Nano Science and Technology, Mohali (An Autonomous Institute supported by DST), Member, Regulatory Framework Advisory Group (RFAG) of Nanomission of DST; Member, Nano-Biotechnology Taskforce of DBT, Member of Nanomedicine Task force of ICMR.

Dr Sandeep Mathur continued as Secretary of the Delhi Chapter of Indian Academy of Cytologists for 3 years till 2020

Dr Deepali Jain received the AMP International Membership Grant Association of Molecular Pathology, 2017; Seminars in Surgical Pathology Series, University of Massachusetts, Worcester, MA, USA March 2017; Section Editor, Molecular Cytopathology, Archives of Pathology and Laboratory Medicine; Member of Digital Content Committee, Image Atlas Team, Website Audio/Visual Team of Pulmonary Pathology Society, USA; Writing PPS position paper on ROSE in EBUS TBNA in Archives of Pathology and Lab Medicine; Attended IASLC Pathology Meeting in Vienna 2016, San Antonio 2017 as an observer; Molecular Cytopathology Training University of Pathology, Basel, Switzerland, 7–15 December 2016; 2016 IASLC International Mentorship Award at 17th World Conference on lung cancer Vienna, Austria; Successfully passed examination conducted in Yokohama, Japan and become Fellow International Academy of Cytology (FIAC) year 2016; Member of the Working group of Asian Thyroid FNA Cytology.

Professor Manoj K. Singh was external expert for Assessment Promotion Scheme for the post of Professor in the Department of Histopathology of the Postgraduate Institute of Medical Education and Research (PGIMER), Chandigarh on 15 September 2016; attend the first meeting of the Internal Quality Assurance Cell (IQAC) as an external expert member at UCMS and GTB Hospital on 3 October 2016

Professor M.C Sharma was co-author of the following chapters in the updated WHO classification of Tumours of the Central Nervous System to be published in May 2016 (i) Tuberos Sclerosis Complex; (ii) Subependymal Giant Cell Astrocytoma

Dr Prasenjit Das was elected Member, the Rodger C. Haggitt Gastrointestinal Pathology Society, USA; Elected as Associate Editorial Board Member for the Medical Journal of Clinical Trials & Case Studies (MJCCS); Conferred Membership of National Academy of Sciences, Allahabad.

Dr Geetika Singh was Joint Organising Secretary of the XIIth Annual Conference of the Indian Society of Renal and Transplantation Pathology and 3rd International Renal Pathology Conference held at AIIMS, New Delhi between 9 and 12 February 2017; Inducted as Member of the Website and Communications Committee of the Renal Pathology Society, USA.

9.30. Pharmacology

Professor and Head

Y.K. Gupta

Professors

V.L. Kumar
S.K. Maulik
Surender Singh

Kamal Kishore
D.S. Arya
K.H. Reeta

N.R. Biswas (on deputation)
Jatinder Katyal
Jagriti Bhatia

Assistant Professors

N.S. Raj
Harlokes Narayan Yadav

Pooja Gupta
Sudhir Chandra Sarangi

Scientists

Sharda S. Peshin
Madhuri Gupta

Thomas Kaleekal
Sunder Singh Samuel

Amita Srivastava

HIGHLIGHTS

The Pharmacology Department continues to be ADR Monitoring Center (ADR-AMC) under Pharmacovigilance Programme of India (PVPI) and Dr Y.K. Gupta as National Scientific Coordinator. The department has also been designated as Medical Device Monitoring Centre (MDMC) for Materiovigilance Programme of India (MvPI) by Ministry of Health and Family Welfare, Govt. of India with Dr Pooja Gupta as the Coordinator.

EDUCATION

The department is engaged in the teaching programmes of BSc Nursing (Hons), MBBS, MSc (Pharmacology), MD, PhD and DM (Clinical Pharmacology) courses.

CMEs/Workshops/Symposia/National and International Conferences

1st Annual Conference of Indian Society of Nano-medicine was jointly organized by Department of Pharmacology and Department of Pathology, AIIMS under the aegis of Department of Biotechnology (DBT) from 24 to 26 November 2016.

AIIMS, Clinical Development Services Agency (CDSA) Ethics Committee Training Workshop was organized by IIT Delhi and AIIMS on 24 January 2017 at AIIMS, New Delhi.

Preconference workshop on “Fundamentals of Pharmacoeconomics” was conducted during the 49th Annual Conference of Indian Pharmacological Society (IPS) at Post Graduate Institute of Medical Education and Research (PGIMER), Chandigarh, India on 20 October 2016.

Lectures delivered

Y.K. Gupta 19

Kamal Kishore: 1

S.K. Maulik: 5

K.H. Reeta: 2

Jagriti Bhatia: 2

Pooja Gupta: 4

Harlokesh Narayan Yadav: 2

Sudhir Chandra Sarangi: 2

Sharda Shah Peshin: 2

Thomas Kaleekal: 1

Amita Srivastava: 1

Y.K. Gupta 19

1. Establishing Pharmacovigilance centers in a resource limited country, National Pharmacovigilance Expert Group Committee Meeting, 8 April 2016, Kathmandu, Nepal
2. Current status of Pharmacovigilance Programme in India, Indian Pharmacopoeia Commission, Pharmacovigilance Programme of India, 50th Annual Function, 14 April 2016, Indian Habitat Centre, New Delhi
3. Challenges of availability of affordable drugs in India, 13th National Pharmaceutical Conclave, 19 April 2016, New Delhi
4. Current regulations in Biosimilars, Bio-similar round table by United States International Business Council (USIBC), 21 April 2016, New Delhi
5. Strategies for drug development in rare diseases, Rare Disease Workshop, 22 April 2016, Indian National Science Academy (INSA), New Delhi
6. Panel discussion on current regulatory scenario in Pharmaceuticals in India, Seminar on Opportunities in Export of R & D Services in Healthcare and Life Sciences, 22 April 2016, India Expo Centre and Mart, Greater Noida
7. Current regulations in Pharmacovigilance, International Pharmacovigilance Conference, 13 May 2016, Andheri East, Mumbai
8. Potential of commercialization of herbal medicines in India, Brainstorming-cum-Interactive Meeting on Herbal Drug Pipeline Project, 18 May 2016, Conference room of Department of Biotechnology (DBT), New Delhi
9. Adverse drug reactions reporting by non-health care professionals, Seminar on Pharmacovigilance organized by Ministry of Health, Dept. of Drug Administration, 5 June 2016, Kathmandu, Nepal
10. Pharmacovigilance in India: Today and Tomorrow, Indian Pharmacovigilance Day, 12 July 2016, Nehru Planetarium, Mumbai
11. Drug development in Kala Azar, Drug Development Workshop, 30 July–1 August 2016, BP Koirala Institute of Health Sciences, Kathmandu, Nepal
12. Course of Drug Development, Pharmacy week celebrations, 9 September 2016, Shaheed Rajguru College of Applied Sciences for Women, New Delhi
13. Pharmacovigilance for better health care system in India, 3rd National Symposium “Evolving a Pharmacovigilance in India, Collaborations Opportunities & Challenges,” 24 September 2016, New Delhi
14. Clinical trial: Changing regulations, 49th Annual Conference of Indian Pharmacological Society, 21–23 October 2016, Post Graduate Institute of Medical Education and Research, Chandigarh
15. Issues in Food safety in India, One Day Seminar on “Ensuring Safety of Food, Agrochemical, Medical Devices and Pharmaceuticals” (FAMP), 16 November 2016, India International Centre, New Delhi
16. Translational nano-medicine in India, First Annual Conference of Indian Society of Nano-medicine at AIIMS, 24 November 2016, AIIMS, New Delhi
17. Alternate animal model in biomedical research, Brain Storming Session on Alternatives to Animal Experimentation, 9 February 2016, Indian Council of Medical Research, New Delhi
18. Pharmacologists in India for 2020, 50th Annual Inaugural Golden Jubilee Conference of Indian Pharmacological Society, 14–15 February 2017, Indira Gandhi Institute of Medical Sciences (IGIMS), Patna, Bihar
19. Regulatory Challenges of Cancer, Nano medicines: An Indian Perspective, International Conference on Cancer Nano medicine Translational Challenges, Systems Oncology, 10–12 March 2017, Amrita Institute of Medical Sciences, Cochin

Kamal Kishore: 1

1. Environmental Pollutants “Where do they hide in my body”? 9 November 2016, Indian International Centre (IIC), New Delhi

S.K. Maulik: 5

1. Pharmacological validation of Ayurvedic drug as an expert, Brainstorming Workshop on Development of Experimental Methodology for Generation of Scientific Evidence on Fundamental Principles of Ayurveda, 18 January 2017, Regional Ayurveda Institute for Fundamental Research, Pune, Pune
2. Arjuna from animal to human: In heart failure, an AIIMS study. Workshop cum Brainstorming Seminar on Ayurveda and Prevention of Cardiovascular Disorders, 9 February 2017, Vallabhbhai Patel Chest Institute, University of Delhi, Delhi
3. Treatment of Pulmonary Hypertension: Does Arjuna hold any promise? International Conference Recent Advances in Cardiovascular Research: Impact on Health and Disease, 9–11 February 2017, Vallabhbhai Patel Chest Institute, University of Delhi, Delhi
4. Role of medicinal plants, Putting facts before faith, Annual inaugural Golden Jubilee Conference of Indian Pharmacological Society 2017, 14–15 February 2017, Indira Gandhi Institute of Medical Sciences, Patna, Bihar
5. Involvement of Peripheral Benzodiazepine Receptor in Oxidative Stress associated with Cardiac Hypertrophy in rat, Symposium on Oxidative Stress in Health and Disease, 30–31 March 2017, University of Kalyani, West Bengal

K.H. Reeta: 2

1. Curcumin in epilepsy and memory impairment: Experimental evidences, 50th Annual Inaugural Golden Jubilee Conference of Indian Pharmacological Society, 14 February 2017, Indira Gandhi Institute of Medical Sciences, Patna, Bihar
2. Herbal drugs in Epilepsy, 4th International Conference on Ayurveda, Unani, Siddha and Traditional Medicine 2016, 9 December 2016, Institute of Indigenous Medicine, University of Colombo, Sri Lanka

Jagriti Bhatia: 2

1. Epicatechin gallate attenuates cisplatin induced kidney injury in rats, 50th Annual Inaugural Golden Jubilee Conference of Indian Pharmacological Society (AIGJCONIPS2017), 13–15 February 2017, Indira Gandhi Institute of Medical Sciences, Patna, Bihar
2. Career prospects in Pharmacology, 8th National Conference of Indian Society for Rational Pharmacotherapeutics (ISRPTCON 2017), 9–12 February 2017, Late Shri Lakhi Ram Agrawal Memorial Government Medical College (LAMGMC), Raigarh, Chhattisgarh

Pooja Gupta: 4

1. Causality Assessment: Logic & methods & workshop on causality assessment & narrative writing, 2nd Skill Development Programme on Basic and Regulatory Aspects of Pharmacovigilance, 3 March 2017, Indian Pharmacopeia Commission, Ghaziabad
2. Indian National Young Academy of Science, 1st Asian National Young Academies' Meeting, 15–16 December 2016, Bangkok, Thailand
3. Developing DM Clinical Pharmacology Curriculum, 49th Annual Conference of Indian Pharmacological Society, 21–23 October 2016, Post Graduate Institute of Medical Education and Research, Chandigarh
4. Evaluating Pharmacoeconomic Publications, Preconference Workshop of 49th Annual Conference of Indian Pharmacological Society, 20 October 2016, Post Graduate Institute of Medical Education and Research, Chandigarh

Harlokesh Narayan Yadav: 2

1. Effect of daidzein in experimental diabetic nephropathy in Wistar rats, National Seminar on evidence based on Alternative Medicine: Challenges and opportunities, 29–30 April 2016, Rameesh Institute G. Noida, G. Noida, U.P.
2. Ischemic preconditioning in diabetic and hyperlipidemic rat heart, Eastern Regional Indian Pharmacological Society Conference (ERIPSCON 2017), 24–25 March 2017, Vijaya Institute of Pharmaceutical Sciences for Women, Vijayawada, Telangana

Sudhir Chandra Sarangi: 2

1. IEC, Documentation and archiving AIIMS, Clinical Development Services Agency (CDSA), Ethics Committee Training Workshop, 24 January 2017, AIIMS, New Delhi, New Delhi
2. Clinical trial: Investigator role and responsibilities, 50th Annual Inaugural Golden Jubilee Conference of Indian Pharmacological Society (AIGJCONIPS2017), 13–15 February 2017, Indira Gandhi Institute of Medical Sciences, Patna

Sharda Shah Peshin: 2

1. Current status, role & challenges of poisons center in India, 49th Annual Conference of Indian Pharmacological Society (IPSCON-2016), 22–23 October 2016, Post Graduate Institute of Medical Education and Research, Chandigarh
2. Poison information center in India: Current status, 36th Annual Conference of Society of Toxicology (India) 2016, International Conference on new insights & multidisciplinary approaches in Toxicological Studies, 3–5 August 2016, Amity University, Noida, UP

Thomas Kaleekal: 1

1. Righting the wrongs in the teaching of Toxicology, Pharmaceutical Toxicology, 10th Annual National Conference of Toxicology (TOXOCON-10), 28–29 December 2016, Amrita Institute of Medical Sciences (AIMS), Cochin, Kerala

Amita Srivastava: 1

1. Righting the wrongs in teaching of Toxicology, 10th Annual National Conference of Toxicology (TOXOCON-10), 28–29 December 2016, Amrita Institute of Medical Sciences, Cochin, Kerala

Oral papers/posters presented: 29

1. Anti-inflammatory and anti-arthritis activities of Homeopathic drugs, Proceedings of the 49th Annual Conference of Indian Pharmacological Society (IPSCON-2016), 21–23 October 2016, Post Graduate Institute of Medical Education and Research, Chandigarh
2. To evaluate the safety profile of -anti-arthritis homeopathic drugs, Proceedings of the 49th Annual Conference of Indian Pharmacological Society (IPSCON-2016), 21–23 October 2016, Post Graduate Institute of Medical Education and Research, Chandigarh
3. Screening of Antiepileptic and Neurobehavioural effect of *Ocimum sanctum* Hydroalcoholic extract in experimental Animal Models, 49th Annual Conference of Indian Pharmacological Society, 21–23 October 2016, Post Graduate Institute of Medical Education and Research, Chandigarh
4. Seizure recurrence in persons with Epilepsy undergoing Anti-Epileptic drug tapering: Potential risk factors, 49th Annual Conference of Indian Pharmacological Society, 20–23 October 2016, Post Graduate Institute of Medical Education and Research, Chandigarh
5. Conventional and newer Antiepileptic drugs with reference to quality of life and cost of treatment: A trend analysis, 49th Annual Conference of Indian Pharmacological Society, 20–23 October 2016 Post Graduate Institute of Medical Education and Research, Chandigarh
6. Treatment pattern of initial therapy for multiple myeloma at a tertiary care hospital in India: Interim results, 49th Annual Conference of Indian Pharmacological Society, 20–23 October 2016, Post Graduate Institute of Medical Education and Research, Chandigarh
7. Psychomotor Impairments in Patients taking Antihypertensive Medicines in India, Hypertension Seoul 2016, 24–29 October 2016, Coex Centre, Seoul, Korea
8. Taurine ameliorates intra-cerebroventricular streptozotocin induced sporadic model of Alzheimer's disease and neuroinflammation in rats, 49th Annual Conference of Indian Pharmacological Society, 20–23 October 2016, Post Graduate Institute of Medical Education and Research, Chandigarh
9. Does enrichment of herbal drugs improve activity? A study on *Withania somnifera*, 49th Annual Conference of Indian Pharmacological Society, 20–23 October 2016, Post Graduate Institute of Medical Education and Research, Chandigarh
10. Effect of taurine on expression of Rho kinase, 2(ROCK-II), glycogen synthase kinase, 3 β (GSK-3 β) and choline acetyl transferase (ChAT) in intra-cerebroventricular streptozotocin (ICV-STZ) model of Alzheimer's disease, 49th Annual Conference of Indian Pharmacological Society, 20–23 October 2016, Post Graduate Institute of Medical Education and Research, Chandigarh
11. Cost comparison of drug regimens for treatment of breast carcinoma using drugs from NLEM, 2015 and drugs not included in NLEM, 49th Annual Conference of Indian Pharmacological Society, 20–23 October 2016, Post Graduate Institute of Medical Education and Research, Chandigarh
12. Anti-convulsant effect of hydroalcoholic extract of *Terminalia chebula* in pentylenetetrazol (PTZ) and maximal electroshock (MES) model of seizures and cognitive impairment in rat, 49th Annual Conference of Indian Pharmacological Society, 20–23 October, 2016, Post Graduate Institute of Medical Education and Research, Chandigarh

13. Cost comparison analysis of antimicrobials used in *Pseudomonas* infection from NLEM 2015, 49th Annual Conference of Indian Pharmacological Society, 20-23 October, 2016, Post Graduate Institute of Medical Education and Research, Chandigarh
14. Cost differential analysis of pharmacotherapy of hypertension using drugs included and not included in NLEM 2015, 49th Annual Conference of Indian Pharmacological Society, 20-23 October 2016, Post Graduate Institute of Medical Education and Research, Chandigarh
15. Metformin affords protection in murine model of colitis by inhibiting oxidative stress and pro-inflammatory signaling-Xth AAPI Global Healthcare Summit 2016, 28 December 2016, Rabindranath Tagore Medical College, Udaipur
16. Kaempferol attenuates myocardial ischemic injury *via* inhibition of MAPK signaling pathway in experimental model of myocardial ischemia-reperfusion injury, 26th Scientific Meeting of the International Society of Hypertension, 24-29 September 2016, Coex Centre, Seoul, South Korea
17. Losartan but not enalapril protects development of Pentylentetrazole induced kindling in rats: Role of BDNF, 2nd European Academy of Neurology Congress, Copenhagen, 28-31 May 2016, Bella Center, Copenhagen, Denmark
18. A prospective study on potentially inappropriate medications in elderly, Proceedings of the 49th Annual Conference of Indian Pharmacological Society (IPSCON-2016), 20-23 October 2016, PGI, Chandigarh
19. Chrysin, a naturally occurring flavone, attenuates Pentylentetrazole induced kindling and associated cognitive impairment and oxidative stress in rats, 4th International Conference on Ayurveda, Unani, Siddha and Traditional Medicine 2016 organized by Institute of Indigenous Medicine, 8-10 December 2016, University of Colombo, Sri Lanka
20. Assessment of percentage infarct in cerebral ischemic stroke model in rats: Comparison of TTC staining and MRI imaging, *Eur Stroke J* 2016; *1* (IS): 398, 2nd European Stroke Organization Conference 2016, 10-12 May, 2016 CCIB, Centre Conventions International de Barcelona, Barcelona, Spain
21. Interaction profile of panchagavya ghrita with sodium valproate and phenobarbital in pentylentetrazole induced seizures in rats: Pharmacodynamics and Pharmacokinetic study, 49th Annual Conference of Indian Pharmacological Society, 20-23 October 2016, Post Graduate Institute of Medical Education and Research, Chandigarh
22. Antinociceptive effect of intrathecal carbenoxolone, a gap junction blocker in Brennan's paw incision model [PT0361], 16th World Congress on Pain, 26-30 September 2016, Pacifico Convention Center, Yokohama, Japan
23. Mangiferin protects against myocardial insults through modulation of MAPK pathway, 26th scientific meeting of the International Society of Hypertension, 24-29 September 2016, Coex Center, Seoul, South Korea
24. Cost comparison of NLEM versus non-NLEM medicines using candidiasis as a case study, 49th Annual Conference of Indian Pharmacological Society, 21-23 October 2016, Postgraduate Institute of Medical Education and Research, Chandigarh
25. Prescribing patterns of antihypertensive medication among adult and geriatric patients in a tertiary care hospital in Delhi, 49th Annual Conference of Indian Pharmacological Society, 21-23 October 2016, Postgraduate Institute of Medical Education and Research, Chandigarh, Chandigarh
26. Could consumption of tea from street vendors pose a risk for aluminium accumulation: A pilot study, 18th International Conference on Heavy Metals in the Environment (ICHMET), 12-15 September 2016, University of Ghent, Ghent, Belgium
27. Poisoning calls reported to National Poisons Information Centre, AIIMS, New Delhi: A five years retrospective study, 49th Annual Conference of Indian Pharmacological Society, 20-23 October 2016, Postgraduate Institute of Medical Education and Research, Chandigarh, Chandigarh
28. An eleven years retrospective study of poisoning incidence in children reported at National Poisons Information Centre, (NPIC), AIIMS, New Delhi, 49th Annual Conference of Indian Pharmacological Society, 20-23 October 2016, Post Graduate Institute of Medical Education and Research, Chandigarh, Chandigarh
29. Poisoning due to chemical compounds reported to the National Poisons Information Centre, (NPIC), AIIMS, New Delhi, 49th Annual Conference of Indian Pharmacological Society, 20-23 October 2016, Post Graduate Institute of Medical Education and Research, Chandigarh, Chandigarh

RESEARCH

Funded projects

Ongoing

1. Neuroprotective study of Lercanidipine and Citalopram in experimental model of stroke in rats, Y.K. Gupta, DST, 2014-2017, Rs. 22.75 lakhs

2. Establishment of Clinical Research Centre (CRRC) for Pharmacovigilance. Y.K. Gupta, PATH (Program for Appropriate Technology in Health), 2013–2018, Rs. 59.79 lakhs
3. Pharmacological Evaluation of Herbomineral Ayurveda Formulations (AFYs) used in the Prophylaxis of Migraine, Y.K. Gupta, IPCA Laboratories, 2011–2017, Rs. 29.61 lakhs
4. Studies on the efficacy of latex of *Calotropis procera* in experimental models of Colitis and Colorectal Cancer, V.L. Kumar, AIIMS, 2016–2017, Rs. 4.24 lakhs
5. Anti-inflammatory strategy in the treatment of pulmonary Artery hypertension., S.K Maulik, ICMR, 2017–2020, Rs. 8.96 lakhs
6. To determine the effect of seizures on neurogenesis and cardiac remodeling in lithium pilocarpine model in rats, Role of AT1 receptor blocker losartan and kappa opioid receptor agonist U50488, Jatinder Katyal, AIIMS, 2016–2018, Rs. 4.95 lakhs
7. Role of brain derived neurotrophic factor (BDNF) as a potential biomarker in seizure related cardiac abnormalities, Jatinder Katyal, DST, 2017–2019, Rs. 21.35 lakhs
8. Preliminary pharmacological and safety studies of homeopathic drugs, Surender Singh, Central Council for Research in Homeopathy, 2016–2017, Rs. 9.96 lakhs
9. Evaluation of fumaric acid esters (FAEs) in experimental model of stroke in rats, KH Reeta, DBT, 2015–2018, Rs. 59.54 lakhs
10. Evaluation of the nephroprotective effect of berberine and diadzein in cisplatin induced nephrotoxicity in rats, Jagriti Bhatia, DBT, 2015–2018, Rs. 24.99 lakhs
11. Evaluation of the nephroprotective effect of mangiferin in cisplatin induced nephrotoxicity in rats, Jagriti Bhatia, AIIMS, 2016–2017, Rs. 4.6 lakhs
12. Role of glucose regulated protein (GRP78) in response to bortezomib-based regimen in multiple myeloma, Pooja Gupta, AIIMS, 2016–2017, Rs. 4.95 lakhs
13. A prospective observational study to find out correlation of serum antiepileptic drug (AED) and biomarkers levels with seizure recurrence in persons with epilepsy (PWE) undergoing AED tapering Sudhir Chandra Sarangi, AIIMS, 2016–2018, Rs. 5 lakhs
14. Polymorphism of APOE gene in alzheimer's disease due to exposure of residuals of DDT, BHC and dieldrin pesticides in Indian population, Madhuri Gupta, AIIMS, 2016–2018, Rs. 5 lakhs

Completed

1. Studies on the efficacy of artesunate in experimental model of colorectal cancer, V.L Kumar, AIIMS, 2014–2016, Rs. 7.75 lakhs
2. Evaluation of novel pharmacological agents in arjun and tulsi in experimental pulmonary artery hypertension in rats, S.K Maulik, AYUSH, 3.5 years, 2013–2017, Rs. 22.99 lakhs
3. Antihypertensive and cardio-protective action of herbal formulation, S.K. Maulik, DABUR, 2014–2016, Rs. 12.48 lakhs
4. Fibrosis in heart failure, S.K Maulik, UKIERI, 2012–2015, Rs. 11.27 lakhs
5. Effect of seizures, zinc administration and antiepileptic drugs on brain and body zinc homeostasis, Jatinder Katyal, AIIMS, 2014–2016, Rs. 4.6 lakhs
6. Evaluation of the potential of edaravone, taurine and their combination in sporadic model of alzheimer's disease in rats. KH Reeta, DST, 2012–2015, Rs. 28.6 lakhs
7. Evaluation of nephroprotective effect of enalapril, galangin and their combination in cisplatin induced nephrotoxicity in rats-Jagriti Bhatia, DST, March, 2013–2016, Rs. 21.6 lakhs
8. Evaluation of the protective effect of Hesperidin on Bleomycin induced Pulmonary Fibrosis in rats, Jagriti Bhatia, AIIMS, 2015–2016, Rs. 4.6 lakhs
9. Ameliorative potential of combination of tribulus terrestris, boerhaavia diffusa and terminalia chebula in cisplatin and mercury chloride induced nephrotoxicity in Wistar rats, H.N. Yadav, AIIMS, 2016–2017, Rs. 4.69

Departmental projects

Ongoing

1. Neuroprotective study of lercanidipine and citalopram in experimental model of stroke in rats
2. Evaluation of different extracts of *Bacopa monnieri*, *Centella asiatica* and *Withania somnifera* and their combination for Alzheimer's disease: *In vitro* and *in vivo* experimental study

3. Evaluation of interaction profile of selected medicinal plants with conventional antiepileptic and oral hypoglycemic agent
4. Factors associated with seizure recurrence in persons with epilepsy undergoing AED tapering: A prospective observational study
5. Depression in persons with epilepsy (PWE): Correlation with Serum BDNF and Zinc levels
6. To study the influence of CYP2C19 polymorphism on bortezomib blood concentration and clinical response in multiple myeloma patients
7. The evaluation of neuroprotective potential of synaptic acid by intracerebroventricular streptozotocin induced cognitive impairment in rats
8. Add on antidepressant (sertraline) with AED and effect on cognitive impairment and seizures in rats
9. Pharmacokinetic and pharmacodynamic interaction of hydroalcoholic extract of *ocimum sanctum* with valproate
10. Targeted co-delivery of p53 modulators and anti-cancer drugs to achieve synergistic effect for cancer therapeutics
11. Evaluation of fumaric acid esters (FAEs) in experimental model of stroke in rats
12. Post-transplant diabetes mellitus, A prospective observation study
13. Evaluation of dihydromyricetin in experimental model of stroke and post stroke seizure susceptibility in rats
14. Study of pyrrolidine dithiocarbamate on experimental model of alzheimer's disease in rats
15. A prospective study on potentially inappropriate medications in elderly
16. Potential effect of kappa opioid receptor in prevention of epileptogenesis and spontaneous recurrent Seizures (SRS) in experimental model in rats
17. Studies on the safety and efficacy of artesunate in experimental model of colorectal cancer
18. Studies on the antiulcer properties of artesunate
19. Efficacy of methanol extract of latex of *calotropis procera* in experimental model of colitis
20. Efficacy of methanol extract of latex of *calotropis procera* in experimental model of colorectal cancer
21. Comparative evaluation of metformin and silymarin in cyclosporine induced hepatorenal toxicity
22. Evaluation of the analgesic effect of metformin in experimental models
23. Prevalence of medication adherence in patients of chronic heart failure
24. PPAR α AGONIST IN pulmonary hypertension: An animal study
25. Evaluation of [*Terminalia arjuna* (Roxb.)] and [*Ocimum Sanctum* (Linn.)] in experimental pulmonary artery hypertension in rats.
26. A study to assess the prevalence and effect of concurrent drug therapy mentioned in Indian System of Medicine along with modern drug therapy received in patients with cardio vascular disorders
27. Prescribing pattern in advanced non-small cell lung cancer (NSCLC) at IRCH, AIIMS with quality of life and cost analysis
28. Trace elements in non-alcoholic fatty liver disease: A Cross-sectional Study
29. Study of sesamol in bleomycin induced pulmonary toxicity in rats.
30. Pharmacological and molecular studies on fisetin in experimental models of myocardial infarction in type-2 diabetic rats.
31. Comparison of newer and conventional antiepileptic drugs in focal and generalized seizures in terms of quality of life and cost of treatment
32. Formulation of oral liraglutide polymeric nanoparticles and evaluation of its hypoglycemic activity in experimentally induced diabetes mellitus in Wistar rats

Completed

1. Adverse effects of antihypertensive medicines in tertiary care hospital
2. Antibiotics, analgesics and anti-inflammatory drug prescribing practices and adverse drug reactions monitoring in dentistry: A Questionnaire-based Study
3. Study of the efficacy of antiepileptic drug, nano-drug delivery systems in experimental animal models
4. Studies on the efficacy of roxithromycin in experimental model of ulcerative colitis
5. Studies on the effect of metformin in experimental models of inflammation and ulcerative colitis
6. Chronic seizure induced changes in cardiovascular parameters: Effect of antiepileptic drug (sodium valproate) and cardiac remodeling agent (Losartan) in rats.
7. Intensive adverse drug reaction (ADR) monitoring of HIV positive patients on highly active anti retro-viral therapy (HAART)
8. Evaluation of the nephroprotective effect of mangiferin in cisplatin-induced nephrotoxicity in rats

9. Evaluation of the effect of hesperidin in an experimental model of cardiac hypertrophy
10. Study on the cardioprotective effect of febuxostat in experimental model of ischemia-reperfusion injury in rat heart.
11. Study on the cardioprotective effect of Chrysin in an experimental model of cardiac hypertrophy
12. Pharmacological and molecular approaches to investigate the effect of chrysin in experimental models of myocardial infarction in streptozotocin-induced diabetes.
13. Studies on cardioprotective mechanism(s) of mangiferin and kaempferol in experimental models of myocardial infarction in streptozotocin induced diabetes.
14. Studies on pharmacological and molecular mechanisms to investigate the effect of apigenin in streptozotocin-induced diabetic nephropathy in rats
15. Pharmacokinetic and pharmacodynamic interaction of hydroalcoholic extract of *Ocimum sanctum* with valproate
16. Evaluation of interaction profile of selected medicinal plants with conventional antiepileptic and oral hypoglycemic agents
17. Factors associated with seizure recurrence in persons with epilepsy undergoing antiepileptic drug tapering: A prospective observational study
18. Pharmacodynamic and pharmacokinetic interaction of medicinal plants (*Termenilia chebula*, *Embllica officinalis*) with calcinurin inhibitor (Tacrolimus)
19. Pharmacodynamic and pharmacokinetic interaction of medicinal plants *Punica gratum*, *Boerhaviadiffusa* with tacrolimus a calcinurin inhibitor
20. Pharmacodynamic and pharmacokinetic study of *Terminalia bellerica*, *Glycyrrhiza glabra* and *Curcuma longa* with methotrexate in experimental model of arthritis

Collaborative projects

Ongoing

1. Comparison of the profile of DNA damage in lymphocytes of neonates with hyperbilirubinemia receiving high versus low irradiance using light emitting diode phototherapy, Paediatrics
2. Studies on the efficacy of artesunate in experimental model of colorectal cancer, Pathology Department
3. Studies on the efficacy of latex of *calotropis procera* in experimental models of colitis and colorectal cancer, Pathology Department
4. "A morphological and functional study on intra-cerebroventricular streptozotocin-induced rat model of Alzheimer's disease: Effect of magnetic field stimulation"
5. A morphological and functional study on intra-cerebroventricular streptozotocin-induced rat model of Alzheimer's disease: Effect of magnetic field stimulation
6. A morphological and functional study on intra-cerebroventricular streptozotocin-induced rat model of Alzheimer's disease: Effect of magnetic field stimulation
7. A morphological and functional study on intra-cerebroventricular streptozotocin-induced rat model of Alzheimer's disease: Effect of magnetic stimulation, Physiology
8. Blood heavy metals and quantitative EEG correlates in children with autism, Department of Paediatrics, AIIMS
9. Trace elements in non-alcoholic fatty liver disease: A cross-sectional study, Department of Gastroenterology
10. Association of plasma lead (Pb) levels to hypertension in non-occupationally exposed participants of the Center for Cardiometabolic Risk Reduction in South Asia Surveillance Study (CARRS), PHFI, India
11. Evaluation of the frequency of polymorphisms affecting Lead and Mercury toxicity among children with cerebral palsy, Department of Paediatrics, AIIMS, New Delhi
12. Survival analysis of PLHA with adult HIV Progression Model, Department of Medicine, AIIMS, New Delhi

Completed

1. A study to characterize Bortezomib induced peripheral neuropathy and identify risk factor that predict its occurrence. Blood levels of Pb, Cu, Zn, IRCH
2. To evaluate Adverse Reaction to Metal Debris (ARMD) in Indian patients who have undergone Hip Arthroplasty with a metal on metal articulation, Department of Orthopaedics
3. Study of quantitative determination of Aluminium and Zinc levels as a tool in fatal phosphide poisoning, Department of Forensic Medicine & Toxicology
4. Once daily dose of Nevirapine (400 mg) vs Twice daily dose (200 mg) of Nevirapine based highly active antiretroviral therapy regimens in antiretroviral naïve patients with HIV and TB infection in India: A randomized prospective study, Department of Medicine, AIIMS, New Delhi

PUBLICATIONS

Journals: 53

Abstracts: 5

PATIENT CARE

Estimation of metals in biological samples with ICP-AES Spectrophotometer

The department has been involved in the estimation of number of metals such as heavy metals Pb, Cd, Hg, As, and trace metals Cu, Zn, Ni, Al, Cr, Co in biological samples of human and animal model (blood, serum, tissues) and Ayurvedic formulations for collaborative studies by Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP-AES) Spectrophotometer (Model JY-2000@2) at PPB levels.

Therapeutic Drug Monitoring facility

TDM (Therapeutic Drug Monitoring) facility in the department of Pharmacology has been engaged in estimating drug levels in patient samples. High Performance Liquid Chromatography (HPLC) systems are used for qualitative and quantitative estimations of drug levels in patient samples

National Poison Information Centre

National Poisons Information Centre (NPIC) in the Department of Pharmacology plays a vital role in providing information on management of poisonings. Round the clock service rendered by NPIC is availed by treating physicians, government agencies, NGOs, and general public from all over the country.

Poisoning Calls received by National Poisons Information Centre,

Department of Pharmacology (April 2016–March 2017)

	n	%
Total no. of Calls	2187	
Poisoning Calls	2132	97.48
Information Calls	55	2.51
Sex		
Male	1318	61.81
Female	814	38.18
Categories		
Household Products	947	44.41
Industrial Chemicals	125	5.86
Agricultural Pesticides	278	12.03
Drugs	586	13.03
Bites & Stings	64	3
Plants	54	2.53
Miscellaneous	56	2.62
Unknown	21	0.98

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor D.S. Arya received the AIIMS Excellence Research Award 2016. Awarded under the category Basic Research.

Prof Surender Singh received the AIIMS Excellence Research Award 2016. Awarded under the category Basic Research; Dr B. Mukherjee Prize for Best paper in Indian Journal of Pharmacology, 2016; Fellow of National Academy of Medical Sciences (FAMS), India.

Dr K.H. Reeta received the AIIMS Excellence Research Award 2016. Awarded under the category Basic Research

VISITING SCIENTIST

1. Dr Vinay Parikh, Associate Professor, Director Neuroscience Program, Temple University Philadelphia. Emerging Insights into the Cellular and Behavioral Substrates of Nicotine Dependence, 6 January 2017, Demonstration Room
2. Dr Bhagwat Prasad, Assistant Professor, Department of Pharmaceutics, University of Washington Seattle, WA. Emerging Role of Physiological Modeling in Optimizing Pediatric Drug Efficacy and Safety 11 January 2017 Demonstration Room

9.31. Physical Medicine and Rehabilitation

Professor and Head

U. Singh

Professors

Sanjay Wadhwa

S.L. Yadav

Gita Handa

Assistant Professors

Srikumar V.

Asem Rangita Chanu

Senior Physiotherapist

O.P. Yadav

Superintendent Occupational Therapist

Raman Kumar Singh

Senior Occupational Therapist

Lily Farhat Parveen

Senior Technical Officer

Ajay Babbar

HIGHLIGHTS

The Physical Medicine and Rehabilitation Department organized Dr Ganga Bai Memorial Pain Medicine and Musculoskeletal Ultrasound Cadaveric Course in which faculty of international repute from USA gave hands on training to participants from different parts of India. The department was involved in organising the Annual Conference of Indraprastha Association of Rehabilitation Medicine (Delhi PMR Con 2017). Prof U Singh was felicitated and gave oration lecture in this August gathering. The department facilitated the provision and distribution of wheelchairs (125 wheelchairs worth Rs. 25 lakhs) through "Motivation", a UK based NGO. The implementation of customised wheelchair prescription, checkout and service provision as per WHO guidelines is also one of the major activities during the year. The number of patients has been gradually increased over the years and has also been continuing to increase at a steady pace. The department's faculty, officers and resident doctors took active part in the collaborative research projects within AIIMS and outside, besides taking part in speaking at the CME programmes besides patient education over mass media as well as public lectures held by AIIMS for patient education. The faculty of the department has been invited by various bodies of the Government and the Universities to give their expert opinion for activities.

EDUCATION

Undergraduate teaching: A set of 8 Seminars for the VIIIth Semester and one for the VIth Semester was undertaken by the department. Besides, the students were also shown various activities being done by the department including the Prosthetic and Orthotic (P&O) Workshop. Eleven Postgraduate students are pursuing MD (PMR). Students of Prosthetics and Orthotics from two Government of India institutions visited the P&O Workshop as part of their teaching programme. Two long term trainees from the Armed Forces took their training in PMR; one completed the training during the year.

CMEs/Workshops/Symposia/National and International Conferences

1. 2016 Dr Ganga Bai Memorial Pain Medicine and Musculoskeletal Ultrasound Cadaveric Course, 20–21 August 2016, IHC and AIIMS, New Delhi, India. Faculty of international repute from USA, Dr Divakara Kedlaya, Dr Narasimha R Gundamraj and Dr Srinivas Chiravuri gave hands on training to participants.
2. 11th Annual Conference of Indraprastha Association of Rehabilitation Medicine (Delhi PMR Con 2017), 25–26 February 2017 Bilaspur, Gurgaon, India.

Lectures delivered

U. Singh: 3

Sanjay Wadhwa: 10

S.L. Yadav: 7

Gita Handa: 2

Srikumar V.: 3

Nitin Joshi: 1

Sandipan Hazra: 2

U. Singh: 3

1. Overview of pain management-2016, Dr Ganga Bai Memorial Pain Medicine and Musculoskeletal Ultrasound Cadaver Course, 20 August 2016, IHC and AIIMS, New Delhi, India
2. IPARM oration: Horizons in PMR: Learning from patients with PID-Delhi PMR Con 2017, 25 February 2017, Bilaspur, Gurgaon, India
3. Technology in the service of persons with locomotor disability, National Science Day Celebrations, “Science and Technology for the Specially Abled Persons”, 28 February 2017, IIT Delhi, New Delhi, India

Sanjay Wadhwa: 10

1. Physical medicine and rehabilitation in osteoporosis management, NAMS-PGI Symposium on Osteoporosis, 23 April 2016, PGIMER, Chandigarh, India
2. Disability evaluation in spinal cord injury: A critical study of existing guidelines, 16th ISSICON Conference of Spinal Cord Society, 6 October 2016, Kathmandu, Nepal
3. Importance of team work in SCI management, 16th ISSICON Conference of Spinal Cord Society, 6 October 2016, Kathmandu, Nepal
4. Geriatric cervical spinal cord injury: Surgical and rehabilitation protocols, Panel Discussion, 16th ISSICON Conference of Spinal Cord Society, 6 October 2016, Kathmandu, Nepal
5. Challenges of SCI management in emerging countries like Nepal: The consumer experience, Panel Discussion, 16th ISSICON Conference of Spinal Cord Society, 7 October 2016, Kathmandu, Nepal
6. Scientific Symposium on AYUSH: Need of integrative medicine, Chaired/Moderated the Symposium, 56th Annual Conference of the National Academy of Medical Sciences NAMSCON 2016, 22 October 2016, AIIMS, Raipur, India
7. Cerebral Palsy: Research status and possibilities in India, IAPMR expert group for Indian guidelines for physiatrists for approach to cerebral palsy, 19 November 2016, Composite Rehabilitation Centre (CRC), Bhopal, India
8. Cerebral palsy: GMFCS classification, IAPMR Expert Group for Indian Guidelines for Physiatrists for Approach to Cerebral Palsy, 20 November 2016, Composite Rehabilitation Centre (CRC), Bhopal, India
9. Cerebral palsy: Use of ICF, IAPMR Expert Group for Indian Guidelines for Physiatrists for Approach to Cerebral Palsy, 20 November 2016, Composite Rehabilitation Centre (CRC), Bhopal, India
10. Role of rehabilitation in chronic NCDs, 3 PGI, AIIMS National Course on Public Health Approaches to NCDs, 3 March 2017, PGIMER-Chandigarh, India

S.L. Yadav: 7

1. Phenol block in the management of spastic foot following stroke, Joint ISPRM and JARM 2016 Symposium on Stroke, 9 June 2016, Kyoto International Conference Centre, Kyoto, Japan
2. Evidence based behind exercise programme for back pain, ISSICON 2016 and ASSN 2016, 6 October 2016, Hyatt Regency, Kathmandu, Nepal
3. Enhancing quality of life after SCI-ISSICON 2016 and ASSN 2016, 6 October 2016, Hyatt Regency, Kathmandu, Nepal
4. Current status of rehabilitation in burns victims in India, National Programme for Prevention and Management of Burn Injuries (NPPMBI) and Burn Registry in India, 1–2 November 2016, IHC, New Delhi, India
5. Sports medicine practice: Current evidence and reality, IAPMRCON2017, 20 January 2017, Science City, Kolkata, India
6. Amputees: Need for sexual rehabilitation, OPAI MIDCON-2017, 24 March 2017, Vigyan Dham, Dehradun, India
7. Phenol block in spasticity, IFNRCON 2017, 31 March 2017–2 April 2017, Mumbai Education Trust, Mumbai, India

Gita Handa: 2

1. Medical management in cerebral palsy, Drafting and finalizing Indian guidelines for physiatrists for approach to cerebral palsy, 19–21 November 2016, CRC, Bhopal, India
2. Geriatric rehabilitation of the elderly: Types of intervention, Orientation programme on geriatric care, 8 November 2016, National Institute of Social Defense, Delhi, India

Srikumar V.: 3

1. Physiatric approach to spinal cord injury, IAPMR National Mid Term CME 2016, 2 October 2016, KGMU and Dr RML Institute of Medical Sciences, Lucknow, India

2. Orthosis and prosthesis, DOACON 2016, 27 November 2016, New Delhi, India
3. Biomechanics of lifting and carrying load, International Workshop on Clinical Spine Biomechanics, 5 March 2017, ISIC, New Delhi, India

Nitin Joshi: 1

1. Efficacy of conditioning exercises in low back pain, International Workshop on Clinical Spine Biomechanics, 5 March 2017, ISIC, New Delhi, India

Sandipan Hazra: 2

1. fNIRS in assessment of central nociception, Biological signals in cognitive and psychophysiology, 4 November 2016, AIIMS, New Delhi, India
2. Bereitschafts potential, fNIRS and Physiological Monitoring, Techniques in Physiological Sciences (TIPS-2016) for SAARC Nation, 20–22 December 2016, AIIMS, New Delhi, India

Oral papers/posters presented: 15

1. Yadav SL. A prospective comparison study of functional outcomes and demographic characteristics after traumatic and atraumatic spinal cord lesions in Indian patients, ISPRM 2016, 29 May 2016–2 June 2016, Kuala Lumpur Convention Centre, Kuala Lumpur, Malaysia
2. Gupta AK, Yadav SL, Singh U, Pandey RM. Correlation between instrumental hand function and activities of daily living in Rheumatoid Arthritis, MENA Physical Medicine and Rehabilitation Congress 2016, 13–14 October 2016, Dubai, UAE
3. Vasundhara S, Singh U, Wadhwa S, Yadav SL, Handa G, Kumar L. Appraisal of needs for rehabilitation in patients with multiple myeloma, IAPMRCON 2017, 21 January 2017, Science City, Kolkata, India
4. Sannyasi G, Chanu AR. Postpartum Paraplegia following spontaneous Spinal Epidural Hematoma, Probable HELLIP Syndrome, IAPMRCON 2017, 21 January 2017, Science City, Kolkata, India, **Best Poster Award at IAPMRCON 2017, Kolkata, India**
5. Ramanathan S, Thomas R, Thomas N, Naik D, Chanu AR, Chalegiri P, Mahesh. Comparison of standard outpatient screening tools and nerve conduction studies for the diagnosis of Diabetic Peripheral Neuropathy, IAPMRCON 2017, 21 January 2017, Science City, Kolkata, India
6. Chaudhary S, Srikumar V, Chhabra HS, Singh N. Sexual dysfunction in women with traumatic spinal cord injury and its impact on quality of life: An Indian Scenario, IAPMRCON 2017, 21 January 2017, Science City, Kolkata, India
7. Sivaruban S, Wadhwa S, Singh U, Srikumar V, Gupta AK, Jana M. Evaluation of bone mineral density in paraplegic patients with spinal cord injury, IAPMRCON 2017, 21 January 2017, Science City, Kolkata, India
8. Soni P, Chaudhary S, Singh U. Osteoporosis: Do we need to think beyond BMD? IAPMRCON 2017, 22 January 2017, Science City, Kolkata, India
9. Mishra S, Handa G, Singh U, Wadhwa S, Gamangati S. Prospective randomised control trial comparing outcome of local steroid injection by ultrasound vs palpation technique in plantar fasciitis, IAPMRCON 2017, 22 January 2017, Science City, Kolkata, India
10. Verma DK, Handa G, Singh U, Yadav SL, Gamanagatti S. Prospective randomised control trial to compare outcome of ultrasound guided suprascapular nerve block vs intra-articular steroid injection in adhesive capsulitis of shoulder, IAPMRCON 2017, 22 January 2017, Science City, Kolkata, India
11. Ali N, Singh U, Wadhwa S, Handa G, Srikumar V, Kumar A, Khan MA. A comparison of balance impairment in early and advanced osteoarthritis of knee, IAPMRCON 2017, 22 January 2017, Science City, Kolkata, India
12. Mishra S, Handa G, Singh U, Wadhwa S, Gamangati S. Prospective randomised control trial comparing outcome of local steroid injection by ultrasound vs palpation technique in plantar fasciitis, Delhi PMR Con 2017, 26 February 2017, Gurgaon, India
13. Sivaruban S, Wadhwa S, Singh U, Srikumar V, Gupta AK, Jana M. Evaluation of bone mineral density in paraplegic patients with spinal cord injury, Delhi PMR Con 2017, 26 February 2017, Gurgaon, India, **IPARM Gold Medal (Best Paper Award) at Delhi PMR Con 2017, Gurgaon, India**
14. Choudhary AK, Yadav SL, Singh U, Wadhwa S, Handa G, Srikumar V, Gamanagatti S. Prospective randomised control trial comparing effectiveness of oral diclofenac sodium vs combination of collagen peptide type-1, low molecular weight chondroitin sulphate, Sodium hyaluronate and vitamin-C in Achilles Tendinopathy, Delhi PMR Con 2017, 26 February 2017, Gurgaon, India
15. Soni P, Chaudhary S, Singh U. Osteoporosis: Do we need to think beyond BMD? Delhi PMR Con 2017, 26 February 2017, Gurgaon, India

RESEARCH

Departmental projects

Ongoing

1. To compare the effectiveness of conventional therapeutic exercises with Yoga for chronic nonspecific low back pain in a tertiary health care centre
2. A cross sectional study on autonomic function and cortical pain perception in fibromyalgia
3. A comparison of balance impairment in early and advanced osteoarthritis of knee
4. Evaluation of the effect of custom molded footwear on the center of pressure in the foot in patients with diabetes mellitus
5. Comparison of effect of single dose of intra articular injection of platelet rich plasma and high molecular weight hyaluronic acid in pain reduction and improving quality of life in patients with osteoarthritis of knee
6. Relationship between stump length, Gait parameters and dynamic balance in unilateral transtibial amputee
7. Clinical validation and effectiveness study of innovative Custom 3D printed foot orthosis using foot images

Completed

1. Randomised control trial comparing effectiveness of oral diclofenac sodium vs combination of collagen peptide type-I, Low molecular weight chondroitin sulphate, Sodium hyaluronate and vitamin-C in Achilles Tendinopathy
2. Evaluation of bone mineral density in paraplegic patients with spinal cord injury
3. Appraisal of needs for rehabilitation in patients with multiple myeloma
4. An exploratory study of challenges faced in accessing health services by persons with physical disabilities in AIIMS, New Delhi, India
5. Prospective randomised control trial comparing outcome of local steroid injection by ultrasound vs palpation technique in plantar fasciitis
6. Prospective randomised control trial to compare outcome of ultrasound guided suprascapular nerve block vs intra-articular steroid injection in adhesive capsulitis of shoulder

Collaborative projects

Ongoing

1. Damper control in lower limb prosthesis (IIT, Delhi)
2. Effect of transcranial magnetic stimulation on pain modulation status in Fibromyalgia patients (Physiology)
3. Skeletal muscle strength including its energy metabolism, Bone mineral homeostasis and Th1/Th2 cytokines expression in Asian Indians with chronic hypo-vitaminosis D before and after oral cholecalciferol supplementation (Endocrinology)
4. Role of vitamin D supplementation in vitamin D deficient COPD patients: A double-blind, randomised controlled trial (Medicine and Endocrinology)
5. Prevalence of shoulder periarthritis in patients with type 1 diabetes mellitus attending tertiary care centre (Endocrinology)
6. Design of Artificial Hand with Artificial Fingers (North Eastern Hill University, Shillong)
7. A study of pain status and motor cortex excitability in chronic low back pain patients: Effect of transcranial magnetic stimulation (Physiology)
8. To compare the effectiveness of conventional therapeutic exercises with yoga for chronic nonspecific low back pain: A randomised comparative trial (Centre for Integrative Medicine and Research, AIIMS)
9. Effect of dual-task exercise in conjunction with fluoxetine and intracranial direct current stimulation on postural stability and gait in stroke patients (Neurology)
10. Prevalence of disability and its effect on quality of life among adult population in rural Ballabhgarh, Haryana (Centre for Community Medicine)

Completed

1. To assess the effectiveness of the exercise programme in improving the quality of life of patients having mild or moderate asthma (College of Nursing)

PUBLICATIONS

Journals: 6

Abstracts: 9

Chapters in books: 1

PATIENT CARE

New patients

OPD (physician consultations)	15404	Prosthetics and Orthotics	4229
Ballabhgarh PMR OPD	3487		
Total new cases	23120		

Old cases

OPD old cases (physician consultation)	24208	Disability Evaluation Clinic	135
Railway Concession Certificates	288	OPD visits (PT Section)	15952
OPD visits (OT Section)	12877	OPD visits (MSW)	3328
OPD visits (P&O Clinic)	7623	Minor OT procedures	3864
Major surgeries at Ballabhgarh OT	46		
Total old cases	68321		

Grand total for the year **91441**

Special clinics of the department

New services added

1. Musculoskeletal ultrasound guided interventions
2. Custom moulded insoles in Foot Clinic
3. Wheelchair prescription and checkout clinic for customised wheelchair delivery as per WHO guidelines

Ongoing clinics

1. Musculo-skeletal laboratory: Computerized evaluation and exercise equipment
2. Foot Clinic
3. Disability Evaluation Clinic
4. Brace Check Out Clinic: Checking Prosthetic and Orthotic devices made in our workshop before final delivery to the patients
5. Case Conference: Discussion of long term rehabilitation patients for goal setting and treatment evaluation.
6. Gym Round Clinic: Evaluation of the therapy of the indoor patients admitted under PMR

Community services

Patient care: The departmental faculty and resident doctors are periodically involved in rural camps in Mathura for the welfare of the persons with disability

Mass media

Dr Sanjay Wadhwa: Expert Panellist in the health programme on Lok Sabha TV on 25 June 2016 on the topic 'Stroke'; Lok Sabha TV on 29 October 2016 on 'World Stroke Day'; DD News, 'Total Health' on 8 January 2017 on 'Arthritis and other Joint Problems in Winter'. Delivered public lecture on 'Exercise for Better Health', at JL Auditorium, AIIMS on 29 March 2017

Dr S.L. Yadav: Knee Pain, Talk show "Total Health" DD News; Back Ache, Talk show "Total Health" DD News

Dr Gita Handa: Public Health discussion in a Programme on Vividh Bharti

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor U. Singh was Member, Research Committee, Guru Nanak Dev University, Amritsar; Member, Academic Committee, National Institute for the Orthopaedically Handicapped, Kolkata; Emeritus Editor, Indian Journal of Physical Medicine and Rehabilitation; Consulting Editor and Reviewer, Journal of Rehabilitation Council of India Locomotor and Associated Disabilities; Reviewer, Annals of Indian Academy of Neurology, Indian Journal of Neuro-surgery, Journal of Spinal Cord Medicine, Journal of American Academy of Physical Medicine and Rehabilitation, Leprosy Review; Editorial Board Member, Indian Journal of Physiotherapy and Occupations Therapy; Honorary Member of the editorial board for the International Journal of Biosciences and Technology (IJBST); Advisory Board Member: St John's Handbook of Physical Medicine and Rehabilitation, Bengaluru, August 2013; Senior Editor: Astrocyte, Multispecialty Journal by National Board of Examinations, New Delhi, India, from December 2013; World Trauma Conference, organised by AIIMS, New Delhi, Vigyan Bhavan, New Delhi, India,

20 August 2016; Consolation prize for “Annual Hindi Dictation Competition 2015–16” during the Hindi fortnight, AIIMS, New Delhi, India September 2016; Consolation prize for “Essay competition” during the Hindi fortnight, AIIMS, New Delhi, India, September 2016; IPARM Oration, Delhi PMR Con 2017, Gurugram, India, 25 February 2017.

Professor Sanjay Wadhwa was Chairman, Committee for framing guidelines for Locomotor Disability Evaluation and Certification, Dept. of Empowerment of Persons with Disabilities, Ministry of Social Justice and Empowerment, Govt. of India, New Delhi, India; Chairman, Artificial Limbs, Rehabilitation Appliances and Equipment for Disabled, Sectional Committee, MHD 09, Bureau of Indian Standards, Govt. of India, for another term of 3 years from March 2016 to February 2019; Vice-President, National Academy of Medical Sciences (India) for 3 years term from July 2015 onwards; Member, Council of the National Academy of Medical Sciences (India) for 3 years term from June 2015 onwards; Member, Editorial Board, Annals of the National Academy of Medical Sciences (India); Member, Standing Committee on Management, NAMS; Member, Disciplinary Committee, NAMS; Member, Publication Advisory Committee, NAMS; Member, Academic Committee of NAMS; Member, Academic Council of NAMS; Member, Orations and Awards Committee of NAMS; Member, Medical Equipment and Hospital Planning Division Council (MHDC), Bureau of Indian Standards, Govt. of India, Manak Bhawan, New Delhi, India; Member, Programme Advisory and Monitoring Committee Meeting for the TIDE Programme, Department of Science and Technology, Ministry of Science and Technology, Govt. of India; National Advisor, Indian Journal of Geriatric Care; Chairman, Committee to review disability related research projects submitted to ICMR; Member, Working Group on ‘Research in Disability’, ICMR; Member, Institutional Review Board (IRB) of National Institute of Public Cooperation and Child Development, New Delhi, India; Member, Committee formed by the Dept. of Empowerment of Persons with Disabilities, Ministry of Social Justice and Empowerment, Govt. of India, New Delhi for framing guidelines for High Support Needs for persons with disabilities; Subject Expert, Selection Committees for Selection of Faculty in PMR at AIIMS Bhopal, Jodhpur, Raipur, and Rishikesh and at PGIMER, Chandigarh, India.

Professor S.L. Yadav was External Examiner, Master of Rehabilitation Medicine, 14–18 November 2016, Kuala Lumpur, Malaysia; Expert for recruitment of faculty in the Department of PM&R at AIIMS, Bhopal on 7 March 2017; External Examiner, MD Physical Medicine and Rehabilitation examination, 23 August 2016, SMS Medical College, Jaipur; Panellist, ISSICON 2016 and ASSN 2016, 6–8 October 2016, Kathmandu, Nepal: (i) SCS Position Statement: Prevention strategies in SCI are more or less similar but different from developed countries, (ii) Challenges of SCI Management in Emerging Countries like Nepal: The consumer experience; President, Indian Association of Physical Medicine and Rehabilitation; President, Indraprastha Association of Rehabilitation Medicine; Organising Chairman, Delhi PMR Con 2017; Course Co-ordinator, Dr Ganga Bai Memorial Pain Medicine and Musculoskeletal Ultrasound Cadaveric Course.

Professor Gita Handa was Member, DBT Screening Committee meeting for short-listing the LOIs received in response to Bioengineering Proposal Fair; Academic Committee Member, Drafting and Finalising Indian Guidelines for Physiatrists for approach to Cerebral Palsy; Member, Standing Selection Committee, Postgraduate Institute of Medical Education and Research, Chandigarh as an External Expert; Examiner, KGMU, Lucknow; Book Reviewer on Disability Evaluation from CRC Press; A provisional patent filed on “Aspiration monitoring system for dysphagia” along with SIB fellows 2016.

Dr Srikumar V. received Best Trainee Award – Second Prize, 2016, Dr Ganga Bai Memorial Pain Medicine and Musculoskeletal Ultrasound. Cadaveric Course, 20–21 August 2016, IHC and AIIMS, New Delhi, India; First Prize “Essay competition” during the Hindi fortnight, AIIMS, New Delhi, India, September 2016; Reviewer, International Journal of Advanced Medical and Health Research (Official Journal of JIPMER, Puducherry); Book Reviewer, CRC Press, Taylor and Francis Group; Member Secretary, Accessibility India Campaign (Sugamya Bharat Abhiyan), AIIMS, New Delhi, India; Member, Committee for Revision of Chapter on Physical Infrastructure in the Indian Public Health Standards, MOHFW, GOI; Panelist, Role of cervical traction in cervical PIVD, International Workshop on Clinical Spine Biomechanics, 4 March 2017, ISIC, New Delhi, India; Judge for Award Session (IPARM Gold Medal) at Delhi PMR Con 2017; Organised Delhi PMR Con 2017 in the capacity of Treasurer; Treasurer, Indraprastha Association of Rehabilitation Medicine; Executive Committee Member, Indian Association of Physical Medicine and Rehabilitation; Co-web administrator: www.iapmr.org, official website of Indian Association of Physical Medicine and Rehabilitation.

Mr Ajay Babbar was Member of Artificial Limbs, Rehabilitation Appliances and Equipment for Disabled Sectional Committee, MHD 09 Bureau of Indian Standards, New Delhi, India.

Mr Anil Kumar was Member of Artificial Limbs, Rehabilitation Appliances and Equipment for Disabled Sectional Committee, MHD 09 Bureau of Indian Standards, New Delhi, India.

Dr Sandipan Hazra won Gold Medal, 200 m Freestyle in Aquatics, Pulse, 44th Annual South Asian Medical Socio-Cultural, Literary and Sports Meet; Silver Medal, 400 m Freestyle in Aquatics, Pulse, 44th Annual South Asian Medical Socio, Cultural, Literary and Sports Meet.

Dr Lukram Sumila received MD Thesis Support Award, Indian Council of Medical Research.

9.32. Physiology

Professor and Head
Kishore Kumar Deepak

Professors Hrudananda Mallick Ratna Sharma Ashok Kumar Jaryal	Professors Debabrata Ghosh Nalin Mehta Raj Kumar Yadav	Professors Kanwal Preet Kochhar Suman Jain Anjana Talwar
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Associate Professors Asmita Patil	Associate Professors Renu Bhatia
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Assistant Professors Simran Kaur Nasreen Akhtar Ritesh Netam (from 4 November 2016)	Assistant Professors Prashant Tulsidas Tayade Geetanjali Bade (from 21 November 2016)	Assistant Professors Dinu S. Chandran Akanksha (from 4 November 2016) Kiran Prakash (from 29 November 2016)
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HIGHLIGHTS

The Physiology department of Physiology has been involved in undergraduate and postgraduate teaching in addition to the doctoral programme. The faculty also undertook to train manpower for undergraduate, postgraduate teaching and research techniques in house by holding workshops and symposia at AIIMS and other institutions. A number of extramural and intramural research projects were taken up faculty in various areas including neurophysiology (including autonomic nervous system), cellular and molecular physiology, nutrition, vascular physiology, reproduction, respiration, sleep, cognition, transcranial magnetic stimulation and yoga. The research outcomes were presented in various national and international scientific forums and published in indexed journals. On the basis of its original research, the department has provided significant support in patient care by utilising cutting-edge technologies in autonomic and vascular function assessments, pain management, intraoperative monitoring during corrective surgeries, and yogic intervention. In addition to the research work, the department also successfully organised three public lectures on common public issues such as obesity, sleep and exercise. Several awards and honors have been received by faculty members and the students of the department in appreciation of their innovative contributions in research and medical education. Rich academic events were organised under the aegis of Association of Physiologists and Pharmacologists of India (APPI), Delhi chapter. The department also organised workshop for SAARC Nations from 20–22 December 2016 and shared their expertise with the scientists abroad. The department organised a hands-on-workshop on 27 March 2017 on indigenous medical devices developed under Department of Science and Technology (DST) and shared its recent state-of-the-art equipments and techniques with the delegates (Photograph 1).

EDUCATION

List of all academic activities

1. **Undergraduate teaching:** Lecture 200 hrs and Practical 240 hrs, UG students: Total number of students:77
2. **Postgraduate teaching:** Total number of PG students: 62
 - a. M.Sc. students: 9
 - b. M.D. students: 17
 - c. Ph.D. scholars: 36

Nursing and allied courses: Total number of students:142

Short-term training in the department of Physiology

1. One MSc student for 27 days (23 May 2016 to 18 June 2016)
2. One MSc student for 47 days (5 May 2016 to 20 June 2016)
3. Three MSc students for 1 month (15 June 2016 to 14 July 2016)
4. One MSc student for 1 month (26 May 2016 to 24 June 2016)
5. One MSc student for 1 month (15 June 2016 to 14 July 2016)
6. One MSc student for 9 days (23 December 2016 to 31 December 2016)
7. One Assistant professor from UIET, KUK, Kurukshetra (26 December 2016 to 31 December 2016)



Inauguration of workshop on Medical Devices (Seen in picture are: (R to L) Prof A Sharma, Secretary DST; Prof K. K. Deepak, Head, Department of Physiology and Prof Randeep Guleria, Director AIIMS)

8. Four M.Sc. students along with their Professor from University of Calcutta, Kolkata (1 March 2017)
9. One MSc student for 28 days (15 July 2016 to 11 August 2016)
10. Autonomic Function Lab: Short-term training to 2 PhD students from NIT Jalandhar (23 May 2016 to 26 May 2016)
11. Autonomic function and vascular Physiology lab and Neurophysiology lab: Short term training to 2 students from Nepal (KUSMS) for one month (15 February 2017 to 15 March 2017)
12. Cognitive physiology lab: Short-term training to 7 MBBS, AIIMS students (16 May 2016 to 15 August 2016)
13. The integral health clinic of the department: Short-term training on yoga based comprehensive lifestyle training to one MSc student (15 February 2017 to 1 March 2017)

CMEs/Workshops/Symposia/National and International Conferences

1. Workshop on Objective Structured Practical Examination (OSPE) (Convener: Dr KK Deepak), SAAP-IUPS Teaching Workshop on the Theme 'Learning of Physiology in 21st Century', Kathmandu, Nepal, 10 November 2016
2. Workshop on Assessment Drives Learning (Convener: Dr KK Deepak), Hamdard Institute of Medical Sciences and Research (HIMSAR), New Delhi, India, 15 November 2016
3. Workshop on Autonomic Function Tests (Convener: Dr KK Deepak) under the Programme CME cum Workshop on Environmental Stresses on Autonomic and Cardio-Respiratory Functions, Department of Physiology, JNMC, Aligarh Muslim University, Aligarh, India, 17 December 2016
4. Symposium on Autonomic and Vascular Function Assessment (Convener: Dr KK Deepak), 27th Annual Conference of The Physiological Society of India (PHYSICON-2016), Midnapore, West Bengal, India, 20 November 2016
5. Workshop on Techniques in Physiological Sciences (TIPS 2016) for SAARC Nations (Convener: Dr KK Deepak), Department of Physiology, AIIMS, New Delhi, India, 20–22 December 2016
6. Tele-Symposium on How to Do innovations in Physiology and How to Protect Intellectual Property Rights (IPR) (Convener: Dr KK Deepak), Departments of Physiology, AIIMS, New Delhi, India, 7 February 2017
7. Conducted Workshop on 'Live Cell Imaging Applications and Calcium Imaging' (Dr D Ghosh) in Department of Physiology, AIIMS from 18 to 19 August 2016

8. Workshop on Brain Mapping: Use of Electrophysiological Appliances in Music Therapy (Convener: Dr KP Kochhar), Department of Physiology, AIIMS, New Delhi, India, 29 July 2016
9. Workshop on Cognitive Neurophysiology and Psychophysiology and Physiological Monitoring Workshop (Convener: Dr KP Kochhar), Seminar and Demonstration Room, Department of Physiology, AIIMS, New Delhi, India, 4 November 2016
10. Workshop on Recording of Bereitschafts Potentials (Convener: Dr KP Kochhar), Techniques in Physiological Sciences for SAARC Nations (TIPS 2016), Department of Physiology, AIIMS, New Delhi, India 20–22 December 2016
11. Workshop on Recording and Analysis of Quantitative EEG (Convener: Dr Ratna Sharma), Techniques in Physiological Sciences for SAARC Nations (TIPS 2016), Department of Physiology, AIIMS, New Delhi, India, 20–22 December 2016
12. Workshop and Hands-on-Training on Neurostereology and Assessment of Pain in Animals and Humans (Convener: Dr Suman Jain), Department of Physiology and Department of Physiology, AIIMS, New Delhi, India, 18 October 2016
13. Symposium on Neuro Inflammation and Plasticity in Neurodegenerative Disorders (Convener: Dr Suman Jain), 34th Annual Conference of Indian Academy of Neurosciences, National Brain Research Centre, Manesar, 19–21 October 2016
14. Workshop on Pain Assessment in Humans and Animals (Convener: Dr Suman Jain), Techniques in Physiological Sciences for SAARC Nations (TIPS 2016), Department of Physiology, AIIMS, New Delhi, India, 20–22 December 2016
15. Teleconference Symposium on How to Do Innovations in Physiology, How to Protect Intellectual Property Rights, (Convener and Moderator: Dr KK Deepak), (Between AIIMS New Delhi and AIIMS Jodhpur), Under the aegis of APPI Delhi chapter, Department of Physiology AIIMS, New Delhi, India, 7 February 2017
16. Symposium on Mind-Body Synergy and Stress (Convener: Dr Anjana Talwar), National Book Trust, Ministry of HRD, Government of India, Conference Hall, AIIMS, New Delhi, 7 May, 2016
17. Workshop on Pulmonary Function Testing by Spirometry (Convener: Dr Anjana Talwar), Techniques in Physiological Sciences for SAARC Nations (TIPS 2016), Department of Physiology, AIIMS, New Delhi, India, 20–22 December 2016
18. Workshop on Empathy Development and Stress Management (Convener: Dr Asmita Patil), CMET, AIIMS, New Delhi, India, 21 October 2016
19. Workshop on Transcranial Magnetic Stimulation in Pain Management (Convener: Dr Renu Bhatia), Techniques in Physiological Sciences for SAARC Nations (TIPS 2016), Department of Physiology, AIIMS, New Delhi, India, 20–22 December 2016
20. Workshop on Assessment of Various Domains of Cognitive Functions (Convener: Dr Simran Kaur), Techniques in Physiological Sciences for SAARC Nations (TIPS 2016), Department of Physiology, AIIMS, New Delhi, India, 20–22 December 2016
21. Workshop on Expression Microarray (Convener: Dr D Ghosh), Techniques in Physiological Sciences for SAARC Nations (TIPS 2016), Department of Physiology, AIIMS, New Delhi, 20–22 December 2016
22. Workshop on Polysomnography (Convener: Dr H N Mallick), Techniques in Physiological Sciences for SAARC Nations (TIPS 2016), Department of Physiology, AIIMS, New Delhi, 20–22 December 2016
23. Workshop on Sleep Technology (Convener: Dr H N Mallick), 5th National Sleep Technology Workshop, AIIMS, New Delhi, 29–30 November 2016
24. Public lecture on Importance of Sleep (Moderator: Dr H N Mallick), 30 November 2016, AIIMS, New Delhi
25. Workshop on Sleep Disorders (Convener: Dr H N Mallick), 5th March 2016, Visakhapatnam

Lectures delivered

Kishore Kumar Deepak: 20

Kanwal Preet Kochhar: 4

Ashok Kumar Jaryal: 4

Renu Bhatia: 5

Dinu S. Chandran: 8

Hrudananda Mallick: 12

Nalin Mehta: 19

Raj Kumar Yadav: 8

Simran Kaur: 5

Nasreen Akhtar: 4

Debabrata Ghosh: 1

Suman Jain: 5

Asmita Patil: 3

Prashant T Tayade: 2

Kiran Prakash: 1

Kishore Kumar Deepak: 20

1. Physiological variability, Invited guest lecture, 19 August 2016, Newton Hall, Aerospace Building, Dept. of Applied Mechanics, IIT-Madras, Chennai, India

2. The clinical implication of autonomic function studies, Invited guest lecture, 25 August 2016, Goa Medical College, Goa, India
3. Impedance based cardiac and vascular function studies, Belgaum Branch of Association of Physiologists and Pharmacologists of India (APPI), 27 August 2016, Jawaharlal Nehru Medical College, KLE University, Belagavi, India
4. Preparing research protocol for funding, Qualitative Research Methods and Analysis (QRMA 2016), 9 September 2016, Department of Community Medicine, ESIC Medical College, Faridabad, India
5. Physiological research on yoga, National Seminar on Emerging Trends of Research in Yoga and Naturopathy, 16 September 2016, Adhyatma Sadana Kendra, New Delhi, India
6. The future of physiology in India, Annual Conference of Association of Physiologist and Pharmacologist of India (APPICON 2016), 23 October 2016, AIIMS, Patna, India
7. The use of LBNP device in elucidating cardiovascular mechanisms, Invited talk (visiting professor), 29 October 2016, Dept. of Orthopaedics, UCSD, San Diego, USA
8. Principles of assessment in medical education, Assessment drives learning, 15 November 2016, Hamdard Institute of Medical Sciences and Research, Jamia Hamdard, New Delhi, India
9. Role of autonomic parameters in environmental physiology, CME cum Workshop on “environmental stresses on autonomic and cardiorespiratory functions”, 18 November 2016, J N Medical College, Aligarh Muslim University (AMU), Aligarh, India
10. How to counter the autonomic and muscular-skeletal dysfunction in astronauts, 14th International Conference on Humanising Work and Work Environment, 11 December 2016, Dr B R Ambedkar National Institute of Technology, Jalandhar, India
11. Physiological basis of yoga, Pune International Yoga Festival, 15 January 2017, Institute of Yoga, Pune, India
12. Yoga for diabetes mellitus physiological perspective, Clinical grand round, AIIMS, 24 January 2017, LT-1, AIIMS, New Delhi, India
13. How to do innovations in physiology, Teleconference Symposium between AIIMS and AIIMS Jodhpur on Innovations in Physiology and IPR Issues, 7 February 2017, LT-1, AIIMS, New Delhi, India
14. Clinical application of Heart Rate Variability (HRV): Evidences and challenges, Invited lecture by University, 15 February 2017, King George’s Medical University, Lucknow, India
15. Curriculum development, Basic Course Workshop in Medical and Health Professions’ Education
16. February 2017, KL Wig CMET, AIIMS, New Delhi, India
17. Assessment of clinical and practical skills, Basic Course Workshop in Medical and Health Professions’ Education, 16 February 2017, KL Wig CMET, AIIMS, New Delhi, India
18. Role of physiologists in Brain Computer Interface (BCI) research, Global Initiative of Academic Network (GIAN), 27 February 2017, Jamia Milia Islamia Central University, New Delhi, India
19. Sleep medicine curriculum in medical colleges in India, Workshop Series on Sleep Disorders for Andhra Pradesh, 5 March 2017, Government Medical College, Visakhapatnam, India
19. The space physiology: The next frontiers for Indian physiologists, CME Programme on “Space Physiology” by Association of Physiologists, Tamilnadu, 10 March 2017, SRM Medical College Hospital and Research Centre, Kattankulapur, TN, India
20. Translating physiology for meaningful applications, 5th Biennial Conference of South Asian Association of Physiologists (SAAPCON-2016), 10 September 2017, Kathmandu University, Dhulikhel, Nepal

Hrudananda Mallick: 12

1. Preoptic area: Past, present and future, CME on Recent Advances in Sleep Physiology, 20 April 2016, Saveetha Medical College, Chennai, India
2. Current status of sleep medicine education in India, APPICON 2016, 24 October 2016, AIIMS, Patna, India
3. PG practicals in nervous system, APPICON 2016, 24 October 2016, AIIMS, Patna, India
4. Certification Programme by Indian Society for Sleep Research, National Sleep Technology Workshop, 29–30 November 2016, AIIMS, Delhi, India
5. Orexinergic system (in narcolepsy), CME on National Sleep Medicine Course 2016, 2 December 2016, HIMS, Dehradun, India
6. Circadian entrainment mechanism in suprachiasmatic nucleus and impact of blue light in children, CME on National Sleep Medicine Course 2016, 2 December 2016, HIMS, Dehradun, India
7. What are sleep spindles, where do they come from and what they do? CME on National Sleep Medicine Course 2016, 3 December 2016, HIMS, Dehradun, India

8. Certification of sleep physician: Role of ISSR, CME on National Sleep Medicine Course 2016, 4 December 2016, HIMS, Dehradun, India
9. Society of glutamate in food and brain, Workshop on “Current knowledge on monosodium glutamate: Scientific and regulatory perspective”, 27 January 2017, Kathmandu, Nepal
10. Introduction to sleep medicine, Workshop on Sleep Disorders, 5 March 2017, Andhra Medical College, Visakhapatnam, India
11. Nuts and bolts of a sleep laboratory, Workshop on Sleep Disorders, 5 March 2017, Andhra Medical College, Visakhapatnam, India
12. Inaugural lecture on stereotoxic techniques in neurosciences, 5th Annual State Conference of APPI, 18 March 2017, RG Kar Medical College, Kolkata, India

Debabrata Ghosh: 1

1. Transcriptomics of endometrial receptivity towards blastocyst implantation, 5th Biennial Conference of South Asian, Association of Physiologist (SAAPCON-2016), 10–13 November 2016, Kathmandu University, Dhulikhel, Nepal

Kanwal Preet Kochhar: 4

1. Stress, stigma and social erosion in medical students: Social responsibility of teachers, 22nd World Congress of Social Psychiatry, WASP 2016, 30 November 2016–4 December 2016, New Delhi, India
2. Recording of Bereitschafts potentials, Workshop on Techniques in Physiological Sciences for SAARC Nations, 20–22 December 2016, Department of Physiology, AIIMS, New Delhi, India
3. Indian diet: Ideal for Mind-Body Medicine, 1st National Conference of Indian Society of Clinical Nutrition (INSCN), 15 October 2016, ILBS, New Delhi, India
4. Bhartiya aahar sampoon swasthya ke liye - Indian diet for iIntegral health, 2nd International Conference on Public Health: Issues, Challenges, Opportunities, Prevention, Awareness (Public Health: 2016) organised by Krishi Sanskriti, 21 May 2016, Jawaharlal Nehru University, New Delhi, India

Nalin Mehta: 19

1. Roles and responsibilities of ethics committees, Capacity Building Workshop for Ethics Committees, 8 April 2016, Pt B D Sharma PGIMS, University of Health Sciences, Rohtak, India
2. Research involving vulnerable population, Capacity Building Workshop for Ethics Committees, 8 April 2016, Pt B D Sharma PGIMS, University of Health Sciences, Rohtak, India
3. Risk-Benefit analysis of research protocols, Capacity Building Workshop for Ethics Committees, 8 April 2016, Pt B D Sharma PGIMS, University of Health Sciences, Rohtak, India
4. Ethical issues in Healthcare and Research, PHYSIOCON 2016 (Conference of Association of Physiologists of Haryana), 24 April 2016, Pt B D Sharma PGIMS, University of Health Sciences, Rohtak, India
5. Evaluation of an integrated teaching programme, Faculty Development Programme, 28 June 2016, Kalinga Institute of Medical Sciences, Bhubaneswar, Bhubaneswar, India
6. Integration of Basic Sciences Faculty Competencies in Clinical Settings, 5th Faculty Development Workshop and Workshop on Competency Based Medical Education, -7 September 2016, Chitwan Medical College, Bharatpur, Nepal
7. Microteaching: An introduction, Lesson plan for microteaching, 5th Faculty Development Workshop and Workshop on Competency Based Medical Education, 7 September 2016, Chitwan Medical College, Bharatpur, Nepal
8. Teaching Ethics to Medical Students, 5th Faculty Development Workshop and Workshop on Competency Based Medical Education, 8 September 2016, Chitwan Medical College, Bharatpur, Nepal
9. Microteaching: Lesson plan preparation, Presentation and review of the process, 5th Faculty Development Workshop and Workshop on Competency Based Medical Education, 8 September 2016, Chitwan Medical College, Bharatpur, Nepal
10. Making effective scientific presentations, 5th Faculty Development Workshop and Workshop on Competency Based Medical Education, 10 September 2016, Chitwan Medical College, Bharatpur, Nepal
11. Introduction to Medical Ethics, Training in Medical Ethics and Workshop on Professionalism Among Doctors, 24 September 2016, Pt JNM Medical College and State Health Training Centre, Kalibadi, Raipur, India
12. Bioethics case studies (sickle cell anemia screening and treatment), Training in Medical Ethics and Workshop on Professionalism among Doctors, 25 September 2016, Pt JNM Medical College and State Health Training Centre, Kalibadi, Raipur, India

13. The ATCOM Module of the MCI, Medical Education Conference – 2016, 13–14 October 2016, JIPMER, Puducherry, Puducherry, India
14. Ethics of Healthcare and Research, Annual Rohtak Medical Students Conference (ARMSCON) 2016, 25 October 2016, Pt B D Sharma PGIMS, University of Health Sciences, Rohtak, India
15. Sensitization on Roles and Responsibilities of Ethics Committees and Ethics Review Procedures, 2nd Capacity Building Workshop for Ethics Committees, 7 December 2016, Pt B D Sharma PGIMS, University of Health Sciences, Rohtak, India
16. Research Risk-Benefit Analysis, 2nd Capacity Building Workshop for Ethics Committees, 7 December 2016, Pt B D Sharma PGIMS, University of Health Sciences, Rohtak, India
17. Panelist, General ethical issues, Informed consent process and vulnerability, ICMR, WHO National Consultation for Draft National Ethical Guidelines for Biomedical and Health Research involving Human Participants, 14 December 2016, ICMR, New Delhi, India
18. Bioethics and the Medical Profession, Training in Medical Ethics and Workshop on Professionalism among Doctors, 25 February 2017, Pt JNM Medical College and State Health Training Centre, Kalibadi, Raipur, India
19. Functioning of ethics committees and ethics review procedures, Training in Medical Ethics and Workshop on Professionalism among Doctors, 25 February 2017, Pt JNM Medical College and State Health Training Centre, Kalibadi, Raipur, India

Suman Jain: 5

1. Assessment of pain in animals and humans, Hands-on-Training Workshop for one day on Neurostereology and Assessment of Pain in Animals and Humans, 18 October 2016, Department of Physiology, AIIMS, New Delhi, India
2. Sensory and motor assessment in laboratory rats, Biological signals in cognitive and psychophysiology, 4 November 2016, Department of Physiology, AIIMS, New Delhi, India
3. Pain assessment in animals and humans, Workshop on Techniques in Physiological Sciences 2016, 20–22 December 2016, Department of Physiology, AIIMS, New Delhi, India
4. Visual system, Systems Biology Course Work for Postgraduates, 13–14 January 2017, National Brain Research Centre, Manesar, India
5. Effects of magnetic field stimulation in parkinson's disease, International Symposium on Neurodegenerative Disorders, 29–30 March 2017, National Institute of Mental Health and Neurosciences, Bangalore, India

Ashok Kumar Jaryal: 4

1. Why do we need IOM in skull base surgery, The First Indian Course on Intraoperative Neurophysiology in Neurosurgery, 4 February 2017, Park Clinic, Kolkata, India
2. Phase reversal and cortical mapping for motor areas in the asleep patients, The First Indian Course on Intraoperative Neurophysiology in Neurosurgery, 3 February 2017, Park Clinic, Kolkata, India
3. Literature review, Online literature search, Workshop on Research Methodology, 19 August 2016, PGIMER-Chandigarh, India
4. Intraoperative electrophysiological techniques: Technical considerations, problems, and pitfall, 5th Annual Conference of Neurological Surgeons Society of India, 2 April 2016, Sher-i-Kashmir International Convention Centre, Srinagar, India

Raj Kumar Yadav: 8

1. Basic principles and physiology of pranayama and meditation, Yoga Training Programme for Defense Staff, 27 April 2016, DIPAS (Defence Institute of Physiology and Allied Sciences), New Delhi, India
2. Scientific basis of yoga-meditation based lifestyle interventions, Science behind naturopathy and yoga, 16 May 2016, Apollo Hospitals, New Delhi, India
3. Mind, Medicine and Meditation: An evidence based scientific journey, International Yoga Day, 21 June 2016, Lady Hardinge Medical College (LHMC), New Delhi, India
4. Yoga: Science and medicine, International Yoga Day, 21 June 2016, National Centre for Disease Control (NCDC), New Delhi, India
5. Evidence based yoga: Our AIIMS experience, Symposium on Yoga and Environmental Physiology ASSOPICON 2016, 14–17 September 2016, Shri B M Patil Medical College, Hospital-Vijayapura, Karnataka, India
6. Future direction of physiology: As a teacher and researcher, Panel discussion, ASSOPICON 2016, 14–17 September 2016, Shri B M Patil Medical College, Hospital-Vijayapura, Karnataka, India

7. Role of yoga in combating environmental stress, CME cum Workshop, 17 December 2016, Aligarh Muslim University (AMU), Aligarh, India
8. Cardiovascular risk, Framingham risk score and yoga based lifestyle intervention, PHYSIOCON 2017, 5 March 2017, ESIC Medical College, Faridabad, India

Asmita Patil: 3

1. Bioethics: Application in health care, Orientation Programme of MBBS Students, 20 July 2016, AIIMS, New Delhi, India
2. Exercise physiology, Role of exercise science on health awareness, 2 February 2017, Institute of Home Economics, Delhi University, New Delhi, India
3. Improving essay questions and SAQ, Basic course in medical education for faculty, 17 February 2017, CMET, AIIMS, New Delhi, India

Renu Bhatia: 5

1. Food for bones, Interactive session for primary school children, 3 July 2016, St. Mary's School, Safdarjung Enclave, New Delhi, India
2. Transcranial magnetotherapy: A new approach towards pain management and neurorehabilitation, International Conference of Physical Therapy, 11 December 2016, AIIMS, New Delhi, India
3. Sensory motor evaluation in humans, Workshop on Biological Signals in Cognitive and Psychophysiology, 4 November 2016, AIIMS, New Delhi, India
4. Pain assessment in humans, Workshop on Techniques in Physiological Sciences for SAARC Nations 2016, 20–22 December 2016, Department of Physiology, AIIMS, New Delhi, India
5. Transcranial magnetic stimulation for pain management, Workshop on Techniques in Physiological Sciences for SAARC Nations 2016, 20–22 December 2016, Department of Physiology, AIIMS, New Delhi, India

Simran Kaur: 5

1. Physiology of cognition, Workshop on Techniques in Physiological Sciences for SAARC Nations 2016, 20–22 December 2016, Department of Physiology, AIIMS, New Delhi, India
2. Learning of Physiology in 21st Century, SAAPCON, Physiological Society of Nepal, 10 November 2016, Kathmandu, Nepal
3. OSPE and OSCE, Assessment drives learning, 15 November 2016, HIMSR, New Delhi, India
4. Assessment of knowledge, Basic Medical Sciences, 17 February 2017, AIIMS, New Delhi, India
5. Assessment of clinical and practical skills, Basic Medical Sciences, 17 February 2017, AIIMS, New Delhi, India

Prashant T Tayade: 2

1. Electromyography, SAAPCON-2016, Post Conference Workshop, 14–15 November 2016, B.P Koirala Institute of Medical Sciences, Dharan, Nepal
2. Introduction to QEEG, Workshop on Techniques in Physiological Sciences for SAARC Nations 2016, 20–22 December 2016, AIIMS, New Delhi, India

Dinu S. Chandran: 8

1. Cardiovascular autonomic function studies in chronic kidney disease, Fortnightly Faculty Research Presentation, 16 August 2016, AIIMS, New Delhi, India
2. HRV and cardiovascular homeostasis, Workshop on Biological Signals in Cognitive and Psychophysiology, 4 November 2016, Department of Physiology, AIIMS, New Delhi, India
3. Assessment of heart rate variability, 5th Biennial Conference of South Asian Association of Physiologists, Post Conference Workshop, 14–15 November 2016, B P Koirala Institute of Health Sciences, Ghopa Dharan, Nepal
4. Quantification of cardiac autonomic tone (HRV) and vascular tone (BPV), 28th Annual Conference of the Physiological Society of India, Symposium on Autonomic and Vascular Function Assessment: Physiological Applications, 18–20 November 2016, Midnapore College, Midnapore City, West Bengal, India
5. Assessment of heart rate variability, Workshop on Techniques in Physiological Sciences Workshop for SAARC Nations 2016, 20–22 December 2016, AIIMS, New Delhi, India
6. Development of national portal for centralized heart rate variability analysis, Grand Round, 24 January 2017, AIIMS, New Delhi, India

7. Role of young faculty in innovation, AIIMS, New Delhi, AIIMS, Jodhpur, Teleconference – Symposium on How to Do Innovation in Physiology and How to Protect Intellectual Property Rights, 7 February 2017, AIIMS, New Delhi, India
8. Development of national portal for centralized heart rate variability analysis, Last mile connectivity for indigenous medical devices developed under DST, Hands-on-Workshop on Available Technologies, 27 March 2017, AIIMS, New Delhi, India

Nasreen Akhtar: 4

1. MCQs – concept and formulation, A Workshop on Assessment Drives Learning, 15 November 2016, Hamdard Institute of Medical Sciences and Research, New Delhi, India
2. Sleep disorders in India: A systematic analysis, Symposium on ‘Sleep in health and disease’ at Association of Physiologists and Pharmacologists of India Conference 2016, 22 November 2016, AIIMS, Patna, India
3. Basics of respiration related to sleep, 5th National Sleep Technology Workshop, 29–30 November 2016, AIIMS, New Delhi, India
4. Basics of Polysomnography, Workshop on Techniques in Physiological Sciences for SAARC Nations 2016, 20–22 December 2016, AIIMS, New Delhi, India

Kiran Prakash: 1

1. Assessment of vascular function, Workshop on Techniques in Physiological Sciences 2016, 20–21 December 2016, AIIMS, New Delhi, India

Oral/poster presentations: 49

1. Ahuja N, Mehta N, Sharma R. Perceptual reversals of negative vs neutral stimuli during binocular rivalry are marked by higher current source density and increased beta power over bilateral scalp, Cognitive Neuroscience Society 23rd Annual Meeting 2016, 2–5 April 2016, New York Hilton Midtown, New York, USA
2. Arya S, Duggal R, Jain S, Bhatia R. Thermal sensitivity of masseter muscle in patients undergoing fixed orthodontic therapy, ISSPCON 2017, 3– 5 February 2017, SMS Medical College, Jaipur, India
3. Batabyal T, Tayade P, Sharma R, Kaur S. Effect of Emotional Face Word Interference on Behavioral Outcome, Association of Physiologists and Pharmacologists of India (APPICON) 2016, 22–24 October 2016, AIIMS-Patna, India
4. Bhatia R, Mattoo B, Tanwar S, Jain S, Kumar U, Bhatia R. Transcranial magnetic stimulation of dorsolateral prefrontal cortex in chronic pain management, 2nd International Brain Stimulation Conference, 6 March 2017, Hotel Hesperia Towers-Barcelona, Spain, **Outstanding poster presentation award**
5. Bhattacharyya S, Jain S. Effect of low intensity electromagnetic field exposure on severely contused spinal cord rats: An electrophysiological quantification, 34th Annual Conference of Indian Academy of Neurosciences, 19-21 October 2016, National Brain Research Centre, Manesar-Haryana, India
6. Bose S, Jain S. Scientific evidence for the role of music in modulating embryonic nervous system development, Brain Mapping and Music Therapy Workshop: Use of electrophysiological appliances, 29 July 2016, Department of Physiology, AIIMS-New Delhi, India
7. Bose S, Umarao P, Jain S. Disease modifying effect of magnetic field stimulation in Parkinson’s disease: Inflammation to motor function, 34th Annual Conference of Indian Academy of Neurosciences, 19–21 October 2016, National Brain Research Centre, Manesar-Haryana, India
8. Edmin C, Prachi S, Jaryal A K, Roy A, Chandran DS, Deepak KK. Vascular and endothelial dysfunction in MI patients: The role of infarct location, Annual Conference of Association of Physiologist and Pharmacologist of India (APPICON 2016), 22–24 October 2016, AIIMS, Patna, India
9. Garg P, Badhwar S, Jaryal AK, Kachhawa G, Deepak KK, Kriplani A. The temporal trend of vascular function in women with gestational diabetes, Annual Conference of Association of Physiologist and Pharmacologist of India (APPICON 2016), 22–24 October 2016, AIIMS, Patna, India
10. Garg P, Prathiban R, Yadav K, Garima K, Jaryal A K, Deepak KK. Temporal trend of changes in baroreflex sensitivity during the course of healthy pregnancy, Annual Conference of Association of Physiologist and Pharmacologist of India (APPICON 2016), 22–24 October 2016, AIIMS, Patna, India
11. Garg P, Smriti B, Shivangi, Garima K, Jaryal AK, Deepak KK. Assessment of arterial stiffness in preeclampsia: A longitudinal study, Annual Conference of Association of Physiologist and Pharmacologist of India (APPICON 2016), 22–24 October 2016, AIIMS, Patna, India, **R. Srinivasan prize for best paper in PG category**
12. Garg P, Yadav K, Anasuya B, Garima K, Jaryal AK, Deepak KK. Assessment of cardiac autonomic tone during the course of healthy pregnancy, Annual Conference of Association of Physiologist and Pharmacologist of India (APPICON 2016), 22–24 October 2016, AIIMS, Patna, India

13. Gurja JP, Muthukrishnan S-P, Tripathi M, Mehta N, Sharma R. EEG biomarker to distinguish Mild Cognitive Impairment from normal ageing, Indian Ageing Congress, 2016, 9–11 November 2016, AIIMS, Delhi, India
14. Mattoo B, Tanwar S, Bhatia R, Tripathi M, Jain S, Bhatia R. Beneficial effect of low frequency repetitive transcranial magnetic stimulation on dorso lateral prefrontal cortex in chronic tension-type headache, 34th Annual Meeting of Indian Academy of Neurosciences, 19–21 October 2016, National Brain Research Centre, Manesar-Gurgaon, Haryana, India
15. Mattoo B, Tanwar S, Bhatia R, Tripathi M, Jain S, Bhatia R. Effect of repetitive transcranial magnetic stimulation on pain status in chronic tension-type headache, APPICON 2016, 62nd Annual Conference of Physiologists and Pharmacologists of India, 22–24 October 2016, AIIMS, Patna, Bihar, India
16. Mattoo B, Tanwar S, Bhatia R. Repetitive transcranial magnetic stimulation as a therapeutic intervention in chronic tension type headache: A randomised controlled study, 16th World Congress on Pain (IASP), 26–30 September 2016, PacificoYokohama Convention Complex, Yokohama, Japan
17. Muthukrishnan S-P, Ahuja N, Mehta N, Sharma R. Functional brain microstate predicts the outcome in a visuospatial working memory test, Association of Physiologists and Pharmacologists of India (APPICON) 2016, 22–24 October 2016, AIIMS, Patna, India, **B.K. Anand Research prize for best paper presentation**
18. Muthukrishnan S-P, Mehta N, Sharma R. Effect of working memory load on visuospatial search: A QEEG Study, Association of Physiologists and Pharmacologists of India (APPICON) 2016, 22–24 October 2016, AIIMS, Patna, India
19. Muthukrishnan S-P, Mehta N, Sharma R. Effect of working memory load on visuospatial search: A QEEG Study, 23rd EEGLAB Workshop, 16–20 January 2017, All India Institute of Speech and Hearing, Mysore, India
20. Pal A, Behari M, Mehta N, Sharma R. Resting state alpha power changes in patients with Parkinson's disease, 23rd EEGLAB Workshop, 16–20 January 2017, All India Institute of Speech and Hearing, Mysore, India
21. Pal A, Behari M, Sharma R. Interplay between alpha and theta during working memory task in patients with Parkinson's disease, Movement Disorder Congress 2016, 13 March 2016, Newport City Complex-Manila, Philippines
22. Patel SK, Netam RK, Jakhar R, Kochhar KP, Yadav RK. Effect of short-term yoga based life style intervention on nerve conduction velocity in obesity, APPICON 2016, 21–24 October 2016, AIIMS, Patna, India
23. Prachi S, Edmin CS, Anasuya B, Viveka P, Jaryal AK, Chandran DS, Deepak KK. Effect of Angiotensin Converting Enzyme Inhibitor on Arterial Stiffness in Type 2 Diabetes with Newly Diagnosed Hypertension, Annual Conference of Association of Physiologist and Pharmacologist of India APPICON 2016, 22–24 October 2016, AIIMS, Patna, India
24. Pragya P, Khadgawat R, Yadav RK. Assessment of Vitamin D status and its correlation with cardiovascular risk factors in obese Indian adults, 68th Annual Conference of Cardiological Society of India, 8–11 December 2016, Le-Meridian-Kochi, India
25. Pragya P, Khadgawat R, Yadav RK. Evaluation of Vitamin D status and its Correlation with Insulin Resistance in Indian Obese Adolescents: A cross sectional study, First National Conference of Indian Society of Clinical Nutrition (INSCN), 14–16 October 2016, ILBS, New Delhi, India
26. Pragya P, Netam R, Khadgawat R, Yadav RK. Correlation of Vitamin D and PTH with Insulin Resistance in Indian obese adults: A cross sectional study, 46th Annual Conference of Endocrine Society of India, 21–23 October 2016, New Delhi, India
27. Roy S, Jaryal AK, Srivastava AK, Deepak KK. Impedance plethysmography testing reveals different vascular responses during orthostasis in parkinson's disease and multiple system atrophy with parkinsonism, American Autonomic Society, 2–5 November 2016, San Diego
28. Samanchi R, Muthukrishnan S-P, Sharma R. Role of data statistics in identifying artifacts in EEG Signal, 23rd EEGLAB Workshop, 16–20 January 2017, All India Institute of Speech and Hearing-Mysore, India
29. Sampath M, Talwar A, Jaryal AK, Goyal V, Srivastava A, Deepak KK. Respiratory system impedance with impulse oscillometry in Parkinson's disease: Relation with disease severity, European Respiratory Congress (ERS), 5 September 2016, London Excel, Convention Centre, London
30. Sankalp, Yadav RK, Dada T, Netam R. Quality of life in patients with glaucoma, APPICON 2016, 21–24 October 2016, AIIMS, Patna, India
31. Shivangi, Smriti B, Prathiban R, Chandran DS, Jaryal AK, Deepak KK. Blood pressure fluctuations induced by using oscillatory lower body negative pressure, Annual Conference of Association of Physiologist and Pharmacologist of India (APPICON 2016), 22–24 October 2016, AIIMS, Patna, India
32. Shridhar G, Nishikanth S, Singh A, Thukral A, Sankar M J, Agarwal R, Jaryal A, Deorati A, Paul V K. Pharyngeal pressure in preterm infants receiving nasal continuous positive airway pressure, 36th Annual Conference of National

Neonatology Forum, Neocon 2016 and 16th Annual MP State NEOCON, 8–11 December 2016, Brilliant Convention Centre, **Indore Best poster award**

33. Soni S, Muthukrishnan S-P, Sood M, Kaur S, Mehta N, Sharma R. A copying mechanism for cognitive loading in Schizophrenia: Anterior cingulate and insular hyperactivation, 10th AAPI Global Healthcare Summit 2016, 28 December 2016, Rabindranath Tagore Medical College, Udaipur, India
34. Soni S, Muthukrishnan S-P, Sood M, Kaur S, Mehta N, Sharma R. A copying mechanism for cognitive loading in Schizophrenia: Anterior Cingulate and Insular Hyperactivation, 23rd EEGLAB Workshop, 16–20 January 2017, All India Institute of Speech and Hearing, Mysore, India
35. Soni S, Muthukrishnan S-P, Sood M, Kaur S, Mehta N, Sharma R. Is dorsal “where” visual pathway affected in Schizophrenia? International Congress on Schizophrenia Research 2017, 24–28 March 2017, Manchester Grand Hyatt, San Diego, California, USA
36. Soni S, Sood M, Kaur S, Mehta N, Sharma R. Visuospatial working memory and schizophrenia (e-poster), Schizophrenia International Research Society 2016 Biennial Meeting, 2–6 April 2016, Firenze Fiera Congress Center, Florence, Italy
37. Tamuli D, Jaryal AK, Srivastava AK, Deepak KK. Vagal and adrenergic baroreflex sensitivity induced by valsalva maneuver in patients of SCA1, SCA2 and SCA3, American Autonomic Society, 2–5 November 2016, San Diego
38. Tanwar S, Mattoo B, Bhatia R. Transcranial magnetotherapy in management of chronic pain and associated symptoms of fibromyalgia, 16th World Congress on Pain (IASP), 26–30 September 2016, Pacifico Yokohama Convention Complex, Yokohama, Japan
39. Tanwar S, Mattoo B, Jain S, Bhatia R. Effect of transcranial magnetic stimulation on chronic pain and the related symptoms in fibromyalgia patients, 34th Annual Meeting of Indian Academy of Neurosciences, 19–21 October 2016, National Brain Research Centre, Manesar-Gurgaon, Haryana, India
40. Tanwar S, Mattoo B, Jain S, Kumar U, Dada R, Bhatia R. Effect of transcranial magnetic stimulation on noxious cold mediated pain modulation in fibromyalgia syndrome, 2nd International Brain Stimulation Conference, 7 March 2017, Hotel Hesperia Towers, Barcelona, Spain
41. Tanwar S, Mattoo B, Jain S, Kumar U, Dada R, Bhatia R. Low frequency transcranial magnetic stimulation in management of chronic pain and associated symptoms of fibromyalgia, National Conference on Recent Advances in Biomedical Science: Diagnosis and Research and 2nd Annual Scholar’s Science Meet at SBMLS, 16 December 2016, New Delhi, New Delhi, India
42. Tanwar S, Mattoo B, Jain S, Kumar U, Dada R, Bhatia R. Role of repetitive transcranial magnetic stimulation in reducing chronic pain and associated symptoms in patients with fibromyalgia syndrome, 2nd Annual Conference of Association of Physiologists of Haryana, 4–5 March 2017, ESIC Medical College and Hospital-Faridabad, Haryana, **Best oral presentation award in PG category**
43. Tanwar S, Mattoo B, Jain S, Kumar U, Dada R, Bhatia R. Transcranial magnetic stimulation in reducing chronic pain and related symptoms in patients with fibromyalgia, APPICON 2016, 62nd Annual Conference of Physiologists and Pharmacologists of India, 22–24 October 2016, AIIMS, Patna, Bihar, India
44. Trivedi A, Talwar A, Chandan M, Bade G, Guleria R, Ghosh D. Interleukins in induced sputum and plasma of COPD and asthma patients in Indian population: Correlation with respiratory indices and cell counts, European Respiratory Society (ERS) Congress, 4 September 2016, London Excel Convention Centre, London
45. Yadav BS, Talwar A, Ghosh D, Guleria R. Relation of exhaled breath temperature and systemic markers of inflammation and remodelling in stable bronchial asthma, European Respiratory Congress (ERS), 4 September 2016, London Excel Convention Centre, London
46. Yadav R, Yadav RK, Khadgawat R, Mehta N. Beneficial effects of a 12-weeks yoga based lifestyle intervention on cardio-metabolic risk factors and adipokines in subjects with pre-hypertension or hypertension, 26th Scientific Meeting of the International Society of Hypertension, 24–29 September 2016, Seoul, Korea
47. Yadav R, Yadav RK, Khadgawat R. Effect of 12-weeks yoga based lifestyle intervention on adipokines and leptin to adiponectin ratio in subjects with metabolic syndrome, India International Science Festival, 7–11 December 2016, CSIR-NPL, New Delhi, India
48. Yadav R, Yadav RK, Khadgawat R. Beneficial effects of 12-weeks yoga based lifestyle intervention on stress and inflammation in subjects with Metabolic Syndrome, 46th Annual Conference of Endocrine Society of India, 21–23 October 2016, New Delhi, India
49. Yadav RK, Yadav R, Kumar S, Netam R. Framingham Risk Score and estimated 10-years cardiovascular disease risk can be reduced by a short-term yoga-based lifestyle intervention, 14th World Congress on Insulin Resistance, Diabetes and Cardiovascular Disease (WCIRDC), 1–3 December 2016, Hilton, Los Angeles, CA, USA

RESEARCH

Funded projects

Ongoing

1. Acute effects of slow breathing on cardiovascular variability during head up tilt, head down tilt and lower body negative pressure in naïve healthy subjects and trained yoga practitioners. K.K. Deepak, AYUSH, 3 years, 2016–18, Rs. 66.75 lakhs
2. Correlation of angiographic score with Framingham risk score, vascular and autonomic function parameters in coronary artery disease patients, K.K. Deepak, CSIR, 3 years, 2015–18, Rs. 23.18 lakhs
3. Transcriptomic landscaping for endometriosis from Genome-Wide Analysis (GWA) of Expression Arrays, Debabrata Ghosh, DST, 3 years, 2015–18, Rs. 47.37 lakhs
4. Molecular basis of estrogenism in endometriosis, Debabrata Ghosh, DST, 3 years, 2016–19, Rs. 49.72 lakhs
5. The study of therapeutic effect of superparamagnetic iron oxide nanoparticles implantation and magnetic field stimulation on motor, cognitive in a 6-OHDA rat model of Parkinsons Disease, SRF Fellowship under Dr Suman Jain, ICMR, 3 years, 2015–18, Rs. 10.68 lakhs including fellowship and contingency
6. Effect of extremely low frequency magnetic field on neuroregeneration in severely injured spinal cord in rat model: A therapeutic approach, SRF Fellowship under Dr Suman Jain, ICMR, 3 years, 2017–20, Rs. 10.68 lakhs including fellowship and contingency
7. EEG microstate and phase coherence correlates of cognitive deficits in Parkinson's disease, SRF Fellowship under Dr Ratna Sharma, ICMR, 3 years, 2016–19, Rs. 2.28 lakhs for 6 months
8. Efficacy of yoga as an adjunct therapy to modify fatigability and stress in breast cancer patients: A randomised controlled trial, Raj Kumar Yadav, AIIMS, 1 year, 2016–17, Rs. 5 lakhs
9. Genome-wide gene profiling using array based comparative genomic hybridization and global gene transcript profiling of respiratory tract macrophages in stable COPD patients, Anjana Talwar, DST, 4 years, 2013–17, Rs. 50 lakhs
10. A study of Psychoneuroimmunological correlates of Fibromyalgia: Effect of transcranial magnetic stimulation, Renu Bhatia, AIIMS, 1 year, 2016–17, Rs. 2.85 lakhs
11. Emotion dependent modulation of interference: A QEEG study, Simran Kaur, AIIMS, New Delhi, 1 year, 2016–17, Rs. 4.41 lakhs
12. Study of EEG microstates and resting state networks in relaxed wakefulness, Prashant Tayade, AIIMS, New Delhi, 2 years, 2016–18, Rs. 9.9 lakhs
13. To study the relationship between components of Renin Angiotensin Aldosterone System and Vascular Functions following Angiotensin converting enzyme inhibition in Type 2 Diabetes patients with newly diagnosed hypertension, Dinu S. Chandran, AIIMS, New Delhi, 1 year, 2016–17, Rs. 4.6 lakhs
14. Effect of endocannabinoid at the medial septum on sleep wakefulness, Nasreen Akhtar, AIIMS, New Delhi, 1 year, 2016–17, Rs. 4.2 lakhs

Completed

1. A study of cardiac and vascular autonomic mechanisms underlying the pranayama practices, K.K. Deepak, CCRYN, 3 years, 2013–17, Rs. 17.64 lakhs
2. Design and development of centralised system on heart rate variability analysis, K.K. Deepak, Media Lab Asia, Govt. of India, 2 years, 2015–17, Rs. 47.60 lakhs
3. Role of the preoptic area thermo TRPV channels in thermoregulation of rat, H.N. Mallick, ICMR, 3 years, 2014–2016, Rs. 15 lakhs
4. Cellular and molecular basis of action of cationic α -helical antimicrobial peptide on human placental cytotrophoblast cells, Debabrata Ghosh, ICMR, 4 years, 2012–16, Rs. 41.58 lakhs
5. Understanding endometriosis using high throughput proteomics strategy, Debabrata Ghosh, DST, 4 years, 2012–16, Rs. 35 lakhs
6. Multi-analyte profiling of plasma biomarkers in patients with stable COPD and their correlation with clinical parameters: A Pranayama based study, Anjana Talwar, CSIR, 3 years, 2013–16, Rs. 23.6 lakhs
7. Effect of transcranial magnetic stimulation on pain status of chronic tension type headache patients, Renu Bhatia, AIIMS, New Delhi, 2 years, 2014–16, Rs. 2.5 lakhs
8. Cortical sources of dissonance: A QEEG study, Simran Kaur, AIIMS, New Delhi, 1 year, 2015–2016, Rs. 4.99 lakhs

Departmental projects

Ongoing

1. Acute effects of slow breathing on cardiovascular variability during head up tilt, head down tilt and lower body negative pressure in naïve subjects and trained yoga practitioners
2. Effect of graded lower body positive pressure on dynamic cerebral autoregulation
3. To study the effect of hypercapnia on dynamic cerebral autoregulation during induced transient hypotension
4. Assessment of peripheral arterial compliance during graded lower body negative pressure
5. Low flow mediated constriction in brachial and radial arteries and its comparison in dominant and non-dominant arms after correcting for the shear rate
6. Molecular basis of estrogenism in endometriosis
7. A study of transcriptomic landscape of ovarian endometriosis
8. A neoplastic potential of endometrial stromal cells in endometriosis
9. Quantitative EEG correlates of positive, negative and neutral affect on cognitive functions and associated psychological stress response
10. Quantitative EEG correlates of visuo-spatial working memory in Schizophrenia
11. Neural correlates of cognitive performance in glaucoma: A quantitative EEG study
12. Neural processing of congruency and affective valence during binocular rivalry: A QEEG study
13. Real time QEEG correlates of default mode network and its regulation
14. Brain computer interface based on EEG data of motor imagery
15. Molecular basis of cationic anti-microbial peptide action on human cytotrophoblast cell lines
16. To study the therapeutic effect of superparamagnetic iron oxide nanoparticles implantation and magnetic field stimulation on motor, cognitive in a 6-OHDA rat model of Parkinson's disease
17. Neuroregeneration following implantation of iron oxide nanoparticle along with magnetic field exposure in spinal cord injured rats
18. Cortical reorganization in complete spinal cord injured rats: Effect of superparamagnetic nanoparticles and low intensity magnetic field exposure
19. A morphological and functional study on intracerebroventricular streptozotocin induced rat model of Alzheimer's disease: Effect of magnetic field stimulation
20. Muscle regeneration in complete spinal cord injury: Effect of iron oxide nanoparticle implantation along with magnetic field exposure in rats
21. Genomic expression and protein profile correlates of peripheral blood mononuclear cells in obesity after yoga based lifestyle intervention
22. Effect of short-term yoga based ocular exercise on glaucoma: A randomized controlled trial
23. Understanding the pathophysiology of endometriosis by protein profiling and its correlation with stress
24. Effect of vitamin D supplementation on pancreatic beta cell functions in obese Indian subjects: A randomised controlled trial
25. Genome-wide gene profiling using array based comparative genomic hybridization and global gene transcript filing of respiratory tract macrophages in stable COPD patients
26. Multi-analyte profiling of plasma biomarkers in patient with stable COPD and their correlation with clinical parameters: Pranayama based study
27. Effect of transcranial magnetic stimulation on pain modulation status in fibromyalgia patients
28. A study of pain status and corticomotor excitability in chronic low back pain patients: Effect of transcranial magnetic stimulation
29. Role of neuronavigation based repetitive transcranial magnetic stimulation in chronic migraine
30. A study of conditioned pain modulation in trigeminal neuralgia patients
31. The effect of motor imagery on corticomotor excitability and pain status in rheumatoid arthritis patients
32. The effect of neuronavigation based rTMS therapy on cognition and corticomotorexitability in patients of fibromyalgia
33. QEEG correlates of cross modal audio-visual interaction
34. Effect of slow breathing on frequency dependent baroreflex sensitivity assessed by oscillatory lower body negative pressure

35. Effect of physiological challenges on regional brain temperature in rats (ICMR – JRF)
36. Role of mediodorsal thalamic nuclei in sleep
37. Role of the lateral septal nuclei in sleep in rats
38. Neuromuscular changes in sleep and sleep deprivation (ICMR – JRF)
39. Polysomnographic studies of the effect of pranyamas on various physiological functions (DBT – Post Doc)

Completed

1. Quantitative EEG correlates of cognitive performance in Mild Cognitive Impairment and Alzheimer's Disease
2. Quantitative EEG correlates of cognitive deficits in Parkinson Disease
3. Quantitative EEG correlates of the effect of music on cognitive interference
4. Effect of short-term yoga based lifestyle intervention on cognition in obesity
5. Bcl-2 and Rab25 proteins in endometrial tissue of patients with endometriosis
6. Effect of rTMS on central and peripheral pain modulation in chronic tension type headache
7. A study of thermal sensitivity and motor activity of masseter muscle during fixed orthodontic therapy
8. Effect of rTMS on pain status of chronic tension type headache
9. Cortical sources of emotional interference: A QEEG study
10. The mechanism of thermogenesis induced by glutamate in the gut and in the preoptic area

Collaborative projects

Ongoing

1. Cuff less noninvasive blood pressure measurement using radial arterial pressure patch (INDO-US Science and Technology Forum and Dept. of Mechanical Engineering, IIT Delhi)
2. Evaluation of autonomic functions in patients of spinocerebellar ataxia types 1, 2 and 3 and comparison with morphological changes in brain (Neurology, NMR)
3. Evaluation of vascular functions baroreflex sensitivity and biochemical factors to investigate preeclampsia (Obstetrics and Gynaecology)
4. Assessment of autonomic and vascular function before and after tumour removal in patient with pheochromocytoma (Endocrinology and Metabolism)
5. Effect of Angiotensin converting enzyme inhibitor on autonomic vascular and endothelial function in diabetics with newly diagnosed hypertensive (Endocrinology and Metabolism)
6. Evaluation of autonomic tone, vascular and endothelial function in myocardial on infraction patients undergoing yoga based cardiac rehabilitation (Cardiology)
7. A study of endothelial function and gene expression in healthy individuals and their correlation with various somatotype classifications (Institute of Genomics and Integrative Biology, IGIB, New Delhi)
8. Study of effect of magnetic field exposure on red blood cells and blood flow in humans (Centre of Biomedical Engineering, IIT, Delhi)
9. Evaluation of vascular functions baroreflex sensitivity and biochemical factors to investigate preeclampsia (Obstetrics and Gynaecology)
10. To study the role of vascular function and pain sensitivity in post myocardial patients (Cardiology)
11. To study the mechanism of altered spontaneous baroreflex sensitivity during blood donation (Transfusion Medicine)
12. Investigation of Heart-Brain Interactions during Internally Operative vs Externally Operative Attention Regulatory Mechanisms (NIT, Jalandhar)
13. Characterization of dynamic interaction between cardiovascular and respiratory signal during Autonomic Stimulation (NIT, Jalandhar)
14. Comparison of D wave and myogenic, Motor evoked potential based intraoperative monitoring in spinal cord surgeries (Neurosurgery)
15. Comparison of Monopolar and bipolar stimulation for cortical motor mapping in Neurosurgery (Neurosurgery)
16. Isolation and molecular characterisation of colorectal cancer stem cells (Biochemistry)
17. Isolation and molecular characterisation of human bone marrow derived mesenchymal stem cells (Biochemistry)
18. Nutritional profile and lifestyle of Indian women (18–40 years) with infertility (Lady Irwin College, Delhi University)
19. A study of the functional brain activation and electro-physiological spectral analysis in catatonia (Psychiatry)

20. A study of brain activation using functional near infrared spectroscopy and quantitative electroencephalographic spectral analysis in depression, negative and positive schizophrenia (Psychiatry)
21. Evaluation of the effect of mindfulness based stress reduction in patients with advanced glaucoma (Ophthalmology)
22. A study for determination of allocentric neural navigation process schematic utilizing dynamic optic array for prospective control (Psychiatry)
23. Study of cognitive function in patients with chronic kidney disease and the effect of renal transplantation (Nephrology)
24. To study the changes in Bereitschafts potentials or movement related cortical potentials in Fibromyalgia Syndrome (Psychiatry and PMR)
25. Comparative assessment of cognition, default mode networks and analysis of psychosocial behavior and lifestyle, between obese and post-bariatric surgery groups of patients (Surgery)
26. Blood heavy metal levels and quantitative EEG correlates in children with autism, Pediatrics, AIIMS, New Delhi, India
27. Identification of biomarkers in Parkinson's disease using NMR (NMR)
28. Effect of administration of human bone marrow derived mesenchymal stem cells on the expression level and promoter methylation pattern of stroke related genes in middle cerebral artery occlusion model of stroke in rats (Neurology)
29. Role of nanoparticles and magnetic field exposure in attenuating chronic pain in spinal cord injured rats (Biotechnology)
30. Evaluation of effect of mindfulness based stress reduction in patients with primary open angle glaucoma (RP Centre for Ophthalmic Sciences)
31. Impact of nutritional and lifestyle modification in subjects with BMI 25–29.9 kg/m² vs 30–34.9 kg/m² and to assess the effect of bariatric surgery in BMI \geq 35 kg/m² (Surgical Disciplines)
32. Impact of supervised diet and lifestyle modifications on weight loss, body fat distribution and insulin resistance in adult Indian obese patients, (Surgical disciplines)
33. Role of cytokine levels in recurrent pregnancy loss and effect of progesterone on cytokine levels (Obstetrics and Gynecology)
34. To compare the metabolic and hormonal effects of metformin vs metformin plus myoinositol in PCOS women undergoing ovulation induction + IUI cycles and infertility outcome (Obstetrics and Gynecology)
35. Effect of yoga based lifestyle intervention on biomarkers of cellular aging in patients with depression (Anatomy)
36. Role of yoga based intervention as an adjunct in improving quality of life of glaucoma patients, (RP Centre)
37. Study of potential modulator targeting pathways involved in the hyperphosphorylation of tau in Alzheimer disease (Biophysics)
38. A pilot study of the role of Intercessory Prayer in determining the outcome after severe traumatic brain injury (Neurosurgery, RML and Neurosurgery, AIIMS)
39. A randomised controlled trial to assess the impact of relaxation techniques on stress and milk output among post-partum mother of hospitalised neonates (College of Nursing)
40. Central serous chorio-retinopathy and meditation: Functional and morphological outcome study (RP Centre for Ophthalmic Sciences)
41. Evaluation of physical activity and its determinants in preschool children (Paediatrics)
42. Impact of yoga and meditation on epigenetic profile in rheumatoid arthritis (Anatomy)
43. Feasibility of introducing structured yoga programme and its effect on stress and perceived well-being on new medical under-graduate students of AIIMS, New Delhi, India (Centre for Community Medicine)
44. A study of impulse oscillometry in Sarcoidosis (Pulmonary Medicine)
45. A study of respiratory impedance, resistance and reactance in Interstitial Lung Disease (Pulmonary Medicine)
46. Role of regulatory T cells in COPD (Pulmonary Medicine)
47. Transcriptomic basis of COPD (Pulmonary Medicine)

Completed

1. Expression analysis of potential micro RNAs in tuberculosis (Medicine)
2. Impact of local endometrial injury on the outcome of IVF cycle with previous failed implantation: Exploring the genome wide transcriptomic basis (Obstetrics and Gynecology)

3. Differential pre frontal cortex (PFC) activation for Attention Deficit Hyperactive Disorder (ADHD) patients and control group in response to emotional stimuli: A Functional Near Infrared Spectroscopy (fNIRS) study (Psychology, University of Delhi)
4. A study of respiratory impedance and heart rate variability in Parkinson's disease (Neurology)
5. Effect of exercise intervention on bone mineral density in Cystic Fibrosis patients aged 6–18 years (Paediatrics)
6. In vitro generation of induced T-regulatory cells in COPD (Pulmonary Medicine)

PUBLICATIONS

Journals: 34

Abstracts: 14

Chapters in books: 4

PATIENT CARE

Autonomic Function lab and Vascular Function lab provide diagnostic facility for referred patients. The labs provide routine test of autonomic reactivity along with autonomic tone quantification and non-invasive recording of gastric motility (Electrogastrography, EGG). A total number of 858 humans have been tested for autonomic function test this year, which included 841 patients and 17 healthy subjects.

Intraoperative Neurophysiology. Intraoperative Neuromonitoring Support was provided to departments of Neurosurgery and Orthopaedics and Trauma centre. A total of 310 surgeries were supported.

Cognitive Neurophysiology Lab provided body composition analysis to obese patients and staff (323). Wireless monitoring of Physiological variables and Pain sensitivity in 50 patients of Fibromyalgia, 12 patients of obesity 14 cases of neuro developmental disorders and 10 patients of anxiety disorders. Visual Tracking in Infantile nystagmus syndrome was done for 17 patients of childhood obesity and 44 adult obese patients. Measurement of cerebral haemodynamics by infrared neuroimaging in 21 glaucoma, 14 ADHD and 10 anxiety patients.

Integral health Clinic provided health services to a total of 491 subjects (with follow-up visits) that included patients of chronic diseases (like diabetes, obesity, cardiovascular diseases, chronic depression) and referred patients from different departments (Cardiology, Surgical disciplines, Psychiatry and RPC) of AIIMS-Delhi, India.

Pain Research and TMS laboratory provided facility for pain assessment and rTMS therapy for chronic pain conditions referred from Rheumatology, Physical medicine and rehabilitation and Neurology clinics. rTMS at dorsolateral prefrontal cortex was given to 95 patients of chronic pain (fibromyalgia, tension type headache and low back pain).

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor K.K. Deepak was honoured with a D.Sc. Degree in Doctor of Science (Yoga) by Swami Vivekanda Yoga Anusandhana Samsthana, Bangalore, 2017; Elected for Fellowship of Academy of Medical Sciences (FAMS) by NAMS, India; Member, Biomedical Device and Technology Development (BDTD), Expert Advisory Group (EAG), DST, GOI; Member, 55th meeting of Armed Forces Medical Research Committee (AFMRC) under the Defence Research and Development Organisation (DRDO), Ministry of Defence, GOI; Visiting Professor by University of California San Diego (UCSD), School of Medicine, Department of Orthopaedic Surgery, San Diego, CA, USA between 31 October and 1 November, 2016; Participated in Indo-US Symposium on Integrated Medicine and Role of Yoga and Ayurveda convened by the Indo-American Health initiatives at the Gordan Hall, Harvard School of Medicine, Boston, USA held on 27 June 2016; Member, Peer Committee for Assessment and Accreditation under NAAC, GOI; Member, National Research Development Corporation (NRDC) Award Committee for innovation and inventions; Member, Task Force on 'Science and Technology of Yoga and Meditation' (SATYAM), DST, GOI; Member, Scientific Advisory Committee (SAC) of CCRYN at Adhyatma Sadana Kendra, Chhattarpur, ND; Member, the selection committee for NIMHANS, Bengaluru, Dr Baba Saheb Ambedkar Medical College and Hospital, Rohini, JIPMER, Puducherry, AIIMS Jodhpur and UPSC, GOI; Awarded citation by Belgaum Branch of Association of Physiologists and Pharmacologists of India (APPI) at KLE University Jawaharlal Nehru Medical College, Belagavi, Karnataka on 27 August 2016

Professor H.N. Mallick was President: Asian Sleep Research Society for 2013–2018; President: Indian Society for Sleep Research 2015–2017; Finance Secretary: Association of Physiologists and Pharmacologists of India, 2013–2016; Member Governing Council World Sleep Society 2016–2018; Associate Editor Frontiers in Neurology and Sleep and Vigilance; Expert, Selection Committee of AIIMS Rishikesh, Bhubaneswar and Jodhpur

Professor D. Ghosh Was Chair 5th Biennial Conference of South Asian Association of Physiologist (SAAPCON-2016) on 10–13 November 2016 at Kathmandu University, Dhulikhel, Nepal; Expert in the selection committee meeting for direct recruitment to the post of Assistant Professor in the Department of Human Physiology, Tripura University on 20 September 2016; Chief Editor, Journal of Reproductive Health and Medicine, Elsevier

Professor Kanwal Preet Kochhar was Visiting Faculty to “The Energy and Research Institutes (TERI) New Delhi for the Bioethics and Biotechnology module for M.Sc. biotechnology students; Member of Cognitive Science colloquium for ongoing activities an AIIMS IIT NBRC initiative

Professor Nalin Mehta was Member, Research Advisory Committee, AIIMS Rishikesh, Uttarakhand, India; Member, Board of Studies for Post-graduate courses, JIPMER, Puducherry, India; Member, Expert Committee for Recognition of Teachers (Medical), Guru Gobind Singh Indraprastha University, New Delhi, India

Professor Suman Jain was Chairperson to conduct a Symposium on “Neuroinflammation and Plasticity in Neurodegenerative Disorders” during 34th Annual Conference of Indian Academy of Neurosciences held at National Brain Research Centre, Manesar, India on 19–21 October 2016; Member of Indian Academy of Neurosciences; Member of Assessment Committee to assess performance of scientists of NBRC, held at International Centre for Genetic Engineering and Biotechnology, New Delhi, India, on 28 December 2016; Adjunct Faculty to National Brain Research Centre, Manesar, Haryana and Dept. of Biotechnology, AIIMS, New Delhi, India

Professor Ashok Kumar Jaryal received AIIMS Excellence Research Award 3rd Prize (Clinical). AIIMS, New Delhi, India, 2016

Professor Raj Kumar Yadav received “Shri Ram Murthy Smarak” Award for the year 2016 for best research in Yoga and Naturopathy during ASSOPICON 2016, Vijayapura, Karnataka, 14–17 September 2016; Member, Medical Board, AIIMS, for medical examination/ossification test for bone age; Member, Institutional Ethics Committee, CCRYN, AYUSH for three years 2015–2018; Member, Teaching Schedule Committee for MBBS (Phase I); Member, AIIMS Students Benevolent Fund Committee for UG students, since May 2016; Member Editorial Board: Annals of yoga and physical therapy; Member Editorial Board Journal of clinical and experimental physiology (Wolters Kluwer Health); Deputy Hostel Superintendent, AIIMS, New Delhi; Secretary, Association of Physiologists and Pharmacologists of India (APPI), Delhi Chapter; Secretary, Faculty Club, AIIMS, New Delhi; Joint Secretary, Association of Physiologists of India; Organized multiple sessions of “Summer workshops in painting techniques” for children and AIIMS faculty in June 2016

Dr Renu Bhatia was Member, International Association for Study of Pain (IASP); Award for outstanding presentation at 2nd International Brain Stimulation Conference, 5–8 March 2017, Barcelona, Spain

Students’ awards

1. Gandhi Anuj Parimalbhai and Oshin Bhatia (2015–16 batch), MBBS students’ team won first prize at The second intercollegiate undergraduate Physiology Quiz 2017 held on the 1st of March 2017 at Lady Harding Medical, New Delhi
2. Dr Surya Prakash Muthukrishnan MD student received B.K. Anand Research Prize for best paper presentation at Annual Conference of Association of Physiologist and Pharmacologist of India (APPICON 2016) held on 22–24 October 2016 at AIIMS, Patna
3. Ms Priyanka Garg, PhD scholar received R Srinivasan best oral presentation award in PG category at Annual Conference of Association of Physiologist and Pharmacologist of India (APPICON 2016) held on 22–24 October 2016 at AIIMS, Patna
4. Ms Suman Tanwar, PhD scholar received award for best oral presentation in PG category at 2nd Annual Conference of Association of Physiologists of Haryana, 4 March 2017, ESIC Medical College and Hospital, Faridabad, Haryana
5. Ms Rashmi Yadav PhD scholar received Travel Fellowship Award of US\$ 1000 by International Society of Endocrinology to PhD student to attend 17th International Congress of Endocrinology, 31 August–4 September 2016, Beijing, China; Travel Grant Award of US\$ 500 to attend scientific meeting of International Society of Hypertension, ‘Hypertension Seoul 2016’, 24–29 September 2016 at Seoul; Second Prize in poster presentation at the Annual Conference of Endocrine Society of India (ESICON 2016) at New Delhi, 21–23 October 2016

Social outreach programmes

1. Public lecture and panel discussion on lack of sleep (Moderator: Dr K K Deepak, Convener: Dr KP Kochhar), Jawahar Lal Nehru Auditorium, AIIMS, New Delhi, 30 November 2016
2. Public lecture and panel discussion on exercise for good health (Moderator: Dr K P Kochhar), Jawahar Lal Nehru Auditorium, AIIMS, New Delhi, 29 March 2017
3. Media Coverage: Prof Raj Kumar Yadav:

S. no.	Media	Programme	Date
1	Television	As an expert for “Yoga and Lifestyle” participated in DD National TV channel live show, ‘Good Evening India’	11 April 2016
2	Television	Yoga for All on Door Darshan channel, DD INDIA, Telecast	19 and 21 June 2016
3	All India Radio	Yoga; Radio Broadcast on channel Indraprastha (102)	17 June 2016
4	Television	As an expert for “Psychological First Aid to reduce stress” participated in DD National TV channel live show, ‘Good Evening India’	10 October 2016

VISITING SCIENTISTS

1. Guest lecture on “Integrative Medicine and Practical Application” by Dr Sudhir Kumar Bagga, Torrance, California, 19 January 2016
2. Guest lecture on “Dosimetric Uncertainties: Potential Impact of Non-ionizing Radiation and Magnetic Fields on Humans and Plants” by Dr Malka N Halgamuge, Researcher, Department of Electrical and Electronic Engineering, University of Melbourne, Australia on 21 July 2016
3. Organised a Guest Lecture on “Mind-Body Medicine to Vastly Improve Treatment Outcome” by Dr Rick Levy, Internationally Acclaimed Clinical Psychologist, USA on 17 January 2017, Dr Ramalingaswami Board Room, AIIMS, New Delhi
4. Guest lecture on “Feature Extraction, Data analysis and Heart Rate Variability” by Ms. Reeta Dahiya, Senior Faculty Department of Electronics and Communication Engineering at University Institute of Engineering Technology, Kurukshetra University, Kurukshetra held on 31 December 2016 at 9.30 AM in Seminar Room of the Department of Physiology, AIIMS
5. Guest lecture on “Sixth sense of Taste: Taste of Fat and Obesity” by Dr Naim Khan, Head French Physiology Society, 21 March 2016
6. Guest lecture on “Environments Effects of Non-ionizing Radiation and Magnetic Fields” by Dr Malka N Halgamuge, Researcher, Department of Electrical and Electronic Engineering, University of Melbourne, Australia on 21 July 2016
7. Guest lecture on “Development of HRV Biofeed Based Therapy using Mobile-Based Technology” by MrElad Fein, CEO, iFeel Labs Israel, 16 January 2017
8. Dr Rich Fletcher from MIT, D Lab visited department on 22 August 2016 for academic exchange

9.33. Plastic, Reconstructive and Burns Surgery

Professor and Head
Maneesh Singhal

Assistant Professors
Shashank Chauhan
(from November 2016)

Raja Tiwari
(from 18 November 2016)

Shamendra Anand Sahu
(from 4 November 2016)

Raj Kumar Manas
(from 28 November 2016)

Rakesh Dawar
(from 30 December 2016)

HIGHLIGHTS

The **Plastic, Reconstructive and Burns Surgery** department has been recently established at AIIMS, New Delhi. In the past one year, five new faculty members and seven MCh residents have joined the Plastic and Reconstructive Surgery degree course. The department has been providing emergency hand surgeries and other reconstructive surgeries for functional improvement of patients. Our team has managed to set up a state-of-the-art plastic and reconstructive surgery department, which provides treatment free of charge to all those in need. We have attempted to reduce the economic burden on society, not only by rendering free treatment, but also by limiting and restoring post-trauma disability. Also by arranging the first of its kind hands-on cadaver training programs and live surgical workshops; and having participants from all over the region, we have contributed towards education and research in the region. Microvascular surgery has been well established with extremity replants and microvascular free flap reconstructions in poly-trauma patients in the department. Specialized clinics in hand surgery, cleft surgery, amputation rehabilitation have been started in collaboration with other departments

of the institute besides combined case discussions and clinical combined rounds. The department has conducted numerous cadaver based hands-on plastic surgery flap workshops and external ear reconstruction workshops which were widely acclaimed and attended by nationally and internationally recognized faculty and delegates from over nine countries. We were the cohosts of the Annual Conference of Association of Plastic Surgeons of India, APSICON 2016 held in Delhi in November 2016. The number of patients in the outpatient departments and surgeries has increased manifold. The future endeavors of the department include starting of a state-of-the-art Center for Burn Care and Reconstructive Surgery and a dedicated skin bank, and composite tissue allotransplantation program for hand and face transplant.

EDUCATION

1. Undergraduate class
 - a. Diseases of the lymphatic and venous system, 20 January 2017 – Dr Raja Tiwari
 - b. Peripheral vascular disease ulcer management, 27 January 2017 – Dr Rakesh Dawar
2. Faculty lecture on facial reanimation for senior residents on 14 February 2017 – Dr Raja Tiwari

CMEs/Workshops/Symposia/National and International Conferences Organized by the Department

1. Plastic Surgery Cadaver Flap Dissection Course, 16 and 17 April 2016, Cadaver Training and Research Facility (CTRF), JPN Apex Trauma Centre, New Delhi.
2. National wound care consensus meeting, 9 July, 2016
3. Organizing Committee, World Trauma Congress, from 17 to 20 August 2016, Vigyan Bhawan, New Delhi.
4. Course on Building Global Capacity to Recognize and Mitigate “Agents of Opportunity” for chemical and radiological emergencies, Board room, AIIMS, 5 September 2016
5. Plastic Surgery Cadaver Flap Dissection Course, 17 and 18 December 2016, Cadaver Training & Research Facility (CTRF), JPN Apex Trauma Centre, New Delhi.
6. APSI – Ethicon Accredited PG Instructional Course on “Trunk & Genitalia Reconstruction” and Preconference workshops of APSICON 2016, 21 to 23 November 2016, JL Auditorium, AIIMS, New Delhi.
7. Delhi Chapter Meet of Association of Plastic Surgeons of India (APSI), 25 March 2017, Dr Ramalingaswami Board Room, AIIMS, New Delhi.
8. “Workshop on Wound Care & Pressure Sore Prevention” for Nurses on 29 March 2017, KL Wig CMET, AIIMS, New Delhi.

Lectures delivered

Maneesh Singhal: 7

Raja Tiwari: 5

Shashank Chauhan: 6

Shamendra Anand Sahu: 1

Raj Kumar Manas: 3

Rakesh Dawar: 2

Maneesh Singhal: 7

1. Faciomaxillary trauma Maxilla Mandible, PGIMER lecture series, 23 April 2016-PGIMER Auditorium, New Delhi
2. Full thickness and split thickness skin grafting, ACS(I) North Zone dermatology workshop 2016, 13 November 2016, New Delhi
3. Gynaecomastia, APSI Ethicon accredited PG instructional course on trunk and genitalia, 21 November 2016, AIIMS, New Delhi
4. Situational analysis of burn injuries, NABICON 2017, 4 February 2017, RML hospital, New Delhi
5. Plastic surgery and wound healing, CTRF Plastic Surgery Flap Dissection Course, 9 May 2017, CTRF, JPNATC, New Delhi
6. Deltopectoral and Pectoralis major muscle flap, CTRF Plastic Surgery Flap Dissection Course, 9 May 2017, JPNATC, AIIMS, New Delhi
7. Systemic integration of psycho-social care within burn care, National policy round table on building holistic support for women burn survivors of violence, 23 May 2017, New Delhi

Raja Tiwari: 5

1. DCIA flap, CTRF Plastic Surgery Flap Dissection Course, 17 December 2016, CTRF, JPNATC, New Delhi
2. Parascapular flap, CTRF Plastic Surgery Flap Dissection Course, 17 December 2016, CTRF, JPNATC, New Delhi
3. Post bariatric Surgery body contouring: plastic surgeons perspective, BARICON 2016, 1 December 2016, New Delhi

4. Medial Plantar Artery Flap, CTRF Plastic Surgery Flap Dissection Course, 9 May 2017, CTRF, JPNATC, New Delhi
5. Microvascular 2nd Toe harvest, CTRF Plastic Surgery Flap Dissection Course, 9 May 2017, CTRF, JPNATC, New Delhi

Shashank Chauhan: 6

1. TRAM flap, CTRF Plastic Surgery Flap Dissection Course, 17 December 2016, CTRF, JPNATC, New Delhi
2. ALT flap, CTRF Plastic Surgery Flap Dissection Course, 17 December 2016, CTRF, JPNATC, New Delhi
3. Trapezius myocutaneous flap, CTRF Plastic Surgery Flap Dissection course, 18 December 2016, CTRF, JPNATC, New Delhi
4. Deltopectoral flap, Surgery CME, AIIMS, 18 February 2017, AIIMS, New Delhi
5. Gracilis myocutaneous flap, CTRF Plastic Surgery Flap Dissection Course, 9 May 2017, CTRF, JPNATC, New Delhi
6. Fibula Osteocutaneous flap, CTRF Plastic Surgery Flap Dissection Course, 9 May 2017, CTRF, JPNATC, New Delhi

Shamendra Anand Sahu: 1

1. Reverse sural artery flap, CTRF Plastic Surgery Flap Dissection Course, 17 December 2016, JPNATC, AIIMS, New Delhi

Raj Kumar Manas: 3

2. Radial artery forearm flap, LD flap, AIIMS CTRF Flap Dissection Course, 17–18 December 2016, JPNATC, AIIMS, New Delhi
3. Comprehensive review of post burn Marjolin Ulcer, NABICON 2017, 25th Annual Conference of National Academy of Burns, 5 February 2017, RML Hospital, New Delhi
4. Controversy and consensus of primary repair of cleft lip nose deformity, 13th International CLEFT congress 2017, 9 February 2017, Mahabalipuram, Chennai

Rakesh Dawar: 2

1. Deltopectoral and pectoralis major muscle flap, CTRF Plastic Surgery Flap Dissection Course, 9 May 2017, JPNATC, AIIMS, New Delhi
2. Posterior interosseous artery flap, CTRF Plastic Surgery Flap Dissection Course, 9 May 2017, JPNATC, AIIMS, New Delhi

RESEARCH

Funded projects

Ongoing

1. Controlled clinical trial to assess the effectiveness of topical application of C1 herbal oil on superficial external wound and split thickness skin graft donor's site for surgical wound healing, Dr Maneesh Singhal, CCRAS, Ministry of AYUSH, 2 years, 2015–2017, Rs. 38.5 lakhs
2. Situational analysis for burn injuries, Maneesh Singhal, Ministry of Health and Family Welfare, 2016, Rs. 38 lakhs

Completed

1. Animal trials of wound products, Maneesh Singhal, AIIMS, 2017–2017, Rs. 4.84 lakhs

Departmental projects

Ongoing

1. Role of Liposuction combined with Subcutaneous Mastectomy in Gynecomastia
2. Outcomes after breast cancer treatment: An International perspective
3. Investigation of clinical types, hormonal profile and treatment outcomes in patients with Gynecomastia.

Collaborative projects

Ongoing

1. A clinical study on the investigation of caries risk in children with cleft lip and palate (CL/P) and non-cleft control (CDER, Department of Orthodontics)

2. Artificial skin (Bio-inspired bi-layer polymeric hybrid scaffold) for burn injuries and trauma care (IIT Delhi)
3. Development of clinical grade tissue grafts for the treatment of bone and cartilage tissue defects and diseases (NIT, Rourkela)
4. Cleft lip and palate anomaly in India Clinical profile risk factors and current status of treatment: A hospital based study (CDER, Department of Orthodontics)
5. Reducing the burden of injury in India and Australia through development and piloting of improved systems of care (Surgery, JPNATC)
6. Project on capacity building for Advanced Trauma Life Support in India (Surgery, JPNATC)
7. Prospective, randomized comparison of efficacy and safety of thoracic epidural analgesia with bupivacaine and opioid in two different concentrations versus intravenous two drug analgesia in thoracic trauma (Anaesthesia, JPNATC)
8. A Device for personalized management of chronic wounds (Excel matrix biological devices Pvt Ltd, BIRAC)

Oral papers/posters presented: 10

1. Management of lower extremity ulcers, CMET, Advanced wound management workshop, 27 April 2017, AIIMS, New Delhi
2. Basic principles of management of chronic wounds, CMET Workshop on Wound Care and Pressure Sore Prevention, 29 March 2017, AIIMS, New Delhi
3. Our experience with upper extremity replantation, APSI, Delhi Chapter meet, 27 March 2017, AIIMS, New Delhi
4. Classification of wounds and factors affecting wound healing, CMET “Workshop on Wound Care and Pressure Sore Prevention” for Nurses, 29 March 2017, AIIMS, New Delhi
5. Utility of distally based ALT flap for reconstruction around the knee joint, APSI, Delhi Chapter Meet, 27 March 2017, AIIMS, New Delhi
6. Negative pressure wound therapy, CMET, Advanced Wound Management Workshop for Residents, 27 April 2017, CMET AIIMS, New Delhi
7. Corrective procedure in craniofacial surgery requires multiple surgical interventions, APSICON 2016, 27 November 2016, New Delhi
8. Comprehensive review of post burn Marjolin Ulcer, NABICON 2017, 25th Annual Conference of National Academy of Burns, 5 February 2017, RML Hospital, Delhi
9. Controversy and consensus of primary repair of cleft lip nose deformity, 13th International CLEFT congress, 9 February 2017, Mahabalipuram, Chennai
10. Wound assessment and classification, CMET, Advanced Wound Management Workshop for Residents, 27 April 2017, CMET AIIMS, New Delhi

PUBLICATIONS

Journals: 10

Abstracts: 7

Chapters in books: 3

Books: 2

PATIENT CARE

1. Facilities
 - a. Inpatient patient care facilities:
 - Hyperbaric Oxygen therapy facility
 - Microvascular and craniofacial surgery facility
 - Hand and congenital anomalies surgery facility
 - b. Clinics
 - Combined Cleft clinic
 - Combined Hand clinic
 - Combined aesthetic clinic
 - Specialized plastic surgery clinics
2. Community Service/Camps
 - a. Professor Maneesh Singhal and Dr Shashank Chauhan went to Kerala for Puttingal Temple fire disaster at Kollam as part of the special expert team for the management of Burn injured patients from AIIMS along with the Hon’ble Prime Minister of India. (April 2016)

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor Maneesh Singhal was awarded Fellowship of Royal College of Surgeons (FRCS, Glasgow) in January 2017; Expert member: (i) Committee for Capacity Building for Developing Trauma Care Facilities in Govt. Hospitals on National Highways, MOHFW, Govt. of India; (ii) National Programme on Prevention and Management of Burn Injuries, MOHFW, Govt. of India; (iii) Disaster management, Indian Red Cross Society, Govt. of India; (iv) Project Sanctioning Committee, Ministry of AYUSH, Govt. of India; (v) Project Appraisal Committee, Ministry of AYUSH, Govt. of India; (vi) Stem cell Ethics, Animal Ethics and PG Ethics Committee, AIIMS, New Delhi; Editorial board member Journal of Wound Care & Wound Medicine; Conducted DNB (Plastic & Reconstructive Surgery), National Board of Examination.

VISITING SCIENTISTS

1. Prof Edwin G. Wilkins, Professor of plastic surgery, University of Michigan (March 2017)
2. Dr Kavitha Ranganathan, University of Michigan, November 2016 (three weeks)

9.34. Psychiatry		
Professor and Head		
S.K. Khandelwal (up to 31 December 2016)		R.K. Chadda (from 1 January 2017)
Professors		
Pratap Sharan Nand Kumar		Rajesh Sagar Mamta Sood
Associate Professors		
Sujata Satapathy (Psychology)		Raman Deep Pattanayak
Assistant Professors		
Koushik Sinha Deb Bichitra Nanda Patra		Rohit Verma Gagan Hans
Chief MSSO Karan Singh	Child Psychologist Renu Sharma	Occupational Therapist S. Vijay

HIGHLIGHTS

The Psychiatry Department has been at the forefront of providing mental health services in general hospital setting in India. The department provides multidisciplinary services (with team consisting of psychiatrists, clinical psychologists, social worker, occupational therapist and nurses) in the field of general adult psychiatry, child and adolescent psychiatry, consultation liaison psychiatry and community psychiatry in addition to round the clock emergency mental health services. The department runs daily walk-in and follow-up clinics. It also runs weekly special clinics for child and adolescent psychiatric disorders, psychosomatic disorders, common mental disorders, severe mental disorders, dual diagnosis disorders and a brain stimulation clinic. Besides pharmaco-therapeutic interventions, psychological treatments are also used. Modified electro convulsive therapy is given twice a week. The department provides advanced biological treatments like rTMS, tDCS and biofeedback.

Some of the research initiatives and national and international collaborations of the department include funded projects with international agencies like World Health Organization, University of California, University of San Francisco and national agencies like Indian Council of Medical Research, Department of Science and Technology, National Commission for Protection of Child Rights, etc. The department is one of the leading partners for research regarding the development of ICD-11 by the World Health Organization.

Professor SK Khandelwal, superannuated on 31 December after nearly three decades of service. A scientific symposium was organized as a part of his farewell.

EDUCATION

Undergraduates

- *Theory lectures:* 6th Semester: 20 hours
- *Clinical teaching/posting* 3rd Semester: 7 hours
4th & 5th Semester: 25 days
6th–8th Semester: 40 days
- *Teaching in community at CRHSP, Ballabhgarh* 7th Semester: 12 hours (Community Psychiatry)

BSc Nursing

- *Theory lectures:* First year (Psychology) for 15 hours
Third year (Psychiatry) for 8 hours
- *Clinical posting:* Third year in Psychiatry ward for 2 months

MSc Nursing

- *Theory lectures:* First year for 8 hours
- *Clinical posting:* First year– 8 months in psychiatry ward and 1 month in psychiatry OPD
Second year– 3–4 months in psychiatry ward
- *Thesis work:* Conduct their thesis work in psychiatry OPD and ward

Junior residents posted from other departments

Junior residents from Departments of Medicine, Geriatric Medicine, Emergency Medicine and Palliative Medicine, and DM trainees in neurology are posted to department of psychiatry for a period of 2–4 weeks for training in psychiatry.

MD (Psychiatry) and PhD teaching

- Seminar once a week
- Case Conference once a week
- Journal discussion once a week
- Thesis protocol and mid-term presentation once a week
- Tutorials once a week
- Psychotherapy supervision for postgraduate psychiatry and doctoral level clinical psychology students
- Supervision of Consultation-Liaison training for junior residents in psychiatry

CMEs/Workshops/Symposia/National and International Conferences



- The department was involved in the organization of the 22nd World Congress of the World Association of Social Psychiatry (WASP 2016) in collaboration with World Association for Social Psychiatry and the Indian Association for Social Psychiatry (IASP) from 30 November to 4 December 2016 at Hotel Ashok, New Delhi, India. The theme of the conference was “Social psychiatry in a rapidly changing world”. Professor RK Chadda was the Chair, Organizing Committee of WASP, and faculty members from the department were involved in all the committees for coordination and smooth functioning of the event, in addition to scientific and technical inputs. The WASP 2016 was received as a landmark and successful professional event, with 1100 delegates from across 49 countries.
- A one-day **National Symposium on Preventive Psychiatry** was organised on 11 September 2016. It was titled ‘*Prevention of Mental Disorders: A Tangible Possibility*’. The symposium was sponsored by the National Academy of Medical Science.
- A one-day **scientific programme** titled “*Reflections and way forward: Empowering people with mental health needs*” was organised in association with Richmond Fellowship Society (India) with speakers from various parts of India at Dr Ramalingaswamy Board Room, AIIMS on 24 September 2016.
- **Public lecture and panel discussion** on “*Dignity and first aid in mental health*” on 10 October 2016, at JLN Auditorium was organized on occasion of World Mental Health Week in association with Ministry of Health and Family Welfare as part of the AIIMS Golden Jubilee celebrations.
- **Public lecture and panel discussion** on “*Overcoming Schizophrenia*” was organized on 27 August 2016 as part of the AIIMS Golden Jubilee celebrations.
- **World Schizophrenia Day** was celebrated on 24 May 2016 and a symposium with theme of “Understanding Needs of People with Schizophrenia” was organized.
- **Public lecture and panel discussion** on “*Adventure and Mental Health*” was organized on 5 April 2016 as part of the India International Centre (IIC), Mental Health Series, which was held at the seminar hall II & III, Kamaladevi Complex, India International Centre, New Delhi.
- **National Workshop** on “*Recent Technological Advances and Intervention for Psychiatric Disorder*” was organised on 2 April 2016 at Dr Ramalingaswamy Board Room, AIIMS, New Delhi.
- Workshop on “Ecological Implementation Field Studies for ICD-11” was organised on 18 March 2017 at GMCH, Chandigarh.

Lectures delivered

R.K. Chadda: 10

Pratap Sharan: 12

Rajesh Sagar: 50

Nand Kumar: 2

Mamta Sood: 6

Sujata Satapathy: 10

Raman Deep Pattanayak: 6

Koushik Sinha Deb: 8

Rohit Verma: 6

Bichitra Nanda Patra: 2

Gagan Hans: 1

Renu Sharma: 1

R.K. Chadda: 10

1. Treatment resistant schizophrenia, CME of Indian Association of Private Psychiatrists, Delhi Chapter, 22 May 2016, Man Singh, New Delhi
2. Non-conventional therapeutic approaches in psychiatry: Lessons from the East—Ancient Indian concepts, International Conference of the Asian Federation of the Psychiatric Associations (AFPA) and 13th Annual Academic Sessions of the Sri Lanka College of Psychiatrists, 27–31 May 2016, Colombo
3. Community psychiatry: Training aspects, National Workshop on Community Psychiatry, 1 & 2 July 2016, GMCH, Chandigarh
4. Approaches to preventive psychiatry in special populations: Panel discussion, National Symposium on Preventive Psychiatry, 11 September 2016, AIIMS, New Delhi
5. Mental health, Annual Rohtak Medical Students Conference, 26 & 27 October 2016, PGIMS, Rohtak
6. Symposium on preventive psychiatry in general hospital settings, 22 World Congress of Social Psychiatry, 30 November–4 December 2016, New Delhi
7. Symposium on mental health services in disaster affected population in low resource settings, 22 World Congress of Social Psychiatry, 30 November–4 December 2016, New Delhi
8. Symposium on social support and psychosis, 22 World Congress of Social Psychiatry, 30 November–4 December 2016, New Delhi
9. Role of psychologist in society: Address as chief guest, National Seminar on Psychological Sciences: Current perspectives and emerging avenues of practice, training and research, 24–26 March 2017, Central University of South Bihar, Patna
10. Principles of mental health, Health Awareness Programme by the Ministry of Communications, 29 March 2017, Soochna Bhawan, Delhi

Pratap Sharan: 12

1. Suicide and depression, Meeting of experts on finalization of the regional strategy on prevention of suicide, 21 & 22 April 2016, WHO SEARO, New Delhi
2. Research directions on early identification, diagnosis and clinical management, Brainstorming on prioritization of mental health research, 12 May 2016, ICMR, New Delhi
3. Research priorities for GCP network, WHO Field Studies Coordination Group Meeting, 5–11 April 2016, Cape Town, South Africa
4. Overview of ecological implementation field studies, WHO Field Studies Coordination Group Meeting, 5–11 April 2016, Cape Town, South Africa
5. Capacity building priorities, WHO Field Studies Coordination Group Meeting, 5–11 April 2016, Cape Town, South Africa
6. Discussion of ecological implementation field studies training: Local responsibilities and local procedures, WHO Field Studies Coordination Group Meeting, 5–11 April 2016, Cape Town, South Africa
7. ERC submission, protocol 3, and clinical utility studies, WHO Field Studies Coordination Group Meeting, 5–11 April 2016, Cape Town, South Africa
8. Trauma and loss: Identification and management of grief-related mental disorders in the aftermath of a disaster, Regional Workshop for strengthening capacity and preparedness on post-disaster mental health and psychosocial support, 25 & 26 July 2016, Dhaka, Bangladesh
9. Challenges in preventive psychiatry, National Symposium on Preventive Psychiatry, 11 September 2016, AIIMS, New Delhi
10. Current status of studies of transgender populations and sexual dysfunctions, WHO Field Studies Coordination Group Meeting, 5–7 October 2016, Tokyo, Japan
11. Current status, plans, and difficulties encountered in ecological implementation studies in other countries (Clinical Consistency and Clinical Utility), including target dates for training, implementation, and completion of data collection: India, WHO Field Studies Coordination Group Meeting, 5–7 October 2016, Tokyo, Japan
12. Finalization of work plan and timeline for ecological implementation field studies, WHO Field Studies Coordination Group Meeting, 5–7 October 2016, Tokyo, Japan

Rajesh Sagar: 50

1. Child and adolescent mental health, recent developments in India, Guest lecture as visiting faculty, 22 April 2016, Royal Childrens' Hospital, University of Melbourne, Australia
2. Reducing the burden of mental illness: A perspective from India, Guest lecture as visiting faculty, 22 April 2016, Australia India Institute, University of Melbourne, Australia
3. Personal resilience for nurses, Guest lecture, Improving health systems resilience, Nurses Day Celebration 2016, 13 May 2016, JPNATC, AIIMS, New Delhi
4. Mental health issues in women, Speaker and round table panel discussion on: "Women's Health Issues: Broadening the Mandate beyond Maternal Health" International Women's Health Day, 27 May 2016, ICMR, New Delhi
5. Primordial prevention of psychiatric illnesses, Is lifestyle modification the answer? Annual postgraduate development program of Indian psychiatry society, North zone, 28 & 29 May 2016, Convention centre, Pahalgam, Kashmir
6. Relevance of CBT in clinical practice, Inaugural address, Workshop of Indian Association for Cognitive Behavior Therapy (CBT), 30 May 2016, AIIMS, New Delhi
7. Specific learning disorders, National CME of Child and Adolescent Psychiatry, Child Psychiatry Specialty Section, Indian Psychiatric Society, 9 July 2016, Esplanade, Kolkata
8. Psychiatry aspects of PCOS public lecture: Polycystic ovary syndrome (PCOS), A multi-specialty, multi-system galloping epidemic AIIMS, 15 July 2016, AIIMS, New Delhi
9. Disclosure of child sexual abuse (CSA), Regional ToT on CSA, Prevention and response, Organized by IMA and UNICEF, 30 July 2016, Patna
10. Child sexual abuse (CSA), Its behavioral indicators, dynamics, complexities and patterns, Regional ToT on CSA, Prevention and response, Organized by IMA and UNICEF, 30 July 2016, Patna
11. Depression and other affective disorders, Training of Trainer's (ToTs) Workshop under National mental health program (NMHP) by ministry of health and family welfare, 4 August 2016, National Institute of Health and Family Welfare (NIHFW), New Delhi
12. Anxiety disorders, Training of Trainer's (ToTs) Workshop under National mental health program (NMHP) by ministry of health and family welfare, 5 August 2016, National Institute of Health and Family Welfare (NIHFW), New Delhi

13. Academics and career in Government sector, Evolving minds, A career connect for young minds (Psychiatrists), Organized by Delhi Psychiatry Society, 4 September 2016, New Delhi
14. Approaches to preventive psychiatry in special population: Child and adolescent psychiatry, National Symposium on Preventive Psychiatry organized by AIIMS and National Academy of Medical Sciences, 11 September 2016, AIIMS, New Delhi
15. Medico legal aspects in current mental health scenario, Mid-term CME 2016 of Delhi Psychiatric Society, 25 September 2016, New Delhi
16. Mental health services delivery network, Conference on World Mental Health Week organized by IHBAS, Delhi, 3 October 2016, India International Centre, New Delhi
17. Management of child sexual abuse (Part 1): An overview of the child protection system and the POCSO act, Workshop on Child Sexual Abuse (CSA), Child sexual abuse: Prevention and response for nursing college principals and faculties, Organized by Indian Medical Association jointly with UNICEF and Heart care foundation of India, 5 October 2016, IMA head quarter, New Delhi
18. Mental health consequences of CSA: Mental health management and therapeutic interview of the child, Workshop on Child Sexual Abuse (CSA), Child sexual abuse: Prevention and response for nursing college principals and faculties, Organized by Indian Medical Association jointly with UNICEF and Heart care foundation of India, 5 October 2016, IMA head quarter, New Delhi
19. Depression, Live web cast by Indian Medical Association (IMA), 6 October 2016, IMA, New Delhi
20. Dignity and first aid in mental health, Public lecture, AIIMS dignity and first aid in mental health, 7 October 2016, AIIMS, New Delhi
21. Technology use in adolescent mental health, Conclave on mental health awareness Initiative organized by Mental Health Foundation India (MHFI), 10 October 2016, AIIMS, New Delhi
22. Promotion of mental health in youth, Speaker and panel discussion on occasion of World Mental Health Day organized by Ministry of Health and Family Welfare, Government of India, 10 October 2016, New Delhi
23. Mental health services for victims, National consultation on “Child Trafficking and Commercial Sexual Exploitation of Children: Medical and Psychosocial Services for the Victims” organized by The Indian Child Abuse Neglect and Child Labour (ICANCL) Group, IAP Delhi and India Alliance for Child Rights (IACR), 13 October 2016, Indian International Centre, New Delhi
24. Assessment and management of childhood and adolescent depression, 41st Annual Conference of Indian Psychiatry Society, North zone, 2016, 22 October 2016, Udaipur, Rajasthan
25. India collaborative care models session: Delivering health services, Invited speaker on Workshop on Multi-morbidity, Addressing the global challenge of multi-morbidity organized by Academy of Medical Science, UK and Academy of Science of South Africa, 2 & 3 November 2016, Johannesburg, South Africa
26. Adolescent girls, Mental health issues and concerns, 31st Annual Conference of Indian Psychiatric Society (Rajasthan Branch), 19 & 20 November 2016, CKRDM Nursing college campus, Jhunjhunu, Rajasthan
27. Enabling adoption as a society, Speaker and panel discussion in National Summit on Adoption organized by families of joy foundation, 27 November 2016, Sanskriti School, New Delhi
28. Mental health issues in school children, Training of Trainers (ToT) Program, Program on school safety plan organized by National Institute of Disaster Management (NIDM) from 28 November to 2 December 2016, 29 November 2016, NIDM Campus, New Delhi
29. Adolescent mental health issues across settings: Management and challenges in India, Symposium in 22nd World Congress of Social Psychiatry, WASP 2016, 30 November 2016, New Delhi
30. Need for National suicide prevention policy, Symposium youth suicide prevention program in India in 22nd World Congress of Social Psychiatry, WASP 2016, 30 November 2016, New Delhi
31. Health services in disaster affected population in low resource settings, Tsunami experience, Symposium in 22nd World Congress of Social Psychiatry, WASP 2016, 2 December 2016, New Delhi
32. Protection of children from sexual offences (POCSO) act: Is it relevant for pediatricians? PCNI, 2016, Pediatric Conference of North India, 3 December 2016, India Habitat Centre, New Delhi
33. Need for measurement of health outcomes, Symposium: Measurement of health outcomes in child psychiatry: Challenges and rewards in 22nd World Congress of Social Psychiatry, WASP 2016, 4 December 2016, New Delhi
34. Mental health care for children and adolescents in alternative care, Workshop on Alternate Care for Children organized by UNICEF and Udayan Care, 8 & 9 December 2016, Mapple Express, New Delhi
35. Children right to mental health Session: Who is the “last” and Who is “Unseen”? Investing in every right for every child: From commitments to real change, Country meeting by India Alliance for Child Rights, 13 December 2016, India International Centre, New Delhi

36. Food advertisement and celebrity endorsements: Impact on buying behavior of children. Workshop and Public Meeting on Labeling, Claims and Advertisements, 16 December 2016, India Habitat Centre, New Delhi
37. Challenges and management of behavioral symptoms in Alzheimer disease patients, Speaker and resource person “Annual Caregivers’ Meet” organized by Hope Ek A.S.H.A. (Regd.), 18 December 2016, Constitution Club of India, New Delhi
38. Peripheral biomarkers in bipolar disorder: Key issues and challenges, Symposium in Annual Conference of Indian Psychiatric Society (ANCIPS), 7 January 2017, Convention Centre, Raipur, Chhatisgarh
39. Challenges for parents, 21st century parenting: A roller coaster ride organized by ‘Centre for Child and Adolescent Well-Being’ (CCAW), 15 January 2017, India International Centre, New Delhi
40. Stress, Importance and management, Speaker and resource person for mid-career training (MCT) for senior forest officers, organized by Indian Institute of Forest Management (IIFM), 17 January 2017, Indira Gandhi National Forest Academy (IGNFA), Dehradun
41. Mental health and well-being, Speaker and resource person for mid-career Training (MCT) for senior forest officers, Organized by Indian Institute of Forest Management (IIFM), 17 January 2017, Indira Gandhi National Forest Academy (IGNFA), Dehradun
42. Role of health officials in protecting human rights of juveniles and old age persons, Juvenile justice: Issues and challenges organized by Indian Law Institute, 23 January 2017, Indian Law Institute, New Delhi
43. Psychological first aid for victims of road accident, Trainer and resource person for Indian Road Safety Campaign, 18 February 2017, IIT, New Delhi
44. Psychiatric consideration in facial plastics, 3rd AIIMS Facial Plastics and Rhinoplasty Workshop 2017, 21 February 2017, AIIMS, New Delhi
45. Nosological status of medically unexplained symptoms, challenges, National Symposium on Medically Unexplained Symptoms, 25 February 2017, NIMHANS, Bangalore
46. Feasibility and acceptability of measuring illness activity in mood disorders using smartphone based tracking, Speaker and resource person for ministry of health and family welfare, Directorate general of health services, 7 March 2017, MoHFW, Nirmanbhawan, New Delhi
47. Trauma informed care and its application in the context of juvenile justice system, National Consultation on Trauma Informed Care: Concepts and practices for children in Alternative Care organized by Udayan Care and UNICEF, 17 March 2017, Mapple express, New Delhi
48. Child’s right to mental health, Second International Conference on Health and Well Being: An interdisciplinary inquiry, 22 March 2017, Conference Hall, Department of Psychology [UGC DRS], Jamia Millia Islamia, New Delhi
49. Psychiatric aspects of adolescent girls, National Symposium and Awareness Program on “Life style and Reproductive Health Challenges”, 29 March 2017, Daulat Ram College, Delhi University, Delhi
50. Clinical and lifestyle aspects of depression, Guest speaker, Technical briefing for media on World Health Day 2017 organized by WHO, 30 March 2017, New Delhi

Nand Kumar: 2

1. Overview of brain stimulation technique in psychiatric disorders, National Workshop on “Recent Technological Advances and Intervention for Psychiatric Disorders”, 2nd April 2016, AIIMS, Delhi
2. Recent advances in trans-cranial magnetic stimulations, National Workshop on Non Invasive Brain Stimulation, NIMHANS Bangalore, 13 July 2016, NIMHANS Bangalore

Mamta Sood: 6

1. Non-conventional therapeutic approaches in psychiatry: Lessons from the east-ancient Indian knowledge in clinical practice, International Conference of the Asian Federation of the Psychiatric Associations (AFPA) and 13th Annual Academic Sessions of the Sri Lanka College of Psychiatrists, 27–31 May 2016, Colombo
2. Developing a model of preventive psychiatry for low resource settings: Workshop for postgraduates, National CME on preventive psychiatry, 11 September 2016, AIIMS Conference Hall near JLN Auditorium 1st floor, New Delhi, India
3. Symposium on psychosis and social support, 22 World Congress of Social Psychiatry, 30 November–4 December 2016, New Delhi
4. Symposium on mobile telephony and social psychiatry, 22 World Congress of Social Psychiatry, 30 November–4 December 2016, New Delhi

5. Developing a model of preventive psychiatry for low resource settings: Workshop for Postgraduates, National CME on Preventive Psychiatry, 11 September 2016, AIIMS Conference Hall near JLN Auditorium 1st floor, New Delhi, India
6. Symposium on psychosis and social support, 22 World Congress of Social Psychiatry, 30 November–4 December 2016, New Delhi

Sujata Satapathy: 10

1. Conflict resolution, Workshop on Human Relations in Health Care, 21 February 2017, AIIMS, New Delhi
2. Psychological first aid: Safe behaviours on roads, Workshop on National Road Safety Programme, 18 February 2017, IIT Delhi, New Delhi
3. Psychometric analysis of health administrators: Leadership, conflict management style and teamwork, Healthcare Executive Management Development Programme (HExMDP) for CMOs for the state of UP, 19–24 December 2016, SGPIMS, Lucknow
4. Intervention on psycho: Social support for victims and offenders of sexual violence, National Seminar on Impact of Violence and Abuse: Need for Psycho, Social, Medical and Legal Intervention, 14 & 15 December 2016, Seminar Hall, MES College, Goa
5. Psychological management of pain, Seminar on Pain and Palliative Care in Cancer Patients, 6 December 2016, IRCH Seminar Hall, AIIMS, New Delhi
6. Basics of psychological trauma counseling, Orientation Lecture Series for Counselors from Afghanistan, 15 November 2016, Board Room, AIIMS, New Delhi
7. Body, mind equilibrium for health professionals, CEUTH, 2016, 9 & 10 September 2016, AIIMS Auditorium, New Delhi
8. Definition and concept of PFA, Workshop on Psychological First-aid during the Trauma Congress, 2016, 16–18 August 2016, Trauma Centre, AIIMS, New Delhi
9. Psychometric analysis of health administrators: Leadership, Conflict Management Style, Perceived Stress and Burnout, Healthcare Executive Management Development Training Programme (HExMDP) for CMOs for the state of UP, 18–22 July 2016, SGPIMS, Lucknow
10. Psychometric analysis of health administrators: Leadership, Conflict Management Style, Perceived Stress and Burnout, Healthcare Executive Management Development Training Programme (HExMDP) for CMOs for the state of Uttar Pradesh, 2–6 May 2016, SGPIMS, Lucknow

Raman Deep Pattanayak: 6

1. Peripheral biomarkers in bipolar disorder: Key issues and challenges (Symposium Biomarkers in Bipolar Disorder:), Annual Conference of Indian Psychiatric Society (ANCIPS), 7 January 2017, Sec 27, Naya Raipur, Chhatisgarh, Raipur, India
2. Social psychiatry in relation to biological psychiatry: Cut, contrast or complement? (Symposium title: Social Psychiatry amidst biological psychiatry), 22nd World Congress for social psychiatry, World Association of Social Psychiatry, WASP 2016, 4 December 2016, New Delhi, India
3. Unexpected political events and tyranny: Impact on mental health (Symposium title: Impact of global events on society and mental health), National Conference, Indian Association for Social Psychiatry NCIASP, 4 December 2016, New Delhi, India
4. Prevention of depressive disorders (including suicide) and anxiety disorders, National CME on Preventive Psychiatry, 11 September 2016, AIIMS Conference Hall near JLN Auditorium 1st floor, New Delhi, India
5. Addressing issues of the persons with disabilities: Focus on disability due to mental disorders, Seminar on 'From Judging to Justicing', 14 & 15 October 2016 and 4 & 5 November 2016, 2nd floor, Seminar Hall, Sec 14, Delhi Judicial Academy, Dwarka, New Delhi, India
6. Do antidepressants work? A critical look at the evidence, 4th Body, Mind and Life Conference, 12–14 October 2016, Men, Tsee-khang, Dharamsala, HP, India

Koushik Sinha Deb: 8

1. Psycho, social rehabilitation in resource poor settings, WAPR National Workshop on psychosocial rehabilitation, 1 & 2 April 2016, BP Koirala Institute of Health Sciences, Dharan, Nepal
2. Rum diaries: Quiz on alcohol dependence and management, Alcohol use disorders: Contemporary issues, 30 April 2016, Conference Hall, AIIMS, New Delhi
3. Addressing issues of the persons with disabilities from judging to justicing, Empowering judges, 3 September 2016, Delhi Judicial Academy (DJA), New Delhi

4. Concepts of primary prevention in: Developing a model of preventive psychiatry for low resource settings: Workshop for Postgraduates, National Symposium on Preventive Psychiatry (NSPP), 11 September 2016, Conference Hall, AIIMS, New Delhi
5. Mindscape: Postgraduate quiz on mental and substance use related health, 22nd World Congress of Social Psychiatry (WASP 2016), 30 November–4 December 2016 New Delhi, India
6. Mobile telephony in mental health: Relevance for social psychiatry in South Asia, 22nd World Congress of Social Psychiatry (WASP-2016), 30 November–4 December 2016, New Delhi, India
7. Technology, enhanced cognitive behavior therapy: Reality or distant dream? International Conference on Cognitive Behavioural Interventions, India 2017 (ICCBI INDIA 2017), 7 March 2017, Conference Hall, AIIMS, New Delhi
8. Issues of the persons with disabilities, Mental and physical, Sensitization Programme on justicing: Balancing rules, Principles and Social Context, 18 March 2017, Delhi Judicial Academy (DJA), New Delhi

Rohit Verma: 6

1. Disability in patients with dual diagnosis and time for paradigm shift in care, 22nd World Congress of Social Psychiatry (WASP-2016), 30 November–4 December 2016, New Delhi, India
2. Mobile telephony in mental health: Relevance for Social Psychiatry in South Asia, 22nd World Congress of Social Psychiatry (WASP-2016), 30 November–4 December 2016, New Delhi, India
3. Developing a model of preventive psychiatry for low resource settings: Workshop for Postgraduates, National Symposium on Preventive Psychiatry (NSPP), 11 September 2016 Conference Hall, AIIMS, New Delhi, India
4. Quantitative EEG, Workshop on Biological Signals in Cognitive and Psychophysiology, 3 November 2016, Seminar Hall, Department of Physiology, AIIMS, New Delhi, India
5. Yoga nidra for brain activation, IITD, NBRC Neuro-Imaging Workshop, 12th July 2016, National Brain Research Center (NBRC), Gurgaon, Haryana
6. Role of rTMS in psychiatric conditions: Evidence base, National Workshop on Recent Technological Advances and Intervention for Psychiatric Disorders (RETADIP), 2 April 2016, Dr Ramalingaswamy Board Room, AIIMS, New Delhi, India

Bichitra Nanda Patra: 2

1. Secondary prevention of psychiatric disorders in low resource setting, National Symposium on Preventive Psychiatry, 11 September 2016, Conference Hall, AIIMS, New Delhi
2. Epidemiology of psychiatric disorder in India, Invited talk, 23 December 2016, Department of Psychiatry, AIIMS, Bhubaneswar

Gagan Hans: 1

1. Suicide prevention and psychological first aid, Public lecture on World Suicide Prevention Day, 10 September 2016, North DMC Medical College and Hindurao Hospital, Delhi, India

Renu Sharma: 1

1. Impact of trauma in child sexual abuse, 2nd International Conference of Cognitive Behavior Therapy, 5 March 2017, AIIMS, New Delhi, India

Oral papers/posters presented: 75

1. Sharan P, Sagar R. Development of depression identification instrument in hindi, Royal College of Psychiatrists International Congress, 2016, 27–30 June 2016, Excel London, United Kingdom
2. Kathiresan P, Chawla N, Sharan P. Vilazodone induced decreased libido: A Case report, World Psychiatric Association (WPA) Regional Congress, 25–27 September 2016, Le Meridien, Kochi
3. Sharan P. India's early community studies: Psychiatric epidemiology in subaltern perspective, From psychiatry epidemiology to psychiatric epidemiologies, Using historical, epistemic and social perspectives to bridge research and public health, 15–17 November 2017, Brocher Foundation, Hermance, Switzerland
4. Sharan P. An overview of the World Health Organisation development of the ICD, 11 classification of mental and behavioural disorders, 22nd World Congress of Social Psychiatry, World Association of Social Psychiatry (WASP-2016), 30 November–4 December 2016, New Delhi
5. Sharan P. Mental health services in disaster affected population in low resource settings, 22nd World Congress of social psychiatry, World Association of Social Psychiatry (WASP-2016), 30 November 2016–4 December 2016, New Delhi
6. Sharan P. Development of culturally appropriate instruments for mental health, 22nd World Congress of Social Psychiatry, World Association of Social Psychiatry (WASP-2016), 30 November–4 December 2016, New Delhi

7. Sharan P. Overview of the ICD, 11 developmental process, 69th Annual Conference of the Indian Psychiatric Society (ANCIPS-2017), 5–8 January 2017, Rajyotsava Mela Ground, Raipur
8. Sharan P. Ecological implementation field studies, 69th Annual Conference of the Indian Psychiatric Society (ANCIPS-2017), 5–8 January 2017, Rajyotsava Mela Ground, Raipur
9. Sahu A, Patil V, Sharan P, Sarkar S. Integrative cognitive behavioural treatment for prolonged grief disorder: A case report, International Conference on Cognitive Behavioural Interventions, 2017, 6–8 March 2017, AIIMS, New Delhi (Best Paper Award)
10. Sagar R and Pattanayak RD, Rhinoplasty. Difficult and revision cases, 3rd Facial Plastics and Rhinoplasty Workshop 2016, 22 April 2016, AIIMS, New Delhi
11. Patnaik KP, Sagar R, Pattanayak RD, Vivekanandhan S, Mehta M. Potential nutritional and hormonal biomarkers in children with attention deficit hyperactivity disorder presenting to a tertiary care centre in India, 22nd International Association for Child and Adolescent Psychiatry and Allied Professions World Congress (IACAPAP), 18–22 September 2016, Convention Centre, Calgary, Canada
12. Gnanavel S, Sagar R. Subjective experiences and quality of life in siblings of children with intellectual disabilities: A review of literature, 22nd International Association for Child and Adolescent Psychiatry and Allied Professions World Congress (IACAPAP), 18–22 September 2016, Convention Centre, Calgary, Canada
13. Sahu A, Bhargava R, Sagar R, Mehta M. Feasibility of home-based intervention module for specific learning disorder in Indian context, 22nd International Association for Child and Adolescent Psychiatry and Allied Professions World Congress (IACAPAP), 18–22 September 2016, Convention Centre, Calgary, Canada
14. Mahapatra A, Choudhary V, Sagar R. An exploratory analysis of Internalized stigma, stress, and needs in parents of children suffering from neurodevelopmental disorders, 22nd International Association for Child and Adolescent Psychiatry and Allied Professions World Congress (IACAPAP), 18–22 September 2016, Convention Centre, Calgary, Canada
15. Satapathy S, Choudhary V, Sharma R, Sagar R, Mahapatra A. Trauma in children and adolescents with sexual abuse in India: A current update on impact, assessment, clinical management and policy framework, 22nd International Association for Child and Adolescent Psychiatry and Allied Professions World Congress (IACAPAP), 18–22 September 2016, Convention Centre, Calgary, Canada
16. V Choudhary, RD Pattanayak, R Sagar. Qualitative study on caregiver's burden, experiences and unmet needs of parents having children with specific learning disorder (SLD), 22nd World Congress of International Association for Child and Adolescent Psychiatry and Allied Professions, IACAPAP, 2016, 18–22 September 2016, Convention Centre, Calgary, Canada
17. Sagar R. Qualitative study on caregiver's burden, experiences and unmet needs of parents having children with specific learning disorder (SLD), 22nd International Association for Child and Adolescent Psychiatry and Allied Professions World Congress (IACAPAP), 2016, 18–22 September 2016, Convention Centre, Calgary, Canada
18. Bhargava R, Dhawan A, Sagar R, R Shah. Mental health issues across settings: Management and challenges in India, 22nd World Congress of Social Psychiatry, WASP 2016, 30 November 2016–4 December 2016, New Delhi, India
19. Nebhinani N, Purushottam, Solanki RK, Vijayakumar L, Sagar R. Youth suicide prevention program in India, 22nd World Congress of Social Psychiatry, WASP 2016, 30 November 2016–4 December 2016, New Delhi, India
20. Chadda RK, Sharan P, Sagar R, Satpathy S. Mental health services in disaster affected population in low resource settings, 22nd World Congress of Social Psychiatry, WASP 2016, 30 November 2016–4 December 2016, New Delhi, India
21. Sahu A, Bhargava R, Sagar R, Mehta M. Home-based intervention for specific learning disorder: A case series, 22nd World Congress of Social Psychiatry (WASP), 2016, 30 November 2016–4 December 2016, Delhi, India
22. Sahu A, Bhargava R, Sagar R, Mehta M. Psychopathological co-morbidities in specific learning disorders: A Cross-sectional Study, 22nd World Congress of Social Psychiatry (WASP), 2016, 30 November 2016–4 December 2016, Delhi, India
23. Sagar R, Abhyankar A, Gupta V. Measurement of health outcomes in child psychiatry: Challenges and rewards, 22nd World Congress of Social Psychiatry (WASP), 2016, 30 November 2016–4 December 2016, Delhi, India
24. Sharan P, Sagar R, Prakash S, Gupta A. Development of culturally appropriate instruments for mental health, 22nd World Congress of Social Psychiatry (WASP) , 2016, 30 November 2016–4 December 2016, Delhi, India
25. Bhattacharya D, Bhargava R, Dhawan A, Sagar R. Psycho-social profile of juveniles in conflict with law in Indian setting, 22nd World Congress of Social Psychiatry (WASP), 2016, 30 November 2016–4 December 2016, Delhi, India

26. Sharma P, Mehta M, Sagar R, Bhargava R, Working with Adolescents with Headache and Anxiety Disorder: Challenges and emergent issues, 22nd World Congress of Social Psychiatry (WASP), 2016, 30 November 2016–4 December 2016, Delhi, India
27. Mandal P, Chatterjee B, Sagar R, Prakash S. A stigma towards mentally ill among health care staffs in India and way forward, 22nd World Congress of Social Psychiatry (WASP), 2016, 30 November 2016–4 December 2016, Delhi, India
28. Mahapatra A, Choudhary V, Sagar R. Prevalence of internalized stigma in parents of children suffering from neurodevelopmental disorders, 22nd World Congress of Social Psychiatry (WASP), 2016, 30 November 2016–4 December 2016, Delhi, India
29. Mahapatra A, Choudhary V, Sagar R. Psychopathological comorbidities in specific learning disorders: A crosssectional study, 22nd World Congress of Social Psychiatry (WASP), 2016, 30 November 2016–4 December 2016, Delhi, India
30. Gupta T, Mehta M, Sagar R, Jain V, Ammini AC. Psychosocial aspects of childhood obesity, 22nd World Congress of Social Psychiatry (WASP), 2016, 30 November 2016–4 December 2016, Delhi, India
31. Patra BN, Rajkumar S, Bharhava R, Sagar R. Socio-demographic and clinical profile of patients attending child and adolescent psychiatry (CAP) clinic of a tertiary care centre, 22nd World Congress of Social Psychiatry (WASP), 2016, 30 November 2016–4 December 2016, Delhi, India
32. Kathiresan P, Gupta R, Patra BN, Sagar R. Physiotherapy as a treatment modality in a child with somatoform pain disorder, 22nd World Congress of Social Psychiatry (WASP), 2016, 30 November 2016–4 December 2016, Delhi, India
33. Parmar A, Ranjan R, Sagar R. Sub-acute sclerosing pan encephalitis (SSPE) presenting with psychosis: A case report, 22nd World Congress of Social Psychiatry (WASP), 2016, 30 November 2016–4 December 2016, Delhi, India
34. Kaushal T, Satapathy S, Bakhshi S, Sagar R, Chaddha R, Sapra S. Psychological interventions for paediatric cancer patients: A review, 22nd World Congress of Social Psychiatry (WASP), 2016, 30 November 2016–4 December 2016, Delhi, India
35. Mahapatra A, Gupta R, Choudhary V, Sagar R. Post-partum depression in India: A systematic review of epidemiological studies, 22nd World Congress of Social Psychiatry (WASP), 2016, 30 November 2016–4 December 2016, Delhi, India
36. Mohanan K, Gupta S, Sagar R. Awareness of undergraduate girl students about avoidance strategies for sexual harassment, 22nd World Congress of Social Psychiatry (WASP) 2016, 30 November 2016–4 December 2016, Delhi, India
37. Sahu A, Bhargava R, Sagar R, Mehta M. Feasibility of home-based Intervention Module for Specific Learning Disorder in Indian Context, 22nd World Congress of Social Psychiatry (WASP) 2016, 30 November 2016–4 December 2016, Delhi, India
38. Satapathy S, Choudhary V, Sharma R, Sagar R, Mahapatra. Trauma in Children and Adolescents with Sexual Abuse in India: A Current Update on Impact, Assessment, Clinical Management and policy Framework, 22nd World Congress of Social Psychiatry (WASP), 2016, 30 November 2016–4 December 2016, Delhi, India
39. Sagar R. The clinical practice of psychosocial-behavioural Management of CSA, 22nd World Congress of Social Psychiatry (WASP), 2016, 30 November 2016–4 December 2016, Delhi, India
40. Sagar R, Choudhary V, Pattanayak R. Qualitative study on caregiver's burden, Experiences and unmet needs of parents having children with specific learning disorder (SLD), 22nd World Congress of Social Psychiatry (WASP), 2016, 30 November 2016–4 December 2016, Delhi, India
41. Gnanavel S, Sagar R. Subjective experiences and quality of life in siblings of children with intellectual disabilities: A review of literature, 22nd World Congress of Social Psychiatry (WASP), 2016, 30 November 2016–4 December 2016, Delhi, India
42. Patnaik KP, Sagar R, Pattanayak RD, Vivekanandhan S, Mehta M. Potential nutritional and hormonal biomarkers in children with attention deficit hyperactivity disorder presenting to a tertiary care centre in India, 22nd World Congress of Social Psychiatry (WASP), 2016, 30 November 2016–4 December 2016, Delhi, India
43. Mahapatra A, Choudhary V, Sagar R. An exploratory analysis of internalized stigma, stress, and needs in parents of children suffering from neurodevelopmental disorders, 22nd World Congress of Social Psychiatry (WASP), 2016, 30 November 2016–4 December 2016, Delhi, India
44. Sahu A, Bhargava R, Sagar R, Mehta M. Utility of home-based Intervention for specific learning disorder: A pilot study, National Annual Conference of Indian association of clinical psychologists (NACIACP); 2017, 27–29 January 2017, Coimbatore, Tamil Nadu

45. Sahu S, Sarkar S, Bhargava R, Sagar R. A systematic review and meta-analysis of parent implemented interventions for reading disorder (Dyslexia), National Annual Conference of Indian association of clinical psychologists (NACIACP); 2017, 27–29 January 2017, Coimbatore, Tamil Nadu
46. Seth R and Sagar R. Disclosure of child sexual abuse (CSA), Regional ToT on CSA, Prevention and response, Organized by IMA and UNICEF, 26 February 2017, IMA, Guwahati
47. Seth R and Sagar R. Child sexual abuse (CSA), Its behavioral indicators, dynamics, complexities and patterns, Regional ToT on CSA, Prevention and response, organized by IMA and UNICEF, 26 February 2017, IMA, Guwahati
48. Sahu A, Bhargava R, Sagar R, Mehta M. Impact of home-based intervention in specific learning disorder: A pre-post study, 54th Annual International Conference of learning disability association of America (LDA), 2017, 16–19 February 2017, Baltimore, MD, USA
49. Seth R and Sagar R. Disclosure of child sexual abuse (CSA), Regional ToT on CSA , Prevention and response organized by IMA and UNICEF, 26 March 2017, IMA, Raipur
50. Seth R and Sagar R. Child sexual abuse (CSA), Its behavioral indicators, dynamics, complexities and patterns, Regional ToT on CSA, Prevention and response organized by IMA and UNICEF, 26 March 2017, IMA, Raipur
51. Satapathy S. Full day workshop on psychological trauma and child sexual abuse, International Conference on cognitive behavioural interventions, (ICCBi 2017), 4–8 March 2017, CMET, AIIMS, New Delhi
52. Satapathy S. National Initiatives in disaster psychosocial support and mental health services (PSSMHS) in India, 22nd World Conference on social psychiatry, 30 November 4 December 2016, New Delhi, India
53. Satapathy S, Swain R, Choudhary V, Sharma R, Behera C, Mohapatra A. Understanding adult sexual offenses: An alarming but marginalized social psychiatry issue in India, 22nd World Conference on social psychiatry (WASP-2016), 30 November–4 December 2016, New Delhi, India
54. Satapathy S, Sharma R, Sagar R, Choudhary V. Non-pharmacological interventions for children with ADHD in India in last 40 Years: Where do we stand? 22nd International Conference on child and adolescent psychiatry, 18–22 September 2016, Telus Convention Center, Calgary, Canada
55. Satapathy S. Therapeutic approaches and management of child sexual abuse in India, 22nd International Conference on child and adolescent psychiatry, 18–22 September 2016, Telus Convention Center, Calgary, Canada.
56. Satapathy S, Sharma R, Sagar R, Choudhary V, Mohapatra A. Psychological correlates associated with adverse childhood experiences in children and adolescents diagnosed with dissociative disorders, 22nd International Conference on child and adolescent psychiatry, 18–22 September 2016, Telus Convention Center, Calgary, Canada
57. Satapathy S, Choudhary V, Swain R, Sharma R, Behera C, Mohapatra A. Adverse childhood experiences and other psychosocial correlates of adult males accused of sexual offences: An exploratory study, 22nd International Conference on child and adolescent psychiatry, 18–22 September 2016, Telus Convention Center, Calgary, Canada
58. Shobhit Jain, Ashish Pakhare, RD Pattanayak, Anju Dhawan. Should drugs be criminalized? 22nd World Congress for social psychiatry, World Association of Social Psychiatry, WASP 2016, 30 November–4 December, 2016, New Delhi, India
59. RD Pattanayak, Swarndeep Singh, Saurabh Kumar, SK Khandelwal. Profile of patients presenting with psychiatric emergencies at a tertiary care centre in India over a one year period, Annual Conference of Indian Psychiatric Society (ANCIPS), 7 January 2017, Sec 27, Naya Raipur, Chhatisgarh, Raipur, India
60. P Shakya, P Rajhans, N Gautam, RD Pattanayak. Successful management of lithium induced polyuria: A case report, Annual Conference of Indian Psychiatric Society (ANCIPS), 7 January 2017, Sec 27, Naya Raipur, Chhatisgarh, India
61. P Rajhans, RD Pattanayak. An interesting case of de novo old age onset ultra-rapid cycling bipolar disorder, Annual Conference of Indian Psychiatric Society (ANCIPS), 6 January 2017, Sec 27, Naya Raipur, Chhatisgarh, India
62. B Shah, A Mahapatra, RD Pattanayak. Migrants and mental disorder in South Asian countries: A case-based discussion and brief review of literature, 22nd World Congress for social psychiatry, World Association of Social Psychiatry, WASP 2016, 30 November 2016–4 December 2016, New Delhi, India
63. Ashish Pakhre, SK Khandelwal, RD Pattanayak, Ashima Nehra, AC Ammini. Assessment of cognitive functioning in prediabetes, diabetes and healthy controls, Annual Conference of Indian Psychiatric Society (ANCIPS), 7 January 2017, Sec 27, Naya Raipur, Chhatisgarh, Raipur, India
64. Mahapatra A, Pattanayak RD, Khandelwal SK. Prevalence and predictors of family accommodation in obsessive, Compulsive disorder in an Indian setting: An exploratory study, Annual Conference of Indian Psychiatric Society (ANCIPS), 7 January 2017, Sec 27, Naya Raipur, Chhatisgarh, Raipur, India (**Bhagwat Award**)

65. Pandey A, Kumar S, Pattanayak RD, Khandelwal SK, Bhattacharya D, Bhargava R. Internet gaming disorder in a follow-up, lithium, stabilized patient with bipolar disorder: Role of sub-syndromal depressive symptoms as a culprit, 18th Conference of International Society for bipolar disorders jointly organized with 8th International Society of Affective Disorders, 13–16 July 2016, Amsterdam, Netherlands
66. Mangla S, Pattanayak RD. Episodic OCD presenting as a compulsive “need to beg” in bipolar disorder-I: A 1-year follow up and brief review, 18th Conference of International Society for Bipolar Disorders jointly organized with 8th International society of Affective Disorders, 13–16 July 2016, Amsterdam, Netherlands
67. Chandan N, Bagra I, Pattanayak RD. Intentional production of symptoms: How to resolve the unrequited issue, 22nd World congress for social psychiatry, World Association of Social Psychiatry, WASP 2016, 30 November 2016–4 December 2016, New Delhi, India
68. Tuli A, Singh P, Sood M, Deb KS, Jain S, Jain A, Wason M, Chadda RK, Verma R. Harmony: Close knitted mhealth assistance for patients, Caregivers and doctors for managing SMIs, 2016 ACM International Joint Conference on pervasive and ubiquitous computing (UbiComp 2016), 12–16 September, 2016, Kongresshaus Stadthalle Heidelberg, Germany
69. Gupta R, Mahapatra M, Deb KS. Natural disasters and mental health issues in India: A systematic review of epidemiological studies, 22nd World Congress of Social Psychiatry (WASP-2016), 30 November 2016–4 December 2016, New Delhi, India
70. Chandran N, Parmar A, Deb KS. Episodic obsessive compulsive disorder associated with bipolar mania: A case report, 22nd World Congress of Social Psychiatry (WASP-2016), 30 November 2016–4 December 2016, New Delhi, India
71. Singh J, Prajapati DC, Modak T, Kumar S, Deb KS. Meditation masquerading as catatonia: Diagnostic and management issues: A case report, 22nd World Congress of Social Psychiatry (WASP-2016), 30 November 2016–4 December 2016, New Delhi, India
72. Verma R, Anand KS. A comparison of depressive symptoms and sleep disturbances in individuals with Parkinson’s disease and Parkinson plus syndrome, 5th Asian and Oceanian Parkinson’s Disease and Movement Disorders Congress (AOPMC), 17–19 March 2017, Taipei International Convention Center (TICC), Taipei, Taiwan
73. Tuli A, Singh P, Sood M, Sinha Deb K, Jain S, Jain A, Wason M, Chadda R, Verma R. Harmony: Close knitted mhealth assistance for patients, caregivers and doctors for managing SMIs, 2016 ACM International Joint Conference on pervasive and ubiquitous computing (Ubi Comp 2016), 12–16 September 2016, Kongresshaus Stadthalle Heidelberg, Germany
74. Parmar A, Verma R. Obsessive compulsive disorder (OCD) co-morbid with miyoshi myopathy: A case report, 22nd World Congress of Social Psychiatry (WASP-2016), 30 November 2016–4 December 2016, New Delhi, India
75. Sharma R, Satapathy S. The effect of psychological trauma among children and adolescents diagnosed with dissociative disorder

RESEARCH

Funded projects

Ongoing

1. Field testing of ICD, 11 proposals for sexual disorders and sexual health in India, Pratap Sharan, WHO, 3 years, 2013–2017, Rs. 12 lakhs
2. Development of Identification Instrument for Prolonged Grief Disorder in SEAR countries, Pratap Sharan, WHO SEARO, 2 years, 2016–2017, Rs. 4 lakhs
3. Depressive and anxiety disorders in the postpartum period: Prevalence, psycho-social correlates and effect on mother-infant bonding, Rajesh Sagar, ICMR, 3 years, 2014–2016, Rs. 46.28 lakhs
4. Psycho-social outcome and Cognitive functions in bipolar disorder: A longitudinal study, Rajesh Sagar, DST, 3 years, 2016–2019, Rs. 28.53 lakhs
5. Project ROCK ON: Remediation of cognition in kids to overcome neglect, Rajesh Sagar, University of California San Francisco, USA, 1 year, 2015–2017, Rs. 12.83 lakhs
6. Development of psychosis identification instrument for WHO, SEARO, Validation in outpatient and primary care setting (Phase IV), Rajesh Sagar, WHO SEARO, 1 year, 2016–2017, Rs. 14.96 lakhs
7. To study the effect of high-frequency repetitive transcranial magnetic stimulation (rTMS) in cognitive function and predominantly negative symptoms in person suffering from schizophrenia in a randomized sham controlled double trial, Nand Kumar, CSRI, DST, 3 years, Rs. 54 lakhs
8. Translation and validation of the teen addiction severity index on Indian population, Renu Sharma, AIIMS, 2 years, 2015–2017, Rs. 2 lakhs
9. Extent of internet use amongst adolescence with non-psychotic disorders: A case control study, 2015–2017, AIIMS

Completed

1. The development of a culturally sensitive comprehensive measure and screening scale for depression, using an item response approach, Pratap Sharan, AIIMS, 1 year, 2014–2015, Rs. 1 lakhs
2. Review for selection/development of identification instrument for prolonged grief disorder in SEAR countries, Pratap Sharan, WHO SEARO, 3 months, 2015, Rs. 4 lakhs
3. Development of a Psychosis Identification Instrument for WHO-SEARO, Rajesh Sagar, WHO, SEARO, 2 years, 2013–2016, Rs. 7.8 lakhs
4. Study on Gaps Analysis in Mental Health Care Services in Child Care institutions, Rajesh Sagar, NCPCH, 10 months, 2015, Rs. 4.99 lakhs
5. To develop technical guidelines on home-based interventions for management of Intellectual Disability for WHO-SEARO, Rajesh Sagar, WHO-SEARO, 3 months, 2015, Rs. 3 lakhs
6. Development of Non-computer based Cognitive Training Intervention Kit for 6–11 years old Children with ADHD, Sujata Satapathy, AIIMS, 1.5 years, 2015–2017, Rs. 4.49 lakhs
7. A study of brain activation using functional near infrared spectroscopy and quantitative electro-encephalographic spectral analysis in catatonia, Rohit Verma, AIIMS, 2 years, 2015–2017, Rs. 2.24 lakhs
8. Stigma in patients with depressive disorders and substance use disorders: A pilot study, Bichitra Nanda Patra, AIIMS, 2015–2017, Rs. 25,000

Departmental projects

Ongoing

1. Transcranial direct current stimulation (tDCS) in treatment resistant obsessive – compulsive disorder: An open-label trial
2. Effect of dual-task exercise in conjunction with fluoxetine and transcranial direct current stimulation (tDCS) on postural stability and gait in stroke patients
3. Child sexual abuse: Development of multidimensional scale and psychological trauma focused intervention module
4. Psycho, behavioural and cognitive functioning of children with acute lymphoblastic leukaemia: Development and feasibility of composite psychological intervention module
5. Development of trauma focused cognitive behaviour intervention and family therapy module for child and adolescent cancer survivors
6. Relationship of lithium response to neurochemical profile using magnetic resonance study (MRS) in bipolar type I patients
7. Depression and anxiety disorders in patients with type 2 diabetes mellitus and its relation with glycemic control: Quality of life and disability
8. Effect of cognitive and emotional stress in patients of multi-somatoform pain disorder: A fMRI based case control study
9. An observational study of side effects of selective serotonin reuptake inhibitors in patients attending psychiatric outpatient clinic
10. Neuro-chemical correlates of anterior cingulate white matter integrity in symptomatic first episode schizophrenia
11. A study of allocentric neural navigation process schematic utilizing dynamic optic array for prospective control
12. A pilot randomized controlled trial of targeted prefrontal cortex modulation with bilateral transcranial direct current stimulation (tDCS) for reducing craving in patients with opioid dependence
13. A cross-sectional study of association of illness disability and cognitive functioning in patients to caregiver needs in first episode schizophrenia
14. A prospective study of sleep pattern, perceived stress and coping strategies in first year medical undergraduate students
15. A study of knowledge and attitude regarding ECT and rTMS among patients and their caregivers
16. To assess change in knowledge towards mental illness and treatment among caregivers of patient with severe mental illness in a tertiary mental health care in, Patient setting: A case, Control study
17. A cross-sectional study about knowledge towards mental illness and treatment in patients with severe mental illness and their caregivers
18. Cross-sectional, controlled fMRI study on neural correlates of dissociation in dissociative convulsions

Completed

1. Need assessment survey about consultation liaison psychiatry amongst the clinical faculty members at AIIMS, New Delhi
2. Neuro-cognitive and psychosocial aspects of childhood obesity, 2013–2016
3. Screening specific disorders using draw: A person test in Indian children, 2015–2018
4. Cognitive behaviour therapy for adolescent with depression, 2013–2016
5. Self help manual approach in the treatment of obsessive compulsive disorders
6. Anxiety disorders amongst adolescents in rural Ballabgarh–A Community based study
7. Comparative study of individual versus group trans-diagnostic cognitive behavior therapy in adolescents with headache and anxiety disorder
8. Sleep disturbances in children with attention deficit hyperactivity disorders (ADHD)
9. Computer assisted integrated cognitive behavior therapy for depressed adolescent
10. Anger in adolescents-psychopathology and management
11. Clinical profile and peripheral biomarkers in children with attention deficit hyperactivity disorder
12. Effect of high-frequency repetitive transcranial magnetic stimulation on negative symptoms and cognitive functioning in schizophrenia
13. Assessment of the effect of repetitive transcranial magnetic stimulation (rTMS) on cognitive functioning in patients with moderate traumatic brain injury (TBI)
14. Psychological correlates associated with adverse childhood experiences in children and adolescents diagnosed with dissociative disorders
15. Psychosocial correlates of adult male accused of sexual offences: An exploratory study
16. Assessment of white matter integrity through diffusion tensor imaging in schizophrenia patients with auditory hallucinations
17. Prevalence and correlates of family accommodation in patients with obsessive compulsive disorder: An exploratory study from India
18. A study of the association of anxiety and depression with cardiac arrhythmia in post myocardial infarction patients
19. Assessment of needs, scope and focus for consultation liaison services at AIIMS, New Delhi
20. Development of a mobile based intervention framework for difficult to treat severe mental illnesses in low-resource settings
21. Feasibility of using mobile phones in improving service delivery and creating health awareness in patients with mental disorders
22. Effect of repetitive transcranial magnetic stimulation on cognitive functioning in moderate traumatic brain injury
23. Effect of high frequency repetitive transcranial magnetic stimulation (rTMS) on negative symptoms and cognitive functioning in schizophrenia
24. Qualitative assessment of caregivers' needs of young patients with first episode psychosis
25. A retrospective chart review of the pattern and outcome of electroconvulsive therapy in a tertiary care centre
26. A retrospective chart review of the pattern and outcome of repetitive transcranial magnetic stimulation (rTMS) therapy in a tertiary care centre
27. Development of a mobile based intervention framework for difficult to treat severe mental illnesses in low-resource settings
28. A study of brain activation using functional near infrared spectroscopy and quantitative electro-encephalographic spectral analysis in catatonia
29. Profiles of patients attending a tertiary care child and adolescent psychiatry clinic: A retrospective chart review
30. Patient and caregiver perspectives on ethical issues in mental health care

Collaborative projects

Ongoing

1. Illness narratives in schizophrenia: A medical chart review study (Department of Anthropology, Brown University, Providence, USA)
2. A phenomenological and EMIC study of Shrine based healing practices for mental disorders in North India (Department of Anthropology, Brown University, Providence, USA)

3. Clinical consistency and clinical utility of proposed diagnostic guidelines for ICD-11 childhood mental and behavioural disorders (WHO)
4. Clinical consistency and clinical utility of proposed diagnostic guidelines for ICD-11 severe mental and behavioural disorders (WHO)
5. Clinical consistency and clinical utility of proposed diagnostic guidelines for ICD-11 common mental and behavioural disorders (WHO)
6. Cross-sectional, controlled fMRI study on neural correlates of dissociation in dissociative convulsions (Nuclear Magnetic Resonance)
7. Quality of life following BCS and mastectomy along with sentinel node biopsy in operable breast cancer (Surgery)
8. Effect of paravertebral anaesthesia on quality of life scores and circulating tumour cells in breast cancer patients (Anaesthesia)
9. Evaluation of eating disorders and their effect on metabolic parameters and glycemic control in adult patients with diabetes mellitus type 2 (Endocrinology)
10. Neurocognitive rehabilitation modules for patients with schizophrenia (Neuropsychology, CN Centre)
11. Effect of physical, cognitive and emotional stress in patients of multisomatoform disorder: A fMRI based case-control study (Nuclear Magnetic Resonance)
12. Prospective randomized controlled study comparing long term outcome, chronic pain, quality of life and cost effectiveness following laparoscopic repair of incision and ventral hernias with different techniques of Mesh Fixation, A pilot study (Surgical Disciplines)
13. Prospective randomized controlled study comparing long term outcomes, chronic pain, quality of life and cost effectiveness following two techniques of mesh fixation, non-absorbable versus absorbable tackers, for laparoscopic mesh repair of incisional and ventral hernias (Surgical Disciplines)
14. Prospective randomized controlled study to compare the outcome of standard four port laparoscopic cholecystectomy with single incision laparoscopic cholecystectomy in patients with gall stone disease (Surgical Disciplines)
15. Study of peripheral stress biomarkers (S100B, 8-Isoprostane and 8-hydroxy, 2-deoxyguanosine) in Major Depression (Lab Medicine)
16. Toxicological analysis and distribution pattern of alcohol and different drugs in various biological samples and their neurobiological effects in suicidal deaths (Forensic Medicine)
17. Study of clock genes in rat model of mania-like behavior (Neurochemistry, NSC)
18. Study of polymorphisms in TNF- α [308 G/A], IL-1 β [511 C/T], and IL-6 [174 G/C] genes in patients of depression: Their association and clinical severity (Lab Medicine)
19. A Prospective study Comparing outcomes and quality of life after laparoscopic donor nephrectomy versus open donor nephrectomy (Surgical Disciplines)
20. Prefrontal cortical activity in children with ADHD: A functional near infrared spectroscopy (fNIRS) study
21. Comparison of quality of life after single stage vs two stage management of patients with concomitant gall stones and common bile duct stones: A prospective randomized control trial (Surgical Disciplines)
22. Emotional and behavioural health status associated with HIV status disclosure in children with HIV infection aged 8–18 years (Pediatrics, LHMC)
23. Depressive disorders amongst adolescents in rural Ballabgarh: A community based study (Centre for Community Medicine)
24. Psycho-behavioural and cognitive functioning of children with acute lymphoblastic leukemia: Development of a composite psychological intervention module
25. Mapping functional and biochemical correlates in brain of Parkinson's Patient with Mild Cognitive Impairment (NMR)
26. To study the effect of Yoga on pulmonary functions, respiratory muscle strength and endurance, chest wall mobility, inflammatory markers and quality of life in blunt chest trauma patients and their correlation with thoracic trauma severity score at level-I trauma centre (Surgical Disciplines)
27. Proteomics of CSF for the identification of protein signatures in the dopamine dictated states of schizophrenia and Parkinson's disease (Biophysics)
28. Identification of associations between genetic variants in neuronal migration pathway and behavioral correlates of dyslexia, linking genes and behavior using familial and sporadic cases (NBRC Manesar).
29. Collaborative care for depression and diabetes in India (Endocrinology)
30. To study the effect of mobile phones on well-being, sleep and cognitive function (Medicine)

31. Utility on novel coated platelets as a marker for early prognostication of neurocognitive impairment following traumatic injury 2015–2018 (Trauma Centre)
32. A study of Neuro-cognition and Neuro-imaging in patients with acute transient psychotic disorder, their first degree relatives and normal controls (DBT)
33. New Delhi Birth Cohort, Follow-up studies to assess association of early life growth patterns on lung function: Cardio metabolic risk factors and Mental Health in a Family Cohort, 2015–2017 (PHFI, CDRF)
34. Association between parental growth patterns and chronic disease risk in their children: An intergenerational study in the New Delhi Birth Cohort, 2015–2017 (SERB, DST)
35. Morphological, functional, biochemical and behavioral evaluation post – EMF radiation, 2015–2018 (NMR)
36. Effect of EMF radiation due to mobile phone use on sleep and neurocognitive functions: A molecular approach, 2015–2018 (Medicine)
37. A randomized control trial to study the impact of Yoga intervention in lower limb amputees following trauma in relation to postsurgical outcome, behavior and quality of life at Level-I (Trauma Centre)
38. Effect of Yoga on psychological, cognitive and glycemic control in patients with T2DM and depression: Two arm parallel randomized controlled trial (DST)
39. Study of cortical sources of EEG and brain iron levels during rest and visuospatial working memory in attention deficit hyperactivity disorder (ADHD) (Department of Health Research, Government of India)
40. Optimizing diet and insulin regimes in children with Type 1 Diabetes in low- resource settings (Department of Health Research)
41. A pilot multi-centre open label parallel arm RCT evaluating whether yoga can delay initiation of insulin therapy in patients with type 2 diabetes mellitus with suboptimal glycemic control on near maximal oral drugs and/or who may require insulin therapy in near future (Endocrinology)
42. A translational randomized trial of Yoga based lifestyle intervention for major depressive disorder (MDD) management in India and analyzing biomarkers of cellular aging associated with it (AYUSH)
43. QEEG based neural correlates and microstates of attention and interference in ADHD, An endophenotypic marker (DST)
44. To study the impact of Yoga on pulmonary functions, immune response and quality of life in chest trauma patients at level-I trauma centre (DST)
45. To develop a bio-feedback rehabilitation technique using residual EMG triggered TMS for spastic patients (IIT, Delhi)
46. Effect of dual-task exercise in conjunction with fluoxetine and transcranial direct current stimulation (tDCS) on postural stability and gait in stroke patients (Neurology)
47. Development of a scale to measure the psychosocial impact of vitiligo in family members of patients (Dermatology)
48. Association of inflammatory cytokines with suicidal deaths: a hospital based comparative cross-sectional study (Forensic Sciences and Toxicology)
49. Anxiety and stress in children and parents undergoing congenital cardiac surgery: Effect of brief intervention (Cardiac Anesthesia)
50. Prospective pilot study evaluating incidence of postoperative cognitive decline in older adults comparing isoflurane and desflurane (Anesthesiology)
51. A study to assess the effects of laughter yoga on perceived stress, quality of sleep and caregiver burden among caregivers of mentally ill clients in AIIMS, New Delhi (College of Nursing)
52. A study to assess body image disturbance, self-esteem, acne quality of life among adolescents and young adults with acne visiting Dermatology OPD AIIMS with the view to develop information booklet on Psychosocial aspect of Management of acne (College of Nursing)
53. Online assessment of Indian adolescents'/youths' (14 to 24 years) understanding on elderly health (Geriatric Medicine)
54. Development of a culturally appropriate health literacy instrument and assessing its validity in Hindi speaking patients receiving general and primary eye care services in New Delhi (Community Ophthalmology, Dr RP Centre for Ophthalmic Sciences)
55. Psychosocial impact of pediatric strabismus on caregivers and the effect of strabismus surgery (Dr RP Centre for Ophthalmic Sciences)

56. A study to assess knowledge regarding identification of delirium in various ICUs patients among staff nurses working in AIIMS New Delhi with a view to develop a protocol (College of Nursing)
57. Technology literacy and technology assistance needs of caregivers managing schizophrenia patients in low: Resource settings (Computer Sciences, Indraprastha Institute of Informational Technology, New Delhi)
58. Neuro-chemical correlates of anterior cingulate white matter integrity in symptomatic first episode schizophrenia (Neuroimaging and Interventional Neuroradiology)
59. A study of allocentric neural navigation process schematic utilizing dynamic optic array for prospective control (Physiology)
60. A prospective study of sleep pattern, perceived stress and coping strategies in first year medical undergraduate students (Medicine)
61. Clinical and biochemical evaluation for depression in patients with recently diagnosed head and neck cancer (Otorhinolaryngology)
62. Efficacy of a family based comprehensive Yoga Program for weight reduction among over-weight Children and Adolescents (Pediatrics, AYUSH)

Completed

1. Quality of life during follow-up of gastrointestinal surgeries (Gastrointestinal Surgery)
2. Surgery for corrosive stricture oesophagus: Assessment of complications, mental health and quality of life (QOL) (Gastrointestinal Surgery)
3. Markers of stress and their contributions in persons with mild cognitive impairment and dementia (Biophysics)
4. Neuro-cognitive and neurobiological aspects of bilingual developmental dyslexia studied pre and post-therapy (NMR)
5. Study on role of Intensive Physiotherapy and TMS (Trans cranial Magnetic Stimulation) on Stroke recovery in correlation to expression of growth factors (Neurology)
6. Cancer in older adults: The development of a comprehensive screening tool and biomarkers (Geriatric Medicine)
7. A study on professional quality of life: Burnout and work environment of nurses in AIIMS, New Delhi (Hospital Administration)
8. Tattoos in completed suicides and other deaths (Forensic Sciences and Toxicology)
9. A study to assess effectiveness of planned teaching programme for primary care givers on the home care management of elderly with dementia (College of Nursing)
10. A study to assess the prevalence of aggression and its correlates in patients post traumatic brain injury taking treatment at Jai Prakash Narayan Apex Trauma Centre, AIIMS, New Delhi (College of Nursing)
11. Development of a mobile based intervention framework for difficult to treat severe mental illnesses in low-resource settings, (Computer Sciences, Indraprastha Institute of Informational Technology, New Delhi)
12. Effect of repetitive transcranial magnetic stimulation on cognitive functioning in moderate traumatic brain injury (Neurosurgery)
13. Effect of high frequency repetitive transcranial magnetic stimulation (rTMS) on negative symptoms and cognitive functioning in schizophrenia (Clinical Neuro- Psychology, Neurosciences Centre)
14. Development of a mobile based intervention framework for difficult to treat severe mental illnesses in low-resource settings (Computer Sciences, Indraprastha Institute of Informational Technology, New Delhi)
15. A randomized control trial to assess effectiveness of a Distress Management Module on distress of parents having children with leukemia (College of Nursing)
16. Study on the genotype: Phenotype correlation in Asian Indian subjects with childhood onset of growth hormone deficiency (Anatomy)

PUBLICATIONS

Journals: 80

Abstracts: 51

Chapters in books: 8

Books: 2

PATIENT CARE

OPD/Clinic	New cases	Old cases	Total
Psychiatry	19927	59236	79163
Community clinic (Ballabgarh)	2270	4300	6570
Brain stimulation Laboratory			
rTMS			155
tDCS			66
Modified ECT			328
Lithium Lab			446
Consultation Liaison Psychiatry			1711
Clinical Psychology Services			
Psychodiagnostics			1497
Psychotherapies			542
	Admissions	Discharges (including LAMA, Abscond)	
Psychiatry Ward	290	258	

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor RK Chadda was awarded Honoraray Fellowship of the World Association for Social Psychiatry. He was Chair, Organising Committee, 22nd World Congress of Social Psychiatry, 30th November 2016–4th December 2016; Member, Executive Committee, National Academy of Medical Sciences (India); Acting Treasurer, National Academy of Medical Sciences (India), September 2016 onwards; Member, Editorial Board, BJP International; Chairperson, Indian Psychiatric Society Task Force on Mental Health Legislation. He delivered NN De Oration, Indian Association for Social Psychiatry.

Professor Pratap Sharan was the Professor-in-Charge of Student Welfare at AIIMS, member of WHO's International Advisory Group for the Revision of ICD-10 Mental and Behavioural Disorders (2009 onwards), WHO's Working group on Eating Disorders for the Revision of ICD-10 Mental and Behavioural Disorders (2012 onwards), WHO's Guidelines Development Group for mental health Gap Action Programme - Intervention Guide (2014 onwards). He was the chairperson of the Taskforce on Research of the Indian Association for Social Psychiatry (2012–2016), Senior Editor of Journal for Eating Disorders; Working Committee member of National Medical Journal of India; and member of the Editorial Board of three journals. He chaired the WHO SEARO Meeting of Experts on Finalization of the Regional Strategy on Prevention of Suicide at New Delhi. He was the chairperson for sessions on 'Overview of brain stimulation technique in Psychiatric disorders' at National Conference on Recent Technological Advances and Intervention for Psychiatric Disorders'; 'PG Quiz' at the Annual National CME on Substance Use Disorders; 'Mental health of vulnerable populations' at the 22nd World Congress of Social Psychiatry, World Association of Social Psychiatry; 'PG Quiz' at the 22nd World Congress of Social Psychiatry, World Association of Social Psychiatry; and 'Technology based CBT' at the International Conference on Cognitive Behavioural Interventions-2017. He served as a member of the advisory board for the Technical Resource Group for Transgender/Hijra; a DBT Project; the IPS Task Force on National Mental Health Policy 2016–2017; Indian Psychiatric Society Clinical Practice Guidelines Group on OCD, GAD and Panic Disorder, Sexual Dysfunction and Sleep Disorders; Nishkam Foundation newsletter; reviewer for a ICMR project; and peer reviewer for eleven journals. He served as an examiner for faculty selection boards and as a member of MCI Inspection teams and for MD (Psychiatry) thesis for various national Centers. He was a resource person for Consensus Conference on Technology Enabled Healthcare at George Institute for Global Health; the Brainstorming Meeting on 'Prioritization of Mental Health Research' at ICMR; and the development of the Mental Health Atlas - 2017 Questionnaire for WHO, Geneva. He organized the symposium entitled 'Glimpses of research in relation to ICD-11 at the AIIMS, New Delhi' at 69th Annual Conference of the Indian Psychiatric Society; 'An Overview of the WHO Development of the ICD-11 Classification of Mental and Behavioural Disorders' at the 22nd World Congress of Social Psychiatry, World Association of Social Psychiatry. He was a member of the Scientific Committee for six national and international conferences/meetings.

Professor Nand Kumar was organising secretary, National Workshop on "Recent Technological Advances and Intervention for Psychiatric Disorders held at AIIMS; organising chairperson, Conclave on Mental Health Awareness Initiative held at AIIMS; Chairperson, CME Committee, Indian Psychiatric Society (IPS) North Zone; Chairperson, PG development program and conference organized by IPS North Zone, member Subject Expert Committee, Centre Drugs Standard Control Organization, DCG and attended several meetings.

Professor Mamta Sood was Secretary General of Indian Association for Social Psychiatry; Organizing Secretary, National Symposium on Preventive Psychiatry held at AIIMS.

Dr Raman Deep Pattanayak was Associate Editor of Journal of Mental Health and Human Behaviour (JMHHB).

Dr Koushik Sinha Deb was Assistant General Secretary, Indian Association for Social Psychiatry.

Dr Rohit Verma was Assistant editor of the Journal “Asian Journal of Cognitive Neurology.” He received travel award from the International Parkinson and Movement Disorder Society Asia Oceania Section (MDS-AOS) at 3rd Taiwan International Congress of Parkinson’s Disease and Movement Disorders, 2017 held at Taipei, Taiwan. He was Technical Expert for Disability Evaluation; member, technical committee for developing guidelines for assessment of disability evaluation for Ministry of Social Justice and Empowerment for the Person with Disabilities Act 2016; Technical Expert for OST – On-site accreditation evaluation of 9 OST Centers for NABH.

Dr Bichitra Nanda Patra was Associate editor of the journal ‘*Clinical Case reports*’.

Dr Gagan Hans was awarded Young Psychiatrist Track Award 2016 at the XXII Congress of the World Association of Social Psychiatry, New Delhi, India.

Dr Renu Sharma organized a one day workshop as a co-facilitator on Child Sexual abuse in the IACBT, 2017, at AIIMS, New Delhi. She won Best Paper Award in Second Inter-national Conference of Cognitive Behavior Therapy, 6–8 March, AIIMS, New Delhi.

9.35. Pulmonary Medicine and Sleep Disorder

Professor and Director
Randeep Guleria

Professor and Head
G.C. Khilnani

Additional Professor
Anant Mohan

Assistant Professor

Karan Madan

Vijay Hadda

EDUCATION

CMEs/Workshops/Symposia/National and International Conferences

1. Guidelines for the Management of Chronic Respiratory Diseases for Primary Health Care in India, April 2016
2. Indian Respiratory Summit 2016, International Meeting on Airway Diseases, 20&21 August 2016
3. Workshop on Pulmonary Function Testing, 20 & 21 August 2016
4. AIIMS PULMOCRIT 2017, 13–16 April 2017

Lectures delivered

Randeep Guleria: 15

G.C. Khilnani: 23

Anant Mohan: 18

Karan Madan: 21

Vijay Hadda: 4

Randeep Guleria: 15

1. Broncocon2016, 21st Annual Conference of the Indian Association for Bronchology, 29 & 30 April 2016, SKIMS, Srinagar, Jammu & Kashmir
2. Interstitial Lung Disease, 8 May 2016, Gorakhpur, UP
3. Newer drugs in the management of COPD in pulmonary critical care and sleep medicine, 4 June 2016, SKIMS, Srinagar, Jammu & Kashmir

4. Sarcoidosis, No longer and uncommon disease in India in pulmonary critical care and sleep medicine, 4 June 2016, SKIMS, Srinagar, Jammu & Kashmir
5. Advanced educational program for physicians around the world, REALM-2016 Clinical Pathologic Correlation, 2–3 July 2016, Budapest, Hungary
6. Lectures in the Indian Academy of Allergy's Congress (IAACON), IAACON 2016, 22–24 July 2016, Kolkata
7. Workshop on Spirometry Guidelines for India, PGIMER, 30–31 July 2016, Chandigarh
8. Sunrise, CHEST Live Learning program, Sunrise, CHEST Live, 6–12 August 2016, Bangalore, Karnataka
9. An approach to a case of ILD, 2 October 2016, Pimpri, Pune, Maharashtra
10. Certificate Course in Management of COPD and Asthma (CCCA Cycle 1) in Association of Physicians of India, 15 & 16 October 2016, New Delhi
11. ICP to approach ILD, RAJAPICON 2016, 16 October 2016, Jodhpur, Rajasthan
12. Symposium on Respiratory Allergy and Impact of Air Pollution, CHEST Physician, 6 November 2016, Kanpur, Uttar Pradesh
13. Air Pollution and Health, Laying the foundation for effective use of Ahmedabad, 13 December 2016, Ahmedabad
14. Bronchoscopy, Pulmonary function test (PFT) and arterial blood gases (ABG), New Delhi
15. Talk on NIV, from IRCU to Ward during the pulmonology primer, 10th February, Cochin

G.C. Khilnani: 23

1. Respiratory viral infections challenges and solutions, Convergence of minds: Parts-I bench to bedside at I.H.C., Delhi on 7 May 2016
2. Current challenges and future perspectives, ECMO, Fortis Memorial Res. Institute, Gurgaon, 23–24 July 2016
3. Will cTBN Asurvive?, 3rd International Endobronchial Ultrasound and 7th International Endoscopic Ultrasound Workshop and CME, 13–15 August 2016
4. Weaning from non-invasive ventilation, DCCS, 2016, First ICCMD Course, IHC Delhi, 9–10 September 2016
5. Mechanical ventilation - II, 35th Comprehensive Critical Care Course (\$c) organised by ISCCM from 3–5 October 2016 at New Delhi
6. Current status of NIV in clinical practice, 18th Joint National Conference on Pulmonary Diseases (NAPCON-2016) at Mumbai from 24–27 November 2016
7. Early mobilization interventions in mechanically ventilated patients in the ICU, 18th Joint National Conference on Pulmonary Diseases (NAPCON-2016) at Mumbai, 24–27 November 2016
8. Asthma in the ICU setting, NATCON, 2016 at PGIMER, Chandigarh, 16 & 17 December 2016
9. Pneumonia changing microbiology and management strategies in microbiology and bedside clinical practice, Seven Decade Celebration at SMS Med College, Jaipur on 26–30 December 2016
10. Mechanical ventilation in a patient with liver disease, Pre-conference Symposium, 1st National Conference on Critical Care and Infections in Liver Diseases at ILBS, New Delhi, 25 & 26 January 2017
11. Assessment and management of respiratory failure in a critically ill cirrhotic, 1st National Conference on Critical Care and Infections in Liver Diseases at ILBS, New Delhi, 25 & 26 January 2017
12. Fluid therapy in ARDS patients, 23rd Annual Conference of Indian Society of Critical Care Medicine CRITICARE, 2017, Kochi, 2–5 February 2017
13. Evolving concept – NIV in hypoxemic vs hypercapnic respiratory failure, ACPCON, Kolkata, 11–12 February 2017
14. Fluid therapy in ARDS patients, 23rd Annual Conference of Indian Society of Critical Care Medicine CRITICARE-2017, Kochi, 3–5 February 2017, Indian Society of Critical Care Medicine (ISCCM)
15. Speaker and course director, “NIV Workshop” organized by Vidarbha Chest Society at Nagpur on 12 February 2017
16. Community acquired pneumonia, Physicians Forum, Indian Medical Association, Jalandhar, 26 February 2017
17. Diagnostic bronchoscopy in immunocompromised patients, BRONCOCON-2017, Christian Medical College, Vellore, 2–4 March 2017
18. Panel discussion: TB treatment: What is new, World TB Day Symposium, Department of Microbiology, AIIMS, 22 March 2017
19. Community acquired pneumonia, PCCM CME 2017, Pt. BD Sharma PGIMS, Rohtak, 25–26 March 2017
20. Fundamentals of NIV, PCCM CME 2017, Pt. BD Sharma PGIMS, Rohtak, 25–26 March 2017
21. Graphics and troubleshooting, PCCM CME 2017, Pt. BD Sharma PGIMS, Rohtak, 25–26 March 2017

22. Management challenges in CAP, PCCM CME 2017, Pt. BD Sharma PGIMS, Rohtak, 25–26 March 2017
23. Asthma vs COPD, 42nd Workshop on Respiratory Allergy: Diagnosis and Management, VP Chest Institute, Delhi, 28 March 2017

Anant Mohan: 18

1. Acute severe asthma, National Conference on Allergy and Asthma, 5 April 2016, VP Chest Institute, Delhi
2. Lung cancer masquerading as TB, ACOS 2016, 8–10 April 2016, New Delhi
3. Management of influenza, CME on Influenza, 13 April 2016, VP Chest Institute, Delhi
4. Non-malignant pleural effusions: Problems and solutions, BRONCOCON, 28 April 2016, Shere Kashmir Institute, Srinagar
5. Diagnostic investigations for sleep apnea. Workshop on Sleep Medicine, 21 May 2016, VP Chest Institute, Delhi
6. EBUS in India, in EBUS Workshop during RESPICON, 5 & 6 August 2016, NDMC Convention Centre, Delhi
7. Anatomy of tracheobronchial tree, EBUS Workshop, 13 & 14 August 2016, Jaypee Hospital, Noida
8. Spirometry Plethysmography Workshop, Indian Respiratory Summit, 20–21 August 2016, New Delhi
9. Obstructive airway diseases; Asthma treatment: Unmet needs and COPD: Burden, PULMOCON, 24–25 September 2016, Kolkata
10. Hygiene and sanitation in asthma, Indian Association of Allergy and Asthma, 23 October 2016, VP Institute, Delhi
11. Air pollution in India, PG CME, 27 October 2016, Safdarjung Hospital, New Delhi
12. Photodynamic therapy, NAPCON 2016, 27 Nov 2016, Mumbai
13. NIV Workshop, 10 December 2016, AIIMS, Rishikesh
14. EBUS by radial probe for lung cancer, NALLCON 2016, 14–15 January 2017, Bhubaneswar
15. CTD, ILD, Rheumatology Update 2017, 12 Feb 2017, MAMC, Delhi
16. ROSE in EBUS: Useful, BRONCOCON 2017, 4 March 2017, CMC, Vellore
17. Which stents to use?: Rigid bronchoscopy in the era of flexible bronchoscopy, Advanced Interventional Pulmonology Course, 19 March 2017, Pranayam Hospital, Vadodara
18. Innovations in MDR TB treatment, TB Day Symposium, 22 March 2017, AIIMS, New Delhi

Karan Madan: 21

1. High Resolution and Auto Fluorescence Bronchoscopy, Participated as Faculty and delivered a lecture at 21st Annual Conference of the Indian Association for Bronchology, BRONCOCON 2016, 28 April 2016, Srinagar, Jammu & Kashmir
2. Role of conventional TBLB and cryo TBLB in Interstitial Lung Disease at the Interventional Pulmonology League 2016, 4 June 2016, Mumbai
3. Role of airway stenting in carinal lesions and tracheoesophageal fistula at the Interventional Pulmonology League 2016, 4 June 2016, Mumbai
4. Electro cautery and airway stents at the Interventional Pulmonology League 2016, 4 June 2016, Mumbai
5. Cryoprobe foreign body at the Interventional Pulmonology League 2016, 4 June 2016, Mumbai
6. Interventions in difficult airway diseases at the one-day CME Program, (PACS-2016), 17 July 2016, Noida
7. How I manage hemoptysis in the Baroda chest group CME on respiratory emergencies. 18 September 2016, Vadodara
8. Standard of care of patients with ARDS: Ventilatory settings and rescue therapies for refractory hypoxaemia at CRITITALK 2016, 1st North East Annual Update of ISCCM, Guwahati Branch, 22 September 2016, Guwahati
9. TBNA, How do I do it and current indications in times of EBUS at the Bronchoscopy CME, 13 November 2016, AIIMS, Bhopal
10. Rigid bronchoscopy, Overview at the Bronchoscopy CME, 13 November 2016, AIIMS, Bhopal
11. Mesenchymal stem cells and stem cell therapy in lung biology, NAPCON 2016, 26 November 2016, Mumbai
12. Pleurodesis in the Symposium on Pleural diseases – How I do it, NATCON 2016, 16 December 2016, Chandigarh
13. Carcinoma lung, diagnosis and staging at contemporary practices in surgery: Symposium on Thoracic Surgery 2017, 22 January 2017, AIIMS, New Delhi
14. Controversies and consensus in management of lung cancer, Contemporary Practices in Surgery: Symposium on Thoracic Surgery 2017, 22 January 2017, AIIMS, New Delhi

15. Workshop on Basic Bronchoscopy and EBUS-TBNA, 1st AIIMS Jodhpur Workshop on Interstitial Lung Diseases, 28 January 2017, AIIMS, Jodhpur
16. Bronchoscopy in ILD and cryoprobe transbronchial lung biopsy, 1st AIIMS, Jodhpur Workshop on Interstitial Lung Diseases, 29 January 2017, AIIMS, Jodhpur
17. Role of nurses in cardiopulmonary rehabilitation at the heart failure 360 degrees–3rd Annual Conference, 4 February 2017, Chennai
18. Rigid bronchoscopy and airway stenting: Nuts and Bolts, Tata Memorial Hospital, 16 February 2017, Mumbai
19. Rls, narcolepsy, parasomnia at the National CME and Workshop on Polysomnography, 25 February 2017, Mullana
20. Severe Asthma at the RESPICON-2, Respiratory CME, Saharanpur, 26 February 2017, Saharanpur
21. Use of rigid bronchoscopy in the era of flexible bronchoscope, BRONCOCON 2017, Christian Medical College, 2 March 2017, Vellore, India

Vijay Hadda: 4

1. Spirometry for pulmonologists, Indian Respiratory Summit, 20–21 August 2016, New Delhi
2. Aerosolized nano-antimicrobial therapeutic for pulmonary TB-NAPCON 2016, 27 November 2016, Mumbai
3. CBNAAT in extra-pulmonary TB-NATCON 2016, 17 December 2016, PGI, Chandigarh
4. Genexpert in tuberculosis, TB Day Symposium, 22 March 2017, AIIMS, New Delhi

Oral papers/posters presented: 4

1. Lung infection case reports: Infections other than fungal infections, International Conference ATS-2016, 18 MAY 2016, San Francisco, California, USA
2. Alterations in body composition in non-small cell lung cancer and their clinical implications, IASLC Congress, 4–7 December 2016, Messe Wien Congress Centre, Vienna
3. Does tissue EGFR mutation status predict treatment response and mortality in lung cancer? IASLC Congress, 4–7 December 2016, Messe Wien Congress Centre, Vienna
4. A prospective study of sonographic assessment of skeletal muscle among patients with sepsis during 4th SGANZICS 2017

RESEARCH

Funded projects

Ongoing

1. Impact of host T cell response on expression and function of drug efflux pumps: Relevance to drug resistant TB, 2015–2018, Rs. 14.09 lakhs
2. Genetic and hormonal determinants of obstructive sleep apnea syndrome in obese children from North India, DBT, 2014–2017, Rs. 75.83 lakhs
3. A 12 week treatment, multi-center randomized, double blind double dummy parallel group study to assess the efficacy and safety of switching from salmeterol/fluticasone to QVA149 (indacaterol maleate/glycopyrronium bromide) in symptomatic COPD patients, Novartis Healthcare Pvt. Ltd, 2016
4. Study of evaluating linkage between poor ambient air quality and health indicators among school and college students in Delhi and CR region, Pfizer Ltd, 2016–2017, Rs. 50 lakhs
5. Role of Ets-1 and Th1 mediated biomarkers in the pathogenesis and assessment of response to treatment in patients with Sarcoidosis, DST, 2017–2020, Rs. 56.19 lakhs
6. Effect of outdoor air pollution on acute respiratory symptoms in Delhi: A multisite study, ICMR, 2017–2018, Rs. 22.48 lakhs
7. Elucidation of genetic alterations to understand the biology of non-small cell lung cancer patients, Anant Mohan, DBT, 3 years, 2015–2018, Rs. 25 lakhs
8. A multicenter, randomized, 52, week treatment, double blind, triple dummy, parallel, group study to assess the efficacy and safety of QMF-149 compared with mometasone furoate in patients with asthma, Phase III, Anant Mohan, Novartis, 2 years, July 2016, Rs. 10 lakhs

Completed

1. Design and development of personal use respiratory devices for patients with respiratory failure, DOE, 2004–2009, Rs. 22.64 lakhs
2. Double blind randomized placebo controlled clinical trial of herbal compound MA – 364 in patients with mild to moderate bronchial asthma, Maharishi Ayurveda, 2005–2013, Rs. 3.07 lakhs

3. Assessment of nutritional and antioxidant enzyme status in mechanically ventilated critically ill patients, Effects on mortality and strategies for improving nutritional support, DST, 2006–2009, Rs. 21.75 lakhs
4. A randomized double, blind placebo controlled exploratory study to assess the safety and efficacy of multiple doses of ACZ885 in COPD, 2008–2010, Rs. 6.41 lakhs
5. An interventional nutritional study in subjects with newly diagnosed active tuberculosis (TB), 2008–2011, Rs. 12.33 lakhs
6. Clinical implication of circulating DNA and protein markers in lung cancer, ICMR, 2008–2011, Rs. 23.41 lakhs
7. Genetic, metabolic and hormonal profile in obstructive sleep apnea syndrome, DST, 2008–2011, Rs. 27.38 lakhs
8. Serum leptin, nutritional status and inflammatory markers in chronic obstructive pulmonary disease, Relationship with dyspnea and severity of disease, ICMR, 2007–2011, Rs. 20.16 lakhs
9. To evaluate the efficacy and safety of fixed dose combination of formoterol and fluticasone dry powder inhaler in the management of partly controlled and uncontrolled Asthma prospective study, 2008–2009, Rs. 0.66 lakhs
10. To compare the efficacy of Yoga and Pulmonary rehabilitation on dyspnea, muscle strength, inflammatory markers and quality of life in patients with chronic obstructive pulmonary disease, ICMR, 2009–2012, Rs. 48.98 lakhs
11. Clinical trial of herbal compound MA 305 in patients with mild to moderate hypertension: A pilot study funded by Maharishi Ayurveda, 2010–2015, Rs. 1.8 lakhs
12. To study the genetic polymorphisms and correlations with cytokine and hormone levels of Macrophage migration inhibitory factor (MIF) Peroxisome Proliferator – Activated, Receptor- γ (PPAR γ) Interleukin -6 (IL-6) C-Reactive Protein (CRP), Insulin Receptor Substrate (IRS) Insulin Receptor Substrate (IRS) 1 and Leptin receptor genes in Obstructive Sleep Apnea Syndrome (OSAS) and Non Alcoholic Fatty Liver Disease (NAFLD), DST, 2012–2015, Rs. 44 lakhs
13. Detection of aberrant promoter methylation of tumor suppression genes and onco genes in tumor and serum of lung cancer patients, ICMR, 2011–2014, Rs. 22.78 lakhs
14. Role of acute lung injury biomarker gene polymorphisms in obstructive sleep apnea, ICMR, 2012–2015, Rs. 51.02 lakhs
15. Obesity and metabolic syndrome: The role of nutrition, physical activity and inflammation, DBT, 2013–2016, Rs. 81.84 lakhs
16. An observational, multicentre, prospective post marketing surveillance study (PMS) to evaluate safety and efficacy of elores (Ceftriaxone + Sulactam + Disodium Edetate) in patients with various bacterial infections (Labeled indications), 2015
17. Spectrum of pulmonary infection in HIV positive patients: Indian scenario, 2002–2006, Rs. 10.04 lakhs
18. A 12 week treatment, multi-centre randomized, double blind double dummy parallel group study to assess the efficacy and safety of switching from salmeterol/fluticasone to QVA149 (indacaterolmaleate/glycopyrronium bromide) in symptomatic COPD patients, Novartis Healthcare Pvt. Ltd, 2016
19. Evaluation of various clinical and pharmacological parameters as risk factors for treatment failure and relapse in patients with pulmonary tuberculosis on category II (retreatment) regimen, Anant Mohan, ICMR, New Delhi-3 years, 2013–2016, Rs. 40 lakhs

Departmental projects

Ongoing

1. Study of outcomes following various interventional procedures for central airway obstruction
2. An observational study of the clinico-pathological profile and outcomes in patients with lung cancer at a tertiary care center
3. To study prevalence and clinical profile for sarcoidosis patients with cardiac involvement
4. Role of polyamines in lung diseases and mediating cellular stress and apoptosis via Nef2 signaling pathway in COPD patient and cigarette smoke and biomass extract model
5. Role of Ets-1 and T helper cytokines in the pathogenesis and disease progression in patients with sarcoidosis
6. Clinical implications of detecting epidermal growth factor receptor (EGFR) gene mutations and gene expression in serum of patients with advanced Lung Adenocarcinoma
7. Role of total anti-oxidant status in the diagnosis and response to therapy in patients with pulmonary sarcoidosis
8. A prospective study of sonographic assessment of skeletal muscle among patients with sepsis
9. Comparative evaluation of mycobacterial antigen specific immune responses in sarcoidosis and tuberculosis

10. Identification and evaluation of differentially expressed protein as biomarker in urine of extra-pulmonary tuberculosis patients
11. Rigid mini thoracoscopy versus semirigid thoracoscopy in undiagnosed exudative pleural effusion: A randomized controlled trial
12. Comparison of endotracheal tube with subglottic suction drainage with standard endotracheal tube in the incidence of Airway Colonization and VAP
13. Predictors of ventilator associated pneumonia in patients of acute exacerbation with COPD and its impact on short-term and 3 months outcome
14. To study the dynamic relationship of airway colonization and endotracheal tube biofilm with ventilator associated pneumonia
15. To study antibiotics prescription practices and its effect on outcome in critically ill patients in pulmonary medicine ICU
16. Transcriceid lignocaine versus spray as you go for topical anesthesia during bronchoscopy
17. Transcriceid lignocaine versus spray as you go for topical anesthesia during EBUS TBNA
18. Nebulized Lignocaine during bronchoscopy: A Randomized Controlled Trial
19. Reliability of ultrasonographic skeletal muscle thickness measurement by various levels of health care providers in ICU
20. Ultrasonographic characteristics of diaphragm during spontaneous breathing trial
21. Sleep disordered breathing in interstitial lung disease
22. Characterization of leukocytes and prediction of outcome among patients with sepsis
23. Sleep in ICU
24. Non-invasive ventilation (NIV), Neurally adjusted ventilator assist (NAVA) vs NIV for acute hypercapnic respiratory failure in COPD: A randomized controlled trial
25. Efficacy of intrabronchial voriconazole instillation for inoperable pulmonary aspergilloma: A randomized controlled trial
26. Assessment of diaphragmatic function by ultrasonography and cervical magnetic phrenic nerve stimulation in patients with chronic obstructive pulmonary disease and healthy controls – A comparative study

Completed

1. Pulmonary complications of hematopoietic stem cell transplantation
2. Exhaled nitric oxide values in healthy Indian population and its comparison to patients with obstructive airway disease
3. Comprehensive assessment of clinical outcomes following a hospital based structured pulmonary rehabilitation program in patients with moderately severe chronic obstructive pulmonary disease and strategies for field-level implementation
4. Utility of radial EBUS in evaluation of peripheral pulmonary lesions
5. 1% vs 2% lignocaine for topical anaesthesia during bronchoscopy
6. 1% vs 2% lignocaine for topical anaesthesia during EBUS TBNA
7. The effect of pulmonary rehabilitation in patients with non-cystic fibrosis bronchiectasis: a randomized controlled trial

Collaborative projects

Ongoing

1. A double-blind, randomized, placebo controlled trial evaluating efficacy and safety of oral nintedanib treatment for at least 52 weeks in patients with “Systemic sclerosis associated interstitial lung disease” (SSc-ILD) [Rheumatology]
2. Study of the immunological impact of Type I-Interferon(s) on immune response in tuberculosis patients[Biostatistics]
3. Effects of air pollution on respiratory symptoms in Delhi-ICMR, [Lady Hardinge Medical College, VP Chest Institute]
4. Role of T-helper cells and Neutrophils in the outcome of patients with Chest Trauma [Surgery]
5. To evaluate linkage between poor ambient air quality and health indicators among school and college students in Delhi and NCR region [Pediatrics]
6. Transcriptome analysis to understand mechanism of tolerance in the hosts upon *Mycobacterium tuberculosis* infection [Laboratory Medicine]

7. Adhesive sensors for detection of tuberculosis from skin [Laboratory Medicine]
8. Comparisons of cytokines, matrix metalloproteinase and bone markers between normal, pulmonary, osteomyelitis and osteoarticular tuberculosis subjects [Orthopedics]

Completed

Study of bronchoalveolar and systemic cytokine profile and its correlation to predict outcome of pneumocystis jiroveci pneumonia amongst at-risk population. [ICMR, New Delhi]

PUBLICATIONS

Journals: 43

Chapters in books: 3

PATIENT CARE

Pulmonary Medicine OPD

New cases	10520	Old Cases	19373
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Lung Cancer Clinic

New cases	448	Old cases	1622
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Combined Pulmonary Surgery Clinic

New cases	285	Old Cases	342
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Sleep Disorder Clinic

New Cases	285	Old Cases	342
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ILD/ PAH Clinic

New Cases	204	Old Cases	262
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LABORATORIES

(A) Respiratory laboratory

Spirometry procedures	13768	Diffusion capacity estimation	2890
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MIP, MEP	424		
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Body Box (Plethysmography) measurements	80		
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(B) Bronchoscopy Laboratory

Fiberoptic bronchoscopy procedures	3591	Endobronchial Ultrasound	263
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Thoracoscopy	52	Cryotherapy	7
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Stenting	20	Rigid Thoracoscopy	42
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Electrocautery	11		
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(C) Sleep laboratory

Polysomnography studies	327	CPAP titration	205
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AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor Randeep Guleria was recipient of the prestigious “**Padma Sri**”, the fourth highest Indian civilian award in 2015 in the field of Medicine; Member of the Empowered Committee for Mid-Day Meal Scheme by the Ministry of Human Resource Development, Department of School Education and Literacy, Mid-Day Meal Division, Government of India; Member of the Independent Data Monitoring Committee (IDMC) for monitoring clinical trials constituted by the CSIR; Member of National bodies sponsored by WHO for formulating guidelines for Management of asthma and Chronic Obstructive airway diseases in India; Fellow of the National Academy of Medical Sciences; Life Member of the Association of Physicians of India; Life Member of the National College of Chest Physicians of India; Life Member of the Indian Chest society; Consultant on radiation protection for the International Atomic Energy Agency, Vienna; Member of the Scientific

Advisory Group of Expert (SAGE) Working Group of WHO on Influenza vaccines and Immunization, Geneva, Switzerland; Member of the Selection Committee, AIIMS Patna; Member of the Project Review Committee on “Tuberculosis, Leprosy and other Chest Diseases of the ICMR”; Member of the Core Group for the Asian Regional Training Course on Medication Management in Hospitals: Role of Drugs and Therapeutics Committees, New Delhi; Member of the Independent Expert Committee-Serious Adverse Events, Drugs Controller General (India) since July 2016; Member of Special Committee of “Special Centre for Molecular Medicine”, J.N.U. since September 2016; Member of Task Force “Environmental Sciences” at National Institute for Research in Environmental Health, Bhopal.

Professor G.C. Khilnani was Global Governor—American College of Chest Physicians USA, 2015–2017; Outstanding Alumnus—Seven Decade Celebration at SMS Med. College, Jaipur on 30 December 2016; Chaired sessions: Lung Cancer-II, 12th International Conference of Asian Clinical Oncology Society (ACOS), 8–10 April 2016; Combating Air Pollution North India, Jaipur, 23–24 May 2016; Tuberculosis at Extremes of ages-NATCON, 2016, PGIMER, Chandigarh, 16–17 December 2016; Preoperative and Anesthetic Challenges, Contemporary Practices in Surgery, Symposium on Thoracic Surgery 2017, Department of Surgery, AIIMS, 21–22 January 2017.

Dr Anant Mohan was nominated Fellow of the Royal College of Physicians’ (FRCP, London) since May 2015; Continues to be Fellow of American College of Chest Physicians (FCCP); Member of “Project Review Committee”, ICMR, Delhi.

9.36. Radiodiagnosis

Professor and Head
Arun Kumar Gupta

Professors

Deep Narayan Srivastava
Sanjay Sharma (RPC)
Shivanand Gamanagatti (Trauma Centre)

Raju Sharma
Ashu Seith Bhalla

Sanjay Thulkar (IRCH)
Smriti Hari
Atin Kumar (Trauma Centre)

Associate Professors

Chandan J. Das
Manisha Jana

Madhusudhan K.S.
Devasenathipathy Kandasamy

Surabhi Vyas
Chandrashekhara S.H. (IRCH)

Assistant Professors

Smita Manchanda
Ekta Dhamija (IRCH)

Ankur Goyal

Priyanka Naranje
Mukesh Yadav (IRCH)

Scientist-IV

Shashi B. Paul

Chief Technical Officer (Group A)

Kavita Taneja

HIGHLIGHTS

The Radiodiagnosis Departmental faculty was actively engaged in patient care, education and research. During the period under review the department has extended the facility of online reporting to cover plain radiographs, barium studies, intravenous urography etc. The department added two new portable ultrasound units, one high end ultrasound machine with facility for shear wave elastography and contrast enhanced ultrasound and one film digitizer. The 1.5 Tesla MR scanner in the department was upgraded on site to enhance many of the features. Faculty members delivered 182 lectures in various CMEs, national and international conferences. About 47 educational exhibits and oral papers were presented in various conferences all over the world. They were involved in 13 intramural and extramural funded research projects. Besides, they were involved in 37 completed and ongoing departmental projects and 65 projects in collaboration with other clinical departments. The faculty members were actively involved in research and published more than 110 papers in various indexed national and international journals. The department has started three new fellowships for sub-specialty training in the field of GI Radiology, Thoracic Radiology and Pediatric Radiology.

EDUCATION

Undergraduate: The Radiodiagnosis Department faculty was actively involved in teaching of undergraduate students. A total of 65 lectures were taken by the faculty for undergraduates during this period.

Postgraduates: MD: There were a total of 25 junior residents.

Academic activities for post graduate students included around 35 seminars, 35 journal clubs, 70 case discussions, 70 interesting film sessions and 80 lecture classes.

Fellows: GI Radiology: 2; Thoracic Radiology: 1; Pediatric Radiology: 2

BSc (Hons) Medical Technology in Radiography (MTR): A batch of 10 students was admitted to this course in 2015–2016. This course is of three years duration and a total of 27 students are pursuing this course.

CMEs/Workshops/Symposia/National and International Conferences organized

1. Radiology Course on CT Guided Interventions held at Lecture Theatre –I, AIIMS, New Delhi on 9–10 April 2016.
2. Radiology Course on “Paediatric Chest Imaging” in the Ramalingaswamy Board Room, AIIMS, New Delhi on 30–31 July 2016
3. 4th AIIMS-MAMC-PGI Imaging Course Series. 1st Course: GI and Hepatobiliary Imaging. JL Auditorium 18th & 19th November 2016
4. International Symposium on Urological Imaging and Intervention ISUII 2017, JL Auditorium 27–29 January 2017
5. Delhi Imaging Update: Annual conference of Delhi branch of Indian Radiological and Imaging Association, JL Auditorium 3–5 March 2017

Lectures delivered

Raju Sharma: 25

Shashi B Paul: 3

Chandan J. Das: 9

Manisha Jana: 15

Ankur Goyal: 12

Sanjay Sharma: 2

Shivanand Gamanagatti: 12

Madhusudhan K.S.: 13

Devasenathipathy Kandasamy: 14

Priyanka Naranje: 10

Ashu Seith Bhalla: 33

Atin Kumar: 21

Surabhi Vyas: 5

Smita Manchanda: 13

Raju Sharma: 25

1. Is imaging mandatory in suspected Crohn's Disease? Inflammatory Bowel Disease Summit 2016, 22–24 April, Hyderabad
2. Panel discussion on ileo-cecal ulceration: TB or not TB? Inflammatory Bowel Disease Summit 2016, 22–24 April, Hyderabad
3. Imaging cystic & neuroendocrine tumors of pancreas, Abdomino-Pelvic Imaging Workshop 2016, 7–8 May 2016, Nanawati Hospital Mumbai, Mumbai
4. Imaging pancreatic cancer, Abdomino-Pelvic Imaging Workshop 2016, 7–8 May 2016, Nanawati Hospital Mumbai, Mumbai
5. Imaging of acute abdomen, BRACE STANNUM CME, 10th July 2016, Madras Medical College, Chennai
6. Staging of pancreatic cancer: Does it fit all? Annual Conference of Delhi chapter of Indian Society of Gastroenterology, 24 July 2016, New Delhi
7. Moderated panel discussion on acute abdomen: Imaging Approach, Indo-Korean Joint IRIA-KCR Imaging Summit, 23rd July 2016, India Habitat Centre, New Delhi
8. Fetal MRI: Chest Anomalies, Pediatric Chest Imaging Course, 30th July 2016, Ramalingaswamy Board Room, AIIMS
9. Imaging of jaundice, UP State Branch of IRIA Annual Conference, 4th September 2016, BHU, Varanasi
10. Imaging of pediatric liver tumors, Annual Conference of Indian Society of Pediatric Radiology, 10th September 2016, Kolkata
11. Film reading session: Abdominal imaging, IREP: IRIA Radiology Education Program, 10–12 September 2016, MAMC, New Delhi
12. The many faces of bowel obstruction, Annual Conference of Society of Emergency Radiology, 23–24 September 2017, Vydehi Medical College, Bangalore
13. Clinical and imaging inputs in acute abdominal inflammatory conditions, Annual Conference of Society of Emergency Radiology, 23–24 September 2017, Vydehi Medical College, Bangalore
14. Film Quiz: Pediatric Chest & Abdominal Imaging, Resonance 2016, 6 November 2016, ESSEX Farms, New Delhi

15. Malignant focal lesions of liver, 4th AIIMS-MAMC, PGI Imaging Course Series, 18–19 November 2016, JL Auditorium, New Delhi
16. Film reading session: Abdominal Imaging, 4th AIIMS, MAMC, PGI Imaging Course Series, 18–19 November 2016, JL Auditorium, New Delhi
17. Conducted Dr Suren Kothari memorial film reading session for experts, 70th Annual Conference of IRIA, 5–8 January 2017, Birla Auditorium, Jaipur
18. Diffusion weighted MRI: Abdominal applications, 70th Annual Conference of IRIA, 5–8 January 2017, Birla Auditorium, Jaipur
19. Imaging of focal liver lesions, 70th Annual Conference of IRIA, 5–8 January 2017, Birla Auditorium, Jaipur
20. Imaging the mediastinum: What the surgeon needs to know? Symposium on Thoracic Surgery, 21st January 2017, Ramalingaswamy Board Room, New Delhi
21. Adrenal imaging, ISUII 2017, 27th January 2017, JL Auditorium, New Delhi
22. Film reading session: Uroradiology, ISUII 2017, 27th January 2017, JL Auditorium, New Delhi
23. GI radiology: What a gastroenterology resident need to know?, GYM Course: Conducted by Indian Society of Gastroenterology, 29th January, Gurgaon
24. Film reading session: Abdominal imaging, Delhi imaging update 2017, 3–5 March 2017, JL Auditorium, New Delhi
25. MRI of abdomen, Advances in MRI and MRS: Conference of Indian Chapter of ISMRM, 21st March 2017, Indian National Science Academy, New Delhi

Sanjay Sharma: 2

1. Prostate artery embolization, International symposium on uro-radiology, 27–29, Jan 2017, AIIMS, New Delhi
2. Orbital imaging, AIOS, ARC PG Refresher Program, 29 December 2016, AIIMS, New Delhi

Ashu Seith Bhalla: 33

1. Complications and management of chest biopsies, AIIMS Radiology Course, CT Guided Interventions, 9–10 April 2016, AIIMS, New Delhi
2. Ablation in lung, AIIMS Radiology Course, CT Guided Interventions, 9–10 April 2016, AIIMS, New Delhi
3. Facial vascular malformations, 2nd Facial Plastics and Rhinoplasty Workshop, 22–24 April 2016, AIIMS, New Delhi
4. Advance imaging: Angiography, MRI, AIIMS Pediatric Pulmonology and Intensive Care Course; Module V: Chronic Respiratory disorders, 23–24 April 2016, AIIMS, New Delhi
5. “Radiology of inner ear”, ENT Live Workshop, 30th April, 1st May 2016, Medicity, Gurugram
6. “Embolization for management of haemoptysis”, Regional Symposium on Embolization Techniques and Technologies, 15–16 August 2015, Colombo, Sri Lanka
7. “Chest TB: Translating IAP guidelines in to radiology practice”, AIIMS Radiology Course: Paediatric chest maging, 30th and 31st July 2016, AIIMS, New Delhi
8. Congenital pulmonary vascular anomalies, AIIMS Radiology Course: Paediatric Chest Imaging, 30th and 31st July 2016, AIIMS, New Delhi
9. Case based review of ILD in children, AIIMS Radiology Course: Paediatric chest imaging, 30th and 31st July 2016, AIIMS, New Delhi
10. Mediastinal pathologies, MRI as a problem solving tool, 2nd Annual Conference of AP State Chapter of IRIA, 27th and 28th August 2016, Guntur, Andhra Pradesh
11. Non, neoplastic chest wall abnormalities, 2nd Annual Conference of AP State Chapter of IRIA, 27th and 28th August 2016, Guntur, Andhra Pradesh
12. Tuberculosis mimics in chest imaging, 2nd Annual Conference of AP State Chapter of IRIA Resonance, 2015 on head and neck imaging, 27th and 28th August 2016, Guntur, Andhra Pradesh
13. Film reading session on chest radiology, IRIA Resident Education Programme IREP, From 9 to 11 September 2016, Maulana Azad Medical College, New Delhi
14. Basics of sectional imaging: Detection of laryngeal cartilage and mandibular involvement”, IFHNOS (International Federation of Head and Neck Oncological Societies) combined meeting, 12–15 October 2016, New Delhi
15. Imaging of temporal bone in relation to cochlear implant, Advanced Micro Ear Surgery Workshop, 18th and 19th October 2016, New Delhi
16. Imaging of paediatric ILD-resonance, 5 & 6 November 2016, Essex farms, New Delhi

17. Pulmonary complications in immune-compromised and post-transplant settings, CME on recent advances in liver and renal transplant imaging, 13th November 2016, Apollo Hospitals, New Delhi
18. Advanced MDCT techniques including virtual bronchoscopy in Pediatric respiratory disorders, 28th annual Conference of Indian Academy of paediatrics Respiratory chapter RESPICON, 19 & 20 November 2016. India Habitat Centre, New Delhi
19. Case based approach: Hemoptysis at the, Advanced Radiology Workshop in 28th Annual Conference of Indian Academy of paediatrics Respiratory chapter, 21 November 2016, LHMC, New Delhi
20. Case based approach in Pediatric pulmonary infections, Tuberculosis, Advanced Radiology Workshop in 28th Annual Conference of Indian Academy of paediatrics Respiratory chapter, 21 November 2016, LHMC, New Delhi
21. Airway diseases, Workshop on Chest Imaging' in Joint Annual Conference of National College of Chest Physicians, India, and Indian Chest Society NAPCON, 24–27 November 2016, Mumbai, Maharashtra
22. Tuberculosis, Workshop on Chest Imaging' in Joint Annual Conference of National College of Chest Physicians, India, and Indian Chest Society NAPCON, 24–27 November 2016, Mumbai, Maharashtra
23. Mediastinum – anatomy and tumors, Kakatiya Resident Education Program the 2nd KARE Program, 16–18 December 2016, Indo-American Cancer Hospital, Hyderabad
24. Cystic lung diseases, Kakatiya Resident Education Program the 2nd KARE Program-16–18 December 2016, Indo-American Cancer Hospital, Hyderabad
25. Lung tumors, Classification and imaging, Kakatiya Resident Education Program the 2nd KARE program, 16–18 December 2016, Indo-American Cancer Hospital, Hyderabad
26. Designing a PG thesis, 70th Annual Conference of Indian Radiological and Imaging Association, 5–8 January, 2017, Birla Auditorium, New Delhi
27. "Salivary gland imaging", 70th Annual Conference of Indian Radiological and Imaging Association, 5th–8 January 2017, Birla Auditorium, New Delhi
28. Sarcoidosis vs tuberculosis: A diagnostic dilemma, 70th Annual Conference of Indian Radiological and Imaging Association, 5–8 January, 2017, Birla Auditorium, New Delhi
29. Imaging of the lung and pleura: What a surgeon needs to know?-Contemporary Practices in Surgery: Symposium on Thoracic surgery 2017 n-January 21–2, 2017, AIIMS, New Delhi
30. Newer paradigms in imaging of larynx; Case based, World Phonocon 2017, Joint Meeting of International Association of Phonosurgery and Indian Association of Phonosurgeons, 17–19 February 2017, Gurugram
31. Imaging of solitary pulmonary nodule, 4th Radiology Resident's 'Hot seat' Review Course, 17–19 February 2017, Apollo Hospital, New Delhi
32. Interstitial lung diseases, 4th Radiology Resident's 'Hot seat' Review Course-17th-19th February 2017, Apollo Hospital, New Delhi
33. Film reading session, Chest Annual Conference of Delhi State branch of Indian Radiological and Imaging Association held, 3–5 March 2017, AIIMS, New Delhi

Shashi B Paul: 3

1. Adjunct role of shear wave elastography to B-mode ultrasound in characterizing breast Masses, 12th International Conference of the Asian Clinical Oncology Society (ACOS), 8–10 April 2016, New Delhi, India
2. Breast cancer, All that you need to know, Public lectures in Multispeciality Health Camp, 26th and 27th July, 2016 Nagrota Bhagwan-Himachal Pradesh
3. Hepatitis B and liver cancer, Public Lectures in Multispeciality Health camp, 26th and 27th July 2016, Nagrota Bhagwan, Himachal Pradesh

Shivanand Gamanagatti: 12

1. CT guided liver ablations, CME on CT guided Interventions, 09th and 10th April 2016, AIIMS, New Delhi
2. Indian registry data for interventions in the management of hepatocellular carcinoma-European Conference on Interventional Oncology, 17–20 April 2016, Dublin, Ireland
3. Cryoablation an ablation technique, Nano Knife IRE Symposium, 29–30 April 2016, PGIMER-Chandigarh
4. HCC response assessment, Delhi Imaging Update, 3-5th March 2017-AIIMS-New Delhi
5. Transarterial radioembolisation in HCC-Interventional Radiology CME and Workshop-5th February 2017-NAMS-New Delhi
6. Imaging of spinal trauma, 70th Annual Conference of IRIA, 5–8 January 2017, Jaipur, Rajasthan
7. 7-TIPS, 70th Annual Conference of IRIA, 5–8 January 2017, Jaipur, Rajasthan

8. Angioembolisation in abdominal trauma, 19th Annual Conference of Indian Society of Vascular and Interventional Radiology, 23–26, February 2017, Kolkatta
9. Angioembolisation in pelvic fractures IR: Panel discussion, Pelvic Fractures Cadaveric Course, 6–17 August 2016, *JPNA TC, AIIMS, Delhi*
10. Imaging and intervention in portal hypertension-gastrointestinal and hepatobiliary imaging, 4th AIIMS-MAMC-PGI Course series-18-19, November 2016, *AIIMS, Delhi*
11. Advances in hepatoradiology, CPLD 2016, 26–27 November 2016, PGIMER, Chandigarh
12. Interventions in renal trauma, ISUII 2017, 28–30 January 2017, AIIMS, New Delhi

Atin Kumar: 21

1. Imaging of urotrauma-international symposium on urologic imaging and intervention, 27–29 January 2017, AIIMS, New Delhi
2. Imaging protocol for trauma cases, Annual Conference of Uttarakhand state chapter of Indian Radiological and Imaging Association, 25–26 March 2017, Jolly Grant Medical College, Dehradun
3. Imaging of CNS and spinal trauma, Annual Conference of Uttarakhand state chapter of Indian Radiological and Imaging Association, 25–26 March 2017-Jolly Grant Medical College, Dehradun
4. Imaging of chest trauma, Annual Conference of Gujarat state chapter of Indian Radiological and Imaging Association, Ahmedabad, 18–19 March 2017, Convention Centre, Ahmedabad
5. Imaging of hypoxic ischemic encephalopathy, Annual Conference of Gujarat state chapter of Indian Radiological and Imaging Association, Ahmedabad, 18–19 March 2017, Convention Centre, Ahmedabad
6. Film reading session, Neuroradiology, Delhi Imaging Update 2017, New Delhi, 3–5 March 2017, AIIMS, Delhi
7. Interventions in nonabdominal trauma, 19th Annual Conference of ISVIR, 23–26 February 2017 Sonar, Kolkatta
8. Imaging of urotrauma, International Symposium on Urologic Imaging and Intervention, 27–29 January 2017, AIIMS, New Delhi
9. Imaging of acute neurological emergency, AIIMS Neurological Life Support Course-28–29 January 2017, JPNATC, AIIMS, New Delhi
10. Case in the box, Winter symposium, Vascular anomalies, Birthmarks and beyond, 13–14 January 2017, CMC, Vellore
11. Imaging and intervention in peripheral vascular trauma, 70th Annual Conference of Indian Radiological and Imaging Association, 5–8 January 2017, Birla Auditorium, Jaipur.
12. Imaging and intervention in abdominal trauma, 70th Annual Conference of Indian Radiological and Imaging Association, 5–8 January 2017, Birla Auditorium, Jaipur.
13. Imaging of abdominal trauma, 4th AIIMS MAMC PGI Imaging Course Series on GIT and Hepatobiliary Imaging, 18–19 November 2016, AIIMS, New Delhi
14. Myelination, Normal and abnormal, Resonance 2016, Pediatric Imaging, 5–6 November 2016, Essex farms, New Delhi
15. Imaging of hypoxic ischemic encephalopathy, CME of Agra chapter of UP IRIA, 22nd October 2016, Agra, Agra
16. Imaging of acute trauma, Our experience at Level 1 Trauma Centre, Invited Guest Lecture, 20th October 2016, Base Hospital, New Delhi
17. Film reading session, Neuroradiology, IRIA Resident Education Program, 10–12 September 2016, MAMC, New Delhi
18. Imaging hemodynamics in trauma and critical care, RICON 2016, 30th Annual meeting of UP chapter of IRIA, 4 September 2016, BHU, Varanasi
19. Imaging of brachial plexus injuries, 3rd KSR, IRIA Friendship Symposium on Emergency and Trauma Radiology, 23rd July 2016, India Habitat Centre, New Delhi
20. Workshop on Imaging, World Trauma Congress 2016, 16 August 2016, AIIMS, New Delhi
21. Case based Quiz, AIIMS Radiology Course, CT guided interventions, 9–10 April 2016-AIIMS, New Delhi

Chandan J. Das: 9

1. CT guided ablation of renal tumors, CT Guided Interventions, 10 April 2016, JLN Auditorium AIIMS, New Delhi
2. Approach to Adrenal Mass Imaging, IREP (IRIA Resident Education Programme) 2016, 12 September 2016, MAMC, New Delhi
3. Imaging in Hematological Malignancies, 1st NE Hematology Tutorial, 22 October 2016, Guwahati

4. Image-guided nephrostomy procedures, Indications, techniques, hardware, complications, Image Guided Therapies, 2016, 10 November 2016, Nepal
5. Imaging of Indeterminate renal mass, 70th Annual Indian Radiological Imaging Association (IRIA) Conference 2017, 5 January 2017, Birla Auditorium, Jaipur, Rajasthan
6. Diffusion weighted MRI of urinary tract lesions, International Symposium on Uroimaging & Interventions (ISUII) 2017, 29 January 2017, JLN Auditorium, AIIMS, New Delhi
7. Image-Guided Therapy for Urinary Tract Pathologies, CME on Interventional Radiology, 12 February 2017, Colombo Hospital, Colombo, Sri Lanka
8. Radiological screening, staging of patient with HCC-ISVIR 2017, 25 February 2017, Kolkata
9. Advances of Thermal Ablation-Interventional Radiology CME and Workshop, 2017-5 February 2017, NAMS Auditorium, New Delhi

Madhusudhan K.S.: 13

1. CT guided drainages in abdomen, AIIMS Radiology Course, CT Guided Interventions, 9–10 April 2016, AIIMS, New Delhi
2. CT guided lumbar sympathectomy, AIIMS Radiology Course, CT Guided Interventions, 9–10 April 2016, AIIMS, New Delhi
3. Endovascular management of intractable hematuria, Regional Symposium of Embolization Techniques and Technologies, 22–24 July 2016, Colombo
4. Imaging work up in gastrointestinal bleed: Optimum angiography technique to locate bleeding site, Regional Symposium of Embolization Techniques and Technologies, 22–24 July 2016, Colombo
5. Integrated approach to IGT for liver tumours, Evidence based treatment algorithm, Regional Symposium of Embolization Techniques and Technologies, 22–24 July 2016, Colombo
6. Barium studies: Basic concepts and applications, Resident education program of IRIA, 12 September 2016, MAMC, New Delhi
7. Acute pancreatitis, Imaging and interventions, 4 North zone conference, Punjab state chapter of IRIA, 6 November 2016, Amritsar
8. Hepatic space occupying lesions, 4 North zone conference, Punjab state chapter of IRIA, 6 November 2016, Amritsar
9. Embolotherapy in gastrointestinal bleed, 1st Annual Conference of Nepal Society of Vascular and Interventional Radiology, 10–12 November 2016, Kathmandu, Nepal
10. Acute pancreatitis, Imaging and interventions, 4th AIIMS, MAMC, PGI imaging course series, Gastrointestinal and hepatobiliary imaging, 18–19 November 2016, AIIMS, New Delhi
11. Imaging and interventions in gastrointestinal bleeding, Annual Conference of Indian Radiological and Imaging Association, 5–8 January 2017, Birla Auditorium, Jaipur, Rajasthan
12. CT guided lumbar sympathectomy, Interventional Radiology CME and Workshop, 2017, 5 February 2017, NAMS, New Delhi
13. Drainage in pancreatitis, Annual Conference of Indian Society of Vascular and Interventional Radiology, 23rd–26 February, 2017, Kolkata

Surabhi Vyas: 5

1. Imaging in head and neck, Fourth CME in surgery, 18 February 2017, AIIMS, New Delhi, Delhi
2. CT guided bone biopsy, AIIMS Radiology Course: CT guided interventions, 10 April 16, AIIMS, New Delhi
3. Case based quiz and discussion, 28th Annual National Conference of the Respiratory chapter of Indian Academy of Pediatrics, RESPICON 2016, Workshop, Advanced pediatric chest radiology and imaging, 21 November 16, LHMC, New Delhi
4. Basics of chest radiograph interpretation, AIIMS Radiology Course, Pediatric chest, October 16, AIIMS, New Delhi
5. Infertility: Imaging primer, 30th Annual Conference of UP Chapter of IRIA, 4 September 16, BHU, Varanasi

Manisha Jana: 15

1. Competitive quiz, AIIMS Radiology Course: CT guided interventions, 10th April 2016, AIIMS, New Delhi
2. Imaging in pediatric spine, 70th Annual Conference of Indian Radiological and Imaging Association (IRIA 2017), 8 January 2017, Birla Auditorium, Jaipur, Rajasthan
3. Imaging in cochlear implants, 14th Annual Conference of Indian Society of Pediatric Radiology, 10th September 2016, Kolkata, West Bengal

4. Imaging evaluation in hydronephrosis, CME on pediatric hydronephrosis, 10th September 2016, Kolkata, West Bengal
5. MRI as an imaging modality in chest disorders, Respicon 2016, 20th November 2016, Indian Habitat Centre, New Delhi
6. USG in pediatric chest, Post-Conference Workshop of Respicon 2016, 22 November 2016, LHMC, New Delhi
7. Imaging of the mediastinum, 4th Radiology Resident's 'Hot seat' Review Course, 3 March 2017, Apollo Hospital, New Delhi
8. Case discussion: Mock, Examination, 4th Radiology Resident's 'Hot seat' Review Course, 3rd March 2017, Apollo Hospital, New Delhi
9. Imaging of pediatric airway-Resonance 2016, 6 November 2016, Essex Farms, New Delhi
10. Basic Imaging: Chest X-ray, USG, and CT scan in chronic respiratory disorders, AIIMS Pediatric Pulmonology and Intensive Care Course, 24 April 2016, AIIMS, New Delhi
11. Imaging in cervical pathologies, Dr Harnam Singh Mid-term CME 2016, 21 May 2016, PGIMER and Dr RML Hospital, New Delhi
12. Pediatric Radiology: A case based review, IREP 2016, 12 September 2016, MAMC, New Delhi
13. Imaging in pediatric airway, AIIMS Radiology Course: Pediatric chest imaging-30th July 2016-AIIMS-New Delhi
14. Imaging in ILD in infants-AIIMS Radiology Course: Pediatric chest imaging-31st July 2016-AIIMS-New Delhi
15. Competitive quiz-AIIMS Radiology Course: Pediatric chest imaging-31 July 2016, AIIMS, New Delhi

Devasenathipathy Kandasamy: 14

1. CT Guided Abdominal Diagnostic Interventions, CT Guided Interventions, 9–10 April 2016-LT 1, AIIMS, New Delhi
2. Workshop on CT guided Drainages, CT Guided Interventions, 9–10 April 2016-LT 1, AIIMS, New Delhi
3. Imaging of parathyroid lesions, "Four little warriors", BRACE STANNUM 2016, 10 July 2016, Chennai
4. Optimising Pediatric Chest CT, Pediatric Chest Radiology Course, 30 & 31 July 2016, Board Room, AIIMS, New Delhi
5. Quiz in Chest Masses, Pediatric Chest Radiology Course, 30 & 31 July 2016, Board Room, AIIMS, New Delhi
6. Imaging of Pediatric Abdominal masses, 14th Annual National Conference of ISPR, 10 & 11 September 2016, Kolkata
7. Imaging investigations of thyroid – CT/MRI, National Symposium of Thyroid Cancers, 24 September 2016, India Islamic Culture Centre, New Delhi
8. Spotters in GI and Hepatobiliary Imaging, IREP, 10–12 September 2016, MAMC, New Delhi
9. Pediatric Renal Masses, Resonance 2016, 6 November 2016, ESSEX Farms, New Delhi
10. Ulceroinflammatory Diseases of Bowel, 4th AIIMS, MAMC, PGI Imaging Course Series, 18–19 November 2016, JL Auditorium, New Delhi
11. Case based Approach in Hemoptysis, Workshop on Advanced Paediatric Chest Radiology and imaging, RESPICON 2016, 21 November 2016, Auditorium, LHMC, New Delhi
12. Imaging in pediatric renal masses, 70th Annual Conference of IRIA, 6 January 2017, Birla Auditorium, Jaipur
13. PCN in infants: Urologic Interventions, ISUII 2017, 27 January 2017, JL Auditorium, New Delhi
14. Imaging in thyroid incidentaloma, Delhi Imaging Update 2017, 3–5 March 2017, JL Auditorium, New Delhi

Smita Manchanda: 13

1. Workshop on percutaneous biopsies, AIIMS Radiology Course, CT guided interventions, 10 April 2016, AIIMS, New Delhi
2. CT guided biopsies, Head and neck, AIIMS Radiology Course, CT guided interventions, 10 April 2016, AIIMS, New Delhi
3. Imaging of the endometrium, Dr Harnam Singh Mid-Term CME 2016, IRIA, 21 May 2016 PGIMER and Dr RML Hospital, New Delhi
4. Antenatal USG: Detailed evaluation of fetal chest, AIIMS Radiology Course, Paediatric Chest Imaging, 30 July 2016, AIIMS, New Delhi
5. Potpourri of cases, AIIMS Radiology Course, Paediatric Chest Imaging, 30 July 2016, AIIMS, New Delhi
6. Role of ultrasound in maxillofacial Imaging, National Postgraduate Convention, 2016 of Oral Medicine and Radiology, 21 August 2016, New Delhi

7. Sampling of face and skull base lesions, Tissue Sampling Meet on Image guided Biopsies: All you need to know, 16 October 2016, India Habitat Centre, New Delhi
8. Image guided biopsies: Female Pelvis, Tissue Sampling Meet on Image guided Biopsies: All you need to know, 16 October 2016, India Habitat Centre, New Delhi
9. Contrast media reactions, CME on Applied Radiological Physics and Recent Advances, 16 October 2016, GB Pant Hospital, New Delhi
10. Case based approach pediatric ILD, RESPICON 2016, 21 November 2016 Lady Hardinge Medical College, New Delhi
11. Chest ultrasonography: The tips and tricks, RESPICON 2016, 21 November 2016, Lady Hardinge Medical College, New Delhi
12. Doppler in transplant kidney, International Symposium on Urologic Imaging and Intervention, 2017, 27 January 2017, AIIMS, New Delhi
13. Interesting case of renal tumor: CPC, International Symposium on Urologic Imaging & Intervention, 2017-29-01-2017-AIIMS-New Delhi

Ankur Goyal: 12

1. Designing a postgraduate thesis: The essentials, 70th Annual Conference of Indian Radiological and Imaging Association (IRIA), (5–8 January 2017), Birla Auditorium, Jaipur
2. Vascular malformations: Classification and management, Mid-Term ISVIR 2016 (Joint Meeting of ISVIR 2016 with French Society of IR), 4–6 November, 2016, Trident-Mumbai
3. Pancreatic cancer imaging, 4th AIIMS, MAMC, PGI IMAGING COURSE SERIES (Gastrointestinal and Hepatobiliary Imaging-(18 & 19 November 2016), AIIMS, NEW DELHI
4. Approach to sellar and parasellar lesions, IRIA Resident Education Program 2016, 10–12 September 2016, MAMC, NEW DELHI
5. Workshop on Doppler in transplant kidney and jointly conducted the Film Reading Session with Dr Raju Sharma, International Symposium on Urologic Imaging and Intervention, 27–29 January 2017, AIIMS, NEW DELHI
6. Current applications of dual energy CT, Delhi Imaging Update 2017 (Annual Conference of Delhi state Chapter of IRIA), 3–5 March 2017, AIIMS, NEW DELHI
7. Spotter quiz session, CME on Applied Radiological Physics and Recent Advances, 15–16 October 2016, GB Pant Hospital, NEW DELHI
8. Course Faculty (Abdomen), 4th Radiology Resident's 'Hot Seat' Review Course – 2017, 17–19 February 2017, Indraprastha Apollo Hospital, NEW DELHI
9. Basics of chest ultrasound held at AIIMS, New Delhi, Symposium on Thoracic Surgery “Contemporary practices in surgery”, 21–22 January 2017, AIIMS, NEW DELHI
10. Workshop on ‘Embolization and sclerotherapy’, Interventional Radiology CME, cum Workshop (IRIA Delhi Branch), 26 March 2017, IRIA house, NEW DELHI
11. Imaging in medical conditions of neonatal chest: Image based approach, Quiz on Neonatal Imaging, workshop on “Image and dose optimization in CT”, AIIMS Radiology Course on Pediatric Chest Imaging, 30 & 31 July 2016, AIIMS, NEW DELHI
12. Miscellaneous chest interventions: Hookwire localization and percutaneous thrombin injection, Pleural drainage procedures and fibrinolysis, Drainage workshop, CT-guided Interventions Course, (9, 10 April 2016), AIIMS, NEW DELHI

Priyanka Naranje: 10

1. CT guided biopsy in chest: Approach to lesion/case modules. AIIMS Radiology Course: CT guided interventions 2016, 10 April 2016, AIIMS, New Delhi
2. FNAC/Biopsy hardware workshop, AIIMS Radiology Course: CT guided interventions 2016, 10 April 2016, AIIMS, New Delhi
3. Imaging in non-tuberculous chest infections in children: Imaging based approach, AIIMS Radiology Course: Pediatric chest Imaging 2016, 30 & 31 July 2016, AIIMS, New Delhi
4. Imaging in a child with recurrent chest infections, Case based approach, AIIMS Radiology Course: Pediatric chest Imaging 2016, 30 & 31 July 2016, AIIMS, New Delhi
5. Imaging of chest wall deformities in children, AIIMS Radiology Course: Pediatric chest Imaging 2016, 30 & 31 July 2016, AIIMS, New Delhi

6. Workshop: Ultrasound in paediatric chest, AIIMS Radiology Course: Pediatric chest Imaging 2016, 30 & 31 July 2016, AIIMS, New Delhi
7. Chest ultrasonography: The tips and tricks, RESPICON 2016: Workshop on Advanced Radiology, 21st November 2016, LHMC, New Delhi
8. Case based approach in Pediatric pulmonary infections-RESPICON 2016: Workshop on Advanced Radiology, 21 November 2016, LHMC, New Delhi
9. Workshop on contrast enhanced USG in renal lesions, International symposium on urologic imaging and intervention, 27 January 2017, AIIMS, New Delhi
10. Pattern approach to ILD, Delhi Imaging Update, 3–5 March 2017, AIIMS, New Delhi

Oral papers/posters presented: 47

1. Shashi B. Paul, Devesh Yadav Vidyasagar R, Neeti Nadda, Shivanand R, Gamanagatti, and Subrat K Acharya, Combined Hepatocellular cholangiocarcinoma, Clinical and Imaging Findings, 12th International Conference of the Asian Clinical Oncology Society (ACOS), 8–10 April 2016, New Delhi, India
2. Vidyasagar R, Smriti Hari, Shashi B Paul and Sandeep Mathur, Matrix producing Heterologous Metaplastic Breast Carcinoma, Masquerading a Benign Mass on Mammography, 12th International Conference of the Asian Clinical Oncology Society (ACOS), 8–10 April, 2016 New Delhi, India
3. Dawesh P Yadav, Baibaswata Nayak, Neeti Nadda, Shashi Paul, Shalimar, Subrat K Achar Predictors of response to locoregional therapy in hepatocellular carcinoma patients, 12th International Conference of the Asian Clinical Oncology Society (ACOS), 8–10 April 2016, New Delhi, India
4. Smriti Hari, Shashi B. Paul, Vidyasagar R, Adarsh AD, Sanjay Thulkar, Sanjay Sharma, and Anurag Srivastava, Characteristics of Benign and Malignant Breast Masses on Shear Wave Elastography, 12th International Conference of the Asian Clinical Oncology Society (ACOS). 8–10 April 2016, New Delhi, India
5. Vidyasagar R, Smriti Hari, Shashi B Paul, Sanjay Thulkar, Surabhi Vyas, Ajay Gogia, Deo S.V.S, Seenu V, Sandeep Mathur, and Sreenivas V Assessment of response to neoadjuvant chemotherapy in breast Carcinoma using shear wave elastography Pilot work, 12th International Conference of the Asian Clinical Oncology Society (ACOS), 8–10 April, 2016, New Delhi, India
6. Sharma M, Sharma S, Jana M, Pushker N, Chawla B, Sen S, Kashyap S, Bakhshiee S, Role of DWI in Retinoblastoma, 116th Annual Meeting of the American Roentgen Ray Society, 18 April 2016, Convention Centre, Los Angeles, CA
7. Sharma S, Vishal T D, Thulkar S, Srivastava DN, Hari S, Kumar R, Elastography and Contrast USG biopsy in prostate cancer, 116th Annual Meeting of the American Roentgen Ray Society 21 April 2016, Convention Centre, Los Angeles, CA
8. E Baidya Kayal, Kandasamy D, Khare K, Tiru Alampally J, Bakhshi S, Sharma R, Mehndiratta A, Novel Strategy for Quantitative Analysis of IVIM Diffusion MRI in Ewing's Sarcoma Family of Tumours, ISMRM 2016, 7–13 May 2016 Suntec Singapore Convention and Exhibition Centre, Singapore
9. E Baidya Kayal, Kandasamy D, Khare K, Tiru Alampally J, Bakhshi S, Sharma R, Mehndiratta A-Automated Segmentation of Ewing's Sarcoma using Diffusion Weighted Imaging-ISMRM 2016, 7–13 May 2016-Suntec Singapore Convention & Exhibition Centre-Singapore
10. E Baidya Kayal, Kandasamy D, Khare K, Tiru Alampally J, Bakhshi S, Sharma R, Mehndiratta A-Quantitative estimation of IVIM parameters and Histogram analysis of diffusion MRI in Ewing's Sarcoma family of tumours, Computer assisted radiology and surgery, 21–25 June 2016, Convention Center, Heidelberg, Germany
11. Singh L, Sharma R, Kandasamy D, Madhusudhan KS, Gamanagatti S, Sahoo R, Sharma A, Chaudhary SP, Garg PK, Sahni P-Role of diffusion weighted MRI in evaluation of response to chemotherapy in gall bladder carcinoma, ASCO Annual Meeting, 2016, 3–7 June 2016, Mc Cormick Place, Chicago, IL
12. Baibaswata Nayak, Neeti Nadda, Dawesh Yadav, Shashi B. Paul, Shalimar, Subrat K. Acharya. Differential expression of circulating miRNAs among healthy, diseased controls and HCC patients, Pilot study, 24th Annual Scientific Meeting of Indian National Association of Liver (INASL), 5–7 August 2016, Gurgaon, Delhi (NCR)
13. Shashi B. Paul, Prasenjit Das, Hanish Sharma, Maneesh Vijayvargiya, Shourio Ghosh, R. Vidyasagar, Dawesh Yadav, Shivanand R., Gamanagatti, Shear wave elastography for assessment of liver fibrosis in chronic hepatitis: Pilot Work, 24th Annual Scientific Meeting of Indian National Association of Liver (INASL), 5–7 August 2016, Gurgaon, Delhi (NCR)
14. Neeti Nadda, Shalimar, Saurabh Kedia, Baibaswata Nayak, Dawesh Yadav, Mona Pathak, Shashi B. Paul, Subrat K. Acharya, Post-transarterial chemoembolisation liver failure is associated with poor outcome in hepatocellular carcinoma, 24th Annual Scientific Meeting of Indian National Association of Liver (INASL), 5–7 August 2016, Gurgaon, Delhi (NCR)

15. Shashi B. Paul, Shivanand R. Gamanagatti, Vishnubhatla Sreenivas, Devesh P. Yadav, Neeti Nada, Baibaswata Nayak, Shalimar, Subrat K. Acharya, Transarterial chemotherapy versus oral chemotherapy in the treatment of unresectable hepatocellular carcinoma with portal vein thrombosis: A randomized controlled trial, 24th Annual Scientific Meeting of Indian National Association of Liver (INASL), 5–7 August 2016, Gurgaon, Delhi (NCR)
16. Taruna Yadav, Shivanand Gamanagatti, Atin Kumar, Amit Gupta, Interventional Radiology in Trauma at a Tertiary Level Care Center: Lessons to be learnt by a radiologist, World Trauma Congress 2017, 17–20 August 2016, Nirman Bhawan, New Delhi
17. Taruna Yadav, Shivanand Gamanagatti, Atin Kumar, Amit Gupta, Blunt bladder trauma: What resident should not miss in emergency, World Trauma Congress 2017, 17–20 August 2016, Nirman Bhawan, New Delhi
18. Taruna Yadav, Atin Kumar, Shivanand Gamanagatti, Sumit Sinha, Beyond broken bones: Imaging evaluation of traumatic brachial plexus injuries, World Trauma Congress 2017, 17–20 August 2016, Nirman Bhawan, New Delhi
19. Yadav AK, Sharma R, Kandasamy D, Gamanagatti S, Bhalla AS, Garg PK, Role of Volume Perfusion CT in Diagnosis of Pancreatic Pathology, 72nd Korean Congress of Radiology 2016, 21–24 September 2016, COEX Convention and Exhibition Center, Seoul
20. Tiru Alampally J, Kandasamy D, Sharma R, Bakhshi S, V. Sreenivas, Early Response Assessment of Neo, adjuvant Chemotherapy in Ewing Sarcoma Family of Tumors: Does diffusion weighted imaging help? 72nd Korean Congress of Radiology 2016, 21–24 September 2016, COEX Convention and Exhibition Center, Seoul
21. Sundeep Malla, Surabhi Vyas, Ashu Seith Bhalla, Uma Kumar, Arun Kumar Gupta, Sanjay Thulkar*Early Rheumatoid Arthritis: From clinical palpation to sonopalpation, 72nd Korean Congress of Radiology KCR 2016, 21–24 September 2016, Seoul, Korea, Seoul
22. Razik A, Das CJ, Sharma S, Seth A, Srivastava DN Gupta AK, Role of diffusion weighted imaging in carcinoma of urinary bladder, 72nd Korean Congress of Radiology, 21–23 September 2016, Coex Hall, Seoul
23. Razik A, Das CJ, Sharma S, Renal fusion anomalies, 72nd Korean Congress of Radiology, 21–23 September 2016, Coex Hall, Seoul
24. Razik A, Das CJ, Sharma S, Typical and atypical pyelonephritis, 72nd Korean Congress of Radiology, 21–23 September 2016, Coex Hall, Seoul
25. Venkatesh HA, Srivastava DN, Sharma S and Thulkar S, Clinical outcome and MR evaluation of percutaneous laser disc decompression for treatment of low back pain, Annual Conference of Royal Australian and New Zealand College of Radiologists (RANZCR, 2016), 2016, Gold Coast, Queensland, Australia
26. Abanti Das, Ashu Seith Bhalla, Raju Sharma, Atin Kumar, Alok Thakar, V. Sreenivas, S.C. Sharma, M.C Sharma, Evaluation of neck masses using diffusion weighted MRI at 3 Tesla-IFHNOS (International Federation of Head and neck Oncological Societies) Combined Meeting, 12–15 October 2016, New Delhi
27. Madhusudhan KS, Pattanaik P, Srivastava DN, Pal S, Dash NR, Ahuja V, Sahni P, MDCT esophagography in esophageal carcinoma, Annual Conference of National Academy of Medical Sciences, 22nd October 2016, AIIMS, Raipur
28. Neeti Nadda, Shalimar, Saurabh Kedia, Baibaswata Nayak, Dawesh Yadav, Mona Pathak, Shashi B. Paul, Subrat K. Acharya, Post-transarterial chemoembolisation liver failure is associated with poor outcome in hepatocellular carcinoma, Asian Pacific Digestive Week (APDW), 2–5 November 2016, Kobe, Japan.
29. Shruthi M, M Kabra, N Gupta, A K Gupta, R Sharma, M Jana, Utility of Virtual Autopsy (Postmortem MRI) in the phenotypic characterization of stillbirths, 102nd Annual Conference and Scientific Assembly of RSNA, 27th November 2016, McCormick Place, Chicago
30. Makhija N, Madhusudhan KS, Srivastava DN, Sharma R, Gamangatti S, Naval NK, Role of sonoelastography in monitoring patients of NAFLD: Comparison with MRI, A Prospective Study, 102nd Annual Conference of RSNA, November–December 2016, McCormick Place, Chicago
31. Smriti Hari, Shashi B. Paul, Vidyasagar R, Adarsh AD, Sanjay Thulkar, Sanjay Sharma, and Anurag Srivastava, Shear wave elastography characteristics of benign and malignant breast masses, 70th Annual Conference of Indian Radiology and Imaging Association (IRIA), 5–8 January 2017, Jaipur, India
32. Madhusudhan KS, Chahal A, Vyas S, Aggarwal S, Chumber S, Sharma S-CT guided lumbar sympathectomy as a palliative treatment in patients with peripheral vascular disease of lower limbs not amenable to reconstructive therapy, 70th Annual Conference of Indian Radiological and Imaging Association, 5–8 January 2017, Birla Auditorium, Jaipur, Rajasthan
33. Vidyasagar R, Smriti Hari, Shashi B Paul, Sanjay Thulkar, Surabhi Vyas, Ajay Gogia, Deo S.V.S, Seenu V, Sandeep Mathur, and Sreenivas V. Assessment of response to Neo, Adjuvant chemotherapy in breast carcinoma using shear wave elastography, Pilot Work, 70th Annual Conference of Indian Radiology and Imaging Association (IRIA), 5–8th January 2017, Jaipur

34. Manchanda S, Bhalla AS, Naranje P, Gupta AK, Sharma SC, Central skull base foramina: 'Up and down' transition of pathologies, 70th Annual Conference of Indian Radiological and Imaging Association, 05–08 January 2017, BM Birla Auditorium, Jaipur
35. Ankur Goyal, Deep Narayan Srivastava, Tahir Ansari, Vijay Kumar D, Tunnels and Crossings of the upper limb: Imaging road map, 70th Annual Conference of Indian Radiological and Imaging Association (IRIA), (January 5–8 2017), Birla Auditorium, Jaipur
36. Savinay Kapur, Priyanka Naranje Shivanand Gamanagatti, Smita Manchanda, Arun Kumar Gupta. Vascular causes of acute abdomen: A pictorial essay, 70th Annual Conference of Indian Radiological and Imaging Association (IRIA 2017), 5–8 January 2017, MP Birla Auditorium, Jaipur
37. Priyanka Naranje, Savinay Kapur, Arun Kumar Gupta, Perianal fistulae: How to keep the surgeon happy, 70th Annual Conference of Indian Radiological and Imaging Association (IRIA 2017), 5–8 January 2017, MP Birla Auditorium, Jaipur
38. Manchanda S, Vora Z, Naranje P, Gupta AK, Kumari R, Kulshrestha V, Kriplani A., Where's endometriosis, The Waldo of female pelvis, 70th Annual Conference of Indian Radiological and Imaging Association, 5–8 January 2017, BM Birla Auditorium, Jaipur
39. Vora Z, Manchanda S, Sharma R, Hari S, Das C J, Kumar S, Kacchawa G, Endometrial Pathologies: Evaluation by dynamic contrast enhanced MRI, 70th Annual Conference of Indian Radiological and Imaging Association, 5–8 January 2017, BM Birla Auditorium, Jaipur
40. Kharbanda OP, Kandasamy D, Qureshi T, Cervical vertebrae anomalies in Cleft Lip and palate patient, International Cleft Congress 2017, 8–11 February, 2017, Radisson Blu Resort, Temple Bay, Mahabalipuram, Chennai
41. Naranje P, Bhalla AS, Kumar N, Goyal A, Manchanda S, Salinoma expanding the scope of this lung protective measure in CT guided biopsy procedures, 19th Annual Conference of Indian Society of Vascular and Interventional Radiology, 23–26 February 2017, Kolkata
42. Ashu Seith Bhalla, Ankur Goyal, Shivanand Gamanagatti, Devasenathipathy Kandasamy. Bleeding Mandibular AVM: Description of a novel percutaneous technique as useful adjunct to transarterial embolization, 19th Annual Conference of the Indian Society of Vascular and Interventional Radiology (ISVIR), 23–26 February 2016 Kolkata
43. Taruna Yadav, Shivanand Gamanagatti, Atin Kumar, Spectrum of peripheral vascular injuries: A Comprehensive Review of Imaging Features with Surgical Correlation, European Congress of Radiology 2017, 1–5 March 2017, Austria Centre, Vienna
44. Taruna Yadav, Shivanand Gamanagatti, Atin Kumar, Minimally invasive way of managing penetrating vascular injuries: Role of interventional radiology, European Congress of Radiology 2017, 1–5 March 2017, Austria Centre, Vienna
45. Taruna Yadav, Shivanand Gamanagatti, Atin Kumar, With or without breaking the spine: A pattern approach for MR imaging of spinal cord injuries, European Congress of Radiology 2017, 1–5 March 2017, Austria Centre, Vienna
46. Rangarajan K, Kandasamy D, Jana M, Singh L, Ramalingam V, Modified, Seldinger technique for paediatric percutaneous nephrostomy, European Congress of Radiology 2017, 1–5 March 2017, Austria Center, Vienna
47. E Baidya Kayal, Kandasamy D, Khare K, Tiru Alampally J, Bakhshi S, Sharma R, Mehndiratta A-Quantitative estimation of IVIM parameters and histogram analysis of diffusion MRI in osteosarcoma, Recent advances in MRI and MRS, 21–23 March 2017, Indian National Science Academy, New Delhi

RESEARCH

Funded projects

Ongoing

1. Diffusion tensor imaging (DTI) to assess renal acute allograft dysfunction in renal transplant patient, Chandan J Das, DST, 2 years, 2016–18, Rs. 23.59 lakhs
2. Evaluation of incremental role of MR perfusion in the characterization of neck masses, Smita Manchanda, AIIMS, 2 years, 2016–2018, Rs. 1 lakh
3. Evaluation of the graft kidney by contrast-ultrasound and elastography in early post-operative period, Ankur Goyal, AIIMS, 2016–2017, Rs. 5 lakhs
4. Pilot Implementation of Collaborative Digital Diagnosis System (Collab DDS) Using Medical Imaging, Arun Kumar Gupta, Department of Health Research, 2015–2017, Rs. 114 lakhs
5. Role of Whole body MRI in the evaluation of pyrexia of unknown origin with non, Diagnostic preliminary investigations, Devasenathipathy Kandasamy, AIIMS, 2015–2017, Rs. 3.5 lakhs

6. Management of bilio-enteric anastomotic strictures: Role of percutaneous interventions, Madhusudhan KS, AIIMS, 2016–17, Rs. 5 lakhs
7. Role of MRI in differentiation of mediastinal and Hilar lymph nodes in patients suspected of tuberculosis versus sarcoidosis, Priyanka Naranje, AIIMS, 2016–2018, Rs. 2.12 lakhs
8. Evaluation of efficacy, safety and outcome of splenic artery embolization in traumatic splenic injuries, Atin Kumar, AIIMS, 2015–2017, Rs. 5 lakhs

Completed

1. A comparison of transjugular liver biopsy and co-axial ultrasound guided plugged percutaneous liver biopsy in patients with impaired coagulation, Shivanand Gamanagatti, AIIMS, 2015–2017, Rs. 5 lakhs
2. Pilot Implementation of Collaborative Digital Diagnosis System (Collab DDS) Using Medical Imaging, Arun Kumar Gupta, National Knowledge Network, 2 years, 2013–2015, Rs. 1.3 lakhs
3. Role of non-contrast MRI including diffusion weighted imaging in evaluation of synovitis of small joints of wrist and hands in patients of Rheumatoid Arthritis (RA). Surabhi Vyas, AIIMS, 2 years, 2014–2016, Rs. 1 lakh

Departmental projects

Ongoing

1. Role of contrast enhanced ultrasound in the diagnosis of hepatocellular carcinoma in patients of cirrhosis and in the assessment of tumor response after percutaneous ablation
2. Assessment of liver fibrosis in patients with Chronic liver disease using transient elastography, shear wave elastography and serum biochemical markers
3. Role of shear wave elastography in assessment of response to neo adjuvant chemotherapy in patients with breast cancer
4. Role of microRNAs as a biomarker in hepatocellular carcinoma
5. Role of multiparametric MRI in evaluation of locally advanced rectal cancer
6. Role of multiparametric MRI, diffusion tensor imaging and real time ultrasound elastography in evaluation of prostate cancer
7. Evaluation of feasibility of shearwave sono, Elastography in the assessment of uterine pathology with MRI and/ or histopathology correlation
8. Role of multiparametric MRI and Ga, 68 PSMA PET scan in evaluation of intermediate and high risk prostate cancer
9. Advanced imaging and image guided interventions in chronic back pain
10. Role of shearwave elastography and multiparametric MRI in the assessment of endometrial pathology
11. Randomised controlled trial of uterine artery embolization vs abdominal hysterectomy for symptomatic uterine fibroids in patients who have completed their family
12. Role of high frequency sonography in evaluation and management of traumatic injuries of upper limb
13. To identify the imaging features of chronic cavitary pulmonary aspergillosis and differentiate it from simple aspergilloma on DECT in patients with post-TB sequelae and hemoptysis
14. Comparison of 4DCT, MRI and flourocholine PET in the localization of parathyroid lesions in patients with primary hyperparathyroidism
15. Dual energy CT and MR evaluation of thymic lesions
16. Right sided versus left sided percutaneous transhepatic biliary drainage in the management of iliac obstruction: A Randomized Controlled Study
17. Role of dual energy computed tomography in the evaluation of liver fibrosis in patients of chronic liver disease
18. Role of MRI in evaluation of residual tumor burden following neoadjuvant therapy in patients with breast cancer
19. To identify the imaging features of chronic cavitary pulmonary aspergillosis and differentiate it from simple aspergilloma on dual energy CT in patients with post-TB sequelae and hemoptysis
20. Imaging of infantile brachial plexopathy
21. Lung ultrasound for diagnosis of early ventilator associated pneumonia in critically ill
22. Comparison of mesotherapy (non-operative) with surgery in management of superficial lipomas
23. Role of shear wave elastography in diagnosis, prognostication and follow up of neonatal/ infantile cholestatic liver diseases
24. Role of contrast enhanced ultrasound in the evaluation of solid organ injuries in blunt abdominal trauma
25. Diagnostic and prognostic role of MRI in acute traumatic cervical cord injury

Completed

1. Role of MRI in preoperative assessment of breast carcinoma patients
2. Role of dual phase CT in blunt abdominal trauma role of dual phase CT in blunt abdominal trauma
3. Role of split bolus dual energy single acquisition CT in evaluation of urological diseases of the upper urinary tract
4. MRI evaluation of chronic elbow pain
5. Utility of dual energy CT angiography (Combined Bronchial and Pulmonary Protocol) in hemoptysis
6. Role of DWI in response evaluation of oral carcinoma
7. Role of MRI in the diagnosis and follow-up of non-alcoholic fatty liver disease
8. Role of ultrasonography with power doppler in the evaluation of rheumatoid arthritis of hand and wrist joints: Comparison with MRI and radiography
9. Role of perfusion CT in predicting the response to chemoradiation in carcinoma cervix
10. Evaluation of PET/CT versus CECT in baseline, interim, and post treatment assessment of paediatric hodgkin lymphoma
11. Role of MR enterography in ulceroconstrictive diseases of small bowel
12. Role of CT cisternography and MR cisternography in patients with traumatic CSF rhinorrhoea

Collaborative projects

Ongoing

1. ¹⁷⁵Lu dosimetry in castration resistant prostate cancer [Nuclear Medicine]
2. 3D ultrasound to evaluate fetal femoral volume. [Endocrinology, Metabolism and Diabetes]
3. A randomised controlled trial for comparison of success-rate between costochondral graft interpositional arthroplasty and transport disc distraction osteogenesis in treatment of temporomandibular joint ankylosis [Dental-OMFS]
4. A retrospective study on the outcome of operated cases of TMJ ankylosis in a tertiary care centre [Dental-OMFS]
5. A retrospective study to compare the outcomes in different management strategies of pediatric mandibular fractures [Dental-OMFS]
6. A split face randomized controlled study comparing the efficacy of fractional CO₂ laser and microneedling in the treatment of acne scars [Dermatology and Venereology]
7. Achalasia cardia: Long term outcome and assessment of factors predicting outcome following laparoscopic Heller's cardiomyotomy. [Surgical Disciplines]
8. An evaluation of the effect of shortened dental arch on the thickness of masseter muscle and bite force: A preliminary study, [Division of Prosthodontics, CDER]
9. Analgesic efficacy and safety profile of glossopharyngeal nerve block using extra-oral approach by landmark technique versus ultrasound guided technique in patients with eagle's syndrome: A randomized, prospective, controlled trial, [Anaesthesiology, Pain medicine and Critical care]
10. Applicability of laparoscopic ultrasound in various intra-abdominal pathologies, A prospective observational study, [Surgical disciplines]
11. Assessment of depth of invasion in oral cavity squamous cell carcinoma by clinical palpation and radiology and their correlation to histopathological depth of invasion, [Otorhinolaryngology, Head and neck surgery]
12. Assessment of sleep apnoea in acromegaly and correlation of its severity with clinical, laboratory parameters and imaging of pharynx [Endocrinology, Metabolism and Diabetes]
13. Association of NAFLD with adiposity, bone mineral density and nutrient intake, [Medicine]
14. Bone mineral density in children and adolescents with congenital adrenal hyperplasia receiving physiological steroid replacement, Pediatrics
15. Clinical, biochemical, hormonal, functional characteristics and FTO gene variation in women with PCOS with or without history of type 2 diabetes, [Endocrinology, Metabolism and Diabetes]
16. Comparison between two regimens of intermittent ulipristal acetate treatment in management of uterine myomas: Pilot study [Obstetrics and Gynaecology]
17. Comparison of color doppler and CT portography in EHPVO, [GI Surgery]
18. Comparison of mesotherapy with surgery in management of superficial lipomas. [Surgical disciplines]
19. Diagnosis of patients of oligoarthritis with special reference to brucellosis and Lyme's disease, [Medicine]
20. EBUS in mediastinal lesions, Correlation with CT and PET, CT, Medicine

21. Effect of visceral fat and serum adipocytokines on severity and Course of IBD and intestinal TB, [Gastroenterology]
22. Estimation of diagnostic yield of bronchoscopy and bronchoscopic procedures in patients presenting with fever and miliary shadowing in chest imaging, [Medicine]
23. Evaluation of epidermal growth factor receptor (EGFR) expression in cholesteatoma sac in different types of pneumatization of temporal bone, [Otorhinolaryngology, Head and neck surgery]
24. Evaluation of gene expert in tubercular lymphadenopathy, Medicine
25. Evaluation of upper airways in continuous positive airway pressure (CPAP) failure or non-compliant cases to improve its compliance by surgery in obstructive sleep apnoea syndrome (OSAS) cases. [Pulmonary medicine and Sleep disorders]
26. Gallium-68 (Ga-68), labeled PSMA PET/CT in the evaluation of prostate cancer patients, [Nuclear medicine]
27. IVIM DWI MRI in patients with osteosarcoma and Ewing's Sarcoma family of tumors [Biomedical Engineering, IIT Delhi]
28. Opportunistic infection in AIDS [Medicine]
29. Osteopontin as a biomarker and its relationship with phenotypic severity score in enzyme naive children with Gaucher Disease, [Pediatrics]
30. Pilot study to assess the role of metabolic imaging in patients with undiagnosed abdominal pain, [Surgical Disciplines]
31. Pituitary adenoma in Cushing's syndrome. [Anatomy]
32. Preoperative prediction of tumor angiogenesis by DW MRI and perfusion CT in renal cell carcinoma and using these biomarkers to predict tumor grade in advanced renal cell carcinoma. [Urology]
33. Prevalence and risk factors of allergic bronchopulmonary aspergillosis in children with poorly controlled asthma, [Pediatrics]
34. Pulmonary infections in renal transplant recipients: a prospective cohort observational study, [Nephrology]
35. Randomized controlled trial of N-acetylcysteine in prevention of renal failure in hepatocellular carcinoma patients undergoing transarterial chemotherapy and transarterial chemoembolization [Gastroenterology]
36. Role of chest radiograph in predicting length of central line, [Anaesthesiology, Pain Medicine and Critical Care]
37. Role of cytokines in severe dengue infection, [Medicine]
38. Role of inflammation in Indian women with polycystic ovary syndrome (PCOS) and its modulation by dietary factors. [Endocrinology, Metabolism and Diabetes]
39. Role of microRNA as biomarker and its modulation in HCC targeting mTOR pathway [Gastroenterology]
40. Role of MRI in evaluation of multifocality in hepatoblastoma and correlation of VEGF with multi-focality [Pediatric surgery]
41. Role of PET, CT and DWI in evaluation of tumor angiogenesis and treatment response in advanced carcinoma lung, [Nuclear Medicine]
42. Standardization of dynamic 18-F FDG PET/CT protocol and comparison of Whole Body 18-F FDG PET/CT with Diffusion Weighted MRI for early treatment response evaluation in non-small cell lung cancer, [Nuclear Medicine]
43. Study evaluating adequacy of unilateral video assisted thoracoscopic thymectomy in patients with myasthenia gravis, [Surgical Disciplines]
44. Study of the utility of FDG-PET/CT Vs CECT for the evaluation of fever of more than 4 weeks duration in HIV/AIDS (AIDS associated PUO), [Medicine]
45. Study pattern of HIV drug resistant mutations in HIV patients co-infected with active tuberculosis [Medicine]
46. Surgical outcome of patients with pulmonary aspergilloma, [An observational study, Surgical Disciplines]
47. To compare the efficacy of ulipristal acetate versus GnRH agonist in women with symptomatic uterine myoma and post treatment follow Up: A prospective randomized control study [Obstetrics and Gynaecology]
48. To study prevalence of cerebral oedema and neuropathological changes in brain in acute on chronic liver failure, [Gastroenterology]
49. To study the effect of platelet rich plasma therapy on Leprosy related peripheral neuropathy [Dermatology and Venereology]
50. Treatment outcomes in patients with MDR/XDR, A prospective study [Medicine]

Completed

1. To evaluate the factors that might be associated with the patency rates of microsurgical vasopididymostomy for idiopathic obstructive azoospermia, [Urology]

2. Clinico-biochemical and radiological differences between young and late onset Rheumatoid arthritis, [Geriatric Medicine]
3. To study pituitary morphometry using MRI across different age groups, [Endocrinology, Metabolism and Diabetes]
4. Clinicoradiological correlation in congenital growth hormone deficiency. [Endocrinology, Metabolism and Diabetes]
5. Prevalence of non-alcoholic fatty liver disease in type 1 diabetes. [Endocrinology, Metabolism and Diabetes]
6. To evaluate response of radiosynovectomy in inflammatory joint condition refractory to conventional treatment modalities with Lutetium 177 in knee joint, [Nuclear Medicine]
7. Evaluation of bone mineral density in paraplegic patients with spinal cord injury, [Physical Medicine and Rehabilitation]
8. Prevalence of smooth muscle dysfunction among children with Duchenne muscular dystrophy, [Pediatrics]
9. Clinico-radiological-histopathological correlation of mandibular involvement in squamous cell carcinoma of oral cavity, [Otorhinolaryngology, Head and neck surgery]
10. A cluster randomised controlled clinical trial to evaluate fate and volumetric shrinkage of interposed pedicled buccal pad of fat and abdominal fat in the treatment of TMJ ankylosis, [Dental-OMFS]
11. Clinical comparison of effect of embolisation on resection of juvenile nasopharyngeal angiofibroma. [Otorhinolaryngology, Head and neck surgery]
12. A prospective study of sonographic assessment of skeletal muscle among patients with sepsis, [Pulmonary Medicine and sleep disorders]
13. A cross-sectional study to assess the correlation between morphology and extent of pigmentary changes in the background of cutaneous sclerosis and major organ involvement in systemic sclerosis, [Dermatology and Venereology]

PUBLICATIONS

Journals: 110

Abstracts: 11

Chapters in books: 35

Books: 3

Details of Investigations for the period of April 2016 to March 2017

S. no.	Name of investigations / Special procedures	Total no. of investigation
1	Routine X-rays <ul style="list-style-type: none"> • OPD • Indoor • Casualty • Portable Total Routine X-rays	1,00,467 25,050 54,259 45,361 2,25,137
2	Special Investigations <ul style="list-style-type: none"> • Barium Studies • Intravenous pyelography • Micturating cystourethrography • Hysterosalpingography • Operation Theater Studies • Others contrast studies Total	2013 1729 1683 792 185 1074 7,476
3	Mammography	3,442
4	Dexa Scan	183
5	Ultrasound <ul style="list-style-type: none"> • Routine • Emergency • Doppler Total	30,026 26,124 2288 58,438
6	CT <ul style="list-style-type: none"> • Body • Head Total	17,333 9,090 26,423

7	MRI	5895
8	Interventional Procedures <ul style="list-style-type: none"> • Vascular • Ultrasound –guided • CT –guided • Non-Vascular • Mammography Biopsy/FNAC Total	2067 4416 473 1513 60 8,799
	Grand Total	3,35,793

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor Deep Narayan Srivastava was advisor for the editorial board of Indian Journal of Vascular and Interventional Radiology (IJVIR)

Professor Raju Sharma received Fellowship of Indian College of Radiology & Imaging; IMA Dr V Parmeshwar Lifetime Achievement Award 2016

Professor Ashu Seith Bhalla was appointed Joint Editor, Indian Journal of Radiology and Imaging IJRI; received Academic Excellence Award 2014-15 by Delhi state branch of Indian Radiological and imaging Association IRIA

Professor Atin Kumar delivered Sir JC Bose oration at 70th Annual conference of Indian Radiological and Imaging Association held at Jaipur in Jan 2017; received Fellowship of Indian College of Radiology and Imaging; National Leadership Award by Delhi state chapter of Indian Radiological and Imaging Association

Dr Madhusudhan K.S. awarded Dr VP Lakhanpal Gold Medal for best academic contribution in the year 2014 by Indian College of Radiology and Imaging; Dr SS Misra Memorial Award for best unpublished research paper by National Academy of Medical Sciences 2016; NAMS 2007 Amritsar Award for best oral paper presentation at the Annual conference of National Academy of Medical Sciences, Raipur, 2016.

Dr Ankur Goyal received President Appreciation Award in recognition and appreciation of distinguished contribution to Radiology and IRIA, awarded at Delhi Imaging Update 2017 held at AIIMS, New Delhi

Dr Smita Manchanda: Membership of National Academy of Medical Sciences.

Dr Shashi Bala Paul received Second Prize for the Paper titled “Adjunctive role of SWE in Breast mass evaluation” in the competitive Paper presentation event in ‘Breast Imaging’ held on the 5th International Day of Radiology [IDoR-2016] – 8th November 2016 at New Delhi; Member of the ‘Task force on Hepatocellular carcinoma’, formed by the Indian National Association for the study of Liver (INASL); Member of European association of study of liver (EASL); Participated in Multispeciality Health camp at Nagrota Bhagwan, Himachal Pradesh, on July 26–27, 2016

9.37. Reproductive Biology

Professor and Head

Anand Kumar
(up to 31 October 2016)

Ashutosh Halder
(from 1 November 2016)

Additional Professor

Pradeep Kumar Chaturvedi

Assistant Professors

Surabhi Gupta

Mona Sharma

Scientists

Deepak Pandey, Scientist II

Neeraj Kumar, Scientist II

Manish Jain, Scientist I

HIGHLIGHTS

The Reproductive Biology Department is mainly involved in teaching, training, research and publication related work beside diagnostic services (reproductive hormones and cancer biomarkers) and guiding/advising/counseling referral cases from various parts of India. Training and teaching was provided to our own PhD students and various trainees of the department. Approval for starting the MSc course in Reproductive Biology and Clinical Embryology has been obtained. The first batch of MSc course started in August 2016. Department is also providing various fluorescent insitu hybridization (FISH) and polymerase chain reaction (PCR) related services as well as reproductive counseling/opinion, directly or on request from pediatrics, cardiology or clinical hematology as well as from/and outside Delhi as referral cases on request. Most of the clinical counseling was self-referral following web search (cases were with reproductive disorders, malformation, cancer, infertility, etc.). Faculty members of the department were invited by several national academics for different academic contributions (NII stem cell committee, NABL expert committee meeting, Ministry of Agriculture expert meeting, ICMR APS selection committee, MCI assessment for DM courses, MHFW, Ayush, etc.).

EDUCATION

PhD students (Registered/Ongoing):	6	MSc students	5
Trainee student:	1	SRF	1

Weekly seminars and journal club; Biweekly laboratory data presentation; Day to day case wise/laboratory work discussion

Approval for starting MSc course in Reproductive Biology and Clinical Embryology has been obtained. The first batch of MSc students joined in August 2016.

Postgraduate, MD laboratory medicine and MD biochemistry students

CMEs/Workshops/Symposia/National and International Conferences

Two sessions chaired by the faculty in International Conference on Reproductive Health with Emphasis on Strategies for Infertility, assisted reproduction and family planning and 27th Annual Meeting of ISSRF, 23–25 January 2017.

Lectures delivered

Ashutosh Halder: 3

1. Clinical spectrum of 22q11.2 microdeletion syndrome. 42nd Annual Meeting of the Indian Society of Human Genetics, 2–4 March 2017, IISc, Bangalore
2. NGS for clinical diagnostics (workshop attended), Select Biosciences India Pvt. Ltd, 18 August 2016, New Delhi
3. Precision genomics in the diagnosis of fragile X syndrome (chairing session), Indo-USA Symposium: Fragile X syndrome, 26 February 2017, AIIMS, New Delhi

Oral papers/posters presented: 8

1. Halder A. Approach to antenatally detected fetal malformations, Symposium on Antenatal Diagnosis and Management of Fetal Malformations, 6 November 2016, LHMCH, Delhi
2. Halder A, Kumar P, Jain M. Primary testicular failure: A search for ideal biomarkers, ESICON 2016, October 2016, Delhi
3. Halder A, Kumar P, Jain M. A comparative study on various biomarkers of primary testicular failure, ISSRF, January 2017, AIIMS, Delhi
4. Halder A, Jain M, Kalsi AP. Clinical spectrum of 22q11.2 micro deletion syndrome, ISHG, March 2017, IISc, Bangalore
5. Mona Sharma, Ashutosh Halder, Aparna Singh, Alka Kriplani, JB Sharma, PK Chaturvedi, Anand Kumar. Sex Chromosome Aberrations in Premature Ovarian Failure: A Pilot Study. 16th Annual Conference of National Academy of Medical Sciences (India), 21–23 October 2017, AIIMS, Raipur (Cattisgarh)
6. Dhole B, Gupta S, Kumar A. VEGF stimulation by the thyroid hormone T3 is mediated by steroids and HIF-1 in mouse leydig cells, 27th Annual Meeting of the Indian Society for the Study of Reproduction and Fertility, 23–25 January 2017, AIIMS, New Delhi
7. Shekhar S, Dhole B, Gupta S, Kumar A. A unique anti-gonadotropic effect of TSH on leydig cell derived MLTC-1 line, Endo 2017 – The Endocrine Society's 99th Annual Meeting and Expo, 28 March–4 April 2017, Orange County Convention Center, Orlando, Florida, USA
8. Jain M, Halder A. Reduction of cost of genetic diagnosis test through FISH and PRINS, 6th International CME, Workshop and Conference on Cost effective use of Technology in e-Health Care (CEUTEH, 2016), 8–10 September 2016, AIIMS, New Delhi

RESEARCH

Funded projects

Ongoing

1. An investigation to find out reasons for Phenotypic Heterogeneity/Variability in 22q11.2 deletion Syndrome, Halder A, ICMR, 2 years, 2015–2017, Rs. 41 lakhs
2. Quality control for hCG kits, P.K. Chaturvedi, HLL Lifecare Limited/Ministry of Health, Yearly-7, Rs. 80 lakhs
3. Circulating microRNAs as biomarkers for testicular germ cell tumors: A pilot study, Gupta S, AIIMS, 2 years, 2015–2017, Rs 8 lakhs
4. Role of 3, 5, 3'. L-triiodothyronine (T3) in the modulation of VEGF expression and leydig cell function, Gupta S, DBT, 3 years, 2016–2019, Rs 39 lakhs
5. High resolution sex chromosome genome analysis in pathogenesis of premature ovarian failure, Mona Sharma, AIIMS, 2 years, 2015–2017, Rs 5 lakhs
6. 6-DAC inhibitor(s) mediated genome-wide dynamics of healthy aging in *Caenorhabditis elegans*, Neeraj Kumar, SERB, DST, 3 years, 2017–2020, Rs. 52.28 lakhs

Departmental projects

Ongoing

1. Testicular germ cell arrest (maturation arrest): An investigation of phenotype-genotype correlation.
2. Etiopathology of macroprolactinemia
3. Etiology and Biomarker of Polycystic Ovarian Syndrome
4. The Genetic Determinants of Premature Ovarian Failure
5. Role of TSH on Leydig cell function
6. Etiopathogenesis of PCOD
7. Mutational analysis of Hs6st2: A Candidate Gene in Idiopathic Premature Ovarian Failure
8. To study the role of conserved RNA binding proteins (RBPs) in reproductive ageing using C-elegans as model system
9. Effects of zinc and vitamin D on prostate epithelial cells growing under the influence of prostate stromal cells
10. Genetic study on Hypospermatogenesis
11. Role of miRNAs in modulating trophoblast cell invasion.

Completed

1. Role of 3, 5, 3', L-triiodothyronine (T3) in the regulation of VEGF production in Leydig cell
2. A correlative study of fetomaternal hydrogen sulfide production with umbilical artery velocimetry in preeclampsia

Collaborative projects

Ongoing

1. A prospective, double, blind, randomized control trial to determine the effect of vitamin D supplementation on the development of active tuberculosis and pneumonia in HIV infected individuals (Medicine)
2. Randomized clinical trial to assess the efficacy of myoinositol with metformin on clinical, metabolic and hormonal parameters of polycystic ovary syndrome (Obstetrics and Gynecology)
3. Age specific nomogram of Anti mullerian Hormone and Antral follicle counts in infertile and fertile Indian women (Obstetrics and Gynecology)
4. Effect of continuous positive airway pressure therapy on neurocognitive impairment in patients with moderate to severe obstructive sleep apnea (Medicine)
5. Endothelial function in moderate to severe obstructive sleep apnea syndrome (Medicine)
6. Effect of continuous positive airway pressure therapy on neurocognitive impairment in patients with moderate to severe obstructive sleep apnea (Medicine)
7. Reference range of serum alpha feto protein in Indian children below 3 years of age (Pediatric Surgery)
8. A prospective randomized comparison of testicular function, sexual function and quality of life following laparoscopic totally extra peritoneal (TEP) and trans abdominal pre-peritoneal (TAPP) inguinal hernia repair (Surgery)
9. Effect of structured weight bearing program on bone mineral density in children with cerebral palsy (Pediatrics)
10. Role of Bone Marrow Microenvironment in Multiple Myeloma (Medical Oncology)

11. Understanding the pathophysiology of endometriosis by protein profiling and correlation with stress (Physiology)
12. Molecular Genetic Evaluation of Unexplained Stillbirths (Genetics Unit, Pediatrics)
13. Molecular biology of early immature T-cell acute lymphoblastic leukaemia (Laboratory Oncology, IRCH)
14. Evaluation of C MET gene expression in gastric adenocarcinoma and co-relation with conventional clinic, pathological parameters, a descriptive study (Pathology, UCMS/GTB, Delhi University)
15. Evaluation of hTERT amplification in cervical cytology specimens as a marker of histologic grade of cervical intraepithelial neoplasia (Pathology, UCMS/GTB, Delhi University)
16. Effect of non-ionizing electromagnetic field in human health (Biochemistry)
17. Role of urinary neutrophil gelatinase associated lipocalin in diagnosing contrast induced nephropathy (Nephrology)
18. Correlation between preoperative pain prediction questionnaire and serum progesterone and prolactin levels with postoperative analgesic requirement in lower segment caesarean section patients (Anesthesia)
19. Role of Plasma Renin Activity in predicting renal damage in patients with neurogenic bladder and its correlation with existing parameters of renal damage (Pediatric Surgery)

Completed

1. Sperm proteomics differential protein expression in normal and non-motile spermatozoa possible cases and markers (Biophysics)

PATIENT CARE

About 100 cases were referred mainly from other hospitals of Delhi or self referral for Counseling/Planning of Management/Advice and related to Reproductive Genetics in particular Male Primary Hypogonadism, Recurrent Abortion, Recurrent IVF failure, Genetic Disorders and Malformation Syndromes.

Workload in the form of laboratory service

Standardized additional molecular cytogenetic technique (in addition to ongoing fluorescent in situ hybridization services) using STR/microsatellite markers and used for patient care

CRIA Facility: Routine assays for LH, FSH, Prolactin, T3, T4, TSH, Testosterone, Estradiol, Progesterone, alpha Feto-Protein, Prostate Specific Antigen (PSA), Beta hCG, CA-125, cortisol and vitamin D in the blood samples of in and out patients were carried out in the facility. Permission to start 30 new tests has been obtained and Most of these tests are available free of cost and six of them with nominal fee for patients (Anti TPO, Anti Tg, free T3, free T4, BNP, Troponin I, CKMB, Homocystein, SHBG, CEA, CA 19.9, CA 15.3, Free PSA, Pro Grp, HE4, Active B12, Ferritin, Folate, Insulin, PTH, C-peptide, HbA1c and anti CCP, DHT, 17 Hydrox progesterone, ACTH, GH, Inhibin B and AMH). CRIA facility has done **1,69,558 tests this year, an increase of 50,000 test from last year.**

Name of assay	Number of tests done	Name of assay	Number of tests done
FSH	7224	T3	17928
LH	6425	T4	20641
Prolactin	5455	TSH	40982
DHEA-S	814	Testosterone	2467
Estradiol	1403	CA-125	2442
Progesterone	517	Cortisol	1201
AFP	5920	Vitamin D	18849
PSA	3273	Folate	4918
Beta hCG	1792	Active Vitamin B12	7643
C-Peptide	39	Anti CCP	1768
CA19.9	1099	PTH	4658
CEA	1297	ANTI-TPO	554
Ferritin	4806	Homocystein	49
Insulin	480	Free T3	15
CA 15.3	22	Free T4	23
Anti TG	184	Free PSA	5
BNP	273	Tropionin I	243

CKMB	13	17 OH progesterone	308
Cyclosporin	1	Inhibin B	315
GH	53	AMH	2871
DHT	29		
TOTAL	169558		

Andrology Lab: Semen analysis done 96; Fructose analysis done: 96.

Molecular Cytogenetics lab test: done in 100 cases

Microdeletion FISH on blood (Interphase/Metaphase cell), buccal cell, urine cell, solid tissue etc.

- Digeorge syndrome (22q11.2)
- William syndrome (7q11.23)
- Praderwilli syndrome (15q11.13)
- Retenoblastoma (13q)
- Miller decker syndrome (17p13.3)
- Langer Giedions syndrome (8q24.11)
- 1p36.13
- Wolff Hirschhorn (4p16.3)

Prenatal FISH (Amniotic fluid cells/chorionic tissue)

- Trisomy 13/21 (Down syndrome)
- Trisomy 18 (Edward Syndrome)

Sex Chromosome FISH (X, Y, SRY: only research and infertility)

YqMicrodeletion PCR (Cover app. 20 primer)

PRINS (Chromosome13, 18, 21, X, Y)

QF-PCR (DG, WS, PWS, RB, MD, Langer, Giedions, Trisomy 13, 18, 21, etc.)

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor Anand Kumar was reviewer for Indian Journal of Medical Research, Cellular Physiology and Biochemistry, Molecular Biology Reports, Journal of Animal Science and Technology; Examiner for PhD, Rajiv Gandhi Center for Biotechnology, Thiruvanthapuram.

Professor Ashutosh Halder was reviewer for Open Journal of Clinical Diagnostics of Scientific Research; Journal Clinical Case Reports and Reviews; Journal of Clinical Diagnosis and Research; Asian Journal of Medical Sciences; Austin Journal of Reproductive Medicine and Infertility; Bioinfo Publications Journals; Global Journal of Human Genetics and Gene Therapy; Clinical Research and Development: Open Access; Asian Journal of Pharmaceutical and Clinical Research; Journal of the Association of Physicians of India (Genetics section); Clinical Research and Development; Innovare Journal of Medical Science; Member, Task Force, Board of Specialty of Medical Genetics, Medical Council of India; National Accreditation Board for Testing and Calibration Laboratories (NABL) (Accreditation Committee; Genetics and Cytogenetics expert); National Institute of Immunology (Institutional Committee for Stem Cell Research and Therapy); Ministry of Agriculture (Endocrine Disruptors and Pesticides committee); ICMR Genetic Research Center, Mumbai (Scientific Advisory Committee); Assessment Board for promotion of ICMR scientists, ICMR; Examiner for DM Examinations, Medical Genetics (SGPGIMS); Examiner for PhD (various universities).

Dr P.K. Chaturvedi was Examiner for PhD/MTech Chandigarh, Calcutta University, Guwahati University, MSc NDRI Karnal, Reviewer for Journal of Andrology, Institute/Govt. Committee Member for Project Review for ICMR and DBT.

Dr Mona Sharma became Member of National Academy of Medical Sciences (MAMS).

9.38. Rheumatology

Professor and Head

Uma Kumar

Assistant Professors

Ranjan Gupta

Aarti Sharma

Danveer Bhadu

HIGHLIGHTS

The Department of Rheumatology was created in August 2015. It is providing state-of-the-art patient care services and is also instrumental in building resources which are required to deal with tremendous load of patients with rheumatological illnesses. Because of space constraint the department is able to conduct only two OPDs and one Rheumatology clinic. The 6-bed Rheumatology Day Care service which started in 2012, first time in India, is catering to the needs of patients requiring short admissions for various interventions, treatments and procedures. Various educational activities to increase awareness about arthritis and related disorders amongst the public and medical professionals are regular features. The department has been on the forefront in research also; it has research grant of Rs. 2,62,14,922 from extramural sources with many collaborative projects. The departmental clinical immunology laboratory caters to the whole hospital for various immunological investigations. Realizing the need for trained Rheumatology specialists, short-term training to medical specialists from various government organizations is being provided on regular basis. The department has an active teaching programme and it is trying to start a super-specialty course (DM) in Rheumatology.

EDUCATION

UG lectures and bedside teaching

1. Immunosuppressive therapy for connective tissue diseases
2. Overlap syndrome, MCTD, SLE, Sjogren's syndrome, Systemic sclerosis
3. Lupus Nephritis (Seminar)
4. Scope of clinical Immunology, present concept in autoimmunity and autoimmune diseases
5. Systemic necrotizing vasculitis

Bedside teaching for 4th, 6th, & 8th semester was regularly done.

PG: Seminars, bedside teaching, mortalities reviews, Journal scan and Journal club, case discussions every week

Nursing lectures: Lecture series on rheumatological disorders for various cadres of nursing staff

Short term training provided to physicians

1. Dr David Lalruatsanga (15 January 2017–14 January 2018)
2. Dr Vinod Gautam (1 March 2016–31 August 2016)
3. Dr Binaya Kumar Regmi (1 July 2016–31 December 2016)

Telemedicine lectures on 'Rheumatoid Arthritis'

CMEs/Workshops/Symposia/National and International Conferences

1. Public awareness programme on lupus, 10 May 2016, Delhi
2. Delhi Rheumatology Association monthly Clinical Meeting, 23 July 2016, Delhi
3. Public awareness programme on Arthritis, 12 October 2016, Delhi

Lectures delivered

Uma Kumar: 25

1. Gout: New insight in to an old disease, MPCON 2016, 3 April 2016, Convention Centre, Indore, MP
2. Investigations in rheumatology: Association to clinical utility, Rheumatology Update 2016, API NOIDA Chapter, 8 May 2016, NOIDA, UP
3. Management of RA in special situations, Rheumatology Update: IMA Rudrapur, 14 May 2016, IMA Hall, Rudrapur, Uttarakhand
4. Interpretation of immunological investigations in clinical practice, Rheumatology Update: IMA Rudrapur, 14 May 2016, IMA Hall, Rudrapur, Uttarakhand

5. Rheumatic diseases: An overview, 8 February 2016, Varanasi
6. Combination DMARDs vs Initial biologic in the Management of Early Rheumatoid Arthritis, Kochin Rheumatology Club Meeting, 16 May 2016, Kochi, Kerala
7. Pulmonary hypertension and ILD in CTDs (systemic sclerosis vs other connective tissue disorders), Institute Day National CME, 8 July 2016, Madras Medical College, Chennai
8. Demystifying scleroderma-ILD, Scleroderma symposium, 16 July 2016, Bengaluru
9. Importance of early detection of RA, Rheumatology CME, 28 July 2016, RML PGIMER, Delhi
10. Spondyloarthritis: Recent advances, CME on management of joint pain, 20 August 2016, IMA Hall, Nagpur
11. Approach to a patient with polyarthritis, CME on management of joint pain, 20 August 2016, IMA Hall, Nagpur
12. Approach to a patient with vasculitis, TPACON, 2016, 14 August 2016, NRI Auditorium, Kakatiya Medical College, Warangal, Telangana
13. Rheumatoid Arthritis: A case based discussion, Silver CME of IACM West Bengal Chapter, 12 September 2017, Gangtok
14. Connective tissue disease associated interstitial lung disease (CTD-ILD0), Rheumatology Update, 8 October 2016, Government Medical College, Bhopal
15. Biologics and biosimilars in rheumatology, API Delhi State Chapter Annual Conference, 16 October 2016, Delhi
16. Approach to a patient with polyarthralgia, AIIMS Arthroplasty Update 2017, 19 November 2016, AIIMS, Delhi
17. New and emerging therapies in gout, IRACON 2016, 25 November 2016, Kochi, Kerala
18. Current trends in inflammatory arthritis, INCEPT AIIMS 2016, 10 December 2016, AIIMS, Delhi
19. Approach to spondyloarthritis, connect 2016, 21 December 2016, AIIMS, Bhopal
20. Referral to a rheumatologist: Arthritis and beyond, Rheumatology CME, 28 January 2017, Madras Medical College, Chennai
21. Current trends in management of rheumatoid arthritis, Emerging trends in biotechnology and drug discovery, 10 February 2017, CSIR Institute of Genomics and Integrated Biology, Delhi University, Delhi
22. Lab reports in rheumatology: How to interpret?, Annual update of Delhi Rheumatology Association, 12 February 2017, Maulana Azad Medical College, Delhi
23. Management of RA beyond DMARDs, Rheumatology Update, 21 March 2017, Department of Medicine, Institute of Medical Sciences, BHU, Varanasi
24. Interpretation of laboratory investigations in Rheumatology practice, Guest lecture, 22 December 2016, Maulana Azad Medical College, Delhi
25. Assessing the chronic pain patient with joint pain, IASP-ISSP, 11 March 2017, AIIMS, Delhi

RESEARCH

Funded projects

Ongoing

1. To study the interplay of air pollution with autoimmunity and inflammation, Uma Kumar, 2017–2020, DST, Rs. 69.50 lakhs
2. Development of targeted Nanomedicine for the treatment of rheumatoid arthritis, Uma Kumar, 2014–2017, DBT, Rs. 42.79 lakhs
3. A Phase III, randomized, double-blind, placebo controlled multi-center study of subcutaneous secukinumab (150 mg and 300 mg) in prefilled syringe to demonstrate efficacy (including inhibition of structural damage), safety, and tolerability up to 2 years in subjects with active psoriatic arthritis (FUTURE 5), Uma Kumar, 2016–2018, Novartis India Pvt. Ltd., Rs. 19.44 lakhs
4. A multi centric, Randomized, Assessor blind, Parallel, Phase III study to evaluate clinical efficacy, Safety and pharmacokinetics of intasdenosumab (60 mg Single Use Vial) in Comparison to The Reference Listed Drug Prolia® (Denosumab, 60 mg Single Use Vial) in women with Postmenopausal Osteoporosis, Uma Kumar, 2015–2017, Lambda Therapeutics India Pvt. Ltd., Rs. 2.58 lakhs
5. A double blind, randomised, placebo-controlled trial evaluating efficacy and safety of oral nintedanib treatment for at least 52 weeks in patients with ‘Systemic Sclerosis associated Interstitial Lung Disease’ (SSc-ILD), Uma Kumar, 2016–2017, Boehringer-Ingelheim India Pvt. Ltd., Rs. 12.38 lakhs
6. Systems biology of complex diseases: from genetic findings to lead molecule development for rheumatoid arthritis, Centre of Excellence on Genome Sciences and Predictive Medicine (GESPREM) Phase II, Uma Kumar, 2015–2020, DBT, Rs. 59.60 lakhs

Completed

1. To study the effect of climate, air pollution, and socio-economic factors on health (Immunological) and disease state (Rheumatoid Arthritis), Uma Kumar, 2013–2016, DST, Rs. 55.80 lakhs

Departmental projects

Completed

1. Utility of urinary biomarkers (MCP-I and ceruloplasmin) for predicting active lupus nephritis
2. Study of association of vitamin D Deficiency in systemic lupus erythematosus flare
3. Disability and family burden in Rheumatoid arthritis

Collaborative projects

Ongoing

1. An Investigator Initiated Trial to assess the efficacy and safety of adalimumab biosimilar (Exemptia; ZRC-3197) in patients of psoriatic arthritis with concomitant moderate to severe chronic plaque psoriasis: An open labelled prospective pilot case series (Dermatology and Venereology)
2. To evaluate response of radiosynovectomy in inflammatory joint condition refractory to conventional treatment modalities with Lu-177 in knee joint (Nuclear Medicine)
3. Understanding biology of Rheumatoid Arthritis: Functional characterization of some/novel genetic determinants (Delhi University)
4. Impact of yoga and meditation on epigenetic profile in Rheumatoid Arthritis (Anatomy)
5. Focussed pharmacovigilance of rituximab pharmacology (Pharmacology)
6. Studies on the differences in gut microbiome in Inflammatory Bowel Disease (IBD) patients with or without arthritis (Amity University, NOIDA, UP)
7. Diagnosis of patients with oligoarthritis with special reference to brucellosis and Lyme's disease (Microbiology)
8. The effect of motor imagery on corticomotor excitability and pain status in rheumatoid arthritis (Physiology)

Completed

1. Magnitude of psychiatric co-morbidities in patients with rheumatoid arthritis (A Hospital based study) (Medicine)

PUBLICATIONS

Journals: 7

Chapters in books: 1

PATIENT CARE

Department caters to large number of patients. In last one year approximately 3,00,000 patients attended outpatient department.

Facilities in the department

Rheumatology Clinic: 5377

Rheumatology OPD: about 22,000 patients

Rheumatology Day care:

Pulse/Biological therapy	1409	Intraarticular injections	786
Intramuscular injections	167	Subcutaneous injections	104
Biopsies	38	Difficult case discussion	435
Ultrasound	124		
Total	3063		

Clinical Immunology laboratory

RF	9241	ANA	13173
ANCA	5308	aCL	4900
antiDS DNA	4704	Cryoglobulinaemia	164
Anti LKM	2177	ASMA	2181
Total	41873		

Community Service

1. Medical Camp
2. Organized awareness programs on arthritis at AIIMS.
3. Writing in print media to increase awareness about rheumatological disorders.
4. Participating in TV and Radio programs on arthritis.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor Uma Kumar was selected subject expert in Rheumatology by DCGI for CDSCO; Nominated by MCI as subject expert for reviewing functioning of Rheumatology department at various Universities; Nominated member on TEC of DHR, Ministry of health and family welfare, GOI; Member of various selection committees and expert groups.

Dr Ranjan Gupta received Young Researcher's bursary, 2017 given by Indian Rheumatology Association.

VISITING SCIENTIST

1. Dr Jasvinder Singh, Professor of Medicine with Tenure, Staff Physician, Birmingham VA Medical Center, Research Collaborator, Mayo Clinic College of Medicine
2. Dr Robert Fox, Chief, Rheumatology Clinic, Ex-Stanford Medical School Faculty, Scripps Memorial Hospital and Research Foundation, La Jolla, California, USA

9.39. Surgical Disciplines

Professor and Head
Anurag Srivastava

Professors

Sunil Chumber
Sandeep Aggarwal
Subodh Kumar
Sushma Sagar

Rajinder Parshad
V.K. Bansal
Amit Gupta
Biplab Mishra

V. Seenu
Anita Dhar
Maneesh Singhal

Associate Professor
Hemanga K. Bhattacharjee

Assistant Professor

Asuri Krishna
Manjunath Maruti Pol
Kamal Kataria

Piyush Ranjan
Mohit Joshi
Suhani

Yashwant Rathore
Om Prakash

HIGHLIGHTS

Our Surgical Disciplines Department is involved in minimal invasive, Thoracic, Renal transplant, Breast, Endocrine and Gastrointestinal and Bariatric surgery. We are running breast cancer and renal transplant clinics. Department of Surgery has successfully organized 11th AIIMS Surgical Week in 16–19 March 2017 and CME in surgery on 18th & 19th February 2017. AIIMS Breast Course held on 11–13 August 2016. We have also organized Thoracic Surgery Symposium on 21 & 22 January 2017. We organized the first AIIMS BUS (AIIMS Basic Ultrasound for Surgeons) in January 2017. Apart from this, we have been running Minimal Invasive Training Programme for basic and advanced laparoscopic training. This year we participated in National Cancer Screening Programme on 14–27th November, 2017 at India International Trade Fair (IITF), Pragati Maidan, New Delhi organized by Ministry of Health & Family Welfare, Government of India.

EDUCATION

- (a) Seminar on every Wednesday from 5.00 pm to 6.00 pm.
- (b) Journal Club presented by Jr. Resident once in a week in each unit.
- (c) Mortality and morbidity round by Jr. Resident once in a week in each unit.

- (d) Lectures for MBBS students
- (e) Lectures for nursing students
- (f) The following training courses were organized in the Minimally Invasive Surgery Training Centre of the Department:
 - (i) Basic and Advanced Laparoscopic Training Course: 10
 - (ii) Laparoscopic Hernia Surgery: 8
 - (iii) Laparoscopic Colorectal Surgery: 2
 - (iv) Laparoscopic Suturing: 2

CMEs/Workshops/Symposia/National and International Conferences

1. 11th AIIMS Surgical Week, International Minimal Access Surgery Conference CME cum Live Workshop, ENDOSURG-2016, 16–19 March 2017, AIIMS, New Delhi
2. Thoracic Surgery Symposium, 21–22 January 2017, AIIMS, New Delhi
3. CME in Surgery, 2016, 18–19 February 2017, AIIMS, New Delhi
4. AIIMS Breast Course, 11–13 August 2016, AIIMS, New Delhi.
5. Monthly Meeting of Delhi State Chapter of Association of Surgeons of India, 25 February 2017, AIIMS, New Delhi.
6. AIIMS, BUS (AIIMS Basic Ultrasound Course for Surgeons), 27–28 January 2017, AIIMS, New Delhi

Lectures delivered

Anurag Srivastava: 7

Sandeep Agarwal: 14

Piyush Ranjan: 3

Yashwant Rathore: 2

Sunil Chumber: 1

Anita Dhar: 1

Manjunath Maruti Pol: 2

Kamal Kataria: 4

Rajinder Parshad: 10

Hemanga K. Bhattacharjee: 5

Mohit Joshi: 9

Suhani: 4

Anurag Srivastava: 7

1. Workshop on Research Methodology, Bhopal Oncology Society, 4 & 5 March 2017, Jawaharlal Nehru Medical College, AMU, Aligarh
2. Nan biotechnology, Task force meeting, 24 February 2017, IISER, Trivandrum, Kerala
3. 6th Asia-Pacific Breast Cancer Summit 2017 (APBCS 2017), 17–19 February 2017 Kowloon Shangri-La, Hong Kong
4. 50th Meeting of the SAC, 21 January 2017, Central Research Institute of Unani Medicine, Erragadda, Hyderabad
5. Workshop on Breast Diseases, Breast Surgery Cancer Prevention and Research Methodology, 23–30 December 2016, TMSS Medical College, Dhaka, Bangladesh
6. National Meeting of SELSICON, Oration on Abdominal Wound Closure, 4 November 2016, Agra, Uttar Pradesh
7. Advances in Breast Cancer-2016, Conference, Advances in Breast Cancer, 2016, 14–16 October 2016, Lonavala, Mumbai

Sunil Chumber: 1

1. Primary hyperparathyroidism, Surgery Update, 2016, MAMC, New Delhi

Rajinder Parshad: 10

1. Surgical management of GERD, 11th AIIMS Surgical Week, International Minimal Access Surgery Conference CME cum Live Operative Workshop (ENDOSURG 2017), 17 March 2017, JLN Auditorium, AIIMS, New Delhi
2. Myasthenia gravis (Non-Thymomatous): Is there a role of surgery? A Debate: For the Motion, Contemporary Practices in Surgery: Symposium on Thoracic Surgery 2017, 21 & 22 January 2017, Ramalingaswami Board Room, AIIMS, New Delhi
3. VATS Thymectomy, Contemporary Practices in Surgery: Symposium on Thoracic Surgery 2017, 21 & 22 January 2017, Ramalingaswami Board Room, AIIMS, New Delhi
4. Is Sugar a new tobacco? Hype or reality? Baricon 2016, 1 December 2016, CMET Technology Hall, AIIMS, New Delhi
5. Achalasia: Poem or laparoscopic cardiomyotomy, AMASICON 2016, 17 November 2016, Science City, Kolkata.
6. Large and recurrent incisional hernia: Best management approach, 9th SELSICON 2016 9th IHSCON 2016, 4th November 2016, Agra, UP
7. VATS thymectomy, 9th SELSICON 2016 9th IHSCON 2016, 4 November 2016, Agra, UP
8. Classification of bile duct injuries, SELSI Consensus Meeting, 2 October 2016, AIIMS, New Delhi

9. Video assisted thymectomy, Surgery Update 2016, 30 September 2016, Maulana Azad Medical College, New Delhi
10. Management of axilla: More is less, AIIMS Breast Course (ABC), 12 August 2016, Ramalingaswami Board Room, AIIMS, New Delhi

Sandeep Agarwal: 14

1. Revisional bariatric surgery, ACMOMS IX, 22 & 23 July 2016, Chennai
2. Laparoscopic sleeve gastrectomy in obese diabetic patients with BMI <35, 17th International Bariatric Club Symposium 2016, 20–23 April 2016, Moscow
3. Is all blue kidneys: Hyper acute rejection in post transplantation, Annual Conference of Indian Society of Organ Transplantation, 6–9 October 2016, PGI, Chandigarh
4. Symposium on Metabolic Medicine, Symposium on Metabolic Medicine by Department of Biochemistry, AIIMS, 30 September 2016, AIIMS, New Delhi
5. How bariatric surgery works? Have we understood it? Conference and Certificate Course in Bariatric and Metabolic Surgery, 20 & 21 October 2016, JIPMER, Puducherry
6. Sleeve gastrectomy is ideal? Debate, Conference and Certificate Course in Bariatric and Metabolic Surgery, 20 & 21 October 2016, JIPMER, Puducherry
7. Panelist, Public lecture on diet in health and disease prevention, AIIMS Public Lecture, 26 October 2016, AIIMS, Delhi
8. Debate, Roux, En-gastric bypass vs mini gastric bypass, ASI-SURGICON, 11–13 November 2016, Delhi
9. Non-operative management of staple line leaks without the use of stents following laparoscopic sleeve gastrectomy, 32nd Annual Meeting of the German Association for Study of Obesity and 9th Frankfurt Meeting for Obesity Surgery, 17–19 November 2016, Germany, Frankfurt
10. How Bariatric surgery works? BARICON 2016 – 1st International Conference of FORMS, CME cum Live Operative Workshop, 1–3 December 2016, AIIMS, Delhi
11. Unusual complications, BARICON 2016 – 1st International Conference of FORMS, CME cum Live Operative Workshop, 1–3 December 2016, AIIMS, Delhi
12. Panelist, Leak following sleeve gastrectomy, BARICON 2016 – 1st International Conference of FORMS, CME cum Live Operative Workshop, 1–3 December 2016, AIIMS, Delhi
13. Overview of Bariatric surgery, 5th International Conference of Physiotherapy – Physiotherapy Nurturing Globally in Modern Era, 10 December 2016, AIIMS, Delhi
14. Hernia in difficult locations: How to place a mesh, 14th National Congress of Indian Association of Gastrointestinal Endo Surgeons (IAGES), 9–11 February 2017, Hitech City, Hyderabad

Anita Dhar: 1

1. Theme oncoplasty, AIIMS Breast Course, 11 & 12 August 2016, AIIMS, Ansari Nagar, New Delhi

Hemanga K. Bhattacharjee: 5

1. 11th AIIMS Surgical Week, International Minimal Access Surgery Conference, CME cum Live Operative Workshop, ENDOSURG 2017, Rectal carcinoma: Emerging trends in minimally invasive surgery, 16–19 March 2017, AIIMS, New Delhi, India
2. Port placement in laparoscopic surgery, CME in Surgery, 7–10 February 2017, AIIMS, New Delhi, India
3. Surgical innovation: Portable laparoscopy, 62nd Annual Conference, 11–13 November 2016, College of Surgeons, Indian Section, Guwahati, Assam
4. Laparoscopic sleeve gastrectomy: Problems and solutions, 62nd Annual Conference, 11–13 November 2016, College of Surgeons, Indian Section, Guwahati, Assam
5. Ergonomics in laparoscopic surgery, MISIICON 2016, 21–23 October 2016, Kochi, Kerala

Piyush Ranjan: 3

1. Complications in surgery, CME in Surgery, 2017, 18 & 19 February 2017, Department of Surgical Disciplines, AIIMS, New Delhi
2. Guest lecture–post crash management, Training for Police Officers by Orissa Government, 7 April 2017, Police Commissioner Office, Bhubaneswar
3. Lecture in telemedicine surgical complication: Pan Africa project, Telemedicine facility AIIMS. How to reduce them? November 2016, Telemedicine

Manjunath Maruti Pol: 2

1. Abdominoperineal resection, CME in Surgery 2017, 18 & 19 February 2017, AIIMS, Delhi, New Delhi
2. Sutures in surgery, UG Suturing Workshop, 22 April 2017, AIIMS, New Delhi

Mohit Joshi: 9

1. Adult education principles; Giving effective feedback; OSCE, Basic Course Workshop in Medical and Health Professions Education, 30 March–1 April 2016, CMET, AIIMS, New Delhi
2. Lung resections, AIIMS Cadaveric Thoracic Surgery Course, 25 November 2016, JPN Apex Trauma Center AIIMS, New Delhi
3. Management of chest drain; Discussion of challenging patients, Contemporary practices in surgery, Symposium on Thoracic Surgery, 21 & 22 January 2017, AIIMS, New Delhi
4. USG of prostate and scrotum, AIIMS Basic Ultrasound Course for Surgeons (AIIMS BUS), 27 & 28 January 2017, JPN Apex Trauma Center AIIMS, New Delhi
5. How to prepare MCQs; Large group teaching; OSCE, Basic Course Workshop in Medical and Health Professions Education, 15–17 February 2017, AIIMS, New Delhi
6. Generalized lymphadenopathy, CME in surgery, 2017, 18 & 19 February 2017, AIIMS, New Delhi
7. Surgical staplers, Surgery Clinical Oriented Postgraduate Examination Course (SCOPE-2017), 10–12 March 2017, PGIMER and Dr RML Hospital, New Delhi
8. Idiopathic interstitial pneumonia (IIP), AIIMS PULMOCRIT, 15 & 16 April 2017, AIIMS, New Delhi
9. How to make good MCQs, National Workshop for Teachers of College of Nursing. Delivered a session on 18 April 2017, RAK College of Nursing, Lajpat Nagar, Delhi

Yashwant Rathore: 2

1. Lung abscess, CME in Surgery 2017, 18 & 19 February 2017, AIIMS, New Delhi
2. Sutures in surgery, UG Suturing Workshop, 22 April 2017, AIIMS, New Delhi

Kamal Kataria: 4

1. Ischiorectal abscess, CME in Surgery 2017, 18 & 19 February 2017, AIIMS, New Delhi
2. Sutures in surgery, UG Suturing Workshop, 22 April 2017, AIIMS, New Delhi
3. Anatomy of hernias, ESI Medical College and Hospital, Hyderabad, 11 February 2017, ESI Hyderabad, Hyderabad
4. Hernias and their management, Delhi Doordarshan, DD Kisan, New Delhi

Suhani: 4

1. How to treat fibroadenoma, AIIMS Breast Course, 11–13 August 2016, Dr Ramalingaswami Board Room, New Delhi
2. Acyclical mastalgia, CME in Surgery, 18 & 19 February 2017, Conference Room, New Delhi
3. PG master class, SURGICON 2016, November 2016, Jaypee Siddhartha, New Delhi
4. Laparoscopic management of large adrenal tumor: Video presentation, ENDOSURG 2017, 17 March 2017, JLN Auditorium, AIIMS, New Delhi

Oral papers/posters presented: 31

1. USG guided, Blue dye delineated and transparent sheet immobilization for achieving lower re-excision rates in breast conservation surgery, 6th Asia-Pacific Breast Cancer Summit 2017, 17–19 February 2017, Kowloon Shangri-La, Hong Kong
2. Verma E, Parshad R. Story of displaced wraps, 11th AIIMS Surgical Week, International Minimal Access Surgery Conference CME cum Live Operative Workshop (ENDOSURG 2017, 19 March 2017, JLN Auditorium, AIIMS, New Delhi)
3. Dheeraj SSS, Parshad R, Seenu V, Suhani, Joshi M, Saraya A, et al. Urinary and sexual DYSFUNCTION and quality of life assessment following definitive surgery for rectal cancer, 11th AIIMS Surgical Week, International Minimal Access Surgery Conference CME cum Live Operative Workshop (ENDOSURG 2017, 18 March 2017, JLN Auditorium, AIIMS, New Delhi)
4. Sahithi G, Seenu V, Parshad R, Srivastava A, Suhani, Joshi M, Sreenivas V. Long term outcome of sentinel node biopsy in breast cancer patients, 11th AIIMS Surgical Week, International Minimal Access Surgery Conference CME cum Live Operative Workshop (ENDOSURG 2017), 17 March 2017, JLN Auditorium, AIIMS, New Delhi

5. Bharath V, Parshad R. Safety and efficacy of video assisted thoracoscopic (VATS) thymectomy in patients with myasthenia gravis, SURGICON 2016, 12 November 2016, Dr RML Hospital, New Delhi
6. *Gupta P, Parshad R, Sachdeva S, Saraya A, Makharia G, Sharma R (Awarded First prize in Best Paper Award Category), Angle of his accentuation versus Dor's Fundoplication as adjunct to laparoscopic Heller's cardiomyotomy: Results of randomised controlled study, Annual Conference of Delhi State Chapter of ASI "SURGICON 2016", 11–13 November 2016, Dr RML Hospital, New Delhi
7. Agarwal K, Sah RG, Sharma U, Hari S, Mathur S, Seenu V, Parshad R, Jagannathan NR. The potential of apparent diffusion coefficient in differentiating various sub-types of breast tumors and its association with hormonal status. The International Society for Magnetic Resonance in Medicine, 7–13 May 2016, Singapore
8. Jagannathan NR, Agarwal K, Sharma U, Mathur SR, Seenu V, Parshad R. Effect of Neoadjuvant Chemotherapy on tCho and membranous and cytoplasmic β -catenin expression in breast cancer, The International Society for Magnetic Resonance in Medicine, 7–13 May 2016, Singapore
9. Agarwal K, Gururao H, Rani K, Sharma U, Mathur S, Seenu V, Parshad R, Jagannathan NR. Evaluation of the tCho and β -catenin concentration with different molecular biomarkers in breast cancer patients., The International Society for Magnetic Resonance in Medicine, 7–13 May 2016, Singapore
10. Closure of Peterson hernia in a person post LRYGB for morbid obesity: A video presentation, Surgicon 2016, 10 November 2016, New Delhi
11. Impact of bariatric surgery on adolescent obesity: Poster presentation, Surgicon 2016, 10 November 2016, New Delhi
12. Impact of bariatric surgery on pcos, Baricon 2016, 2 December 2016, New Delhi
13. Peterson hernia following a LRYGB in morbidly obese, Baricon 2016, 3 December 2016, New Delhi
14. Peterson hernia following a LRYGB in morbidly obese, Delhi state chapter 2017, 25 February 2017, New Delhi
15. Impact of bariatric surgery on nutritional parameters of morbidly obese patients, Surgicon 2016, 12 November 2016, New Delhi
16. Utility of transient elastography for assessment of non-alcoholic fatty liver disease in morbid obese patients undergoing bariatric surgery, Surgicon 2016, 10 November 2016, New Delhi
17. Dhar A, Srivastava A, Jayesh. Foot drop as a rare manifestation of iliac occlusions disease: A case report, VSICON 2016, 17 September 2016, Bangalore
18. Jayesh, Dhar A, Srivastava A. Brachial artery aneuysyru or abscesses presenting as wrist – Poster presentation, VSICON 2016, 17 September 2016, Bangalore
19. Saha S, Dhar A, A Srivastava. Role of radio guidance to confirm parathyroid adenoma during focused Parathyroidectomy*, IAESCON—17th Annual National Conference of Indian Association of Endocrine Surgeons, 18 September 2016, Meerut
20. Saha S, Srivastava A, Dhar A. Poster: EORTC BR 23 questionnaire: Acceptability in measuring quality of life in breast cancer patients in India, 3rd ESO-ESMO Breast Cancer in Young Women International conference, 10–12 November 2016, Lugano, Switzerland
21. Saha S, Dhar A, Srivastava A. Comparing immediate complications and cosmetic outcome in ladies with early breast carcinoma undergoing oncoplasty versus conventional breast conservation surgery: A randomized trial,* British Bangla Breast Meet at IPGME & R, 19 February 2017, Kolkata
22. Impact of standard pressure and low pressure pneumoperitoneum on shoulder pain following laparoscopic cholecystectomy: A randomized controlled trial, 24th International Congress of European Association of Endoscopic Surgery, 15–18 June 2016, Amsterdam, The Netherlands,
23. Aggarwal L, Rathore Y. Eviscerated small bowel through anus, Endosurg 2017, 16–19 March 2017, AIIMS, Delhi, New Delhi
24. Srivastava A, Saha S, Kataria K. (First Prize) and best poster award, role of radio guidance to confirm parathyroid adenoma during focused parathyroidectomy, IAESCON—17th Annual National Conference of Indian Association of Endocrine Surgeons, 17 & 18 September 2016, Meerut
25. Srivastava A, Saha S, Kataria K. (First Prize), comparing immediate complications and cosmetic outcome in ladies with early breast carcinoma undergoing oncoplasty versus conventional breast conservation surgery - a randomized trial, British Bangla Breast Meet, 18 & 19 February 2017, IPGMER, Kolkata
26. Srivastava A, Saha S, Kataria K. Usg guided, blue dye delineated and transparent sheet immobilization for achieving lower re-excision rates in breast conservation surgery, 6th Asia, Pacific Breast Cancer Summit, 17–19 February 2017

27. Suhani, Parshad R, Seenu V, Joshi M, Qazi M. Retrospective assessment and clinical applicability of Gail model 2 in Indian patients, Annual conference of Association of Surgeons of India (ASICON), 14–18 December 2016, Mysuru, Karnataka
28. Sharma A, Parshad R, Suhani, Kazi M, Seenu V, Joshi M. Risk factor assessment and retrospective applicability of Gail model 2 in Indian patients, RGCON 2017, India Habitat Centre, Delhi
29. Tejas, Seenu V, Parshad R, Suhani, Joshi M, Hari S, Thulakar S, Mathur S. Comparison of resection margins and cosmetic outcome following intra-operative ultrasound guided excision versus conventional palpation guided breast conservation surgery in breast cancer – A randomized controlled trial*, SURGICON 2016, November 2016, Jaypee Siddhartha, New Delhi
30. Sahithi G, Seenu V, Parshad R, Srivastava A, Suhani, Joshi M, Sreenivas V. Long term outcome of sentinel node biopsy in breast cancer patients**, 11th AIIMS Surgical Week, International Minimal Access Surgery Conference CME cum Live Operative Workshop (ENDOSURG 2017), 17 March 2017, JLN Auditorium, AIIMS, New Delhi
31. Dheeraj SSS, Parshad R, Seenu V, Suhani, Joshi M, Anoop Saraya. shalimar, Sharma R. Urinary and sexual dysfunction and quality of life assessment following definitive surgery for rectal cancer, 11th AIIMS Surgical Week, International Minimal Access Surgery Conference CME cum Live Operative Workshop ENDOSURG 2017, 18 March 17, JLN Auditorium, AIIMS, New Delhi

RESEARCH

Funded projects

Ongoing

1. Randomized trial of benzathine penicillin, versus education about limb care in prevention of lymphedema following breast surgery, Anurag Srivastava, ICMR, 2 years, 2016–2017, Rs. 5 lakhs
2. Evaluation of the nitric oxide, Nitric oxide synthase, Vascular endothelium growth factor, Interleukin in lower arterial disease and their association with clinical outcome, Anita Dhar, AIIMS, 3 years, 2014–2017, Rs. 5 lakhs
3. A Non-randomized, Open label, Multicentric, Dose ranging, phase II study assessing the efficacy and safety of intramuscular administration of stempeucel – CLITTM (Ex Vivo Cultured Adult Bone Marrow Derived Allogeneic Mesenchymal Stem Cells) in patients with critical limb Ischemia due to Buerger's disease, Anita Dhar, Stempeutics India Ltd., 2 years, 2015–2016, Rs. 50 lakhs
4. Randomized study to compare efficacy of two types of 2-layer compression bandage systems from KOB and multi-layer local Indian bandages in the treatment of leg ulcers. Anita Dhar. Extramural KOB, 2 years, 2016–2017, Rs. 2 lakhs
5. Centchroman versus tamoxifen in symptomatic benign breast disease. Randomized clinical trial, Manjunath Maruti Pol, AIIMS, 2 years, 2016, Rs. 0.6 lakhs
6. To study the effect of handgrip exercise on the outcome of arterio-venous fistula surgery. A randomized controlled trial, Manjunath Maruti Pol, Department funding, 2 years, 2016, Rs. 0.25 lakhs
7. Hydrostatic dilatation plus balloon angioplasty versus hydrostatic dilatation plus malleable vascular dilator for 2 mm or less caliber veins used during creation of arteriovenous fistula for hemodialysis. A randomized controlled trial, Manjunath Maruti Pol, Department funds, 2 years, 2016, Rs. 0.2 lakhs
8. Management of superficial lipoma by mesotherapy, Kamal Kataria, AIIMS, 2 years, 2016–2018, Rs. 4 lakhs
9. Role of complete estrogen blocked in recalcitrant mastalgia, Suhani, AIIMS, 1 year, 2016–2017, Rs. 3.75 lakhs
10. Role of complete estrogen blockade in recalcitrant mastalgia, Suhani, AIIMS, 1 year, 2016, Rs. 2.81 lakhs
11. A prospective cohort study to measure the effectiveness of NISWANI in achieving regression of Fibroadenoma and Mastalgia, Ravi Mehrotra, Project under EMR scheme, Ministry of AYUSH

Departmental projects

Ongoing

1. Randomized trial of Benzathine Penicillin, versus education about limb care in prevention of lymphedema following breast surgery
2. Therapy of fibroadenoma with intralesional Triamcinalone injection along with anti estrogen centchroman and tamoxifen
3. A randomized controlled, parallel group, noninferiority trial to compare identification rate of fluorescein plus methylene blue versus technetium sulphur colloid plus methylene blue for detection of sentinel node in ladies with operable breast cancer

4. The effect of 1 cm versus 2 cm resection margin and oncoplastic closure of breast parenchymal defect on aesthetic outcome and quality adjusted life years in ladies with early breast cancer: A randomized controlled trial
5. Ambi-spective Cohort study to evaluate the oncologic and aesthetic outcomes of Skin sparing mastectomy
6. Long term outcome of sentinel node biopsy in early and operable breast cancer patients in collaboration with Departments of Biostatistics and Surgical Oncology
7. Comparison of cosmetic outcome and resection margin following intra-operative ultrasound guided excision with palpation guided breast conservation surgery in breast cancer. A randomized control trial
8. Assessment of quality of life following definitive surgery for rectal cancer
9. Use of FES-PET for breast cancer receptor imaging detecting metastasis and predicting response to anti-hormonal therapy
10. Surgical outcome of patients with pulmonary aspergilloma—An observational study
11. Midterm outcome following minimally invasive thymectomy in myasthenia gravis patients
12. Prospective study to evaluate outcomes of protocol based management of chest tubes in patient undergoing elective thoracic surgery
13. Comparison of loco-regional recurrence and cosmesis following simple clousre and breast oncoplasty
14. Impact of intra-operative determinants on graft outcomes following live donor renal transplantations
15. Achalasia Cardia: Long term outcome and assessment of factors predicting outcome following laparoscopic Heller's cardiomyotomy
16. To establish algorithm for management of axilla in patient with clinically axillary lymph node negative early operable breast cancer
17. Evaluation of Impact of Laparoscopic Omega Loop Gastric Bypass Surgery (Mini Gastric Bypass) on Weight Loss, Comorbidities and Quality of Life in Super Obese Patients
18. Impact of nutritional and lifestyle modification in subjects with BMI 25-29.9 kg/m² vs 30-34.9 kg/m² and to assess the effect of bariatric surgery in BMI \geq 35 kg/m²
19. A three arm randomised controlled study to compare sexual functions following open mesh Hernioplasty laparoscopic Totally extra Peritoneal (TEP) and Trans abdominal Pre Peritoneal (TAPP) Repair Groin Hernia
20. To study the effect of handgrip exercise on the outcome of arteriovenous fistula surgery, A randomized controlled trial
21. Omega loop versus RYGB for type 2 diabetes mellitus remission in obese patients: A pilot randomized control study
22. Impact of bariatric surgery induced weight loss on cardiovascular disease risk reduction in morbid obese patients
23. Three arm randomized comparison or laparoscopic peritoneal dialysis catheter insertion with or without omentectomy versus conventional open peritoneal dialysis catheter insertion in chronic kidney disease stage-5 patients in terms of catheter malfunction and post-operative complications
24. Mesh fixation with mechanical fixation device versus fibrin sealant during laparoscopic repair of primary ventral hernia: a double blind randomized controlled study
25. The feasibility and safety of the subxiphoid video assisted thymectomy for myasthenia gravis
26. Comparison of locoregional recurrence and cosmesis following simple closure and breast oncoplasty
27. Impact of intra-operative determinants on graft outcomes following live donor renal transplantations
28. Management of superficial lipoma by mesotherapy
29. Bench dissection of parathyroid in dissected thyroid specimen
30. Role of PET scan in undiagnosed abdominal pain
31. Three Arm Randomised comparison of Laparoscopic peritoneal dialysis. Catheter for insertion with or without omentectomy versus conventional open peritoneal dialysis catheter Insertion in chronic Kidney stage, 5 patient in term of catheter mal function and post-operative complications
32. A three arm Randomised controlled study to compare sexual functions following open mesh Hernioplasty laparoscopic Totally extra Peritoneal (TEP) and Trans abdominal Pre Peritoneal (TAPP) Repair Groin Hernia

Completed

1. Evaluation of awareness and cosmetic satisfaction following breast oncoplasty among breast cancer patients
2. Impact of Laparoscopic sleeve Gastrectomy (Bariatric Surgery) on Non Alcoholic Fatty Liver Disease (NAFLD) in Morbid Obesity

3. Evaluation of Impact of Bariatric Surgery on Clinical Biochemical and Hormonal Parameters in Women with Polycystic Ovary Syndrome (PCOS)
4. Evaluation of awareness and cosmetic satisfaction following breast oncoplasty among breast cancer patients
5. Total versus Near Total thyroidectomy (with radio-ablation of residual thyroid) for differentiated thyroid cancer confined to one lobe of thyroid gland: A randomized trial
6. A randomized controlled, parallel group, noninferiority trial to compare identification rate of fluorescein plus methylene blue versus technetium sulphur colloid plus methylene blue for detection of sentinel node in ladies with operable breast cancer
7. The effect of 1 cm versus 2 cm resection margin and oncoplastic closure of breast parenchymal defect on aesthetic outcome and quality adjusted life years in ladies with early breast cancer: A randomized controlled trial
8. Long term outcome of sentinel node biopsy in early and operable breast cancer patients
9. Assessment of quality of life and urinary and sexual dysfunction following definitive surgery for rectal cancer
10. Surgical outcome of patients with pulmonary aspergilloma: An observational study
11. Prospective study to evaluate outcomes of protocol based management of chest tubes in, patient undergoing elective thoracic surgery
12. Comparison of loco-regional recurrence and cosmesis following simple closure and breast oncoplasty
13. Achalasia Cardia: Long term outcome and assessment of factors predicting outcome following laparoscopic Heller's cardiomyotomy
14. To establish algorithm for management of axilla in patient with clinically axillary lymph node negative early operable breast cancer
15. An investigation to identify the etiopathogenesis of fibroadenoma; An ultrastructural and physicochemical study

Collaborative projects

Ongoing

1. Isolation, identification and characterization of cancer stem cells from different histopathological grades of colorectal carcinoma (Biochemistry, Physiology, Gastrointestinal Surgery and Pathology)
2. Elucidating the link between NUPRI and colorectal cancer stem cells (Biochemistry, and Surgical Oncology)
3. Isolation, identification and characterization of cancer stem cells from different histopathological grades of colorectal carcinoma (Biochemistry, Physiology, Gastrointestinal Surgery and Pathology)
4. Studies on synuclein in various pathological conditions (Biophysics, Ocular Pharmacology, Biotechnology)
5. Evaluation of Xpert MTB/RIF for diagnosis of tubercular lymphadenopathy (Medicine)
6. Development of field, portable multi-modal imaging and spectroscopic system for breast cancer detection and diagnosis in real-time (IIT Delhi)
7. Use of Niswani in prevention of women cancer in NCR (Ravi Mehrotra, NICPR Noida, Ministry of AYUSH)

Completed

1. Multiparametric approach to the study of breast cancer and its correlation with molecular markers (NMR, Radio-diagnosis, Radiotherapy, Biotechnology and Biotechnology).
2. Exploring the role of adipose tissue ATP binding cassette transporter A1 (ABCA1) in determining serum HDL cholesterol levels Biochemistry, Evaluation of Post-Transplant Infections (Nephrology)
3. Importance of angiosome targeted vessel bed identification using DSA and MR techniques for endovascular treatment in patients with critical limb ischemia (Cardiac Radiology)
4. Continuous thoracic paravertebral infusion in MRM, randomized, prospective, Double blinded study to compare efficacy of Ropivacaine with and without Fentanyl (Anaesthesia)
5. A study to assess the prevalence of chronic venous disease and the effectiveness of selected non-pharmacological intervention among nurses working in operation theatres, intensive care (ICU's) of All India Institute of Medical Sciences (AIIMS), New Delhi (College of Nursing)
6. Development of Hindi version of walking impairment Questionnaire for PAD patients to assess and quantify the extent of walking impairment (Indian Spinal Injuries Center, New Delhi)
7. Comparative proteomics of Axillary lymph nodes in early breast cancer: Implications for identification of potential biomarkers for guiding surgical management (Biophysics)
8. To study the efficacy of Intravenous Fluorescent tracer in detecting Axillary nodal metastasis in post chemotherapy breast cancer patients

9. Surgical outcome and disease remission following VATS thymectomy in myasthenia gravis patients (Neurology)
10. Long term clinical outcome of achalasia cardia in patients undergoing laparoscopic Heller's cardiomyotomy with angle of his accentuation v/s laparoscopic Heller's cardiomyotomy with Dor's fundoplication (Gastroenterology, Radiodiagnosis)

PUBLICATIONS

Journals: 61

Chapters in books: 9

Books: 1

PATIENT CARE

The department is providing regular services in multiple fields including multimodality treatment for breast cancer patients, minimally invasive surgery, renal transplantation, Hepato-biliary and pancreatic surgery, thoracic and thoracoscopic surgery, plastic and reconstructive surgery, endocrine surgery, metabolic and bariatric surgery, vascular surgery including surgery for vascular access in end stage renal disease patients and cancer surgery. The department runs Combined Pulmonary Medicine Surgery Clinic (Every Wednesday 2–5 pm) as a special clinic beside regular OPD.

A dedicated Bariatric Surgery clinic was established to look after the ever increasing number of patients seeking weight loss surgery. The clinic serves about 30 new patients every month and keeps a follow-up of more than 500 operated bariatric surgery patients. There is a dedicated bariatric nutritionist who is a part of the team that looks after the patients. Breast Cancer Clinic (BCC) held on every Wednesday at 2.00 PM and every Saturday at 9:00 AM, which includes follow up of old cases, chemotherapy, and registration of new cases.

Bariatric Surgery Clinic is conducted every Thursday Afternoon. More than 250 new patients were counseled last year for Obesity management and Bariatric Surgery. The clinic is attended by a team of bariatric surgeons and nutritionists. New patients are reviewed and discussed for bariatric surgery. Follow-up care is provided to the operated patients. 90 patients underwent weight loss surgery at AIIMS last year.

- (a) **Special Clinic, services and vascular lab:** Complete spectrum of peripheral vascular disease management are available covering arterial, venous and lymphatic diseases. Established a vascular lab with facilities for checking ABI, TcPo₂, Supervised Exercise therapy on Treadmill, compression bandaging for all venous and lymphatic disease patients.
- (b) **Community services/camps:**
 1. Group and individual teaching for management of the lymphedema viza vis skin care eradication of fungal infection, manual lymphatic drainage and compression bandaging (self-learning).
 2. Associated with CPAA – Cancer patient Aid Association: For raising awareness regarding breast disease early detection and dealing with physical and psychological problems after treatment.
 3. Raising awareness in community regarding peripheral arterial disease and how smoking especially BIDI smoking is an important risk factor.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor Anurag Srivastava was Guest Faculty in 6th Asia Pacific Breast Cancer Summit at Hong Kong on 17–19 February 2017. Convenor in the Contemporary Practices in Surgery and Symposium on Thoracic Surgery, organized by Department of Surgical Disciplines, AIIMS, New Delhi on 21 & 22 January 2017.; Delegate in the National Conference (Sylhet-2016) of Society of Surgeon of Bangladesh held at MAB Osmani Medical College on 29 & 30 December 2016.; Awarded by IAESCON 17th Annual National Conference of Indian Association of Endocrine Surgeons held at Subharti Medical College, Meerut, U.P. on 17 & 18 September 2016.; Faculty in Surgery Clinical Oriented Post Graduate Examination (SCOPE) course from 27 & 28 August 2016 at PGIMER and Dr RML Hospital.; Faculty in Surgery Clinical Oriented Post Graduate Examination (SCOPE) course from 10 to 12 March 2017 at PGIMER and Dr RML Hospital.; Public lecture and training of Doctors for National Cancer Screening Programmes during 2016–2017 at Lady Sriram College, New Delhi, National Institute of Cytology and Preventive Oncology Research NOIDA, U.P. and Indian Institute of Ayurveda, Sarita Vihar, New Delhi.

Professor Sunil Chumber was examiner Bangladesh College of Physicians and Surgeons Qualifying examination in Surgery—July 2016.; AIIMS, Raipur, First Final MBBS Examination in Surgery, December 2016.; AIIMS, Bhubaneswar, First Final MBBS Examination in Surgery December 2016.; Subharti Vivkanand University, Meerut, Final MBBS Examination in Surgery, March 2017; Fellowship of IAGES-2016, IAGES-2016, September 2016, Fortis Gurgaon; FALS Hernia Fellowship, IAGES-2016, January 2016, Gurgaon; Received Fellowship, IAGES, March 2017, Hyderabad, Received Fellowship in Hernia, IAGES, March 2017, Attended the AIIMS Jodhpur to interview Candidates for Faculty in AIIMS, March 2017; Attended the AIIMS Rishikesh to interview candidate for Faculty in AIIMS, March 2017.

Professor Sandeep Agarwal conducted BARICON 2016, 1st International Conference on Bariatric Surgery, CME cum Live Operative Workshop, 1–3 December 2016, New Delhi

Professor Anita Dhar was External Examiner for final Fellowship Examination (FCPS part-II) of Bangladesh College of Physicians and Surgeons, 24–26 January 2017, Dhaka, Bangladesh; First prize: Best poster award for abstract titled Role of Radioguidance to confirm parathyroid adenoma during focused parathyroidectomy, IAESCON–17th Annual National Conference of Indian Association of Endocrine Surgeons 17–18 September 2016, Meerut. Shivangi S, Anita D, Anurag S.; First prize for paper titled “Comparing immediate complications and cosmetic outcome in ladies with early breast carcinoma undergoing oncoplasty versus conventional breast conservation surgery, a randomized trial” at British Bangla Breast Meet at IPGME & R, Kolkata 18 & 19 February 2017, Shivangi S, Anita D, Anurag S.; Chairperson Contemporary Practice on Surgery, Symposium on Thoracic Surgery, 2017, 21 & 22 January 2017, AIIMS, Ansari Nagar, New Delhi.; As Chairperson, CME in Surgery, 2017, 19 February 2017 (11.00 to 1.00 pm), JLN Auditorium, AIIMS, New Delhi, Ansari Nagar, New Delhi

Dr Hemanga K. Bhattacharjee was Organising Secretary, BARICON 2016, 1st International Conference of FORMS, CME cum Live Operative Workshop from 1 to 3 December 2016 New Delhi; Organising Secretary, First AIIMS Laparoscopic Cadaver Workshop. 22–24 April 2016 at AIIMS, New Delhi; Joint Organizing Secretary, 10th AIIMS Surgical Week, International Conference, CME cum Live Workshop (ENDOSURG 2016) from 3 to 6 March 2016 at the AIIMS, New Delhi

Dr Asuri Krishna was organising secretary, ENDOSURG 2017, 16–19 March 2017, Department of Surgical Disciplines, AIIMS, New Delhi; SAGES , SAGES , March 2017, Houston/Texa, United States; Conference, ISOT, October 2016, Chandigarh,

Dr Piyush Ranjan Swasthya Chaitna Abhiyan, 14–27 November 2016, Ministry of Health and Family Welfare Government of INDIA; Guest Lecture and Medical Camp, organized by PHC, Aurangabad and MRM Hospital. 8 March 2017, Aurangabad Bihar.; Rahat Medical Camp, organized by Government of MP, Rotary International and Raj Krishna Tankha Foundation, 10–12 February 2017, MORENA Madhya Pradesh.; Breast cancer awareness, guest lecture, 14 January 2017, Rajkumari Amrit Kaur College of Nursing. New Delhi.; Judge for poster evaluation and chairperson in competitive paper session, Endosurg 2017, 16–19 March 2017, Department of Surgical Disciplines, AIIMS, New Delhi, QUIZ MASTER: a) for delegates b) UG QUIZ-for undergraduates c) Postgraduates and delegates, WTC CME in Surgery.; Endosurg 2017, August 2016 February 2017 16–19 March 2017, Department of Surgical Disciplines, AIIMS, New Delhi.; Faculty ATLS Provider and Instructor Course, ATLS Course, February 2017, Trauma Centre, New Delhi.; Faculty for AIIMS BUS (Basic Ultrasound for Surgeons), ATLS, January 2016, JPNATC.; Faculty (AIIMS Critical Care Course), August 2016, JPNATC.; WTC JUDGE for poster during World Trauma Congress., WTC, August 2016, Vigyan Bhawan; Faculty in EM Sono, August 2016, JPNATC.

Dr Manjunath Maruti Pol was Organizing Co-secretary of Endo Surg 2017; Organized Suturing Course for Undergraduates

Dr Mohit Joshi successfully completed BLS and ACLS provider course at AIIMS, New Delhi 24–26 April 2017

Dr Om Prakash was Organizing Co-secretary of Endo Surg 2017.; Suturing Course for undergraduate.; Conducted 5 courses in short term training in Laparoscopic Surgery (Basic and Laparoscopic Skill); Conducted 3 courses for Laparoscopic Hernia Surgery; Conducted one colorectal Surgery Course; Video presentation at Endo Surg 2017 Lap Cystogastrostomy for pseudocyst pancreas

VISITING SCIENTISTS

1. Prof Robert Mansel MB, MS, FRCS (Eng), FRCS (Edin) Emeritus Professor of Surgery, Cardiff University, University Hospital of Wales, Health Park, Cardiff, Wales, UK
2. Prof Ismail Jatoui, Professor and Chief, Division of Surgical Oncology and Endocrine Surgery, Department of Surgery, University of Texas Health Science Center, San Antonio, Texas

9.40. Transfusion Medicine

Professor and Head

D.K. Sharma

Chief Medical Officer, In charge, blood bank

Poonam Coshic

Assistant Professor

Hemchandra Pandey

Gopal Patidar
(Posted at C.N. Centre)

Rahul Chaurasiya
(Posted at Trauma Centre)

Chief Technical Officer

R.M. Thapliyal

S. Masih

Senior Technical Officer

M. Varghese

Paramjeet Kaur

Ajay Sharma

HIGHLIGHTS

The Transfusion Medicine Department is committed to patient care and blood safety and works tirelessly to achieve this. MD Transfusion Medicine Course started in January 2017 and one student is enrolled. There is almost zero wastage of plasma. Surplus plasma is now being given to the plasma fractionation center. Total blood donation has been same as previous year with increase in voluntary blood donation. Donor education, motivation and recruitment have been successfully done in rural areas which have added to the voluntary donation. Blood safety is an ongoing effort and we have been successful in starting testing by ECI which is more sensitive test for screening of all collected units using fourth generation tests for HIV and third generation for HCV. For additional layer of safety ID-NAT test is being done on all collected units and last year more sensitive and specific test Ultrio Plus was started. NAT laboratory of Main Blood Bank is the central testing facility for infectious markers for CNC blood bank and JPNATC blood bank. Testing facility of Antibody screening using extended panel has been extended to emergency patients also. Antibody identification in patients having irregular antibodies is now being done regularly as a routine procedure. Blood bank is supporting ABO incompatible kidney transplants by carrying our plasmapheresis procedures and antibody titers testing.

EDUCATION

MD Transfusion Medicine has been initiated from January 2017 and presently one student is being trained. Teaching of postgraduate students from the departments of Pathology, Laboratory Medicine and Haematology is being done during their posting.

CMEs/Workshops/Symposia/National and International Conferences

Lectures delivered

Hemchandra Pandey: 3

1. Safe blood transfusion, Training of nurses and technician on blood banking/HAI/BMW, 30 January 2017, NTA Dwarka, New Delhi
2. Storage of blood products and blood cold chain maintenance, Training of nurses and technician on blood banking/HAI/BMW, 30 January 2017, NTA Dwarka, New Delhi
3. Overview of apheresis, Training of nurses and technician on blood banking/HAI/BMW. 30 January 2017, NTA Dwarka, New Delhi

RESEARCH

Collaborative projects

Ongoing

1. Complement factor H (CFH), Related protein 1 (CFHR1) and its role in maintenance of immunological tolerance (Haematology, AIIMS and RCB Faridabad)

2. To characterize humoral and cell mediated immune memory in anonymous healthy blood bank donors and to assess whether the cell mediated immune memory strictly co-exists with humoral immune memory (Paediatrics)

Completed

1. The effectiveness of the mirasol PRT process vs the effectiveness when challenged with clinically relevant levels of *S. Epidermidis*.

PATIENT CARE

- 24x7 issue of blood/components to patients.
- Autologous blood donation
- Autologous platelet donation
- Voluntary blood donation camp facility.
- Apheresis procedures(SDP, TPE, PBSC)
- Automated blood grouping and serology.
- Automated infectious markers testing
- ID-NAT testing of all donated units of three blood banks of AIIMS.
- 100% blood component preparation.
- Irregular antibody identification.
- Antibody screening.
- Antibody titres.
- Leucodepleted blood/components.
- Irradiation facility.
- Donor counseling and referral.

Community services/camps:

- Main blood bank organized 79 voluntary donation camps in Delhi NCR and collected over 5800 units of blood.
- Carrying out motivational and educative programme for donors in rural areas in association with CHC Ballabgarh.
- Main blood bank is to become mother Blood Bank for Storage Centre of CHC Ballabgarh, in process.

9.41. Transplant Immunology and Immunogenetics

Professor and Head

D.K. Mitra

Assistant Professor

Uma Kanga

Rakesh Kumar

Deepak

Scientist II

Sunil Kumar

Lata Kumari

Scientist I

Sanjeev Goswami

Gaurav Sharma

Sonia Verma

EDUCATION

Short-term training: The Transplant Immunology and Immunogenetics Department provided short term training to Junior and Senior residents of several departments. During the year, 18 students and doctors from various hospitals and institutions in India and abroad received short-term training for laboratory techniques in HLA testing and other immunological investigations.

Training to DM students: Several DM students from the departments of Haematology (1), Rheumatology (1), Biochemistry (3), AIIMS were trained and learnt techniques in HLA testing and other immunological investigations.

Continuing Medical Education (CME)

During the year, the faculty and scientists of the department participated and delivered several lectures in national and international conferences. A quality control exercise for DNA typing of HLA genes is in progress at the national level. Training on various cell culture assays, including flow cytometry based assays have been regularly given to students and visiting trainees. The faculty also delivered special lectures in various departments of the institute (Biotechnology, Medical Oncology, Hematology, Pathology, Medicine and Anatomy) as part of the academic curriculum of these departments. Lectures were delivered for MD Pediatrics, Haematology and Anatomy PGs. Lecture on Immunology was delivered to various department of the institute.

Lectures delivered

D.K. Mitra: 11	Uma Kanga: 8	Sunil Kumar: 1
Sanjeev Goswami: 1	Gaurav Sharma: 1	

D.K. Mitra: 11

1. T cell immune response in human tuberculosis, One health initiative to foster intersectoral collaboration for human and animal health, 26th–28th April 2016, G.B. Pant University Agriculture and Technology, Pantnagar
2. Protective immune response in TB patients: Impact of PD-1 pathway, Brainstorming Meeting on TB in North Eastern Region (Assam), 19–20 August 2016, Guwahati
3. Inhibiting PD-1 pathway rescues poly-functional T cells in tuberculosis: Impact on bacillary containment, The Cytometry Society and Symposium cum Workshop on Flow Cytometry in Basic, Applied and Clinical Biology, 3–5 November 2016, Guwahati
4. Evaluating immunomodulatory efficacy of *Chenopodium ambrosioides*- A Plant with traditional Ayurvedic relevance, AFOB Regional Seminar on BioBusiness and Bioeconomy in India-The Emerging Opportunities, 25–26 November 2016, IIT Kharagpur
5. PD-1 mediated rescue of protective immune response in tuberculosis, 7th World Ayurveda Congress and AROGYA Expo (7thWAC), 1–4 December 2016, Science City, Kolkata
6. Inhibiting PD-1 pathway rescues poly-functional T cells in tuberculosis: Impact on bacillary containment, 3rd International Conference on Perspective of Cell Signalling and Molecular Medicine, 8–10 January 2017, Kolkata
7. Inhibiting PD-1 pathway rescues poly-functional T cells in tuberculosis: Impact on bacillary containment, Immunocon 2016, 16–18 February 2017, GITAM University, Visakhapatnam
8. PD-1 mediated rescue of protective immune response in tuberculosis, SFEC 2017 UTU, 23–25 February 2017, Bardoli (Surat-district), Gujarat
9. Inhibiting PD-1 pathway rescues poly-functional T cells in tuberculosis: Impact on bacillary containment, 9th Immunotherapeutics and Immunomonitoring Conference, 6–7 February 2017, San Diego, CA, USA
10. Synovial Th9 cells prolong neutrophil survival and functionally enhance the infiltrating T cells in rheumatoid arthritis, Immunology and Rheumatology, VA Medical Center, 8–13 February 2017, University of California, Davis
11. Protective immune response in TB patients: Impact of PD-1 pathway, India-Israel E-Health Workshop, 21–23 March 2017, Ben-Gurion University, Israel

Uma Kanga: 8

1. Transplantation immunology and stem cells, CME in Immunology, 28–29 April 2016, Agra
2. HLA matching and antibody monitoring in solid organ transplantation, 27th Annual Conference of Indian Society of Organ Transplantation, 7–9 October 2016, Chandigarh
3. Clinical relevance of non-classical HLA genes in transplantation, 4th National Conference of Indian Society for Histocompatibility and Immunogenetics (ISHI), 2–3 December 2016, Chandigarh
4. Non-classical HLA genes-clinical relevance in transplantation, Immunocon 2016, 16–18 February 2017, Visakhapatnam
5. Soluble levels and UTR polymorphism of HLA-G impacts the hematopoietic stem cell transplantation outcome, 30th European Immunogenetics and Histocompatibility Conference, 11–14 May 2016, Kos Island, Greece
6. Relevance of immunomodulatory factors in HSCT: HLA-G as a biomarker for Graft versus Host Disease, 16th International Congress of Immunology, 21–26 August 2016, Melbourne, Australia
7. Global immunology challenges for young investigators, Biolegend IUIS Symposium, 16 ICI, 21–26 August 2016, Melbourne, Australia

8. Genetic diversity of Indian population, Advantage of high resolution high throughput technologies like Next Generation Sequencing, Human Genetics Seminar, 28 February 2017, Isehara, Japan

Sunil Kumar: 1

1. Immunogenomics of minor histocompatibility antigens: Implications in hematopoietic stem cell transplantation in Asian Indians, IMMUNOCON 2016, 16–18 February 2017, GITAM University, Visakhapatnam, AP

Sanjeev Goswami: 1

1. Pre-transplant screening for anti-MICA antibodies may reduce the rejection risk in kidney allografts, ISHICON 2016, 2–3 December 2016, PGIMER, Chandigarh

Gaurav Sharma: 1

1. Influence of genetic variations in APOBEC3H on HIV susceptibility, ISHICON 2016, 2–3 December 2016, PGIMER, Chandigarh

RESEARCH

Funded projects

Ongoing

1. Impact of host T cell response on expression and function of drug efflux pumps: Relevance to drug resistant TB, D.K. Mitra, ICMR, 3 years, 2014–2017, Rs. 78.5 lakhs
2. Multivalent Leishmania vaccine development, D.K. Mitra, BIRAC-DBT, 3 years, 2015–18, Rs. 397.57 lakhs
3. Establishment of a Centre for Molecular Medicine at AIIMS: Advance Program in Basic and Applied Immunogenetics, Uma Kanga, ICMR, 5 years, 2012–2017, Rs. 218 lakhs
4. Clinical relevance of HLA-E and MHC class I chain related gene (MICA) in Hematopoietic Stem Cell Transplantation, Uma Kanga, AIIMS, 2 years, 2015–2017, Rs. 8 lakhs
5. *In phase* polymorphism analysis of the HLA minigenome and its application in medical research: advantage of Next Generation Sequencing (Japanese Society for Promotion of Science), Uma Kanga, DST- JSPS (Indo-Japanese), 2 years, 2016–2018, Rs. 6.8 lakhs
6. Genomic analysis of HLA and Non HLA genes and humoral profile of Type 1 Diabetes Mellitus in the population of North East India, Uma Kanga, DBT(BCIL), 3 years, 2017–2020, Rs. 127.8 lakhs
7. Comparative study of HIV/AIDS associated genome/epigenome diversities in India and Japan, Gaurav Sharma, DST-JSPS, 2 years, 2015–2017, Rs. 5 lakhs

Completed

1. Impact of transcriptional gene silencing of HIV1C on ecto-enzymes and negative co-stimulatory molecules expressed by T cell subsets: relevance to chronic immune activation in HIV infection, D.K. Mitra, DBT, 3 years, 2013–2016, Rs. 75.24 lakhs
2. Cytokine profile of poly functional T cells in Latent and Active Tuberculosis patients: Impact of regulatory T cells, D.K. Mitra, DBT, 3 years, 2014–2017, Rs. 97.58 lakhs
3. Impact of HLA-G on host immune response in human tuberculosis, Uma Kanga, ICMR, 3 years, 2012–2016, Rs. 46.5 lakhs
4. Impact of HLA-G on acute rejection in Renal Transplantation, Uma Kanga, AIIMS, 2 years, 2014–2016, Rs. 10 lakhs

Departmental projects

Ongoing

1. Study of T cell response among older patients with TB.
2. Studies on Immunoregulatory mechanisms for host T cell response in human tuberculosis.
3. Phenotypic and functional characterization of various T cell subsets in sarcoidosis.
4. NKT Cells in Tuberculosis: Impact on Protective T cell response.
5. Studies for identification of cofactors/molecules mediating Leishmania DNA and TLR-9 interaction during Leishmania donovani infection.
6. Evaluation of immunomodulatory potential of few Ayurvedic herbs.
7. Role of Exosomes and miRNA in host-pathogen interactions in Tuberculosis & Sarcoidosis.

8. Chronic Atherosclerosis Disease: Integrated analysis of stage-specific alterations in gene expression and miRNA profile of atherosclerotic plaques and correlation with plasma-derived extracellular vesicles in circulation
9. A study on genetic profile of chronic ITP patients in North Indian Tertiary care Centre
10. Clinical relevance of non-classical HLA, MICA and NKG2 receptors in HSCT
11. Genetic susceptibility to drug hypersensitivity: role of HLA genes
12. Genomic diversity of HLA genes in Kashmiri population- advantage of NGS technology

Collaborative projects

1. Multivalent leishmania vaccine development (ZydusCadila)
2. Antifactor H antibody associated Hemolytic Uremic Syndrome (Paediatrics).
3. Evaluation of novel forensic exhibits and informativity of Y-STR markers in chimerism situation (Forensic Medicine)
4. T cell subsets and their functions in Aplastic Anemia (Haematology)
5. Potential role of HLA-G mediated immunomodulation by tissue specific human mesenchymal stem cell (hMSCs), collaboration with (Stem Cell Facility)

PUBLICATIONS

Journals: 3

PATIENT CARE

1. PCR based HLA DNA typing for the patients referred from DrBRA-IRCH unit, AIIMS for selecting 'suitable' donor for stem-cell transplantation.
2. Flow based diagnostic services for the patients suffering from various Primary and Secondary Immunodeficiency Disorders.

Renal Transplantation	Recipients	Donors	Total
Live Related	431	378	809
Cadaver Transplantation (Kidney)	115	15	130
Cross Match Test - CDC (Serology)	1140		
Cross Match Test – (Flowcytometry)	248		
Luminex PRA	285		
Luminex (DSA monitoring)	155		
Bone Marrow/Hematopoietic Stem Cell Transplantation			
Aplastic Anemia	70	191	261
Acute Leukemia	17	42	133
Thalassemia	34	85	119
Chronic Myeloid Leukemia	18	41	73
AML	25	80	105
Others	33	56	94
Total	197	495	785
Primary/Secondary Immunodeficiency Diseases			2450

Chimerism studies in BMT: 474 samples (158 recipient-donor pairs and 158 re-transplant samples included in the test)
 Unrelated HLA matched donor search for BMT from Asian Indian Donor Marrow Registry: 45

DIAGNOSTICS

Spondyloarthropathies (HLA-B27)	447
Other diseases (Behcet's Disease, Coeliac Disease, Narcolepsy)	65
Immune Deficiency Disorders (CGD, ALPS, LAD, Hyper IgM)	2450

Cellular Immunology Division

Free of cost service provided for Primary & Secondary Immunodeficiency Diseases (2016-17)

S. no.	Diagnosis	Markers/Assays	No. of tests
1.	T Cell Frequency	CD3, CD4, CD8	430
2.	B Cell Frequency	CD19, 20	460
3.	NK Cell Frequency	CD3, CD56, CD16	420
4.	NK Cell Activity (HLH)	CD3, CD56, Perforin	210
5.	ALPS	CD3, CD4, CD8, TCR $\alpha\beta$	40
6.	Leukocytes Adhesion Deficiency	CD11a,b & CD18	350
7.	Chronic Granulomatous Disease	DCFDA/ DHR	510
8.	Hyper IgM	CD3, CD69, CD154 (CD40L)	22
9.	T cell function (IFN-gamma)	CD3, CD8, IFN-gamma	8
Total			2450

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Dr Uma Kanga received the Best Poster Award for her presentation at the 30th European Immunogenetics and Histocompatibility Conference held in Kos Island, Greece during May 2016; nominated as a member of the General Assembly of the International Union of Immunological Sciences (IUIS); nominated as a member of the Technical Expert Committee for 'Strengthening of Quality Control Testing of Biochemical Kits' at the National Institute of Biologicals, Ministry of Health and Family Welfare, Govt of India; American Association of Immunologists (AAI) and (ICI) awarded a bursary to participate in the 16th International Congress of Immunology held at Melbourne, Australia. She was invited as a panelist to speak at the special session 'Global Immunology Challenges for Young Investigators' during this conference.

Dr Sanjeev Goswami was elected Council Member in APHIA since 2015.

Dr Gaurav Sharma won the Best oral presentation award in ISHICON-2016.

VISITING SCIENTISTS

Dr Takashi Shiina and Dr Shingo Suzuki from Dept of Molecular Life Sciences, Tokai University, Isehara, Japan visited our department (under the DST-JSPS collaborative project), 13–27 March 2017.

9.42. Urology

Professor and Head

P.N. Dogra

Professors

Amlesh Seth

Rajeev Kumar

Associate Professor

Prabhjot Singh

Assistant Professors

Rishi Nayyar

Brusabhanu Nayak

Sanjay Kumar
(from 3 November 2016)

Siddharth Jain
(from 24 November 2016)

Manoj Kumar
(from 29 November 2016)

HIGHLIGHTS

The Urology Department organized the 2nd Sarinder Man Singh Memorial Oration in Urology on 5 November 2016 at JLN Auditorium. The oration was delivered by Professor NP Gupta, former Head, Department of Urology, AIIMS on 'Journey from Open to Laparoscopic to Robotic Urologic Surgery and Future' at AIIMS, New Delhi.

The department also organized an 'International Symposium on Carcinoma Bladder' on 13–14 November 2016 at AIIMS, New Delhi, jointly organized by Department of Urology, AIIMS and Rajiv Gandhi Cancer Institute, New Delhi.

Two faculty members were awarded the prestigious Dr BC Roy Award by the Honorable President of India to add to the department's list of illustrious achievements.



EDUCATION

The faculty of the department participated and delivered lectures in continuing medical education programs symposia, national and International conferences during the year. The department imparted lectures for the undergraduates and nursing students (BSc and MSc). The department trains 11 postgraduates for the degree of MCh in Urology over a three year period. The department had observers, fellows and visiting faculty from various Indian/Foreign Medical Universities to observe and learn Robotics, Endourology, Laparoscopy, Open surgery and Microsurgery in Urology. Two years Fellowship degree course in 'Minimally Invasive Urology (Lap and Robotics)' was formally started with the induction of a candidate as a fellow in January 2017. The faculty of the department are examiners for NBE and MCh Urology in various universities and Inspector for the Medical Council of India and National Board for recognition of standard of teaching and training and facilities for Urology postgraduate courses. The faculty of the department took active part in restructuring and reframing the curriculum for MCh and DNB training courses in Urology.

CMEs/Workshops/Symposia/National and International Conferences

1. Organized 2nd Dr Sarinder Man Singh Oration in Urology on 5 November 2016 at JLN Auditorium, delivered by Professor NP Gupta, on 'Journey from Open to Laparoscopic to Robotic Urologic Surgery and Future' at AIIMS, New Delhi.
2. Organized International Symposium on Carcinoma Bladder on 13 & 14 November 2016 at AIIMS, New Delhi, jointly organized by Department of Urology, AIIMS and Rajiv Gandhi Cancer Institute, New Delhi.

Lectures delivered

P.N. Dogra: 13

Rajeev Kumar: 17

Prabhjot Singh: 9

Rishi Nayyar: 5

Brusabhanu Nayak: 1

P.N. Dogra: 13

1. Robotic assisted stone surgery and pre-peritoneal RARP, Robotic Surgeons Council 2016, 8–9 April 2016, Indraprastha Apollo Hospital, New Delhi
2. Management of the Ca prostate, USI-BOE Uro-Oncology Workshop, 17 & 18 June 2016, RML Hospital and PGIMER, New Delhi
3. Urologic Robotic Surgery, Surgery Update, 30 September 2016, MAMC, New Delhi
4. Update in management of carcinoma prostate, 17 September 2016, Medanta Hospital, Gurugram, Haryana
5. Millins prostatectomy revisited by a Robot, EZ USICON 2016, 21–23 October 2016, Imphal, Sikkim
6. Management of anastomotic strictures following radical prostatectomy, NZUSICON 2016, 13–15 October 2016, Agra, UP
7. Does robotic assisted radical cystectomy offer any advantage over open radical cystectomy? International Symposium on Bladder Cancer, organized by AIIMS and RGCI, 13–14 November 2016, AIIMS, New Delhi
8. Thematic session related to carcinoma prostate and sequel of radical prostatectomy, NZUSICON 2016, 13–15 October 2016, Agra, UP
9. Renal parenchymal injury in PCNL, PERCON and IAU 2016, 19–21 November 2016, New Delhi
10. Robotic and open radical prostatectomy, what a urologist wants to know, International Symposium on Urologic Imaging and Intervention, 27–29 January 2017, AIIMS, New Delhi
11. Decision making in difficult urethral reconstruction, UROCON 2017, 16–18 February 2017, BPKIHS, Dharan, Nepal
12. What the urologist want to know from radiologist in reference to radical prostatectomy, BAUSCON 2017, 19–20 February 2017, Cox Bazar, Bangladesh
13. Timing of radical cystectomy in non-muscle invasive bladder cancer—Indian scenario, 32nd Annual EAU Congress, 24–28 March 2017, London, UK

Rajeev Kumar: 17

1. Laparoscopic adrenalectomy for large pheochromocytoma: Tips for success, JUA Annual Meeting, 23–25 April 2016, Convention Centre, Sendai, Japan
2. Laparoscopy tips and tricks, 14th UAA Annual Congress, 21–24 July 2016, Suntec Convention Centre, Singapore
3. Why do my papers get rejected, 14th UAA Annual Congress, 21–24 July 2016, Suntec Convention Centre, Singapore
4. Updates on stone disease, 36th SIU Meeting, 20–24 October 2016, Buenos Aires, Argentina

5. Nephroscopes and ureteroscopes, Asian Urology Surgical Training and Education Group, 23–25 September 2016, Olympus Training Centre, Guangzhou, China
6. Technique for reducing warm ischemia during partial nephrectomy, CME on Robotic Surgery, 17 March 2017, PGIMER, Chandigarh
7. Obstructive uropathy and chronic kidney disease, CME on World Kidney Day, 9 March 2017, RML Hospital, New Delhi
8. Male genital tract infections and ART: Evidence based management, FERTICON 2017, 25–26 February 2017, AIIMS, New Delhi
9. IMRAD: The nuts and bolts of scientific communication, USICON 2017, 18–21 January 2017, CIDCO Convention Centre, Mumbai
10. Gathering data for publications, USICON 2017, 18–21 January 2017, CIDCO Convention Centre, Mumbai
11. Status of men's health in India, USICON 2017, 18–21 January 2017, CIDCO Convention Centre, Mumbai
12. Academic urology, NZUSICON 2016, 13–15 October 2016, Agra
13. Biochemical recurrence after radical prostatectomy, CME on Prostate Cancer, 17 September 2016, Medanta Medicity, Gurgaon
14. Urodynamics for the nephrologist, Annual Meeting, Delhi Nephrology Society, 26 June 2016, IHC, New Delhi
15. Nephrometry scores and their importance, BOE course on Oncology, 17–18 June 2016, RML Hospital, New Delhi
16. Global decline in semen parameters, Annual Meeting, KISAR, 1 May 2016, Bengaluru
17. EBM of male infertility, Annual Meeting, KISAR, 1 May 2016, Bengaluru

Prabhjot Singh: 9

1. RPLND: Where we stand now?, 12th International Conference of the Asian Clinical Oncology Society, 10 April 2016, New Delhi
2. Management of voiding dysfunction in multiple sclerosis, Public Lecture on Multiple Sclerosis, 21 May 2016, AIIMS, New Delhi
3. Tumors of male reproductive system, 3rd National Seminar on Reproductive Health Awareness, 10 September 2016, Birla Balika Vidyapeeth, Pilani
4. Nomograms/Prediction tools in Ca Prostate, Update on management of Prostate cancer, 17 September 2016, Medanta Medicity, Gurgaon
5. Urostomy management, Public Lecture on World Ostomy Day, October 2016, AIIMS, New Delhi
6. Urological diseases, Public Lecture in International Trade Fair, 27 November 2016, Pragati Maidan, New Delhi
7. Prostate cancer and problems related to urology, Inhouse lecture for CCW All India Radio Officers in Prasar Bharti (India's Public Service Broadcaster), 6 December 2016, Prasar bharti, New Delhi
8. Lymphadenectomy in Ca penis, UROCON 2017, NAUS, 18 February 2017, Dharan, Nepal
9. Best practices in TRUS guided prostate biopsy, Medanta Urology Grand Round, An Update in Prostate Biopsy, Molecular diagnostics and Immunopathology, 26 March 2017, Medanta Medicity, Gurgaon

Rishi Nayyar: 5

1. Female urethral stricture—Myth or reality, Perineocon, 30 July 2016, Dr RML Hospital and PGIMER, New Delhi
2. Surgical orchiectomy, In metastatic Ca prostate, Update in Management of Carcinoma Prostate, 17 September 2016, Medanta Medicity, Gurgaon
3. Retroperitoneal tumors, XXXIV National Continuing Medical Education Programme in Surgery, 28 September 2016, Maulana Azad Medical College, New Delhi
4. Hematuria, CME in Surgery, 2017, 19 February 2017, AIIMS, New Delhi
5. Negative biopsy and rising PSA—Which protocol to follow, Medanta Urology Grand Rounds, Urologic Oncology Update in Molecular Diagnostics, Immuno-pathology and Prostate Biopsy, 26 March 2017, Medanta Medicity, Gurgaon

Brusabhanu Nayak: 1

1. Current status of lymph node dissection in bladder cancer, UROCON 2017, NAUS, 18 February 2017, BPKIHS, Dharan, Nepal

Oral papers/posters presented: 25

1. Dogra PN. Narrow band imaging cystoscopy in non-muscle invasive bladder cancer: A prospective randomized comparison to the standard white light cystoscopy, AUA, 2016, 6–10 May 2016, Convention Centre, San Diego, USA
2. Dogra PN. Outcomes of pyeloplasty in poorly functioning kidneys, AUA, 2016, 6–10 May 2016, Convention Centre, San Diego, USA
3. Dogra PN, Shrivastava P, Nayyar R. Outcomes of corrective therapeutic procedures in obstructed poorly functioning kidneys secondary to benign conditions, World Congress of Endourology, 9 November 2016, Cape Town Convention Center, Cape Town, South Africa
4. Dogra PN, Singh P, Rao N, Desai P, Nayyar R. Robot assisted preperitoneal simple prostatectomy for large benign prostate—Initial experience, World Congress of Endourology, 9–12 November 2016, Cape Town Convention Centre, Cape Town, South Africa
5. Dwivedi D, Kumar R, Bora G, Thulkar S, Datta Gupta S, Jagannathan N. Pre-biopsy multiparametric MRI correlates with the Gleason score of prostate cancer on biopsy, American Urological Association Annual Meeting, 5–9 May 2016, Convention Centre, San Diego, USA
6. Kaushal R, Yadav S, Shrivastava P, Nayak B, Singh P. The wandering clip: Unusual cause of urolithiasis following minimally invasive reconstructive procedures, USICON 2017, 18–21 January 2017, CIDCO Exhibition Center, Navi Mumbai, India
7. Khan N, Nayyar R, Dogra PN. Endoscopic sclerotherapy for management of urethral hemangioma, NZ-USICON, 14 October 2016, Agra
8. Khan N, Nayyar R, Dogra PN. Lap management of upper pole non-functioning moiety in left duplex kidney with ectopic ureter, NZ-USICON, 14 October 2016, Agra
9. Khan N, Nayyar R, Dogra PN. Robot assisted bilateral ureteric stone removal with tailored ureteral reimplantation for congenital megaureter, USICON, 19 January 2017, CIDCO Exhibition Center, Navi Mumbai
10. Khan N, Saini AK, Singh P, Nayyar R, Dogra PN. Laparoscopic nephroureterectomy for poorly functioning grossly hydronephrotic lower moiety in left duplex system, NZ-USICON, 14 October 2016, Agra
11. Kumar R, Prakash P, Desai P. Laparoscopic adrenalectomy for large pheochromocytomas: tips for success, 36th SIU Meeting, 20–24 October 2016, Buenos Aires, Argentina
12. Nayak B, Tiwari D, Kumar R, Dogra P, Seth A, Singh P, Nayyar R. Comparison of perioperative outcomes of open, Laparoscopic and robotic partial nephrectomy: Experience of a Tertiary Care Centre, World Congress of Endourology, 8–12 November 2016, Cape Town, South Africa
13. Nayyar R. Lap management of upper pole nonfunctioning moiety in Lt duplex kidney, World Congress of Endourology, 9 November 2016, Cape Town Convention Center, Cape Town, South Africa
14. Rao N, Ramachandran R, Tandon N, Prabhjot Singh, Rajeev Kumar. Surgical and hemodynamic outcomes in patients undergoing pheochromocytoma and paraganglioma surgery: A prospective cohort study, 36th SIU Meeting, 20–24 October 2016, Buenos Aires, Argentina
15. Rao N, Ramachandran R, Tandon N, Singh P, Kumar R. Surgical and hemodynamic outcomes in patients undergoing pheochromocytoma and paraganglioma surgery: A prospective cohort study, 14th UAA Congress, 21–24 July 2016, Suntec Convention Centre, Singapore
16. Rao N, Ramachandran R, Tandon N, Singh P, Kumar R. Surgical and hemodynamic outcomes in patients undergoing pheochromocytoma and paraganglioma surgery: A prospective cohort study, American Urological Association Annual Meeting, 5–9 May 2016, Convention Centre, San Diego, USA
17. Seth A, Aggarawala S, Nayyar R, Dogra PN, Shukla A. Posterior sagittal anorectal pull through for a persistent post-traumatic rectourethral fistula in an adult, 36th Congress of Societe Internationale d'Urologie, 20 October 2016, Buenos Aires, Argentina
18. Seth A, Chaudhary S, Pal S, Kumar A, Dogra PN, Nayyar R, Kumar R. Renal cell carcinoma with inferior vena cava thrombus: Single center experience with long term follow up, 36th Congress of Societe Internationale d'Urologie, 20 October 2016, Buenos Aires, Argentina
19. Seth A, Tiwari D, Nayyar R, Saxena R, Chaudhary S. A rare case of epitheloid angiomyolipoma with cavo—atrial thrombus, 36th Congress of Societe Internationale d'Urologie, 20 October 2016, Buenos Aires, Argentina
20. Shrivastava N, Nayak B, Dogra P, Singh P. Perioperative outcome of robotic radical cystectomy: Initial experience from a Tertiary Care Centre, World Congress of Endourology, 8–12 November 2016, Cape Town, South Africa
21. Shrivastava P, Nayak B, Dogra P, Seth A, Singh P. A study of correlation of pre-operative serum C-reactive protein, platelet count and calcium levels with stage and type of RCC and their value in predicting recurrence, metastasis

and mortality in the first year after nephrectomy, USICON 2017, 18–21 January 2017, CIDCO Exhibition Center, Navi Mumbai, India

22. Shukla A, Agarwal T, Kumar R. Laparoscopic excision of inter aorto-caval paraganglioma, 36th SIU Meeting, 20–24 October 2016, Buenos Aires, Argentina
23. Singh P, Kumar A. Bilateral synchronous renal pelvic TCC: Management dilemma, World Congress of Endourology, 9–12 November 2016, Cape Town Convention Centre, Cape Town, South Africa
24. Singh P, Kumar A. Outcomes of shock wave lithotripsy in pediatric population: does the site and size of stone matter? World Congress of Endourology, 9–12 November 2016, Cape Town Convention Centre, Cape Town, South Africa
25. Tiwari D, Nayak B, Dogra P N, Singh P, Chatterjee K. Relationship between ABO blood group type and tumor grade, stage, recurrence and progression in transitional cell carcinoma of bladder, USICON 2017, 18–21 January 2017, CIDCO Exhibition Center, Navi Mumbai, India

RESEARCH

Funded projects

Ongoing

1. Male infertility: Demographics, etiology and outcomes of standard clinical practice, Rajeev Kumar, ICMR, 3 years, 2015–2017, Rs. 11.66 lakhs
2. Human papillomavirus status in penile carcinoma in Indian patients: Incidence, type distribution and correlation with clinico, pathological staging, Prabhjot Singh, AIIMS, 2 years, 2016–2018, 5 lakhs
3. Role of circulating tumor cells in patients undergoing TURBT for bladder cancer: Effect on Tumor cells dissemination and its correlation with histopathology, Rishi Nayyar, AIIMS, 2 years, 2016–2018, 5 lakhs

Completed

1. Study of miRNA 182 and miRNA 187 as potential biomarkers in prostate cancer patients and its correlation with serum PSA, Gleason score and prostate cancer staging, Brusabhanu Nayak, AIIMS, 2 years, 2015–2017, Rs. 4.8 lakhs

Departmental projects

Ongoing

1. mpMRI, TRUS fusion biopsy in detection of early prostate cancer
2. Microbiological evidence of live TB bacilli in nephrectomy specimen of treated genitourinary TB patients
3. Outcomes of upper tract reconstructive surgery in poorly functioning kidneys
4. Role of circulating tumor cells in patients undergoing TURBT for bladder cancer: Effect on tumor cells dissemination and its correlation with histopathology
5. Robot assisted preperitoneal simple prostatectomy for large benign prostate: Revisiting retropubic simple prostatectomy, Initial experience

Completed

1. Prospective analysis of factors predicting patency of vasopididymostomy in patients with idiopathic obstructive azoospermia
2. Prospective comparison of clinical and urodynamic parameters in spinal tuberculosis with lower urinary tract symptoms before and after surgical intervention
3. To study the role of PDE, 5 in the management of chronic prostatitis/chronic pelvic pain syndrome
4. Role of MRI USG fusion biopsy in Carcinoma prostate

Collaborative projects

Ongoing

1. Prevalance and predictors of persistent hypertension and diabetes in patients undergoing pheochromocytoma and paraganglioma removal and its effect on quality of life (Anesthesia, Endocrinology)
2. Male infertility: Demographics, etiology and outcomes of standard clinical practice (Anatomy)
3. Erectile dysfunction in nonalcoholic fatty liver disease (Medicine)
4. A comparison of ^{99m}Tc-DMSA and ^{99m}Tc-LL EC for the evaluation of differential renal function in unilateral hydronephrosis (Nuclear Medicine)

5. Role of early dynamic PET-CT with 68GaPSMA-HBED-CC in patients with adenocarcinoma prostate (Nuclear Medicine)
6. Role of multiparametric MRI and diffusion tensor imaging in prostate cancer: Comparison with whole mount histopathological examination of Robotic prostatectomy specimens (Radiology)

Completed

1. Study of miR200c and EMT markers (ZEB1, ZEB2 and Twist) in bladder urothelial carcinoma (Pathology)
2. Urinary micro semino protein beta (MSMB) and Prostate specific antigen (PSA) ratio for diagnosis of prostate cancer (Anesthesia, Endocrinology)

PUBLICATIONS

Journals: 25

Abstracts: 25

Chapters in books: 7

PATIENT CARE

Main Hospital OPD

New cases: 17895 Old cases: 43527

BRAIRCH Uro-malignancy clinic

New cases: 395 Old cases: 4112

Andrology and Infertility Clinic

New cases: 1001 Old cases: 1417

Admissions

Long admissions: 1425 Short Admission: 735

Discharges: 2345

Main OT Surgical Procedures: 2307

Open surgery: 454

Radical cystectomy	43	Radical nephrectomy+cytoreductive	43+1
Radical cystectomy with nephroureterectomy	6	Radical nephrectomy with IVC thrombectomy	10
Salvage cystectomy	1	Radical Nephroureterectomy	9
Partial cystectomy	3	Simple nephrectomy	17
End To End Urethroplasty	26	Partial nephrectomy	18
Anterior lay open	12	Heminephrectomy	2
Transpubic Urethroplasty	3	RPLND	3
Augmentation Cystoplasty	1	Graft urethroplasty	30
Adrenalectomy	5+1B/L	Second stage closure	4
Adrenalectomy with IVC thrombectomy	1	Pyeloplasty	20
Paraganglioma excision	1	Continent catheterisable pouch	0
Ureteric Reimplant	9	Boari flap	2
VVF repair	19	Ureteroureterostomy	11
Vesicouterine fistula repair	1	Total penectomy	5
Orchidopexy/orchiectomy (undescended testis)	9	Prostatectomy	2
AUS implantation/Penile prosthesis	1	Partial Penectomy	10
Pyelolithotomy	1	Hypospadias repair	7
Cystolithotomy	5	TVT/TOT	2
Ilioinguinal lymph node dissection	3	AV Fistula	1
Chordee correction	6	Ureterocalycostomy	2
High Inguinal Orchiectomy	11	Others	87

Endourology: 1526

Upper tract: 451		Lower tract: 1075					
PCNL	152	TURP	67	CLT	38	DJS	295
URS	219	TURBT	277	PCCLT	5	DJR	55
RIRS	75	TUR fulguration	13	HOLEP	41	OIU/BNI	47
PCNUL	0	TURED	9	HOLCT	6	Endodilatation	17
Endopyelotomy	5	Clot evacuation	9	PVP	16	Laser welding	1
		Endoevaluation	40	Ureterocele incision	6	Others	133

Laparoscopic: 185

Radical nephrectomy	37	Partial nephrectomy	6
Simple nephrectomy	37	Adrenalectomy	15+ 6 B/L
Retroperitoneoscopic nephrectomy	8	Nephroureterectomy	18
Pyeloplasty	31	Ureterolithotomy	8
Pyelolithotomy	2	Lap radical prostatectomy	1
Ureteric reimplant	1	Paraganglioma excision	2
Diagnostic lap	4	Others	9

Robotic: 113

Radical prostatectomy	46	Radical cystectomy	1	Pyeloplasty	35
Ureterolithotomy	6	Simple prostatectomy	2	Ureteric reimplant	1
Simple nephrectomy	3	Partial nephrectomy	12	Radical Nephrectomy	5
Pyelolithotomy	1	Others	0	Partial Cystectomy	1

Microsurgery: 29

VEA	15	VVA	3	MVL	7
Scrotal exploration	3	TESE	1		

Minor OT: 12882

Endoscopic	2627	Uroflowmetry	5290
Open	18	Urodynamic Study	360
Minor cases	4403	Stone Analysis	184

ESWL:1555

New cases	459	Old cases	1096
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Ultrasound procedures: 402

Prostate biopsy	274	SPC	21
MRI-TRUS Fusion biopsy	102	PCN	2
USG	3		

Community services/camps etc.

Dr Brusabhanu Nayak attended Health camp at Leh District Hospital on 25–30 September 2016

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor P.N. Dogra was awarded Dr B.C. Roy National Award by Medical Council of India in recognition of Eminent Medical Teacher for the year 2016; Certificate of Achievement DUSCON 2016 by Delhi Urological Society in 2016; Chairman of the Hospital Management Board of AIIMS; Chairman of the Committee to review the existing emergency services and plan for capacity building in future at AIIMS; Chairman of SPC for procurement of M&E and consumable

items at CDE&R; Chairman of Condemnation Committee of Institute for Vehicles & Equipments; Member of various Committees constituted by Director, AIIMS; Chairman of the committee to review EHS services and suggest measures to strengthen EHS services; Chairman of SC/ST grievances cell; Looking after the administrative responsibilities of the Department regarding teaching, research, patient-care and projecting the Mission and Vision of the department; Appellant authority, AIIMS for the department of Urology; Demonstrated live operative surgeries in workshops; Live demonstration of VVF by trans-vaginal route, Live Operative Workshop on Open Urological Surgery, 20&21 May 2016, IGMC, Shimla; Live demonstration of Bipolar TURP, USI, BOE Uro-Oncology Workshop, 17–18 June 2016, RML Hospital and PGIMER, New Delhi; Chaired scientific sessions in national scientific programmes: (i) Robotic cystectomy and Robotic partial nephrectomy, International Live Operative Workshop on Robotic Assisted Urological Surgery, 10–11 April 2016, Max Hospital, Saket, New Delhi; (ii) Live operative workshop, PERCON and IAU 2016, 19–21 November 2016, New Delhi; (iii) International Society for study on Bladder pain Syndrome, 17–19 November 2016, New Delhi; (iv) Joint session of AUA and USI-USICON 2017, 18–21 January 2017, CIDCO Exhibition Center, Mumbai; (v) Joint session of EAU and USI in Urology beyond Europe, 32nd Annual EAU Congress, 24–28 March 2017, London, UK; (vi) Robotic radical cystectomy and Urinary diversion, Robotic Surgeons Council 2016, 8&9 April 2016, Indraprastha Apollo Hospital, New Delhi; Trained observers from National and International Universities; Invited as a faculty, USI, Board of education Mock examination, 4 March 2017, KEM Hospital, Mumbai; Invited as Chief Guest, EZ USICON 2016, 21–23 October 2016, Imphal, Sikkim; Delivered a live talk on Urological Problems in Health Programme ‘Sanjeevani: Baat Sehat Ki’ 3 July 2016 at Vividh Bharti Services, All India Radio.

Professor Amlesh Seth was awarded Dr BC Roy National Award by Medical Council of India in recognition of Best talents in encouraging the development of specialities in different branches in Medicine for the year 2015.

Professor Rajeev Kumar delivered the Dr PB Sivaraman Endowed Lecture: South Zone USICON, Pondicherry 9–10 July 2016. “Scientific publications, the inside story”; Participated as a resource person and faculty for workshops on medical writing and research methodology; Training program for transplant coordinators, Mid-term ISOT meeting Chennai: 16 March, 2017; XXI Quality improvement workshop, DIPSAR, New Delhi: 4 February 2017; Workshop on scientific writing, IGIMS, Patna: 5&6 August 2016; For Researchers at AIIMS, New Delhi: 19&20 August 2016; For new PG students at AIIMS: multiple courses during the year

Dr Prabhjot Singh received Commendation Certificate AIIMS Excellence Research Award 2015–16 for paper “SIRS following PNL: Assessment of risk factors and their impact on patient outcomes” on Institute Day AIIMS by Health Minister of India; Hargobind Travel Fellowship 2016 by North Zone Urological Society of India to do observership for 2 weeks for any Indian medical institute; Selected as Indian member of Youth Section of Urology Association of Asia; American Urological Association Chakroborty Fellowship 2017 to attend AUA meeting 2017 Boston and observership for 6 weeks at University of Miami, USA; DUSCON Achiever’s Award 2016 from Delhi Urological Society.

Dr Rishi Nayyar was Editorial committee member of Indian Journal of Urology; Council member of North Zone Chapter of Urological Society of India (NZUSI); Live Surgical Demonstration of dorsal onlay free vaginal graft urethroplasty for female urethral stricture at Perineocon on 30–31 July 2016 at Dr RML Hospital and PGIMER, under the aegis of North Zone Chapter, Urology Society of India; Core faculty for Fellowships under Urology department at AIIMS for ‘Reconstructive Urology’, ‘Minimally Invasive Urology’, and ‘Uro-oncology’. Also contributing as faculty for ‘Urogynecology’ fellowship under Department of Obstetrics and Gynecology; Invited as Examiner for DNB trainees under National Board of Examinations for undertaking Formative Assessment and conduct Work Place Based Clinical Assessment in the discipline of Urology (Both Theory and Practical examination); Selected for award of Fellowship of International Medical Sciences Academy (FIMSA); Appointed as the Convener for ‘Epidemiological Men’s Health Survey in Northern India’ by the North Zone Chapter of Urological Society of India (NZUSI); Selected as the Best Reviewer of the Journal for the year 2016 by the Editorial Board of the Indian Journal of Urology; DUSCON Achiever’s Award 2016 from Delhi Urological Society for exemplary contribution and achievement in the field of urology; Member of the Subject Expert Committee (SEC) (Reproductive and Urology) under Directorate General of Health Services, Office of Drugs Controller General (India), Expert Committee Coordination Cell.

Dr Brusabhanu Nayak was awarded European Urology Scholarship to visit Guy’s and St Thomas Hospital, London, UK as a clinical observer from 16 May 2016 till 14 June 2016; DUSCON Achiever’s Award 2016 from Delhi Urological Society.

Dr Siddarth Jain was awarded AUA-USI International Travel Fellowship from USI at USICON 2017; GM Phadke Travel Fellowship from USI at USICON 2017; Uro Quiz First Prize at USICON 2017.

Dr Manoj Kumar was awarded IJU best paper 2016.

10.1. Cardiothoracic Centre

Chief

Balram Airan

Cardiothoracic and Vascular Surgery

Professor and Head

Balram Airan

Professors

S.K. Choudhary
V. Devagourou

U.K. Chowdhury
Milind P. Hote

A.K. Bisoi
Sachin Talwar

Associate Professors

P. Rajasekhar

Manoj Kumar Sahu

Assistant Professors

Amol Bhoje (Contract)

Ramesh P. Menon

Sarvesh Pal Singh

Chief Physiotherapist

V.P. Gupta

Cardiology

Professor and Head

V.K. Bahl

Professors

Anita Saxena
K.C. Goswami
S. Mishra
N. Naik
S. Ramakrishnan

S.S. Kothari
R. Juneja
S. Seth
G. Karthikeyan
S. Singh

Balram Bhargava
R. Narang
Rakesh Yadav
Gautam Sharma
Ambuj Roy

Assistant Professors

Saurabh K. Gupta

Neeraj Parakh

Sunil K. Verma

Cardiac Anaesthesia

Professor and Head

Usha Kiran

Professors

Sandeep Chauhan
Minati Choudhury

Neeti Makhija
Sambhunath Das
Parag Gharde

Poonam Malhotra Kapoor
Vishwas Malik

Associate Professors

Suruchi Hazija

Arindam Choudhury

Cardiac Radiology
Professor and Head

Sanjiv Sharma

Professors

Gurpreet Singh Gulati

Priya Jagia

Assistant Professor

Sanjeev Kumar

Cardiac Biochemistry

Professor

Lakshmy Ramakrishnan

Scientist I

Manoj Kumar Tembhre

Nuclear Medicine

Professor

Chetan D. Patel

Cardiac Pathology

Professor

Ruma Ray

Associate Professor

Sudheer Kumar Arava

Stem Cell Facility

Professor

Sujata Mohanty

Organ Retrieval and Banking Organization

Faculty In-charge

Aarti Vij

Blood Transfusion Services

Faculty In-charge

Lakshmy Ramakrishnan

Chief Medical Officer

Anjali Hazarika

Senior Technical Officer

Kalpana Misra

Bijay Majhi

Suresh Kumar

Medical Social Service Officer

Veena Belani Sup

Dietetics

Assistant Dietician

Jasmin Kaur

HIGHLIGHTS

Cardiothoracic and Vascular Surgery

The Cardiothoracic and Vascular Surgery Department started donor heart harvesting programme from outside Delhi-NCR (Pune, Indore, Chandigarh, Jaipur) and conducted 14 heart transplants in 2016. The department also achieved the milestone of completing more than 50 heart transplants at AIIMS, New Delhi. The maximum in any public sector hospital in the country. There was signing of an MOU between AIIMS, New Delhi and FAM, Paris in the field of Cardiovascular Research, Infectious diseases and cancer. Major progress was made in the planning stage of NCVI (National Cardiovascular Institute) at Jhajjar campus; AIIMS II; by submission of the space requirements and the preliminary plans for the 800 bedded facility to HSCC which has been appointed as Project Management Committee. The department organized 4 workshops and conducted 11 wet labs both in AIIMS New Delhi and at other national centres to train national and international surgeons in management of complex cardiac problems. The department started a new course “DM (Cardiac Surgical Intensive Care)”, first in India and another course—fellowship in Aortic Surgery.

Cardiology

During the year, the Cardiology Department catered to nearly 1,30,000 outpatient visits. Over 35,000 patients underwent echocardiography, and about 3000 diagnostic cardiac catheterizations were performed. More than 3000 patients underwent interventional procedures including angioplasty, device implantations and balloon valvoplasties.

The department participated in several research projects studying patients across a wide spectrum of cardiac disease. Important publications relating to rheumatic heart disease, coronary artery disease and global burden of disease were published in high-impact scientific journals. We organized major cardiology meetings including India Live 2017 and CSI Delhi Branch 2017. The faculties of the department along with JNU have launched a journal JPCS and are part of major cardiology journals including Indian Heart Journal and annals of pediatric cardiology. Various faculty members were part of important committee including ones that regulated stent prices.

In addition to patient-care, research and teaching, the department was involved in a major way in furthering the academic discourse in cardiology in the country. Faculty members from the department have been elected to executive positions in the national and regional cardiology bodies and have helped refocus on the academic agenda.

Cardiac Anaesthesia

The faculty and the residents from the Department of Cardiac Anaesthesia received various awards at National and International Conferences. All professors and additional professors were examiners for various DM Cardiac Anaesthesia, MD Anesthesia and DNB anaesthesia courses all over India. The department pioneered a fellowship in Pediatric Cardiac Anaesthesia. All the faculty of the department are editorial board/review member of various national and international Cardiac Anaesthesia, Anaesthesia and Echocardiography journal. A text book of Vascular Anaesthesia has been published by the joint effort of all the faculty members of the department. Dr Poonam Malhotra has become the Vice President of IACTA (non-elected). Sixty-five publications by the Department of Cardiac Anaesthesia published in various national and international journals.

Cardiac Radiology

The faculty of Cardiac Radiology Department delivered 34 lectures at various national and international scientific meetings. The department hosted 19 observers from various places in India and abroad. They were/are receiving training in various aspects of cardiovascular imaging and endovascular interventions. The faculty are members of editorial boards and reviewers for numerous scientific journals. The departmental faculty has been running 5 research projects and thesis. They published 14 research papers in various peer reviewed international journals. Two papers were presented at an international meeting. The department installed a state-of-the-art, current generation cardiovascular CT system with advanced post-processing workstations, which allow for highly precise information for diagnosis and treatment planning for various cardiovascular diseases. Besides, a state-of-the-art RIS-PACS Data Centre for immediate availability, 100% redundancy and 100% disaster recovery backup of all imaging data and reports for all investigations has been installed in the department.

Cardiac Biochemistry

The Cardiac Biochemistry Department is actively involved in patient care and research. The faculty of the department has been included as a member of technical advisory group constituted by Ministry of Health and Family Welfare for conducting Comprehensive National Nutrition Survey (CNNS). They provided technical support to UNICEF in master training of laboratory staff responsible for analysis in the CNNS. They also helped UNICEF in selection of CRO for the survey. The faculty is also member of review committee for reviewing projects for ICMR in the area of (1) Obesity and metabolic syndrome (2) Non communicable diseases. The department is involved in several research projects involving different departments in AIIMS. For patient care the department is carrying out several investigation for patients of cardiothoracic center as well as other departments in AIIMS and other hospitals in Delhi.

Nuclear Medicine

The unit is involved in international multicenter research project titled “Value of intraventricular synchronism assessment by Gated SPECT myocardial perfusion imaging (MPI) in the management of heart failure patients submitted to cardiac resynchronization therapy”, funded by International Atomic Energy Agency, Vienna, Austria. The unit has been collaborating with other departments in funded project, two of which are funded by ICMR, one by International Atomic Energy Agency and one by National Heart, Lung and Blood Institute (NHLBI), USA.

Stem Cell Facility

The work of the facility as Center of Excellence in Stem Cell Research in 2008–2013 has been recognized by DBT and it has extended support to it for the next 5 years (CoE- Phase II). This is one of its kind facilities in northern India. Currently the faculty has six on-going projects supported by various funding agencies like DBT, ICMR, etc. The faculty is part of various educational programmes like imparting training to postgraduates and professionals from different institutions in India, giving lectures at different conferences organized at national level. A total of 10 PhD students and 7 MD and DM students are pursuing their degree at present. Students from other reputed institutes of India, like IIT Kharagpur and Delhi University, South Campus, have also completed part of their PhD work using this facility. The faculty has also actively participated and is a part of various committees involved in formulating stem cell guidelines like DCGI-CDSCO, etc. It is the only government sector facility to provide amniotic membrane graft to various hospitals in India. Recently, this service has been initiated on payment basis.

Organ Retrieval and Banking Organization

Constitution of Supplementary Board of Expert for Certification of Brain Stem Death of AIIMS, New Delhi: Fifty-one faculty members of various departments of AIIMS were empanelled by Secretary Health, GNCT of Delhi. ORBO started Training Programme for Resident Doctors on Cadaver Organ and Tissue Donation Process. Three batches comprising 139 Resident Doctors from various departments of AIIMS were trained. It conducted In-service Nurses Training Programme on Cadaver Organ and Tissue Donation Process. Five batches comprising 93 nurses from various ICUs of AIIMS were trained. It also initiated rotational posting of nursing officers in ORBO to facilitate screening and maintenance of potential brain dead donors and approach relatives of patients for tissue donation in cardiac death. Forty-six awareness camps were organized for public education and awareness generation on organ and tissue donation. 12282 persons pledged for organ and tissue donation on motivation of ORBO.

Blood Transfusion Services

The blood transfusion services of CN Centre caters to round the clock transfusion needs of patients by collecting, processing and providing safe and quality blood and blood components. Components like packed red cells, plasma, fresh frozen plasma, platelet rich plasma, platelet concentrate, cryoprecipitate, leucodepleted red cells and platelets are available in adequate numbers always. Facility for Apheresis procedures and autologous donation is available. A quality management system is in place for its products like blood and blood components, equipment, processes, and services. Pneumatic tube system installed and used for transporting patient blood samples and forms and computerization of the blood bank activity and integration with the HIS is in process.

EDUCATION

Cardiothoracic and Vascular Surgery

The department started a new course:

- DM (Cardiac Surgical Intensive Care)
- Fellowship in Aortic Surgery.

CMEs/Workshops/Symposia/National and International Conferences

Professor Balram Airan and Professor Sachin Talwar

1. Conducted workshop in paediatric cardiac surgery in April 2016 to facilitate pediatric cardiac surgery programme at Sher-i-Kashmir Institute of Medical Sciences, Srinagar
2. Conducted workshop on congenital heart surgery on 17–18 December 2016 at Sri Jayadeva Institute of Cardiovascular Sciences and Research, Bengaluru.

Dr Shiv Choudhary organized and conducted

1. Workshop on Bentall's Procedure on 20–21 August 2016, AIIMS, New Delhi
2. Wet-lab on Bentall's Procedure in “Workshop on Bentall's Procedure” on 20–21 August 2016, AIIMS, New Delhi
3. Wet lab on Aortic Valve replacement on 16 October 2016 at AIIMS, New Delhi
4. Wet lab on Mitral Valve replacement on 16 October 2016 at AIIMS, New Delhi
5. Wet lab on CABG on 16 October 2016 at AIIMS, New Delhi

6. Wet lab on vascular anastomosis on 16 October 2016 at AIIMS, New Delhi
7. Workshop on “Valve Surgery” 2–3 December 2016 at AIIMS, New Delhi
8. Wet lab on Aortic Valve replacement on 2 December 2016 at AIIMS, New Delhi
9. Wet lab on Mitral Valve replacement on 2 December 2016 at AIIMS, New Delhi
10. Wet-lab on Bentall’s Procedure on 8 January 2017, 7th International Aortic Summit, Chennai.
11. Workshop on perfusion technique in aortic surgery, cerebral perfusion, and spinal cord protection, 15 January 2017, AIIMS, New Delhi
12. Conducted the wet-lab on Bentall’s Procedure in 63rd Annual Conference of Indian Association of Cardiovascular and Thoracic Surgeons, 22–25 February 2017, Bengaluru
13. International Workshop on Pulmonary Thrombo-endarterectomy, 4–5 March 2017, AIIMS, New Delhi

Lectures delivered

Balram Airan: 3

S.K. Choudhary: 75

V. Devagourou: 5

Sachin Talwar: 5

Milind P. Hote: 6

Manoj Sahu: 1

Sarvesh Pal Singh: 5

Ramesh Menon: 2

Balram Airan: 3

1. Cardiac transplant, Present scenario in India, Cardiac CME and Midterm Annual Conference, 15–16 October, Bihar, Patna
2. Mitral valve repair, 2nd French–Indian Public and Medical Innovation Forum Conference, 17–18 November 2016, France, Paris
3. One and half ventricle repair, 63rd Annual National Conference of Indian Association of Cardiothoracic Surgeons (IACTCON 2017), 23–26 February 2017, Bengaluru, Karnataka, India

S.K. Choudhary: 75

1. Basics of cardiac surgery for cardiologist, 4th AIIMS pediatric cardiology CME, 9–10 April 2016, AIIMS, New Delhi
2. Anatomy and pathophysiology of aortic root lesions, Workshop on Bentall’s Procedure, 20–21 August 2016, AIIMS, New Delhi
3. Demonstration of anatomy on heart, Workshop on Bentall’s Procedure, 20–21 August 2016, AIIMS, New Delhi
4. Natural history, development of guidelines, decision making, timing and choice of procedure, Workshop on Bentall’s Procedure, 20–21 August 2016, AIIMS, New Delhi
5. Decision making in Bentall Procedure, Workshop on Bentall’s Procedure, 20–21 August 2016, AIIMS, New Delhi
6. Preoperative evaluation and work-up in Bentall procedure, Workshop on Bentall’s Procedure, 20–21 August 2016, AIIMS, New Delhi
7. Techniques and tricks in Bentall Procedure, Workshop on Bentall’s Procedure, 20–21 August 2016, AIIMS, New Delhi
8. What should be done for moderately dilated aorta? Workshop on Bentall’s Procedure, 20–21 August 2016, AIIMS, New Delhi
9. Video lecture Bentall’s procedure, Workshop on Bentall’s Procedure, 20–21 August 2016, AIIMS, New Delhi
10. Live surgical demonstration of Bentall’s procedure, Workshop on Bentall’s Procedure, 20–21 August 2016, AIIMS, New Delhi
11. CPB management in Bentall’s procedure, Workshop on Bentall’s Procedure, 20–21 August 2016, AIIMS, New Delhi
12. Perioperative management in Bentall’s procedure, Workshop on Bentall’s Procedure, 20–21 August 2016, AIIMS, New Delhi
13. Prevention of bleeding in Bentall’s procedure, Workshop on Bentall’s Procedure, 20–21 August 2016, AIIMS, New Delhi
14. Bentall procedure with hand-made biological conduit, Workshop on Bentall’s Procedure, 20–21 August 2016, AIIMS, New Delhi
15. Follow up management after Bentall’s procedure, Workshop on Bentall’s Procedure, 20–21 August 2016, AIIMS, New Delhi
16. Basic principles and techniques (including AIIMS protocol) of cerebral protection, Workshop on Bentall’s Procedure, 20–21 August 2016, AIIMS, New Delhi
17. Video lecture carotid cannulation, Workshop on Bentall’s Procedure, 20–21 August 2016, AIIMS, New Delhi

18. Video lecture axillary cannulation, Workshop on Bentall's Procedure, 20–21 August 2016, AIIMS, New Delhi
19. Video lecture femoral cannulation, Workshop on Bentall's Procedure, 20–21 August 2016, AIIMS, New Delhi
20. Hemiarch replacement, video lecture, Workshop on Bentall's Procedure, 20–21 August 2016, AIIMS, New Delhi
21. Pathophysiology of acute aortic dissection, Workshop on Bentall's Procedure, 20–21 August 2016, AIIMS, New Delhi
22. Management of acute type A dissection, Workshop on Bentall's Procedure, 20–21 August 2016, AIIMS, New Delhi
23. Cannulation strategy in type A dissection, Workshop on Bentall's Procedure, 20–21 August 2016, AIIMS, New Delhi
24. Type A dissection, video lecture, Workshop on Bentall's Procedure, 20–21 August 2016, AIIMS, New Delhi
25. Decision making in proximal aorta, Cardiology Seminars, 3 October 2016, AIIMS, New Delhi
26. What should we know about prosthetic valve? 4th Post Graduate Workshop 2016, 22–23 October 2016, GKNM Hospital, Coimbatore
27. When to intervene in aortic aneurysm? 4th Post Graduate Workshop 2016, 22–23 October 2016, GKNM Hospital, Coimbatore
28. Video lecture "Mitral Valve Replacement with a mechanical valve: Intra-annular Technique", 4th Post Graduate Workshop 2016, 22–23 October 2016, GKNM Hospital, Coimbatore
29. Video lecture "Mitral Valve Replacement with a bioprosthetic valve, Supra-annular Technique", 4th Post Graduate Workshop 2016, 22–23 October 2016, GKNM Hospital, Coimbatore
30. Video lecture "Aortic Valve Replacement with a mechanical valve, Intra-annular Technique", 4th Post Graduate Workshop 2016, 22–23 October 2016, GKNM Hospital, Coimbatore
31. Video lecture "Aortic Valve Replacement with a mechanical valve, Supra-annular Technique", 4th Post Graduate Workshop 2016, 22–23 October 2016, GKNM Hospital, Coimbatore
32. Video lecture "Aortic Valve Replacement with a Bioprosthetic valve, Intra-annular Technique", 4th Post Graduate Workshop 2016, 22–23 October 2016, GKNM Hospital, Coimbatore
33. Video lecture "Aortic Valve Replacement with a Bioprosthetic valve: Supra-annular Technique", 4th Post Graduate Workshop 2016, 22–23 October 2016, GKNM Hospital, Coimbatore
34. Video lecture "Technique of tricuspid annuloplasty", 4th Post Graduate Workshop 2016, 22–23 October 2016, GKNM Hospital, Coimbatore
35. Video lecture "Technique of tricuspid annuloplasty", 4th Post Graduate Workshop 2016, 22–23 October 2016, GKNM Hospital, Coimbatore
36. Video lecture "Technique of mitral annuloplasty", 4th Post Graduate Workshop 2016, 22–23 October 2016, GKNM Hospital, Coimbatore
37. Decision making in valve surgery, Workshop on Valve Surgery, 2–3 December 2016, AIIMS, New Delhi
38. What should we know about a prosthetic valve, Workshop on Valve Surgery, 2–3 December 2016, AIIMS, New Delhi
39. Terminology in valve surgery, Workshop on Valve Surgery, 2–3 December, 2016, AIIMS, New Delhi
40. Aortic root enlargement, Workshop on Valve Surgery, 2–3 December, 2016, AIIMS, New Delhi
41. Introduction to AF surgery, Workshop on Valve Surgery, 2–3 December 2016, AIIMS, New Delhi
42. Tricuspid valve surgery: When and how? Workshop on Valve Surgery, 2–3 December 2016, AIIMS, New Delhi
43. Decision making in proximal aorta. Workshop on Valve Surgery, 2–3 December 2016, AIIMS, New Delhi
44. Patient prosthesis mismatch, Workshop on Valve Surgery, 2–3 December 2016, AIIMS, New Delhi
45. Bentall's procedure, Workshop on Valve Surgery, 2–3 December 2016, AIIMS, New Delhi
46. Techniques of Homograft/Autograft, Workshop on Valve Surgery, 2–3 December 2016, AIIMS, New Delhi
47. Techniques of MVR (video lecture), Workshop on Valve Surgery, 2–3 December 2016, AIIMS, New Delhi
48. Techniques of AVR (Video lecture), Workshop on Valve Surgery, 2–3 December 2016, AIIMS, New Delhi
49. Difficult mitral exposure (Video lecture), Workshop on Valve Surgery, 2–3 December 2016, AIIMS, New Delhi
50. Biobentall, Workshop on Valve Surgery, 2–3 December 2016, AIIMS, New Delhi
51. Principles of mitral valve repair, Workshop on Valve Surgery, 2–3 December 2016, AIIMS, New Delhi
52. Video lecture Mitral valve repair, Workshop on Valve Surgery, 2–3 December 2016, AIIMS, New Delhi

53. Principles of tricuspid annuloplasty, Workshop on Valve Surgery, 2–3 December 2016, AIIMS, New Delhi
54. Video lecture tricuspid valve repair, Workshop on Valve Surgery, 2–3 December 2016, AIIMS, New Delhi
55. Homograft valve banking, Workshop on Valve Surgery, 2–3 December 2016, AIIMS, New Delhi
56. Cannulation strategy in acute type A dissection, 7th International Aortic Summit 2017, 6–8 January 2017, Chennai, India
57. Video lecture: New packing technique, 7th International Aortic Summit 2017, 6–8 January 2017, Chennai, India
58. Video lecture: Circumflex aortic arch, 7th International Aortic Summit 2017, 6–8 January 2017, Chennai, India
59. Video lecture: Cannula translocation for hemiarch replacement, 7th International Aortic Summit 2017, 6–8 January 2017, Chennai, India
60. CPB strategy in Bentall's procedure, Workshop on perfusion technique in aortic surgery, cerebral perfusion, and spinal cord protection, 15 January 2017, AIIMS, New Delhi
61. Cerebral protection in arch surgery, Workshop on Perfusion Technique in Aortic Surgery, Cerebral Perfusion, and Spinal Cord Protection, 15 January 2017, AIIMS, New Delhi
62. Spinal cord protection, Workshop on Perfusion Technique in Aortic Surgery, Cerebral Perfusion, and Spinal Cord Protection, 15 January 2017, AIIMS, New Delhi
63. Video lecture Bentall's procedure, Workshop on Perfusion Technique in Aortic Surgery, Cerebral Perfusion, and Spinal Cord Protection, 15 January 2017, AIIMS, New Delhi
64. Video lecture Hemiarch procedure, Workshop on Perfusion Technique in Aortic Surgery, Cerebral Perfusion, and Spinal Cord Protection, 15 January 2017, AIIMS, New Delhi
65. Video lecture arch replacement, Workshop on Perfusion Technique in Aortic Surgery, Cerebral Perfusion, and Spinal Cord Protection, 15 January 2017, AIIMS, New Delhi
66. Cannulation techniques in acute aortic dissection, Workshop on Perfusion Technique in Aortic Surgery, Cerebral Perfusion, and Spinal Cord Protection, 15 January 2017, AIIMS, New Delhi
67. CPB strategy in re-do aortic surgery, Workshop on Perfusion Technique in Aortic Surgery, Cerebral Perfusion, and Spinal Cord Protection, 15 January 2017, AIIMS, New Delhi
68. Cardiac anatomy relevant to the general surgeon, Contemporary practices in surgery: Symposium on Thoracic Surgery, 21–22 January 2017, AIIMS, New Delhi
69. Management of chronic type B dissection, 63rd Annual Conference of Indian Association of Cardiovascular and Thoracic Surgeons, 22–25 February 2017, Bengaluru
70. Introduction to Bentall's procedure, 63rd Annual Conference of Indian Association of Cardiovascular and Thoracic Surgeons, 22–25 February 2017, Bengaluru
71. Tricks and techniques in Bentall's procedure, 63rd Annual conference of Indian Association of Cardiovascular and Thoracic Surgeons, 22–25 February 2017, Bengaluru
72. Video lecture: Bentall's procedure, 63rd Annual Conference of Indian Association of Cardiovascular and Thoracic Surgeons, 22–25 February 2017, Bengaluru
73. Epidemiology of CTEPH, International Workshop on Pulmonary Thrombo-endarterectomy, 4–5 March 2017, AIIMS, New Delhi
74. Pathophysiology of CTEPH, International Workshop on Pulmonary Thrombo-endarterectomy, 4–5 March 2017, AIIMS, New Delhi
75. Acute type A dissection, Cardiology Seminars, 27 March, AIIMS, New Delhi

V. Devagourou: 5

1. Cardiac trauma, 8th Annual Conference of the Society for Trauma and Acute Care, 17–20 August 2016, New Delhi
2. Timing of surgery in infective endocarditis, 14th International Conference of Cardiac Society of Nepal, 4–5 November 2016, Kathmandu, Nepal
3. Mitral valve repair in ischemic heart disease, International Coronary Congress 2016, 11–13 November 2016, New Delhi
4. ECMO in post cardiectomy patients, Heart failure 360, 3rd Annual Conference of Heart Failure Association of India, 5 February 2017, Chennai
5. Mitral valve repair at ventricular and annulus level, Indian Association of Cardio Thoracic Surgeons Conference 2017, 23–26 February 2017, Bangalore

Sachin Talwar: 5

1. Surgery for congenital heart defects, Workshop on Congenital Heart Surgery, Sher-e-Kashmir Institute of Medical Sciences, 19 April, 2016, Kashmir, Srinagar
2. Surgical strategies in late presenters for Fontan, 6th Scientific Meeting of the World Society of Paediatric and Congenital Heart surgery, 27–30 October 2016, UAE, Abu Dhabi
3. Cardiopulmonary bypass in neonates and infants, Workshop on Congenital Heart Diseases, Bengaluru, 12 December 2016, Bengaluru, India
4. Borderline fontan “63rd Annual National Conference of Indian Association of Cardiovascular, Thoracic Surgeons (IACTSCON 2017), 23–26 February 2017, Bengaluru, India
5. Surgery for congenital heart diseases with severe pulmonary arterial hypertension”, Annual Meeting of Cardiological Society of India, Delhi Branch, New Delhi, March 2017, New Delhi

Milind P. Hote: 6

1. Setting up a heart transplant programme, Heart failure conclave, Narayana Hridayalaya, 28 August 2016, Jaipur
2. Heart transplantation – Current Indian scenario, 4th Annual Conference of Society for Heart Failure and Transplantation, 3–4 September 2016, Kochi
3. Fundamentals of CPB: Standard and minicircuits, International Coronary Congress, 11–13 November 2016, New Delhi
4. Mitral valve replacement – Surgical technique, Workshop on Valve Surgery, 2–3 December 2016, New Delhi, JPNATC AIIMS, New Delhi
5. Heart transplantation: Donor and recipient aspects, 3rd Annual Conference Heart Failure Association of India, 4–5 February 2017, Chennai
6. Heart transplantation indications and contraindications, 3rd Annual Foundation Day Workshop SGPGI, 25–26 March 2017, Lucknow, SGPGI Auditorium

Manoj Sahu: 1

1. Spectrum, course and assessment of low cardiac output shock, 1st National Conference on Critical Care and Infections in Liver Diseases (CCILBS), 25–26 January 2017, Institute of Liver and Biliary Sciences, New Delhi

Sarvesh Pal Singh: 5

1. Percutaneous tracheostomy – Practical Aspects, Workshop on Percutaneous Tracheostomy, 8 October 2016, JN Medical College, Aligarh
2. Heart transplant management, AIIMS Transplant Update, 9 October 2016, JLN Auditorium, AIIMS, New Delhi
3. Case studies: The Asia Experience with the HVAD Pump, VAD Clinician Forum organized by HEART WARE, 27 November 2016, Hong Kong
4. Cardiac ECMO in Children, 7th Annual Conference of ECMO Society of India, 10 December 2016, Medica Superspecialty Hospital, Kolkata
5. Bedside ECMO in ICU, 3rd Annual Conference organized by Heart Failure Association of India, 5 February 2017, Delhi

Ramesh Menon: 2

1. Pulmonary artery hypertension, AIIMS Pediatric Pulmonology and Intensive Care Course, Module V: Chronic Respiratory disorders, 23–24 April 2016, New Delhi
2. Humanities in Medical Education, TRANS-NATIONAL MEDCON-2016 organized by Govt. Medical College, Trichur under the aegis of Kerala University of Health Sciences, 8 December 2016, Govt. Medical College, Trichur, Kerala

Oral papers/posters presented: 21

1. Choudhary SK, Das A, Bhoje A, Gharde P, Solanki Y, Kumar L, et al. Common carotid artery cannulation for arterial inflow and antegrade cerebral perfusion during complex aortic surgeries. The 63rd Annual National Conference of Indian Association of Cardiovascular, Thoracic Surgeons (IACTSCON 2017), 23–26 February 2017, Bengaluru, India
2. Choudhary SK, Bhoje A, Shivaparasad MB, Talwar S, Gharde P, Sahu M, et al. Management of coarctation of aorta with ascending aortic aneurysm, The 63rd Annual National Conference of Indian Association of Cardiovascular Thoracic Surgeons (IACTSCON 2017), 23–26 February 2017, Bengaluru, India

3. Choudhary SK, Agasti S, Arun V, Pradeep R, Talwar R, Sahu M, et al. Study of Circle of Willis in Indian population, The 63rd Annual National Conference of Indian Association of Cardiovascular Thoracic Surgeons (IACTSCON 2017), 23–26 February 2017, Bengaluru, India
4. Choudhary SK, Bhoje A, Das A, Gharde P, Sahu M, Pavulose L, et al. Aortic valve replacement (AVR) with zero patient prosthesis mismatch (PPM): An integrated approach, The 63rd Annual National Conference of Indian Association of Cardiovascular, Thoracic Surgeons (IACTSCON 2017), 23–26 February 2017, Bengaluru, India
5. Choudhary SK, Bhoje A, Das A, Gharde P, Sahu M, Biju M, et al. Acute type A dissection complicated by stroke: Optimum strategy?, The 63rd Annual National Conference of Indian Association of Cardiovascular Thoracic Surgeons (IACTSCON 2017), 23–26 February 2017, Bengaluru, India
6. Choudhary SK, Seth A, Bhoje A, Gharde P, Sahu M, Pavulose L, et al. Renal cell carcinoma (RCC) with intracardiac extension: Radical excision under moderate hypothermia, The 63rd Annual National Conference of Indian Association of Cardiovascular, Thoracic Surgeons (IACTSCON 2017), 23–26 February 2017, Bengaluru, India
7. Choudhary SK, Pradeep R, Ray R, Arava SK, Gharde P, Sahu M, et al. Analysis of the extent of degenerative changes in intra-pericardial aorta of patients with bicuspid aortic valve (BAV), The 63rd Annual National Conference of Indian Association of Cardiovascular-Thoracic Surgeons (IACTSCON 2017), 23–26 February 2017, Bengaluru, India
8. Choudhary SK, Abraham A, Bhoje A, Gharde P, Sahu M, Thomas M, et al. Trans-aortic mitral valve repair for functional MR in patients undergoing aortic root/valve procedure: A feasibility study, The 63rd Annual National Conference of Indian Association of Cardiovascular-Thoracic Surgeons (IACTSCON 2017), 23–26 February 2017, Bengaluru, India
9. Seth A, Tiwari DP, Nayyar R, Saxena R, Choudhary SK. A rare case of epitheloidangio, Myo-lipoma with cavo-atrial thrombus, 46th Congress of the Societe Internationale d' Urologie (SIU 2016), 20–23 October 2016, Buenos Aires
10. Seth A, Choudhary SK, Pal S, Kumar A, Dogra PN, Kumar R, Nayyar R. Renal cell carcinoma with inferior vena cava (IVC) thrombus: Single center experience with long-term follow-up, 46th Congress of the Societe Internationale d' Urologie (SIU 2016), 20–23 October 2016, Buenos Aires
11. Yadav R, Kumar L, Solanki Y, Kumar A, Choudhary SK. Outcome in patients undergoing aortic arch procedures with high flow cerebral perfusion, Annual Meeting of Indian Society of Extracorporeal Technology, 24–25 February 2017, AQ-JN TATA Auditorium, Bengaluru
12. Talwar S, Bhoje A, Sreenivas V, Choudhary SK, Makhija N, Airan B. Baltimore, US between comparison of Delnido and St Thomas cardioplegia solutions for myocardial protection in pediatric patients undergoing open heart surgery: A prospective randomized clinical trial, 96th Annual meeting of the American Association for thoracic Surgery, 14–18 May 2016, Baltimore, USA
13. Talwar S, Murugan S, Sreenivas V, Choudhary SK, Makhija N, Airan B. Effect of administration of allopurinol on postoperative outcomes in patients undergoing intracardiac repair of Tetralogy of Fallot, 96th Annual Meeting of the American Association for thoracic Surgery, 14–18 May 2016, Baltimore, USA
14. Talwar S, Bhoje A, Sreenivas V, Choudhary SK, Makhija N, Airan B. Oral thyroxin supplementation in infants undergoing cardiac surgery: A double blind placebo controlled randomized clinical trial, 96th Annual Meeting of the American Association for thoracic Surgery, 14–18 May 2016, Baltimore, USA
15. Talwar S, Kumar MV, Nehra A, Kapoor PM, Makhija N, Sreenivas V, et al. Bidirectional Glenn on Cardiopulmonary Bypass: A comparison of Three Techniques, 63rd Annual National Conference of Indian Association of Cardiovascular, Thoracic Surgeons (IACTSCON 2017), 23–26 February 2017, Bengaluru, India
16. Talwar S, Alam I, Sreenivas, Rajashekar P, Subramanian R, Choudhary SK, et al. Polytetrafluoroethylene patch versus autologous pericardial patch for right ventricular outflow tract reconstruction, 63rd Annual National Conference of Indian Association of Cardiovascular, Thoracic Surgeons (IACTSCON 2017), 23–26 February 2017, Bengaluru, India
17. Talwar S, Anand A, Choudhary SK, Airan B. Results of surgery for discrete membranous subaortic stenosis, 63rd Annual National Conference of Indian Association of Cardiovascular-Thoracic Surgeons (IACTSCON 2017), 23–26 February 2017, Bengaluru, India
18. Talwar S, Divya A, Makhija N, Choudhary SK, Airan B. Immediate and early post-operative sequelae of off-pump total cavopulmonary connection, 63rd Annual National Conference of Indian Association of Cardiovascular, Thoracic Surgeons (IACTSCON 2017), 23–26 February 2017, Bengaluru, India

19. Talwar S, Divya A, Makhija N, Choudhary SK, Airan B. Mid-Term Results of Correction of Tetralogy of Fallot With Absent Pulmonary Valve, 63rd Annual National Conference of Indian Association of Cardiovascular-Thoracic Surgeons (IACTSCON 2017), 23–26 February 2017, Bengaluru, India
20. Singal A, Sahu MK, Mohan A, Singh SP, Menon RP, Talwar S, et al. Nutritional intervention in post-operative pediatric cardiac surgical patients, IDACON 2016, 24–26 September 2016, Mumbai, India
21. Sahu MK, Singal A, Mohan A, Singh SP, Menon RP, Talwar S, et al. Early enteral nutrition therapy in congenital cardiac repair postoperatively: A randomized controlled pilot study, Criticare 2017, 3–5 February 2017, Kochi, Kerala, India

Physiotherapy unit

V.P. Gupta: 4

1. National Conference of Physiotherapy, 10–11 September 2016, University of Medical Sciences, Saifai, Etawah (UP)
2. 2nd CLBS Liver Symposium (Parallel Session), Transplant Physiotherapy Conference, 16 September 2016
3. Heart Failure Conference, Physiotherapeutic Management of Heart Transplant Patients, 9 October 2016, AIIMS, New Delhi
4. Physiotherapy Interventions in Intensive Care, 8–9 September 2016, University of Medical Sciences, Saifai, Etawah

Cardiology

The department is involved in the education and training of undergraduate, postgraduates. The daily academic activities include journal club, mortality meeting, cath conferences, short and long seminars, debates, clinical case discussion and spotters by faculty.

New Courses: DM in Pediatric Cardiology.

CMEs/Workshops/Symposia/National and International Conferences

1. India Live 2017, New Delhi
2. TCT India Next, New Delhi
3. CSI Delhi Branch Annual meeting 2017, New Delhi
4. ISHR (Indian Society of Heart Research) Annual Meeting, IGIB, New Delhi

Lectures delivered

V.K. Bahl: 16

Balram Bhargava: 14

G. Karthikeyan: 7

Anita Saxena: 14

R. Juneja: 2

S. Ramakrishnan: 16

S.S. Kothari: 2

Sandeep Seth: 1

V.K. Bahl: 16

1. Guidelines on valvular heart disease, World Congress of Cardiology, 4–8 June 2016 Mexico City, Mexico
2. Bifurcation stenting techniques, CCVCC-2016, 15–17 June 2016, New York
3. Revascularization instable angina, ICCCON, 17 September 2016, Goa
4. Leadless pacemaker, ISC, 2016, 30 September–1 October 2016, Lucknow, UP
5. Left main trifurcation angioplasty, CCT-2016, 20–22 October 2016, Kobe, Japan
6. Revascularization in stable angina: When and Why, 14th International Conference on conquering Heart Diseases in the Himalayan Region, 4–5 November 2016, Nepal
7. Leadless pacemaker, CSI Hybrid, 2016, 11 November 2016, Patna, Bihar
8. Management of ST elevation MI, CSI Chennai Branch, 26 November 2016, Chennai
9. Top interventional cardiology trials, Annual Meeting of CSI-2016, 7–11 December 2016, Kochi, Kerala
10. Revascularisation for stable angina: Whom, when and how? Annual Scientific Session of ASC, 2016, 16–18 December 2016, China
11. What I have learnt in 2016? Top 10 practice changing trials in 2016, TIC, 2017, 7 January 2017, Thanjavur, Tamil Nadu
12. Recent landmark trials in cardiology: How have they changed our practice? APICON-2017, 28 January 2017, Mumbai, Maharashtra
13. Heart failure: What next after usual drug therapy? CSI-HFC, 11 February 2017, Bhubaneswar, Odisha
14. Top trials in interventional cardiology, CARDICON-2017, 25 February 2017, Lucknow, U.P.
15. Bifurcation stenting techniques--Fellows Course, India Live, 2017, 1 March 2017, New Delhi, India
16. Recent top interventional cardiology trials, India Live, 2017, 2–4 March 2017, New Delhi, India

Anita Saxena: 14

1. Training of Trainers (TOT) Workshop conducted by Ministry of Health and Family Welfare – WHO-RF/RHD interventions, 12–13 May 2016, 26 May 2016, 10–11 August 2016, Hoshangabad Firozabad, Gaya, MP, UP, Bihar
2. Approaches for fontan fenestration creation, TCT India Next 2016, 5–7 August 2016, New Delhi
3. Rheumatic fever and rheumatic heart disease control in the developing world, PCSI 2016, 29 September–2 October 2016, Bangalore
4. a) CHD with pulmonary hypertension: Testing for operability in borderline cases b) Health system barriers to RHD prevention and control in South Asia, 6th APPCS 2016, 20–23 October 2016, Shanghai, China
5. a) Cyanotic congenital heart disease in adults b) RHD Mukht Bharat: What we must do? CSI, Bihar Chapter, 12–13 November 2016, Patna
6. CHD in India: Challenges and Opportunities ACHD care in India: Specific challenges, Indo German Collaborative Summit, 26 November 2016, Kochi, Kerala
7. a) Operability assessment for borderline left to right shunts with pulmonary hypertension b) Cardiac challenges during pregnancy: CHDc) Changing epidemiology of RF – RHD, 68th Annual Conference of CSI, 8–11 December 2016, Kochi, Kerala
8. Approach to CCHD, Clinical Cardiology Update of CSI, 27 January 2017, Chennai
9. Heart failure in adult congenital heart disease: Optimizing therapies for an evolving problem, 2nd HF Conference of CSI, 11 February 2017, Bhubaneswar
10. Approach to CCHD, GMC, AMDAANA International Conference, 24 February 2017, Amritsar
11. Status of pediatric cardiac interventions in India-CSI, UP Chapter, CARDICON 2017, 26 February 2017, Lucknow
12. a) Prevention and eradication strategies for RHD, b) Approach to a patient with CHD: Acyanotic, Pediatric Cardiology Update 2017, 19 March 2017, Ahmedabad
13. Hemodynamics from clinical examination, CSI Delhi Branch, 25–26 March 2017, New Delhi
14. Secondary Prophylaxis for Rheumatic Heart Disease: What are the challenges in developing countries? AEPC 2017, 29 March–1 April 2017, Lyon, France

S.S. Kothari: 2

1. Annual Conference of Pediatric Cardiac Society of India, 2016, 29 September–2 October 2016, Bengaluru
2. TGA with PAH, Symposium on TGA, 28–29 January 2017, Mumbai

Balram Bhargava: 14

1. Imagination to reality, Designing tomorrow at, TEDx BIMTECH: Gandhian Innovation. 2016, Greater Noida
2. Frugal medtech innovation, University of Aalto, 2016, Helsinki
3. Medical device innovations for Maternal, Newborn and Child Health, National Centre for Child Health and Development, 2016, Tokyo
4. Frugal medtech innovation, WHO Health Innovation Group, Innovation Guest Speaker Series, 2016, Geneva
5. School of International Biodesign: The programme, Launch of ‘Qora, Consure’ device, 2016, Ministry of Science and Technology, Delhi
6. Frugal innovation, Imagination to reality, Designing tomorrow, TEDx AIIMS, 2016, AIIMS, New Delhi
7. Frugal/jugaad medtech innovation, Master class for NHS Doctors:2016, London (UK)
8. Management of acute coronary syndromes, Masterclass for NHS Doctors, 2016, Manchester, UK
9. India’s need for digital health, India-UK Tech Summit on the visit of the Prime Minister of UK Theresa, May, 2016, New Delhi
10. Valedictory Address, 86th Annual Scientific Session of the National Academy of Sciences, 2016, Dehradun
11. Chronic stable angina management, International Society for Heart Research (Indian Section), 2017, New Delhi
12. Triage and management of non ST elevation myocardial Infarction at a peripheral centre, Annual Meeting of the Cardiology Society of India (UP Chapter), 2017, Lucknow
13. Triage and management of non ST elevation myocardial infarction at a peripheral centre, Annual Meeting of the Cardiology Society of India (Delhi Chapter), 2017, New Delhi
14. Frugal innovation in healthcare, Science and Technology for the Specially Abled Persons National Science Day Lecture and Chief Guest, 2017, Jamia Hamdard University, New Delhi

R. Juneja: 2

1. Arrhythmia Symposium, The Annual Conference of the Pediatric Cardiac Society of India, PCSI 2016–30 September 2016, Bengaluru
2. Arrhythmia in children, An overview, First Joint CSI, CRC and CSI, NCSI Conference Cardiological Society of India, 13 November 2016, Patna

Sandeep Seth: 1

1. Heart failure, Continuing Nursing Education, 5 March 2017, AIIMS, Delhi

G. Karthikeyan: 7

1. a) Critical questions in RHD b) Interventions in RHD c) Burden of RHD: Challenges, opportunities and failures, World Congress of Cardiology 2016, 4 June 2016, WCC 2016, Mexico City
2. Getting familiar with interventional cardiology, International Conference on Integrated Medical Imaging in Cardiovascular Diseases (IMIC2016), 12 October 2016, IAEA Headquarters, Vienna
3. The REMEDY registry: 2-year follow-up results, INVICTUS Trial Steering Committee Meeting at the ESC Congress 2016, 27 August 2016, European Society of Cardiology Congress, Rome
4. a) Clinical presentation of RHD: Lessons from REMEDY b) Debate: Echocardiographic screening for subclinical RHD-added value or added cost, Rheumatic Heart Disease: From Molecules to the Global Community, 13–16 January 2017, Global RHD Meeting, Cairo

S. Ramakrishnan: 16

1. Indian Heart Journal Session, American College of Cardiology (ACC) 2016, 1–3 April 2016, Chicago
2. 10 commandments on ASD and PDA device closure, NIC 2016, 15–17 April 2016, Hyderabad
3. The great India BP campaign, I, Connect Symposium on Hypertension and Diabetes, 18–20 May 2016, Srinagar
4. How to write a paper? Analysis and interpretation of data, Research Methodology Workshop 2016, 28–30 May 2016, Dhaka
5. Infective endocarditis in children—Asia Pacific Experience, ‘AEPC 2016’ (Association of European Pediatric Cardiology), 1–5 June 2016, Rome
6. Burden of CVD in India, WCC 2016 (World Congress of Cardiology), 5–10 June 2016, Mexico
7. TAVR—Current understanding and—how to establish larger Indian Registries? EIICON 2016, 26 June 2016, Kolkata
8. IHJ now and then: Miles to go before I sleep, ESC 2016, 26–31 August 2016, Rome
9. Paediatric cardiology registries, CPC, Pediatric Cardiac Society of India, 1–2 October 2016, Bengaluru
10. Newer concepts in echocardiographic screening for RHD, APPCS 2016, 20–23 October 2016, Shanghai
11. Evidence based selection of statin a case based approach, CME by Sri Lanka Heart Association 2016, 25–27 November 2016, Colombo
12. Optimal timing of surgery in asymptomatic MR, CSI 2016, 7–11 December 2016, Kochi
13. Hemodynamics from clinical examination, Face the Examiners (PG Course), 4 February 2017, Hyderabad
14. Management of pediatric heart failure, CSI HF 2017, 10–12 February 2017, Bhubaneswar
15. Optimal medical therapy in heart failure and STEMI in young, World Congress on Cardiac Imaging and Clinical Cardiology (WCCICC 2017), 24 February 2017, Mumbai
16. Timing of surgery in CHD, Cardicon 2017, 26 February 2017, Lucknow

Oral papers/posters presented: 4

1. Saxena A, Ramakrishnan S, Roy A, Juneja R. Echocardiographic prevalence of cardiac malpositions, at birth and in children 5–15 years: Data from two large cross sectional observational studies, AEPC 2017, 29 March–1 April 2017, Lyon, France
2. Saxena A, Narang R, Thangjam R, Kulkarni S, Narvencar K, Dias A, et al. Prevalence and determinants of hypertension in apparently normal school children in India: A four-center study, 6th APPCS 2016, 20–23 October 2016, Shanghai, China
3. Saxena A, Ramakrishnan S, Juneja R, Gupta SK, Mehta RS. Utilization of public health services by children with rheumatic heart disease: Results from the AIIMS pediatric RHD registry, 6th APPCS 2016, 20–23 October 2016, Shanghai, China

4. Parakh N, Utagi B, Arava S, Verma S, Karthikeyan G, Singh S, et al. Immunohistopathology of intracoronary thrombus aspirated during primary percutaneous intervention for ST elevation myocardial infarction and its clinical significance, American College of Cardiology's 66th Annual Scientific Sessions, 19 March 2017, Convention Centre, Washington DC

Cardiac Anaesthesia

Thirteen DM candidates including 2 sponsored Lt. Col from Army and 12 other MD, Junior resident doctors from main anesthesia department have undergone super specialty training in Cardiac-Thoracic-Anesthesia. Nine MD candidates from Lady Hardinge Medical College and two from Kolkata were imparted short term training in the specialty of Cardiac-Anesthesia. Short term training imparted to four DM candidates from Shree Chitra Tirunal Institute, Trivandrum. Three candidates including two faculties and one perfusionist are doing PhD in the department.

New Courses: DM in Pediatric Cardiac Anaesthesia.

CMEs/Workshops/Symposia/National and International Conferences

1. Postgraduate Assembly: Cardiothoracic vascular anaesthesia, 8–9 October 2016, AIIMS, New Delhi
2. Workshop: Meditation in medicine, June 2016, Ramlinga Swami Board Room, AIIMS, New Delhi
3. Symposium on Doctor Patient Relationship, August 2016, Mount Abu
4. Leadership programme on 19 October, AIIMS, New Delhi
5. Symposium: Human consciousness, March 2017, Ramlinga Swami Board Room, AIIMS, New Delhi
6. Organized "Update on Vascular Anaesthesia" on 22 December 2016, at CMET, All India Institute of Medical Sciences, New Delhi

Lectures delivered

Usha Kiran: 7

Poonam Malhotra Kapoor: 19

Parag Garghe: 4

Suruchi Hasija: 1

Sandeep Chauhan: 1

Minati Choudhury: 15

Vishwas Malik: 4

Arindum Choudhury: 4

Neeti Makhija: 4

Sambhunath Das: 4

Usha Kiran: 7

1. A talk and demonstration of spiritual exercise, Parkinson's Day Celebrations at AIIMS for National Society of 'PRAN', April 2016, AIIMS, New Delhi
2. Stress management in a CME organized by NIS AIIMS at CMET, CME on Stress Management, CMET AIIMS, July 2016, AIIMS, New Delhi
3. Optimization of mind and heart connections to have healthy heart, International Conference of Paediatric and Curative Cardiology, 23 September 2016, Mount Abu, Rajasthan
4. Blending science with spirituality, Seminar on Science and Spirituality, 24 December 2016, Vaishali Yoga Center, Ghaziabad, Uttar Pradesh
5. Doctor patients relationship, National Conference on mind body medicine, August 2016, Mount Abu, Rajasthan
6. Role of women in world transformations, National Seminar on God's power for world transformation, 18 December 2016, Mount Abu, Rajasthan
7. Meaning of life, National Seminar on Meaning of Life by Amity Institute of Education, Accredited by NAAC, 17 March 2017, Amity University, Noida, Uttar Pradesh

Sandeep Chauhan: 1

1. Use of electrical cardiometry in children with structural heart disease in the catheterization laboratory, Cardiology, 24 February 2017, Orlando, USA

Neeti Makhija: 4

1. Updating skills of practicing anaesthetists: Do we need guidelines? 64th Annual National Conference of Indian Society of Anaesthesiologists, 27–29 November 2016, Agricultural University, Ludhiana
2. Cardiopulmonary bypass, Disaster Management, 64th Annual National Conference of Indian Society of Anaesthesiologists, 27–29 November 2016, Agricultural University, Ludhiana
3. Transesophageal echocardiography for Aortic Surgery, Update of Cardiac Anaesthesia, 22 December 2016, CMET, AIIMS, New Delhi
4. TEE in mitral stenosis, The 11th Annual Perioperative and Critical Care Echocardiography Workshop, 3–5 March 2017, PGIMER, Chandigarh

Poonam Malhotra Kapoor: 19

1. ECMO in cathlab, CSI-NIC 2016 Mid Term Meet (NIC 2016, 15–17 April 2016, Hyderabad)
2. a) Anaesthesia management for heart transplant single ventricle physiology, post operative management after BDG operation, 4th FIACCTA Refresher Course (IACCTA-ICCA), 13–15 May 2016, UN Mehta Institute of Cardiology and Research Centre and – IACTA, Gujarat
3. a) Role of echo in ECMO b) Thromboelastogram seventh annual ECMO training course, 26–29 May 2016, Mumbai
4. ECMO: Current challenges and future perspectives, Managing the ECMO Patient: Walking the fine line, 23–24 July 2016, The Epicentre, Ground Floor, Apparel House, Sector 44, Gurgaon
5. Imaging, Physiology, Debulking and “Structural Interventions”, 11th Advanced Cardiovascular Therapeutics (ACT) 2016, 13–15 August 2016, Institute of Cardio-Vascular Diseases, The Madras Medical Mission, Chennai
6. Conduct of Pediatric ECMO, 3rd Pediatric Cardiac Anaesthesia, Intensive Care and Perfusion Update 2016, 20–21 August 2016, Nitu Mandke Convention Centre, Kokilaben Dhirubhai Ambani Hospital, Mumbai
7. Echo in ECMO, 1st International and 10th National Transoesophageal Echocardiography Workshop, 26–28 August 2016, NH, Narayana Health, Bangalore
8. Tetralogy of fallot (Non-cardiac surgery in child with TOF, X-rays and ECGs to be discussed, if relevant), EORCAPS 2016, 30 August 2016, GTB Hospital, New Delhi
9. ECMO and ECHO, WCCPCI, 2016, 22–25 September 2016, Shantivan, Abu Road, Rajasthan
10. 2D–3D Transeosophageal views, 6th Annual National Conference of the Society of Cardiac Anaesthesiology–Delhi and NCR Branch, 8–9 October 2016, CMET, AIIMS, New Delhi
11. Stenotic heart lesions and anaesthesia challenges for non cardiac surgery, MISACON 2016, 13–16 October 2016, MGM Medical College, Aurangabad
12. Perioperative bleeding, 1st National Symposium on Cardiac Surgical Critical Care, 5–6 November 2016, Zachariah Mar Dionysius Auditorium, Chennai
13. Workshop–ECMO – CRRT, 64th Annual National Conference of Indian Society of Anaesthesiologists, 26–29 November 2016, Punjab Agricultural University, Ludhiana
14. a) Monitoring in ECMO b) Simulation based troubleshooting c) Echocardiography in ECMO, Annual Conference of the ECMO Society of India, 9–11 December 2016, Medica Superspecialty Hospital, Kolkata
15. 2nd Annual 3D Echocardiography Workshop IACTA–ICCA, 17–18 December 2016, UN Mehta Institute of Cardiology, Ahmedabad
16. JIC-Advanced CIMS Echo Academics b) In pre operative risk assessment and use of TEE during cardiac surgery, 13th Annual Scientific Symposium of Joint International Conference, 6–8 January 2017, GMERS Medical College, Sola, Ahmedabad
17. a) Workshop, ECMO b) Workshop, Coagulation c) Research articles that made impact on clinical practice, Indian Association of Cardiovascular and Thoracic Anaesthesia, 16–19 February 2017, Pune
18. a) Pregnancy and heart disease, b) Cases that made their life tougher, Women Cardiac Care 2017, 8 March 2017, Hyderabad
19. Role of ECHO in ECMO-Mechanical ventilation (includes ECMO), Workshop under the banner of Indian College of Anaesthesiologists, 25–26 March 2017, Narayana Hrudayalaya Hospitals, Bangalore

Minati Choudhury: 15

1. Echo of tricuspid and pulmonary valve, 5th Comprehensive Perioperative TEE Workshop, 24–25 April 2016, Medanta, The Medicity, Gurgaon
2. Coronary artery bypass grafting: Anaesthesia management, Recent update, Annual Conference of Indian College of Anesthesiologist, 28–30 September 2016, NEIGRIEMS, Shillong
3. Transesophageal echocardiography: How to do it? Annual Conference of Indian College of Anesthesiologist, 28–30 September 2016, NEIGRIEMS, Shillong
4. Basics of TEE, Annual Conference of Indian College of Anesthesiologist, 28–30 September 2016, NEIGRIEMS, Shillong
5. Echo in ICU for non cardiac anesthesiologists, Annual Conference of Indian College of Anesthesiologist, 28–30 September 2016, NEIGRIEMS, Shillong
6. Comprehensive management in Intensive care holistic touch, Multidisciplinary Health Care Conference AIIMS, 2–8 November 2016, AIIMS, New Delhi
7. Pulmonary artery catheter and hemodynamic monitoring, 1st Critical Care Conference in Liver Disease, 24 January 2017, ILBS, New Delhi

8. Postoperative care for vascular surgery, Update in vascular anaesthesia, AIIMS, 24–26 November 2016, New Delhi
9. How to mend this tricuspid valve after mitral valve repair? 13th Perioperative and Critical Care TEE Conference, 3–5 March 2017, PGIMER, Chandigarh
10. Basics of cardiac ultrasound, knobology and views in transesophageal echocardiography, Pre-Congress Workshop, SAARAC 2017 – 33rd Annual Conference of Sri Lanka College of Anesthesiologist, 23 March 2017, Colombo, Sri Lanka
11. TEE for non cardiac surgical patients, Pre-congress Workshop, SAARAC 2017 and 33 Annual Conference of Sri Lanka College of Anesthesiologist, 23 March 2017, Colombo, Sri Lanka
12. Interesting case discussion in TEE, Pre-congress Workshop, SAARAC 2017 and 33 Annual Conference of Sri Lanka College of Anesthesiologist, 23 March 2017, Colombo, Sri Lanka
13. Hemodynamic calculations by TEE, Pre-congress Workshop, SAARAC 2017 and 33 Annual Conference of Sri Lanka College of Anesthesiologist, 23 March 2017, Colombo, Sri Lanka
14. Anesthesiologist role in minimally invasive cardiac surgery, SAARAC 2017 and 33 Annual Conference of Sri Lanka College of Anesthesiologist, 24–26 March 2017, Colombo, Sri Lanka
15. How to mend this tricuspid valve after mitral valve repair? 13th Perioperative and Critical Care TEE Conference, 3–5 March 2017, PGIMER, Chandigarh

Sambhunath Das: 4

1. Photo-responsive nanomaterials and nanobiosensors, 1st Annual Conference of Indian Society of Nanomedicine being organised in collaboration with Department of Science Technology (DST) and Department of Biotechnology (DBT), Government of India, 24–26 November 2016, AIIMS, New Delhi
2. Endovascular repair and hybrid rocedure for aortic aneurysm, Update on Vascular Anaesthesia, 24–26 November 2016, AIIMS, New Delhi
3. Ambulatory anaesthesia care for cardiac patients, 20th Annual Conference of IACTA, 16–19 February 2017, Pune
4. Echocardiography for Cardiac Transplant, 11th Annual Perioperative and Critical Care Echocardiography Workshop, 3–5 March 2017, PGIMER, Chandigarh

Parag Garghe: 4

1. Essentials of ventilation for cardiologists, 4th AIIMS Pediatric Cardiology CME, 9– 10 April 2016, AIIMS, New Delhi
2. Neuromonitoring, Bentall Workshop, 20– 21 August 2016, CT Center, AIIMS, New Delhi
3. Anaesthesia for arch procedure, Perfusion Workshop, 15 January 2017, Trauma Center, AIIMS, New Delhi
4. Volume therapy in aortic surgery, Perfusion Workshop, 15 January 2017, Trauma Center, AIIMS, New Delhi

Vishwas Malik: 4

1. Hemodynamic monitoring, Paediatric Cardiac Surgical Workshop, 22 April 2016, SKIMS, Sri Nagar, Kashmir
2. Diastolic dysfunction, TEE Workshop, 24–25 April 2016, Medanta, The Medicity, Gurgaon
3. Sepsis in congenital heart disease, Paediatric Cardiac Workshop, 17 October 2016, Jai Deva Heart Institute, Karnataka, Bangalore
4. Aortic gurgitation (Decision making), 13th Perioperative – Critical Care TEE Conference, 3–5 March 2017, PGIMER, Chandigarh

Suruchi Hasija: 1

1. Venovenous ECMO, IVth AIIMS ECMO Workshop, 16 August 2016, AIIMS, New Delhi

Arindum Choudhury: 4

1. Double lumen tube for lung isolation, National Airway Conference, 16–18 August 2016, Varoda, Gujarat
2. Simulation on difficult airway, Indian Society of Anesthesiologist Conference (UP chapter), 9–11 November 2016, Ram Nagar, UP
3. Hemodynamic monitoring, Indian Society of Anesthesiologist Annual Conference, 25–29 November 2016, DMC, Ludhiana
4. TEE for infective endocarditis, 13th Perioperative and – Critical Care TEE Conference, 3–5 March 2017, PGIMER, Chandigarh

Oral papers/posters presented: 18

1. Divya, Dr Kiran U, Dr Vatsa M, Dr Devagouru V. Study to assess the effectiveness of communication board to improve communication among intubated patient (Endotracheal/tracheal) in Intensive Care Unit, Nurses Conferences, 13 August 2016, AIIMS, Trauma Center, New Delhi
2. Hasija S, Shiva, Talwar S, Makhija N, Chauhan S. Comparison of bivalirudin and heparin with protamine reversal in acyanotic children undergoing open heart surgery, 20th Annual Conference of Indian Association of Cardiovascular Thoracic Anaesthesiologists, 16–19 February 2017, Pune
3. Das SN, Makhija N, Airan B, Lakshmy R, Sharma G. Efficacy and safety of perioperative dexmedetomidine treatment in patients undergoing valve surgery, A randomized control, double blind trial, 20th Annual Conference of Indian Association of Cardiovascular Thoracic Anaesthesiologists, 16–19 February 2017, Pune
4. Das SN, Makhija N, Airan B, Lakshmy R, Sahu M, Sharma G. Effect of dexmedetomidine on PaO₂/FiO₂ and inflammatory marker in patients undergoing valve surgery: A randomized double blind trial, 12th SAARC Annual Conference, Colombo, 24–26 February 2017, Sri Lanka
5. Choudhury M, Gupta A, Airan B, Kiran U. The relationship between Endothelin-1 plasma nitric oxide products and clinical outcome in cyanotic congenital heart disease children suffering from pulmonary hypertension*, Anesthesiology 2016, 22–26 October 2016, McCormick Place, Illinois, Chicago
6. Choudhury M, Chowdhury UK, Airan R. Integrated ECMO: A blessing after surgical repair of ALCAPA Anesthesiology 2016, 22–26 October 2016, McCormick Place, Illinois, Chicago
7. Dhawan I, Choudhury M, Gupta A, Hote MP, Kapoor PM, Kalaivani MV. Is endothelin gene polymorphism associated with post operative atrial fibrillation in patients undergoing coronary artery by pass grafting? Best paper award, IACTACON 2017, 17–19 February 2017, Pune
8. Das SN, Makhija SN, Sharma G, Airan B. Hemodynamic effects of perioperative dexmedetomidine therapy in valvular heart surgeries—A randomized control trial, IACTACON 2017, 17–19 February 2017, Pune
9. Das SN, Makhija N, Airan B, Lakshmy R, Sahu M, Sharma G. Effect of dexmedetomidine on pao₂/fio₂ ratio and inflammatory marker in patients undergoing valve surgery—A randomized double blind trial, SAARAC 2017 and 33 Annual Conference of Sri Lanka College of Anesthesiologist, 24–26 March 2017, Colombo, Sri Lanka
10. Das SN, Makhija N, Airan B, Lakshmy R, Sharma G. Efficacy and safety of perioperative dexmedetomidine treatment in patients undergoing valve surgery: A randomized control double blind trial, IACTACON 2017, 17–19 February 2017, Pune
11. Kumar A, Hasija S, Das SN. Perioperative Transesophageal Echocardiography in a patient with Scimitar Syndrome, 13th Perioperative and Critical Care TEE Conference, 3–5 March 2017, PGIMER, Chandigarh
12. Hasija S, Talwar S, Makhija N, Chauhan S, Krishna NS, Gupta R. Comparison of bivalirudin to heparin with protamine reversal in acyanotic children undergoing open heart surgery, 18th Annual National Conference of Indian Association of Cardiovascular and Thoracic Anaesthesiologists, 17–19 February 2017, Pune
13. Gupta R, Hasija S. Cardiopulmonary bypass management with bivalirudin, Indian Society of Extracorporeal Technology Conference 2017, 24–25 February 2017, JN Tata Auditorium, Indian Institute of Science, Bengaluru
14. Kumar A, Hasija S, Das SN. Transesophageal echocardiography for Scimitar syndrome, 11th Annual Perioperative and Critical Care Transesophageal Echocardiography Workshop, 3–5 March 2017, PGIMER, Chandigarh
15. Dhawan I, Malik V, Makhija N, Kiran U. Annual Preseantaion of RSOV, Role of TEE. Best paper award, 11th Annual Perioperative and Critical Care Transesophageal Echocardiography Workshop, 3–5 March 2017, PGIMER, Chandigarh
16. Choudhury A. Effect of induction with etomidate or thiopentone on left ventricular strain and strain rate —A double blind randomized control trial, ICGEB Courses on US imaging in cardiac and vascular medicine: From pre-clinical to clinical studies, 8–10 February 2017, Trieste, Italy
17. Bhardwaj V, Malhotra P. Coagulopathies in cyanotic cardiac patients: An analysis with three point of care testing (TEG, ROTEM – SONOCLOT ANALYZER), 18th Annual National Conference of Indian Association of Cardiovascular and Thoracic Anaesthesiologists, 17–19 February 2017, Pune
18. Kapoor P, Dr Kapoor PM. Life style interventions in stress related disorders, Lifestyle physiology changes, 3rd April 2016, Lady Hardinge Medical College, New Delhi

Cardiac Radiology

Teaching:

Undergraduates: Lectures on basics of cardiovascular imaging and vascular interventions

Postgraduates: Cardiac Radiology quiz, moderating seminars in departments of allied specialties viz. Medicine, Surgery, Gastroenterology, Cardiology and Cardiothoracic Surgery

Clinico-radiology meetings with Department of Cardiology and CTVS

Participation in Clinical Combined Rounds and Clinical Grand Rounds with allied specialties

Lectures delivered

Sanjiv Sharma: 11

Gurpreet Singh Gulati: 3

Priya Jagia: 12

Sanjeev Kumar: 10

Sanjiv Sharma: 11

1. Endovascular repair of Type B aortic dissections, Perspective from India Techniques and outcomes of endovascular management of pulmonary arteriovenous malformations endovascular repair of pseudoaneurysm of aortic arch Indications for EVR in type B dissection, 12th Asian Pacific Congress of Cardiovascular and Interventional Radiology, 21–24 April 2016, China
2. Endovascular management of vascular complications in oncologic practice, International Forum 2016 (6th MK Interventional Radiology Symposium), 29 May–1 June 2016, Mongolia
3. Changing paradigms and challenges in intra-arterial cell based therapies, Symposium on Image Guided and Endovascular Techniques with emphasis on embolization, 22–23 July 2016, Sri Lanka
4. APSCVIR MYSIR, Current trends in targeted embolization and catheter directed chemoembolization for carcinoma cervix, Malaysian Society of Interventional Radiology (MYSIR-2016), 25–27 August 2016, Malaysia
5. Basics of chest radiography, 30th Annual Meeting of the UP State Branch of IRIA, 3 September 2016, Varanasi
6. Clinical and imaging approach to acute aortic syndromes, Annual Conference of Society for Emergency Radiology 2016, Bangalore, 24 September 2016, Bangalore
7. Image-guided cell-based therapies for limb ischemia and diabetes endovascular treatment of peripheral vascular disease, Image-guided treatment of uterine fibroids, 1st Annual Meeting of Nepalese Society of Vascular and Interventional Radiology, 10–12 November 2016, Kathmandu, Nepal
8. Current trends in intra-arterial chemotherapy in advanced cancer of cervix, 3rd Tumor Minimally Invasive Interventional Therapy and Targeted Therapy Forum (Chinese Society of Interventional Oncology), 17–18 December 2016, China
9. Overview of cardiac imaging: Chest radiograph in heart disease imaging evaluation of aortic aneurysm and dissections, Endovascular management of peripheral vascular disease, Imaging in cardiomyopathies, CME on Image and Interventions in Cardiovascular Diseases, 10 February 2017, Colombo, Sri Lanka
10. The role of therapeutic angiogenesis in management of diabetic foot ulcer, Pain Arab Interventional Radiology Society Annual Scientific Meeting 2017, 15–16 March 2017, Dubai
11. Feasibility, safety and efficacy of IA delivery of autologous stem cells in treatment of diabetes mellitus, Acute outcomes of endovascular treatment of stenosis in the aorta and renal arteries in Takayasu's arteritis, International Symposium on Endovascular Therapeutics, 29–31 March 2017, Barcelona, Spain

Gurpreet Singh Gulati: 3

1. MRI in postoperative imaging for TOF repair, Delhi, Association of Pediatric Cardiac Surgeons of India, 10 July 2016, Fortis Hospital, Delhi
2. Basics of coronary angiography, Annual Meeting of Society of Cardiac Anaesthesia, 7 October 2016, AIIMS, Delhi
3. Aortoiliac reconstruction, Endovascular Live, 9–11 February 2017, Delhi

Priya Jagia: 12

1. CT, FFR, CT India Next 2016, 5–7 August 2016, Eros, Delhi, Chandigarh
2. When to do coronary CTA, 11th WCCPCI (World Congress on Clinical, Preventive Cardiology and Imaging), 22–25 September 2016, Shantivan, Mt Abu
3. Imaging in stroke, CVT carotid India course, 3–4 September 2016, Delhi
4. CIMT for risk stratification, CSI Cardiac Prevent 2015, 26–27 September 2015, Delhi
5. Imaging of aortic diseases, IRIA resident update, 11–12 September 2016, MAMC, Delhi
6. Bronchial artery embolisation, Annual Meeting of the Nepal Society of Vascular and Interventional Radiology, 9–12 November 2016, Kathmandu
7. Vascular access, Annual Meeting of the Nepal Society of Vascular and Interventional Radiology, 9–12 November 2016, Kathmandu
8. Cardiac mass imaging, Annual Meeting of the Sri Lankan Society of Interventional Radiology, 10–11 February 2017, Colombo Medical College, Colombo
9. Imaging in PTE, Annual Meeting of the Sri Lankan Society of Interventional Radiology, 10–11 February 2017, Colombo Medical College, Colombo

10. Cardiac imaging, Annual Meeting of the Sri Lankan Society of Interventional Radiology, 10–11 February 2017, Colombo Medical College, Colombo
11. MRI in IHD, Annual Meeting of the Sri Lankan Society of Interventional Radiology, 10–11 February 2017, Colombo Medical College, Colombo
12. Imaging for prognostication in PTE, CTVS resident update, 5 March 2017, AIIMS, Delhi

Sanjeev Kumar: 10

1. Uterine artery embolization–technical challenges and result, Regional Symposium on Embolization Techniques and Technologies, 22 July 2016, Colombo, Sri Lanka
2. Case based panel discussion on male genital tract embolization, Regional Symposium on Embolization Techniques and Technologies, 22 July 2016, Colombo, Sri Lanka
3. Vascular access techniques, Regional Symposium on Embolization Techniques and Technologies, 23 July 2016, Colombo, Sri Lanka
4. Deep venous thrombosis, lytic or catheter based approach: When and why? TCT India Next 2016, 5 August 2016, New Delhi
5. TOF, Preoperative coiling–When and how? TCT India Next 2016, 5 August 2016, New Delhi
6. Revascularization option of SFA lesion, TCT India Next 2016, 6 August 2016, New Delhi
7. Imaging of proximal aorta, Bentall CME, 20 August 2016, AIIMS, New Delhi
8. Cardiac MRI interpretation before surgery, SCA-2016 Cardiac critical care and imaging, 8 October 2016, AIIMS, New Delhi
9. Workshop on aortic stent graft, SIRAP-2016, 29 October 2016, Tokyo Science Centre, Japan
10. Indication of IVC filter, Thromboembolism Workshop, 4 March 17, Board Room, AIIMS, New Delhi

Oral papers/posters presented: 2

1. Jagia P, Gulati GS, Sharma S. Amplatzer plugs in patients with CHD, Controversies and updates in vascular surgery, 25–27 January 2017, Paris
2. Kumar S. Aortic pulsatility in patient of aortic dissection, Annual Meeting of the Radiological Society of North America, 30 November 2016, McCormick Place, Chicago, USA

Cardiac Biochemistry

Lectures delivered: 1

1. Association of birthweight with cellular senescence in adults: Data from New Delhi Birth Cohort, Association of Clinical Biochemists of India, 2016, December 2016, T.M. Pai Convention Center, Mangalore

Oral papers/posters presented: 5

1. Sen A, Abraham RA, Prabhakaran D, Reddy KS, Ramakrishnan L. Cholesterol ester transfer protein taq 1b polymorphism, physical activity and alcohol use are determinants of plasma HDL-C and its subunits in Indian industrial population, Association of Clinical Biochemists of India, 12–15 December 2016, TMA Pai Convention Center, Mangalore
2. Abraham RA, Bahl VK, Roy A, Dorairaj P, Ramakrishnan L. Association between trans fatty acids measured in cheek epithelium and incident myocardial infarction, Association of Clinical Biochemists of India, 2016, 12–15 December 2016, TMA Pai Convention Center, Mangalore
3. Mohamad T, Lakshmy R, Sinha S, Sachdev HS, Tandon N, Roy A, et al. and NDBC. Association of telomere length in adults with birthweight and early catch up growth: Data from the New Delhi Birth Cohort (NDBC), 17th International Congress of Endocrinology, September 2016, Beijing, China
4. Mohamad T, Lakshmy R, Sinha S, Sachdev HS, Tandon N, Roy A, et al. and NDBC. Association of birth outcomes and postnatal growth with leukocyte telomere length in adults: Data from the New Delhi Birth Cohort (NDBC), Association of Clinical Biochemists of India, 2016, 12–15 December 2016, TMA Pai Convention Center, Mangalore
5. Sen A, Vemparala K, Roy A, Bahl VK, Prabhakaran D, Nath N, et al. Endothelial Nitric Oxide Synthase (eNOS) gene expression of Endothelial Progenitor Cell (EPC) in Premature Coronary Artery Disease (PCAD) patients in Indian Population: A determinant of circulatory EPC level, International Society for Heart Research (Indian Section), February 2017, IGIB, Delhi

Nuclear Medicine

Number of lectures for undergraduates allotted and delivered: One

Number of postgraduate students: 40 (18 MD Nuclear Medicine students and 22 MSc Nuclear Medicine Technology students on rotational basis in Nuclear Cardiology)

Lectures delivered: 3

1. Assessment of Cardiac Dyssynchrony: Nuclear Medicine Techniques, CME program of PAN–African e-network project, 8 September 2016, Tele-medicine facility AIIMS, Delhi
2. Approaches of reducing radiation dose in myocardial perfusion SPECT, 48 Annual Conference of Society of Nuclear Medicine, 17–20 November 2016, Ahmedabad Management Association (AMA), Ahmedabad
3. Role of nuclear medicine techniques in the assessment of cardiac dyssynchrony, 1st World Congress on Cardiac Imaging and Clinical Cardiology, 23–26 February 2017, Santa Cruz, Mumbai

Oral papers/poster presented: 2

1. Pandey AK, Yadav U, Saroha K, Patel CD, Bal CS and Kumar R. Development and verification of a computer program that reconstructs image from multiple parallel projections using Filtered Back Projection Technique, 48th Annual Conference of Society of Nuclear Medicine, 17–20 November 2016, Ahmedabad Management Association (AMA), Ahmedabad
2. Saroha K, Pandey AK, Sharma PD, Patel CD, Bal CS and Kumar R. Development and Validation of Suprathreshold Stochastic Resonance based Image Processing Method for Detection of Abdomino-pelvic Tumor on PET/CT scans, 48th Annual Conference of Society of Nuclear Medicine, 17–20 November 2016, Ahmedabad Management Association (AMA), Ahmedabad

Cardiac Pathology

Lectures delivered

Ruma Ray: 1

Sudheer Kumar A: 7

Ruma Ray: 1

1. Pathology of cardiac transplant, Indian Society of Organ Transplantation 2016, 4–6 October 2016, PGI, Chandigarh

Sudheer Kumar A: 7

1. CPC case based on autopsy pathology, 14th Annual Meeting of International Society for Heart Research (Indian section), 27–29 January 2017, IGIB, New Delhi
2. Vascular lesions of the skin, CME in Dermatopathology, 18–19 February 2017, India Habitat Center, New Delhi
3. Cardiac transplant vasculopathy, APCON 2016, 1–4 December 2016, Birla Auditorium, Jaipur
4. Necrobiotic granulomas of the skin, Lecture, APCON 2016, 1–4 December 2016, Birla Auditorium, Jaipur
5. Cardiac tumor, Lecture, APCON 2016, 1–4 December 2016, Birla Auditorium, Jaipur
6. Dermatopathology quiz and lecture, Annual Meeting Dermatopathology Society of India, 11–13 November 2016, PGI, Chandigarh
7. Tumor and tumor like lesions of the heart lecture and poster presentation, SACH and ACPN Conference, 23–25 March 2017, Kathmandu, Nepal

Stem Cell Facility

The department participates in PhD, DM and MD programs

S. no.	Program	Number of students
1	MSc	NA
2	PhD	10
3	DM – MD	07
4	Paramedical	NA
5	Training:	
	a. Short term	05
	b. Long term	04

Lectures delivered: 9

1. Mesenchymal stem cells: The New Immunomodulatory Agents, 43rd Annual Conference of Indian Immunology Society (IIS) Immunocon 2016, 16–18 February 2017, GITAM University, Vishakhapatnam
2. Realizing the potential of stem cell research, DBT, NER Hands on training Workshop on “Stem Cell Biology”, 13 February 2017, ACTREC, Tata Memorial Centre, Mumbai
3. Stem cells and regeneration: Role of mitochondria, International Conference on Mitochondria in Health and Disease, 10–11 February 2017, Jawaharlal Nehru University, Delhi
4. Stem cell therapy: Current status, 14th Annual Meeting of International Society for Heart Research, 27–29 January 2017, CSIR, Institute of Genomics and Integrative Biology, Delhi
5. Mesenchymal stem cell biology and hypoxia, Seminar on Current Trends in Hypoxia Research, 18 January 2017, Jawaharlal Nehru University, Delhi
6. Experience with stem cell research, 2nd French-Indian (FAM-ANM-AIIMS) Public and Medical Innovation Forum Conference, 17–18 November 2016, Paris, France
7. Application of mesenchymal stem cells: Bench to Bedside, 1st Malaysian Society for Stem Cell Research and Therapy Symposium on Stem Cell, 11 October 2016, Institute of Medical Research, Malaysia
8. CLET and AM regulations, availability and accessibility issues, Doscon 2016: Ophthalmic Panorama, 15–17 April 2016, Delhi
9. Stem cells: Their role and clinical implications in dentistry, National CDE program on Regenerative Endodontics, 9 April 2016, Maulana Azad Institute of Dental Sciences, Delhi

Oral papers/posters presented: 6

1. Kakkar A, Sharma R, Mohanty S, Bhargava B, Airan B. Is oxytocin the new stimulant for cardiogenesis of mesenchymal stem cells? 43rd Annual conference of Indian Immunology Society (IIS) “IMMUNOCON 2016” 16–18 February 2017, GITAM University, Vishakhapatnam
2. Singh M, Sharma R, Bhargava B, Airan B, Mohanty S. Effect of growth factors and oxysterol towards generation of dopaminergic neurons from human bone marrow derived mesenchymal stem cells, 43rd Annual Conference of Indian Immunology Society (IIS) “IMMUNOCON 2016”, 16–18 February 2017, GITAM University, Vishakhapatnam
3. Gupta S, Sharma R, Menon SK, Dinda A², Mohanty S. Effect of hypoxia on exosomes secretion by tissue specific Mesenchymal Stem Cells. 43rd Annual conference of Indian Immunology Society (IIS) “IMMUNOCON 2016”, 16–18 February 2017, GITAM University, Vishakhapatnam (**Best poster**)
4. Rawat S, Sharma R, Mohanty S, Bhargava B, Airan B. Mesenchymal stem cells derived from Human Bone Marrow and Adipose Tissue shows differential immunomodulatory properties: Involvement of HLA-G, 43rd Annual Conference of Indian Immunology Society (IIS) “IMMUNOCON 2016”, 16–18 February 2017, GITAM University, Vishakhapatnam
5. Mohanty S, Singh M, Kumar M, Chowdhury S. A comparative assessment of tissue-specific human mesenchymal stem cells for generation of functional dopaminergic neurons, 14th International Society for Stem Cell Research (ISSCR) Annual Meeting, 22–25 June 2016, San Francisco, USA
6. Mohanty S, Kakkar A, Kumar M, Chowdhury S, Airan B. Oxytocin is an efficient inducer for generation of functional cardiomyocytes from human MSCs for translational research, 14th International Society for Stem Cell Research (ISSCR) Annual Meeting, 22–25 June 2016, San Francisco, USA

Organ Retrieval and Banking Organization

- Training Programme for Resident Doctors on Cadaver Organ and Tissue Donation Process. Three batches comprising 139 resident doctors from various departments of AIIMS were trained.
- In service Nurses Training Programme on Cadaver Organ and Tissue Donation Process. Five batches comprising 93 nurses from various ICUs of AIIMS were trained.
- Orientation of MHA Students of AIIMS and other institutions.
- Short term training of Social Work students from Centre for Social Work, Chandigarh.

Lectures delivered**Arti Vij: 6**

1. Eye banking–ORBO Perspective, National Consultation for Application of Mobile Telephony in Old Age Care, 26 August 2016, AIIMS, Delhi
2. Issues in organ retrieval and banking in India, World Trauma Congress 2016, 20 August 2016, JPN Apex Trauma Centre, New Delhi

3. Unusual medico-legal case studies, ISOT–2016, 8 October 2016, Chandigarh
4. Organ donation: Opportunities and challenges, Air Force Organ Donation Initiative, 12 December 2016, Air Force Auditorium, New Delhi
5. Organ donation—Achieving national self sufficiency, UCL–Difficult dialogues–Is India’s Health a Great Challenge (Health Ethics), 12 February 2017, International Centre, Goa
6. Organ Donation in India, 3FORT–MOHAN Foundation Training on Transplant Coordination, 16 April 2016, Meditorium, Gurgaon

Oral papers/posters presented: 5

1. Kumar M, Vij A. *Social work practice in organ donation and–transplantation, ISPSW 2017, 9–11 February 2017, GMCH, Chandigarh
2. Kumar M, Vij A. Social work practice: Pscho-Social Issues in Organ Transplantation, AIAMS, WP, 28 January 2017, KGM University, Lucknow
3. Kumar M. Medical social work practice in heart failure and–heart transplantation, ISWC 2016, 22 October 2016, Kashi Vidyapeeth, Varanasi
4. Kumar M, Vij A. Hospital initiative towards public awareness and education on deceased organ donation and transplantation, ISOT-2016, 8 October 16, Chandigarh
5. Kedar SA, Balamurgan M, Nigesh KM, Mathew B, Vij A, Sawhney C, et al. Role of nurse coordinators in organ donor detection and management, World Trauma Congress 2016, 18 August 2016, AIIMS, New Delhi

Blood Transfusion Services

Dr Anjali Hazarika CMO (SAG) I/c, Enrolled for PhD in CNC, AIIMS, 2015 onwards

Mr BS Bisht, Tech Asstt, Obtained BMLT Degree, 2016

Mr William Massey, Tech Asstt, Obtained BMLT Degree, 2016

Mr Sanjay Tiwari, Lab Tech, Obtained BMLT Degree, 2016

Ms Chitra Sharma, Lab Tech, Obtained BMLT Degree, 2016

Lectures delivered

Anjali Hazarika: 3

1. Donor haemovigilance in blood bank and outdoor mobile camp, National Workshop on Blood Donor Vigilance and CME on Voluntary Blood Donation, 14 June 2016, Gymkhana Club, Darjeeling, West Bengal
2. Equipment maintenance and use, “Training of Trainers for e-RaktKosh Software Training and Strengthening of Blood Services” for medical officers and technical personnel from district level blood banks by NHMn and NIB, 10 November 2016, NIB, NOIDA, Uttar Pradesh
3. Role of NACO/NBTC for promotion of VBD and challenges in organising outdoor blood donation camps, National Workshop on Voluntary Blood Donation Programme, Roadmap to achieving 90–100% Vol Blood Donation in India, 4 March 2017, NIB, NOIDA, Uttar Pradesh

Dietetics

NUTRITION EDUCATION: Training of short term post graduate students (MSc FN), Teaching undergraduate and postgraduate nursing students

Lectures delivered

Jasmine Kaur: 2

1. National Conference (Multi Disciplinary Health Care) on Dietary Management in Multiple Sclerosis, 5 November, AIIMS organized in collaboration with J.R.N. Rajasthan Vidyapeeth University, Udaipur
2. Joining hands to nourish India—Nutrition beyond nutrient, 49th Annual National Conference of Indian Dietetics Association at Mumbai, 23–25 September 2016, 2nd prize winner of IDA, Pune Chapter Award (clinical case presentation)

Oral papers/posters presented: 3

1. Kaur J. Nutritional assessment of hospitalized patients with multiple sclerosis, 1st National Conference of Indian Society of Clinical Nutrition, 14–16 October 2016, ILBS (Received consolation prize for the poster presentation)
2. Manral M. Use of modified atkins diet in refractory epilepsy: A case report has been selected as an entry for the Pune Chapter Award for clinical case presentation, IDACON 2016, Mumbai from 23 to 25 September 2016
3. Manral M. Diet therapy in refractory epilepsy, CGR Neurology, 13 September 2016

RESEARCH

Cardiothoracic and Vascular Surgery

Funded projects

Ongoing

1. Evaluation of safety and efficacy of BACE (Basal Annuloplasty of Cardia Externally) Device in the treatment of functional Mitral Valve Regurgitation (FMR), Choudhary SK, Phoenix Cardiac Devices Pvt Ltd, Hyderabad, 3 years, 2015

Departmental projects

Ongoing

1. Aneurysm of Sinus of Valsalva dissecting into interventricular septum
2. Prevalence of Bicuspid Aortic Valve (BAV) and Ascending Aortic Dilatation in First Degree Relatives (FDR) of Patients with BAV
3. Morphology of Sinus of Valsalva aneurysms in Indian patients
4. Genetic polymorphisms and dosing of Warfarin in Indian patients after heart valve surgery
5. Assessment of Circle of Willis in Indian population
6. Genetic screening in patients with Bicuspid Aortic Valve
7. Homograft Valve Banking
8. Management of coarctation of aorta with ascending aortic aneurysm.
9. Acute Type A dissection complicated by stroke: Optimum strategy?
10. Mycobacterial ortopathy: An institutional review of its presentation and management
11. Nosocomial infections in the intensive care unit after pediatric cardiac surgery: A prospective study
12. A comparison of three different techniques of bidirectional cavopulmonary anastomosis on cardiopulmonary bypass in patients undergoing surgery for univentricular physiology
13. Evaluation of differential pulmonary perfusion using Tc99m Macroaggregated Albumin (MAA) after Fontan procedure
14. Risk factors for conduit restenosis and revision
15. Randomized trial of Custadiol versus del Nido cardioplegia
16. Evaluation of differential pulmonary perfusion using Tc99m Macroaggregated Albumin (MAA) after Fontan procedure
17. Risk factors for conduit restenosis and revision
18. Randomized trial of Custadiol versus del Nido cardioplegia
19. Efficacy of Yoga based Cardiac Rehabilitation on clinical outcomes in post CABG patients – randomized controlled trial

Completed

1. Outcomes of patients undergoing primary Fontan operation after first decade of life
2. Arterial switch in patients beyond neonatal period
3. Long term outcomes of patients with discrete subaortic stenosis
4. Risk factors for prolonged pleural drainage after Fontan
5. Pathological changes in aorta and pulmonary artery in patients with dextro transposition of great arteries undergoing arterial switch operation: A prospective study
6. Vasoactive inotropic score and outcome assessment in cyanotic infants after cardiovascular surgery
7. Off pump versus on pump Glenn
8. Determining risk factors for early outcomes following bidirectional Glenn
9. Pericardial patch versus PTFE patch for RVOT reconstruction
10. Trans RA versus Trans RA-RV repair of TOF
11. Repair of AP window beyond infancy
12. Mid-term results of TOF with absent pulmonary valve
13. Surgical audit and outcome of patients who underwent Bentall's procedure with hemiarch procedure
14. Survey to assess the understanding of anticoagulation among patients

15. Trans-aortic mitral valve repair for functional MR in patients undergoing aortic root / valve procedure: A feasibility study
16. Analysis of the extent of degenerative changes in Intra-pericardial aorta of patients with Bicuspid Aortic Valve (BAV)
17. Predictors of IABP insertion in different spectrum of patients undergoing coronary artery bypass grafting: A prospective observational study
18. Evaluation of incidence, risk factors and management protocols for early postoperative arrhythmias after pediatric cardiac surgery: An observatory cross sectional study
19. To study risk factors for persistent Pleural Effusion following total cavopulmonary connections: A prospective observational study

Collaborative Projects

Ongoing

1. Morphometric analysis of thoracic aortic aneurysms (Pathology)
2. Genetic markers for thoracic aortic aneurysm and dissections (Cardiac Radiology, Cardiology)
3. Histopathological study of extent of degenerative changes in ascending aorta of patients with bicuspid aortic valve (Pathology, Cardiology, Cardiac Radiology)
4. Surgical audit of Ebstein Anomaly and significance of MRI correlation (Cardiac Radiology, Cardiology)
5. Non-invasive detection of sub-clinical disease activity in patients with established rheumatic valvular disease (Cardiology, Pathology)
6. Effect of pre-operative administration of allopurinol on postoperative outcomes in patients undergoing intracardiac repair of Tetralogy of Fallot (Cardiac biochemistry, Cardiac anaesthesiology)
7. Relationship between aortic annulus diameter and intertrigonal distance in rheumatic mitral regurgitation patients: A study evaluating the correlation between 2D, 3D transesophageal echocardiographic derived intertrigonal distance and directly measured intertrigonal distance (Cardiac anaesthesia)
8. Fibrillin 1 gene mutation and the role of TGF beta in aortic aneurysms with cystic medial degeneration (Pathology)
9. Renal cell carcinoma (RCC) with intracardiac extension: Radical excision under moderate hypothermia (Urology)
10. A randomized trial comparing Glenn with or without cardiopulmonary bypass (Cardiac biochemistry, Cardiac anaesthesiology)

Completed

1. Effect of pre-operative administration of allopurinol on postoperative outcomes in patients undergoing intracardiac repair of Tetralogy of Fallot (Cardiac biochemistry, Cardiac anaesthesiology)
2. Efficacy of yoga based cardiac rehabilitation on clinical outcomes in post CABG patients: A randomized controlled trial (Cardiology)

Cardiology

Funded projects

Ongoing

1. To study the prevalence of rheumatic heart disease among adults 18–25 years age group in Ballabgarh Block of Haryana using echocardiography with Doppler, Anita Saxena, DHR, 3 years, February 2016–January 2019, Rs. 38.83 lakhs
2. TEXTMEDS: TEXT messages to improve MEDication adherence and Secondary prevention: An international randomized trial, G Karthikeyan, National Health and Medical Research Council (NHMRC), Australia, 2 years, 2015–2017, AUD 30,000 (India only)
3. INVICTUS (*IN*vestigation of rheumatic AF Treatment Using vitamin K antagonists, rivaroxaban or aspirin Studies), G Karthikeyan, Population Health Research Institute, Canada, 4 years, 2016–2020, Rs. 16.7 Crores
4. Surgery compared to fibrinolytic therapy for left-sided valve thrombosis (SAFE-PVT), G Karthikeyan, ICMR, 2 years, 2017–2019, Rs. 69 Lakhs
5. Endothelial function in acute rheumatic fever, S Ramakrishnan, ICMR, 3 years, 2014–2017, Rs. 55 Lakhs

Completed

1. Vascular closure devices compared to manual compression following PCI, Sandeep Singh, AIIMS, 1 year, 2014–2015

2. Manual thrombus aspiration with fractional flow reserve guided stenting during primary angioplasty, Neeraj Parekh, AIIMS, 1 year, 2014–2015
3. Valuation of novel markers of acute coronary syndrome in young adults, Sunil Kumar Verma, AIIMS, 2 years, 2013–2015, Rs 10 Lakhs

Departmental projects

Ongoing

1. Does high dose statin therapy cause memory impairment?
2. Pericardial diseases in children: An observational study
3. FOCUS Ultrasound: Development of protocol to teach FOCUS ultrasound to intensivists
4. Incidence and predictors of left ventricular dysfunction in patients with right ventricular pacing
5. Efficacy of flecainide for management of rheumatic atrial fibrillation
6. Prevalence of cardiac involvement in patients of known Primary Sarcoidosis
7. Use of lung ultrasound in congenital heart disease
8. Clinical and angiographic profile and six months outcomes of smoker's patients of ST elevation myocardial infarction patients undergoing primary PCI
9. Clinical and morpho-antomic study of common arterial trunk

Completed

1. Pericardial diseases in children: An observational study
2. Electrophysiologic characterization of persons with early repolarization pattern on resting 12-lead ECG
3. Characteristics of patients undergoing primary PCI and determinants of outcomes
4. Incidence and predictors of left ventricular dysfunction in patients with right ventricular pacing
5. Cardiovascular assessment in patients with chronic liver disease
6. Utility of flecainide in acute conversion and short term control of atrial fibrillation in patients of mitral stenosis having had PTMC

Collaborative projects

Ongoing

1. MeRes1 Clinical Trial (Meryl)
2. Ischemia Trial (NIH)
3. Low Cost Cardiopulmonary Resuscitation machine (Chest compression device) for Sudden Cardiac Death patients (Wellcome Trust, London, UK)
4. Stanford India Biodesign (SIB) Programme and the SIB Centre (DBT, Stanford University, USA)
5. Utility of next generation DNA sequencing technologies in patients of Cardiac channelopathies, Familial cardiomyopathies and other rare familial cardiac disorders (CSIR, Institute of Genomics and Integrative Biology)
6. Validation of an innovative, low cost, wearable, two electrode, single lead ECG device against conventional ECG for detecting cardiac arrhythmias (Cardea Biomedical Technologies (P) Ltd)
7. TEXTMEDS- TEXT messages to improve MEDication adherence and secondary prevention: An international randomized trial (National Health and Medical Research Council, Australia)
8. INVICTUS (INVESTigation of rheumatiC AF treatment using vitamin K antagonists, rivaroxaban or aspirin Studies) (Population Health Research Institute, Canada)
9. Steering Committee Member and National Principal Investigator of G-CHF (Global Congestive Heart Failure) Registry—A large multinational registry of heart failure patients
10. Steering Committee Member and National Principal Investigator of the IVVE Trial (Influenza Vaccine to Prevent Adverse Vascular Events)—A trial to study role of Influenza vaccine in preventing cardiovascular events in patients of heart failure
11. Population prevalence of Vitamin D deficiency in urban and rural Delhi and its association with Cardiovascular Disease Risk factors (Department of Health Research, Government of India)
12. Assessment of HDL quality in Healthy Adult Indians and Impact of High Altitude (Defense Institute of Physiology and Allied Sciences)
13. Yoga: CaRe Trial, Effects of a yoga-based cardiac rehabilitation programme (Yoga-CaRe) on cardiovascular health: A clinical trial (India) and mechanistic study (UK) (ICMR-MRC UK)

14. Childhood and young adult predictors of myocardial structure and function at age 45 years in the New Delhi and Vellore Birth Cohorts, India (British Heart Foundation funded study)

Cardiac Anaesthesia

Funded projects

Ongoing

1. Comparison of the effects of desflurane—fentanyl and midazolam—fentanyl anaesthesia on cardiac and neurological biomarkers after valvular heart surgery, Poonam Malhotra Kapoor, ICMR, 3 years, 2014–2017, Rs. 18 Lakhs
2. Effect of induction with etomidate, thiopentone or ketamine on hemodynamic responses in patients with left ventricular dysfunction due to coronary artery disease undergoing coronary artery bypass graft surgery, Arindam Choudhury, AIIMS, 3 years, 2014–2017, Rs. 4.5 Lakhs
3. RCT on Rajyoga meditation modulating cognitive function and cortisol level in children undergoing surgery for congenital heart disease, Usha Kiran, DST project, 2 years, 2016–2018

Completed

1. Comparison of bivalirudin to heparin with protamine reversal in acyanotic children undergoing open heart surgery, Suruchi Hasija, AIIMS, 2014–2017, Rs. 2.5 Lakhs
2. Desflurane and tiva in shunt procedures for cyanotic congenital heart disease, Poonam Malhotra, Impart by Florida group, 2 years, 2014–2016
3. Clinical efficacy and safety of Perioperative Dexmedetomidine therapy in patients undergoing valvular heart surgeries—A randomized control trial, Sambhunath Das, AIIMS

Departmental projects

Ongoing

1. Role of echocardiography derived right ventricular function parameters as compared to $P_{RV/LV}$ ratio for evaluation of perioperative right ventricular function in children undergoing intracardiac repair for tetralogy of fallot
2. Comparative evaluation of the three point-of-care testing devices; Thromboelastograph (TEG), Rotational thromboelastometer (ROTEM) and Sonoclot analyzer in cyanotic congenital cardiac surgery: a correlation with routine laboratory tests and postoperative bleeding
3. Retrograde autologous priming of cardiopulmonary bypass circuit in adults: comparison of venous and arterial
4. Changes in bispectral index (BIS) value during cardiopulmonary bypass—An observational study
5. Comparison of Tricuspid Annular Plane systolic excursion (TAPSE) with modified TAPSE in coronary artery bypass patients.
6. Correlation of TEE derived diastolic strain and tissue doppler indices with pa catheter measured LV filling pressures in patients with preserved ejection fraction undergoing CABG
7. Comparison of the effect of two levels of PaCO₂ (30–35 mmHg and 40–45 mmHg) on cerebral venous oxygen saturation using NIRS (Near-infrared spectroscopy) during rewarming on cardiopulmonary bypass
8. Evaluation of the effect of conventional ultra-filtration during cardio-pulmonary bypass in adult patients
9. Relationship between aortic annulus diameter and intertrigonal distance in rheumatic mitral regurgitation patients: A study evaluating the correlation between 2D, 3D Transesophageal echocardiographic derived intertrigonal distance and directly measured intertrigonal distance
10. Effect of intraoperative Red cell volume reduction on cardiopulmonary bypass in cyanotic heart disease patients with high hematocrit
11. Anxiety and stress in children and parents undergoing congenital heart surgery
12. Osteoponin, RV function and clinical outcome in tetralogy of Fallots
13. Thiopentone vs. Etomidate Induction – Ventricular function by speckle tracking echocardiography
14. Correlation between thoracic fluid content, total leukocyte count and C-reactive protein in pediatric cardiac surgery
15. Induction effects of Anaesthetic agents on ventricular function of congenital heart disease children by speckle tracking echocardiography
16. Dexmedetomidine in prevention of atrial fibrillation in patient's undergoing valve surgery
17. Leukocyte reducing blood transfusion filter in patients undergoing cardiopulmonary bypass
18. Use of Autologous Umbilical Cord Blood for Cardiac Surgery
19. FLEV and FIBTEMA5 comparison using Point of Care Testing

Completed

1. Urine NGAL analysis with different EACA doses in arterial switch operation
2. Comparison of balanced crystalloid solution containing gluconate (Plasmalyte) and Ringer Lactate as priming solution in children undergoing cardiopulmonary bypass
3. Bidirectional superior Cavopulmonary anastomosis Procedure: A comparison of on pump versus off pump technique
4. Pulmonary alveolar proteinosis with whole lung lavage extracorporeal membrane oxygenation
5. BNP measurements for on pump and off pump BD Glenn.
6. Comparison of the effects of inhalational anesthesia with desflurane and total intravenous anesthesia on cardiac biomarkers after aortic valve replacement
7. Goal Directed Therapy in off pump and on pump coronary artery bypass grafting
8. Left atrial appendage velocity by TEE and atrial fibrillation in CABG surgery

Collaborative projects**Ongoing**

1. Comparison of del Nido vs custodial cardioplegia solution in patients undergoing intracardiac repair (CTVS)

Completed

1. Bidirectional superior cavopulmonary anastomosis procedure: A comparison of on pump vs off pump technique (CTVS)
2. NGAL for off pump and on pump CABG using perioperative goal directed therapy (Medanta, The Medicity)
3. Comparison of standard del Nido Cardioplegia prepared in crystalloid solution containing gluconate (Plasma lyte A) with modified forms of del Nido cardioplegia prepared in Ringer Lactate and prepared in maleate – acetate (sterofunder) in adult patients undergoing Cardiac surgery (Perfusion Technology)

Cardiac Radiology**Funded projects****Ongoing**

1. Safety and efficacy of autologous bone marrow derived mononuclear cells in patients of spinal Injury, Jagia P, AIIMS, 2 years, August 2016, Rs. 5 Lakhs

Departmental projects

1. Role of cardiac magnetic resonance imaging in identification of myocardial fibrosis and wall morphology in patients of nonischemic dilated cardiomyopathy

Collaborative projects**Ongoing**

1. Left atrial appendage (LAA) morphology as predictor of LAA clot formation in patients with rheumatic heart disease (Cardiology)
2. To study prevalence and clinical profile of sarcoidosis patient with cardiac involvement (Pulmonary medicine)
3. Morphometric description of common arterial trunks and its clinical implications (Cardiology)

Completed

1. Strength of sternal wound healing in patients of sternal osteoporosis—Comparison between use of bone wax and absorbable gel for marrow hemostasis (CTVS)

Cardiac Biochemistry**Funded projects****Ongoing**

1. To study the association of tetrahydrobiopterin (BH4) levels in endothelial progenitor cell (EPC) with the functional activity of EPC in coronary artery disease (CAD) patients, R. Lakshmy, ICMR, 2 years, Rs. 39 lakhs
2. Study of association of tetrahydrobiopterin (BH4) levels in endothelial progenitor cell (EPC) with EPC number in CAD patients, R. Lakshmy, AIIMS, 2 years, 2015, Rs. 10 lakhs
3. Health survey of tribal population in Kashmir valley with special reference to magnitude and risk factors of non-communicable diseases, R. Lakshmy, DBT, 3 years, 2015

4. Proposal for engagement of All India Institute of Medical Sciences to serve as QC lab for comprehensive national nutrition survey, R. Lakshmy, UNICEF, 1.5 years, 2016
5. Childhood and young adult predictors of myocardial structure and function at age 45 in the new Delhi birth cohort and Vellore birth cohorts India: Biochemical component, Delhi, R. Lakshmy (Biochemical Investigator), BHF, 3 years, 2016, Rs. 20 lakhs
6. Piloting of the national survey for monitoring the national non communicable disease targets 2016, R. Lakshmy, WHO, 6 months, 2016, Rs. 15.6 lakhs

Departmental projects

Ongoing

1. Biomarkers in ACS (Cardiology)
2. Study of endothelial progenitor cell (EPC) tetrahydrobiopterin (BH4) levels and its association with EPC number and function in coronary artery disease (CAD) patients
3. Optimizing Blood Inventory in a Blood Bank at a Superspeciality Centre in India

Collaborative projects

Ongoing

1. Relations of Leucocyte membrane complement regulatory proteins, MBL and MASP2 with the pathophysiology and severity of coronary artery disease (Biochemistry)
2. Role of inflammation in Indian women with Polycystic ovary syndrome (PCOS) and its modulation by dietary factors (Endocrinology)
3. Health survey of tribal population in Kashmir valley with special reference to magnitude and risk factors of non-communicable disease: A collaborative cross sectional study (Endocrinology)
4. Prevalence of vitamin B12 deficiency among Indian women with Polycystic ovary syndrome (PCOS) and the impact of vitamin B12 supplementation on the efficacy of conventional drugs in the management of women with PCOS (Endocrinology)
5. Assessment of Nutritional Status, diet related morbidity and utilization of health care facilities in the elderly population aged 60 years and above (Human Nutrition Unit)
6. Role of cardiac biomarkers in risk stratification of patients with acute coronary syndrome (ACS) in the emergency department (Emergency Medicine)
7. Validation of spot urine sample against 24 hr urine sample for estimation of dietary sodium intake at population level (CCM)

Completed

1. Association of Vitamin D and Calcium with Development of Breast Cancer: A Case Control Study (Human Nutrition Unit)
2. Effect of antioxidant supplementation on pancreatic function and markers of fibrosis in chronic pancreatitis: A randomized controlled double blind trial (Gastroenterology)
3. A comparison of Delnide and St. thomas cardioplegia solution in pediatric open heart surgery: A prospective randomized control trial (CTVS)

Cardiac Nuclear Medicine

Funded projects

Ongoing

1. Value of intraventricular synchronism assessment by Gated SPECT myocardial perfusion imaging (MPI) in the management of heart failure patients submitted to cardiac resynchronization therapy. Chetan D. Patel, International Atomic Energy Agency IAEA, Vienna, 4 years, 2013–2017, Rs. 14 lakhs

Department projects

Ongoing

1. Evaluation of F-18 FDOPA in detection of Myocardial Sympathetic Denervation in patients with Advanced Parkinson's disease
2. Role of Ga68-DOTANOC PET/CT in Cardiac Sarcoidosis: Comparison with Cardiac MRI
3. Optimization of reconstruction parameters in Ordered Subset Expectation Maximization (OSEM) and comparison with images reconstructed using Filtered backprojection in 99mTc-SESTAMIBI myocardial perfusion imaging

4. Comparison of pulmonary perfusion after Fontan procedure using Tc99m MAA lung perfusion scan: Extracardiac TCPC vs. lateral tunnel TCPC
5. To study the role of vascular function and pain sensitivity in microvascular angina
6. Normalized Mutual Information based methods and its influence on PET and CT image registration
7. Role of Gaussian and Butterworth filter in Noise Removal from Nuclear Medicine Images
8. Interim treatment response evaluation of non-small cell lung cancer after four cycles of chemotherapy using texture analysis on F18-FDG PET/CT study
9. Role of texture analysis of baseline F18-FDG PET/CT as predictor of survival in non-small cell lung cancer

Completed

1. Tumor segmentation on F-18 FDG PET/CT images in patients with solid tumour malignancies using the Watershed Algorithm
2. Detection of asymptomatic myocardial ischemia in patients with type 2 diabetes mellitus
3. Pediatric Hodgkin lymphoma: Biology and outcome
4. Comparison of Myocardial perfusion abnormalities detected by stress adenosine
5. Tc99m MIBI myocardial perfusion SPECT and Coronary flow reserve on adenosine stress echocardiography for the screening of patients after arterial switch operation for transposition of great arteries with regressed ventricle
6. Role of Suprathreshold Stochastic Resonance Technique in the detection of abdomino-pelvic tumor on 18F-FDG PET/CT scan
7. Development and validation of Filtered Back Projection (FBP) Algorithm for Research Purposes
8. Development of 18F-FDG PET/CT database of lung masses and computation of their feature vector

Collaborative projects

Ongoing

1. International Study of Comparative Health Effectiveness with Medical and Invasive Approaches. (ISCHEMIA TRIAL) (Cardiology)
2. Prevalence of symptomatic and asymptomatic coronary artery disease in patients with ischemic stroke and TIA (Neurology, Cardiology)

Cardiac Pathology

Funded projects

Ongoing

1. Role of Fibrillin 1 gene mutation and TGF beta in thoracic aortic aneurysms of non marfanoid individuals, Sudheer, AIIMS, 2 years, 2016–2017, Rs. 10 lakhs

Departmental projects

Ongoing

1. Electron microscopic study of ciliary abnormality in clinically suspected cases of primary ciliary dyskinesia
2. A study to assess the efficacy of cultured plucked hair follicle outer root sheath cell melanocytes for transplantation in stable vitiligo
3. Immunohistochemical characteristics and surgical outcomes of oral sub mucous fibrosis

Completed

1. Expression of Matrix Metalloproteinase-2, Matrix Metalloproteinase-9, Tissue Inhibitor Metalloproteinase-1, Tissue Inhibitor Metalloproteinase-2, Collagen I and IV Expression in Thoracic Aortic Aneurysms
2. A comparative study of efficacy and composition of various cell populations of extracted hair follicle outer root sheath cell suspension prepared using a single enzyme (trypsin) and multiple enzymes (trypsin, collagenase and dispase) for transplantation in vitiligo
3. Hpv16, 18 E6 protein expression and EGFR mutation in oral squamous cell carcinoma and verrucous carcinoma

Collaborative projects

Ongoing

1. Finding the correlation of toll like receptors (TLRs) with inflammation in patients with chronic heart failure (Cardiology, Safdarjung Hospital)

2. Comparative evaluation of MicroRNA profiling and cytokine profiling analysis in patients with Pulmonary Sarcoidosis and Mediastinal tuberculosis (Pulmonary Medicine)
3. Development of a new formulation and packaging for reducing adverse effects and injection pain of Mycobacterium vaccine and its clinical trial in recalcitrant anogenital and extra-genital (common) warts (Dermatology)
4. Autologous non cultured dermal cell suspension transplantation in treatment of facial volume loss (Dermatology)
5. Study of Sesamol in Bleomycin induced pulmonary toxicity in rat (Pharmacology)
6. Exploring the phenotypic and functional role of $\gamma\delta$ T cell subsets along with pattern recognition receptors (PRRs) in the immunopathogenesis of Pemphigus Vulgaris (Pharmacology)

Stem Cell Facility

Funded Projects

Ongoing

1. Sculpturing corneal constructs using micropatterned surface and decellularized corneas, Sujata Mohanty, DBT, 3 years, 2014–2017, Rs. 27.98 lakhs
2. Targeting Telomerase Reverse Transcriptase (TERT) gene to immortalize Peripheral Blood Mononuclear Cells of patients with coronary artery disease, Sujata Mohanty, ICMR, 3 years, 2014–201, Rs. 56.0 lakhs
3. A comparative study to evaluate the role of tissue specific MSCs in cellular repair and regeneration through mitochondrial transfer, Sujata Mohanty, DBT, 3 years, 2016–2019, Rs. 16.0 lakhs

Completed

1. Study of Exosomes secreted by Mesenchymal Stem Cells (MSCs) derived from bone marrow and adipose tissue, Sujata Mohanty, AIIMS, 1 year, 2015–2016, Rs. 4.7 lakhs

Departmental projects

Ongoing

1. Study of functional Dopaminergic neurons from human mesenchymal stem cells
2. Immunomodulatory potential of tissue specific human MSC through HLA-G and other soluble factors
3. To evaluate the role of tissue specific MSC derived exosomes in drug induced liver injury model
4. In-vitro studies to explore strategies for extended utilization of donor corneal tissues by harnessing their full clinical potential
5. Molecular characterization of Steve Johnson Syndrome and its Ocular Sequelae
6. Imaging and molecular characterization of differentiated thyroid cancer
7. Role of micro RNA as biomarker in hepato cellular carcinoma
8. Comparative evaluation of cellular responses and osteogenic potential of undifferentiated mesenchymal stem cells induced by calcium-silicate based cements: A histochemical study
9. Optical characterization of breast cancer
10. In vitro and in vivo stabilization of endothelial tubes from HUVEC micro tissues using human bone marrow derived hMSCs and its application in bone tissue engineering
11. Detection and quantification of circulating tumour cells in oral cavity squamous cell carcinoma
12. T cells subsets and their functions in aplastic anemia
13. To understand the differentiation of adipose derived mesenchymal stem cells in the given matrix to enhance the healing power of diabetic wounds.
14. Effects of administration of human bone marrow derived mesenchymal stem cell on the expression level and promoter's methylation pattern of stroke related genes in middle cerebral artery occlusion model of stroke in rats

Completed

1. To explore differentiation potential of bone marrow derived mesenchymal stem cells into functional cardiomyocytes
2. Role of stem cell therapy to decrease pacing requirements in complete heart block
3. A comparative study to assess the efficacy, viability and composition of various cell populations of extracted hair follicle outer root sheath cell suspensions (EHF ORS CS) prepared using a single enzyme (trypsin) and multiple enzymes (trypsin, collagenase and dispase) for transplantation in vitiligo
4. Isolation and characterization of mesenchymal stem cells derived from amniotic fluid
5. To study the role of recombinant human erythropoietin in trauma victims with hemorrhagic shock: An in-vitro approach through stem cell differentiation

Collaborative projects

Ongoing

1. Evaluation of autologous bone marrow derived stem cells in dry age related macular degeneration (RP Centre)
2. Comparison of autologous cultured limbal stem cells on amniotic membrane transplant versus limballenticule transplantation alone in the management total limbal stem cell deficiency due to ocular burns: A randomized controlled clinical trial (RP Centre)
3. Study of paracrine mechanism of autologous stem cell transplantation in stroke using bifunctional markers (Neurology)
4. Assessment of the effect of various storage media on viability, proliferative ability and differentiation potential of human periodontal ligament stem cells (HPDLSCS): An in-vitro study (CDER)
5. Utilization of intra arterial injections of autologous bone-marrow derived mononuclear cells for treatment of spinal injury (Cardiac Radiology)

Completed

1. Isolation and characterization of mesenchymal stem cells from amniotic fluid and wharton jelly (Obstetrics and Gynaecology)

Organ Retrieval and Banking Organisation

Departmental projects

Ongoing

1. Optimising Blood Inventory Management at a Super-specialty Blood Centre in India
2. A study of Organizational Climate Amongst the Newly Recruited Professionals (Doctors – Nurses) at AIIMS
3. To study communication between health care providers as a tool of patient safety in the Deptt. of GI Surgery

Completed

1. A study of professional quality of life and burn out in nurses at AIIMS Hospital
2. A study of investigations and charges thereof in various labs at AIIMS

Collaborative projects

Completed

1. A study of knowledge and barriers for organ donation among adult rural population of CRHSP, AIIMS Ballabgarh (CCM)

Blood Transfusion Centre

Departmental Projects

1. Optimizing blood inventory management at a super-specialty blood centre in India: A case study

Collaborative projects

Ongoing

1. Generation and characterisation of molecularly cloned HIV-1 EnvPseudoviruses from Indian HIV-1 infected children (Biochemistry)
2. Use of autologous umbilical cord blood transfusion in neonates undergoing surgical correction of congenital cardiac defects: A pilot study (Cardiothoracic Centre)
3. Study the potential role of HLA-G mediated immunomodulation by tissue specific human mesenchymal stem cells (Stem Cells)
4. Effect of hyperglycemia on macrophage function in pathophysiology of pulmonary TB (Biochemistry)
5. Regulation of HIV reservoirs through autophagy (Biochemistry)
6. Targeting Telomerase Reverse Transcriptase (TERT) gene to immortalize peripheral blood mononuclear cells of patients with coronary artery disease (Stem Cell)
7. Establishing normal reference range of serum free light chains in healthy Indian adults (Lab oncology, BRA IRCH)

Dietetics

Departmental project

Ongoing

1. Efficacy, safety and tolerability of modified atkins diet in adolescence and adults with drug resistant epilepsy: A randomized controlled trial

Completed

1. Early enteral nutrition therapy in congenital cardiac repair postoperatively: A randomised controlled pilot study, Annals of Cardiac Anaesthesia, October 2016

Collaborative project

1. Effect of lifestyle modification programme with yoga on overweight and non-morbidly obese patients with obstructive sleep apnea: A RCT study with neurology, 2017–2019

PUBLICATIONS

Cardiothoracic and Vascular Surgery

Journals: 22

Abstracts: 15

Chapters in book: 2

Cardiology

Journals: 79

Chapters in Books: 11

Cardiac Anaesthesia

Journals: 46

Chapters in books: 11

Books: 4

Cardiac Radiology

Journals: 14

Cardiac Biochemistry

Journals: 7

Cardiac Nuclear Medicine

Journals: 10

Abstracts: 2

Cardiac Pathology

Journals: 20

Stem Cell Facility

Journals: 9

Organ Retrieval and Banking Organization

Journals: 1

PATIENT CARE

Cardiothoracic and Vascular Surgery

53054 patients attended and were seen in the Outpatient Department.

Total operations performed in 2016–2017: 4060

Cardiology

New cases

39068

Old Cases

99656

TMT	1985	ABP	74
Holter	2986	TEE	40
Echocardiography	34489	HUTT	146
ECG	31963		

MUGA LAB

Myocardial perfusion study

Cardiac PET

RNV study

Misc (V/Q scan 1st pass)

Cath Lab Services

CART	2609	PTCA	1330
Cath	376	Pacemakers	188
Balloon Dilatation	130	CRT-P	15
PTMC	284	RFA	134
PDA	130	CARTO	26
ASD Device	60	DSA	187
VSD Device	11	EVLA	395

Cardiac Anaesthesia

1. Advanced monitoring facilities (TEE, TTE, NIRS, NICO monitoring) for management of routine, emergency and high risk cardiac surgical patients belongs to all spectrum
2. Specialized cognitive rehabilitation programme for heart failure, heart transplant and LVAD patients
3. Routine stress management programme both for pre and post operative patients
4. Different community programme by the faculties

Cardiac Radiology

Facility	Number of procedures	Facility	Number of procedures
Cine Fluoroscopy	34059	MRI	482
CT	3994	DSA	1051
Doppler and Ultrasound	6045	Catheter angiographies	7000

Cardiac Biochemistry

The Cardiac Biochemistry laboratory caters to outpatients and inpatients of cardiothoracic center and for some of the diagnostic tests to patients from other departments as well as from other hospitals. Patient care services have been improved through interfacing of laboratory equipments with hospital information system. The ward samples are received through pneumatic tube system. The list of tests being carried out and their annual load in the laboratory is as follows:

Tests done in Centralised Lab

S. no.	Description	No. of tests (ward)	No.of tests (OPD)
Clinical Chemistry			
1	Glucose	50,200	56,588
2	Urea	61,500	51,400
3	Creatinine	62,500	50,200
4	Calcium	52,500	48,500
5	Phosphorous	52,500	56,450
6	Uric Acid	55,000	48,300
7	Sodium	65,000	55,000
8	Potassium	65,000	55,000
9	Bilirubin	60,300	53,200
10	Direct Bilirubin	58,400	48,400
11	Total Protien	58,500	52,200
12	Albumin	58,400	52,200
13	AST	61,500	57,500
14	ALT	61,500	57,500
15	ALP	63,000	60,000
16	Cholestrol	50,000	47,200
17	Amylase	45,000	30,420
18	Cyclosporin	690	NA

Haematology and coagulation			
1	Hb, TLC, DLC, Platelets, ESR	48050	35242
2	PT	44673	12,243
3	APTT	1850	400
Hormones			
1	T3	12000	6000
2	T4	12000	6000
3	TSH	13,000	7000
4	Prolactin	1400	1100
5	Cortisol	1800	1000
6	Vit B12	10000	4000
7	Folate	2000	2000
8	Homocysteine	1300	1200
9	Ferritin	300	200
Catecholamines/VMA			
1	Adrenaline/Nor adrenaline	400	200
2	VMA	221	211
PTH/Vitamin D			
1	Vitamin D	2500	1279
2	PTH	280	200
Lipids/Cardiac Enzymes/HbA1c			
1	PTH	280	200
2	LIPID PROFILE	32,300	32,000
3	CK-NAC	10,000	3100
4	CK-MB	3000	1440
5	LDH	8000	8680
6	ASLO	1750	2000
7	CRP	14300	13,000
8	DIGOXIN	500	332

Cardiac Nuclear Medicine

Nuclear Cardiology unit in CNC is equipped with a dual head SPECT-CT Gamma Camera. The nuclear cardiology unit caters to patients referred for cardiac studies from CN center and other departments of the hospital.

The department performs myocardial perfusion study which is an integral investigation in the diagnosis and management of patients with coronary artery disease. The department also performs radionuclide ventriculography for assessment of left ventricular function in CAD patients referred from the center and from IRCH for cardiac evaluation in patients receiving chemotherapy. We also perform cardiac PET imaging with PET perfusion tracer N-13 NH3 and metabolic tracer F-18 FDG for assessment of myocardial viability and other non CAD indications.

Total Number of patients investigated in Nuclear Cardiology from 1/4/16 to 31/3/2017

Myocardial perfusion study:	1683	RNV study:	719
Cardiac PET:	81	Misc. (V/Q scan, 1st pass):	162
Total number of studies performed: 2645			

Cardiac Pathology

Specimens

Routine:	495	Research:	136
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Others works

Immunohistochemistry:	271 slides	H-E stain:	69 slides
Manual processing of post-transplant biopsies:	21 cases	Special stains:	189 slides
Cutting of blocks (unstained sections):	356 slides		

Stem Cell Facility

- Recently, we have extended the Amniotic Membrane Graft distribution services from RPC, AIIMS to other departments of AIIMS (Paediatric Surgery, Trauma Center, AIIMS) and to outside Institutions (ESI Hospital, Safdarjung Hospital, Dr Ram Manohar Lohia Hospital, etc.
- This service will be on the charge basis, for which a proposal has been sent to the Standing Finance Committee and is being considered favorably.

S. no.	Service provided	Number of samples processed
1.	Stem Cell Isolation from Bone Marrow	33
2.	Cryopreservation of Bone Marrow	01
3.	Cryopreservation of Apheresis sample	08
4.	Umbilical Cord Blood Cryopreservation	03
5.	Cultured Oral Mucosa Epithelial Transplantation	21
6.	Culture Limbal Epithelial Transplant	03
7.	Amniotic Membrane preparation for grafting	17 batches (380 patients)
8.	Hair Follicle Stem Cells	02
9.	Viability of Stem Cells (pre-post transplantation/infusion)	50
10.	Stem Cell Enumeration	39

ORBO

PATIENT CARE

- Initiated Rotational Posting of Nursing Officers in ORBO to facilitate screening and maintenance of potential brain dead donors and approach relatives of patients for tissue donation in cardiac death.
- 46 awareness camps and IEC activities were organized for public education and awareness generation on organ and tissue donation.
- 12282 persons pledged for organ and tissue donation on motivation of ORBO.
- Collaboration with various organizations to promote the noble cause of organ and tissue donation.

Total No. of Community Services/Camps: 46

S. no.	Date	Awareness activities on organ and tissue donation at
1.	03.04.2016	TRISH (NGO), Delhi
2.	06.04.2016	Rufaida College of Nursing, Jamia Hamdard University, New Delhi
3.	06.04.2016	GoFC, New Delhi
4.	21.04.2016	Radha Soami Satsang Beas, New Delhi
5.	11.05.2016	Maharaja Agarsen School, Delhi
6.	06.06.2016	Border Security Force, Delhi
7.	14.06.2016	Jai Prakash Narayan Apex Trauma Centre, AIIMS
8.	20.06.2016	7th BN, Delhi Arm Forces, Malviya Nagar, New Delhi
9.	02.07.2016	Dadhichi Deh Dan Samiti, Delhi
10.	02.07.2016	National Housing Banking, Delhi
11.	12.08.2016	Sawan Kripal Ruhani Mission, Delhi
12.	14.08.2016	Ministry of New – Renewable Energy, Govt. of India
13.	16.08.2016	Gurugram Nursing Club, Gurgaon
14.	05.09.2016	Lord Jagannath Society of Delhi
15.	07.09.2016	RWA, Janakpuri
16.	28.09.2016	Nishkam Sewa Sansthan, Pitampura, Delhi
17.	28.09.2016	DGND Medicare Charitable Hospital, Delhi
18.	07.10.2016	Samsung India, Gurgaon
19.	27.11.2016	NDTV Awareness Campaign on Organ Donation, Delhi

20.	20.12.2016	Guru Singh Sabha Gurudwara, Adarsh Nagar, Delhi
21.	22.01.2017	Mata Seta Devi Charitable Trust, Delhi
22.	28.01.2017	St. Colomba's School, Delhi
23.	05.03.2017	Laxmi Narayan Temple, NOIDA
24.	19.03.2017	Nishkam Sewa Sansthan, Pitampura, Delhi

Organized IEC activity on organ donation in the following conferences/workshops conducted by the institute:

1.	02.04.2016	ESP Suturing Workshop for MBBS Students of AIIMS at AIIMS, Dr Sunil Chumber, Surgery
2.	04–07.04.2016	Workshop in Fetal Medicine at AIIMS, Dr Vatsla Dadhwal, Obstetrics and Gynae
3.	06.04.2016	First Pelvic Aetabulam Cadaveric Course in Trauma Centre at JPNATC, AIIMS, Dr Vijay Sharma, Orthopaedics
4.	08–10.04.2016	20th National Annual Conference of Association of Radiation Therapy of Technologist of India, First World Congress at AIIMS, Mr. Ajeet Singh Organizing Secy (ARTTICON 2016), Radiation Oncology, AIIMS
5.	09–10.04.2016	Annual Conference of ISA Delhi Branch (ISA Delhi-AIIMS) at AIIMS, Dr M.K. Arora, Anaesthesiology, AIIMS
6.	09–10.04.2016	Conduct Course on CT Guided Interventions at AIIMS Dr Arun K Gupta, Radiodiagnosis
7.	14.04.2016	New Frontiers in Total Knee Replacement Course and Live Surgery demonstration by Dr Mark T. McBride from USA, Dr Rajesh Malhotra, Orthopaedics
8.	21.04.2016	CME cum Workshop on Emerging infections with special reference to pathogens in India at AIIMS, Dr Rama Chaudhry, Microbiology
9.	07–08.05.2016	6th AIIMS Complex Spine Live Operative Workshop at JPNATC, AIIMS, Dr Deepak Agrawal, Neurosurgery
10.	10.05.2016	Patient Awareness Programme on World Lupus Day at Conference Hall at AIIMS, Dr Uma Kumar, Rheumatology, AIIMS
11.	16.05.2016–25.06.2016	XXXI national Training Programme in Electron Microscopy for Scientific Investigators at AIIMS, Dr T.C. Nagar, EM Facility, Anatomy
12.	2nd week of June–November	IAPC Certificate Course in essential of Palliative Care for Doctors and Nurses at AIIMS, Dr Sushma Bhatnagar, Anaesthesiology Dr BRAIRCH AIIMS
13.	24–24.07.2016	CME Series on Hemato-Oncopathology at AIIMS, Dr Ritu Gupta, Lab Oncology, DBRA IRCH, AIIMS
14.	12–14.08.2016	Neuro Trauma – 2016 – JLN Auditorium, New Delhi
15.	06.08.2016	Workshop on Full Mouth Rehabilitation at AIIMS, ND, Dr Veena Jain, Prosthodontics (CDER)
16.	01–03.09.2016	CME + Workshop on AIIMS-DBT Epilepsy Surgery Epilepsy Neurobiology at AIIMS, Dr P Sarat Chandra, Neurosurgery, AIIMS
17.	25–27.09.2016	AIIMS Health Exhibition 2016
18.	15.10.2016	Public Awareness Programme on Arthritis at AIIMS, Dr Uma Kumar, Rheumatology, AIIMS
19.	20–23.10.2016	6th AIIMS Annual Spine Workshop at AIIMS, Dr Rajeev Sharma, Neurosurgery, AIIMS
20.	25.10.2016	Indo-German Joint Symposium on Pediatrics Oncology and Hematology at AIIMS, Dr Lalit Kumar, Medical Oncology, Dr BRA, IRCH, AIIMS, New Delhi
21.	30.11.2016 to 04.12.2016	International Congress on 22nd World Congress of Social Psychiatry, Dr Rakesh K Chadda, Psychiatry, AIIMS
22.	2–3.12.2016	Workshop on Valve Surgery at AIIMS, Dr S.K. Choudhary, CTVS

Blood Transfusion Centre**Patient Care:**

Blood units collected	
Replacement donors	11655
Voluntary donors in the department	259
Voluntary through blood mobile	89
Family Voluntary Donors	8838
Blood received from IRCS	34
Blood received from Hospital Blood Bank, AIIMS	97
Blood received from other hospital	161
Blood received from JPNATC	105
Total No. of Blood units collected	21238
Blood units issued	
Blood units issued to CTVS/NS	21556
Blood issued to Hospital Blood Bank, AIIMS	723
Blood issued to JPNATC	153
Blood issued to IRCS	34
Blood issued to other hospitals	889
HIV/HBsAg/HCV reactive units discarded	594
Total No. of blood units issued	23949
Lab. Procedures	
Total no. of Blood grouping (ABO)	61716
Total no. of Blood grouping (RH)	36584
Total no. of Cross matching done	135811
Infectious markers	
HIV Testing	24546
HBV Testing	24905
HCV Testing	25041
VDRL Testing	22875
MP Testing	22875
NAT Testing	20509
Total	140751
Total No. of Blood Components	
Fresh Frozen Plasma (FFP)	20111
Platelet Concentrate	17413
Cryoprecipitate	940
Packed Red Cells	20572
Single Donor Plateletpheresis	41
Total	59077

Dietetics**1. DIET IN GENERAL – PRIVATE WARDS:**

- Normal diet: 68,750
- Khichdi/Semisolid diet: 19,053
- Feeds: 21,973
- Private diet (C.N.Tower): 22,630

2. THERAPEUTIC DIETS IN GENERAL – PRIVATE WARDS:

- Diabetic diet-10,585
- Child diet-10,220

- c. High protein high calorie diet-3285
- d. Diabetic renal diet-365
- e. Heart transplant diet-1095
- f. Liquid diet-730
- g. High protein diet-4015

3. THERAPEUTIC FEEDS:

- a. high calorie high protein feed-13,505
- b. Diabetic feed-5475
- c. Renal feed-365
- d. Hepatic feed-365
- e. Curd feed-730
- f. modified feed-1095

4. No. of diet counseling given to indoor–outdoor patients (Cardio OPD):

Month	No. of patient	Month	No. of patient
April	320	October	303
May	316	November	308
June	242	December	255
July	163	January	165
August	273	February	302
September	60	March	324
TOTAL	3031		

5. No. of diet counseling given to indoor–outdoor patients (Neuro OPD):

Month	No. of patient	Month	No. of patient
April	98	October	32
May	58	November	20
June	45	December	25
July	20	January	07
August	70	February	43
September	15	March	74
TOTAL	507		

6. NUTRITIONALCARE OF PATIENTS:

a. Nutritional assessment, ward rounds, diet counseling for:

- CTVS- ICU B, CT-3, NS-3, CT-6, CNT-1, CNT-2 – Mrs Jasmin Kaur
- NS-ICU A, B, C, CT-2 CCU, NS-2, NS-5, CNT-5, CNT-6 –Mrs Mala Manral
- CTVS- ICU A, CT-4, NS-4, CT-5, C N T-3, CNT-4 – Mrs Minakshi

b. Special diet counseling for cardiac clinics:

1. Cardiology (mon., wed., fri.) – Afternoon
2. Hypertension clinic (thurs.) – Morning
3. Group diet counselingfor P/CABG, Valve replacement patient
4. Heart failure patients diet counseling
5. Pediatric cardiac diet counseling, weaning charts

c. Foods service management:

Planning and supervision of modified feed/diet section by the dietitians for their respective wards.

d. Maintain and supervise store records

- Non consumable items (utensils), foods supplements—Mrs Jasmin Kaur
- Consumable items (crocery), stationery stores—Mrs Mala Manral

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Cardiothoracic and Vascular Surgery

Professor Balram Airan delivered the First Golden Jubilee oration of AIIMS on occasion of Institute Day on 26 September 2016. He delivered the prestigious J.P. Das Heart Failure Oration for the year 2016 on the topic “End-stage Heart Failure” at the 23rd Annual Conference ICCCON 2016 at Goa (16–18 September 2016). He also delivered the prestigious Professor PL Wahi oration during the conference of International Society for Heart Research India on 27 January 2017 at the Institute of Genomics and Integrative Biology, New Delhi. He also was awarded the “Certificate of Honour” at the felicitation function organized by the Indian Society of Organ Donation at Indore on 5 June 2016.

Professor S.K. Choudhary was appointed as the Section Editor, Aorta and Vascular, for Indian Journal of Thoracic and Cardiovascular Surgery, New Delhi. He was nominated as the leader of the team to support RIMS, Ranchito develop CTVS department and was appointed as “Mentor” for the Department of CTVS at AIIMS, Jodhpur.

Professor A.K. Bisoi was conferred Dr B.C. Roy National Award in the category of “Eminent Medical Teacher” for the year 2015, awarded on 9 February 2017. He was felicitated by Members of the Cardiological Society of India, Odisha Branch on 10 February 2017 in their XXI Annual Conference. He delivered the prestigious Prof. U.C. Samal Oration on Heart failure “Beyond the Boundary” in the XXI Annual Conference 2017 of Cardiological Society of India, Odisha Chapter.

Professor Sachin Talwar was invited to attend the 96th Annual meeting of the American Association for Thoracic Surgery at Baltimore, US in May 2016 and presented three papers, one of them in the plenary session. One paper on thyroid supplementation following open-heart surgery in infants won the award for the best paper. He was MCh exam external examiner for PGI Chandigarh and RML Lucknow. He was approved for active membership of the American Association for Thoracic Surgery in May 2016 at Baltimore, US. Membership: conferred on 30 April 2017, at Boston, US.

Professor Milind Hote and Dr Sarvesh Pal Singh were awarded certificate of Appreciation from Indore Society for Organ Donation on 5 June 2016 at Indore.

Dr Manoj Sahu was Chairperson, Trauma Critical Care, 3rd World Trauma Congress 2016, 17 to 20 August 2016, Vigyan Bhawan, New Delhi

Cardiology

Professor V.K. Bahl was Course Director of India Live; Emeritus Editor of Indian Heart Journal; *Judge, Best Case Award*, 12th Asian Interventional Cardiovascular Therapeutics (AICT), 23–25 September 2016, Taipei, Taiwan; *Moderator, Live Case*, Asia PCR **Singapore Live, 2017**, 19–21 January 2017, Singapore.

Professor Anita Saxena was President of Asia Pacific Pediatric Society of India (APPCS); Visiting professor of Pediatric Cardiology, Variety Children’s Heart Centre Winnipeg; President of National Rheumatic Heart Consortium; Challenges in care of adults with congenital heart disease in India, CSI-TS oration ACHD, 27 August 2016, Hyderabad.

Professor S.S. Kothari was External Examiner of DM Cardiology Professional University Examination, 28–29 July 2016, Shilong; External Examiner of DM Cardiology Professional University Examination, 11 June, SGPGIMS, Lucknow (UP); External Examiner of DM Cardiology (Part II) Examination, 16–17 December 2016, Sree Chitra Tirunal Institute of Medical Sciences, Trivendrum.

Professor Balram Bhargava was a part of Wellcome Trust DBT initiative on R and D for Affordable Health Care for India; Editor, BMJ Innovations; President, SLIM (Society for Less Investigative Medicine); UNESCO Equatorial Guinea International Prize for Research in Life Sciences, Laureate, Paris 2016; First MGK Menon Lecture, Indian National Science Academy, 2016, National Academy of Sciences India, New Delhi; First JIPMER Research Oration, Jawaharlal Institute of Postgraduate Medical Education and Research, 2016, Pondicherry; V Ramalingaswami Memorial Lecture, Seventh Symposium on Molecular Medicine, 2017, JNU, New Delhi; Rakesh Kuckreja Oration, International Academy of Cardiovascular Sciences (Indian Section), 2017, Vallabh Bhai Patel Chest Institute, New Delhi; Indian National Science Academy (INSA) Science Day Lecture, 2017, University of Delhi, South Campus, New Delhi.

Professor K.C. Goswami was President of Cardiological Society of India, Delhi Branch.

Professor Sandeep Seth was Editor in Chief, JPCS.

Professor Sundeep Mishra was Editor, Indian Heart Journal; Board of Trustees SCAI; Associate editor of Asia Intervention; Course Director of TCT India.

Professor Nitish Naik was Executive editor of IHJ.

Professor G. Karthikeyan was Editor-in-Chief of *Heart Asia* which is one of the three heart journals published by the BMJ Group; Member of the Rheumatic Heart Disease (RHD) Expert Group of the Global Burden of Disease Study coordinated by the Institute of Health Metrics and Evaluation (IHME); Chair of the Advisory Committee of Rheumatic Heart Disease, Evidence, Advocacy, Communication, Hope (RhEACH); Amar Shyam Oration 2016, Indian Society for Atherosclerosis Research 2016, 22 October 2016, ISARCON 2016, Kochi.

Professor S. Ramakrishnan was Secretary, Cardiological Society of India, Delhi Branch (CSI); Assistant editor of Annals of pediatric cardiology; Secretary of Pediatric cardiac society of India; Treasurer of national rheumatic heart consortium; Associate editor of JPCS; Secretary, SLIM; EC Member CSI; Executive editor of IHJ; Convenor of scientific program, CSI, CRC – CSI, CHD 2016, 11–13 November 2016, Patna.

Cardiac Anaesthesia

Professor Usha Kiran is continuing as Vice President in the Society of “PRAN”.

Professor Poonam Malhotra Kapoor received “Award of Excellence in Cardiology in the world” by Hon’ble Union Health Minister, Govt. of India in WCCPCI, 2016 on 3–6 September 2015 at Main Arena, Shantivan, Abu Road, Rajasthan, India; Public Health Poster Award for stress management.

Professor Minati Choudhury received Certificate of Appreciation by American College of Anesthesiologists for the work: “Biomarkers on Pulmonary hypertension” (Co-faculties for this project—Dr Anushree Gupta, Prof. Balram Airan, Prof. Usha Kiran), Venue: Chicago, Event Anesthesiology Annual Meeting, October, 22–28 October 2016; Certificate of appreciation by SAARC–Sri Lanka College of Anesthesiologist: for excellent workshop conduction in: 1. hemodynamic monitoring 2. Transesophageal echocardiography, Event: SAARC, 2017, 3rd Annual Academic Congress, Sri Lanka College of Annual Meeting, February 2017 at Colombo, Sri Lanka.

Dr Ira Dhawan received Janak Mehta Award in IACTACON 2017, at JW Marriot, Pune, Project Work Endothelin gene polymorphism and atrial fibrillation. (PI – Dr Minati Choudhury), Presenter – Dr Ira Dhawan, Co- PIs- Anushree Gupta, Milind P Hote.

Cardiac Radiology

Professor Sanjiv Sharma was Examiner for MD (Radiodiagnosis) in May 2016 at PGI, Chandigarh; Examiner for MD (Radiodiagnosis) in May at Kathmandu, Nepal; Examiner PDCC (Vascular Radiology) in June, at SGPGIMS, Lucknow; Expert for the purchase of PACS – RIS in September 2016 at Chandigarh; Chair, Gold Medal Oration in September, Sri Venkateswara Institute of Medical Sciences, Tirupat; External Expert: Selection Committee Meeting for the post of Professor, September, PGI, Chandigarh; External Examiner: MSc Medical Tech in December, 2016 at PGI, Chandigarh; Reviewer for many national and international radiology and cardiology journals.

Professor Gurpreet S Gulati was Reviewer for many national and international radiology and cardiology journals.

Professor Priya Jagia was Reviewer for many national and international radiology and cardiology journals.

Dr Sanjeev Kumar was Reviewer for many national and international radiology and cardiology journals.

Cardiac Pathology

Professor Ruma Ray was moderator Cardiac Tumors, APCON 2016, 1–4 December 2016, Birla Auditorium, Jaipur

Cardiac Biochemistry

1. Member, Technical advisory group, Ministry of Health and Family Welfare for conducting Comprehensive National Nutrition Survey (CNNS).

2. Expert, Project review committee, ICMR in Obesity and Metabolic Syndrome; and Non Communicable Diseases.
3. Expert member, Task Force Project, ICMR-India Diabetes [INDIAB] study for estimating prevalence of Diabetes and Pre- Diabetes in different states of India
4. Member editorial board, International Journal of Cardiology and Research
5. National editor, J of Practice of Cardiovascular Sciences
6. Reviewed articles for PLoS one, BMC Clinical Pathology, J of Developmental Origin of Adult Diseases, IJMR, Cardiovascular and Thoracic Open, Indian Heart Journal
7. Lead discussant in panel discussion on identifying opportunities of translational research in cardiovascular diseases. GENOMEET 2017 International Society of Heart Research (Indian Section), CSIR-Institute of Genomics and Integrative Biology, New Delhi, 27–29 January 2017.

Cardiac Nuclear Medicine

1. External expert, Technical Specification Committee for purchase of solid state detector SPECT camera, PGIMER, Chandigarh
2. Subject expert/Advisor, Selection of Assistant Professor, Nuclear Medicine, Medical Education Department, Rajasthan State Public Service Commission, Ajmer
3. Reviewer for national and international academic journals
4. Member, Executive committee, Society of Nuclear Medicine India.
5. Member-Secretary, Technical Specification – Evaluation Committee, Cardiothoracic Center
6. Member, Internal expert Committee for establishing of national cardio-vascular Institute at Jhajjar (Haryana) campus of AIIMS
7. Inter-departmental lecture for DM Cardiology students, August 2016
8. Reviewed thesis of MD Nuclear Medicine student, Homi Bhabha Institute, Tata Memorial Hospital, Mumbai

Stem Cell Facility

Professor Sujata Mohanty was **Member of Institute Committee for Stem Cell Research**-National Institute of Immunology, New Delhi, Institute of Liver – Biliary Sciences, New Delhi, DBT Representative at Apollo Hospital, Sri Ganga Ram Hospital, New Delhi, V.P. Chest Institute, New Delhi, National Brain Research Centre, Manesar, THSTI, Faridabad, IIT, Indore; **Member: International Bodies**-International Society for Cellular Therapy (ISCT), International Society for Stem Cell Research (ISSCR), Society of Biological Chemists (SBC), Indian Immunology society, Indian Society of Nanomedicine, Indian Science Congress Association, Stem Cell Research Foundation of India, Cytometry Society of India; **Member of Advisory Bodies:** Core Committee for Stem Cell Donor Registry for Bone Marrow Transplant in India Stem Cell Donor Registry, Ministry of Science–Family Welfare, Govt. of India, High Powered Committee by Ministry of Health and Family Welfare, Govt. of India, Brainstorming meeting on Biofabrication– 3D Bioprinting, Expert Group Committee-Limbal Stem Cell Transplantation-ICMR, Centre for induced pluripotent Stem Cell Research and Application (CiRA) – For collaboration; Investigating team of CDSCO-Dendritic Cell Vaccine Scandal, Department of Biotechnology Task Force on Bioengineering, DBT Expert Committee for Indo-Australian Career Boosting Gold Fellowships (IACBG-Fellowships); **Member-Research Grant Review Committee**-Project Monitoring Committee (BIRAC), DBT, Biotechnology Career Advancement and Reorientation Program for Women Scientists (Bio-Care), DBT, Biotechnology Industry Research Assistance Council (BIRAC), Indian Council of Medical Research, New Delhi, Department of Science and Technology, New Delhi, Council of Scientific and Industrial Research, New Delhi, Peer Review Committee- DRDO-Apollo Hospital, Hyderabad; **Member, Journal Review Committee:** Stem Cell Research Open library (SCROL), Life Science, Journal of Biosciences, Biomedical Research Journal, Insights in Stem Cells, World Journal of Stem Cells, CEINCIA publishing group, Translational Surgery, Molecular and Cellular Biochemistry; **Member, Editorial Committee:** Journals- Current Trends in Stem cells and Regenerative Medicine (CTSR), Jacobs Journal of Bone Marrow and Stem Cell Research, Scientific Reports, Nature publishing house, Stroke Research–Treatment

Organ Retrieval and Banking Organization

Professor Arti Vij was Independent (Non-Official Part Time) Director of Goa Antibiotic–Pharmaceuticals Ltd (GAPL) (Government of India Enterprises); Independent (Non-Official Part Time) Director of HLL Biotech Limited (Government of India Enterprises); Received Certificate of Appreciation from Dr R.P. Centre for Ophthalmology for outstanding contribution to National Eye Bank

Blood Transfusion Centre

1. Member, Selection Board for interview of Senior Medical Officer in ESI Hospital, Delhi Region, 29th August 2016
2. Member, Advisory committee of Haemovigilance Programme of India, NIB, under MoFHW, GOI and attended related meetings and workshops

3. Member, National Blood Cell, NHM, participated in Restructuring of Guidelines of Blood Storage Centres in India
4. External Technical Expert in Committee for Technical Evaluation of Equipments for Blood bank in Safdarjung Hospital
5. External examiner at Vardhaman Mahavir Medical College, DMLT, 24 November 2016
6. Member, Internal Co-ordination Committee for Establishing National Cardio Vascular Institute, Jhajjar campus, AIIMS
7. Technical expert and resource person in Content development of Quality Management System, Training Module for Training of Trainers by National Blood Transfusion Council, 14 to 29 July 2016
8. Participated in Capacity Building Workshop, Symposium on Quality Improvement by AIIMS, USAIDS, 2–3 August 2016
9. Chaired session at 6th International CME CEUTH (Cost effective use of Technology in E- healthcare) at AIIMS, 10th Sept 2016
10. Member of Technical Expert Committee of National Blood Cell, participated in framing guidelines for Blood Storage Units (BSU) and developing Model SOPs for BSU, 4th October 2016
11. Technical Expert in Review Committee for Training Module of in e-Raktkosh Software Manual on Blood Banking by National Health Mission, GOI–NIB, 10th Oct, 6th November 2016
12. Participated in Pre-CME workshop on Immunohaematology organized by Asian Association of Transfusion Medicine (AATM) in Bangalore, 9th December 2016
13. CME on Transfusion Medicine –AATM in Bangalore, 10–11th Dec 2016
14. Orientation meeting of Medical and Technical officers of Blood banks for Quality Management System in Transfusion Services by NACO in Delhi, 1st Feb 2017
15. Panel Discussion: 100% Voluntary Blood Donation- A challenge in India now-National Workshop on Blood Donor Vigilance – CME on Voluntary Blood Donation, 15th June 2016, Gymkhana Club, Darjeeling-West Bengal

Dietetics

Jasmine Kaur received Certificate of participating in Workshop on Clinical Nutrition Held at Auditorium, Indraprastha Apollo Hospital, Sarita Vihar, New Delhi on 30 July 2016; actively participated and successfully completed workshop on obesity and diabetes, organized by N-DOC (National Diabetes Obesity and Cholesterol Foundation), 12 November 2016, New Delhi; giving diet counseling for obstructive sleep Apnea patients for weight reduction in neurology OPD.

Mala Manral received Certificate of participation as faculty in the Pre-conferences ‘AOCN-IDA (Delhi chapter) Workshop on Dietary Therapies in Refractory Epilepsy (level 1)’, New Delhi, 3 February 2017; participated in the workshop on Writing a Research Paper, AIIMS, New Delhi; KL Wig Centre for Medical Education Technology (CMET), The National Medical Journal of India (NMJI); Certificate of participating in the workshop on Clinical Nutrition, 30 July 2016, Indraprastha Apollo Hospitals, Sarita Vihar, New Delhi; 49th Annual National Conference of Indian Dietetics Association. Joining Hands to Nourish India – Nutrition Beyond Nutrient; Certificate for attending the Pre-conference workshop ‘Entrepreneurship’ on 23 September 2016 organized by IDA; Certificate for attending the Pre-conference workshop ‘Clinical Nutrition in ICU –Are we doing it the Right Way?’, 23 September 2016; Nutrition in Clinical practice: An Unerring Perspective on 1st National Conference of Indian Society of Clinical Nutrition jointly organized by INSCN and department of clinical nutrition, ILBS, New Delhi; Algorithms for Cardiovascular Disease Prevention organized by Jawaharlal Nehru University, 9 October, 2016; Running special clinic on Mondays and Thursdays; Dietary therapies in Refractory Epilepsy patient.

VISITING SCIENTIST

Cardiothoracic and Vascular Surgery

1. Dr Mohesn Saber Mohammed, Egypt
2. Dr Eze Nkemakonam John, Nigeria
3. Dr Arpan Doshi, United Kingdom

Cardiac Anaesthesia

1. Dr Anushman Sharma, visiting Pediatric Anaesthesiologist from USA
2. Dr Harmeet Singh, visiting Cardiac Anaesthesiologist from Kolkata, India

10.2. Centre for Dental Education and Research

Chief

O.P. Kharbanda

Division of Orthodontics and Dentofacial Deformities

Professors

O.P. Kharbanda

Ritu Duggal

Assistant Professor

Prabhat Kumar Chaudhari

Vilas Samrit

Division of Oral and Maxillofacial Surgery

Professors

Ajoy Roychoudhury

Ongkila Bhutia

Assistant Professors

Krushna Bhatt

Rahul Yadav

Division of Prosthodontics

Professor

Veena Jain

Assistant Professors

Gunjan Pruthi

Dheeraj Kumar Koli

Division of Pedodontics

Professor

Vijay Prakash Mathur

Assistant Professors

Kalpana Bansal

Nitesh Tewari

Division of Conservative Dentistry and Endodontics

Professor

Ajay Logani

Assistant Professors

Amrita Chawla

Vijay Kumar

Division of Oral Pathology and Microbiology

Assistant Professor

Deepika Mishra

Division of Periodontics

Assistant Professor

Kunaal Dhingra

Vikender Singh

Division of Oral Medicine

Assistant Professor

Shalini Gupta

Division of Public Health Dentistry

Assistant Professor

Harsh Priya

Division of Anaesthesia

Associate Professors

Dalim Kumar Baidya

Devlina Goswami

HIGHLIGHTS

Division of Orthodontics at the CDER, AIIMS has provided quality orthodontic care to patients with malocclusion, dento-facial deformities and cleft lip and palate. The department has provided leadership in the field at national and international level. Dr Kharbanda was an invited speaker to twelve national and eight international events in the reporting year. In addition, the professional and academic expertise was also extended to various government/research organizations such as ICMR and Ministry of Health and Family Welfare, and other institutions. Dr Kharbanda gave significant inputs to important international journals in the field of Orthodontics in the capacity of International Editorial Board/Peer Review Board.

Division of Oral and Maxillofacial Surgery is involved in providing high quality surgical care in Trauma, Facial esthetics, temporomandibular joint, craniosynostosis etc. Department has the distinction of performing largest number of temporomandibular joint surgeries in India. We are the only center where 3D based planning of the total joint replacement and total facial deformity correction is undertaken in India. Recently department conducted the first ever Temporomandibular joint replacement Conference. There was live session and lectures and hands on 3D models. Delegates attended this from India, Europe and SAARC countries. Department is also collaborating with the neurosurgery for the syndromic craniosynostosis patients for midface distraction and other corrective procedures. Department is collaborating with Ophthalmology for oculoplasty and Pulmonary medicine for the surgical treatment of Obstructive Sleep Apnea. This year the collaboration yielded two combined grand round presentations at the AIIMS CGRs

Division of Periodontics, CDER, deals with prevention, diagnosis and treatment of periodontal diseases. This department provides optimum care to huge number of patients visiting daily for seek periodontal treatment and well as those referred from other departments. Various types of treatment procedures such as conventional non-surgical and surgical periodontal therapy, periodontal plastic surgery, soft and hard tissue regenerative procedures, diode laser assisted soft tissue excision and adjunctive pocket debridement procedures are being carried out in the department. The department currently has strength of 2 Assistant Professors as faculty and 2 senior residents. The department also has four dental hygienists who are trained to provide basic periodontal care under specialist's supervision.

Division of Public Health Dentistry. Ministry of Health and Family Welfare has designated Centre for Dental Education and Research as the National Centre of Excellence for the Implementation of National Oral Health Programme and the Division under the guidance of Chief and Director of the programme works for the execution of NOHP. Also, CDER Collaborates with the World Health organization for the Oral Health Promotion.

CMEs/Workshops/Symposia/National and International Conferences

1. International Symposium on "Management of Complex Malocclusion and Canted Occlusal Plane", 1 November 2016, AIIMS, New Delhi
2. CDER CDE Series-11: Interactive lecture on 'Naso-Alveolar Moulding', 16 February 2017, AIIMS, New Delhi
3. Lecture on 'Cochrane systematic review' by Prof Neeraj Gujnani, Professor, Pediatric Dentistry, DAV Dental College, Yamunanagar, August 2016, CDER, AIIMS
4. International Symposium, Is sugar the New Tobacco?, Oral health perspectives, 11 November 2016, IHC, New Delhi
5. Dental traumatology update, CDE, 21 December 2016, CDER, AIIMS
6. Organised Academic Committee Meeting of Indian Society of Pedodontics and preventive Dentistry, 19 July 2016, New Delhi
7. Organized Guest lecture on Restorative strategies in early childhood caries by Dr Justin JC Lee, 18 October 2016, CDER, AIIMS
8. 1st AIIMS total TMJ replacement Workshop with hands on organized by OMFS Division, 30 & 31 January 2016, AIIMS

9. AOCMF Course, Management of Facial Trauma, (Dr Ajoy Roychoudhury was Chairman of the course), 24–26 February 2017, New Delhi
10. National Dental Bioethics Seminar, 13 February 2017, New Delhi
11. Course director and faculty for Workshop on “Maxillofacial Prosthodontics, Sculpting Finesse” on Including lectures and Hands-on. Workshop faculties were Dr Veena jain, and Dr Gunjan Pruthi, 21 & 22 April 2016 at Subharti Dental College and Hospital, Swami Vivekananda Subharti University, Meerut
12. Organized and conducted a clinical Workshop on titled “Full mouth rehabilitation CDE-2”, Workshop faculties by Dr Veena jain, Dr Gunjan Pruthi and Dr Dheeraj Koli, on 6 August 2016, CDER

EDUCATION

Undergraduate: Clinical teaching of 7th semester MBBS student's

Postgraduate:

Division of Orthodontics, MDS

- At present the Centre is conducting MDS full time Postgraduate programs in Orthodontics and the first PhD candidate in Orthodontics was admitted in January 2012 and another one in July 2016
- Dr Kharbanda is Co-Guide for PhD thesis of Mr Bala Chakravarthy N, at Central Scientific Instruments Organisation (CSIO), Chandigarh
- Fellowship programme for two years in “Cleft and Craniofacial Orthodontics” was started in January 2017

Division of Oral and Maxillofacial Surgery

Recently the department completed 10 years of postgraduate studies in Oral and Maxillofacial surgery

The teaching includes Postgraduate seminars, journal clubs, bedside case discussions and surgical training, problem based learning, “Tell-show-do-review” model in teaching, Logbook and record keeping. ‘What went right? What could have been better?’ Is the model used in seminars?

Division of Prosthodontics, MDS

- Full time PG Programme (MDS) in Prosthodontics

Division of Conservative Dentistry and Endodontics

- Full time Postgraduate Programme in Conservative Dentistry and Endodontics

Division of Pedodontics, MDS

- MDS in Pedodontics and Preventive Dentistry was initiated in the January 2017 session

Lectures delivered

O.P. Kharbanda: 19

Veena Jain: 7

Ajay Logani: 8

Shalini Gupta: 2

Kunaal Dhingra: 2

Prabhat Kumar Chaudhari: 1

Rahul Yadav: 2

Ritu Duggal: 3

Ongkila Bhutia: 1

Dalim Kumar Baidya: 7

Gunjan Pruthi: 6

Nitesh Tewari: 3

Deepika Misra: 2

Ajoy Roychoudhury: 9

Vijay Mathur: 3

Devlina Goswami: 5

Dheeraj Kumar Koli: 4

Harsh Priya: 5

Krushna Vasantkumar Bhatt: 1

O.P. Kharbanda: 19

1. CDE titled “Developing Class II Malocclusion: Timely intervention”, 11 April 2016, Shree Bankey Bihari Dental College, Uttar Pradesh
2. CDE titled “PRAGNYA”, 29 & 30 July 2016, Mahatma Gandhi University of Medical Sciences and Technology, Jaipur
3. 3D Cephalometrics, Postgraduate Dental Convention, 5–6 August 2016, Andhra Pradesh
4. Induction ceremony of medical and dental students, 14 September 2016, Dr D.Y. Patil University, Mumbai
5. Orthodontic alternative for post surgical secondary deformities in adult and growing subjects, 10th World Cleft Lip and Palate Congress, 24–28 October 2016, Chennai
6. Three decades of excellence in Cleft Care: A journey to BLISS, 51st Indian Orthodontic Conference and 8th World Implant Orthodontic Conference

7. 3rd Professor V. Surendra Shetty Oration, 3–6 November 2016, Goa Dental College and Hospital, Goa
8. Quality assurance in dental education, Creating quality health professionals: Goals, barriers and opportunities, 30 November 2016, King George's Medical University, Lucknow
9. Orthodontics: For kids, adolescents, adults and elders, 30th Annual Pierre Fauchard Academy Convocation and Awards Ceremony Delivered Third Maj. Gen. Kartar Singh Oration, 3 December 2016, Lucknow
10. Research to reality, 29th Indian Society for Dental Research (ISDR) Conference/IADR India Division, 9–11 December 2016, King George's Medical University, Lucknow
11. Cleft palate orthodontics, Treatment Modalities in Cleft Lip/Palate patients, 16 December 2016, SGT University
12. Construction bite and modus operandi of functional appliances, Ramachandra Orthodontic Accelerated Review 2017 (ROAR), 5 January 2017, Ramachandra University, Chennai
13. Reducing burden of orthodontic care: Orthodontists perspectives in Public Health, International Cleft Congress 2017, 8–11 February 2017, Mahabalipuram
14. Global Cleft Network Taskforce, Co-chair at International Cleft Congress 2017
15. Global Taskforce on Cleft Lip and Palate, 8–11 February 2017, Mahabalipuram
16. 3D imaging applications in orthodontics, Guest Speaker 21st IOS PG Convention, 14–19 February 2017, Banaras Hindu University, Varanasi
17. Research opportunities on CLP/Setting up Combined Cleft Clinic, CDE on "Orthodontic Management of Cleft Lip and Palate: From Birth to Adulthood", 17–19 May 2016, Faculty of Dentistry, UiTM Sungai Buloh Campus, Malaysia
18. Excellence in Cleft Orthodontics: CDER experience of three decades, 8th Asian Chief Dental Officers' Meeting (ADCOM 2016), 24–26 May 2016, Japan
19. Nuclear protein HMGB1 estimation around mini-screw implants during Enmasse Retraction, International Association of Dental Research (IADR) General Session and Exhibition 2016 and WHO Meeting, 22–25 June 2016, Korea

Ritu Duggal: 3

1. Functional appliances, CME on Functional Appliances, 11 April 2016, Ghaziabad, UP
2. Skeletal and dentoalveolar effects of twin block appliances in the treatment of Class II malocclusion: Finite element analysis, 18th International Conference on Oral Health and Maxillofacial Surgery, 5 & 6 December 2016, Madrid, Spain
3. Inaugural Oration Lecture, "Orthodontics", What do we Know, CME, ITS Center for Studies and Research, 23 December 2016, Ghaziabad, UP

Ajoy Roychoudhury: 9

1. Management of panfacial fractures, AOCMF Seminar—Facial Trauma, 19 May 2016, Tehran University of Medical Sciences, Tehran
2. Surgical correction of asymmetric face, AOCMF Seminar—Orthognathic surgery, 20 May 2016, Tehran University of Medical Sciences, Tehran
3. Key note lecture, "Feature lecture", Condylar trauma and TMJ ankylosis, AOCMF Seminar—Complications and Controversies in Condylar Trauma, 15 & 16 September 2016, Johannesburg
4. Paediatric considerations in trauma to the condyle, South African Society of Maxillofacial and Oral Surgeons Conference, 15 & 16 September 2016, Johannesburg
5. Outcome of total temporomandibular joint replacement in the temporomandibular joint ankylosis, 23rd Congress of European Association of Cranio-maxillofacial Surgery, 13–16 September 2016, London
6. Le Fort III osteotomies for syndromic craniosynostosis patients, 1st AIIMS Paediatric Neurosurgery Operative Workshop, 18 January 2017, AIIMS, New Delhi
7. Biomechanics of TMJ in replacement, 1st AIIMS Total TMJ Replacement Workshop with Hands-on, 30 & 31 January 2017, AIIMS, New Delhi
8. Concomitant orthognathic surgery and TMJ replacement, 1st AIIMS Total TMJ Replacement Workshop with Hands-on, 30 & 31 January 2017, AIIMS, New Delhi
9. Is total joint replacement a new protocol for adult temporomandibular joint ankylosis, 23rd International Conference of Oral and Maxillofacial Surgery, 30 March 2017, Hong Kong

Veena Jain: 7

1. Diagnosis and treatment planning for facial rehabilitation, Maxillofacial Prosthodontics, Sculpting Finesse, 21 & 22 April 2016, Subharti Dental College and Hospital, Meerut
2. Prosthodontic considerations and procedures for fabrication of facial prosthesis, Maxillofacial Prosthodontics, Sculpting Finesse, 21 & 22 April 2016, Subharti Dental College and Hospital, Meerut
3. Mid facial rehabilitation, 2nd AIIMS Facial Plastics and Rhinoplasty Workshop, 22–24 April 2016, AIIMS, New Delhi
4. Maxillary anterior jaw bone resorption with different overdenture attachment systems, 2016 IADR APR General Session, 22–25 June 2016, Seoul, South Korea
5. Diagnosis and treatment planning for full mouth rehabilitation; Splints and their roll in full mouth rehabilitation Hobo and Takayama philosophy, Clinical Workshop on Full Mouth Rehabilitation CDER-CDE, 2–6 August 2016, AIIMS, New Delhi
6. Prosthetic rehabilitation of mid face defect of a case of Non-Hodgkin's lymphoma: A case report, Clinical Combined Round, 17 January 2017, AIIMS, New Delhi
7. Prosthodontic rehabilitation of Mandibular defects, Second International Craniofacial and Dental Summit, 2–4 February 2017, King George's Medical University, Lucknow

Ongkila Bhutia: 1

1. Fuss around TMJ, 1st AIIMS Total TMJ Replacement Workshop with Hands-on, 30 & 31 January 2017, AIIMS, New Delhi

Vijay Mathur: 3

1. Cells of Life: A translational insight into stem cell research in paediatric dentistry, 38th Annual National Conference of Indian Society of Pedodontics and Preventive Dentistry, Pedobyte, 21 October 2016, Kochi, Kerala
2. Stem cell application in pediatric dentistry from a lucid dream to reality, Regenerative Dentistry: Insights and practicality, 28 November 2016, ZA Ahmed Dental College, Aligarh Muslim University, Aligarh, Uttar Pradesh
3. Stem cells in dental traumatology: Myths, controversies and translational research, 21st UAE International Dental Conference and Arab Dental Exhibition, 7 February 2017, Dubai, UAE

Ajay Logani: 8

1. Regenerative endodontics, Past, present and future perspectives, National CDE Programme on Regenerative Endodontics, 9 April 2016, Maulana Azad Institute of Dental Institute, New Delhi
2. DNA for Success of Endodontics, IDA North Delhi Branch, 16 April 2016, Maharaja Agrasen Hospital, New Delhi
3. Evidence based management of traumatized non-vital immature teeth, 19th World Congress on Dental Traumatology and the 5th Trans-Tasman Endodontic Conference, 11–13 August 2016, Brisbane, Australia
4. Revascularization: Experience of a decade, 10th World Endodontic Congress, 18 & 19 August 2016, Cape Town, South Africa
5. How large a canal apical diameter should I instrument to? 29th Indian Society for Dental Research Conference, 2016, 9–11 December 2016, King George Medical University, Lucknow
6. Update on Management of Pediatric Dental Trauma, Post Graduate update, 10 December 2016, Department of Pediatrics, King George Dental College, Lucknow
7. Recent advances apical barrier techniques: Managing the open apices predictably, Dental traumatology update intricacies and advances in management of traumatic dental injuries in growing children, 21 December 2016, Center for Dental Education and Research, AIIMS, New Delhi
8. Root canal awareness: Who REALLY needs it? Postgraduate CME, 5 March 2017, ITS Dental College, Greater Noida

Dalim Kumar Baidya: 7 (for details see 9.1)**Devlina Goswami: 5 (for details see 9.1)****Shalini Gupta: 2**

1. Screening of oral cancer and precancers, Rolling out opulation Based Screening of Common NCDs Two-day Training of Trainers for ASHA Workers, 25 January 2017, NIHFw, New Delhi
2. Screening of oral cancer and precancers, Workshop on “Training of trainers, Module for ANMs on Non-Communicable Diseases” for Breast Cancer and Oral Cancer Screening, 1 February 2017, AIIMS, New Delhi

Gunjan Pruthi: 6

1. Surgical concepts for implant supported facial prosthesis, Maxillofacial Prosthodontics, Sculpting Finesse, 21 & 22 April 2016, Subharti Dental College and Hospital, Meerut
2. Crestal bone level and implant stability around an immediate implant using L-PRF and Alloplast, 2016 IADR APR General Session, 22–25 April 2016, Seoul, South Korea
3. Technique and philosophy of FMR, Pankey mann schyuler philosophy and technique in detail, Clinical Workshop on full mouth rehabilitation CDER-CDE 2, 6 August 2016, AIIMS, New Delhi
4. Crestal bone levels around immediate implants and their stability after using platelet rich fibrin and allograft as graft materials, 10th World Congress of Oral Implantology and AAID Global Conference 2016, 11–13 November 2016, New Delhi
5. Clinical study to evaluate the wear of natural enamel opposing polished or glazed zirconia crowns, 44th IPS Conference, 1–4 December 2016, Mumbai
6. Complete esthetic rehabilitation of a patient with glass cut injury with forehead flap repositioning and implant supported nasal prosthesis, Maxillofacial Prosthesis Symposium, 23–25 March 2017, Kochi (2nd prize poster)

Dheeraj Kumar Koli: 4

1. Face Bow, Jaw relation, Soft tissue management and temporization, Clinical Workshop on Full Mouth Rehabilitation, 6 August 2016, CDER, AIIMS, New Delhi
2. Reverse engineering for flapless implant placement and immediate loading, 10th World Congress of Oral Implantology and AAID Global Conference 2016, 11–13 November 2016, New Delhi, 3rd prize for poster presentation
3. A stitch in time saves nine, Making the best of tool of time in implantology! 10th World Congress of Oral Implantology and AAID Global Conference 2016, 11–13 November 2016, New Delhi
4. Implant prosthetic rehabilitation with free fibula graft after mandibulectomy, A case report, Maxillofacial Prosthesis Symposium, 23–25 March 2017, Kochi

Kunaal Dhingra: 2

1. Part of Panel Discussion, “Nanobiotech 2016”, the 1st Annual Conference of Indian Society of Nanomedicine organized in collaboration with DST and DBT, 24–26 November 2016, AIIMS, New Delhi
2. Part of Panel Discussion, National Dental Bioethics Seminar titled ‘Dental Ethics, Let’s Be the Change’, organized jointly by National Dental Bioethics Program, UNESCO Chair in Bioethics Haifa, CDER, AIIMS and Santosh Dental College, 13 February 2017, AIIMS, New Delhi

Nitesh Tewari: 3

1. Cells of life, A translational insight into stem cell research in Paediatric Dentistry, 38th Annual National Conference of Indian Society of Pedodontics and Preventive Dentistry, Pedobyte, 21st October 2016, Kochi, Kerala
2. Stem cell application in pediatric dentistry from a lucid dream to reality, Regenerative dentistry: Insights and practicality, 28 November 2016, ZA Ahmed Dental College, Aligarh Muslim University, Aligarh, Uttar Pradesh, India
3. Stem cells in dental traumatology: Myths, controversies and translational research, 21st UAE International Dental Conference and Arab Dental Exhibition, 7 February 2017, Dubai, UAE

Harsh Priya: 5

1. Tobacco cessation–AIIMS Initiatives, IMPACT: Implementing Activities for Cessation of Tobacco, 11 August 2016, Manipal College of Dental Sciences, Mangalore
2. Oral Health Promotion–Gaps and Solutions, 21st Conference of the Indian Association of Public Health Dentistry, 18 November 2016, KIIT University, Bhubaneswar
3. Summing up Situational Analysis, A Way Forward, Reorientation Workshop for the State Nodal Officers of the National Oral Health Programme, 17 & 26 January 2017, AIIMS, New Delhi
4. Chair Side Examination of Oral Cavity, Training of ANMs from various states in India on basics of oral cancer screening, 1 February 2017, AIIMS, New Delhi
5. Oral Hygiene Promotion and Oral Cancer Prevention, Lifestyle Management and Screening Programme, 13 February 2017, FHQ BSF Hospital, New Delhi

Prabhat Kumar Chaudhari: 1

1. 3D printing: Emerging opportunities of collaborative innovations for dental applications, International Conference on Future Health Care and Economic Development in South East Asia, 14–19 August 2016, Medical Device Innovation Centre, National Cheng Kung University (NCKU), Tainan, Taiwan

Deepika Misra: 2

1. Screening of oral cancer, Rolling out “Population based screening of common NCDs Two-day Training of Trainers for ASHA Workers”, 25 January 2017, Nirman Bhawan, New Delhi
2. Screening of Oral cancer, Workshop on “Training of trainers, Module for ANMs on Non-Communicable Diseases” for Breast cancer and Oral cancer screening, 1 February 2017, AIIMS, New Delhi

Krushna Vasantkumar Bhatt: 1

1. Autogenous TMJ replacement options, 1st AIIMS Total TMJ Replacement Workshop with Hands-on, 30 January 2017, AIIMS, New Delhi

Rahul Yadav: 2

1. Transport distraction in TMJ reconstruction, 1st AIIMS Total TMJ Replacement Workshop with Hands-on, 30 January 2017, AIIMS, New Delhi
2. Management of orbital trauma, Clinical grand rounds, 18 February 2018, AIIMS, New Delhi

Oral papers/posters presented: 46

1. Krunal T, Logani A, Kumar V. Oral Paper, Variation in stimulation rate of electric pulp tester on sensation threshold of dental pulp, 17th IACDE and IES PG Convention, 1–3 April 2016, Peoples College of Dental Sciences, Bhopal
2. Kumar V, Logani A, Chawla A, Kumar V. Oral Poster, Revascularisation: Have we achieved what we intended? 17th IACDE and IES PG Convention, 1–3 April 2016, Peoples College of Dental Sciences, Bhopal
3. Saleem AK, Logani A, Chawla A. Oral Poster, Specificity of electric pulp testing in normo and hypertensive patients, 17th IACDE and IES PG Convention, 1–3 April 2016, Peoples College of Dental Sciences, Bhopal
4. Wasim W, Logani A. Oral Paper, Effect of age of dentin on microcrack formation, 17th IACDE and IES PG Convention, 1–3 April 2016, Peoples College of Dental Sciences, Bhopal
5. Choudhury AR, Goswami D, Venkateswaran V, Gnanasagar S, Kundu R. AMBU LMA® as airway device in children with cleft palate undergoing ophthalmic, ISA Delhi Chapter 2016, 9 April 2016, AIIMS, New Delhi
6. Prabhat KC. Development of novel nanostructured trans-mucosal drug delivery carrier that releases PTH continuously intraorally during orthodontic teeth movements, BiTERM-2016, 14–17 April 2016, IIT, New Delhi, New Delhi
7. Prabhat KC, Kshetrimayum N, Singh IF. Perceived barriers to oral health care access among Manipuri Community, International Association of Dental Research (IADR), 22–25 June 2016, Seoul, Republic of Korea
8. Tewari N. Long term sequelae of primary tooth trauma, Predicting the un-predictable presented in All India Institute of Medical Sciences, New Delhi in December 2016, 19th World Congress Dental of Traumatology and 5th Trans Tasman Endodontic Conference, 11–13 August 2016, Brisbane, Australia
9. Bansal A, Roychoudhury A, Bhutia O, Yadav R, Bhatt K, Dekyi T. Paediatric mandibular fractures: A retrospective study to compare the outcomes in different management strategies in a tertiary care hospital, 23rd Congress of European Association of Cranio-Maxillofacial Surgery, 15 September 2016, London, UK
10. Dekyi T, Roychoudhury A, Bhutia O, Yadav R, Bhatt K, Bansal A. A retrospective study to evaluate the treatment outcomes in temporomandibular joint ankylosis management in a tertiary care center, 23rd Congress of European Association of Cranio-Maxillofacial Surgery, 14 September 2016, London, UK
11. Rawat P. Poster prosthetic management of patients with continuous defects involving maxilla and orbit, 18th PG Convention, 24–26 June 2016, Bangalore, **First prize for best poster**
12. Gupta C. Paper retentive aids in maxillofacial prosthesis, 18th PG Convention, 24–26 June 2016, Bangalore
13. Raj R. Poster Light is right: Technique to fabricate hollow obturator, 18th PG Convention, 24–26 June 2016, Bangalore
14. Alam MS. Poster feeding appliance, 18th PG Convention, 24–26 June 2016, Bangalore
15. Roychoudhury A, Bhutia O, Yadav R, Goswami D, Baidya DK, Agarwal B. Outcome of stock total temporomandibular joint prosthesis in TMJ ankylosis patients, 23rd Congress of the European Association for Cranio Maxillary Surgery, 13 September 2016, London, UK

16. Machanali G, Baidya DK, Bhalla AP, Goswami D. Sono-anatomical analysis of right internal jugular vein and carotid artery at different levels of positive end expiratory pressure in anaesthetized paralyzed patients, Australian Society of Anaesthesiologists, 75th National Scientific Congress, 18 September 2016, Victoria, Australia
17. Machanali G, Dalim K, Baidya DK, Bhalla AP, Goswami D. Oroanatomical analysis of right internal jugular vein and carotid artery at different levels of PEEP in anaesthetised paralyzed patients, 75th National Conference of Australian Society of Anesthesiologists, 17–20 September 2016, Melbourne, Australia
18. Goswami D, Jain G, Mohod M, Baidya DK, Bhutia O, Roychoudhury A. Randomized controlled trial to compare oral analgesic requirements and patient satisfaction in using oral non-steroidal anti-inflammatory drugs or Benzydamine Hydrochloride Oral Rinses after Mandibular Third Molar Extraction: A Pilot Study–IASP 16th World Congress on Pain, 30 September 2016, Yokohama
19. Goswami D, Sardar A, Bhutia O, Roychoudhury A, Baidya DK. Effect of single dose preemptive etoricoxib on postoperative pain relief following open reduction and internal fixation of Mandibular Fracture under General Anesthesia: A Prospective, Randomized, Double Blind, Placebo Controlled Trial, IASP, 16th World Congress on Pain; 30 September 2016, Yokohama
20. Chauhan A, Kharbanda OP. My Tryst with cleft patients in one year of residency, 10th World Cleft Lip and Palate Congress, 27 & 28 October 2016, Chennai
21. Gupta S. Neuropathic pain after dental implant surgery 10th World Congress for Oral Implantology and AAID Global Conference 2016, 13 November 2016, New Delhi, **First prize for best poster**
22. Kumar V. Effect of photo activated disinfection on inter-appointment pain following root canal preparation in teeth with pulp necrosis and symptomatic apical periodontitis, 31st IACDE and 24th National Conference, 9–13 November 2016, Science Centre, Kolkata
23. Chawla A. Evaluating the efficacy of different techniques and irrigation solutions for removal of calcium hydroxide from the root canal system, A Scanning Electron Microscopic study, 31st IACDE and 24th National Conference, 9–13 November 2016, Science Centre, Kolkata
24. Mishra D, Kale A, Hallikerimath S, Yerramalla V, Subbiah V. Genetic polymorphism in progression of oral potentially malignant disorders, XXV Conference of the IOMFP and the 18th International Congress of Oral Pathology, 8 November 2016, Chennai
25. Azhar A, Logani A. Oral Paper, Endodontic oddities, 31st IACDE and 24th National Conference, 9–13 November 2016, Science Centre, Kolkata
26. Heena R, Logani A, Chawla A. Oral paper: Atypical radiographic presentation of horizontal apical root fracture in a maxillary central incisor, 31st IACDE and 24th National Conference, 9–13 November 2016, Science Centre, Kolkata, **First prize for paper presentation**
27. Paulose P, Logani A, Kumar A. E-poster, Trouble shooting in apex locators, 31st IACDE and 24th National Conference, 9–13 November 2016, Science Centre, Kolkata
28. Gill S, Logani A, Chawla A, Kumar V. Video presentation, Cracked tooth: diagnosis that cracks you, 31st IACDE and 24th National Conference, 9–13 November 2016, Science Centre, Kolkata, **First prize for paper presentation**
29. Saleem AK, Logani A, Kumar V. Video presentation, Flip for Success 180° Intra-Alveolar Transposition for management of complicated crown-root fracture, 31st IACDE and 24th National Conference, 9–13 November 2016, Science Centre, Kolkata
30. Sumit G, Logani A, Chawla A. E-Poster, Soft or hard: Your preferences, 31st IACDE and 24th National Conference, 9–13 November 2016, Science Centre, Kolkata
31. Vishal K, Logani A, Chawla A. Oral Paper: Minimal invasive endodontic protocol in augmentation of non-vital immature permanent teeth, 31st IACDE and 24th National Conference, 9–13 November 2016, Science Centre, Kolkata
32. Vishal K, Paulose P, Logani A. Table clinic, Electronic working length determination in teeth with full metal prosthesis, 31st IACDE and 24th National Conference, 9–13 November 2016, Science Centre, Kolkata
33. Baidya DK, Arora MK, Maitra S, Anand RK, Ray BK, Khanna P. A randomized comparison between short axis and medial oblique view for ultrasound guided internal jugular vein cannulation, Critical Care Canada Forum 2016, 30 October 2016–2 November 2016, Toronto, Canada
34. Alam MS. Paper immediate implant replacing maxillary anterior, A case series, 10th WCOI, 11–13 November 2016, Delhi
35. Raj R. Paper prosthodontic rehabilitation of nasal defects, Clinical considerations and case reports, 44th IPS Conference, 1–4 December 2016, Mumbai, **First prize for paper presentation**

36. Gupta S. Secondary burning mouth syndrome with gastric acid reflux, ISDR 2017, 9 December 2016, KGMU, Lucknow
37. Bansal K. Metagenomic perspective of dental caries, 29th ISDR, 9–10 December 2016, KGMU, Lucknow
38. Tewari N, Mathur VP, Sardana D, Bansal K. Lesch Nyhan Syndrome, A rare defect mirroring through oral cavity, 3rd International Conference on Birth Defect (ICBD-2016) and 3rd National Conference of the Society for Indian Academy of Medical Genetics (SIAMG), 5 December 2016, AIIMS, NewDelhi
39. Gupta S. Caffey, Silverman disease of the Mandible: A diagnostic challenge, IAOMR 2016, 17 December 2016, Kanyakumari
40. Tabsum, Kharbanda OP. Cervical vertebrae anomalies in cleft lips, International Cleft Congress 2017, 8–11 February 2017, Mahabalipuram, Chennai
41. Prabhat KC, Kharbanda OP. Application of 3-Dimensional Printing Technology in Cleft Lip and or Palate Care, International Cleft Congress 2017, 8–11 February 2017, Mahabalipuram, Chennai
42. Raj R. Prosthetic rehabilitation of midfacial defects, case reports, MFPS 2017, 23–25 March 2017, Kochi
43. Subin KM. Poster Prosthetic rehabilitation of a patient with complete maxillectomy defect, A case report, MFPS 2017, 23–25 March 2017, Kochi
44. Kirti BK. Poster implant supported auricular prosthesis, AIIMS clinical experience, MFPS 2017, 23–25 March 2017, Kochi (**Third prize for best poster presentation**)
45. Roychoudhury A, Yadav R, Bhutia, O, Agarwal B, Soni B, Goswami D, Baidya DK. Is total joint replacement along with fat grafts a new protocol for adult temporomandibular joint ankylosis treatment? 23rd International Conference on Oral and Maxillofacial Surgery, 31 March 2017, Hong Kong
46. Kaur K, Roychoudhury A, Bhutia O, Seith A, Pandey RM, Bhatt K, Yadav R. Short-term comparison of success rate between costochondral graft interpositional arthroplasty and transport disc distraction osteogenesis in treatment of children with unilateral temporomandibular joint ankylosis, 23rd International Conference of Oral and Maxillofacial Surgery; 31 March 2017, Hong Kong, China

RESEARCH

Funded projects

Ongoing

1. Maxillofacial planning and simulation system, Ajoy Roychoudhury, Ministry of Electronics and Information Technology, 3 years, 2016, Rs. 131.93 lakhs
2. A clinical study on the investigation of caries risk in children with Cleft Lip and or Palate (CL/P) and non-cleft control, Prabhat KC, AIIMS, New Delhi, 2 years, 2016, Rs. 8 lakhs
3. Association between serological levels and genetic polymorphisms of VEGF A and C with clinicopathological characteristics in oral squamous cell carcinoma and oral submucous fibrosis, A pilot study, Shalini Gupta, AIIMS, 2 years, 2016, Rs. 4.99 lakhs
4. In-vitro efficacy and safety evaluation of novel mucoadhesive silver nanoparticle based local drug delivery system for treatment of periodontitis, Kunaal Dhingra, AIIMS, 1 year, 2016–2017, Rs. 5 Lakhs
5. Assessment of microflora of severe dental caries in Indian children using anaerobic culture and molecular techniques, Kalpana Bansal, AIIMS, 1 year, 2016–2017, Rs. 4.65 lakhs
6. Effect of various tooth storage media on viability, proliferative ability and differentiation of human periodontal ligament stem cells, An in-vitro preliminary study, Nitesh Tewari, AIIMS, 2016–2017, 1 year, 2016, Rs. 4 lakhs
7. Pilot Project on School Based Sealant Programme under NOHP, Harsh Priya, MoHFW, 1 year, 2016–2017, Rs. 3.6 lakhs
8. Genetic profiling of non-syndromic Pierre Robin Sequence patients by whole exome sequencing and microarray, Deepika Mishra, AIIMS, 1 year, 2016–2017, Rs. 5 lakhs
9. Effect of Preoperative and intra-operative administration of antibiotic V. Post operative administration on clinical and patient reported outcome in healthy, partially dentate patients undergoing dental implant placement, a pilot study, Gunjan Pruthi, AIIMS, 1 year, 2016, Rs. 3.98 lakhs
10. To assess the analgesic efficacy of adjuvant magnesium sulphate added with Ropivacaine over Ropivacaine alone as a continuous infiltration in total abdominal hysterectomy wounds: A randomized controlled trial, Devlina Goswami, AIIMS, 1 year, 2016, Rs. 17.5 lakhs
11. Evaluation of the effects of miniplate anchored hybrid fixed functional appliance in post adolescent and young adults with Class II malocclusion, Vilas D. Samrit, AIIMS, 2 years, 2016, Rs. 3.67 lakhs

Completed

1. A study to evaluate correlation between markers for hypercoagulability and development of temporomandibularanklyosis in mandibular condylar fracture patients, Ajoy Roychoudhury, AIIMS, 3 years, 2013–2016, Rs. 5 lakhs

Departmental projects

Ongoing

1. Analysing the long term effects of primary tooth trauma on permanent dentition
2. An observational analytical study to evaluate the effects of Anti-cancer therapy on developing dentition in long term survivors of childhood cancers
3. Comparative evaluation of Simvastatin Gel and Diode Laser for pulpotomy in primary molars: Single blind Phase 2 Randomized trial
4. Comparative evaluation of Diode Lasers and conventional surgical technique in soft tissue procedures
5. Effectiveness of a web based Learning Module on Oral Health Promotion for Nursing Professionals
6. Oral Health Status and Treatment Need among EHS Employees at AIIMS New Delhi
7. A Rodent Model Study to Quantify the Acceptable Levels of Inoculated Dentinal Debris in Context to Periapical Extrusion during Non-Surgical Endodontic Therapy
8. Cone beam computed tomographic characterization of periapical lesions that are evident on intraoral periapical radiographs: a retrospective analysis
9. A Prospective Study to Observe the Influence of Co-existing Traumatic Overbite on the Outcome of Non-Surgical Endodontic Therapy (NSET) Performed on Anterior Teeth with Periapical Pathosis
10. A cross-sectional pathfinder study to evaluate the impact of serum vitamin d level on the radiographic outcome of non-surgical endodontic therapy
11. An ex-vivo study to explore the strategies for enhancing the micro-tensile bond strength of composite resin in cavity previously restored with amalgam.
12. A preliminary clinical study to evaluate the effect of minimal invasive endodontic treatment protocol on apical augmentation of non-vital immature permanent anterior teeth
13. A Preliminary Clinical Study to Determine the Optimal Apical Extent of Mineral Trioxide Aggregate Barrier for the Management of Non-vital Immature Permanent Anterior Teeth
14. A randomized controlled trial to determine the optimal apical size for non surgical endodontic retreatment
15. A Cross-Sectional Pathfinder Study to assess the Serum Vitamin D Level in Patients Undergoing Non-Surgical Endodontic Therapy and observe its Potential Association with Periapical Healing
16. An established rodent model study to quantify the acceptable levels of inoculated dentinal debris in context to periapical extrusion during non-surgical endodontic therapy
17. An ex-vivo study to explore the strategies for enhancing the bond strength of composite resin in cavity previously restored with amalgam
18. Epidemiology and prognostic utility of cellular components of hematological system in sepsis
19. Integrated Ultrasound Protocol in predicting Weaning Success and Extubation Failure: A Prospective Observational Study
20. Evaluation of diaphragmatic muscle mass in patients receiving pressure regulated volume controlled ventilation and synchronized intermittent mandatory ventilation for acute respiratory failure: A randomized controlled trial
21. To determine whether implementation of a new ICU delirium prevention bundle will reduce the incidence of delirium compared to standard of care protocol in mechanically ventilated patients
22. A randomized controlled trial for comparison of success rate between costochondral graft interpositional arthroplasty and transport disc distraction osteogenesis in treatment of temporomandibular joint ankylosis
23. Comparative evaluation of success rate of modified nasolabial flap vs buccal fat pad transfer in reconstruction of intraoral defects after fibrotomy in oral submucous fibrosis cases, A parallel group randomized controlled trial
24. Comparison of post-extraction bleeding complication in patients taking oral anticoagulants, with and without bridging therapy: a pilot study
25. Comparison of efficacy of Mitek mini-anchor suture technique with conventional technique for TMJ disc plication procedure in Wilkes class III patients, A randomized controlled study
26. A prospective study to evaluate the fate of costochondral grafts used for ramus condyle reconstruction in temporomandibular joint ankylosis patients

27. Determination of efficacy of dexamethasone in post-operative analgesia as an adjunct to ropivacaine in extra-oral mandibular nerve block in patients of maxillofacial surgeries
28. Comparative evaluation of crestal bone level and implant stability around immediate implant using PRF and autoplast as graft material
29. An evaluation of effect of shortened dental arch on the thickness of masseter muscle and bite force
30. The effect of mandibular single implant supported overdenture on residual ridge resorption
31. To compare the effect of L-PRF or alloplastic graft material on crestal bone level around immediate implant placed in mandibular molar region
32. The effect of prosthodontic rehabilitation of completely edentulous geriatric patient with mild cognitive impairment on their memory process, A functional MRI based pilot study
33. Stress distribution pattern in two different types of removable partial dentures on the supporting structures, A 3d finite element analysis and a clinical study
34. Evaluation of the effect of prosthodontic rehabilitation on quality of life and psychological distress in maxillectomy patients: a preliminary study
35. Comparative evaluation of the wear of glazed zirconia crown, polished zirconia crown and opposing natural enamel: an in vivo study
36. To compare the efficacy of local anaesthetic wound infiltration in temporomandibular joint ankylosis surgery for control of post operative pain
37. Comparison of Opioid based and Opioid free TIVA I laparoscopic gynaecological surgery: A randomized controlled trial
38. To evaluate the effect of low level laser therapy on rate of orthodontic tooth movement.
39. Reliability and validity of cephalometric superimposition measurements: A comparison of conventional and computerized cephalometric softwares
40. Quantitative evaluation of macrophage colony stimulating factor levels in peri mini screw implant fluid
41. Circulating cell, free nucleic acids as biomarker around miniscrew site during orthodontic tooth movement, A quantitative analysis.
42. Quantitative evaluation of Pentraxin, 3 levels in peri-miniscrew implant crevicular fluid before and after orthodontic force application
43. Evaluation of white spot lesions post fixed orthodontic treatment using visual examination, laser fluorescence and operating microscope: a comparative clinical study
44. Reliability and validity of cephalometric superimposition measurements: A comparison of conventional and computerized cephalometric softwares, using Rickett's Superimposition Methods
45. Effect of two time micro-osteoperforations on rate of orthodontic tooth movement, A pilot study

Completed

1. A combined polysomnographic and radiographic study to evaluate the effects of arthroplasty on Obstructive Sleep Apnea in Temporomandibular Joint Ankylosis Patient
2. A prospective study to evaluate the EMG changes in diaphragm and mylohyoid muscles complex area following genial distraction in retrogenia patients
3. Arthroscopic Lavage in internal derangement of Temporomandibular Joint, A prospective study
4. Evaluation of Mandibular Kinematics and Quality of Life of Patients with alloplastic TMJ replacement in TMJ ankylosis among Indian population
5. A Cluster Randomised Controlled clinical trial to evaluate fate and volumetric shrinkage of interposed pedicled buccal pad of fat and abdominal fat in treatment of TMJ ankylosis
6. Effectiveness of a web based Learning Module on Oral Health Promotion for Nursing Professionals
7. Oral Health Status and Treatment Need among EHS Employees at AIIMS, New Delhi
8. Correlation of the Radiographic Size of a Periapical Lesion with the Degree of Invasion and Penetration Depth of Bacteria into Apical Dentinal Tubules of Teeth with Asymptomatic Apical Periodontitis
9. Comparative evaluation of fracture resistance of Fuji IX GP Extra (encapsulated GIC) posterior composite and amalgam in class II box only cavities, An ex vivo study
10. Efficacy of Left ventricular outflow tract velocity time integral (LVOT VTI) and carotid artery VTI as predictor of volume responsiveness to passive leg raising (PLR) in sepsis and septic shock patients by correlation with Echocardiography guided stroke volume change (delta SV%) to PLR

11. To study the efficacy of clonidine as an adjuvant to ropivacaine in ultrasound guided transversus abdominis plane block in adult renal transplant recipients, A double blinded randomised controlled trial
12. To assess the efficacy of local anesthetic wound infiltration in temporomandibular joint ankylosis surgery for control of post operative pain: Randomized controlled trial
13. Treatment satisfaction in maxillectomy patient after prosthetic rehabilitation and its association with their socioeconomic status, A preliminary study
14. Effect of soft liner on masticatory efficiency and bite force in complete denture patients, An in vivo study
15. Pattern of microbiological colonization around orthodontic mini-screw implants.
16. Reliability and validity of PA cephalometric measurements, A comparison of conventional and computerized cephalometric analysis software
17. The levels of MMP-8 around miniscrew implant site during orthodontic tooth movement

Collaborative projects

Ongoing

1. Interdisciplinary variations in spectrum of oral mucosal lesions (Dermatology, ENT)
2. Genetic profiling of non syndromic Pierre Robin Sequence patients by whole exome sequencing and microarray (Oral Pathology, Oral Medicine and Radiology, Genetics)
3. Etiology of Oral cancer in Indian population younger than 30 years (Oral Pathology, Oral Medicine and Radiology)
4. Assessment of peri-natal oral health and Implementation of oral health promotion program in Indian pregnant women (Obstetrics and Gynaecology)
5. Comparative evaluation of Diode Lasers and conventional surgical technique in soft tissue procedures
6. An observational analytical study to evaluate the effects of Anti-cancer therapy on developing dentition in long term survivors of childhood cancers (Medical Oncology)
7. Comparative evaluation of Simvastatin Gel and Diode Laser for pulpotomy in primary molars: Single blind Phase 2 Randomized trial (Pharmacology and Conservative Dentistry and Endodontics, CDER)
8. Effect of various tooth storage media on viability, proliferative ability and differentiation of human periodontal ligament stem cells, an in-vitro preliminary study (Stem Cell Facility)
9. Incidence and risk factors of back pain after cesarean section: A prospective observational study (Gynaecology and Obstetrics)
10. Association of vitamin D deficiency with duration of mechanical ventilation in critically ill adults in ICU: Observational study (College of Nursing)
11. A study to assess the effectiveness of a planned simulation teaching on the knowledge and skill of nurses working in critical care unit of AIIMS (College of Nursing)
12. Estimate the oral cancer conversion risk with long term follow up (10–15 years) of patients with precancerous lesions, leukoplakia, submucous fibrosis, lichen planus among patients included in a ICMR tobacco task force project (General Surgery, National Institute of Cancer Prevention and Research, Noida)
13. Association between serological levels and genetic polymorphisms of VEGF A and C with clinicopathological characteristics in oral squamous cell carcinoma and oral submucous fibrosis, A pilot study (Biochemistry)
14. Cleft Lip and Palate anomaly in India: Clinical profile Risk factors and current status of treatment: A hospital based study (Genetics Unit and CSIR Institute of Genomics and Integrative Biology, Delhi)
15. Evaluation of the effects of miniplate anchored hybrid fixed functional appliance in post adolescent and young adults with class II malocclusion (Orthodontics and Dentofacial orthopaedics)
16. Pilot Implementation of Collaborative Digital Diagnosis System (Collab DDS) using Medical Imaging (National Informatics Centre, New Delhi, Central Scientific Instruments Organisation, Chandigarh, Indian Institute of Technology, Mumbai, Radiodiagnosis)
17. Design and testing of orthodontic mini-screw embedded with sensors to detect inflammation, Phase I (Biomedical Engineering, Indian Institute of Technology, New Delhi)
18. Automatic segmentation of upper airway using CBCT scans data (Central Scientific Instruments Organization [CSIO], Chandigarh)

Completed

1. Automatic Landmark Detection for 3-D Cephalometric Analysis using CBCT data (Central Scientific Instruments Organisation [CSIO], Chandigarh)

PUBLICATIONS

Journals: 56

Abstracts: 2

Chapters in books: 7

PATIENT CARE

Division of Orthodontics: Provided greater emphasis on Interdisciplinary treatment of patients with Cleft Lip and Palate.

Oral and Maxillofacial Surgery OPD and Inpatient services: Exodontia, simple and complicated, Temporomandibular Joint Surgery, Cranio-facial trauma, Orthognathic and Aesthetic Surgery of face, Oral and Maxillofacial Pathology, Maxillofacial Infections, Surgery for Obstructive sleep apnea, Trigeminal neuralgia Clinic, Oste-odontokeratoplasty

Division of Prosthodontics: Specialty clinic on Oral and Maxillofacial Prosthodontics, implant dentistry and temporomandibular disorders. Different types of prosthesis which we are fabricating for the patients are Complete denture, Removable Partial Denture, Crown and Bridge work, Laminates, Occlusal splints, Implant supported Prosthesis (Removable and Fixed), and Maxillofacial Prosthesis (Extra oral/Facial and Intra oral). At the department we are running two labs to fabricate removable and fixed Prosthodontic appliances.

Division of Public Health Dentistry

- Participation and contribution at the Institute Day Exhibition on “Six Decades of AIIMS” held during Diamond Jubilee Celebrations of AIIMS, New Delhi on 25–27 September 2016
- Contributed as a Technical Assistance team in TV Commercial final shoot for National Oral Health Programme at the Kamaal Amrohi Studio, Mumbai on 15 & 16 October 2016
- Participation and Contribution at the exhibition on the role of Centre of Dental Education and Research, AIIMS, New Delhi as a WHO, Collaborating Centre for Oral Health Promotion at the “Regional Consultation of the WHO Collaborating Centres in South–East Asia Region” 20 & 21 October 2016
- Participating at the Swasthya Chetna Evam Jan Sampark Abhiyan in Mission Mode Awareness and Screening Shivir at India International Trade Fair (IITF), Pragati Maidan, New Delhi from 14–27 November 2016, organized by the Ministry of Health and Family Welfare, Government of India (NCD Division)
- Oral Health Awareness at the Children Day Celebration at the Paediatric OPD and the D5 Wards on 14 & 21 November 2016
- Oral Health Promotion Drive on the occasion of International Childhood Cancer Day on 8 February 2017 at the Jawaharlal Nehru Auditorium at AIIMS, New Delhi
- Participated in the Video Conferencing on “Efforts of Dental Surgeon towards NOHP” as a Resource Person for all dental surgeons in various districts of Maharashtra through State Nodal Officer, Maharashtra on 28 February 2017
- Organising a week long Oral Health Screening Camp at the Nirman Bhawan on the occasion of the World Oral Health Day from 20–24 March 2017
- Organising a Public Lecture and Panel Discussion on the topic “Dental Health–32 Facts, Myths and more...” on the occasion of World Oral Health Day on 21 March at the JLN Auditorium, AIIMS, New Delhi
- Contributing and participating at the Multimedia Kit launch developed under National Oral Health Programme on 20 March 2017 at Health Minister Committee Room, Third Floor, Nirman Bhawan
- CDER Community Outreach Centre at AIIMS Midtown Rotary Hospital, Trilokpuri: Dental Services extended for 3 days a week, 734 patients examined and 137 treatments executed so far, in the months of April and May 2017

Division of Periodontics

Various treatment procedures carried out in department are:

Conventional non-surgical and surgical periodontal therapy, Periodontal plastic surgery, Soft and hard tissue regenerative procedures,

Diode laser assisted soft tissue excision and adjunctive pocket debridement procedures

Division of Pedodontics

Special needs children, Cancer Survivor Clinic, Traumatic Dental Injury Clinic

Education of 200 pregnant women in the ante-natal clinic about the self oral care, its importance during pregnancy and infant oral care for the prevention of early childhood caries in children

An educational oral health preventive program was delivered to pregnant women and an improved knowledge score was obtained on a follow up visit in the ante natal care clinic in the Department of Obstetrics and Gynaecology, AIIMS

A lecture on “Oral health preventive care was delivered by the faculty to children and the parents in the Pediatric ward and Pediatric OPD waiting area on the Children’s day 14 November 2016

Division of Oral Medicine and Radiology

Specialty clinic: Oral Ulcer Clinic

The clinic was initiated for diagnosis and medical management of complex Oral lesions in collaboration with Department of Dermatology AIIMS

Participation in Oral Health Screening camp organized by MoHFW at Nirman Bhavan during World Oral Health Day 20–24 March 2017

Division of Oral Pathology and Microbiology

Oral ulcer clinic

Started chairside exfoliative cytology staining at Center for Dental Education and Research, AI

AWARDS, HONORS AND SIGNIFICANT EVENTS

Professor O.P. Kharbanda: CDER has been named the Global Alliance Partner of the Cochrane Oral health Group. Under his able chairmanship, the first ever protocol writing Workshop was conducted in collaboration with the Cochrane South Asia Group; instrumental in the collaboration between CDER AIIMS and Roseman University of Health Sciences, Henderson, Nevada, USA in the field of education and research. He has been unanimously nominated as Editor of the Journal of Pierre Fauchard Academy (India Section) with its Headquarters at Paris. At the 30th Annual Pierre Fauchard Academy Convocation, he delivered the 3rd Maj. Gen. Kartar Singh Oration in which he spoke about Orthodontics for kids, adolescents, adults and elderly; honored as a **“Distinguished/alumni”** of King George’s Medical University (KGMU), Lucknow; delivered the 3rd Prof V Surendra Shetty Oration at the 51st Indian Orthodontic Conference and the 8th World Implant Conference; delivered a lecture on Quality Assurance in Dental Education where he spoke on creating quality health professionals and highlighted the barriers and opportunities at KGMU Lucknow; appointed as an Expert member of the Faculty Selection at AIIMS Rishikesh and served as Chairman to the Ethics Committee of Manav Rachna Dental College (MRDC) Faridabad; nominated by Government of India, Ministry of Health and Family Welfare, New Delhi as Member-Expert of the Constitution of Hearing Committee for establishment of new Dental Colleges/increase in BDS seats for academic session 2016–2017; appointed by SGT University, Gurgaon as an **Honorary Adviser** for scientific consultation and on matters of academia; PG Examiner at Tribhuvan University Nepal and Swami Vivekanand Subharti University, Meerut; Chief Resource Faculty at “6th Insight into Orthodontic Postgraduate Examination” at Jamia Millia Islamia, New Delhi; Chief Guest, Manav Rachna Dental College, Faridabad, Haryana to Orthodontic Quiz “Torque 2016”.

Professor Ritu Duggal delivered Inaugural Dr Hari Parkash Oration Lecture at ITS Centre for Studies and Research, Ghaziabad. Appointed as Chairman of Ethical Committee of Faculty of Dental Sciences at SGT University, Gurgaon. An Expert Committee Member for hearing to Dental Colleges for starting/increase of seats/renewal of MDS/PG Courses for the Academic Session 2016–2017 at Ministry of Health and Family Welfare, Department of Health and Family Welfare. Panelist for CME in Orthodontics entitled “An Insight into Orthodontic Post Graduate Examination-2017” held at Jamia Millia Islamia, New Delhi Act as Subject Expert to carry out the inspection for extension of affiliation in MDS Course at Ch. Charan Singh university. Act as an expert for the assessment of starting PG Course (MDS) in Orthodontics in the Department of Dental Surgery, AIIMS, Bhubaneswar. Act as Expert Member in the Selection Board for the Interview for Recruitment of Teaching Faculty posts for Selection of Senior Research Associates (Pool Scientists) in Medical Sciences at ITS CSIR., Act as Expert Member in the Selection Board for faculty selection of Dr Ram Manohar Lohia Avadh University, Faizabad. Expert for Faculty Selection at King George’s Medical University, Lucknow. Act as an examiner to conduct Oral and Practical Examination in the subject of orthodontics at Faculty of Dental Sciences, K.G’s Medical University, Lucknow, SGT University, S.B.B. Dental Studies and Research, Ghaziabad, Baba Farid University of Health Sciences, Faridkot and Jaipur Dental College, Jaipur.

Professor Ajoy Roychoudhury was Reviewer for indexed journal. British Journal of Oral and Maxillofacial Surgery, National Medical Journal of India, Dental Traumatology and National Journal of Oral and Maxillofacial Surgery. Dr Roychoudhury has been Dental Council Inspector to verify the teaching, infrastructure facility of various dental college in India providing Post graduate education. Also has been in the committee of MOH&FW to review the decisions of Dental Council of India pertaining to recognition to various Dental Colleges in India. He served as an expert at selection committee at Public service commission Uttar Pradesh, King Georges University Lucknow, ESI hospitals and Six AIIMS across country He has been a Post Graduate examiner to King Georges University, Lucknow.

Professor Veena Jain’s post graduate student Dr Kailash Mundhe was awarded the Best Postgraduate thesis award for thesis titled “A comparative study to evaluate the wear of natural tooth wear opposing to zirconia and metal ceramic crowns, In Vivo study” during 2nd international craniofacial and dental summit 2–4 February 2017 at KGMC Lucknow.

Professor Ongkila Bhutia was nominated member of the hearing committee to various Dental Colleges for renewal/fresh BDS Scheme on 27 June 2016, 8 July 2016 & 21 July 2016 in MoH&FW. Expert member for evaluation of the Posters and

Slogans on Poster and Slogan Competition, World Oral Health Day 2016 Date: 17 June 2016 at CDER, AIIMS. National Faculty at WTC 2016 AIIMS, New Delhi. Nominated as chairman screening committee for the new faculty recruitment in the division of periodontology, CDER, AIIMS. Member of Organizing committee ISDR to be held in October 2017 in Delhi. Was course faculty of 1st AIIMS Total TMJ Replacement Workshop with Hands on at AIIMS on 30 & 31 January 2017.

Professor Vijay P Mathur was member of International Association of Dental Traumatology, International Society for Stem Cell Research, International Academy of Paediatric Dentistry. Appointed as a Standing Committee Member of Membership and Recruitment Committee of International Association of Dental Traumatology (IADT, USA) in March 2017. International Travel Support Award for young researchers by Science and Engineering Research Board of Department of Science and Technology, Government of India in July 2016. Chaired scientific session on 21 October 2016 in 38th Annual National Conference of Indian Society of Pedodontics and Preventive Dentistry, Pedobyte-2016 at Kochi, Kerala. Chaired scientific session in World Congress of Dental Traumatology, Brisbane, Australia, Session Concurrent 2D, 11 August 2016. Invited as subject expert for question bank Workshop by National Board of Examinations, New Delhi on 16 April 2016 & 8 December 2016. Appointed as Reviewer in Dental Traumatology and International Journal of Pediatric Dentistry. Invited as a special Invitee to present the Guidelines for management of Traumatic Dental Injuries in Academic Committee Meeting of Indian Society of Pedodontics and Preventive Dentistry in New Delhi on 19 July 2016. Served as Faculty in-charge of examination centres at Thane (AIPG, 13 December 2015), Ghaziabad (Sister Grade II online CBT, 17 January 2016), Chennai (AIIMS PG, 8 May 2016), Lucknow (AIIMS MBBS, 30 May 2016), Gurugram (LDC recruitment examination, 26 November 2016), Ghaziabad (Sister Grade II recruitment for MOHFW, Government of India) administering over 200 candidates in each centre. Appointed as an external examiner for undergraduates for Chaudhary Charan Singh University Meerut in IDST, Muradnagar on 13–14 December 2016

Dr Prabhat Kumar Chaudhari Participated in the Educational Travel Grant Schemes to attend 8th International Orthodontic Congress, London-2015 to present his innovation entitled “MINISCREW IMPLANT SUPPORTED K-LOOP (MISK) SPRING FOR MOLAR DISTALIZATION, A PILOT TYPODONT STUDY” has been selected and awarded among one of the 10 best posters on 26 September 2016 by World Federation of Orthodontists (WFO), USA and these 10 selected posters has been displayed on WFO website for public viewing (<http://www.wfo.org/about-wfo/programs/educational-grant-posters/>). He was awarded with best Indian Orthodontic Society Research Fund (IOS RF)-3M UNITEK GRANT FOR RESEARCH for the LIFE MEMBER of Indian Orthodontic Society for the year of 2016 for the project entitled, “Mini-screw Implant Supported Bi-helix Appliance (MISBA) for Asymmetric Maxillary Expansion: A Finite Element Analysis followed by Controlled Clinical Study.” Was subject matter expert of National Board of Examination MoHFW, Government of India for Orthodontics and Dental Orthopedics, Medical Enclave, Ansari Nagar, New Delhi. Invited for participation in the panel discussion in Nanobioteck 2016; 1st Annual Conference of Indian Society of Nanomedicine being organized in collaboration with DST and DBT, GOI on 24–26 November 2016 at AIIMS. Member of IADR and IADR cariology research group, USA. Fellow-Member World Federation of Orthodontist. International Member of ACPA. Reviewer of Cleft Palate Craniof J and IJDR.

Dr Shalini Gupta was member project advisory Committee(PAC) of the ICMR Task Force study titled “Screening and early detection of cervical, breast and oral cancer in the Dibrugarh, Assam: a demonstration project in TATA Tea gardens, and also was Technical expert.” Operational Framework and Management of Common Cancers” published by MoHFW GOI. 2016–2017

Dr Kunaal Dhingra was conferred the ‘Fellowship’ status of the prestigious World Academy of Ultrasonic Piezoelectric Bone Surgery, Korea, for the recognition of his clinical skills in Oral Implantology and Piezosurgery, at the World Congress of Ultrasonic Piezoelectric Bone Surgery 2017 held in New Delhi from 27–29 January 2017.

Dr Nitesh Tewari was member International Association of Dental Traumatology, International Society for Stem Cell Research, International Academy of Paediatric Dentistry. Appointed as a Standing Committee Member of Membership and Recruitment Committee of International Association of Dental Traumatology (IADT, USA) in March, 2017. International Travel Support Award for young researchers by Science and Engineering Research Board of Department of Science and Technology, Government of India in July 2016. Chaired scientific session on 21 October 2016 in 38th Annual National Conference of Indian Society of Pedodontics and Preventive Dentistry, Pedobyte-2016 at Kochi, Kerala. Chaired scientific session in World Congress of Dental Traumatology, Brisbane, Australia, Session Concurrent 2D, 11 August 2016. Invited as subject expert for question bank Workshop by National Board of Examinations, New Delhi on 16 April 2016 & 8 December 2016; Appointed as Reviewer in Dental Traumatology and International Journal of Pediatric Dentistry. Invited as a special Invitee to present the Guidelines for management of Traumatic Dental Injuries in Academic Committee Meeting of Indian Society of Pedodontics and Preventive Dentistry in New Delhi on 19 July 2016. Served as Faculty in-charge of examination centres at Thane (AIPG, 13 December 2015), Ghaziabad (Sister Grade II online CBT, 17 January 2016), Chennai (AIIMS PG, 8 May 2016), Lucknow (AIIMS MBBS, 30 May 2016), Gurugram (LDC recruitment examination, 26 November 2016), Ghaziabad (Sister Grade II recruitment for MOHFW, Government of India) administering over 200

candidates in each centre. Contributed as organising committee member/faculty in organising Institute's Day Exhibition of All India Institute of Medical Sciences, New Delhi in September 2016. Appointed as an external examiner for undergraduates for Chaudhary Charan Singh University Meerut in IDST, Muradnagar on 13–14 December 2016

Dr Harsh Priya Contributed at the Meeting for World Alliance on Mercury free Dentistry with Mr. Charlie Brown, Mercury Free Dentistry, Washington, DC, USA held on 8 June 2016 at the Resource Centre, 445, A Wing, Nirman Bhawan, New Delhi under the Chairmanship of Dr NS Dharmshatku, Spl. DGHS, Dte GHS, MoHFW. Contributed at the brainstorming Meeting for National Oral Health Programme held on 7 December 2016 to brainstorm/discuss the expansion of the National Oral Health Programme held on 7 December 2016 in room no. 153 A wing, Nirman Bhawan, New Delhi under the Chairmanship of Dr Mohd. Shaukat, Adviser (NCD), Dte GHS, MoHFW

VISITING SCIENTISTS

1. Dr Noriaki Yoshida, Professor and Chair, Department of Orthodontics and Dentofacial Orthopedics, Nagasaki University, Japan
2. Dr Anka, orthodontist, practicing in Tokyo Japan

10.3. Dr B.R. Ambedkar Institute Rotary Cancer Hospital

Professor and Chief

G.K. Rath

(Radiation Oncology)

Professors

N.K. Shukla (Surgical Oncology)	Lalit Kumar (Medical Oncology)	Subhash Chander (Radiation Oncology)	Sidhartha Satpathy (Hospital Administration)
Rajive Kumar (Laboratory Oncology)	S.V.S. Deo (Surgical Oncology)	Sanjay Thulkar (Radio Diagnosis)	Sushma Bhatnagar (Anaesthesiology)
Atul Sharma (Medical Oncology)	Sameer Bakshi (Medical Oncology)	Seema Mishra (Anaesthesiology)	D.N. Sharma (Radiation Oncology)
Suman Bhaskar (Radiation Oncology)	Pratik Kumar (Medical Physics)	Sushmita Pathy (Radiation Oncology)	Ritu Gupta (Laboratory Oncology)

Associate Professors

Haresh K.P. (Radiation Oncology)	Subhash Gupta (Radiation Oncology)	Anita Chopra (Laboratory Oncology)	Pranay Tanwar (Laboratory Oncology)
Sanjeev Kumar Gupta (Laboratory Oncology)	Rakesh Garg (Anaesthesiology)	Nishkarsh Gupta (Anaesthesiology)	Vinod Kumar (Anaesthesiology)
Sachidanand Jee Bharti (Anaesthesiology)	Chandershekhara S.H. (Radiodiagnosis)	Sunil Kumar (Surgical Oncology)	M.D. Ray (Surgical Oncology)

Assistant Professors

Amar Ranjan Singh (Laboratory Oncology)	Ajay Kumar Gogia (Medical Oncology)	Ranjit Kumar Sahoo (Medical Oncology)	Prabhat Singh Malik (Medical Oncology)
Sameer Rastogi (Medical Oncology)	Raja Pramanik (Medical Oncology)	Rambha Pandey (Radiation Oncology)	Atul Batra (Medical Oncology)
Ahitagni Biswas (Radiation Oncology)	Ritesh Kumar (Radiation Oncology)	Mayank Singh (Medical Oncology)	Mukesh Yadav (Radiodiagnosis)
Ekta Dhamija (Radiodiagnosis)	Thoudam Debraj Singh (Medical Oncology)	Chandra Prakash Kumar (Medical Oncology)	

Administrative Officer

Renu Bhardwaj

Accounts Officer

Meera Gupta

Stores Officer

Rakesh Sharma

Total number of officials

Faculty Member	46
Resident Doctor	89
Group 'A' Official	29
Group 'B' Official	386
Group 'C' Official	132
Part Time Social Guide	6
Outsourced House Keeping Staff	142
Outsourced Security Staff	79
Outsourced Data Entry Operators	27
Outsourced Sanitation Staff	77

HIGHLIGHTS

Onco-Anesthesia and Palliative Medicine

The Radiation Oncology Department provides services in anaesthesiology, intensive care, pain and palliative medicine. Our mission is to provide State-of-the-Art and comprehensive care for patients with cancer with both curative and palliative intent. This includes services for various diagnostic interventions, surgical procedures, pain and palliative procedures. The department provides round the clock services for acute and chronic pain management. A 6-bed intensive care unit provides care for critically ill patients and a 6-bed palliative care ward for oncology patients. The department has regular academic activities and also pursues various research activities in the fields of cancer pain, palliative care and perioperative medicine. The department has developed protocols and has standard operating procedures (SOPs) for better patient management.

Delhi Cancer Registry

This is a population-based cancer registry that collects data of patients with cancer from more than 170 government or private hospitals/centers and 250 nursing homes and vital statistics division of MCD and NDMC and reports the incidence of various cancers among Delhi Urban residents. The common sites of cancer among males in Delhi are lung, tongue, prostate, mouth and larynx and among females are breast, cervix, ovary, gallbladder and cervix uteri. The reports prepared by the registry are used by researchers, government organizations, etc.

Medical Oncology

The department is actively involved in patients care, research and teaching. In the past year clinical services provided by the department were as follows

In-patients:	3516	Day care patients:	31,676
Medical procedures:	6100	Outpatient chemotherapy:	14,034
Outpatient intravenous antibiotics:	23,123		
Haematopoietic stem cell transplantation (autologous, allogeneic and cord blood): 91 (75, 14, 2)			

Medical Oncology Lab

Cytogenetics (Philadelphia chromosome):	449	RT-PCR for BCR-ABL (qualitative):	390
RQ PCR for BCR-ABL (quantitative):	4	CD 34 counts (FCM):	234
CD 3 Counts (FCM):	12	MNC counts:	181
Cryopreservation at -800C:	96	Stem cell storage at 40C:	89
Viability testing for stem cells:	140		
ELISA for galactomanan (aspergillosis):	931		

Aphaeresis lab

PBSC harvests:	192	SDP aphaeresis:	2164
Granulocyte aphaeresis:	28	Haemogram testing:	24044

The department has DM (21 students), PhD (7 students) and summer training programmes. A number of papers was published in various international and national medical journals, and various invited lectures were delivered in International and national meetings. Medical oncology faculty was invited by a number of Universities in India as examiner for DM and PhD.

Department is active on the research front as well; many research projects being run at present are funded by various international, national, Government and non Government agencies. There is a regular lab service for patient care. These

include cytogenetics and PCR facilities for CML patients, CD 34 enumeration and cryopreservation facilities for stem cell recipients. A new BMT fellowship programme has been started.

Medical Physics

The department is working in the area of radiation application in medicine and renders services to about 20 departments and centers located at AIIMS regarding licensing of their radiation emitting x-ray radiography, interventional fluoroscopy, CT scanner, C-arm fluoroscopy, DEXA Bone Mineral Density machines, and use of sealed and unsealed radioactivity in laboratories in many departments. The services involved advising for preparation of proper lay-out for radiation installations, ensuring radiation safety of staff, patients and public, periodic Quality Assurance tests on radiation equipment, advising patients and staff in inadvertent exposure during pregnancy and medical imaging, radiation measurement and radiation protection related research and training. During 2016–2017 we did 6621 measurements, tests, experiments and irradiation sterilization of blood bags for blood transfusion.

Surgical Oncology

All faculty members of the department participated in undergraduate and postgraduate teaching and structured training of 27 Senior Residents including 15 MCh and 12 non-academic senior residents and 2 short/long term trainees. The faculty acted as co-guides in the thesis work of various departments including Radiation Oncology, Medical Oncology, Biochemistry and Biotechnology Geriatric medicine etc. The faculty and residents of the department presented 43 papers in national and international conference. The department is involved in 5 funded research projects. Eighteen departmental projects are ongoing and one departmental project has been completed. The department is involved in six collaborative research projects. The faculty and residents are participating in special cancer clinics for breast, gastrointestinal, head and neck, gynecological cancer, bone and soft tissue, thoracic, hepato-biliary-pancreatic and genitourinary cancers. The department is providing major and minor operation facilities to patients of cancer. 1390 complex major operations and 7908 minor operation and various diagnostic and therapeutic endoscopy procedures were performed during the year. Faculty participated in community services by giving advice to ostomates, talks on All India Radio, television and participating in cancer awareness camps organized by NGOs.

EDUCATION

Onco-Anaesthesia and Palliative Medicine

The department is running two academic courses: DM (Onco-Anaesthesia) and MD (Palliative Medicine). First batch was admitted in January 2016. The department also organizes certificate course in Palliative Care twice a year in the month of June and November and Foundation course on Palliative Care once a year in the month of February.

Laboratory Oncology

It provides morphology, myeloma and flow cytometry training to residents from Pathology, Hematology and Lab Medicine. In addition, residents from Medical Oncology, Pediatrics also receive training here. Short-term training is given to MSc students from various colleges all over India.

Medical Oncology

Undergraduates: Seminars 2, Lectures 2

BMT Fellowship: A new program initiated in January 2017. One fellow is enrolled in the program.

Medical Physics

The department imparted training and education regarding physics of medical imaging, radiation protection, radiation dosimetry physics and quality assurance tests in medical imaging to students of MD Radiology, MBBS, BSc (Hons) Nursing and BSc (Hons) Radiography. At present the department has three PhD students. We imparted training to Mr Krishna Subedi, Nepal for six months on 'Radiation dosimetry and quality assurance test in computed tomography (CT) imaging' under Research Training Fellowship for Developing Country Scientist (RTF-DCS) fellowship awarded by inter-governmental organisation Non-Aligned Movement S & T.

Radiodiagnosis

Faculty participated in undergraduate, postgraduate and super speciality teaching, radio-conferences, tumor board meeting, Clinical Combined Rounds, Clinical Grand Round. Faculty also participated in various symposiums held in IRCH and institute.

Surgical Oncology

- a. Undergraduate teaching: The faculty was involved in undergraduate teaching by giving didactic lectures and by participating/moderating seminars on oncological topics.

- b. Postgraduate teaching: The faculty was involved in teaching and training of MCh surgical oncology students and senior residents, DM medical oncology residents and MD radiotherapy junior residents. The faculty was also involved in teaching and training of dental surgery residents and MCh students from RCC, Thiruvananthapuram who are posted on one month rotation.
- c. Para clinical teaching/training: The faculty was involved in the teaching of the MSc nursing oncology students.
- d. Long and short term training:
 1. Dr Pushpendra Malik, Assistant Professor, 3 months, from 1 February to 30 April 2016
 2. Dr Suman Kharkwal, Assistant Professor, 24 months, from 1 April 2016 to 31 March 2018

CME/Workshop/Symposia/National and International Conference

Onco-Anesthesia and Palliative Medicine

1. 23rd International Conference of Indian Association of Palliative Care (IAPCON 2016), 12–14 February 2016, Pune
2. 15th Foundation Course on Palliative Care, March 2016, AIIMS, New Delhi
3. IAPC Certificate Course in Palliative Care, June and November 2016, Dr BRA IRCH, AIIMS, New Delhi
4. Palliative Care Training Programme for Cancer Treatment Centers in India, 30 July–3 August 2016, Faridabad, Haryana
5. World Hospice Day, 8 October 2016, Dr BRA IRCH, AIIMS
6. Training Course on IASP Advanced Certificate Programme in Evidence Based Pain Management, 10 & 11 March, 2 & 3 May and 11 & 12 July 2017, AIIMS

Medical Oncology

1. CME: Debates in Medical Oncology, 26 November 2016

Lectures delivered

Onco-Anesthesia and Palliative Medicine

Sushma Bhatnagar: 22

Seema Mishra: 10

Rakesh Garg: 8

Nishkarsh Gupta: 11

Vinod Kumar: 3

Sachidanand Jee Bharati: 6

Sushma Bhatnagar: 22

1. 24th International Palliative Care Conference, 10–12 February 2017, Tamil Nadu
2. 32nd Annual National Conference of ISSP, 3–5 February 2017, Jaipur
3. Mentoring Programme, Lien Collaborative with the Asia Pacific hospice Network and AIIMS, 16–18 January 2017, Jaipur and Bikaner
4. External Examiner, MD Palliative Medicine Examination, 19 December 2016, Mumbai
5. IASP Meeting, International Association for the Study of Pain Council Meeting, 7–9 December 2016, Miami FL, USA
6. 2nd AIIMS French Academy of Medicine, Toulouse, 17–18 November, France
7. Workshop on Palliative Care RSACPCON 2016, 14–16 October 2016, Patna
8. Workshop on Methadone of Palliative Care, 18 October 2016, Bhubaneswar
9. 16th World Congress on Pain (IASP), 26–30 September 2016, Japan
10. 5th Education in Cancer and Acute Pain, 17 & 18 September 2016, Mumbai
11. 6th World Congress of Anaesthesia, 28 August–2 September 2016, Hong Kong
12. As a Council Member of APHN and Speaker: 4 Annual Hue Cancer Conference, 24–26 August 2016, Vietnam
13. As an Master Mentor: Palliative Care Capacity Building Project, 30 July–3 August 2016, Faridabad, Haryana
14. External Faculty: IAPC Certificate Course in Essentials of Palliative Care, 2 & 3 July 2016, Rajasthan
15. Workshop on International Update on Pain Management and Palliative Care Advance, 25 June 2016, Dehradun
16. 8th World Congress of the World Institute of Pain, 20–23 May 2016, New York, USA
17. Workshop coordinator: 12th International Conference of Asian Clinical Oncology Society, 8–10 April 2016, New Delhi, India
18. Co-team leader and faculty, Asia Pacific Hospice Palliative Care Network (APHN), Training of Trainers in Palliative Care Programme, 10–16 March 2016, Dhaka, Bangladesh

19. Meeting on Project: Advance stage cancer pain management evaluation of Yogic breathing intervention on biochemical markers, Patients pain perception quality of life, 26 February 2016, Bangalore
20. 31st Annual National Conference of ISSPCON, 5–7 February 2016, Indore
21. Foundation Course IAPC, International Collaborative for Best Care for the Dying Person, 11–13 January 2016, Bangalore
22. Co-Chairperson, 23rd International Conference of Indian Association of Palliative, 12–14 February 2016, Pune

Seema Mishra: 10

1. Ethics issues and EOL care in Palliative care, IAPC Certificate Course in Essential of Palliative Care, 11 & 12 June 2016, Dr Brairch AIIMS, New Delhi
2. Pediatric palliative care, IAPC Certificate Course in Essential of Palliative Care, 11 & 12 June 2016, Dr Brairch, AIIMS, New Delhi
3. Management of intractable pain, 5th International Conference on Pain Management, 25 October 2016, Port Blair, Andamans, India
4. Integration of palliative care, ICRA PAIN 2016, 26–28 August 2016, Kolkata
5. USG guided block (Workshop), ICRA PAIN 2016, August 2016, Kolkata
6. End of life care and ethical issues in palliative care, IAPC Certificate Course in Essential of Palliative Care, 5 & 6 November 2016, IRCH AIIMS, New Delhi
7. Children also need palliative care, IAPC Certificate Course in Essential of Palliative Care, 5 & 6 November 2016, IRCH, AIIMS, New Delhi
8. Role of psychological assessment and interventions for children and adults with cancer: Clinician's experience and conviction, International Conference on Cognitive Behavioural Interventions, India 2017 (ICCBI INDIA 2017), 6–8 March 2017, AIIMS, New Delhi
9. Lymphedema management, 16th Annual Foundation Course in Palliative Care, 30 & 31 March 2016, AIIMS, New Delhi
10. Oncological emergencies, 16th Annual Foundation Course in Palliative Care, 30 & 31 March 2016, AIIMS, New Delhi

Rakesh Garg: 8

1. Nutrition in cancer patients, Self Care for Palliative Care Professionals, 6th Annual Foundation Course in Palliative Care, 30 & 31 March 2017, AIIMS, New Delhi
2. How to do research? Workshop on Basics of Research Methodology and Publications, 5 March 2017, KIMS, Hubballi
3. Anaesthesia for airway surgery, Airway Guidelines, Can't Intubate and Can't Ventilate, 33rd Annual Academic Congress 2017 and 12th SAARC AA Conference, 22 & 23 February 2017, Colombo, Sri Lanka
4. One-Minute preceptor model (OMP), Teaching and assessing communication skills, Giving effective feedback, Basic Course Workshop in Medical and Health Professions, 15–17 February 2017, AIIMS, New Delhi
5. How to improve publications rate, 64th Annual National Conference of ISA, 25–29 November 2016, Ludhiana
6. Prescribing opioids safely, 5th International Conference on Pain Management, 21–25 October 2016, SGPGIMS, Lucknow
7. Is it time for change from direct laryngoscopy? Collapse airway: Mechanism and management, 7th National Airway Conference, AIDAA, 17 & 18 September 2016, Vadodara
8. Nutrition in palliative care, Certificate Course Programme of IAPC, 11 & 12 June 2016, Dr Brairch, AIIMS, New Delhi

Nishkarsh Gupta: 11

1. Core faculty for basic and advanced cardiac life support course (ACLS), AHA Accredited Basic Life Support (BLS) and Advanced Cardiac Life Support Course (ACLS), November 2016, January 2017, AIIMS, Delhi
2. Respiratory symptom management, 15th Annual Foundation Course in Palliative Care, March 2017, Dr Brairch, AIIMS, Delhi
3. Perioperative arrhythmias, Preconference Workshop: Difficult Airway Workshop, ISACON 2016, 24–29 November Ludhiana, Punjab
4. Three phase esophageal cancer surgery in 70 year old: Are you ready, 12th International Conference of Asian Clinical Oncology Society (ACOS), 8–10 April 2016, Delhi

5. ACLS, 2nd International Conference on Medical and Health Sciences, 3–5 November 2016, KGUMSB, Bhutan
6. Workshop for airway management in ICU, AIDIAA, September 2016, Vadodara, Gujarat
7. Coordinator and faculty workshop on vascular access, Medical Oncology Residents IRCH, March 2017, Dr Brairch, AIIMS
8. Basic and Advanced Cardiac Life Support Course, AHA Accredited, August 2016, AIIMS, New Delhi
9. Resuscitation related airway equipment, EORCAPS, September 2016, UCMS and GTB Hospital, New Delhi
10. Airway Workshop, SAARC Anesthesia Conference, 22–24 February 2017, Colombo, Sri Lanka
11. GI Symptoms in palliative care, Certificate Course in Palliative Care Programme of IAPC, 13 & 14 June 2016, Dr Brairch, AIIMS

Vinod Kumar: 3

1. Managing a breathless patient in palliative care, IAPC Certificate Course Programme, 11 & 12 June 2016, AIIMS, Delhi
2. Respiratory symptom management in terminally ill cancer patients, IAPC Certificate Course Programme, 5 & 6 November 2016, AIIMS, Delhi
3. Management of gastrointestinal symptoms in terminally ill cancer patients, 16th Annual Foundation Course in Palliative Care, 30 & 31 March 2017, AIIMS, Delhi

Sachidanand Jee Bharati: 6

1. Palliation in locally advanced unresectable oesophageal cancer, 12th International Conference of Asian Clinical Oncology Society, 8–10 April 2016, New Delhi
2. Cancer pain management, BIPRACON, 2 & 3 October 2016, BHU, Varanasi
3. Workshop on Ultrasound Guided Regional Nerve Block, ISACON Bihar, Jharkhand, 23 September 2016, SKMCH, Muzaffarpur
4. Chronic pain: Tip of an iceberg, 26th RSACPCON, 14–16 October 2016, Patna
5. Palliative care issues in head and neck cancer patient, Annual Foundation Course in Palliative Care, 31 March 2017, AIIMS, New Delhi
6. Videolaryngoscopic intubation, Cadaveric Workshop, 5 March 2017, CTRF, Trauma Centre, New Delhi

Delhi Cancer Registry

N. Manoharan: 2

1. Experience of cancer registry working, First Workshop on Development of Cancer Atlas in Haryana, 21 & 22 May 2016, DGHS, Panchkula
2. Cancer registry working, Second Workshop on Development of Cancer Atlas in Haryana, 13 February 2017, Medicity, The Medanta, Gurgaon

Laboratory Oncology

Rajive Kumar: 1

Sanjeev Kumar Gupta: 1

Anita Chopra: 1

Rajive Kumar: 1

1. Introduction to flow cytometry, Pathcon and Lab Expo, December 2017, New Delhi

Sanjeev Kumar Gupta: 1

1. An interesting case with ovarian tumor, CME Series on Hemato-Oncopathology, 24 July 2016, AIIMS, New Delhi

Anita Chopra: 1

1. Laboratory diagnosis of acute leukemia in children, Workshop on Pediatric Oncology organized by Department of Pediatrics, 26 November 2016, AIIMS, New Delhi

Medical Oncology

Lalit Kumar: 6

Atul Sharma: 10

Sameer Bakhshi: 24

Prabhat Singh Malik: 2

Sameer Rastogi: 2

Raja Pramanik: 2

Chandra Prakash Prasad: 3

Atul Batra: 1

Lalit Kumar: 6

1. EBMT Global Collobarations: East and West raising the bar together: The Indian perspective, 43rd EBMT Annual Meeting, 29 April 2017, Marseille, France
2. Managing myeloma with limited recourses, 16th International Myeloma Workshop, 4 March 2017, New Delhi
3. Autologous stem cell transplantation for multiple myeloma—Why, When and How myeloma, State of Art, 30 September 2016, PGIMER, Chandigarh
4. New avenues in biomedical research: The Road Ahead, Cancer Therapy, Department of DBT, 18 June 2016, GCRI, Ahmedabad, Gujarat
5. International myelmoa collaboration—The Indian perspective, 2nd World Congress on Controversies in Multiple Myeloma, 28–30 April 2016, Paris, France
6. Role of transplant for myeloma in the era of novel agents, 12th Indian Stem Cell Transplantation Group Meeting, 5 March 2016, CMC, Vellore

Atul Sharma: 10

1. Optimizing treatments in locally advanced gallbladder cancer, Annual Meeting of Asian Clinical Oncology Society, 8–10 April 2016, New Delhi
2. Does evidence support the use of chemoradiotherapy in biliary tract cancers? Controversies in Clinical Oncology, 22 & 23 July 2016, Kolkata
3. Epidemiology of gastric cancer—Global and Indian perspectives, Gastric cancer latest advances, 21 August 2016, Kolkata
4. How do I treat CLPD? CME Series on Haemato-Oncopathology, 24 July 2016, AIIMS, New Delhi
5. Panelist—Measures to combat antibiotic resistance, CME on Antibiotic Resistance: Renewed Fears, 10 September 2016, India International Centre, New Delhi
6. Treatment algorithm in metastatic colo-rectal cancer, Society of Medical Oncology of India, AIIMS Alumni Meet, 19 & 20 November 2016, AIIMS, New Delhi
7. Familial gastrointestinal cancer—The Indian perspective, Third International Conference on Birth Defects, 10 December 2016, AIIMS, New Delhi
8. Discussion towards a consensus statement in management of colorectal cancer, Evidence Based Management 2017, 25 & 26 February 2017, TMH, Mumbai
9. Who should be treated, Stage II colon cancer, Cochin Oncology, Butterfly Foundation and Indian Society of Nanomedicine, 10–12 March 2017, Kerala
10. Targeted and immune-therapy in gastric cancer, Indian Co-operative Oncology Network Conference (ICON), 25 & 26 March 2017, Lucknow

Sameer Bakhshi: 24

1. Metronomics in Cancer Therapy, 35th Annual Convention of Indian Association for Cancer Research, 10 April 2016, Delhi
2. Osteosarcoma in resource limited setting (web based talk), 1st International Pediatric Oncology Conference, 21 April 2016, From Office at AIIMS, Karachi
3. Refractory/metastatic disease—Should we call it a day!!! Workshop on Paediatric Solid Tumors, 22 & 23 April 2016, Tata Memorial Hospital, Mumbai
4. Stem cells in treating malignancies, SYSCON 2016, 26 May 2016, AIIMS, New Delhi
5. Recent advances in management and prognostication of sarcomas, The International Cancer Congress, 10 July 2016, Nagpur Cancer Hospital and Research Institute, Nagpur
6. Acute leukemia: My treatment algorithm, CME Series on Hemato-Oncopathology 2016, 23 & 24 July 2016, AIIMS, New Delhi
7. Cancer medicine: Advances in therapeutics, 6th Orientation Programme, 26 July 2016, HRDC, JNU, New Delhi
8. Expanding role of stem cells in pediatric malignant and benign conditions, 4th Dr I.C. Verma Excellence in Research Award 2016, 18 September 2016, Sir Ganga Ram Hospital, New Delhi
9. Advances in cancer medicine and planning research, BSc (Hons.) Biochemistry students, 20 September 2016, Shivaji College, New Delhi
10. Research, Recent advances and InPOG, 1st Paediatric Haematology Oncology Support Services Conference, 4 November 2016, Tata Memorial Hospital, Mumbai

11. Metastatic osteosarcoma: End of the road? Osteosarcoma Update 2016, 12 November 2016, Rajiv Gandhi Cancer Institute and Research Centre, New Delhi
12. Cancer is preventable and potentially curable, Ministry of Health and Family Welfare to deliver a public lecture on cancer, 20 November 2016, India International Trade Fair, New Delhi
13. Reformations and future readiness: Clinical trial regulations, Indian Society for Clinical Research, 22 December 2016, India Habitat Center, New Delhi
14. Cancer medicine: Advances in therapeutics, 1st Refresher Course in Chemistry, 4 January 2017, UGC-HRDC, JNU, New Delhi
15. Advance in ALL therapies (Includes immunotherapy and targeted therapy), Bridging the Gap 2017 Hematologic Malignancies, 11 January 2017, Gurgaon
16. Immune therapy in cancer: Is it a revolution in the making? Inaugural Conference of Pediatric Research and Education Society of India, 15 January 2017, AIIMS, New Delhi
17. Research opportunities in pediatric practice, 54th National Conference of India Academy of Pediatrics (PEDICON 2017), 21 January 2017, Gayathri Vihar, Palace Grounds, Bangalore
18. Germ cell tumors, Master classes in paediatric surgical oncology, 1–4 February 2017, JIPMER, Puducherry
19. Chemotherapy, immunotherapy and new treatment, Thoracic tumors, Renal tumor, Non-genitourinary RMS, Genitourinary RMS, Liver tumors, Master classes in paediatric surgical oncology, 1–4 February 2017, JIPMER, Puducherry
20. Expectations of ethics committees, Bioethics Workshop, 10 March 2017, AIIMS, New Delhi
21. Chemotherapy in soft tissue sarcomas: Current evidence, 3rd Annual Conference of the Indian Musculoskeletal Oncology Society, 11 March 2017, Varanasi
22. Environmental toxins and childhood cancer: Is there a connection? Brain Storming Session on Environmental Pollution: Impact on Women and Child Health, 24 March 2017, Indian Institute Toxicological Research, Lucknow
23. 5 year updates in neo/adjuvant/metastatic chemotherapy of STS, 36th Indian Cooperative Oncology Network Conference, 25 & 26 March 2017, Indira Gandhi Prathisthan, Lucknow
24. Is metronomic therapy the answer in refractory pediatric solid tumors? 36th Indian Cooperative Oncology Network Conference, 25 & 26 March 2017, Indira Gandhi Prathisthan, Lucknow

Prabhat Singh Malik: 2

1. Management of advanced NSCLC: A model for personalized medicine, 60th State Conference of IMA and Pre-conference CME, 20 November 2015, SS Medical College, Rewa, MP
2. Addition of Bevacizumab in current standard of care in advanced non squamous NSCLC, Lung Cancer Update, 13 February 2016, Chandigarh

Sameer Rastogi: 2

1. Establishing clinical genetic services in sarcoma clinic: Report from AIIMS, 3rd Indian Cancer Genetics Conference, 7–11 December 2016, Tata Memorial Centre, Mumbai
2. Debate against the use of high dose methotrexate in non-metastatic osteosarcoma, Osteosarcoma Update 2016, New Delhi

Raja Pramanik: 2

1. Introduction and basic principles of chemotherapy, Oncology Nursing Update, 20 February 2017, CMET, AIIMS, New Delhi
2. Hematopoietic stem cell transplantation, Types, care of patient before during and after transplant, 6 February 2017, BSc Nursing students, College of Nursing, AIIMS

Chandra Prakash Prasad: 3

1. Cancer therapeutics: Targeting WNT-5A signaling, 2 April 2017, Department of Biotechnology, Graphic, Era University, Dehradun
2. WNT-5A signaling: Potential therapeutic target for cancer treatment, 11 April 2016, Department of Biochemistry, AIIMS, New Delhi
3. Clinical potential of reconstituting deficient WNT-5A signaling as an anti-metastatic therapy, 12 September 2017, Centre for biotechnology, Faridabad

Atul Batra: 1

1. Acute leukemia: Diagnosis and management, 6 February 2017, BSc Nursing students, College of Nursing, AIIMS

Medical Physics**Pratik Kumar: 9**

1. Installation of a CT scan: Statutory compliances, planning and installation, 30 April 2016, Department of Hospital Administration, AIIMS, New Delhi
2. Medical physics education: Upcoming challenges, Symposium on Medical Physics Education, 9 July 2016, UCMS and GTB Hospital, Delhi
3. Regulatory environment in India: AERB issues, CME on Radiological Physics and Recent Technological Advances, 15 & 16 October 2016, GB Pant Hospital, New Delhi
4. Image quality in conventional radiology, CME on Radiological Physics and Recent Technological Advances, 15 & 16 October 2016, GB Pant Hospital, New Delhi
5. Ultrasound and doppler: Basic principles, transducer technology and image optimisation, CME on Radiological Physics and Recent Technological Advances, 15 & 16 October 2016, GB Pant Hospital, New Delhi
6. Optically stimulated luminescence (OSL) system as online real-time radiation dosimeter: A review, Annual Conference of Association of Medical Physicists of India, Northern Chapter, 25 & 26 February 2017, UCMS and GTB Hospital, Delhi
7. Medical physics: Application of radiation in medicine, Golden Jubilee Lecture Series on Physics for Society, 23 March 2017, Gargi College, New Delhi
8. Basics of radiation protection as applicable to radiology, 22 February 2017, SGT University, Gurgaon
9. Studies of coronary artery atherosclerotic plaque in cadaver samples using SEM-EDS, Seventh Symposium on Frontiers in Molecular Medicine, 23 & 24 March 2017, Special Center for Molecular Medicine, JNU, New Delhi

Radiodiagnosis**Sanjay Thulkar: 8****Chandrashekhara S: 5****Mukesh Kumar: 4****Ekta Dhamija: 2****Sanjay Thulkar: 8**

1. How I do it: Basics of ultrasound guided breast interventions, Mid-term CME of Breast Imaging Society of India—Comprehensive review of breast imaging, 22 April 2016, Medanta the Medicity, Gurgaon
2. Carcinoma of ovary: Role of imaging in resectability assessment and detection of recurrence, Cadaver Workshop and CME Gyne Oncology under FOGSI Oncology Committee, 23 & 24 April 2016, JPNATC, AIIMS, New Delhi
3. Basic principles of USG: Why ultrasound for nerve blocks', International Conference on Recent Advances in Pain, 25–28 August 2016, Kolkata
4. Ultrasound guided breast interventions: Beyond biopsy, 4th Annual Conference of Breast Imaging Society of India, 11–13 November 2016, PGIMER, Chandigarh
5. Ultrasound evaluation of adnexal masses, Silver Jubilee Conference of Association of Gynecologic Oncologists of India AGOICON, 2–4 December 2016, Gurgaon
6. USG guided chronic pain procedure, 32nd Annual National Conference of Indian Society for the study of Pain, 3–5 February 2017, SMS Medical College, Jaipur
7. Who should get a neuroaxial intervention in palliative care in India, 24th International Palliative Care Conference, 10–12 February 2017, Coimbatore
8. Assessment of the chronic pain patient, Role of Ultrasound, International Association of Study of Pain (IASP), Indian Society of Study of Pain (ISSP) multidisciplinary evidence based pain management program, 10 & 11 March 2017, AIIMS, New Delhi

Chandrashekhara S: 5

1. CT guided nerve blocks, AIIMS CT guided interventions CME, 9 & 10 April 2016, AIIMS, New Delhi
2. Imaging in mediastinal mass, Pediatric Chest CME and workshop, 30 & 31 July 2016, AIIMS, New Delhi
3. Pediatric chest imaging quiz, Respicon Conference, 18 November 2016, LHMC, New Delhi
4. Local tumor ablation workshop, International Symposium on Urologic Imaging and Intervention, 27–29 January 2017, AIIMS, New Delhi

5. Pre procedure work up and patient preparation in PTBD, Ultrasound and fluoroscopy interventions CME, 8 April 2017, AIIMS, New Delhi

Mukesh Kumar: 4

1. CT guided biopsy: Basics and hardware, AIIMS CT Guided Interventions CME, 9 & 10 April 2016, AIIMS, New Delhi
2. Imaging in mediastinal mass, Pediatric chest CME and workshop, 30 & 31 July 2016, AIIMS, New Delhi
3. Vascular interventions in genitourinary tract, International Symposium on Urologic Imaging and Intervention, 27–29 January 2017, AIIMS, New Delhi
4. Biopsy, Basics and advances, 1st Annual Meeting of Nepalese Society of Vascular and Interventional Radiology, 10–12 November 2016, Kathmandu, Nepal

Ekta Dhamija: 2

1. Image guided nerve blocks, AIIMS CT Guided Interventions CME, 9 & 10 April 2016, AIIMS, New Delhi
2. Ultrasound guided VAB, 4th Annual Conference of Breast Imaging Society of India, 11–13 November 2016, PGIMER, Chandigarh

Radiation Oncology

G.K. Rath: 12

Subhash Chander: 4

D.N. Sharma: 6

Sushmita Pathy: 1

Subhash Gupta: 3

Haresh K.P.: 8

Rambha Pandey: 6

Ahitagni Biswas: 3

GK Rath: 12

1. Guest lecture, NEC, Pink chain Cancer Conclave, 16–23 April 2016, Shillong
2. Current scenario of National Cancer Control Programme in India, Government Royapettah Hospital, 20 April 2016, Chennai
3. Overview of prevention and early detection of oral cancer, Multidisciplinary Cancer Symposium, Oral cancer, 9 & 10 July 2016, Patel Hospital, Jalandhar, Punjab
4. National cancer control programme in India, Cancer awareness programme, 27 August 2016, Eden Medical Centre, Dimapur, Nagaland
5. Cancer screening in India: State of the science and future directions, 5–7 September 2016, RCC, Agartala
6. Cancer care: Where does India stand and the road ahead, Conference on Lung Cancer, 3 September 2016, Lbnroh, Nzaroi, SMVDU, Jammu
7. Addressing tech innovation in health care, Panelist, Medical Electronics innovation summit, MEIS India, 20–23 September 2016, IIT Mumbai
8. Lung cancer, Till now and way forward, Orientation programme on early detection of common cancers, 12 December 2016, NCD, Rajasthan
9. Lung cancer state level seminar, Attended, Lung cancer state level seminar, 30 November 2016, NHM, Lucknow
10. New ways of caring for cancer patients, Chair, 2nd French, Indian Public and Medical Innovation Forum Conference, 17 & 18 November 2016, Toulouse, France
11. Leading innovations and nurturing academics for consensus (LINAC), AROICON, 24–27 November 2016, Bhubaneswar, Odisha
12. International convention for scientific, medical and technological advances in health care, Attended, International convention for scientific, medical and technological advances in health care, 23–25 November 2016, Indian Institute of Science, Bengaluru

Subhash Chander: 4

1. Lecture delivered at 37th the Annual Conference of Association of Medical Physicists of India, 18–20 November 2016, Hyderabad
2. Lecture delivered at 45th National Conference of Association of Indian Association of Dermatologists, Venereologists and Leprologists, 12–15 January 2017, Kolkata
3. Lecture delivered at 7th International Conference on Stem Cells and Cancer, Proliferation, Differentiation and Apoptosis, 21–23 October 2016, Goa

- Lecture delivered at 12th SAARC, AA and 33rd Annual Academic Congress of the College of Anaesthesiologists and Intensivists of Sri Lanka, 24–26 February 2017, BMICH, Colombo, Sri Lanka

DN Sharma: 6

- Gynae brachytherapy course, 1st AROI-ESTRO, 8–11 March 2017, Bangalore
- Expert group Meeting for formulation of NCG guidelines for management of cervical cancers, 15th Conference of Evidence Based Management of Cancers in India, EBM, 24–25 February 2017, Mumbai
- Panel discussion member on cervical cancer, 15th Conference of Evidence Based Management of Cancers in India, EBM, 24 & 25 February 2017, Mumbai
- Brachytherapy for head neck cancer: Art of practice, Key note lecture, IGSHNO, 24–26 February 2017, Jaipur
- Lecture delivered at 38th Annual Conference of Association of Radiation Oncologists of India, 24–27 November 2016, Bhubaneswar
- Teaching faculty for Indian College of Radiation Oncology (ICRO), 5–6 November 2016, Guwahati
- Presenting scientific paper, Annual Conference of American Society for Radiation Oncology, 25–28 September 2016, Boston, USA

Sushmita Pathy: 1

- Challenges in management of locally advanced non-small cell lung cancer, Clinical grand round, 17 January 2017, AIIMS, New Delhi

Subhash Gupta: 3

- Role of SRS in malignant brain tumors, YROC, 27–29 January 2017, Geetanjali Cancer Centre, Udaipur
- Panelist: Open versus minimal invasive approach in laryngeal cancer surgery, IGSHNO, 22 February 2017, Jaipur
- Chaired the session: Pelvic OARs, Dose constraints and plan evaluation, BHMRC ONCO, CON, 17–19 March 2017, New Delhi

Haresh KP: 8

- Initial results of HDR brachytherapy in prostate cancer, AIIMS experience, International Prostate Cancer Brachytherapy Symposium, 17 March 2017, PD Hinduja Hospital, Mumbai
- Advantages of newer techniques in radiotherapy for breast cancer, Breast Cancer Update, 19 November 2016, IGIMS, Patna
- Adjuvant treatment in breast cancer, AIIMS Breast Teaching Course, 3 March 2016, AIIMS, New Delhi
- Panel, Concurrent cetuximab in H & N radiotherapy, 38th AROICON, 24–27 November 2016, Bhubaneswar
- Panel, CNS radiosurgery: Benign lesions, 5th National Conference of Young Radiation Oncologists of India, 27 January 2017, Geetanjali Cancer Center, Udaipur
- Panel, LABC: Breast Cancer Update, 19 November 2016, IGIMS, Patna
- New OAR's coming into focus with longer survival, advanced imaging and precision radiotherapy, BHMRC ONCO, CON, 19 March 2017, New Delhi
- Hormonal therapy and novel agents in metastatic breast cancer, Breast Cancer Update, 19 November 2016, IGIMS, Patna

Rambha Pandey: 6

- Panel discussion on palliation in locally advanced unresectable oesophageal cancer, stent/laser/RT/management of tracheoesophageal fistula, Asian Clinical Oncology Society, 8–10 April 2016, New Delhi
- Advances in radiotherapy: What a general surgeon should know? Surgery Update, 27 September 2016, Maulana Azad Medical College, New Delhi
- Role of radiotherapy in the management of thyroid cancer, National Symposium on Thyroid Cancer, 24 September 2016, New Delhi
- Panelist: Retroperitoneal liposarcoma, ISMPOCON, 5 November 2016, New Delhi
- Panelist: Oncofertility—The need of the hour, International Gynae Cancer Congress, 19 February 2017, New Delhi
- Talk on 1. “Adjuvant radiation therapy in Lung cancer, 2. Panel discussion as a panelists on “lung cancer: Controversies and consensus”, AIIMS Symposium on Thoracic Surgery, 21 & 22 January 2017, AIIMS, New Delhi

Ahitagni Biswas: 3

1. Introduction to radiotherapy and management of radiotherapy related complications, Oncology Nursing Update, 20 February 2017, AIIMS, New Delhi
2. Organ at risk in head and neck malignancy, Imaging and contouring, BHMRC Oncocon, 19 March 2017, New Delhi
3. Radiotherapy in retinoblastoma: Old and new, 2nd Annual Paediatric Solid Tumour Workshop, 29 April 2017, Tata Memorial Hospital, Mumbai

Surgical Oncology**NK Shukla: 6****SVS Deo: 17****Sunil Kumar: 4****MD Ray: 10****NK Shukla: 6**

1. Limb conservation in extremity sarcomas, 30th National Conference of IASO, 22–25 September 2016, AIIMS, Jodhpur
2. Current status of surgical oncology facility in India, 2nd Annual Conference of INDO-FRANCH Academy, 16 & 17 November 2016, Toulouse Cancer Centre, Paris
3. Data of Delhi PBCR, Annual Review Meeting of NCDIR-NCRP, 11 & 12 November 2016, Naga Hospital, Kohima, Nagaland
4. Mediastinum and chest wall, Symposium on Thoracic Surgery, 21 & 22 January 2017, AIIMS, New Delhi
5. Axillary surgery and oncoplastic breast conservation, 16th Annual International Conference RGCON, 3–5 February 2017, RGCI and Research Centre, New Delhi
6. Gynae Oncology under the aegis of FOGSI Oncology Committee and AGOI, 3rd Cadaver Workshop and CME, 11 & 12 February 2017, AIIMS, New Delhi

SVS Deo: 17

1. Mammo-surgery, New vistas, 12th International Conference of the Asian Clinical Oncology Society, 8–10 April 2016, New Delhi
2. Recent advances in breast cancer management, Faculty grand round, 4 May 2016, King George's Medical University, Lucknow
3. Moderator for panel discussion on early breast cancer, Annual Conference of the Association of Breast Surgeons of India, 1–3 July 2016, Bengaluru
4. Management of chest wall recurrences, Annual Conference: Controversies in Clinical Oncology, 23 & 24 July 2016, TMC, Kolkata
5. Status oncoplastic surgery in India, Moderating a Surgical Workshop, Panelists for Oncoplasty, 3rd Indo-British Advanced Master, Class in Oncoplastic Breast Surgery and Breast Cancer Symposium, 5–7 August 2016, Pune
6. ABC of breast health care, Annual Conference of ASI A.P. Chapter, 25 August 2016, Gitam University, Vishakhapatnam
7. Standardization in surgical oncology training and curriculum in India, 30th Annual National Conference of Indian Association of Surgical Oncology NATCON, IASO, 22–25 September 2016, Jodhpur
8. Head and Neck cancer surgery using ultrasonic energy panel discussion, Thyroid Cancer, IFHNOS Delhi, 13–15 October 2016, New Delhi
9. Cancer epidemiology and cancer registry activities in India, 2nd AIIMS, French Academy of Medicine Conference, 17 & 18 November 2016, Toulouse Cancer Centre, Toulouse, France
10. Surgery versus SRBT for early lung cancer, 38th Annual Conference of Association of Radiation Oncologists of India, 24–27 November 2016, Bhubaneswar
11. Panel discussion based on clinical scenarios in Oncology, 76th Annual Conference of the Association of Surgeons of India, ASICON 2016, 14–18 December 2016, Mysore
12. Land mark trials in CRS and HIPEC, 76th Annual Conference of the Association of Surgeons of India, ASICON 2016, 14–18 December 2016, Mysore
13. CRS and HIPEC, AIIMS experience, 76th Annual Conference of the Association of Surgeons of India, ASICON 2016, 14–18 December 2016, Mysore
14. International course and operative workshop on HIPEC and Peritoneal Surface Malignancies, 8 & 9 February 2017, Manipal Hospitals, Bengaluru
15. Basics of breast oncoplasty, Volume replacement oncoplasty, 2nd hands on Course of Breast Imaging and Oncoplasty workshop, 18 & 19 February 2017, Meril Institute, Vapi, Gujarat

16. Surgical management of advanced breast cancer, Breast Cancer CME, 18 March 2017, King George's Medical University, Lucknow
17. Role of surgery in LABC and MBC, Breast Oncology CME, 1 & 2 April 2017, Himalayan Institute of Medical Sciences, Jollygrant

Sunil Kumar: 4

1. Current status of pulmonary metastectomy, Annual Conference of Indian Society for Study of Lung Cancer, January 2017, Bhubaneswar
2. Right lower lobectomy for lung cancer: Video, Annual Conference of Indian Society for Study of Lung Cancer, January 2017, Bhubaneswar
3. Surgical management of periampullary cancer, CME, February 2017, AIIMS, New Delhi
4. Moderation of live surgery workshop: Left lower lobectomy for lung cancer, Live surgical workshop, November 2016, Tata Memorial Hospital, Mumbai

MD Ray: 10

1. Live workshop, ACOS 2016 Cancer in Asia: Bridging the Gaps, Live Cytoreductive surgery and HIPEC Workshop, 6 & 7 April 2016, Delhi
2. Conference, ACOS 2016 Cancer in Asia: Bridging the Gaps, 12th International Conference of the Asian Clinical Oncology Society and 35th Annual Convention of Indian Association for Cancer Research and Mid-term Conference of IASO, 8–10 April 2016, Delhi
3. 2nd Cadaver Dissection Workshop and CME in Gynae Oncology (CaDGO) (under the aegis of AGOI and FOGSI Oncology Committee), 23 & 24 April 2016, AIIMS, Delhi
4. Hands on training of colposcopy and hysteroscopy by B'ORZE-USA and HEAGER, Germany and Srushti Hospital and Fertility Research Centre, 16–18 June 2016, Chennai
5. Invited lecture in 10th International Congress on Peritoneal Surface Malignancies, 17–19 November 2016, Washington, DC, USA
6. Invited lecture in 76th Annual Conference of The Association of Surgeons of India, ASICON, 14–18 December 2016, Mysuru, Karnataka
7. Invited lecture in 6th International Science Conference hosted by World Science Congress. 23–25 December 2016, PGIMER, Dr RML Hospital, New Delhi
8. Workshop: 3rd Cadaver Workshop and CME Gynae Oncology under the aegis of FOGSI Oncology Committee and AGOI, 11 & 12 February 2017, AIIMS, New Delhi
9. Invited lecture in International Gynae Cancer Congress 2017, 18 & 19 February 2017, Dharamshila Hospital and India Habitat Centre, Lodhi Road, New Delhi
10. Cancer burden in India and its prevention, 8th National Science Conference of World Science Congress, 15–18 March 2017, Kolkata

Oral papers/posters presented

Onco-Anesthesia and Palliative Medicine: 8

1. Satija A, Singh V, Singh SP, Mishra S, Bhatnagar S. The impact of pain on quality of life of patients with advanced cancer, IAPCON 2016, 2–14 February 2016, Pune
2. Singh SP, Satija A, Singh V, Mishra S, Bhatnagar S. Evaluation of Total pain in cancer patients in Indian context: A pilot study, IAPCON 2016, 2–14 February 2016, Pune
3. Mishra S, Bhatnagar S. A comparative efficacy of epidural triamcinolone and betamethasone for lumbosacral radicular pain in cancer patients: A prospective randomized study, 16th World Congress on Pain, 26–30 September 2016, Yokohama, Japan
4. Mishra S. Palliative care in developing countries, 2017 Annual Assembly, Hospice and Palliative Care, 22–25 February 2017, Phoenix, AZ
5. Huda W, Garg R, Babbar S, Bhatnagar S, Mishra S, Gupta N, Kumar V, Bharati SJ. Traditional Tracheal Suctioning (TTS) versus Protected Telescoping Catheter Suctioning (PTCS) for diagnosing VAP (ventilator associated pneumonia) in mechanically ventilated patients, 23rd Annual Conference of Indian Society of Critical Care Medicine, 3–5 February 2017, Kochi, Kerala
6. Dr Gupta N, Dr Sahoo P, Dr Sachidanand, Dr Madan K. Fiberoptic guided blue Rhino dilator assisted dilatation of post intubation tracheal stenosis: A novel technique, Video presentation in ISACON 2016 (awarded best video presentation), 25–29 November 2016, Punjab Agricultural University, Ludhiana

7. Garg R, Gupta N, Kumar V, Bharati SJ, Bhatnagar S, Deo SVS, Jaiswal R. Impact of nutritional status on length of hospital stay in adult patients undergoing cancer surgeries: Prospective observational study, 4th Global Conference on Perioperative Care of the Cancer Patients, 23–25 November 2016, Royal Marsden NHS Foundation Trust, London
8. Bharati SJ. Aprepitant versus dexamethasone for preventing postoperative nausea and vomiting in breast cancer patients, 4th Global Conference on Perioperative Care of the Cancer Patients, 23–25 November 2016, Royal Marsden NHS Foundation Trust, London

Delhi Cancer Registry: 3

1. Shukla NK, Manoharan N, Rath GK. Delhi PBCR, XXXII Annual Review Meeting of National Cancer Registry Programme, 11 November 2016, Naga Hospital Authority, Kohima, Nagaland
2. Deo SVS, Manoharan N, Rath GK, HBCR, Dr Brairch. XXXII Annual Review Meeting of National Cancer Registry Programme, 12 November 2016, Naga Hospital Authority, Kohima, Nagaland
3. Manoharan N, Deo SVS, Rath GK. Hospital Based Cancer Registry in RCC, Dr Brairch, Project Review Meeting of HBCR in RCC's under NCDIR, 1 February 2016, National Centre for Disease Informatics and Research, ICMR, Bangalore

Laboratory Oncology: 8

1. Gupta SK, Bakhshi S, Kumar L, Kumar R. Utility of multiplex ligation dependent probe amplification (MLPA) and fluorescent multiplex PCR for detection of IKZF1 deletions in BALL, 29th Conference of International Society of Lab Hematology, 12 May 2016, MiCo Milano Congressi, Milan, Italy
2. Gupta SK, Ranjan A, Bakhshi S. Early T-cell Precursor ALL (ETP-ALL) with aberrant B-cell markers: A diagnostic challenge, 27th Annual Conference of DSH, 25 September 2016, Delhi
3. Gupta SK, Bakhshi S, Kumar L, Kumar R. IKZF1 (IKAROS) deletion profile in B-cell acute lymphoblastic leukemia (B-ALL) and its clinical correlation, 57th Annual Conference of ISHBT, 10–13 November 2016, Jaipur
4. Gupta SK, Kumar L. Flow cytometry as an adjunctive technique in myelomatous pleural effusion: Two cases, International CME in Pathology, 2–4 February 2017, Institute of Nursing Education, Goa
5. Ranjan A, Pramanik R, Tanwar P. Waldenstrom Macroglobulinemia, 12th International Conference of the Asian Clinical Oncology Society; 8–10 April 2016, New Delhi
6. Ranjan A, Pramanik R, Tanwar P. D/D of Plasmablastic myeloma and Plasma cell myeloma, Pan Pacific Lymphoma Conference, 18–22 July 2016, Hawaii, USA
7. Ranjan A, Tanwar P. Diagnosis of Lymphoplasmacytic Lymphoma, Hematocon, 10–13 November 2016, Jaipur
8. Ranjan A. Diagnosis of marginal zone lymphoma, Pathocon and Lab Expo, 24–15 December 2016; New Delhi

Medical Oncology: 43

1. Cheng AL, Cornelio GH, Shen L, Price TJ, Yang TS, Chung IJ, Dai G, Lin JK, Sharma A, et al. Association between early tumor shrinkage and outcomes in *RAS*-wild type patients with metastatic colorectal cancer receiving first-line FOLFOX or FOLFIRI + cetuximab once every 2 weeks in the APEC study, Annual Meeting of Asian Clinical Oncology Society, 8–10 April 2016, New Delhi
2. Madan R, Bhasker S, Benson R, Thakar A, Sharma A, Mohanti BK. Clinical audit of head and neck cancer patients treated at a tertiary care center, FHNO-IFHNOS Joint Meeting Delhi, 12–15 October 2016, New Delhi
3. Madan R, Bhasker S, Benson R, Thakar A, Sharma A, Mohanti BK. Audit of carcinoma larynx from a tertiary care center in India: Management, compliance and outcome, FHNO-IFHNOS Joint Meeting Delhi, 12–15 October 2016, New Delhi
4. Jyoti S, Deo SVS, Shukla NK, Sultania M, Sharma A, Sahoo R, Bhasker A. Radical surgery with postoperative radiotherapy in 64 Cases of locally advanced retromolar trigone tumors, FHNO-IFHNOS Joint Meeting Delhi, 12–15 October 2016, New Delhi
5. Gupta R, Dahiya M, Mathur N, Kumar L, Sharma A, Kaur G, Shekhar V. Immunophenotyping patterns of plasma cells in plasma cell proliferative disorders, 16th IMMOW, 1–4 March 2017, New Delhi
6. Alampally J, Kandasamy D, Sharma R, Bakhshi S, Sreenivas V. Early response assessment of neo-adjuvant chemotherapy in Ewing sarcoma family of tumors: Does diffusion weighted imaging help? 72nd Korean Congress of Radiology, 23 September 2016, Korea
7. Biswas A, Julka P, Bakhshi S, Singh M, Rath G. Treatment outcome in patients of primary central nervous system germ cell tumour: Clinical experience from a regional cancer centre in north India, 17th International Symposium on Pediatric Neuro-Oncology (ISPNO), 12–15 June 2016, Liverpool, United Kingdom

8. Sharma A, Tilak TVSVGK, Bakhshi S, Raina V, Kumar L, Sahoo RK, Gupta R. Lactobacillus brevis CD2 lozenges prevent oral mucositis in patients undergoing high dose chemotherapy followed by haematopoietic stem cell transplantation, ESMO 2016 Congress, 7–11 October 2016, Denmark
9. Soni D, Agarwala S, Bakhshi S, Biswas A, Bisoi A, Srinivas M, Bajpai M, Bhatnagar V, Gupta DK. Long-term outcome of children with Wilms Tumor having inferior vena caval thrombus, 48th Congress of the International Society of Paediatric Oncology, 19–22 October 2016, Dublin, Ireland
10. Bakhshi S, Bhethanabhotla S, Kumar R, Agarwal K, Sharma P, Thulkar S, Malhotra A, Dhawan D, Vishnubhatla S. Post-treatment PET-CT rather than interim PET-CT using Deauville criteria predicts outcome in pediatric Hodgkin lymphoma: A prospective study comparing PET-CT versus conventional imaging, 48th Congress of the International Society of Paediatric Oncology, 19–22 October 2016, Dublin, Ireland
11. Dhua A, Agarwala S, Bakhshi S, Jana M, Srinivas M, Bhatnagar V. Irinotecan as salvage therapy for recurrent Hepatoblastoma, 48th Congress of the International Society of Paediatric Oncology, 19–22 October 2016, Dublin, Ireland
12. *Gupta VG, Srivastava R, Dhawan D, Geeta K, Bakhshi S. Nutritional ignorance and restrictions among families of children with cancer: A cross-sectional study of 700 families, 48th Congress of the International Society of Paediatric Oncology, 19–22 October 2016, Dublin, Ireland
13. *Pramanik R, Batra A, Bakhshi S, Thulkar S, Sreenivas V, Dhawan D, Agarwala S, Gupta YK. Progressive paediatric solid tumors other than bone-sarcomas benefit from metronomic chemotherapy: A subgroup analysis from a double blind placebo controlled randomized study, 48th Congress of the International Society of Paediatric Oncology, 19–22 October 2016, Dublin, Ireland
14. Mitra A, Agarwala S, Bakhshi S, Biswas A, Srinivas M, Bajpai M, Jana M, Bhatnagar V, Gupta DK. Evaluating urologic outcomes in the survivors of Rhabdomyosarcoma bladder prostate: 14 years experience at a tertiary care centre, 48th Congress of the International Society of Paediatric Oncology, 19–22 October 2016, Dublin, Ireland
15. Arora A, Kumar M, Bhattacharjee B, Paul R, Nair SC, Biswas B, Rastogi S, Bakhshi S. Improved compliance of out patient visit with use of active database management and help of nursing staff in pediatric cancer patients, 48th Congress of the International Society of Paediatric Oncology, 19–22 October 2016, Dublin, Ireland
16. Bhethanabhotla S, Sandeep J, Kapoor G, Mahajan A, Chopra A, Vishnubhatla S, Bakhshi S. Risk factors for predicting survival in pediatric advanced Hodgkin Lymphoma treated with ABVD: A multicenter study of 186 patients, 48th Congress of the International Society of Paediatric Oncology, 19–22 October 2016, Dublin, Ireland
17. Patel A, Biswas B, Kumari M, Bakhshi S. Prognostic significance of “B” symptoms in pediatric T-lymphoblastic lymphoma: An analysis of 46 patients treated with BFM-90 LL Protocol, 48th Congress of the International Society of Paediatric Oncology, 19–22 October 2016, Dublin, Ireland
18. Bhattacharjee B, Kumar M, Paul R, Arora A, Nair SC, Biswas B, Rastogi S, Bakhshi S. Role of nursing staff in out-patient management of pediatric low-risk febrile neutropenia: A single institutional prospective observational study, 48th Congress of the International Society of Paediatric Oncology, 19–22 October 2016, Dublin, Ireland
19. Young breast cancer, 48th Congress of the International Society of Paediatric Oncology, 19–22 October 2016, Dublin, Ireland
20. Mehta P, Kumar L, Raina V, Sharma A, Bakhshi S, Gogia A, Sahoo RK, Pabbi S, Chopra A, Kumar R. High dose (18 g/m²) versus low dose (12 g/m²) cytosine arabinoside as consolidation for acute myeloid leukemia: A phase 3 study: An interim analysis, 12th International Conference of Asian Clinical Oncology Society, 25–29 September 2016, Vienna, Austria
21. Tsvvgk T, Kumar L, Sharma A, Bakhsh S, Sahoo RK, Kayal S, Cahudhary S, Raina V. Clinical features and outcome of relapsed refractory aggressive peripheral T-cell lymphoma: A ten year study from a single institute in India, ISMPO 2015, 6–8 November 2015, Mumbai
22. Kumar L, Boya RR, Pai R, Sainath B, Sahoo RK, Malik PS, Mookerjee A, Malik S, Gupta R, Sharma OD, Sreenivas V, Gogia A. Autologous stem cell transplantation (ASCT) for multiple myeloma (MM): Predictors of long term outcome, 15th International Myeloma Workshop, 23–26 September 2016, Rome
23. Kumar V, Kumar S, Malik P, Deo SVS, Shukla NK, Pandey D, Jain D. Surgery after neoadjuvant chemotherapy: What determines the outcome? 12th International Conference of Asian Clinical Oncology Society, 6–8 April 2016, New Delhi
24. Jain D, Jangra K, Malik P, Sharma MC. ALK immunohistochemistry in NSCLC: Evaluation of performance of D5F3-IHC without using automated Ventana system, World Conference on Lung Cancer, 6–9 September 2015, Denver, Colorado, USA
25. Rastogi S, Bakhshi S, Biswas B. ORAL-Changing staging paradigm of rhabdomyosarcoma: Supporting data from tertiary care centre from India, Pediatric Solid tumor Workshop, 22–24 April 2016, Tata Memorial Centre, Mumbai

26. Sharma V, Kumar A, Sharma MC, Deo SVS, Sharma DN, Rastogi S. Concordance and discordance of histopathological diagnosis of patients with soft tissue sarcoma referred to tertiary care centre: Retrospective Study, ISMPOCON 2016, 5 & 6 November 2016, Delhi
27. Kaur K, Jain D, Rastogi S, Kumar S, Madan K. Primary pulmonary sarcoma: An entity lost in misdiagnosis, World Conference on lung cancer, 4–7 December 2016, Vienna
28. Singh TD, Lee SW, Jeong SY, Ahn BC, Lee J, Jeon YH. A new and highly selective inverse agonist of estrogen-related receptor gamma (ERR γ), DN434, enhances sodium iodide symporter function in mice with anaplastic thyroid cancer, American Society of Clinical Oncology, 3–7 June 2016, Chicago, United States
29. Singh TD, Lee SW, Jeong SY, Ahn BC, Lee J, Jeon YH. Inverse agonist of estrogen-related receptor gamma (ERR γ) enhances sodium iodide symporter function via mitogen-activated protein kinase signaling in papillary thyroid cancer cells, World Molecular Imaging Congress, 7–10 September 2016, New York, United States
30. Singh TD, Lee SW, Jeong SY, Ahn BC, Lee J, Jeon YH. GSK5182 enhances sodium iodide symporter function via mitogen-activated protein kinase signaling in papillary thyroid cancer cell, Society of Nuclear Medicine and Molecular imaging, 11–15 June 2016, San Diego, United States
31. Ahn SB, Singh TD, Lee SB, Oh SG, Yoon SY, Jeong SY, Lee SW, Ahn BC, Lee J and Jeon YH. Visualization of the migration of bone marrow derived dendritic cells and its antitumor effects with multimodal optical reporter gene imaging, Society of Nuclear Medicine and Molecular imaging, 11–15 June 2016, San Diego, United States
32. Oh SG, Lee HW, Singh TD, Lee SB, Ahn SB, Yoon SY, Lee SW, Jeong SY, Ahn BC, Lee J, Jeon TH. Non-invasive imaging of the biological behavior of mast cells in living mice with lung cancer using a combined optical and nuclear medicine imaging, Society of Nuclear Medicine and Molecular imaging, 11–15 June 2016, San Diego, United States
33. Lee SB, Lee HW, Singh TD, Oh SG, Ahn BC, Lim DK, Lee J, Jeon YH. The use of highly sensitive and stable radionuclide embedded gold nanoparticles for *in vivo* imaging of macrophage migration to acute inflammation, Society of Nuclear Medicine and Molecular imaging, 11–15 June 2016, San Diego, United States
34. Lee HW, Oh SW, Singh TD, Lee SB, Yoon SY, Lee SW, Jeong SY, Ahn BC, Lee J, Jeon YH. *In vivo* imaging of rapid recruitment of mast cells into inflammation lesion using an optical imaging with an enhanced firefly luciferase gene, Society of Nuclear Medicine and Molecular imaging, 11–15 June 2016, San Diego, United States
35. Singh TD, Lee SW, Jeong SY, Ahn BC, Lee J, Jeon YH. A new and highly selective inverse agonist of estrogen-related receptor gamma (ERR γ), DN434 enhances sodium iodide symporter function via mitogen-activated protein kinase signaling in Anaplastic thyroid cancer cells, Korean Society of Nuclear Medicine, 28–29 October 2016, Asan Medical Center, Seoul, South Korea
36. Oh SW, Lee HW, Singh TD, Lee SB, Ahn SB, Lee SW, Jeong SY, Ahn BC, Lee J, Jeon YH. Non-invasive visualization of mast cell recruitment and function in lung cancer by optical reporter gene imaging and glucose metabolism monitoring, Korean Society of Nuclear Medicine, 28 & 29 October 2016, Asan Medical Center, Seoul, South Korea
37. Lee SB, Singh TD, Yoon GS, Lee SW, Jeong SY, Ahn BCh, Lee J, Lim DK, Jeon YH. Combined Positron Emission Tomography and Cerenkov Luminescence Imaging of Sentinel Lymph Nodes Using PEGylated Radionuclide-Embedded Gold Nanoparticles, Korean Society of Nuclear Medicine, 28 & 29 October 2016, Asan Medical Center, Seoul, South Korea
38. Ahn SB, Singh TD, Lee SB, Oh SG, Yoon SY, Jeong SY, Ahn BC, Lee J, Lee SW, Jeon YH. Visualization of the migration of bone marrow derived dendritic cells and its antitumor effects with multimodal optical reporter gene imaging, Korean Society of Molecular Imaging, 26 February 2016, Yeosu, South Jeolla Province, South Korea
39. Mohapatra P, Linnskog R, Moradi F, Prasad CP, Södergren K and Andnerström T. Dual Interference of a WNT5A-IL6 Positive Feedback Loop Impairs Melanoma cell Invasion, Cellular signaling and Cancer therapy, 27–31 May 2016, Croatia
40. Mohapatra P, Prasad CP, Södergren K, Andnerström T. WNT5A signaling inhibits Platelet type-Phosphofructokinase thereby impairing breast cancer cell migration, 11th Annual MCC Retreat, 1 & 2 September 2016, Sweden
41. Singh M, Pal D, Burrows AC, Messina A, Dickson A, Summers MK. The deubiquitinating enzyme USP37 stabilizes Chk1 to promote the cellular response to replication stress, AACR Precision Medicine Series: Cancer Cell Cycle, Tumor Progression and Therapeutic Response, 28 February–2 March 2016, Orlando, FL USA
42. Singh MK, Burrows AC, Pal D, Dickson A, Matthew K. Summers-USP37 promote oncogenesis by stabilizing protein involved in DNA damage repair pathway and provides a novel way to modulate Chk1 activity, AACR Annual Meeting 2016, 16–20 April 2016, New Orleans, LA, USA
43. Singh M, Burrows AC, Dickson A, Matthew K. Summers-USP37 promote tolerance of Replication by stabilizing Oncoproteins, 18th Annual Midwest DNA Repair Symposium, 28–29 May 2016, The Ohio State University

Medical Physics: 3

1. Bisht R, Kale S, Natanasabapathi G, Singh M, Agarwal D, Rath GK, Julka P, Kumar P, Thulkar S, Garg A, Sharma B. Technical treatment accuracy in a clinic of fractionated stereotactic radiosurgery, 58th Annual Meeting of Association of American Physicists in Medicine (AAPM), 31 July–4 August 2016, Washington DC
2. Bisht RK, Kale SS, Gopishankar N, Singh MJ, Agarwal D, Rath GK, Julka PK, Kumar P, Garg A, Thulkar S, Sharma BS. Statistical uncertainty based optimisation of fractionated stereotactic radiosurgery using Extend system of Gamma Knife, 18th International Leksell Gamma Knife Society Meeting, 15 & 16 May 2016, Amsterdam
3. Kumar P, Mandal SR, Chandra PS. Radiation dose during intra-operative cone beam computed tomography (O-Arm) scanning during surgery of spine, 37th Annual Conference of Association of Medical Physicists of India, 18–20 November 2016, Hyderabad

Radiodiagnosis: 7

1. Thulkar S, Bhatnagar S, Dhamija E. Ultrasound guided transabdominal celiac plexus block for pain management in patients with advanced upper abdominal cancers, 67th Annual Scientific Meeting of The Royal Australasian and New Zealand college of radiologists, 13–16 October 2016, International convention center, Gold Coast, Australia
2. Dhamija E, Thulkar S, Hari S. Technical Innovation, Custom made tumor marker clip for Locally Advanced Breast Cancer, 4th Annual Conference of Breast Imaging Society of India, 11–13 November 2016, PGIMER, Chandigarh
3. Khandelwal I, Yadav R, Dhamija E, Thulkar S. Mammography and Ultrasound in evaluation of symptomatic breasts, 4th Annual Conference of Breast Imaging Society of India, 11–13 November 2016, PGIMER, Chandigarh
4. Anoop MK, Dhamija E, Thulkar S. Ultrasound guided thoracocentesis using pigtail catheter with or without pleurodesis in the palliation of recurrent/refractory malignant pleural effusions in carcinoma breast patients, 4th Annual Conference of Breast Imaging Society of India, 11–13 November 2016, PGIMER, Chandigarh
5. Das A, Dhamija E, Deo SVS, Thulkar S. Hook wire Bracketing: A Rare Technique for Pre-operative Localization of Non-palpable Multifocal Breast cancer, 4th Annual Conference of Breast Imaging Society of India, 11–13 November 2016, PGIMER, Chandigarh
6. Yadav T, Dhamija E, Thulkar S, Yadav M. CT imaging spectrum in rhabdomyosarcoma: A retrospective analysis, European congress of Radiology, 1–5 March 2017, Austria Center, Vienna, Austria
7. Singh J, Dhamija E, Thulkar S. Common and Uncommon Locations of Peripheral Primitive Neuroectodermal tumors, European congress of Radiology, 1–5 March 2017, Austria Center, Vienna, Austria

Radiation Oncology: 13

1. Sharma DN, Gandhi AK, Dutta S, Makkar N, et al. Cost Comparison of Pulsed-Dose-Rate versus High-Dose-Rate Intracavitary Brachytherapy for Cervical Carcinoma: A Mono-Institutional Economic analysis, World Congress of Brachytherapy, 27–29 June 2016, San Francisco, USA
2. Sharma DN, Rath GK, Gandhi, AK, Kumar P, et al. The best dose rate system of intracavitary brachytherapy for cervical carcinoma: A comparative study, World Congress of Brachytherapy, 27–29 June 2016, San Francisco, USA
3. Suman Bhasker, Renu Madan, Kumar RV. Oral cavity cancer in India: An audit from a tertiary care centre, 38th Asia Pacific Dental Congress, 17–19 June 2016, Hongkong
4. Pathy S, et al. Treatment compliance and outcome in geriatric patients with locally advanced non-small cell lung cancer: Experience from India, European Cancer Congress (ECCO) 2017, 27–30 January 2017, Amsterdam, Netherlands
5. Biswas A, Julka PK, Bakhshi S, Singh M, Rath GK. Treatment outcome in patients of primary central nervous system germ cell tumour: Clinical experience from a regional cancer center in north India, 17th International Symposium on Pediatric Neuro-Oncology (ISPNO), June 2016, Liverpool, UK
6. Biswas A, Julka PK, Sharma S, Binjola A, Sarkar C, Rath GK. Postoperative hypofractionated accelerated intensity modulated radiotherapy with concurrent and adjuvant temozolomide in the management of patients with newly diagnosed glioblastoma: Clinical outcome and prognostic factors, 13th Asian Society for Neuro-Oncology (ASNO)/9th COGNO Annual Scientific Meeting, September 2016, Sydney, Australia
7. Biswas A, et al. Hypofractionated accelerated intensity modulated radiotherapy with concurrent and adjuvant temozolomide in the management of patients with newly diagnosed glioblastoma: Results of a pilot study, 12th Meeting of European Association of Neuro-Oncology (EANO), October 2016, Mannheim, Germany
8. Soni D, Agarwala S, Bakhshi S, Biswas A, Bisoi A, Srinivas M, et al. Long term outcome of children with Wilms tumour (WT) having inferior vena caval thrombus (IVC-TH), 48th Congress of the International Society of Paediatric Oncology (SIOP), October 2016, Dublin, Ireland

9. Mitra A, Agarwala S, Bakhshi S, Biswas A, Srinivas M, Bajpai M, et al. Evaluating urologic outcomes in the survivors of rhabdomyosarcoma bladder prostate: 14 years of experience at a tertiary care centre, 48th Congress of the International Society of Paediatric Oncology (SIOP), October 2016, Dublin, Ireland
10. Biswas A, Julka P, Bakhshi S, Singh M, Rath G. Treatment outcome in patients of primary central nervous system germ cell tumour: Clinical experience from a regional cancer center in north India, 48th Congress of the International Society of Paediatric Oncology (SIOP), October 2016, Dublin, Ireland
11. Kumar A, Biswas B, Biswas A, Bakhshi S. Ewing sarcoma family tumors of vertebral column treated with uniform chemotherapy protocols: Experience from a tertiary cancer care center, 2nd ESMO Asia Conference, December 2016, Suntec, Singapore
12. Kumar R. Five versus six fractions of radiotherapy per week for squamous-cell carcinoma of the head and neck (IAEA-ACC study): A randomized, multicentre trial, IFHNOS 2016, FHNO 2016, 12–15 October 2016, New Delhi
13. Kumar R. Attended as a member of Indian delegation, The seventh session of the conference of the parties (COP7) (WHO), 7–12 November 2016, Greater Noida, India

Surgical Oncology: 43

1. Vinay JR, Shukla NK, Deo SVS, Kumar S, Bakshi S, Pathy S, Thulkar S. Clinical profile, treatment patterns and outcomes in locally advanced and recurrent orbital tumors a tertiary care cancer centre, FHNO-IFHNOS, 12–15 October 2016, New Delhi
2. Deo SVS, J Ashish, Shukla NK, M Dilip, Sharma DN, Gogia A, Thulkar S. How to overcome barriers to Breast Conservation Surgery: Surgical Oncology, AIIMS Experience, ABSICON, 1–3 July 2016, Bengaluru
3. Ashish J, Deo SVS, Shukla NK, Dilip M, Ajay G, Sharma DN, Sandeep M. Scope of sentinel lymph node biopsy (SLNB) in locally advanced breast cancer (LABC) among Indian Breast Cancer Population, ABSICON, 1–3 July 2016, Bengaluru
4. Ashutosh M, Deo SVS, Shukla NK, Ashish J. Thoraco-abdominal flap: A simple flap for covering large post mastectomy soft tissue defects in locally advanced breast cancer, ABSICON, 1–3 July 2016, Bengaluru
5. Sandeep B, Deo SVS, Shukla NK, Kumar R, Thulkar S. Comparison of PET-CT versus conventional staging investigations for locally advanced breast cancer: Results of a prospective study, ABSICON, 1–3 July 2016, Bengaluru
6. Ashish J, Deo SVS, Shukla NK, Mathur S, Sharma DN. Cavity shaves during breast conservation surgery: An ongoing controversy, 12th International Conference of the Asian Clinical Oncology Society (ACOS), 8–10 April 2016, New Delhi
7. Ashish J, Deo SVS, Shukla NK, Mathur S, Sharma DN. Role of post mastectomy radiotherapy (PMRT) in breast cancer patients with one-three axillary lymph nodes, 12th International Conference of the Asian Clinical Oncology Society (ACOS), 8–10 April 2016, New Delhi
8. Deo SVS, Shukla NK, Bhushan B, Sultania M, Sharma DN, Bakhshi S. Clinical profile, treatment patterns and outcome of head and neck sarcomas in a tertiary care cancer centre, IFHNOS, FHNO 2016, 13–15 October 2016, New Delhi
9. Sultania M, Deo SVS, Shukla NK, Sahoo R, Bhaskar S. Low cost home based, low dose, oral, neoadjuvant metronomic chemotherapy protocol in locally advanced/borderline oral cancers, Feasibility study, IFHNOS, FHNO 2016, 13–15 October 2016, New Delhi
10. Shukla NK, Deo SVS, Bhorawal S, Jakhetiya A, Khanna P. Spectrum of enteral access procedures for peri-operative nutritional management of oral cancer patients, IFHNOS, FHNO 2016, 13–15 October 2016, New Delhi
11. Shukla NK, Deo SVS, Jakhetiya A, Manjunath NML, Garg PK, Shreenivas V, Bhaskar S, Sharma. Clinical spectrum, treatment and relapse pattern of two most common sub sites of oral cancer treated with curative intent at tertiary care center in North India, IFHNOS, FHNO 2016, 13–15 October 2016, New Delhi
12. Deo SVS, Shukla NK, Jakhetiya A. Piezoelectric bone surgery in oral cancer: Preliminary result from a tertiary care cancer center in North India, IFHNOS, FHNO 2016, 13–15 October 2016, New Delhi
13. Kumar JR, Deo SVS, Shukla NK, Ray MD, Bhatnagar S. Clinical profile and patterns of major palliative surgeries in patients with advanced gynecological malignancies: Experience from Referral Tertiary Cancer Center Results of a pilot study, UICC World Cancer Conference, 1–3 November 2016, Paris
14. Jakhetiya A, Deo SVS, Shukla NK, Gogia A, Sharma DN, Muduly D. Breast cancer survival in patients treated with protocol based multimodality treatment at a tertiary care cancer center in India (Low-middle income country), UICC World Cancer Conference, 1–3 November 2016, Paris
15. Sumayya R, Sattar A, Shukla NK, Deo SVS, Husain SA. A study on YAPt expression in sporadic breast cancer patients from North India, RGCON, 2–4 February 2017, New Delhi

16. Sadaf, Sumayya R, Shukla NK, Deo SVS, Husain SA. Down, regulation of LATS2 mRNA expression in human breast cancer patients, A study from North India, RGCON, 2–4 February 2017, New Delhi
17. Deo SVS, Shukla NK, Sultania M, Sharma A, Sahoo R, Bhaskar S. Neoadjuvant metronomic chemotherapy in locally advanced head and neck cancers, Feasibility study, ECCO, 27–30 January 2017, Amsterdam
18. Pathak M, Deo SVS, Shukla NK, Dwivedi SN, Sreenivas V, Thakur B. Total preoperative NACT vs sandwich NACT in breast cancer patients: Systematic review and meta-analysis, ECCO, 27–30 January 2017, Amsterdam
19. BK Sandeep, Deo SVS, Shukla NK, Kumar R, Gogia A, Thulkar S. Comparison of PET-CT versus conventional staging investigations for Locally advanced breast cancer: Results of a Prospective Study, NATCON-IASO 2016, 22–25 September 2016, Udaipur
20. Jakhetiya A, Deo SVS, Shukla NK, Sharma DN, Gogia A. Patterns of locoregional recurrence in 2336 patients of operable breast cancer: A single center retrospective study, NATCON-IASO 2016, 22–25 September 2016, Udaipur
21. Deo SVS, Shukla NK, Bhatnagar S, Jakhetiya A, Manjunath NML. Cytoreductive surgery (CRS) and Hyperthermic intraperitoneal chemotherapy (HIPEC) for peritoneal surface malignancy (PSM), Surgical oncology AIIMS, New Delhi, Initial experience, NATCON-IASO 2016, 22–25 September 2016, Udaipur
22. Sandeep BK, Deo SVS, Shukla NK, Dwivedi SN. Single versus three doses of antibiotic prophylaxis in surgical oncology patients: Prospective randomized trial, NATCON-IASO 2016, 22–25 September 2016, Udaipur
23. Kumar S, kumar JR, Malik PS, Deo SVS, Shukla NK. Nodal staging of non-small cell lung cancer Using PET-CT in a Tuberculosis, Endemic setting: Experience from a tertiary care cancer centre in India, Annual Conference of the American College of Surgeons, October 2016, Washington, USA
24. Mishra A, Sandeep BK, Mahesh S, Kumar S, Deo SVS, Shukla NK, Pandey D. Outcome of radical cholecystectomy for gallbladder cancer patients in a tertiary care oncology centre in Northern India, ESSO Annual Conference, April 2016, Krakov, Poland
25. Ray MD. Moderating the session of the live cytoreductive surgery and HIPEC, ACOS 2016 Cancer in Asia: Bridging the gaps, Live cytoreductive surgery and HIPEC (Hyperthermic Intraperitoneal Chemotherapy) Workshop, 6 & 7 April 2016, Delhi
26. Ray MD. Awarded for the best paper presentation for selfdesigned river flow incisional technique for ilio inguinal block dissection, ACOS 2016 cancer in Asia: Bridging the gaps, 12th International Conference of the Asian Clinical oncology Society and 35th Annual Convention of Indian Association for Cancer Research and Mid-term Conference of IASO, 8–10 April 2016, Delhi
27. Ray MD. Complete cytoreduction and HIPEC in peritoneal carcinomatosis, Initial experience from tertiary cancer center in India, 10th International Congress Conference on Peritoneal Surface Malignancies, 17–19 November 2016, Washington, DC, USA
28. Ray MD. Multi-visceral resection for a huge ovarian growing teratoma syndrome: Overcoming pessimism, 6th International Science Conference hosted by World Science Congress, 23–25 December 2016, PGIMER, Dr RML Hospital, New Delhi
29. Ray MD. Cancer burden in India and its prevention, 8th National Science Conference of World Science Congress 2017, 15–18 March 2017, Kolkata
30. Singh M, Deo SVS, Shukla NK, Bhaskar S, Biswas A, Bhatnagar S. Management of locally advanced central arch mandibular squamous cell carcinoma in a resource constrained population: Challenges and solutions, FHNO-IFHNOS, 12–15 October 2016 New Delhi
31. Mishra A, Shukla NK, Deo SVS, Manjunath NML, Jakhetiya A. Clinicopathological correlation of nodal involvement in oral cancer patients undergoing surgery, FHNO-IFHNOS, 12–15 October 2016, New Delhi
32. Jakhetiya A, Deo SVS, Manoharan N, Rath GK, Shukla NK. Strengthening cancer control: Optimising outcomes of health systems, World cancer Congress, 31 October–3 November 2016 Paris, France
33. Jakhetiya A, Deo SVS, Manoharan N, Rath GK, Shukla NK. Incidence and time trends of tobacco related cancers in India over a decade: A review from hospital based cancer registry in North India, World cancer congress, 31 October–3 November 2016, Paris, France
34. Garg PK, Deo SV, Kumar R, Shukla NK, Thulkar S, Gogia A, Sharma DN, Mathur SR. Staging PET-CT scanning provides superior detection of lymph nodes and distant metastases than traditional imaging in locally advance breast cancer, World Cancer Congress, 31 October–3 November 2016, Paris, France
35. Kumar M, Mehra S, Thakar A, Shukla NK, Roychoudhary A, Sharma MC, Ralhan R, Chauhan SS. End binding 1 (EB 1) over expression in oral lesions and cancer: A biomarker of tumor progression and poor prognosis, India Conference of Medical and Pediatric Oncology, Mumbai
36. Iqbal N, Shukla NK, Deo SV, Agarwala S, Sharma DN, Sharma MC, Bakhshi S. Non-rhoadomyosarcomatous abdominopelvic sarcoma: Analysis of prognostic factors, Indian Conference of Medical and Pediatric Oncology, Mumbai

37. Kakkar A, Gupta RK, Khanna P, Balasundaram P, Ray R, Shukla NK. Kimura disease of the breast, A previously under scribed entity, FHNO-IFHNOS, 12–15 October 2016, New Delhi
38. Sultania M, Shukla NK, Deo SVS. Experience of 347 cases of carcinoma of the Alveobuccal complex at a tertiary cancer centre in north India, FHNO-IFHNOS, 12–15 October 2016, New Delhi
39. Vinaya JR, Shukla NK, Deo SVS, Kumar S, Bakshi S, Pathy S, Thulkar S. Clinical profile, treatment patterns and outcomes in locally advanced and recurrent orbital tumors a tertiary care cancer centre, Society of Surgical Oncology, 2–5 December 2016, Boston, USA
40. Mishra A, Deo SVS, Shukla NK, Jakhetiya A, Muduly D, Garg P, Gogia A, Sharma DN, Mathur S, Sreenivas V. A comparative study of clinical profile and relapse patterns in triple, negative and non-triple-negative breast cancer patients treated with curative intent, Breast Cancer Congress 2016, San Antonio, Switzerland
41. Mishra A, Shukla NK, Deo SVS, Manjunath NML, Jakhetiya A. Clinicopathological correlation of nodal involvement in oral cancer patients undergoing surgery, FHNO-IFHNOS, 12–15 October 2016, New Delhi
42. Sultania M, Shukla NK, Deo SVS, Kumar S. Neoadjuvant metronomic chemotherapy protocol in locally advanced borderline oral cancers feasibility study, Annual scientific Meeting of Australia New Zealand Head and Neck Cancer Society, 25–27 October 2016, Auckland, New Zealand
43. Sultania M, Shukla NK, Deo SVS, Kumar S. Multimodality management of locally advanced retromolar trigone tumors in a tertiary care cancer centre, Annual scientific Meeting of Australia New Zealand Head and Neck cancer society, 25–27 October 2016, Auckland, New Zealand

RESEARCH

Funded projects

Ongoing

Onco-Anesthesia and Palliative Medicine

1. An exploratory cross sectional study to identify the social contents of pain in cancer patients
2. Development of tool to assess total pain in cancer patients, Sushma Bhatnagar
3. A randomized control study to evaluate the efficacy of scrambler therapy in the Management of Oncological Pain in Cancer Patients, Sushma Bhatnagar
4. To find social determinants of cancer pain, Sushma Bhatnagar
5. Spiritual problems and concerns faced by Indian palliative care patients, Sushma Bhatnagar, ICMR, 3 years, 2017–2019, Rs 1.32 lakhs
6. Prevalence and factors associated with cancer related neuropathic pain in India: A cross sectional study, Sushma Bhatnagar, ICMR, 2 years; Rs 1 lakh
7. To evaluate the comparative efficacy and safety of gabapentin, duloxetine and pregabalin in patients with Chemotherapy Induced Painful Neuropathy (CIPN): A randomized controlled pilot trial, Seema Mishra, 3 years, 2017–2019
8. Pain and Symptom management in patients with malignant spinal cord compression (MSCC) in palliative care setup at tertiary care centre: A Retrospective study, 2016–2017, Seema Mishra
9. Prevalence of chemotherapy induced peripheral neuropathy in a palliative care setup and its impact on the quality of life of cancer patients, 3 years, 2017–2019, Seema Mishra
10. Prevalence and factors affecting anxiety and depression in cancer patients in palliative care setup at tertiary care centre, 3 years, 2016–2018, Seema Mishra
11. Assessment of care Giver Burden in palliative care, 2 years, 2017–2018, Seema Mishra
12. To assess the role of respiratory physiotherapy in the effectiveness of pleurodesis in adult patients with malignant pleural effusion, Rakesh Garg, AIIMS, 2 years, 2015–2016, Rs 1.89 lakhs
13. Comparative evaluation of nasotracheal intubation with glidescope videolaryngoscope and conventional macintosh laryngoscope using cuff inflation technique in patients undergoing head and neck cancer surgeries: A prospective randomized study, Nishkarsh Gupta
14. Comparison of two different doses of hyperbaric bupivacaine for intracavitary radiotherapy in patients with carcinoma cervix: A randomized control trial, Nishkarsh Gupta
15. Comparison of two techniques (bolus morphine vs. infusion morphine) of analgesic titration with intravenous morphine in palliative cancer patient, Vinod Kumar, AIIMS, 2 years, 2016–2018, Rs 1.5 lakhs

Laboratory Oncology

1. Molecular analysis of cytogenetically normal acute myeloid leukemia, Rajive Kumar, DBT, 3 years, 2014–2017, Rs. 51.61 lakhs

2. Early immature T-lymphoblastic leukemia (ALL): evaluation of early thymic precursor T-ALL immunophenotype, absence of biallelic deletion of TCR γ chains (ABD) and expression of MEF2C as predictors of treatment response as assessed by minimal residual disease determination, Anita Chopra DST, 2015–2018, Rs. 20.16 lakhs.
3. Molecular determinants of prednisolone sensitivity in pediatric acute lymphoblastic leukemia, Anita Chopra, AIIMS, 2016–2017, Rs. 4 lakhs
4. Prevalence of intra-chromosomal amplification of chromosome 21 (iAMP21) in B-ALL, Sanjeev Kumar Gupta, AIIMS, 2016–Ongoing, Rs 5 lakhs

Medical Oncology

1. Risk of cancer in mobile phone users, Lalit Kumar ICMR, 4 years, March 2012–2017, Rs 11.74 lakhs.
2. Weekly paclitaxel in combination with carboplatin every 3 weeks for advanced epithelial ovarian cancer, Lalit Kumar, DBT, 4 years, 2010–2015, Rs 17.95 lakhs
3. Global study to assess the addition of Bevacizumab to carboplatin and paclitaxel as first line treatment of epithelial ovarian cancer, Fallopian tube carcinoma or primary peritoneal carcinoma, Lalit Kumar, Roche Product, 4 years, November 2011–October 2016, Rs 5.4 lakhs
4. Study of molecular genetics in MM, Lalit Kumar, DBT, 3 years, 2015–2018, Rs 45 lakhs
5. Aspirin for dukes C and high risk dukes B Colorectal Cancers, An International, Multi-centre, Double blind, randomised placebo controlled phase III trial, Atul Sharma, Singapore Clinical Research Institute, Singapore, 2013–2018, 500 USD per patients
6. A phase II/III, randomized, double-blind, placebo controlled study to investigate the efficacy of a probiotic VSL#3®, on Chemotherapy, induced diarrhea in cancer patients receiving Fluoropyrimidines and or Irinotecan, Atul Sharma, CD Pharma India Pvt Ltd, 2010–2016, Rs 18 lakhs
7. To study clinical and biological significance of mutations in mitochondrial DNA regulatory region in acute myeloid leukemia, Bakshi S, DBT, 2013–2016, Rs 45.75 lakhs
8. A phase III, open label, randomized trial ofatumumab added to fludarabine-cyclophosphamide Vs. fludarabine-cyclophosphamide combination in subjects with relapsed chronic lymphocytic leukemia, Bakshi S, Smith Kline G, 2011–2017, Rs 9 lakhs
9. A phase III, open label, randomized multicentre trial of ofatumumab-chlorambucil combination Vs. chlorambucil monotherapy in previously untreated patients with chronic lymphocytic leukemia, Bakshi S, Smith Kline G, 2011–2017, Rs 13 lakhs
10. Investigating the efficacy of microRNAs as molecular marker in pediatric acute myeloid leukemia, Bakshi S, DBT, 2015–2018, Rs 26.85 lakhs
11. Improving refusal, non-compliance, abandonment and outpatient infection treatment in pediatric and adolescent cancers, Bakshi S, Lebara Foundation, 2015–2018, Rs 93.33 lakhs
12. Establishing a nutritional counseling program and developing a nutritional database in pediatric patients with cancer, Bakshi S, Cuddle Foundation, 2016–2019, Rs 13.37 lakhs
13. Role of mitochondrial complex encoding genes in Pediatric AML, Bakshi S, AIIMS, 2016–2018, Rs 10 lakhs
14. Expression of EGFR, CK5/6 and androgen receptor in Triple negative Breast cancer, Ajay Gogia, AIIMS, Intramural grant, Rs 3.25 lakhs
15. MGMT methylation in primary CNS lymphoma, Sahoo RK, AIIMS, 3 years, 2015–2017, Rs. 3.15 lakhs
16. Role of RRM1, RRM2, hENT1 and ERCC1 expression in advanced carcinoma of gall bladder treated with Gemcitabine, Platinum doublet, Sahoo RK, Self, Nag Foundation, Pune, 3 years, 2016–2018, Rs. 5 lakhs
17. A Prospective, Randomized, Multicenter Study to compare the safety, tolerability and efficacy of Bevacizumab (Zudus Cadila) with Bevacizumab (Avastin) in Non-small cell lung cancer, Malik PS, Cadila Health Care Ltd, 1 year, December 2015–December 2016, Rs 13.64 lakhs
18. Prospective study to assess ckit mutation in advanced melanoma. Sameer Rastogi, AIIMS, 2016–2017, Rs 4.38 lakhs

Medical Physics

1. Non-invasive characterisation of kidney stones, Pratik Kumar, AIIMS, 2015–2017, Rs 3 lakhs

Radiodiagnosis

1. Metallic tumour marker clip for breast cancer: design, development and clinical implications, Sanjay Thulkar, Science and Engineering Research Board (SERB), 3 years, 2015–2017, Rs 23.27 lakhs

Radiation Oncology

1. Hypofractionated radiotherapy with concurrent chemotherapy vs. conventional concurrent chemo-radiotherapy in locally advanced non-small-cell carcinoma of lung, Randomised Controlled Trial, Sushmita Pathy, 3 years, 2016
2. A prospective study to evaluate the effect of UPLAT in the management of chemotherapy, induced thrombocytopenia, Haresh KP, Sanat Pharmaceuticals, 2 years, 2013–2015

Surgical Oncology

1. HBCR and pattern of care and survival studies in breast, head and neck and cervical cancer, SVS Deo, ICMR, 3 years, 2014–2017, Rs 35 lakhs/year
2. Diversity of Oral microbiome of smokeless tobacco induced oral cancer patients as compared to tobacco chewers and non-tobacco chewer healthy individuals, A metagenomic approach, Digvijay Varma, DST-SERB, Government of India, 3 years, 2015–2018, Rs 50 lakhs
3. Evaluation of diffusion weighted magnetic resonance imaging for assessment of response to neo adjuvant chemotherapy in advanced Squamous cell carcinoma of oral cavity, Kumar S, AIIMS, 2 years, 2015–2017, Rs 1 lakh

Completed

Onco-Anesthesia and Palliative Medicine

1. Molecular determinates of response to opioids in cancer patients: Indian Scenario, ICMR, 3 years, 28 Lacs, Sushma Bhatnagar
2. To study the impact of nutritional intervention in delaying the progression of cachexia to refractory cachexia in female cancer patients: A study based in India, Sushma Bhatnagar
3. Comparative evaluation of forced air warming and infusion of amino Acid enriched solution on intraoperative hypothermia in patients undergoing head and neck cancer surgeries: A prospective randomized study, AIIMS, 2014–2015, Nishkarsh Gupta, Rs 4 lakhs
4. Aprepitant versus dexamethasone for preventing postoperative nausea and vomiting in breast cancer patients, Intramural, 2014–2015, Rs. 4 lakhs, Sachidanand Jee Bharati

Laboratory Oncology

1. IKZF1 (Ikaros) mutations in B cell acute lymphoblastic leukemia, Sanjeev Kumar Gupta, AIIMS, 2016–Ongoing; Rs 5,00,000, AIIMS, 2 years, 2013–2015, Rs 9 lakhs
2. Evaluation of thrombopoietin as a marker of sepsis in post operative cases of gastrointestinal malignancy, Amar Ranjan, AIIMS, Rs 4 lakhs
3. Evaluation of HE4 level in epithelial ovarian cancer for diagnosis and monitoring of therapy Amar Ranjan, ICMR, New Delhi, Rs 25 lakhs

Medical Oncology

1. A randomized phase III study of Imatinib dose optimization compared with Nilotinib in patients with chronic myelogenous and suboptimal response to standard, dose Imatinib, Lalit Kumar, Novartis India Ltd., 5 years, October 2011, December 2016, 15 lakhs
2. To investigate the role of PARP-1 in cisplatin resistance in cervical cancer, Kumar L, AIIMS, 1 year, 2015–2016 Rs. 5 lakhs

Radiation Oncology

1. A pilot study evaluating quality of life with AYUSH QOL, 2C in non-metastatic breast cancer patients treated with adjuvant chemotherapy/radiotherapy and correlating it with molecular markers, GK Rath, Central Council for Research in Ayurveda and Siddha, Ministry of Health and Family Welfare, Government of India, 5 years, 2010–2016, Rs. 51.45 lakhs
2. Predictive biomarkers for response to neoadjuvant chemo-radiotherapy in locally advanced rectal cancer, Sushmita Pathy, AIIMS, 3 years, 2013, Rs 5 lakhs

Surgical Oncology

1. Peri operative morbidity after complete cyto reduction and HIPEC, MD Ray, NK Shukla, SVS Deo, 2016–2017

Departmental projects

Onco-Anesthesia and Palliative Medicine

1. An exploratory Cross sectional study to identify the social contents of pain in cancer patients

2. Development of tool to assess total pain in cancer patients
3. A randomized control trial to evaluate the efficacy of scrambler therapy in the Management of Pain Due to Cancers of Head, Neck and Thoracic origin
4. A prospective randomized study to assess the analgesic efficacy of SAP block (SAP) for modified radical mastectomy under general anesthesia
5. A comparison between lignocaine-fentanyl intravenous infusion and ropivacaine-fentanyl epidural infusion as perioperative analgesia technique in patients undergoing major abdominal onco-surgery
6. A prospective, randomized, double blinded comparison of intranasal dexmedetomidine vs intranasal ketamine for efficacy of sedation in preschool children undergoing radiotherapy procedures
7. Prevalence of breakthrough cancer pain and its impact on quality of life in cancer patients at Regional Cancer Centre, India: A Cross-sectional Study
8. To study and analyze the pattern of symptoms of patients presenting in Palliative care wards at Regional Cancer Centre of India
9. A prospective randomized study to assess the analgesic efficacy of serratus anterior plane block for modified radical mastectomy with axillary dissection under general anaesthesia
10. A comparison of two techniques of postoperative analgesia: lignocaine-fentanyl intravenous infusion and ropivacaine-fentanyl epidural infusion in patients undergoing major abdominal onco-surgery, a randomized control trial
11. Predicting difficult laryngoscopy in oral cancer patients by clinical and radiological parameters, a prospective, observational study
12. A prospective, randomized, double blinded comparison of intranasal dexmedetomidine vs intranasal ketamine for efficacy of sedation in preschool children undergoing radiotherapy procedures
13. To assess the correlation between nutritional status and quality of life in Indian adult palliative cancer patients
14. To assess the role of respiratory physiotherapy in the effectiveness of pleurodesis in adult patients with malignant pleural effusion
15. To evaluate relation between sleep quality and cancer pain in patients admitted in palliative care unit, an observational study
16. Comparative evaluation of nasotracheal intubation with glidescope videolaryngoscope and conventional macintosh laryngoscope using cuff inflation technique in patients undergoing head and neck cancer surgeries: A prospective randomized study
17. Comparison of two techniques (bolus morphine vs. morphine infusion) of analgesic titration with intravenous morphine in palliative cancer patient, a prospective randomized study

Medical Oncology

Ongoing

1. The role of the PARP,1 and B-Catenin in cisplatin resistance in cervical cancer
2. Minimal residual disease in multiple myeloma
3. To study the Wnt signaling molecules and their correlation with common mutation (FLT3, CEBPa) in Acute myeloid leukemia
4. Role of bone marrow microenvironment in multiple myeloma
5. To study clinical and biological significance of mutations in mitochondrial DNA regulatory region in acute myeloid leukemia
6. Role of PARP1 and γ -Glutamyl Systeine Synthetase (GCS) inhibitors on cisplatin sensitivity and DNA methylation in ovarian cancer
7. Gene expression profile and its co-relation with mitochondrial energy metabolism in pediatric Acute myeloid leukemia
8. Clinicopathologic and treatment outcome of pediatric non-Hodgkin lymphoma at tertiary care hospital
9. To study the effect of base line serum zinc level on overall survival in paediatric AML patients
10. Pediatric hodgkin lymphoma–Biological and outcome
11. Prognostic significance of IL-6 expression by immunohistochemistry on outcome of pediatric Hodgkin Lymphoma
12. Study of Philadelphia negative myeloproliferative neoplasm of IRCH, AIIMS
13. Early stoppage versus continuation of antimicrobial therapy in low risk pediatric cancer patients with febrile neutropenia, before recovery of counts: DALFEN study

14. A Phase III open label randomized control study to compare efficacy and safety of Pemetrexed-Carboplatin versus paclitaxel-Carboplatin as induction regimen in advanced non-squamous non-small-cell lung cancer
15. A phase III open label randomized study to compare the efficacy of lenalidomide, Rituximab (LR) vs Bendamustine, Rituximab (BR) in treatment naïve follicular lymphoma
16. Role of glucose regulated protein (GRP78) in response to bortezomib based regimen in multiple myeloma
17. A three arm prospective phase II/III randomised study comparing Erlotinib+BSC, SA-Capecitabine+BSC and BSC in unresectable/metastatic Ca:GB patients having poor performance status (ECOG-III)
18. Lymphocyte reconstitution and infectious morbidity post autologous hematopoietic stem cell transplantation
19. Evaluation and correlation of role of absolute lymphocyte count and minimal residual disease in pediatric ALL patients
20. Single arm prospective study evaluating role of neoadjuvant chemotherapy in soft tissue sarcoma
21. A study to determine the association of trace elements and heavy metals with lung cancer and their correlation with smoking
22. Study of philadelphia chromosome negative myeloproliferative neoplasm at IRCH, AIIMS
23. Evaluation of clinicopathological features, prognostic factors and treatment outcome of Nasopharyngeal carcinoma at IRCH, AIIMS. retrospective Analysis
24. A prospective, interventional study assessing response to Cytarabine, Daunorubicin and Etoposide (ADE) for First relapse of Paediatric Acute Myeloid
25. Pazopanib based combination oral metronomic therapy in platinum relapsed, platinum refractory and advanced ovarian cancer: A randomized phase 2 study
26. A prospective, Interventional study assessing response to Cytarabine, Daunorubicin and Etoposide (ADE) for first relapse of Paediatric Acute Myeloid Leukemia
27. Early stoppage versus continuation of antimicrobial therapy in low risk pediatric cancer patients with febrile neutropenia, before recovery of counts: A randomized controlled study, DALFEN study
28. Intimation for analysis of serum copper and selenium in research samples in addition to zinc as a secondary objective
29. Clinico-pathologic variations and treatment outcome of pediatric Non-Hodgkin's Lymphoma patients treated at IRCH, AIIMS
30. To study the effect of baseline serum zinc level on overall survival in pediatric AML patients
31. Study to evaluate the anti-emetic effect of Aprepitant as an add-on therapy in children and adolescents receiving AML remission induction chemotherapy: An investigator, initiated, randomized, open label trial
32. Immune reconstitution in autologous stem cell transplantation
33. Retrospective analysis of testicular germ cell tumours treated at IRCH, AIIMS
34. Study of efficacy and safety of neoadjuvant chemotherapy in patients with stage 2B and 3 NSCLC: A pilot study
35. A Phase III open label randomized control study to compare efficacy and safety of pemetrexed-carboplatin versus paclitaxel-carboplatin as induction regimen in advanced non-squamous non-small-cell lung cancer
36. Prospective single arm study of neoadjuvant chemotherapy in soft tissue sarcoma

Completed

1. Pediatric Hodgkin lymphoma, Biology and outcome
2. Prognostic significance of interleukin, 6 expression by immunohisto chemistry in pediatric Hodgkin's lymphoma
3. Low dose chemotherapy (Metronomic therapy) versus best supportive care in progressive and/or refractory pediatric malignancies: A double blind placebo controlled randomized study

Medical Physics

Ongoing

1. Development of protocol for quality assurance of medical image laser printer
2. Development of new luminescence material for dosimetry purpose
3. Calibration and use of optically stimulated luminescence dosimeter
4. Development of protocol for quality assurance of fluoroscopy
5. Development of protocol for quality assurance of lead apron and thyroid collar
6. Development of radiochromic film dosimeter

Completed

1. Characterization of kidney stone using dual energy CT scanner

Radiodiagnosis**Ongoing**

1. Role of MRI in assessing residual mass after neoadjuvant chemotherapy in breast cancer

Completed

1. Role of diffusion weighted MRI for local staging and response assessment after neoadjuvant chemotherapy in locally advanced Squamous cell carcinoma of oral cavity

Radiation Oncology**Ongoing**

1. MRI guided ICRT for cervical carcinoma
2. Study to evaluate the feasibility of reduced dose whole brain radiotherapy in patients of newly diagnosed primary central nervous system lymphoma after complete response to methotrexate based poly-chemotherapy
3. To study and compare acute toxicity and quality of life in hypo-fractionation versus conventional fractionation radiotherapy after breast conservation surgery in early breast cancer
4. Patterns of care in carcinoma oesophagus : Experience from Tertiary Cancer Center in India
5. Evaluation of patient specific pretreatment verification methods for Intensity Modulated Radiotherapy Techniques: PhD thesis
6. A Randomized study of hypo-fractionated vs. conventional radiotherapy in elderly Glioblastoma multiforme
7. A study of dosimetric effect of ITV (Internal Target Volume) in external beam radiotherapy
8. A study evaluating the patient positioning accuracy using electronic portal imaging device (EPID) and cone beam computed tomography (CBCT) for image guided radiotherapy (IGRT) in the treatment of cancers
9. Study to evaluate the feasibility of reduced dose whole brain radiotherapy in patients of newly diagnosed primary central nervous system lymphoma after complete response to methotrexate based poly chemotherapy
10. To study and compare acute toxicity and quality of life in hypofractionation vs regular fractionation RT after conservative treatment in early breast cancer
11. Study to evaluate the feasibility of response adapted whole brain radiotherapy after methotrexate based chemotherapy in patients of newly diagnosed primary CNS lymphoma
12. Acute pulmonary toxicity and quality of life assessment in post-menopausal hormone receptor positive carcinoma breast patients treated with concurrent versus sequential letrozole with hypofractionated radiotherapy

Completed

1. Patterns of care in carcinoma oesophagus: Experience from Tertiary Cancer Centre in India
2. Randomized control trial of combined external beam radiotherapy plus HDR brachytherapy boost vs. external beam radiotherapy alone with intensity modulated radiotherapy in intermediate and high risk prostate cancer

Surgical Oncology**Ongoing**

1. To analyze the complications and their management in patients undergoing cyto-reductive surgery and hyperthermic intra-peritoneal chemotherapy (CRS+HIPEC)
2. Molecular profiling (BRAF and K-RAS gene mutation) in differentiated thyroid cancer (DTC) in Indian patients operated at BRA IRCH AIIMS
3. A prospective and retrospective study of complex breast conservation therapy
4. A prospective study to validate the role of Integrated Positron Emission Tomography, Computed Tomography and Endobronchial Ultrasound and guided Transbronchial needle aspiration in the mediastinal staging of resectable Non-small cell lung cancer
5. Standardizing surgico-pathological evaluation of oral squamous cell carcinomas specimens, A prospective study
6. A prospective study of breast anthropometry and tumor versus breast ratio assessment using radiological and clinical methods
7. Efficacy of neo-adjuvant chemotherapy in locally advanced, carcinoma oral cavity, A pilot study comparing cisplatin+5-FU with paclitaxel+carboplatin

8. Analysis of a prospective computerized database of esophageal cancer patients presenting to IRCH, AIIMS
9. Clinical profiles and patterns of palliative surgery in cancer patients: An ambi-spective Study
10. Analysis of a prospective computerized database of gastric cancer patients presenting to IRCH, AIIMS
11. A prospective study of assessment of breast anthropometry in Indian breast cancer patients
12. A prospective study to validate the role of PET CT and EBUS in the staging of resectable Non-small cell lung cancer
13. Efficacy of neoadjuvant chemotherapy in carcinoma esophagus, A pilot study comparing Cisplatin+5-FU with Paclitaxel+Capecitabine
14. Peri operative morbidity after complete cyto reduction and HIPEC
15. River flow' incision for decreasing morbidity of Ilio-inguinal dissection
16. A prospective randomized control trial comparing intracostal with pericostal thoracotomy closure to evaluate post thoracotomy pain syndromes
17. Complex breast conservation therapy for breast cancer patient selection criteria clinical profile and outcomes
18. A prospective randomize study to compare pre-operative short course radio therapy with neoadjuvant chemo-radiotherapy in management of locally advanced carcinoma of rectum

Completed

1. A randomized controlled trial comparing single dose versus three doses of antibiotic prophylaxis in surgical oncology patients with clean wounds
2. Role of PET-CT Scan (Positron Emission Tomography and CT Scan) in the staging of locally advanced/Recurrent breast cancer as a Single modality in comparison to multiple organ directed conventional investigations (C.I) A prospective Study
3. Low cost, low dose, oral, neoadjuvant chemotherapy protocol in locally advanced borderline oral cancers, Feasibility study
4. Analysis of a computerized prospective database of patients with uncommon sites of oral cancer presenting to IRCH, AIIMS
5. Analysis of a prospective computerized database of colon cancer patients presenting to IRCH, AIIMS
6. Prospective analysis the role of Positron emission tomography in preoperative evaluation of resectable soft tissue sarcoma and correlation with histo-pathological grading

Collaborative projects

Ongoing

Onco-Anesthesia and Palliative Medicine

1. A prospective randomized control trial comparing intracostal with pericostal thoracotomy closure to evaluate post thoracotomy pain syndromes, (pain) (Surgical Oncology)
2. Prediction of infection in postoperative cases of gastrointestinal malignancy by analysis of thrombopoietin (Laboratory Oncology)
3. Safety and efficacy of neoadjuvant chemotherapy in stage IIB and IIIA NSCLC: Single arm phase II study (Medical Oncology)

Laboratory Oncology

1. ICiCle B-lineage ALL project (Medical Oncology)

Radiodiagnosis

1. A prospective randomized, multicentric study to compare the safety, tolerability and efficacy of Bevacizumab (Zydus cadila) and Bevacizumab (Avastin) in non small cell lung cancer (Medical Oncology)
2. Development of tissue equivalent optically stimulated luminescent materials for measurement of low doses of medical radiation. (Medical Physics and Department of Health Physics Inter university accelerator centre, New Delhi)
3. A randomized controlled study comparing efficacy, quality of life and cost effectiveness following ultrasound guided foam sclerotherapy in comparison to conventional surgery in varicose veins of lower limbs (Surgical Disciplines)
4. Predicting difficult laryngoscopy in oral cancer patients by clinical and radiological parameters, a prospective observational study (Onco-anesthesia and palliative medicine)
5. Role of MRI guided biopsy in detection of prostate cancer (NMR)

Radiation Oncology

1. Randomized study of preoperative short course radiotherapy (25 Gy) Vs. preoperative concurrent radiotherapy (45 Gy) and chemotherapy followed by Surgery in rectal cancer (Surgical oncology, Medical Oncology)
2. MGMT promoter methylation in primary CNS lymphoma (Medical Oncology, Pathology and Radiation Oncology)
3. Radiolabelling of trastuzumab with Lutetium-177: its evaluation as a potential agent for radioimmunotherapy in breast cancer (Nuclear Medicine, Radiation Oncology)

Surgical Oncology

1. A study of promoter methylation of PTEN in sporadic BREAST cancer from North India. (Department of Bio Sciences, Jamia University)
2. Analyzing FGFR2 and candidate genes affecting its downstream signaling In breast cancer, (Department of Bio Sciences, Jamia University)
3. A comprehensive analysis of mammalian target of rapamycin (mTOR) and mitogen activated protein (MAP) kinase signaling pathways in non-small cell lung carcinoma (Pathology)
4. Role of Multiparametric MRI in evaluation of locally advanced rectal cancer. (Radiology)
5. A study to assess the level of fatigue and presence of functional deficit in adult patients undergoing upfront surgery for solid tumors in pre and post-surgical phase in AIIMS, College of Nursing
6. Differentiating inflammatory and metastatic mediastinal lymphadenopathy on 18-FDG, PET/CT in lung cancer: Role of steroid suppression (Nuclear Medicine)
7. A prospective randomised study to compare pre-operative short course radio therapy with neoadjuvant chemotherapy in management of locally advanced carcinoma of rectum. (Radiation Oncology, Medical Oncology)
8. Etiology of oral cancer in Indian population younger than 30 years. (Oral pathology)

Completed

Surgical Oncology

1. A study to assess the effectiveness of an educational package on knowledge regarding post-operative care of oral cancer patient's relatives following discharge (College of Nursing)
2. Role of diffusion weighted MRI for local staging and response assessment after neoadjuvant chemotherapy in locally advanced squamous cell carcinoma of oral cavity (Radio Diagnosis, Medical oncology and Pathology)
3. Pro-apoptotic and anti-proliferative effect of metformin on human colorectal cell lines", Bio chemistry
4. Multidisciplinary management of advanced epithelial ovarian cancer: 15 years audit in Department of surgical oncology, IRCH, AIIMS (Medical Oncology, Pathology and Radio diagnosis)
5. Prospective analysis the role of positron emission tomography in preoperative evaluation of resectable soft tissue sarcoma and correlation with histopathological grading (Nuclear medicine, Radio diagnosis, Radiation oncology, Pathology and Medical oncology)
6. Analysis of a prospectively maintained computerized database of soft tissue sarcomas. (Medical oncology, Radiation oncology, radiology, pathology, NMR)
7. A prospective study evaluating role of ultrasound and ultrasound guided FNAC in the assessment of cervical node metastasis in oral cancer. (Radiology, Pathology)

PUBLICATIONS

Journals: 219

Abstracts: 42

Chapters in Books: 16

Books: 2

PATIENT CARE

1. **TOTAL BED STRENGTH = 182**
 - a. Medical Oncology = 78
 - b. Radiation Oncology = 37
 - c. Surgical Oncology = 61
 - d. Palliative Care Unit = 06
2. **TOTAL OPD ATTENDANCE: 146688**
 - a. New Patient's Registered = **12372**
 - b. Revisits = **14551**

DESCRIPTION OF VARIOUS OPD/CLINICS**G.TOTAL = 12372 + 145512 = 157884****Admissions**

Regular: 8604 Short/Daycare: 31897 Total: 40501

Discharges

Regular: 8416 Short/Daycare: 31458 Total: 39874

Deaths: 321**Operation Theatre Services**

Major Operations: 1390 Minor Operations: 7908 Total: 9298

Electrocardiogram: 4343**Treatment Room No. 15**

OPD procedures: 6100

OPD Chemotherapy Services

Male: 3669 Female: 2167 Male Child: 6161 Female Child: 2037 Total: 14034

OPD ATTENDANCE

New patients registered	Male	Female	Total
April 2016	528	381	909
May 2016	625	478	1103
June 2016	670	506	1176
July 2016	556	491	1047
August 2016	555	480	1035
September 2016	570	457	1027
October 2016	521	384	905
November 2016	486	393	879
December 2016	536	512	1048
January 2017	543	461	1004
February 2017	574	466	1040
March 2017	689	510	1199
Total	6853	5519	12372

Revisits	Male	Female	Total
April 2016	5296	5657	10953
May 2016	5969	6159	12128
June 2016	6123	5924	12047
July 2016	5869	6300	12169
August 2016	6262	6454	12716
September 2016	6443	6727	13170
October 2016	5232	5638	10870
November 2016	5809	6346	12155
December 2016	5828	6101	11929
January 2017	5665	6034	11699
February 2017	5819	6024	11843
March 2017	6797	7036	13833
Total	71112	74400	145512

GEOGRAPHICAL DISTRIBUTION of patients

S. no.	State	Total
1.	Andhra Pradesh	05
2.	Andman Nicobar	00
3.	Assam	38
4.	Arunachal Pradesh	02
5.	Bihar	1699
6.	Chandigarh	03
7.	Chhattisgarh	13
8.	Delhi	3960
9.	Gujrat	13
10.	Haryana	1369
11.	Himachal Pradesh	42
12.	Jammu & Kashmir	99
13.	Jharkhand	177
14.	Kerala	10
15.	Karnataka	02
16.	Madhya Pradesh	216
17.	Maharashtra	16
18.	Meghalaya	03
19.	Manipur	26
20.	Mizoram	03
21.	Nagaland	07
22.	Orissa	61
23.	Punjab	68
24.	Rajasthan	250
25.	Sikkim	35
26.	Tamilnadu	05
27.	Telangana	04
28.	Tripura	07
29.	Uttar Pradesh	3731
30.	Uttaranchal	339
31.	West Bengal	104
	Total	12307

Other Countries

1.	Afghanistan	07
2.	Bangladesh	05
3.	Cameroon	01
4.	Iraq	01
5.	Mongolia	01
6.	Nepal	47
7.	Nigeria	01
8.	Tanzania	01
9.	Yaman	01
	Total	65

Grand Total = 1237 + 65 = 12372

Laboratory Oncology Services

Hemogram (Hb, Tlc, Platelets)	51834	Flow	28405
Peripheral Blood Smear	7971	CSF	615
Bone Marrow Aspiration	4527	ESR	480
Cyto-Chemistry	1031	Molecular Biology	2042
Serum Protein Electrophoresis	3817	SFLC	3249
Immunofixation	2302	Cytopathology	575
Urine Electrophoresis	1157	Beta 2–microglobulin	483
Tumor Marker	2215		
Total	110703		

Apheresis

Single Donor Platelets (SDP)	2163	Hemogram	24213
Peripheral Blood Stem Cell–Harvest (PBSC)	213	No. of Granulocytes	16
TOTAL	26605		

Medical Oncology Laboratory Services

1.	Cytogenetics For Detection Of Phildelphia Chromosome	449
2.	Cytogenetics For Chimerism	03
3.	RT-PCR for detection of P210 and P190 translocation in CML (Qualitative)	390
4.	RQ-PCR for detection of P210 and P190 translocation in CML (Quantitative)	04
5.	CD 34 counts by Flow Cytometry	234
6.	CD 3 counts by Flow Cytometry	12
7.	MNC Counts	181
8.	Cryopreservation of Stem Cells – 80	96
9.	Storage of Stem Cells at 4	89
10.	Infusion Of Stem Cells	121
11.	Viability Of Stem Cell	140
12.	ELISA for Aspergillosis detection	927
	Total	2646

Medical Physics Services

1.	Number of blood bags irradiated	3655
2.	Quality Assurance test done on X-Ray machines	2143
3.	Quality Assurance test done on film processor at DR BRAIRCH, AIIMS	108
4.	Quality Assurance test on film processor at Radiology (Main)	95
5.	Radiation output measurements in X-Ray units	402
6.	Quality Assurance test done on film processor at AIIMS	107
7.	Radiation protection survey measurements	06
8.	Advise in inadvertent exposure to pregnancy	03
9.	Q.C. test fluoroscopy done at AIIMS	102
	Total	6621

Radiotherapy Services

1.	Cases on Radiotherapy	63378
2.	Total Field on Radiotherapy	-
3.	Cases on Brachytherapy	680
4.	Treatment Planning and Simulations	3433
5.	Two and Three Dimensional Dose Distributions	383
6.	Compensators	435
7.	Shielding Blocks Immobilization Devices and Orifits	1960
8.	Radiation Review Clinic	1470
9.	Planning C.T.	1709
	Total	73448

Community services/camps:

- Dr Sushmita Pathy: Speaker in public lecture on “Childhood cancer day celebrations” J.L.N auditorium February 2017.
- Dr Subhash Gupta was associated with the cancer screening activities of ICPO, Noida; Actively involved in medical camps organized by Ashoka mission to attend cancer patients
- Dr K.P. Haresh was associated with the cancer screening activities of ICPO, Noida; Took part in the medical camp at Ladakh organized by the Ashoka mission to attend cancer patients.

Radiodiagnosis Services

C.T. Scan	8147	Doppler	258
Ultrasound	6882	Intervention	1544
Mammography	1637	Special Investigation (Ba,I)	574
X-Rays (Routine)	19285		
Total	38327		

Oncoanaesthesia and Palliative Medicine

Facilities available in the Department

- Six bedded Pain and Palliative care ward.
- Pain and Palliative care clinics six days in a week.
- Ultrasound guided line central venous line placements.
- Radiofrequency ablation for Cancer Pain Patients.
- Scrambler Therapy in Cancer Pain Patients.
- Indian Association of Palliative Care’s Certificate Course in Palliative Care Unit of Anesthesiology, Dr BRA IRCH is Nodal Center for conducting Indian Association of Palliative Care’s Certificate Course in Palliative Care twice in a year.
- Research on psychosocial and spiritual aspect of pain in Cancer patients
- International cooperative research started in area of Pain and Palliative Care
- ICU facilities for post operative patients.
- Home support to patients with advanced malignancies by NGOs and keeping monthly meeting with them to know follow up reports
- Providing critical care to patients of Radio therapy, Medical Oncology, and Surgical Oncology, Pulmonary Medicine.
- Facility for Pediatric Radiotherapy.
- Anaesthesia for minor pediatric oncology procedures like Bone marrow biopsy, Central line insertion, Bone marrow harvesting and others.
- Facility for Pediatric radiological procedures under anaesthesia, Radio frequency ablation for liver, lung, and breast carcinoma.

Medical Oncology

Dr Sameer Rastogi formed AIIMS sarcoma workgroup to interact with patients. This workgroup has sarcoma patients and their relatives who help and provide support to each other. It is also online where the latest updates and general information about sarcomas are provided. The link to the workgroup is <https://goo.gl/SGh0bP>

Surgical Oncology

Special Clinics

1. Thoracic oncology clinic
2. Hepato-biliary and pancreatic clinic
3. Breast Cancer clinic
4. GI cancer clinic
5. Head and Neck cancer clinic
6. Bone and soft tissue clinic

Community service: Providing free cancer care services and student awareness for Cancer in Bihar and Jharkhand through an NGO, Chandrakanti Devi Cancer Foundation

S. no.	Name of OPD/Clinic	New patient			Revisits		
		Male	Female	Total	Male	Female	Total
1.	Adult Medical Oncology	721	784	1505	11884	21609	33493
3.	AML/HL	150	60	210	1717	1069	2786
4.	ALL/CML	258	129	387	3608	2587	6195
5.	BREAST CANCER	45	604	649	557	7544	8101
6.	BONE and SOFT (TISSUE)	141	105	246	902	768	1670
7.	GASTRO-INTESTINAL	404	293	697	1292	1020	2312
8.	GYNAECOLOGY 'A'	-	205	205	-	628	628
9.	GYNAECOLOGY 'B'	-	352	352	-	1760	1760
10.	GYNAECOLOGY 'C'	-	225	225	-	652	652
11.	Genitourinary and Gynaecology	110	210	320	911	1714	2625
12.	Head and Neck (Surgery) – A	436	89	525	1442	472	1914
13.	HEAD and NECK (ENT) – B	1096	188	1284	3909	1032	4941
14.	Hepatobiliary and Pancreatic	189	134	323	1124	596	1720
15.	Lung cancer	518	173	691	3991	2377	6368
16.	NHL/MM/CLL	127	69	196	2716	1620	4336
17.	Neuro Oncology	281	126	407	934	472	1406
18.	Ophthalmic Tumour	15	11	26	-	-	-
19.	Paediatric Medical Oncology	317	116	433	8967	5743	14710
20.	Paediatric Lymphoma Leukemia	153	47	200	4563	2671	7234
21.	Paediatric (Surgery)	51	42	93	1325	1059	2384
22.	Pain Relief	389	282	671	7251	6521	13772
23.	Radiotherapy	567	828	1395	5327	7349	12676
24.	Surgical Oncology	251	223	474	2502	2797	5299
25.	Thoracic Oncology	201	161	362	1391	900	2291
26.	Transplant	15	07	22	637	500	1137
27.	Urology	361	34	395	3448	664	4112
28.	Endocrinology	57	22	79	714	276	990
	Total	6853	5519	12372	71112	74400	145512

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Onco-Anesthesia and Palliative Medicine

Professor Sushma Bhatnagar was chair person of Scientific Committee for Asia Pacific Hospice Network. She is Board of Director of International Association of Hospice and Palliative Care, Council Member of International Association of Study of Pain, Chief Editor of Indian Journal of Palliative Care, Scientific Chairperson of International Conference of Indian Association of Palliative Care, Deputy Team leader of Training-of-Trainers in Palliative Care Programme by Asia Pacific Hospice Palliative Care Network, Editorial Board Member of World Journal of Anaesthesiology and Annals of Palliative Medicine

Professor Seema Mishra has received developing Countries Scholarship from AAHPM (American Academy of Hospice and Palliative Medicine) 2017 AAHPM in USA.

Dr Rakesh Garg has received 3rd Prize for ISCCM Day 2016 Best Poster Competition Award on Patient Safety in ICU at CRITICARE 2017. He was felicitated by All India Difficult Airway Association (AIDAA) for invaluable contribution in formulation of the AIDAA 2016 guidelines for the management of the difficult airway, felicitated at 64th ISACON 2016 for excellent services and contribution as Associate Editor of Indian Journal of Anaesthesiologists. He is Associate Editor of Indian Journal of Anaesthesia, Journal of Anesthesiology and Clinical Pharmacology, Journal of Medical Case Reports and Central Journal of ISA. He is Editorial board member of *World Journal of Clinical Cases*. He is Core Committee member for formulation of National Airway Guideline under aegis of AIDAA; Core Faculty for training of AHA Accredited BLS and ACLS course at AIIMS International Training Centre, Core committee member for National Emergency Life Support Course under Government of India, Ministry of Health and Family Welfare. He wrote Invited Book Review for: *Drugs in Anaesthesia and Intensive Care*, Edward Scarth, Susan Smith (Editors), 5th Edition, published by Oxford University Press; Book Review for *Advanced Practice Palliative Nursing*, Constance Dahlin, Patrick J Coyne and Betty R Ferrell (Editors), published by Oxford University Press, USA and invited Book Review for *Oxford American Handbook of Hospice and Palliative Medicine and Supportive Care*, Sriram Yennurajalingam and Eduardo Bruera (Editors), 2nd Edition, published by Oxford University Press. He was awarded fellowship in Palliative Medicine.

Dr Vinod Kumar has done Basic Life Support (BLS) and Advanced Cardiac Life Support (ACLS) Provider Course accredited by American Heart Association, USA. He was selected to do BLS and ACLS Instructor Course for the same and has done Provider Course.

Dr Sachidanand was awarded Fellowship in Palliative Medicine.

Laboratory Oncology

Dr Sanjeev Kumar Gupta was chairperson for a session at 57th Annual Conference of ISHBT, November 2016, Jaipur; judge for the poster session at 57th Annual Conference of ISHBT, November 2016, Jaipur and member of organizing committee for the CME Series on Hemato-Oncopathology, 23–24 July 2016 at AIIMS, New Delhi.

Dr Amar Ranjan was MBBS External Examiner in Narayan Medical College, Sasaram, Bihar on 22–24 April 2016 and in Hind Inst of Medical Sciences, Barabanki, Lucknow on 29–31 July 2016; organized ‘National Medical Book Authors Workshop’, 10 September 2016, AIIMS, New Delhi.

Medical Oncology

Professor Lalit Kumar was member Scientific Council, IARC (International Agency for Research on Cancer), Lyon, France (24–27 January 2017); National Apex Committee for Stem Cell Research and Therapy (NAC–SCRT) ICMR (2016–2018); received BGRC–Silver Jubilee Oration Awards 2014 by ICMR announced on 24 November 2016; Dr Saroj Gupta Memorial oration during 8th East Zonal Oncology Symposium, 21 January 2017, Kolkata; Council Member, Indian Academy of Sciences, Bangalore (2016–2018); Member, Governing Council, Sun Pharma Science Foundation; Member expert group on cancer during 2nd AIIMS-FAM Conference, Toulouse, France, 18 November 2016.

Professor Atul Sharma was co-organizer of FHNO-IFHNOS Joint Meeting Delhi, October 2016 and organized a 2-day CME to commemorate 20 years of creation of Medical Oncology Department at AIIMS on 19–20 November 2016.

Professor Sameer Bakshi received Best Oncologist of the Year Award, 2015 by Worldwide Achievers Team; 4th Dr I.C. Verma Excellence Award for Young Pediatricians for 2016 by Indian Journal of Pediatrics; AIIMS Excellence Research Award, 2016 for outstanding published research work during the year 2015–2016; Cankids Gold Hero Award 2016 for promoting collaborative research under InPOG and also DNA Winners in Life Award for significant contribution as an oncologist.

Dr Ranjit Kumar Sahoo was awarded ISMPOCON Research award for research in the field of Renal Cell Carcinoma for the year 2016.

Dr Sameer Rastogi received best oral presentation in pediatric solid tumor Workshop for the presentation ‘Changing staging paradigm of rhabdomyosarcoma: Supporting Data from tertiary care centre from India’ along with cash award of Rs 5000.

Dr Thoudam Debraj Singh received Best Basic Science Paper of the Year Award, 2016 (Korean Society of Nuclear Medicine), sponsored by GE Healthcare for ‘Inverse agonist of estrogen-related receptor gamma (ERR γ) enhances sodium iodide symporter function through mitogen-activated protein kinase signaling in anaplastic thyroid cancer cells.’

Dr Atul Batra received Smt Geeta Mittal Award: Best Clinical Research, AIIMS, 2015 and Smt Shakuntala Jolly Award: Best DM Student, 2015, AIIMS

Medical Physics

Professor Pratik Kumar was invited as Reviewer for proposals submitted to Indo-Australia Biotechnology Fund under collaboration between DBT, India and Department of Industry, Innovation and Science, Australia; External expert for revision of ordinance/regulations and allied issues for BSc Medical Imaging Technology Course, Faculty of Medical Sciences, University of Delhi. He received National Research Development Corporation (NRDC) Meritorious Invention Awards for the year 2014. Selection committee member for Radiological Safety Officer (RSO), Department of Radiotherapy, IMS, BHU, Varanasi; Evaluator for projects submitted to Industry Innovation Program on Medical Electronics (IIPME) under Biotechnology Industry Research Assistance Council (BIRAC) and Department of Electronics and Information Technology (DEIT), Government of India; AIIMS nominated Nodal Officer for District Disaster Management Team; Expert for site visit team to evaluate proposals for financial assistance under BIRAC, Government of India; Visiting Faculty, Dr B. Borooah Cancer Institute, Guwahati for MSc Radiological Physics Course; Chaired a session at National Workshop on Nanotechnology: Emerging Frontiers and Applications (NEFA2017), Department of Physics and Chemistry, University of Delhi 2017; Paper Coordinator and Content Writer for subject Radiation Biophysics for e-PG Pathshala under National Mission on Education through Information Technology (NMEIT) initiated by Min. of Human Resource Development and UGC; Member, Editorial Board, Journal of Radiation and Cancer Research; Referee for manuscripts submitted to Luminescence, Ind J Pure and Applied Physics, Open J of Radiology and J of Medical Physics; Examiner for Ph.D. thesis at KGMU Lucknow, Department of Chemistry Delhi Univ, I.I.Sc. Bangalore and Shobit University Meerut; Examiner/question-setter for BSc/MSc imaging technology at PGI Chandigarh, UCMS Delhi, AMU Aligarh, SGT Univ Gurgaon and IGNOU Delhi. Continued to be Editor, Medical Physics Chronicle; Member, Editorial Board, Journal of Medical Physics; Member, Electro-medical Equipment Sectional committee, BIS, New Delhi; Member, Board of College of Medical Physics of India (CMPI).

Radiation Oncology

Professor G.K. Rath is Head, National Cancer Institute (AIIMS 2 campus) at Jhajjar; Chief Guest and delivered convocation address, 10th Convocation of the Pravara Institute of Medical Sciences, Loni, Maharashtra, 12 April 2016; Conferred Doctor of Science (DSc) (Honoris Causa) at 10th convocation of the Pravara Institute of Medical Sciences, Loni, Maharashtra, 12 April 2016; Appointed Visiting faculty at IGIMS, Patna; Guest of Honor at inaugural program of 2nd AMMO Conference and training of Maharashtra state medical officers and GPs at Nagpur on 6 August 2016; invited for consultation meeting for Ca Res NER—A multidisciplinary research programme for prevention and control of cancer in North eastern states in India at Bengaluru on 22 March 2017; Chairman, standing selection committee for faculty selection of AIIMS, Bhopal; participated in ICMR-WHO Regional consultation on National Ethical Guidelines for biomedical and health research involving human participants, 2016, 4 October 2016; attended meeting of International Cancer Screening Network, Agartala, 22–26 August 2016; Chairman, Organizing Committee, 12th International Conference of the Asian Clinical Oncology Society (ACOS), 8–10 April 2016; high power committee to discuss CMC proposal of M/S Elekta Pvt Ltd at the King George Medical University at Lucknow on 13 May 2016; Scientific Advisory Committee (SAC) of National Centre for Disease Informatics and Research (NCDIR), Indian Council of Medical Research, Bangalore; PRSG of the DIT for the projects entitled “Development of computer aided detection system for mammograms” (CAD for mammograms) submitted by CDAC and RCC, Thiruvananthapuram and Calcutta University; ICMR task force on “Cancer Management Guidelines”; National steering committee for project “Research and development of high energy electron linear accelerator technology for medical and other applications” being implemented by SAMEER, Mumbai and INMAS, DRDO, New Delhi; Chairman, Committee for grant of financial assistance from Prime ministers national relief fund to partially defray expenses for medical treatment and Co-chairman Expert group for cancer under Grant in aid (GIA) scheme of intersectoral convergence and coordination for promotion and guidance on Health research; Member, Expert Committees/Bodies of Atomic Energy Regulatory Board (AERB), Government of India, Member, Advisory committee for MSc in Cancer Biology Programme at Dr B Borooah Cancer Institute, Guwahati, Assam; Member, Scientific committee, Regional Cancer Center, Thiruvananthapuram; Member, Scientific advisory committee of Savitribai Phule Pune University, Pune; Expert, Standing selection committee for the post of Assistant Professor in the Department of radiation oncology at IGIMS, Patna on 13 June 2016; Member, Governing Bodies of three Regional Cancer Centers (Acharya Tulsi Regional Cancer Center, Bikaner, Acharya Harihara Regional Cancer Center, Cuttack and Regional Cancer Center, Agartala, and Regional Cancer Center, Allahabad); Member, Academic Committee, AIIMS, Bhopal; Expert, Selection of Assistant Professors, Department of Radiation Oncology, Dr RML Institute of Medical Sciences, Lucknow, 15 September 2016; Member, National coordination committee for Indian Cancer Congress 2017, Bangalore; Member, Technical evaluation committee for procurement, installation and commissioning of equipments for G+7 building at RCC, Agartala; Member, technical committee to evaluate technical offers of high energy linear accelerator at Dr B Borooah Cancer Institute, Guwahati, 11 May 2016.

Professor Sushmita Pathy established new treatment facility in collaboration with Ocular oncology division at RP Center (AIIMS): Plaque brachytherapy facility. She was member of selection committee Guru Govind Singh Indraprastha University, February 2017. She was invited faculty 24th International Conference of the Indian Association of palliative care Coimbatore, February 2017, invited for teaching session on “Master class in Ocular Oncology” held at Hyderabad, February 2017. She is academic in-charge 2016: Designing academic schedule, academic assessments for post graduate teaching.

Dr Subhash Gupta is Associate Editor of International Journal of Oncology Science.

Dr K.P. Haresh is Editor in Chief of International Journal of Oncology Science and Guest of Honor at the ‘Breast Cancer Update 2016’ at IGIMS Patna on 19 November 2017.

Dr Ahitagni Biswas was awarded Fellowship of the Royal College of Radiologists (FRCR), Clinical Oncology (UK) in May 2016.

Surgical Oncology

Professor NK Shukla was invited to attend as a subject expert to start MCh Surgical Oncology Course at AIIMS, Raipur and Rishikesh, external examiner for MCh Course and Phd Course in KGMU Lucknow; invited to start surgical oncology department in super speciality clinic at Lucknow. He continues to be member of ASI, ISO, IASO and ABSCION. He was awarded the Fellowship of the American College of Surgeons (FACS).

Professor S.V.S. Deo was elected as council member Breast Surgery International–International Society of Surgery Switzerland; elected Treasurer of Association of Breast Surgeons of India; appointed Editorial board member, J Clin Surg Oncol and World Journal of Surgery; invited technical expert for procurement of surgical oncology machinery and equipment for GCRI Ahmedabad; subject expert to start MCh Surgical Oncology course at AIIMS, Bhubaneswar; UPSC Expert for selection of Surgical Oncology Faculty; External expert, Standing selection committee meeting for faculty recruitment at IGIMS, Patna; AIIMS Rishikesh; AIIMS Jodhpur; examiner MCh (Surgical Oncology), St Johns Medical College, Bangalore; JIPMER, Puducherry; Cancer Institute and Regional Cancer Center, Adyar, Chennai; awarded Fellowship of American College of Surgeons (FACS) and International College of Surgeons (FICS); Specially invited as moderator of Live surgery for complete cytoreduction and HIPEC by Prof Paul Sugarbaker in Workshop of ACOS 2016; nominated for SSB Prize by Director, AIIMS; received Rastriya Gourav Award in 2017 for excellence in the field of Onco Surgery.

10.4. Dr Rajendra Prasad Centre for Ophthalmic Sciences

Chief

Atul Kumar

Professors

Pradeep Sharma

Ramanjit Sihota

Gita Satpathy
(Ocular Microbiology)

J.S. Titiyal

Radhika Tandon

S.K. Khokhar

Shakti Kumar Gupta
(Medical Superintendent)

Mahesh Chandra

Dilip R. Shende
(Ocular Anesthesia)

Mandeep Singh Bajaj

Raj Pal

Seema Sen
(Ocular Pathology)

Sanjay Sharma
(Radiodiagnosis)

Seema Kashyap
(Ocular Pathology)

Namrata Sharma

Tanuj Dada

Pradeep Venkatesh

Neelam Pushker

T. Velpandian
(Ocular Pharmacology)

Praveen Vashist
(Community Ophthalmology)

Jasbir Kaur
(Ocular Biochemistry)

Rohit Saxena

Vinay Gupta

Renu Sinha
(Ocular Anesthesia)

Tushar Agarwal

M. Vanathi
Bhavna Chawla

Rajesh Sinha

Additional Professor

Parijat Chandra

Associate Professors

Senjam Suraj Singh
(Community Ophthalmology)

Alok Kumar Ravi
(Ocular Biochemistry)

Nabanita Halder
(Ocular Pharmacology)

Assistant Professors

Noopur Gupta
Rachna Meel

Swati Phuljhene
Vivek Gupta
(Community Ophthalmology)

Neiwete Lomi
Dewang Angmo

Vinod Kumar

Nishat Hussain Ahmed
(Ocular Microbiology)

Prafulla Maharana

Rohan Chawla

Shikha Gupta

Shorya Vardhan Azad

HIGHLIGHTS

1. The Centre is engaged in management of the entire spectrum of vitreoretinal and uvea diseases. We perform advanced vitreous surgery including Minimally Invasive Vitreous Surgery (MIVS) in vitreoretinal disorders with excellent results, beside using latest treatment for managing diabetic retinopathy, wet AMD and ROP. Our key research is focused around use of stem cells for Retinitis Pigmentosa and Dry AMD. The department is aided with the latest diagnostic equipment for retinal diseases like Adaptive Optics, Spectral domain OCT, wide field imaging and angiography, microperimetry etc.
2. Glaucoma unit organized world Glaucoma Week in March 2017.
3. Plaque brachytherapy for treatment of ocular malignancies was introduced with collaboration of IRCH.
4. Upgradation of low vision services with additional rehabilitation services with help of Community Ophthalmology and support of Christoffel Blinden Mission (CBM).

5. New collaboration for research: As requested by Director, AIIMS by official circular, in keeping with President Obama and PM Modi's vision for Indo US collaboration, collaborative links have been established with the following Institutes of higher learning and excellence: Jules Stein Institute, Tufts University, UT Western University of Texas, Massachusset Eye and Ear Infermary, Harvard Medical School, NEI, NIH, Bethesde, MD, USA, Sightlife, Seattle, USA, Cleveland Clinic, USA.
6. Research is being done in the following areas in ocular pathology: Micro-RNA and Epithelial-Mesenchymal Transition (Metastasis) in sebaceous gland carcinoma, role of chlamydia in ocular adnexal lymphomas, HMGA proteins in retinoblastoma, mitochondrial mutational study in retinoblastoma, immunohistochemical and molecular study of cell cycle regulatory proteins in ocular surface squamous neoplasia, gene expression profile of human uveal malignant melanoma., Epigenetics of p53 and role of cyclins in ocular surface squamous neoplasia, Role of NF κ B (NFkB) pathway in uveal melaonoma.
7. The ocular microbiology department processed a total of **21,735** specimens during the last year for various investigations like bacterial culture and antimicrobial sensitivity testing; fungal culture; Culture and PCR for Acanthamoeba eye and CNS infections; Chlamydia antigen detection, serology, PCR assay for eye infections and male and female genital tract infections; Herpes simplex virus antigen detection; PCR assays for bacteria, fungi, viruses, Chlamydia and Acanthamoeba etc. from indoor and outdoor patients of Dr RP Centre for Ophthalmic Sciences. The investigations for chlamydial infections and Acanthamoeba infections were also provided to other clinical department of AIIMS on request.
8. **National Surveys:** National Blindness Survey and National Trachoma Survey, India, are being conducted by Community Ophthalmology Dr R.P. Center with support from National Program for Control of Blindness, Ministry of Health and Family Welfare, Government of India. The blindness survey has been completed in 18 districts selected from 16 states. The National Trachoma Prevalence survey has been completed in 10 districts from 7 states. The National Trachoma Rapid Assessment has been completed in 17 districts from 16 states. The result from survey showed that the active trachoma infection among children is eliminated in our country as per WHO Guidelines for trachoma elimination. In addition to this, epidemiological study on childhood blindness survey is being conducted in Delhi. So far, 26 of the 40 clusters have been completed. An operational research on involvement of Accredited Social Health Activists (ASHA) in delivery of primary eye care amongst urban poor population and development of community based disability inclusive eye health program is being started in department. Development of health literacy tool for patients receiving primary eye care services is also undergoing in the community Ophthalmology.
9. **Vision Centres:** For the first time, community ophthalmology started 11 new Vision Centres in collaboration with Delhi Government. These centres are being run in urban vulnerable population of Delhi. Hospital based eye health education activities for OPD patients in Dr R.P. Centre and low vision rehabilitation services also started in the department. Under low vision rehabilitation, more than 13 NGOs working for visually impaired people have established networking with Community Ophthalmology to provide community based rehabilitation.
10. The department plays instrumental role in the development of WHO SEARO action plan for control of blindness in SEARO countries
11. The department was instrumental in the revision of blindness definition under National Program for Control of Blindness, Ministry of Health and Family Welfare as well as visual disability re-classification under Ministry of Social Justice and Empowerment, GOI. It also assists in finalizing the package and packages rates for National Health Protection Scheme (NHPS).
12. Ocular Pharmacology and Pharmacy: Patent for Indian and PCT application has been filed for the innovation entitled 'A novel device, method and kit for the reconstitution of a solid or semi-solid pharmaceutical composition'. A scientific analysis of bioactive compounds including antibiotics in surface and ground water in Delhi and NCR has been undergoing which is a part of the initiative of National Mission for Clean Ganga. Standardized Corneal Storage Media (to enable corneal transplant for Government Ophthalmology Hospitals in India) and serving it to 50 eye banks across 22 states of India (MHFW-AIIMS) from 2010, till date (enabled more than 15000 eye donations across the country).

Department of Ocular Biochemistry is involved in teaching, research and patient care. Patient care services includes routine blood investigations such as blood sugar, lipid profile, kidney and liver function tests and specific investigations like hormones, vitamin B12 etc. Ocular Biochemistry has attained many significant achievements. Scientific research areas include ocular tumors, glaucoma, angiogenesis associated retinal diseases and stem cell research both basic and translational. The novel findings have been observed and archived in the respective International database. International publications have been well recognized and cited in Books. Department has been recognized with many national and international awards. With the help of latest molecular biology techniques and bioinformatics, we have identified candidate genes that could be used as prognostic/therapeutic targets for ocular tumors. Studies on identification of differentially expressed genes and circulating stem cells in preterm infants are in progress for more effective preventive and personalized approach for the ROP.

EDUCATION

Class lectures taken by faculty for:

- MBBS Classes and Assessment.
- MD (Ophthalmology) Rounds and Classes and Assessment
- BSc (Optometry) Classes and Assessment
- BSc Nursing classes
- PG teaching programme in AIOC Conference
- DOS Teaching programme, RPC
- AIOC RPC PG Teaching programme

Qualified during the year

1. Training of District Ophthalmic Surgeon: 5
2. Short/Long term training: 9
3. Workshop/Symposium: Nil

Short term Training

1. Dr (Maj) Priya Tanak, Classified Specialist (Ophth.), Indian Army MH, Ambala, Pin-900129, Haryana, from 15 September 2015 to 14 September 2017 (Anterior Segment Surgery), Unit-III
2. Dr (Cdr) Srujana D Ophthalmologist Sponsored by DGAMS, Ministry of Defence, Government of India, from 20 February 2016 to 19 February 2018
3. Mr Sahib Yuvraj Tuteja, 111A/97, Ashok Nagar, Kanpur, U.P., From 4 July 2016 to 3 August 2016 (Elect. training in Ophth.-I, II, III & IV)
4. Dr Manisha Gupta, Prof of Ophthalmology, Shri Guru Ram Raj Institute of Medical and Health Sciences, Shri Mahat Indresh Hospital, Patel Nagar, Dehradun, 248001, from 30 June 2016 to 29 July 2016 (Corneal Transplantation, Unit-III)
5. Dr Ashu Agarwal, Assistant Professor, SMS Medical College, Jaipur, Rajasthan, from 1 October 2016 to 31 March 2017 (Vitreous Retina), Unit-II
6. Dr Nidhi Gajendregedkar, Sponsored by M and J Western RIO, Ahmedabad, Gujarat, from 1 September 2016 to 15 September 2016 & 19 September 2016 to 4 October 2016, III & VI
7. Dr Rohit Kapoor NFSG, ESI Hospital, Basai Dara Pur, New Delhi-110015, from 1 September 2016 to 30 November 2016 (Vitreous Retinal Surgery), Unit-II
8. Dr Chandana Kakati Registrar, Guwahati Medical College, Assam, from 1 November 2016 to 30 November 2016 (Occuloplasty), Unit-V
9. Dr Jitender Phogat, Asstt. Professor, RIO, Pt. B.D. Sharma, PGIMS, Rohtak, Haryana, from 2 January 2017 to 28 January 2017 (Vitreous Retina), Unit-II

District Ophthalmic Surgeons trained

1. Dr Bai Bam, Jr Eye Surgeon, G.H., Aalo, West Siang District, Arunachal Pradesh Camp, from 4 March 2016 to 3 May 2016 (Glaucoma), Unit-IV
2. Dr Praveen Kant Sharma, Medical Officer, Government General Hospital, Hindaun City District Karauli, Rajasthan, from 1 July 2016 to 31 August 2016 (Pediatric Ophthalmology), Unit-I
3. Dr Bi. P.P., GDMO (Ophthalmology Unit), Indira Gandhi Hospital Kavarati, Lakshadweep, from 11 July 2016 to 31 August 2016, (Phacoemulsification), Unit-III
4. Dr Pradeep Kumar Maheshwari, Sr Specialist (Eye), Mobile Surgical Unit, Ajmer, from 1 September 2016 to 31 October 2016, (Phacoemulsification), Unit-III
5. Dr Rajkesh Pandey, Sr Specialist (Eye), Doon Hospital, Dehradun, from 1 October 2016 to 30 November 2016 (Glaucoma), Unit-IV

CMEs/Workshops/Symposia/National and International Conferences

1. CME on RPC UPDATE 2016 on the occasion of Annual Day of Dr R.P. Centre for Ophthalmic Sciences at Jawahar Lal Auditorium, AIIMS, New Delhi on 10 March 2016
2. AIOS teaching programme, New Delhi, 2016
3. RPC Congress 2017 organized on 11 & 12 March 2017 at Jawahar Lal Auditorium, AIIMS, New Delhi by Dr R.P. Centre for Ophthalmic Sciences on the occasion of the 50th Annual Foundation Day

4. Retina Workshop was hosted by the department on 1 October 2016 at RP Centre, AIIMS.
5. Organized Cornea and Refractive Surgery Workshop as part of Golden Jubilee Celebrations of RPC Foundation Day, October 2016, R.P. Centre for Ophthalmic Sciences, AIIMS, New Delhi
6. Chairman, 31st National Eye Donation Fortnight celebration at R.P. Centre, AIIMS, New Delhi, August 2016
7. President of Indian Society of Cornea and Kerato Refractive Surgeons (ISCKRS) Annual Meet 2016, New Delhi, August 2016
8. RPC, Sightlife DSAEK course. August 2016. RPC, AIIMS, New Delhi
9. Glaucoma Workshop, 21 August 2016, New Delhi
10. Strabismus and Neuro-Ophthalmology Workshop, 17 July 2016
11. World glaucoma week–public education programme, 17 March 2017, New Delhi
12. 2 day Glaucoma Workshop of District Ophthalmologists initiated on 17 March 2017, New Delhi and continued till the month of April, A total of Ophthalmologists trained
13. Oculoplasty and Oncology Workshop organized at RPC, November 2016
14. Cornea and Refractive Surgery Workshop, organized at Dr R.P. Centre for Ophthalmic Sciences, AIIMS LT, 6th Floor, 23 October 2016
15. PK Skills Transfer Course, Dr R.P. Centre for Ophthalmic Sciences, AIIMS, 8–11 November 2016
16. IXth DOS Teaching Program, Dr R.P. Centre for Ophthalmic Sciences, AIIMS and India Habitat Centre, 11 & 12 November 2016
17. Winter DOS 2016, India Habitat Centre, 12 & 13 November 2016
18. Oculoplasty and Ocular Oncology Workshop, Dr R. P. Centre, AIIMS, 20 November 2016
19. Research Collaboration Meeting with NEI, NIH, Board Room of Chief's Office Dr R. P. Centre for Ophthalmic Sciences, AIIMS, 5 December 2016
20. Guest Lecture, Board Room of Chief's Office Dr R.P. Centre for Ophthalmic Sciences, AIIMS, 5 December 2016
21. Guest Lecture, LT, 6th Floor, RPC, 15 February 2017
22. World Optometry Day, 2017, Optometry Students' Association (OSA), Dr R.P. Centre, AIIMS, 23 March 2017
23. Workshop on "Childhood Myopia" for the school principals for involvement in DST intervention study on 19 November 2016 at LT-6, Dr R.P. Centre, AIIMS
24. Training Programme on Primary Eye Care for the Auxiliary Nurse Midwives (ANMs) on 14 February 2017 at community ophthalmology Dr R.P. Centre, AIIMS

Lectures delivered

Atul Kumar: 13	Pradeep Sharma: 12	Ramanjit Sihota: 7
Gita Satpathy: 1	J.S. Titiyal: 24	Radhika Tandon: 16
S. Khokhar: 11	Dilip R. Shende: 6	M.S. Bajaj: 2
Raj Pal: 7	Seema Sen: 1	Sanjay Sharma: 2
Seema Kashyap: 3	Namrata Sharma: 19	Tanuj Dada: 1
Pradeep Venkatesh: 3	Neelam Pushker: 9	T. Velpandian: 4
Praveen Vashist: 18	Jasbir Kaur: 1	Rohit Saxena: 1
Viney Gupta: 13	Renu Sinha: 13	M. Vanathi: 2
Rajesh Sinha: 31	Parijat Chandra: 6	Senjam Suraj Singh: 8
Nabanita Halder: 1	Noopur Gupta: 11	Rachna Meel: 5
Vinod Kumar Agarwal: 7	Swati Phuljhele: 7	Vivek Gupta: 6
Nishat Hussain Ahmed: 2	Shikha Gupta: 1	Dewang Angmo: 1

Atul Kumar: 13

1. Guest speaker, 6 April 2016, Sitapur Eye Hospital, U.P.
2. Panelist public lecture on diabetic mellitus, 7 April 2016, J.L. Auditorium, AIIMS, New Delhi
3. Guest faculty, Retina Meeting, 30 April 2016–1 May 2016, Eye Foundation, Coimbatore
4. Guest faculty, eye advance, 18 June 2016, Mumbai
5. Guest faculty, VEIN, 6 & 7 August 2016, Narayan Netralaya, Bangalore
6. Guest faculty, diabetic retinopathy Symposium and cross fire, 19–21 August 2016, LVPEI, Hyderabad

7. Chief guest and guest faculty, Annual Meeting of the Kanpur Ophthalmic Society, 27 & 28 August 2016, Kanpur
8. Guest faculty, Haryana Ophthalmology Society Conference, 3 September 2016, Haryana
9. Invited speaker, 30th Annual North Zone Ophthalmology Society Conference, 14–16 October 2016, Dehradun
10. Guest speaker, XXV Annual Conference of Vitreo, Retinal Society, 30 November 2016–2 December 2016, Chandigarh
11. Member of NPCB, First regional expert group consultation on prevention of blindness Workshop, 9–11 December 2016, Hyderabad
12. Guest speaker, “iFocus” national education program, 12 January 2017, Hyderabad
13. Guest speaker, Annual Conference of the VRSI, 16–18 February 2017, Jaipur

Pradeep Sharma: 12

1. What’s new in strabismus management, third nerve palsy nystagmus, Ped eye 2017, March 2017, HV Desai Hospital, Pune
 - PG Teaching lecture Indications Dosing and Surgical techniques in Strabismus 2017
 - Nystagmus Simplified
 - Strabismus IC: Can you adjust please?
 - Strabismus IC: From Haves to Have nots!
 - Strabismus IC: Chopping intelligently!
 - Neuro Oph IC Binocular Diplopia relevant investigations
2. WSPOS Symposium: Strabismus Reoperations, The Golden rules, AIOS, February 2017, Jaipur, Rajasthan
 - Squint and Neuroophthalmology–1 (mentor)
3. Tackling Exotropia, Strabismus Surgery–An Overview, Paralytic Strabismus, iFocus 2017, January, 2017, Hi-Tech City, Hyderabad
4. Amblyopia to Streopsis, PGT Teaching programme in ophthalmology 2017, January 2017, Sankara Eye Hospital, Bangalore
5. Decision making in Strabismus, AIOS, ARC, North Zone PG Refresher Programme, December 2016, JLN Auditorium, AIIMS, New Delhi
 - Duane Retraction syndrome
 - Hair to Here: My journey
 - Vertical rectus transpositioning
6. Nystagmus, Conclave on Pediatric Ophthalmology and Strabismus CONVERGENCE Meeting, December 2016, Chitrakoot, M.P.
7. Duane retraction Syndrome: A rational approach, AAPOS, SPOSICON 2016 Meeting, December 2016, Jaipur, Rajasthan
8. Duane Refraction Syndrome: More than meets the eye, Winter DOS, November 2016, New Delhi
9. Intermittent Exotropia, Haryana Ophthalmological Society Annual Conference, September, 2016, Rohtak, Haryana
 - Straightening AV patterns
 - Adjustable surgery
10. Complex Strabismus, The 24th BOA Annual Conference, August 2016, Mumbai
11. Restoring 3, D Vision, Dr R.P. Centre Golden Jubilee Year (2016–2017), July, 2016, JLN Auditorium, AIIMS, New Delhi
 - Evaluation of Strabismus: Understanding and Diagnosis
 - Common Surgical Procedures in Strabismus
 - Management of Paralytic Strabismus
 - Management of Restrictive Strabismus
 - Management of Intermittent XT
12. Management of Childhood Nystagmus, Indonesian Ped Ophthalmology and Strabismus Society annual Meeting, 2016, May 2016, Bandung, Indonesia

Ramanjit Sihota: 7

1. Current Glaucoma management, Palakkad Society for Ophthalmic surgeons, May 2016, Palakkad
2. Pediatric glaucoma—long term, Delhi Ophthalmic Society, April 2016, New Delhi
3. Teleglaucoma in developing countries, Glaucoma Research Society, August 2016, Seoul
4. Relevance of Land mark Glaucoma trials, International Agency for Prevention of Blindness, 10th assembly, October 2016, Durban Conference center, Durban
5. 30 years of glaucoma practice, Glaucoma Society of India, November 2016, CSIR-IHBT Auditorium, Palampur
6. Long term results in pediatric glaucoma, Intercontinental perspective on Pediatric Ophthalmology, December 2016, Convention center, Jaipur
7. Bleb revision in Glaucoma, All India Ophthalmological Society, February 2017, Convention center, Jaipur

Gita Satpathy: 1

1. Be smart with Antibiotics, Antimicrobiol Resistance, 2 April 2016, Sr Gurun Ram Dass Institute of Medical Sciences, Amritsar, Punjab

J.S. Titiyal: 24

1. Symposium on difficult situation in phacoemulsification. 67th Annual Conference, New Delhi, Delhi Ophthalmological Society, April 2016
2. CME Surgifusion, Indian Society of Cornea and Keratorefractive Surgeons, May 2016
3. Endothelial Keratoplasty: Cornea Meet, Jaipur Ophthalmological Society and Indian Society of Cornea and Keratorefractive Surgeons (ISCKRS), June 2016
4. Cornea and Refractive Oration Session, Indian Society of Cornea and Keratorefractive Surgeons (ISCKRS), August 2016
5. Cornea Session, Annual Conference of Bombay Ophthalmologist's Association (BAO, August, 2016
6. Cataract and Refractive Surgery. Delhi Ophthalmological Society, November 2016
7. Corneal collaboration, Delhi Ophthalmological Society, November 2016
8. Symposium Newer Diagnostics Meeting, Annual Karnataka Ophthalmological Society, November 2016
9. Lasers: Technology & An International Symposium, Russian Society of Ophthalmologists (Russian Cornea Symposium, 75th All India Ophthalmological Society, February 2017
10. Breakfast Sessions, Sub, Speciality Capsules, Indian Society of Cornea and Refractive Surgery (ISCRS, 75th All India Ophthalmological Society Conference,) February 2017
11. Legendary Institutes of India-2 (DR R.P. Centre; PGI-Chandigarh). 75th All India Ophthalmological Society Conference. February, 2017, Jaipur, Rajasthan, India
12. Lunch Time Symposia Sponsored by FDC, "New Dimension in the Treatment of Dry Eye Chloroquine Phosphate". 75th All India Ophthalmological Society Conference, February 2017, Jaipur, Rajasthan, India
13. The BIG Standoff: Dilemmas in Cataract and Refractive Surgery Busted! 75th All India Ophthalmological Society Conference, February 2017, Jaipur, Rajasthan, India
14. Guest faculty, XVII Cataract and Refractive Surgery Meeting, October 2016
15. Femtosecond Laser Assisted Cataract Surgery in challenging situations, American Academy of Ophthalmology (AAO), October 2016
16. Management of cataract patients with pterygium, European Society of Cataract and Refractive Surgeons, September 2016
17. Guest faculty, Amritsar Academy of Ophthalmology, March 2017
18. Guest faculty, Department of Eye, Aizawl Hospital and Research Centre, March 2017
19. Guest Faculty, Keracon 2016 Cornea Society of India, December 2016
20. Guest faculty, Intra Ocular Implant and Refractive Surgery Society of India, July 2016
21. Guest faculty CME "Cornea and Eye Banking" B J Government Medical College, April 2016
22. Guest faculty, Karnataka Ophthalmological Society, November 2016
23. Guest Faculty DSAEK and FLACS Delhi Ophthalmological Society, November 2016
24. Guest Faculty Multifocal IOL Surgery, Phaco, Refractive "Decoded", Coimb, October 2016

Radhika Tandon: 16

1. Atypical cases and their management, DOSCON 2016, 15–17 April 2016, New Delhi
2. All India Consortium for the Alleviation of Blindness, XIth International Congress on Advances in Ophthalmology, Eye Advance 2016 Under the auspices of Indian Academy of Ophthalmology Intraocular Implant and Refractive Society, India, 17–19 June 2016, Mumbai
 - Corneal Symposium
 - Cornea Corner
3. Target Emmetropia, Annual Conference of Indian Intraocular Implant and Refractive Surgery Convention (IIRSI 2016), 2 & 3 July 2016, Chennai
4. An update on Post LASIK ectasia, Annual Conference of Indian Society of Cornea and Kerato, Refractive Surgeons (ISCKRS Meet 2016)
5. Cornea and Refractive: Controversies, Concerns and Solutions. 13 & 14 August 2016, India Habitat Centre, Lodhi Road, New Delhi
6. Eye Donation Promotion, 50 Years of National Eye Bank Celebrations and 31st Fortnight Celebrations, 30 August 2016, Jawahar Lal Auditorium, AIIMS, New Delhi
 - Keynote Address: Vision 2020–Eye Banking and role of EBAI
 - OSD: Diagnosis and Indication for surgery
 - Post PK follow up–Challenges to increase graft survival
 - Keratoprosthesis: Indication contraindication and results
7. Medico legal Aspect of Eyebanking, 8th National CME of Eye Bank Association of India, 1 & 2 October 2016, Varanasi
8. Keratoprosthesis Judge Cornea in the diabetic eye Chairperson, Winter DOS 2016 Combined DOST and Winter DOS Session: Live Telecast of Ophthalmic Specialty Surgeries from Dr R.P. Centre, AIIMS
9. Special Session II (DOL season II), Delhi Ophthalmic League 2016 (DOL 2016): VIDEO WARS, DIABETIC EYE–Know All
10. Corneal Collaborations, 12 & 13 November 2016, India Habitat Centre, New Delhi
11. Panelist–Smart Nanosystems for Tissue Engineering and Cosmoceutics, 1st Annual Conference of Indian Society of Nanomedicine “NANOBIOTECK, 2016”, 24–26 November 2016, AIIMS, New Delhi
12. Strategies to control corneal blindness in India, KERACON 2016, 4th National Meeting of Cornea Society of India, 15–17 December 2016, Lavasa, Pune
13. Research Methodology: Insights for Novice, AIIMS Optometry Explorer 2.0, 18–20 January 2017, AIIMS, New Delhi
14. Panel Discussion, Taming the roaring tiger–recurrent pterygium, Annual Conference of All India Ophthalmological Society, 2017, 17 February 2017, JECC Convention Centre, Jaipur
15. Panel Discussion, VAST–ALTK: Tips for donor and host preparation; SALK and HALK (10 mins), Annual Conference of All India Ophthalmological Society, 2017, 18 February 2017, JECC Convention Centre, Jaipur
16. Keynote Section: Corneal Blindness Problems and Solutions, Corneal Blindness Backlog Free Punjab follow up Meeting organized by the Department of Health and Family Welfare Government of Punjab, 29 March 2017, Punjab

S. Khokhar: 11

1. IOLs in infancy, Conference (EPOCH) Karnataka Ophthalmic Society at M. M., 23 & 24 April 2016, Jooshi Eye Institute, Hubli
2. Pediatric Cataract, Department of Opth. 13 June 2016, Indira Gandhi Institute of Medical Sciences, Bihar
3. Key techniques Pediatric Cataract Surgery, Conference APACRS and INACRS Nusadva BACI Indonesia, 27–30 July 2016
4. Caveats in Pediatric cataract surgery and IOLs in infancy (ii) Moderator, Optha Quest, 2016, 16 July 2016
5. Pediatric cataracts on Egs-Complex cases and High Myope, When to say “NO for ICL? Optha Quest, 2016, 17 July 2016
6. Pediatric cataracts with PHPV, DOS Teaching Programme, 24–30 July 2016, AIIMS, New Delhi
7. Video and Poster Presentation, Conference American Academy of Ophthalmology (AAO 2016), 15–18 October 2016, Chicago

8. Non corneal refractive procedures, Annual Conference organized by Lucknow Ophthalmological Society, 5 & 6 November 2016, Lucknow
9. Pediatric Cataract (GA), DOS Teaching Program Live Surgery, 12 November 2016, AIIMS, Dr RPC, New Delhi
10. Low diopter Astigmatism correction in Cataract surgery, Cataract Program (PHACOEXCEL) 2016, Arvind Eye Hospitals Pondicherry, 12 & 13 November 2016
11. Pediatric Cataracts and Controversies in Pediatric Ophth and Strabismus, An Intercontinental perspective of Pediatric Ophthalmology and Strabismus Conference organized by AAPOS and SPOSI Jaipur, 2–4 December 2016, Jaipur

Dilip R. Shende: 6

1. ETT vs LMA, Pearls and Pit falls in an Eye Surgery, 4th World Congress of Ophthalmic Anaesthesiologist (WCOA-2016), 3 & 4 September 2016, Chennai
2. USG Guided Lower Extremity Blocks, ICPM-2016, 5th International Congress on Pain Medicine. 21–25 October 2016, Department of Anaesthesiology S.G.P.G.I Lucknow, Port Blair, Andamans
3. Sedation during Ophthalmic Surgery: Role of Anaesthesiologist, 64-ISACON, 2016, 25–29 November 2016, Punjab Agriculture University, Ludhiana
4. MAC and Sedation during Ophthalmic surgery, Department of the Anaesthesia Golden Jubilee Celebration Dr R.P. Centre AIIMS New Delhi-110029, 28 January 2017
5. Conduct of Sub-Tenon block Workshop Wet Lab Session, 50th Golden Jubilee celebration, Ophthalmic block and resuscitation Workshop/CME, 28 January 2017, Dr R.P. Centre for Ophthalmic Sciences AIIMS, New Delhi, Delhi
6. Anaesthesia for penetrating eye injury in syndromic children, 9th National Conference of Paediatric Anaesthesia, 17–29 February 2017, Department of Anaesthesiology and Critical Care, KGMU, Lucknow

M.S. Bajaj: 2

1. Management of Epiphora, All India Ophthalmological Society Annual Conference, February 2017, Science City, Jaipur
2. Surgical Approches to Orbitotomy, Joint IDOS-COSL Meeting, December 2016, Colombo

Raj Pal: 7

1. Development of New Curriculum of DNB Course, Specialty of Ophthalmology by National Board of Examination, 11 March 2016, Dwarka, NBE, New Delhi
2. Management of Foreign body removal, 67th Annual dos Conference DOSCON 2016, 15–17 April 2016, New Delhi
3. Foreign body removal, (Retina session) RPC UPDATE 2016, 1 October 2016, Dr R.P. Centre, AIIMS, New Delhi
4. Anti-VEGF agents in ROP, (Retina session) RPC UPDATE 2016, 1 October 2016, Dr R.P. Centre, AIIMS, New Delhi
5. Ophthalmic Potpourri, Winter DOS 2016, 12 & 13 November 2016, India Habitat Centre, Delhi
6. ACOIN Meeting, 75th AIOC Conference, 16–19 February 2017, Convention Centre Board Room, Jaipur
7. VRSI 25th Annual Conference, 30 November 2016–4 December 2016, Chandigarh

Seema Sen: 1

1. Pathological spectrum of orbital and adnexal tumours, Oculoplasty and Ocular Oncology Workshop, 20 November 2016, Dr R.P Centre, AIIMS, New Delhi

Sanjay Sharma: 2

1. Prostate Artery Embolization, International Symposium on Uro-radiology, 27–29 January 2017, AIIMS, New Delhi
2. Orbital Imaging, AIOS, ARC PG Refresher Program, 29 December 2016, AIIMS, New Delhi

Seema Kashyap: 3

1. Mol Research in Ocular tumours, IXth DOS Teaching 2016–2017, 17 April 2016, Delhi
2. Ocular Histopathology update for postgraduates, Clinical, Winter DOS 2016, 13 November 2016, AIIMS, Delhi
3. Applications of Ocular Pathology Talk + Moderator, AIOS ARC Teaching programme, 30 December 2016, AIIMS, Delhi

Namrata Sharma: 19

1. Phacoemulsification in Corneal and Ocular Surface Diseases, Eastern India Zonal Ophthalmological Congress, 23 & 24 April 2016, Shillong
2. Right call in Cataract and Refractive Surgery, Karnataka Ophthalmic Society, 21 & 22 May 2016, Bangalore
3. Management of Challenging cases in Ocular infections. Phacoemulsification in Ocular Surface and Corneal Disorders, Coimbatore Society of Ophthalmic Surgeons, 25 May 2016, Coimbatore
4. Recalcitrant keratitis, Indore Divisional Ophthalmological Society, 5 May 2016, Indore
5. Management of Corneal Perforations, 5th Annual Conference of Bangalore Ophthalmic Society, 18 & 19 June 2016, Bangalore
6. Phacoemulsification in OSD, Intraocular Implant and Refractive Society, India, 2 & 3 July 2016, Chennai
7. CME on Surgical Ophthalmology with live surgeries, Eye Fest 2016, 9 & 10 July 2016, Hubli
8. Complications of Refractive Surgery, Ahmedabad Ophthalmic Society–CME, 21 July 2016, Ahmedabad
9. Management Challenges in Ocular infections, Madurai Ophthalmologists Association, 29 July 2016, Madurai
10. Conjunctivitis and Keratitis, VELEYE 2016, 5–7 August 2016, Vellore, Tamil Nadu
11. Sterilization and disinfection of OT and Instruments Infections after kerato, refractive surgery, Annual Conference of the Haryana ophthalmological Society, 3 September 2016, Rohtak
12. Fungal Keratitis: Optimizing therapy, XXXIV Congress of the ESCRS–Eucornea Congress, 8–11 September 2016, Copenhagen, Denmark
13. Component Corneal Surgery, Deccan Ophthalmic Conference, 17 September 2016, Karnataka –Complex Corneal Clinics: Logical Solutions; Cornea, External Disease; Management of Ocular Chemical Injuries; Management of Pre-existing and Postoperative Corneal and Ocular Surface Problems During Phacoemulsification Cataract; Paradigm Shift in Management of Microbial Keratitis; Surgical Caveats for Pediatric Cataract Surgery; Fungal Ulcers: A Mushrooming Problem Cornea, External Disease; Peripheral Ulcerative Keratitis: Diagnosis and Management; Cornea, External Disease
14. Senior Instructor) (NS), American Academy of Ophthalmology 2016, 15–18 October 2016, Chicago, USA
15. Scientific Session Live surgery session, Annual Conference of Vidarbha ophthalmic Society, 21 October 2016, Nagpur
16. Component Surgery fungal keratitis, Sadguru conclave in Ophthalmology convergence 2016, 7 & 8 December 2016, Chitrakoot, U.P.
17. Intraoperative OCT guided anterior segment surgeries, Lamellar corneal surgeries–I–Focus 2017, 8 & 9 January, 2017, Hyderabad
18. Management of post Phacoemulsification corneal edema, 10th Annual Congress of Kolkata Academy of Ophthalmology, 28 & 29 January 2017, Kolkata
19. All India Ophthalmological Society Conference, 14–18 February 2017, Jaipur

Tanuj Dada: 1

1. Difficult scenarios in glaucoma, DOS annual 2017, 10 April 2017, New Delhi

Pradeep Venkatesh: 3

1. Diabetic retinopathy, DOS AIOS teaching Programme, 2016, New Delhi
2. Retinal detachment surgery, AIOS teaching programme, New Delhi
3. Endoresection of choroidal melanoma, Karnataka State Ophthalmic Society Meeting, Dharwad.

Neelam Pushker: 9

1. Interesting orbital tumors, CME on Oculoplasty and Oncology, January 2017, Shroff's Charity Eye Hospital, New Delhi
2. Management of entropion and ectropion, AIOS-ARC PG Refresher Program, December 2016, AIIMS, New Delhi
3. Ptosis, DOS PG Teaching Program, December 2016, AIIMS, New Delhi
4. Guide to correction of eyelid retraction, Winter DOS Conference, December 2016, Manekshaw Auditorium, New Delhi
5. Orbital inflammatory diseases, CME on Oculoplasty, December 2016, Vision Eye Centre, New Delhi
6. Transconjunctival ptosis correction, Workshop on Oculoplasty and Oncology, November 2016, R P Centre, New Delhi
7. Rare orbital tumors, 67th DOS Annual Conference, April 2016, New Delhi

8. Sentinel lymph node biopsy in malignant eyelid tumors, 67th DOS Annual Conference, April 2016, New Delhi
9. Involutional entropion correction, 67th DOS Annual Conference, April 2016, New Delhi

T. Velpandian: 4

1. Lecture, Research Advisory Committee (RAC), 14 September 2016, NIPER, Kolkata
2. Advance bio analytical techniques in biomedical analyses and conducted Live Demonstration on quantification of neurotransmitter and drugs in biological samples by Mass Spectroscopy, Annual Conference of Association of Physiologist and Pharmacologist of India” (APPICON 2016), 21–24 October 2016, AIIMS, Patna, Bihar
3. Smart Ports for the Selective Transport of Drugs Across Ocular Barriers, Golden Jubilee Conference of Indian Pharmacological Society, 14 & 15 February 2017, Patna
4. Innovation in Indian Perspective”, MEDCON–II, Organized by ASSOCHAM, 22 March 2017

Praveen Vashist: 18

1. Methodology of National Blindness Survey, India 2016–2018 and Study Designs in the research methodology session, DOS Conference 2016, 17 April 2016, Chankyapuri, New Delhi
2. Need for modify definition of Blindness, 50th Board Meeting of Vision 2020, 3 June 2016, Pune, Maharashtra, Pune, Maharashtra
3. Vision Centre, models for comprehensive outreach services, Vision 2020 India, 12th Annual Conference 2016, 4 June 2016, Pune, Maharashtra
4. Blindness Scenario in different regions of India: Existing data and future survey plans, Vision 2020 India, 12th Annual Conference 2016, 5 June 2016, Pune, Maharashtra
5. Models for Primary Eye Care Services and Vision for ASHA, 64th Annual Conference of Tamil Nadu Ophthalmic Association in, 5 & 6 August 2016, Vellore, Tamil Nadu
6. How to sensitize Doctors/Paramedics about the eye donation and its importance as well as the vital information related to eye donation, Training Programme of Medical Officer and Para-Medical Staff, 2 September 2016, Lady Harding Medical College, Delhi
7. Eye Donation Programme, Screening Camp, 8 September 2016, Satyagrah Mandap Gandhi Darshan Parisar, Delhi
8. Role of ASHA in Delivering of Primary Eye Care, Sharing Perspectives in Public Health: Newer Paradigms Conference, 10 September 2016, Army College of Medical Sciences, Delhi Cantt, New Delhi
9. Focus Group Discussion with ASHA workers, Involvement in Primary Eye Care Services, 24 October 2016, Khanpur dispensary, Delhi
10. Indian Eye Care, a National Perspective: Challenges and Opportunities, Residential training programme of medical officers and optometrists on “vision centres” by Andhra Pradesh HRD Institute, 2 November 2016, Bapatla, Vijaywada, Andhra Pradesh
11. Plan for accelerating the elimination of cataract backlog blindness, business as usual will not do! And Sustainable development goal and eye care, WHO SEARO Regional expert group consultation, Accelerating Actions for prevention of blindness, 13–15 December 2016, Hyderabad
12. Method of assessing Childhood Blindness and Visual Impairment, CME on Childhood Blindness, 17 December 2016, Community Ophthalmology Department, Dr R.P. Centre, AIIMS, Delhi
13. Study design in Observational Studies, 1 February 2017, DIP SAR, Pushp Vihar, Delhi
14. Focus Group Discussion with ASHA workers on Involvement in Primary Eye Care services, 11 February 2017, Jaunapur dispensary, South Delhi
15. Assessing Avoidable Blindness in India, 75th Annual Conference of All India Ophthalmological Society, AIOC, 2017, 16–19 February 2017, Jaipur, Rajasthan
16. Empowering ASHA workers in Primary Eye Care Delivery in the Vision 2020 Right to Sight Session, 75th Annual Conference of All India Ophthalmological Society, AIOC, 2017, 16–19 February 2017, Jaipur, Rajasthan
17. How to involve optometrist in eye health education, World Optometry Day, 23 March 2017, Dr R.P. Centre, AIIMS, New Delhi
18. How to assess Childhood Blindness, CME at AIIMS Rishikesh, 25 & 26 March 2017, AIIMS, Rishikesh

Jasbir Kaur: 1

1. Genetics of ocular diseases saving future generation, National Conference on medical and life sciences, 11 & 12 April 2016, Baba Farid University of Health Sciences, Faridkot

Rohit Saxena: 1

1. Contact lens vs LASIK for unilateral amblyopes, DOS annual 2017, 10 April 2017, New Delhi

Viney Gupta: 13

1. Overview of Pediatric glaucoma surgeries, EPOCH Meeting by the Karnataka Ophthalmic Association, 24 & 25 April 2016, Hubli
2. Juvenile open angle glaucoma: Thinking outside the box, Bangalore Ophthalmic Society Summit, 18 & 19 June 2016, Bangalore
3. Pitfalls in RNFL analysis, Bangalore Ophthalmic Society Summit, 18 & 19 June 2016, Bangalore
4. Optic disc evaluation in Glaucoma, Ophthalmopedia Glaucoma Workshop, 21 August 2016, AIIMS, Delhi
5. Glaucoma Medical management: How to begin and how to end, North Zone Ophthalmic Society Meeting, 16 October 2016, Dehradun
6. Juvenile Glaucomas, University of Kuala Lumpur, 17 November 2016, Kuala Lumpur
7. Diagnosis and progression on visual fields, AIOS Post graduate teaching program, 30 December 2016, AIIMS, Delhi
8. Disc Assessment: Catching them early and accurately, 75th AIOS Annual Conference, 16–19 February 2017, Jaipur
9. Diabetic with neovascular glaucoma: Should we give injections, drugs, laser or surgery, 75th AIOS Annual Conference, 16–19 February 2017, Jaipur
10. Steroid induced glaucoma in children, 75th AIOS Annual Conference, 16–19 February 2017, Jaipur
11. Quality of life and activities in advanced glaucoma, 75th AIOS Annual Conference, 16–19 February 2017, Jaipur
12. Pedigrees and inheritance of JOAG-APAO Annual Meeting, 1–4 March 2017, Singapore
13. Cataract in ACG Scenario, Glaucoma Update, 5 March 2017, Guru Nanak Eye Centre, Delhi

Renu Sinha: 13

1. Morbidities in syndromic children and their implications, AIIMS ISA Delhi 2016, 10 April 2016, AIIMS, LT, Delhi
2. Intravenous cannulation, Workshop on Perioperative Sonography for Anaesthesiologists, 10 July 2016, JPTC, Delhi
3. Sonoanatomy of brachial plexus block and sonoanatomy of individual nerves, Symposium Cum Workshop, Role of Ultrasound in Regional Anaesthesia and Pain Management on, 6 August 2016, JN Medical College, Aligarh Muslim University, Aligarh
4. Syndromic patients for ophthalmic surgery: What should we do, World Congress of ophthalmic anaesthesia (WCOA) 2016, 3 September 2016, Chennai
5. How I do it: TAP block, 5th International Conference on Pain Management, 21–25 October 2016, Portblair, Andaman
6. Anaesthetic challenges for ophthalmic surgery in syndromic babies, 64th ISACON 2016, 29 November 2016, Panjab University, Ludiana, Punjab
7. Management of patients on antiplatelet and anticoagulant for ophthalmic surgery, 50th Golden Jubilee celebration, ophthalmic blocks and resuscitation Workshop/CME, 28 January 2017, RPC, Delhi
8. Intraoperative common adverse events under eye blocks and their management, 50th Golden Jubilee celebration, ophthalmic blocks and resuscitation Workshop/CME, 28 January 2017, RPC, Delhi
9. Resuscitation Workshop, 50th Golden Jubilee celebration, ophthalmic blocks and resuscitation Workshop/CME, 28 January 2017, RPC, Delhi
10. Evaluation of Minimum Alveolar Concentration (MAC) of sevoflurane and Bispectral Index (BIS) for maintenance of central eye position during short ophthalmic procedure in spontaneous breathing children under general anaesthesia and correlation of MAC of sevoflurane with BIS-Research presentation, 21 March 2017, Conference Hall, AIIMS, New Delhi, Delhi
11. Challenges in ROP surgeries, AIIMS, CCR, 10 January 2017, AIIMS, Delhi
12. Ultrasound guided IJV cannulation, 1st Workshop on Application of Ultrasound on Regional Anaesthesia, 25 March 2017, Seminar Room, RIMS, Imphal, Manipur
13. Ultrasound guided sciatic nerve block, 1st Workshop on Application of Ultrasound on Regional Anaesthesia, 25 March 2017, RIMS, Imphal, Manipur

M. Vanathi: 2

1. Pediatric Cataract surgery in Special situations, Overview, American Academy of Ophthalmology 2016, 18 October 2016, McCormick Place, Chicago, USA

2. Pediatric Keratoplasty, American Academy of Ophthalmology 2016, 18 October 2016, McCormick Place, Chicago, USA

Rajesh Sinha: 31

1. Managing Decentered IOL, Ghaziabad Ophthalmological Society academic meet, 2 April 2016, RDC, Rajnagar, Ghaziabad
2. Alternatives to patients unfit for LASIK, Gorakhpur Ophthalmic Association, 1 May 2016, Raj Eye Hospital, Gorakhpur
3. Malpositioned IOL, Coimbatore Society of Ophthalmic Surgeons, 25 May 2016, Coimbatore
4. Descemet's membrane Detachment, 5th Annual Conference of Bangalore Ophthalmic Society "BOS SUMMIT 2016", 18 & 19 June 2016, Bangalore
5. Step by Step Management of Keratoconus, 11th International Congress on Advance, Eye Advance 2016, 19 June 2016, Powai, Mumbai
6. Collagen Cross Linking, Ludhiana Ophthalmic Society, 25 June 2016, Ludhiana
7. Intraoperative OCT guided anterior segment Surgeries, Annual Conference of Indian Intraocular Implant and Refractive Society, 2 & 3 July 2016, Chennai
8. Complications of Refractive Surgeries, Eye Fest 2016, 9 & 10 July 2016, M.M. Joshi Eye Institute, Hubli
9. Refractive Correction of Keratoconus, Ahmedabad Ophthalmic Society-CME, 21 July 2016, Parth Eye Hospital, Mangal Park, Ahmedabad
10. "Management Challenges in Ocular infections", Madurai Ophthalmologists Association, 29 July 2016, Aravind Eye Hospital, Madurai
11. Amniotic membrane transplantation Kota Divisional Ophthalmic Society, 31 July 2016, Divisional ophthalmic society, Kota
12. Component surgery of cornea, Udaipur Ophthalmic Society, 5-7 August 2016, Udaipur
13. Anterior Lamellar Keratoplasty, Cornea-CME, 31 August 2016, Gandhi Medical Collage, Bhopal
14. OT Construction Phacoemulsification for Beginners, Annual Conference of the Haryana ophthalmological Society, 3 September 2016, PGIMS, Rohtak
15. Endothelial Keratoplasty, Eizocon-2016, 24 September 2016, Patna
16. Limbal Stem Cell Transplantation, Eye Bank Association of India 2016, 1 October 2016, Cantonment, Varanasi
17. How to Publish Malpositioned IOL, Vizay Eye Con-2016, 7 & 8 October 2016, Aravinda Lasek Eye Hospital, Suryaraopeta, Vijayawada, Visakhapatnam
18. Update on Management of Keratoconus Femto Cataract Surgery, Annual Conference of Vidarbha ophthalmic Society, 21 October 2016, Nagpur
19. Managing Subluxated Cataract, Lucknow Ophthalmic Society, 5 November 2016, Gomti Nagar, Lucknow
20. Collagen Cross Linking, CME/Keratoconus Theatre, 6 November 2016, Bangalore
21. Complications of ICL Surgery, Up State Ophthalmological Society, 18 October 2016, Gorakhpur
22. Scleral Fixation of IOL, Kanpur Ophthalmic Society, 23 November 2016, Kanpur
23. Microspherophakia: Optimal Management, Punjab Ophthalmic Society, 10 December 2016, Punjab
24. Insertion of DSAEK Lenticule, Keracon 2016, 15-17 December 2016, Pune
25. Fixing IOL and Capsular bag, CME, Andhra Pradesh Ophthalmic Society, 24 & 25 December 2016, Tirupati
26. Ocular Surface Reconstruction, I-Focus 2017, 8 & 9 January 2017, HICC, Hyderabad
27. Secondary IOL implantation in Children, DSAEK in Challenging Situations, 10th Annual Congress of Kolkata Academy of Ophthalmology, 28 & 29 January 2017, Kolkata
28. Phaco in Small Pupil, DSAEK in Challenging Situations, 10th Annual Congress of Kolkata Academy of Ophthalmology, 28 & 29 January 2017, Kolkata
29. Complications of LASIK, DSAEK in Challenging Situations, 10th Annual Congress of Kolkata Academy of Ophthalmology, 28 & 29 January 2017, Kolkata
30. Work up for Toric IOL, DSAEK in Challenging Situations, 10th Annual Congress of Kolkata Academy of Ophthalmology, 28 & 29 January 2017, Kolkata
31. Scleral Fixation of IOL in Children, All India Ophthalmological Society Conference, 14-18 February 2017, Jaipur

Parijat Chandra: 6

1. Pediatric Retinal Disorders, Annual Conference of DOS, 15-17 April 2016, Delhi

2. Surgical Challenges in Advanced ROP, Annual Conference of DOS, 15–17 April 2016, Delhi
3. Practicing quality improvement: Science art and culture, IAP Delhi Monthly clinical Meeting, 21 July 2016, AIIMS, Delhi
4. ROP Services at RPC-iROP Meeting, 22 & 23 July 2016, Bangalore
5. ROP Treatment: Laser and Anti VEGF, 40th MP State Ophthalmic Conference, 21–23 October 2016, Bhopal
6. ROP Long term effects and new research, 40th MP State Ophthalmic Conference, 21–23 October 2016, Bhopal

Senjam Suraj Singh: 8

1. Setting up low vision and rehabilitation services in the tertiary eye care centre, DOS 2016, 16 April 2016, Chankyapuri, New Delhi
2. Low Vision and Rehabilitation Service with the Community, Vision 2020 India, 12th Annual Conference 2016, 4 June 2016, Pune, Maharashtra
3. How to sensitize Doctors/Paramedics about the eye donation and its importance as well as the vital information related to eye donation, Training Programme of Medical Officer and Para-Medical Staff, 26 August 2016, Safdarjung Hospital NOTTO, New Delhi
4. How to sensitize Doctors/Paramedics about the eye donation and its importance as well as the vital information related to eye donation, Training Programme of Medical Officer and Para-Medical Staff, 8 September 2016, O/o Addl. Director (CGHS) East Zone H Block Laxmi Nagar, Delhi
5. Vision 2020, Right to Sight, World Sight Day, 13 October 2016, Dr R.P. Centre, AIIMS, New Delhi
6. Eye care workforce for comprehensive primary eye care service: Existing and Challenge, 7th Annual Conference ACOIN TRICHY 2016, 21–23 October 2016, Trichy, Chennai
7. Profile of patients presenting at Low Vision Rehabilitation Services in Tertiary Eye Care Centre, 75th Annual Conference of All India Ophthalmological Society, AIOC, 2017, 18 & 19 February 2017, Jaipur, Rajasthan
8. Low Vision Services and Visual Rehabilitation: Bridging the Gap, Scientific Programme 3rd Mid Term IIRSI Conference 2017 Noida, 15 January 2017, Noida, U.P.

Nabanita Halder: 1

1. PG Program Refresher Course, AIOS RPC, 29–31 December 2016

Noopur Gupta: 11

1. Corneal Blindness in the SEARO Region, Regional Expert Group Consultation, Accelerating Actions for Prevention of Blindness, 13 December 2016, LVPEI, Hyderabad, India
2. Role of Environmental factors on Ocular Health, Regional Expert Group Consultation, Accelerating Actions for Prevention of Blindness, 13 December 2016, LVPEI, Hyderabad, India
3. Prevalence of Dry Eye Disease in the Adult Indian Population, 8th International Conference on the Tear Film and Ocular Surface: Basic Science and Clinical Relevance, 7–10 September 2016, Le Corum, Montpellier, France
4. Interplay between eye microbiome and dry eye disease in Indian patients, 8th International Conference on the Tear Film and Ocular Surface: Basic Science and Clinical Relevance, 7–10 September 2016, Le Corum, Montpellier, France
5. Recent Advances in Dry eye, RPC Golden Jubilee Cornea and Refractive Surgery Workshop, 23 October 2016, R.P. Centre, AIIMS, New Delhi
6. Intraocular lenses: Types and selection, AIOS RPC PG Program Refresher Course, 29–31 December 2016, AIIMS, New Delhi
7. Premium Intraocular Lenses, RPC Golden Jubilee Phacoemulsification Workshop, 14 & 15 January 2017, R.P. Centre, AIIMS, New Delhi
8. Current Status of Corneal Blindness, 67th Annual Conference of Delhi Ophthalmological Society, DOSCON 2016, 16 & 17 April 2016, New Delhi
9. Population, based assessment of donor cornea need in the North Indian population: A step towards eliminating corneal blindness*, 67th Annual Conference of Delhi Ophthalmological Society, DOSCON 2016, 16 & 17 April 2016, New Delhi
10. Choice of antibiotics in ocular infections, WINTER DOS 2016: Ophthalmic Vista, 9–12 November 2016, India Habitat Centre, New Delhi
11. Corneal Donation, Organ Retrieval Banking Organization, AIIMS, 22 February 2017, CMET, AIIMS, New Delhi

Rachna Meel: 5

1. Interferon Therapy in OSSN, DOSCON 2016: Ophthalmic Panorama, April 2016, New Delhi
2. Entropion and ectropion, 9th DOS teaching program–DOST 2016–2017, Oculoplasty Session, November 2016, India habitat Centre, New Delhi
3. Advances in ocular oncology, Oculoplastics and Ocular Oncology Odissi–Practical Pearls, November 2016, India habitat Centre, New Delhi
4. Squamous Cell Carcinoma Treated with Immunoreduction and Limited Excision, Dr Carol Shield's Master Class in Ocular Oncology, January 2017, Hi Tech City, Hyderabad
5. Orbital lymphoma–unusual presentation, an evening with SCEH, CME, January 2017, Dr Shroff Charity Eye Hospital, New Delhi

Vinod Kumar Agarwal: 7

1. Ultra, wide field imaging in retinal disorders, RPC Golden Jubilee Retina Workshop, October 2016, RPC, AIIMS, Delhi
2. Retinal vascular disorders, RPC Golden Jubilee Retina Workshop, October 2016, RPC, AIIMS, Delhi
3. RAP lesions, The Way I Go About, Annual Conference of DOS, April 2016, Delhi
4. RD with Recurrent haptic dislocation (Glued-SFIOL)–how to manage? Annual Conference of DOS, April 2016, Delhi
5. Understanding Pachychoroid Spectrum: DOS winter Conference, November 2016, IHC, New Delhi
6. Diabetic Retinopathy, Risk Factors, Pathogenesis, Classification, RPC, AIOS PG teaching program, December 2016, RPC, AIIMS, New Delhi
7. Publishing in peer reviewed journals, Annual Conference of AIOS, February 2017, JICC, Jaipur

Swati Phuljhele: 7

1. Investigations in Neuro-Ophthalmology, Strabismus and Neuro, Ophthalmology Workshop, July 2016, DOS AIOS, New Delhi
2. Neuro, Ophthal Nuances, the Delhi Ophthalmological Society Annual Conference, April 2016, AIOS, New Delhi
3. Adie's, areflexia and more, 75th Annual Conference of All India Ophthalmology Society, February 2017, Jaipur, Rajasthan
4. Not just resections but Apt Plications too! 75th Annual Conference of All India Ophthalmology Society, February 2017, Jaipur, Rajasthan
5. Swollen Disc: Not no disc oedema!, 75th Annual Conference of All India Ophthalmology Society, February 2017, Jaipur, Rajasthan
6. Management of Disc oedema, 75th Annual Conference of All India Ophthalmology Society, February 2017, Jaipur, Rajasthan
7. Pediatric Optic Neuritis, "Neurogyan" An interesting Neuro-Ophthalm CME, March 2017, Shroff's Charity Eye Hospital, New Delhi

Vivek Gupta: 6

1. Role of Health Literacy in Eye Health, Annual DOS Conference 2016, 16 April 2016, Chankyapuri, New Delhi
2. Operational Research for Outreach Programmes, Vision 2020: The Right to Sight India, 12th Annual Conference 2016, 5 June 2016, Pune, Maharashtra
3. National Program for Control of Blindness, AIOS, ARC PG Refresher Programme 2016, 29 December 2016, Jawahar Lal Auditorium AIIMS, New Delhi
4. Health Literacy: An Approach for Universal Eye Health, 3rd Mid Term IIRSI Conference 2017, 15 January 2017, Noida, U.P.
5. National Survey of Blindness and Visual Impairment in India, 75th Annual Conference of All India Ophthalmological Society, AIOC, 2017, 18 & 19 February 2017, Jaipur, Rajasthan
6. Global burden of Childhood Visual Impairment and Blindness, ACOIN State Level CME, 22 March 2017, Government Medical College Srinagar, Jammu and Kashmir

Nishat Hussain Ahmed: 2

1. Update on Ocular Microbiology, Winter DOS 2016, 11 November 2016, RP Centre, AIIMS, New Delhi
2. Clinical Applications of Ocular Microbiology, AIOS RPC PG programme, 30 December 2016, Jawaharlal Nehru auditorium, All India Institute of Medical Sciences, New Delhi

Shikha Gupta: 1

1. Revisiting trabeculectomy, DOS annual 2017, 9 April 2017, New Delhi

Dewang Angmo: 1

1. Outcomes of phaco vs Phaco GSL-DOS Annual 2017, 9 April 2017, New Delhi

Oral Papers/Posters Presented: 49

1. Titiyal JS, Falera R, Rath A, Bageshwar L, Kinkeria A. Evaluation of the effect of postoperative IOL decentration on higher order aberration with aspheric balanced curve design intraocular lens, APAO, March 2017, Singapore
2. Titiyal JS, Kaur M, Falera R, Sinha R. Impact of corneal incision architecture on wound site descemets detachment, AAO, October 2016, Chicago (USA)
3. Titiyal JS, Kaur M, Falera R, Verma M. Comparative evaluation of nucleotomy patterns in Femtosecond laser assisted cataract surgery, AAO, October 2016, Chicago (USA)
4. Titiyal JS, Kaur M, Falera R, Sah P, Veram M. Intraoperative optical coherence tomography, assisted assessment of corneal wound architecture in conventional and femtosecond laser, assisted phacoemulsification, EESCRS, September 2016, Copenhagen, Denmark
5. Aron N, Agarwar T, Sharma N, Titiyal JS, Venugopal V JS. Outcomes of modified phacoemulsification technique in cases of chronic Steven–Johnson Syndrome with Cataract, APAO, March 2017, Singapore
6. Agarwal R, Sharma N, Sinha R, Titiyal JS, Venugopal V. Evaluation of rigid gas permeable contact lens in high post–keratoplasty astigmatism, APAO, March 2017, Singapore
7. Titiyal JS, Kaur M, Falera R, Sinha R, Sharma N. Evolving indications for an explanation of implantable Collamer lens, AAO, Chicago
8. Sharma N, Sehgal D, Titiyal JS, Agarwal T, Sinha R. The comparative evaluation efficacy of oral voriconazole and oral ketoconazole an adjunct to topical Natamycin in severe fungal keratitis: Randomized controlled trial, AAO, October 2016, Chicago
9. Titiyal JS, Kaur M, Falera R. Indications for explanation of implantable Collamer lens, EESCRS, September 2016, Copenhagen, Denmark
10. Titiyal JS, Falera R, Arora T, Kaur M, Rath A. Surgical technique for optimal management of late post-operative capsular block syndrome with flocculent after cataract, APAO, March 2017, Singapore
11. Shende D, Chawla B. comparison of poster peribulber block and Sub-tenon block in pediatric enucleation of eye, SASA, 2017, 22–26 March 2017, SASA (South African Society of Anaesthesiology), Johannesburg
12. Bajaj M S, Pushker N, Sharma S, Kashyap S, Sen S. Clinical profile and management of orbitopalpebral neurofibromatosis type 1 in pediatric patients at a tertiary care centre, European Pediatric Ophthalmology Society, 25 September 2016, University of Zurich
13. Sharma N. Comparative Evaluation of Efficacy of Oral Voriconazole and Oral Ketoconazole as an Adjunct to Topical Natamycin in Severe Fungal Keratitis: Randomized Controlled Trial, American Academy of Ophthalmology 2016, 17 October 2016, Chicago, USA
14. Vanathi M. Intraoperative OCT in lamellar corneal surgeries, 5th Biennial Meeting of Asia Cornea Society, 10 December 2016, Seoul, South Korea
15. Tewari R, Chandra P, Salunkhe M, Behera A, Kumar A. Giant Retinal Tear in Lasered Regressed APROP, Annual Conference of Delhi Ophthalmological Society, 15–17 April 2016, Delhi
16. Salunkhe N, Chandra P, Beri S, Tewari R, Kumar A. Unusual asymmetric presentation of Aggressive Posterior Retinopathy of Prematurity, Annual Conference of Delhi Ophthalmological Society, 15–17 April 2016, Delhi
17. Kapoor M, Chawla R, Chandra P, Vohra R, Regani H. Intra vitreal Ranibizumab in APROP, An adjunct to laser photocoagulation, Annual Conference of Delhi Ophthalmological Society, 15–17 April 2016, Delhi
18. Aggarwal V, Surve A, Chandra P. Peripapillary Staphyloma with Morning Glory Syndrome, Annual Conference of Delhi Ophthalmological Society, 15–17 April 2016, Delhi
19. Chandra P, Das D, Chawla R, Riju S. Reducing General Anesthesia Waiting Area Time in Eye Operation Theater by 87%, International Forum on Quality and Safety in Health Care, 26–28 September 2016, Gothenburg, Singapore.
20. Meel R, Dhiman R, Vanathi M, Sen S. Treatment Outcome with Interferon Alfa, 2b Therapy in Ocular Surface Squamous Neoplasia, 75th Annual Conference of All India Ophthalmic Society, 19–26 February 2017, Jaipur Exhibitin and Convention Centre Sitapura Industrial Area, Sitapura, Jaipur
21. Sharma M, Meel R, Pushker N, Vanathi M. Ocular Surface Squamous Cell Carcinoma with Intraocular Invasion, Case Series of a Rare Presentation, 75th Annual Conference of All India Ophthalmic Society, 19–26 February 2017, Jaipur Exhibitin and Convention Centre Sitapura Industrial Area, Sitapura, Jaipur

22. Dhiman R, Meel R, Devi S, Tandon R. Clinical Profile of Ocular Surface Squamous Neoplasia in Tertiary Eye care Centre, 1 year data, 75th Annual Conference of All India Ophthalmic Society, 19–26 February 2017, Jaipur Exhibitin and Convention Centre Sitapura Industrial Area, Sitapura, Jaipur
23. Meel R, Dhiman R, Pushker N, Sharma S. Immunoreduction of advanced Ossn with Intraorbital If A2b Injection–A Globe Saving Approach, 75th Annual Conference of All India Ophthalmic Society, 19–26 February 2017, Jaipur Exhibitin and Convention Centre Sitapura Industrial Area, Sitapura, Jaipur
24. Sen S, Bhardwaj M, Chosdol K, Sharma A, Pushker N, Bajaj MS, Bakshi S, Kashyap S. Status and significance of ZEB2 and miRNA, 200 family in eyelid sebaceous gland carcinoma, International Society of Ocular Oncology Biennial Conference, 24–28 March 2017, International Convention Centre, Sydney
25. Vivek, Dr Suraj, Dr Noopur, Dr Praveen. Innovative use of WhatsApp messaging and Free Software for GIS Mapping in Ophthalmic Surveys, 75th Annual Conference of All India Ophthalmological Society, AIOC, 2017, 16 & 17 February 2017, Jaipur Rajasthan
26. Vivek, Dr Praveen, Dr Rohit, Dr Radhika. Compliance to spectacles use among urban school children with myopia provided subsidized spectacles (FP 1227), 75th Annual Conference of All India Ophthalmological Society, AIOC, 2017 at Jaipur Rajasthan on 16 & 17 February 2017
27. Pallavi, Dr Suraj, Dr Vivek, Dr Praveen. Paper on Eye Health Education Strategy for Effective Outreach, Vision 2020 India 12th Annual Conference 2016, 4 & 5 June 2016, Pune,
28. Angmo D, Yadav SK, Kamble N, Sdihi T, Dada T. Outcomes of phaco vs PhacoGSL, DOS Annual 2017, 9 April 2017, New Delhi
29. Devi S, Vanathi M, Angle RT. Evaluation in Implantable Collamer Center flow Phakic IOL: An Anterior Segment OCT Study, American Academy of Ophthalmology 2016, 14 October 2016, McCormick Place, Chicago, Chicago USA
30. Behera S, Vanathi M, Gupta N, Velpandian T, Tandon T. Outcomes of Boston Keratoprosthesis with Modified Titanium Back Plate–Our Experience, 5th Biennial Meeting of Asia cornea society, 9–11 December 2016, Seoul, South Korea
31. Ganger A, Parakh NG, Dr Vanathi M, Dr (Mrs) Tandon R. Paper 6 [FP960]: Role of Topical Rebamipide in Vernal Keratoconjunctivitis Patients, Annual Conference of All India Ophthalmological Society, 2017, 16 February 2017, JECC Convention Centre, Jaipur
32. Patil M, Saxena R, Sharma S. Meatstases of renal cell carcinoma presenting as one and a half syndrome, DOSCON 2016, OPHTHALMIC PANORAMA, 15–17 April 2016, Delhi
33. Singh D, Jat D, Devi S, Sahu S, Vanathi M. iOCT aided post DSAEK cataract surgery, DOSCON 2016, OPHTHALMIC PANORAMA, 15–17 April 2016, Delhi
34. Singh D, Yadav S, Vanathi M, Tandon R, Patil M. Changes in anterior chamber angle structures after implantable phakic intraocular lens with centraflow technology: An ASOCT study, DOSCON 2016, OPHTHALMIC PANORAMA, 15–17 April 2016, Delhi
35. Singh D, Vanathi M, Gupta C, Gupta N, Tandon R. Outcomes of deep anterior lamellar keratoplasty following autologous SLET in pediatric unilateral severe chemical injury, DOSCON 2017, OPHTHALMIC SPECTRUM, 7–9 APRIL, 2017, Delhi
36. Anjum S, Sharma N, Sen S, Sharma A, Kashyap S, Singh KV. HSV-I genome and IL-6 in suspected herpetic keratitis, 23rd Annual Meeting of Indian Eye Research Group ARVO India, 30 & 31 July 2016, LV Prasad Eye Institute, Hyderabad
37. Bhardwaj M, Sen S, Chosdol K, Sharma A, Pushkar N, Kashyap S, Bajaj MS, Bakshi S. Status and clinical relevance of epithelial mesenchymal transition associated miRNA-200c and MiRNA-141 in eyelid sebaceous gland carcinoma, 12th International Conference of the Asian Clinical Oncology Society and 35th Annual Convention of India Association for Cancer, 8–10 April 2016, New Delhi, India
38. Bhardwaj M, Sen S, Chosdol K, Sharma A, Pushkar N, Kashyap S, Bajaj MS, Bakshi S. Prognostic significance of ZEB family of transcription factors in eyelid sebaceous gland carcinoma, 12th International Conference of the Asian Clinical Oncology Society and 35th Annual Convention of India Association for Cancer Research, 8–10 April 2016, New Delhi, India
39. Bhardwaj M, Anjana S, Sen S, Satpathy G, Kumar L, Kashyap S, Pushker N. Chlamydia and Ocular lymphomas, 12th International Conference of the Asian Clinical Oncology Society and 35th Annual Convention of India Association for Cancer Research, 8–10 April 2016, New Delhi, India
40. Jayaraj P, Sen S, Bhattacharya T et al. Immunohistochemical expression of cyclo-oxygenase 2 and peroxisome proliferator activated receptor Y, Role in aggressive behavior of eyelid sebaceous gland carcinoma, 12th International

Conference of the Asian Clinical Oncology Society and 35th Annual Convention of India Association for Cancer Research, 8–10 April 2016, New Delhi, India

41. Chauhan S, Sen S, Sharma A, Kashyap S, Tandon R, Pushker N, Vanathi M, Chauhan SS. Clinical relevance of senescence related genes (Stratifyn and p16INK4a) in Ocular squamous cell carcinoma, 12th International Conference of the Asian Clinical Oncology Society 35th Annual Convention of India Association for Cancer Research, 8–10 April 2016, New Delhi, India
42. Singh L, Saini N, Pushker N, Sen S, Kaur J, Kashyap S. NADPH Oxidase-4 Dependent Reactive Oxygen Species Stress: An Expression Study in Human Retinoblastoma Tumour Cells, 48th Congress of the International Society of Paediatric Oncology (SIOP 2016), 19–22 October 2016, International Convention Centre, Dublin, Ireland
43. Singh MK, Kashyap S, Singh L, Sen S, Pushker N, Chawla B. Clinicopathological Significance of HMG Proteins in Retinoblastoma, 48th Congress of the International Society of Paediatric Oncology (SIOP 2016), 19–22 October 2016, International Convention Centre, Dublin, Ireland
44. Srigrayan D, Mishra D, Ahmed N H, Sharma N, Chawla R, Satpathy G. Coagulase negative Staphylococci in eye infections: Speciation and antimicrobial resistance status 40th Microcon, Annual Conference of Indian Association of Medical Microbiologists, 2016, 26 November 2016, Poster-Post graduate Institute of Medical Sciences, Chandigarh
45. Mishra D, Satpathy G, Chawla R, Ahmed NH, Venketesh P, Kumar A. Use of broad-range PCR assay for diagnosis of endophthalmitis and its comparison against conventional and automated (BACTEC) culture, 40th Microcon, Annual Conference of Indian Association of Medical Microbiologists, 2016, 26 November 2016, Oral-Post graduate Institute of Medical Sciences, Chandigarh
46. Sharma S, Vishal TD, Thulkar S, Srivastava DN, Hari S, Kumar R. Elastography and contrast USG biopsy in prostate cancer (Paper), 116th Annual Meeting of the American Roentgen Ray Society, 21 April 2016, Convention Centre, Los Angeles, CA
47. Sharma M, Sharma S, Jana M, Pushker N, Chawla B, Sen S, Kashyap S, Bakhsh S. Role of DWI in Retinoblastoma (Paper), 116th Annual Meeting of the American Roentgen Ray Society, 18 April 2016, Convention Centre, Los Angeles, CA
48. Sooraj K, Goswami S, Kumar S, Ravi AK, Sihota R, Gupta V, Kaur J. Aqueous humor protein analysis in primary open angle glaucoma and primary angle closure glaucoma, National Conference on Medical and Life Sciences, 11 & 12 April 2016, Baba Farid University of Health Sciences, Faridkot
49. Kumar S, Sooraj K, Goswami S, Chawla B, Pushker N, Kaur J. Effect of NF, κ B on biological behavior of human retinoblastoma cells exposed to hypoxia, National Conference on Medical and Life Sciences, 11 & 12 April 2016, Baba Farid University of Health Sciences, Faridkot

RESEARCH

Funded projects

Ongoing

1. The Asia Cornea Society Infectious Study (ACSIKS), Gita Satpathy, Asia Cornea Foundation, Third Hospital Avenue, Singapore, 24 months, 2016, Rs. 16 lakhs
2. A phase 3 randomized masked controlled trial to assess the safety and efficacy of triamcinolone acetate injectable suspension for the treatment of macular edema associated with non-infectious uveitis, Pradeep Venkatesh, Clearside Biomedical Inc.
3. An operational research on developing disability inclusive eye health program in India, Suraj Singh Senjam, CBM, 1 year, 2017–2018, Rs. 40.93 lakhs
4. Asia Cornea Society Infectious keratitis study, Namrata Sharma, Singapore National Eye Centre, 1 year 6 months, 2016–2017, Rs. 18 lakhs
5. Assessment of inflammatory markers and growth factors in normal and diseased corneas, Noopur Gupta, AIIMS, 1 year, 2016–2017, Rs. 5 lakhs
6. CBM, RPC disability eye health programme and strengthening of LV and rehabilitation services, Radhika Tandon, CBM, 5 years, 2015–2020, Rs. 80 lakhs
7. Clinical implication of Epithelial Mesenchymal Transition Markers in eyelid sebaceous gland carcinoma, S. Sen, IRG, 2 years, 2014–2016, Rs. 6 lakhs
8. Clinical study to evaluate the safety and efficacy of the bioengineered cornea in patients requiring deep anterior Lamellar Keratoplasty, Namrata Sharma, Linko Care Life Sciences, Sweden, 3 years, 2014–2017, Rs. 12 lakhs
9. Comparison of autologous cultured limbal stem cells on amniotic membrane transplant versus limbal lenticule transplantation alone in the management total limbal stem cell deficiency due to ocular burns: A randomized controlled clinical trial, Namrata Sharma, DST, 4 years, 2013–2017, Rs. 50 lakhs

10. Comprehensive Primary Eye Care in Rural areas of Delhi, Praveen Vashist, Divya Jyoti Jagrati Sansthan, 1 year, 2016–2017, Rs. 8.43 lakhs
11. Demonstration, methodology development, exhibition and promotion of awareness on donation of ocular tissues based on mapping and researching the gaps in awareness in Western Uttar Pradesh, Rajesh Sinha, Department of Science and Technology, 5 years, 2016–2020, Rs. 47.50 lakhs
12. Development a bioengineered model for study of corneal dystrophies, Radhika Tandon, IIT Delhi, 3 years, 2015–2018, Rs. 25 lakhs
13. Epidemiological study of avoidable blindness in India, Praveen Vashist, NPCB, Ministry of Health and Family Welfare, Government of India, 3 years, 2015–2018, Rs. 528.08 lakhs
14. Establishment of multiplex PCR for detection of Herpes Simplex Viruses Type 1 and Type 2, Cytomegalovirus, Varicella, Zoster Virus and Adenovirus in Ocular Viral Infections, Nishat Hussain Ahmed, AIIMS, New Delhi, Institutional grant, 12 months, 2016–2017, Rs. 5 lakhs
15. Evaluation of autologous bone marrow derived stem cells in the dry age related macular degeneration, A comprehensive study, Atul Kumar, ICMR, 2015–2018, Rs. 49 lakhs
16. Evaluation of role of molecular detection vs conventional microbiological method in rapid diagnosis of fungal keratitis and determination of antifungal sensitivity pattern of the isolated fungi, Gita Satpathy (Project for SRF), ICMR, 2 years, 2016–2018, Rs. 11.6 lakhs
17. Evaluation of tear neuropeptides in long term antiglaucoma therapy, M. Vanathi, ICMR, 2 years, 2015–2017, Rs 30 lakhs
18. Evaluation of thrombospondin-1 polymorphisms in corneal graft rejection, M. Vanathi, AIIMS, 1 year, 2016–2017, Rs. 4 lakhs
19. Genetics of primary angle closure disease, Moulinath Acharya, DBT, 2016–2018
20. Molecular study of mitochondrial DNA in intraocular malignant childhood tumours, Seema Kashyap, ICMR, 2 years, 2015–2017, Rs. 23.7 lakhs
21. Multi-centric study of the impact of exposure to Ultra Violet Radiation (UVR), and aerosols exposure on ocular health in India, Phase 2, Radhika Tandon, ICMR, 5 years, 2017–2022, Rs. 1106.63 lakhs
22. National trachoma prevalence survey, Praveen Vashist, NPCB GOI, 3 years, 2014–2017, Rs. 105.62 lakhs
23. National trachoma rapid assessment, Praveen Vashist, NPCB GOI, 3 years, 2014–2017, Rs. 91.39 lakhs
24. Operation research on involvement of volunteers in providing primary eye care services, Praveen Vashist, Sightsavers, 5 years, 2016–2017, Rs. 163.74 lakhs
25. Operational research project on conducting training sessions for health care professionals, Sumit Malhotra, DHR, 3 years, 2015–2018
26. Operational research project on strengthening integrated primary eye care in urban vulnerable populations of Delhi, Praveen Vashist, Sightsavers, 3 years, 2016–2018, Rs. 1.6 crores
27. Patterns and pathways of care seeking for cataract and common ocular morbidities and impact of local volunteers on the pathways among urban vulnerable population settings of West Delhi, Vivek Gupta, Swami Sivananda Memorial Institute, 2 years, 2017–2018, Rs. 20 lakhs
28. Prognostic significance of nuclear factor markers light chain enhancer of activated B cells (NFkB) in Uveal Melanoma, Rachna Meel, IRG, 1 year, 2016–2017, Rs. 5 lakhs
29. RAINBOW study: A randomized, controlled study evaluating the efficacy and safety of RAnibizumb compared with laser therapy for the treatment of Infants Born prematurely with retinopathy of prematurity, Rajpal, Novartis Health Care Private Limited, May 2016
30. To determine the influence of pre-operative counseling of cataract patients on IOL choice among patients at a tertiary level Government Aided Eye Hospital, Alcon, 8 years, 2010–2017, Rs. 20.5 lakhs
31. To evaluate the safety and efficacy of a new IND (sirolimus) in the management of non-infectious posterior and intermediate uveitis, Pradeep Venkatesh
32. Vision Delhi Project, Rajesh Sinha, Sight Savers, 4 years, 2012–2015, Rs. 1 crore 75 lakhs
33. Visual performance of patients bilateral implanted with the TECHNIS Symphony or TECHNIS Symphony Toric IOLs in Asian population/region: An international multicentric Study, 2016, J.S. Titiyal, Hoya Ltd., 1 year, 2016–2017, Rs. 3 lakhs

Completed

1. Cell Sheet Engineering for Assembling Human Corneal Construct, Radhika Tandon, IIT Delhi, 5 years, 2011–2016, Rs. 27.53 lakhs
2. Multi-centric collaborative study on the impact of Global warming and Ultra Violet Radiation (UVR) exposure on ocular health in India, Radhika Tandon, ICMR, 5, 2010–2016, Rs. 373.28 lakhs
3. A 12 month, Phase III, randomized, double-masked, multi-centre active-controlled study to evaluate the efficacy and safety of two individualized regimens of 0.5 mg ranibizumab vs verteporfin PDTG in patients with visual impairment due to Choroidal neovascularization secondary to pathologic myopia (brilliance), Rajpal, Novartis Health Care Private Limited, 2 years, 2015–2017
4. “LUMINOUS”: Study to observe the effectiveness and safety of LUCENTIS through individualized patient treatment and associated outcomes, Rajpal, Quintals, 2013–2016
5. Ocular lymphomas and Chlamydia: An immunophenotypic and molecular study, Seema Sen, ICMR, 3 years, 2011–2014, Rs. 32 lakhs
6. Role of Micro RNA, 200 Family in Ocular Malignancies, Seema Sen, IRG, 2 years, 2012–2014, Rs. 4 lakhs
7. Role of High Mobility Group Proteins (HMG) in intraocular malignant childhood tumors, ICMR, 2012–2015
8. SSMI-RPC Project on Primary Eye Care Services in Urban Slum Clusters, Praveen Vashist, Swami Sivanand Memorial Institute, 5 years, 2011–2016, Rs. 44.73 lakhs
9. Multi-centric Collaborative Study on the impact of Global Warming and Ultra Violet Radiation [UVR] exposure on ocular health in India, Radhika Tandon/Praveen Vashist, ICMR, 5 years, 2010–2016, Rs. 297.94 lakhs
10. Vision Delhi, Project for strengthening refractive error services in Delhi slums, A community eye care initiative, Praveen Vashist, Sightsavers International, 4 years, 2012–2016, Rs. 173.34 lakhs
11. Tear Analysis for inflammatory markers in patients with keratoconus, Noopur Gupta, AIIMS, 2 years, 2014–2016, Rs. 4.5 lakhs
12. Assessment of compliance to spectacles in school children provided spectacles under School Vision Screening Programme in Delhi, India, Noopur Gupta, Indian Vision Institute, 1 year, 2015–2016, Rs. 0.2 lakhs
13. Trachoma Prevalence Survey, 9 districts under the NPCB National Trachoma Survey In India, Praveen Vashist, NPCB Government of India, 2 years, 2014–2016, Rs. 151.55 lakhs
14. Trachoma Rapid Assessment under the NPCB National Trachoma Survey, Praveen Vashist, NPCB Government of India, 2 years, 2014–2016, Rs. 70.3 lakhs
15. Multi-centric Collaborative Study on the impact of Global Warming and Ultra Violet Radiation (UVR) exposure on ocular health in India, Radhika Tandon, ICMR, 5 years, 2010–2016, Rs. 297.94 lakhs
16. Evaluation of Thrombospondin, 1 polymorphisms in corneal graft rejection, M. Vanathi, AIIMS, 2 years, 2014–2016, Rs. 4.5 lakhs
17. Vision Delhi, Project for strengthening refractive error services in Delhi slums, A community eye care initiative, Praveen Vashist, Sightsavers International, 4 years, 2012–2016, Rs. 173.34 lakhs
18. Prospective study to evaluate the clinical efficacy of topical chloroquine in patients with mild to moderate dry eye, J.S. Titiyal, FDC Ltd., 6 months, 2015, Rs. 3.92 lakhs

Departmental projects

Ongoing

1. A study on changes in corneal biomechanics and quality of vision after Pterygium excision
2. Adapting, updating and validating a modern version of the National Eye Institute Visual Function Questionnaire (VFQ-25) as a tool to analyze quality of life in patients undergoing Keratoplasty in India
3. Anatomical and functional outcomes after vitrectomy (with ILM peeling) for recalcitrant tractional vs non tractional diabetic macular edema
4. Anatomical and visual outcome of posteriorly dislocated crystalline lens after Phacofragmentation
5. Anterior segment OCT in PACD
6. Antifungal sensitivity testing in corneal patients for Voriconazole and Natamycin
7. Assessment of quality of vision and vision related quality of life in patients undergoing anterior lamellar keratoplasty: A pilot study
8. Assessment of role of autologous bone marrow derived stem cells in the treatment of dry age related Macular Degeneration, A comprehensive study
9. Changes in Alzheimer's Disease

10. Characterization of treatment naive Choroidal neovascular membranes using optical coherence tomography-angiography.
11. Choroidal thickness measurement in normal healthy India population by using swept source optical coherence tomography
12. Clinical performance and ocular surface homeostasis study with Gas permeable sclera lens for ocular surface diseases
13. Community based operational research study on involvement of Accredited Social Health Activists (ASHAs) in strengthening Primary Eye Care services for Urban Vulnerable Population of Delhi
14. Comparative study of trephination with stent with mitomycin c vs trephination with stent in distal canalicular and common canalicular block
15. Comparative evaluation of conventional macular hole surgery with inverted internal limiting membrane flap technique for large macular holes, a prospective randomized study
16. Comparative evaluation of intrastromal injections of voriconazole amphotericin B with vatamatrix
17. Comparative evaluation of polyene anti-fungals in treatment of fungal corneal ulcer
18. Comparative evaluation of retinal architectural changes using intra-operative microscope integrated i-OCT in macular hole surgery: A prospective randomized trial
19. Comparative evaluation of ultra wide field fluorescein angiography guided peripheral laser photocoagulation with and without intravitreal anti VEGF in recalcitrant centre involving diabetic macular edema, randomized study
20. Comparison of donor corneal storage media
21. Comparison of OCTA and fluorescein angiography in patient of diabetic retinopathy.
22. Corneal evaluation in patients with Parkinsons disease on longterm oral amantidine therapy
23. Correlation of between baseline intraocular pressure and histopathology of trabecular meshwork (MD)
24. Correlation of Percent Tissue Ablation with corneal biomechanics in myopic LASIK
25. Cost-effectiveness analysis of descemet's stripping automated endothelial keratoplasty versus penetrating keratoplasty in patients with endothelial dysfunction
26. Demographic profile, clinical and surgical outcome and quality of life in patients undergoing bilateral lamellar keratoplasty
27. Demography, clinical features and management outcomes of pediatric keratoconus
28. Development of a culturally appropriate health literacy instrument and assessing its validity in Hindi speaking patients receiving general and primary eye care services in New Delhi
29. Dry eye disease and ocular morbidity in individuals with sleep disorders
30. Effect of induced anisometropia on Binocular simulated stereoptic tasks
31. Effect of topical steroids on intraocular pressure of patients after squint surgery:
32. Epidemiological study on childhood visual impairment in Delhi
33. Epidemiology of pediatric blindness
34. Epithelial-Mesenchymal Transition (EMT) in Sebaceous Carcinoma of the Eyelid-An Immunohistochemical and Molecular Study (PhD)
35. Evaluation of collagen matrix implant in failed dacryocystorhinostomy surgery as compared to mitomycin c
36. Evaluation of Amphotericin B eye drops in fungal corneal ulcers
37. Evaluation of Barrett Universal II Formula for IOL power calculation
38. Evaluation of Boston Keratoprosthesis with modified titanium
39. Evaluation of Botulinum Toxin Injection in lacrimal outflow obstruction Mucous Membrane Grafting (Fibrin Glue vs. Suture) for Lid Margin Pathologies in Patients with Stevens-Johnson
40. Evaluation of disk changes in papilloedema on HD OCT
41. Evaluation of efficacy of silicone intubation after probing with adjunctive mitomycin-c in adults with primary acquired nasolacrimal duct obstruction
42. Evaluation of feasibility and outcome of Femtosecond assisted cataract surgery and its comparison with conventional Phacoemulsification in vitrectomized eyes
43. Evaluation of outer retinal structural integrity and visual improvement using en face OCT imaging in diabetic macular edema eyes receiving intravitreal Ranibizumab treatment, a prospective study

44. Evaluation of treatment modalities for corneal edema
45. Evaluation of visual outcome and Patient comfort with Semi-scleral contact lenses in Advanced Keratoconus
46. Extended Range of Intraocular lenses versus Mono-focal IOL implantation in cataract, A Pilot Study
47. Gene Expression Profiling in ROP
48. Measurement of choroidal thickness in healthy Indian population using swept source OCT
49. Molecular analysis of mitochondrial genes associated with tumorigenesis in Retinoblastoma
50. Molecular characterization of NFκB pathway in Uveal Melanoma
51. Molecular characterization of Steven Johnson Syndrome ocular sequelae.
52. Morphology and molecular characterization of fungi from mycotic keratitis and invasive infection and comparison with conventional method like detection and culture
53. Pilot study of comparison between extended Range Intraocular Lenses Versus Standard Multifocal Intraocular Lenses In Cataract Surgery
54. Predictors for surgical outcomes in stage 4a retinopathy of prematurity
55. Prospective randomized interventional trial comparing branch retinal vein occlusion treatment with ultra wide field imaging guided peripheral laser in combination with Ranibizumab v/s Ranibizumab only in treatment naïve cases
56. Repeatability of white to white measurements and comparison with sulcus diameter to know correct size of Implantable Collamer Lens
57. Risk factors for causation of Ischemic mononeuropathy
58. Role of Brinzolamide in Nystagmus, Evaluation of Binocular vision in Pseudophakia with Monovision
59. Role of conjunctival autofluorescence in ocular surface squamous neoplasia
60. Role of diffusion weighted MRI in retinoblastoma
61. Role of ILM peeling during vitreo-retinal surgery for rhegmatogenous retinal detachment in the development of post-operative epiretinal membrane: A Randomised trial
62. Strengthening of low vision and rehabilitation services in Dr RPC AIIMS New Delhi (Project funding by Christoffel Blinden Mission)
63. Study of corneal changes in Diabetes Mellitus patients
64. Study of post keratoplasty glaucoma and comparative evaluation of fixed combination vs dual therapy in management of raised intraocular pressure
65. Study on objective assessment of the role of virtual reality simulator (EYES surgical) in surgical skill development amongst ophthalmology residents
66. Syndrome: A randomized comparative study evaluation of surgical outcome of porous polyethylene implants in Anophthalmic Sockets with Implant Migration
67. To determine the patterns of ocular trauma and final visual acuity Based on Ocular Trauma Scoring (OTS)
68. To establish a normative data base for retinal arterial and venous caliber measurements using HRA-Spectralis imaging software (as Guide)-ongoing
69. To evaluate the safety and efficacy of bone marrow derived stem cells in the management of patients with ischemic CVO (as Guide)-ongoing
70. To study efficacy of Intravitreal Ranibizumab plus Tricort vs Intravitreal ranibizumab alone in patients with macular edema secondary to CRVO
71. To study fundus autofluorescence patterns in patients with age related macular degeneration
72. To study safety and efficacy of pulse immunotherapy in vision threatening, non-infective posterior uveitis
73. To study SD-OCT patterns of diabetic macular edema and correlate with systemic and ocular risk factors
74. To study the clinical profile and etiological characteristics of retinal vasculitis using wide field fundus imaging
75. To study the prevalence and severity of retinopathy in diabetic mother during the course of pregnancy
76. To study the safety and outcomes of immediate sequential bilateral ROP surgery
77. Ultra Wide Field Fluorescein Angiography (UWFA) guided peripheral laser photocoagulation in Recalcitrant Diabetic Macular Edema eyes: A comparative randomized study.
78. Use of advanced genomics in diagnosis of culture negative infections (septicaemia and endophthalmitis)
79. Use of broad range PCR assay for diagnosis of endophthalmitis and its comparisons against conventional and automated (BACTEC) culture.
80. Visual impairment among elderly persons in an urban resettlement colony

Completed

1. A prospective study of risk factors for non arteritic anterior ischemic optic neuropathy.
2. A randomized controlled trial to evaluate the role of no strict prone positioning versus one day postoperative strict prone positioning in anatomical closure of idiopathic full thickness macular hole: A preliminary study.
3. Adapting, updating and validating a modern version of the NEI visual function questionnaire (VFQ 25) as a tool to analyze quality of life in patients undergoing keratoplasty
4. Anatomical and functional outcome after Vitrectomy (with ILM peeling) for Recalcitrant Tractional vs non Tractional Diabetic Macular Edema.
5. Anatomical and visual Outcome of posteriorly dislocated lens after phacofragmentation
6. Burden and depression in primary caregivers of persons with visual disability
7. Clinical and genetic analyses of anophthalmos, microphthalmos and coloboma
8. Comparative evaluation of Combined mechanism, POAG and PACG
9. Comparative evaluation of conventional macular hole surgery with inverted Internal Limiting Membrane flap technique for large macular holes, a prospective randomized study.
10. Comparative evaluation of patching and no patching after squint surgery on outcomes of surgery
11. Comparative study of minimally invasive strabismus surgery with conventional strabismus surgery for horizontal recti.
12. Comparison of Ultra-Wide field FA (UWFFA) with conv. FA guided Pascal laser treatment in DR.
13. Corneal evaluation in patients with Parkinson's disease on long term oral amantadine therapy
14. Correlation of sensory status and motor control in case of Intermittent Divergent Squint
15. Diabetic vitrectomy outcomes with and without chandelier endoillumination.
16. Low dose fentanyl infusion versus oral sucrose for pain management during laser treatment for retinopathy of prematurity (ROP)—An open label randomized clinical trial.
17. Effect of 25G vitrectomy with silicone oil injection on anterior chamber angle using anterior segment optical coherence tomography.
18. Efficacy of topical Hypertonic Saline in treatment of corneal edema
19. Enhanced depth imaging in retinal dystrophies and assessment of choroidal thickness using spectral domain-oct.
20. Evaluation of Autologous Stem Cells for management of Dry AMD.
21. Evaluation of Boston Keratoprosthesis with modified titanium backplate
22. Evaluation of canalicular trephination and monocanalicular stenting versus canaliculo dacryocystorhinostomy in common canalicular blocks
23. Evaluation of Nishida procedure for transposition in Lateral rectus palsy
24. Evaluation of outcomes and complications of Boston Keratoprosthesis with Modified Titanium Back plate—A pilot study
25. Evaluation of risk factors for non arteritic anterior ischemic optic neuropathy in Indian
26. Evaluation of Silicon Rod as a material for Frontalis Sling Surgery as compared to Fascia Lata
27. Evaluation of the Role of Retinal Renin Angiotensin System (RAS) in the Animal Model of Retinopathy of Prematurity (ROP)
28. Long term review of OHT
29. Microwave assisted synthesis, Development of LC-ESI-MS method and quantification of ocular bis-retinoids in human cadaver retinal pigment epithelium.
30. Patterns of ocular trauma based on ocular trauma score, a comprehensive study.
31. Patterns of retinal vasculitis and their clinical and etiological profile-ultra wide field (UWF) study (co-guide).
32. Phacotrabeculectomy versus phacotrabeculectomy with autologous anterior lens capsule application.
33. Prospective randomized interventional trial, comparing branch retinal vein occlusion treatment with ultra wide field imaging guided peripheral laser in combination with Ranibizumab v/s Ranibizumab only in treatment naïve cases.
34. Prospective randomized interventional trial comparing conventional fluorescein angiography with ultra-wide field fluorescein angiography in pattern scan laser guided treatment of diabetic retinopathy.
35. Randomised controlled trial comparing efficacy of a single intraoperative bolus dose of intravenous antibiotic versus postoperative or a antibiotic prophylaxis for prevention of surgical site infection in external dacryocystorhinostomy.

36. Responsiveness of HRQOL questionnaires in Strabismus.
37. Retinopathy of prematurity profile in inborn and out born babies in a tertiary hospital.
38. Role of fundus fluorescein angiography in the management of aggressive posterior retinopathy of prematurity.
39. Role of mobile game exercises as an adjuvant to amblyopia therapy in children.
40. Role of Stratifin in ocular squamous cell neoplasia and its correlation with other tumour suppressors
41. Sense of coherence and spectacles compliances among school students in Delhi
42. Study of post Keratoplasty Glaucoma and comparative evaluation of fixed combination versus dual therapy in management of raised intraocular pressure
43. To evaluate the role of Intralesional Propranolol for treatment of periocular and eyelid capillary haemangiomas as compared with Oral Propranolol

Collaborative projects

Ongoing

1. Development a bioengineered model for study of corneal dystrophies (IIT Delhi)
2. To evaluate the effect of increased outdoor activity on the incidence and progression of myopia in school children.
3. CBM-RPC disability eye health programme and strengthening of LV and rehabilitation services
4. A pivotal phase II/III, Randomized, double-masked, Sham-controlled trial of QPI-1007 delivered by single or multi-dose intravitreal injections to subjects with acute non-arteritic anterior ischemic optic neuropathy (NAION)
5. A metagenomic approach to evaluate the human ocular microbiome in ocular surface disease (ICGEB, Delhi)
6. Efficacy of low dose versus standard regimen of oral betamethasone pulse therapy in rapidly progressive vitiligo: A randomized controlled trial (Dermatology)
7. Evaluation of clinical and histopath factors associated with success of MMC augmented trabeculectomy among primary glaucomas in India
8. Analysis of the expression of mucins and angiogenesis markers in human oral mucosal epithelial cells (OMEC) on using mycophenolate mofetil (MMF) and bevacizumab (BVCZ) in vitro (Biochemistry)
9. Conjunctival autofluorescence as a marker of ultraviolet radiation exposure in pterygium
10. Molecular characterization of Steven Johnson Syndrome Ocular Sequelae
11. Detection of HSV-I etiology in primary keratoplasty and failed grafts in suspected viral keratitis cases: A prospective clinicopathological and molecular study
12. Chemoreduction failure in retinoblastoma—A clinical and histopathological risk factors
13. Evaluation of multimodal treatment approach for extraocular retinoblastoma: A randomized study
14. Role of diffusion weighted MRI in RB
15. Comparison of safety and bio-compatibility between amniotic membrane and bio-polymer in healing of epithelial defect in an experimental model
16. Correlation of histopathology of angle structures with long term prognosis in congenital glaucoma
17. Gene expression profile of human uveal melanoma (IRG)
18. Clinical significance of Sirtuin 1 and FOXO 3 in intraocular and orbital retinoblastoma (IRCH)
19. Clinical performance and Ocular Surface Homeostasis Study with Gas Permeable Scleral Contact Lens for Ocular Surface Disease
20. Evaluation of circulating cell free DNA (ccfDNA) and their clinical utility as biomarker in skin carcinoma (Delhi University)
21. Genetics of Primary Angle Closure Disease (National Institute of Biomedical Genomics)
22. Role of serum galactomannan assay in the treatment of invasive orbital aspergillosis (ENT, Microbiology)

Completed

1. Cell Sheet Engineering for Assembling Human Corneal Construct (IIT Delhi)
2. A pilot study on health education intervention for modifiable factors affecting myopia among school children in Delhi
3. Levator muscle changes in congenital ptosis (Pathology)
4. Culture of Limbal stem cells for ocular surface reconstruction in stem cell deficiency diseases (ORBO, Biochemistry)
5. Role of Polo-like kinase proteins in retinoblastoma—An immunohistochemical study

PUBLICATIONS**Journals: 247****Abstracts: 3****Chapters in books: 106****Books: 9****PATIENT CARE****OUTDOOR Patients**

		New Cases	Old Cases	Total
1.	General O.P.D.	165779	204728	370507
2.	Emergency	8930	42626	51556
	Total Cases	174709	247354	422063
SPECIALITY CLINICS				
1.	Cornea Clinic	6889	13363	20252
2.	Lens Clinic	1041	2303	3344
3.	Uvea Clinic	1152	3926	5078
4.	Contact Lens Clinic	900	2636	3536
5.	Glaucoma Clinic	4375	9861	14236
6.	Oculoplasty Clinic	4499	2872	7371
7.	Paed. Ophthalmology Clinic	38	21	59
8.	Retina Clinic	5111	5608	10719
9.	Neuro-Ophthalmology Clinic	3193	2685	5878
10.	Vitreo Retinal Clinic	3600	3415	7015
11.	ROP	888	2339	3227
12.	Ocular Oncology Clinic	409	968	1377
13.	Low Visual Aid	3197	994	4191
14.	a) Orthoptic Clinic	928	19644	20572
	b) Squint Clinic	5616	18973	24589
15.	Refraction	0	55754	55754
	Total Cases	41836	145362	187198
	Grand Total of Cases	216545	392716	609261
INDOOR		No. of cases		
1.	General Admissions	15737		
2.	Casualty Admissions	2861		
3.	Private Admissions	1196		
4.	Short Admissions	10757		
5.	Day Care Admissions	10599		
	Total	41150		

OPERATIONS		No. of cases
1.	Major	17535
2.	Day Care	9836
	Total	27371
3.	Minor	14631
	Grand Total	42002

Investigative Laboratories

Investigations	Total no.
Post Segment laser (PRP)	4496
YAG Laser + SLT (Selective)	4110
OCT	35479
FFA + ICG	7671

OCT Angiography	6114
CP (Post Seg.)+ Fundus Photo	5310
LI (Laser Interferometry)	4938
VKG (ORB-Scan)	4082
Refraction	66137
Low Vision Aid Services (133)	3308
NCT + ATN (Tonometry)	53713
CCT/ N.CCT (Pachymetry)	8939
SM (Specular Microscopy)	5554
ASOCT	4765
CP (Clinical Photography)	310
EB clinic-new	5854
UBM	880
AR (Auto Refraction)	64892
i-TRACE	1388
EB clinic-old	1637
Contact lens new	1267
Contact lens old	2954
AL (Axial Length)	22451
KM	19997
IOL Master	21011
USG Bscan	19608
ECG	2936
HVF (Automated Perimetry)	13893
GVF	1368
VER	4464
ERG	738
EOG	41
Contrast Sensitivity	2582
Colour Vision	3830
Multifocal ERG (MF ERG)	92
Video Slit Lamp Photography	679
Autolensometry (POG)	44614
Schirmer's Test	370
Break Up Time (BUT)	341
Keratometry (Manual + Auto)	1286
Tear Lab	165
Pentacam	5319
HRT 3	6215
Flaremeter	688
Medical Board	69
DRPPT	45
GDx ECC / VCC	1013
Optic Neuritis Clinic	709
HD-OCT	983
Ant. Seg. Photo	510
PK-old	421
ROP	2941

LVA (Retina Lab)	214
PDT	181
Cong Glaucoma clinic	953
Scanning and storage of MRI recods	24

Ocular Pathology

Total number of Investigations			1,10,244
i)	– Blood: Total Leucocyte Count (TLC)		
	– Differential Leucocyte Count (DLC)		
	– Peripheral Blood Smear (PBS)		
	– Erthrocyte Sedimentation Rate (ESR)		
	– Bleeding Time (BT)/Clotting Time (CT)		
	Total		77,814
ii)	– Urine		8,489
iii)	– Histopathology, Cytopathology and Research		23,941

Ocular Biochemistry–Total 102021

Sl. no.	Test name	IPD	OPD	Total
1.	Sugar (R, F, PP, GTT)	4835	4145	8980
2.	HbA1c	183	935	1118
3.	TBIL	4386	2738	7124
4.	DBIL	4386	2738	7124
5.	ALT or SGPT	4386	2738	7124
6.	AST or SGOT	4386	2738	7124
7.	ALP	4386	2738	7124
8.	TP	949	1816	2765
9.	ALB	949	1816	2765
10.	Creatinine (CRE)	4519	2780	7299
11.	Urea (UREA)	4519	2779	7298
12.	Uric Acid (UA)	4518	2780	7298
13.	Sodium (Na+)	4520	2779	7299
14.	Potassium (K+)	4520	2779	7299
15.	Chloride (Cl-)	4520	2779	7299
16.	TCHOL	292	1120	1412
17.	LDL-C	292	1120	1412
18.	HDL-C	292	1120	1412
19.	Triglyceride (TRIG)	292	1120	1412
20.	Free T3	87	315	402
21.	Free T4	87	315	402
22.	TSH	88	324	412
23.	Vitamin B12	16	101	117
	TOTAL	57408	44613	102021

Ocular Microbiology-21735

1	Bacterial culture and sensitivity	14574
2	Fungal culture	3921
3	Specimens processed for cytology	2704
4	Specimens processed for chlamydia ag detection using dfa	298
5	Specimens processed for hsv ag detection using dfa	15

6	Viral pcr for herpes simplex virus, adeno and coxsackie virus (conjunctivitis/corneal ulcer)	12
7	Specimens processed for mycobacteria	13
8	Specimens processed for microsporidia	8
9	Culture for acanthamoeba	22
10	Automated (bactec) culture for endophthalmitis	56
11	Broad range pcr for endophthalmitis	56
12	Pcr for fungal identification	56
	Grand Total	21735

Ocular Pharmacology

1. Drugs purchased by the patient and fortified at the pharmacy Drug Dispensed	Total vials (5 ml)
Acetyl Cysteine (10, 20%)	149 vials
Amikacin (1.3%)	34 vials
Amphotericin B (0.25, 0.15%)	38 vials
Betaxolol (0.25%)	371 vials
Cefazolin (5%)	5635 vials
Conc. Tobramycin (1.3%)	5326 vials
Mitomycin (0.02%, 0.04%)	145 vials
Pilocarpine (.125%, 0.5%, 0.25%)	32 vials
Polymixin B (20,000µ-30,000µ/ml, 50,000µ/ml)	175 vials
Povidone Iodine 5%	1 vial
Vancomycin (5%)	291 vials
Timolol 0.25	28 vials
Ceftazidime	8 Vials
Bevacizumab/Avastin	3669 Ampules
Interferon	217 vials
Voriconazole (1%)	480 vials
Gentamycin 1.3%	1 vial

2. Dispensed than pharmacy RPC free of cost	
Autologous Serum	53 vials
Artificial Tears	36189 vials
Ciprofloxacin (0.3%)	11631 vials
Corneal storage media (M.K. Media)	3391 vials
Cyclosporine 2%	30 vials
EDTA (1.1%)	160 vials
Homatropine (2%)	13905 vials
Hypertonic Saline (5%)	3335 vials
Methyl Cellulose (2%)	63 L (for manf AT+Cipro+methylcellulose)
Methyl Cellulose (2%)	525 vials
Pilocarpine (2%)	986 vials
Acetazolamide 30 Mg	2201 Pkt
Sodium Ascorbate (10%)	280 vials
Sodium Citrate (10%)	291 vials
Thimerosal Solution (0.005%)	220 Lits
Tropicamide (1%)	17800 vials
Pipracillin	41
Tropac+ Phenylephrine (0.5%+2.5% (ROP)	6127 Vials

Gancyclovair vials	146
Gancyclovair ampoules	52
Gancyclovair sachets	185
PHMB	63 vials
Meropenam 5 mg/ml	16 vial
Piloclonidine	113 vials
Atropine 1%	165 vials
Atropine 2%	1 vials
Atropine 0.01%	10 vials
Mycophenolate moftil	20
Sodium benzoate	40
Propanalol (Ciplar) 4mg	75
Pyroximate	95
Isoniazis	65
Ethambutol	95
Isomac	20
Diazoxide 10 mg	44
Diazoxide 12.5 mg	32
Amlodipine	33
Hisone	60
Albumin	36
Glycerin 20%	1

Kit items dispensed	
Botox	179 ampules
Ethyl alcohol 20%	87 x 10 ml
Gold chloride	78
Hydrazin Hydrate	78
Sod. Chloride 20% solution	25 ml X 12
Tab. Citrizen 2.5 mg	8 sachets

Radiology

X Rays	7713
CT	1582
MRI	55

Community Ophthalmology

Primary Eye care Clinics	15
Attendees at PEC Counters' in Slums Cluster	46075
Refraction carried out in PEC Centres in slums Cluster	18805
Spectacles prescribed in Slums	17160
Patients referred to R.P. Centre	5876
Primary Eye Care Volunteer training events	
Volunteers Training Programmes organized	21
Volunteers Trained	232
Eye Health Education Events	
Eye Health Education Event conducted	721
Participants in the Health Education events	28864

Reach-in-Programme for cataract surgery in Rural and remote areas	
Adult screening camps organized	14
People examined	2089
Patients referred at R.P. Centre	751
School Eye Screening Programme	
School covered under SES Programme	0
Numbers of Children screened	0
Children prescribed spectacles:	0
Diabetic Retinopathy Screening Camps	
Total number of DR screening camps organized	5
Diabetic patients screened in camps	1286
Total DR Patients identified and referred to R.P.Centre	173(139)
Total patients reported at R.P.Centre for further management	0
Patient Reported for treatment at Dr R.P. Centre under Community Ophthalmology	
Total Patient Reported under community ophthalmology:	2983
Total Patient Operated for cataract surgeries under community ophthalmology	1718
Follow-up camps organized	40
Patients examined in Follow-up camps	864

	Prevalence	Rapid	Total
NPCB-National Trachoma Survey			
Numbers of district covered for Trachoma survey	10	17	27
Numbers of Adults Examined	50603	9225	59828
Numbers of Adults identified with Trichiasis	142	19	161
Numbers of children Examined	19960	8807	28767
Numbers of children identified for active trachoma infection	144	104	248
NPCB-National Blindness Survey			
Numbers of district covered			18
Numbers of 50+ Adults Examined			49536

Eye Bank

Total Eyes/Corneas Collected	1539
Total Transplanted	995

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor Atul Kumar was re-appointed Hon. Consultant Ophthalmology, Armed Forces Medical Services (December 2015–December 2018); appointed Advisor Ophthalmology Government of India, December 2015–2018; invited Guest Webinar on “Understanding Diabetic Retinopathy” AIOS on 9 January 2016; appointed member of the Advisory Board, Current Indian Eye Research Journal of Ophthalmic Research Group, March 2016; appointed Co-Chairperson, Advisory Committee for the 13th Five Year Plan under National Programme for Control of Blindness (NPCB) Government of India, 2016; appointed Member PMOA Duties committee under NPCB Government of India, 16 May 2016; AIIMS Committee Member for selection of Assistant Professor Ophthalmic Anesthesia, 17 May 2016; Member Advisory committee for National Blindness Survey and National Trachoma Survey, May 2016; Co-Chairman Treatment of Retinal Diseases in the country under committee for National Programme for control of Blindness (NPCB), June 2016; was awarded Dr BC Roy National Award for excellence in Ophthalmic Sciences by the President of India, in June 2016; Director, WHO Collaborating Centre for Prevention of Blindness, IND-142 from August 2016; awarded SS Grewal oration at Annual NZOS Meeting, Dehradun, November 2016; awarded Dr S. S. Hayreh oration at silver jubilee celebrations of VRSI, 30, 2 December 2016; Received 1st Krishnendu Sarkar gold medal from OSWB at Kolkata, October 2016; Co-Chairman in the Advisory Committee for the 13th Five Year Plan under National Programme for Control of Blindness (NPCB), 2016; Member of APS “Standing Selection Committee Meeting for Interview under APS” PGIMER, Chandigarh, 15 September 2016; Founder’s day Oration on High Myopia related Retinal Pathologies at 11th Founders Day AEC–PGI Chandigarh, 18 March 2017.

Professor Pradeep Sharma was awarded **Knapp Lecture by American Association for Pediatric Ophthalmology and Strabismus**, AAPOS Vancouver, April 2016; awarded the Invitation Keynote speaker at the Indonesian Pediatric ophthalmology and Strabismus Association, INAPOSS Meeting in Bandung, Indonesia, May, 2016; awarded best Poster in Strabismus: At American Academy of Ophthalmology Chicago, 2017; Best Video film LR to MR transposition at AAO, Chicago, 2017; awarded “International Hero of India” by AIOS, Jaipur, February 2017.

Professor Ramanjit Sihota delivered Prof NN Sood oration of the Glaucoma Society of India, 2016; Prof IS Roy oration, Kolkata Ophthalmological Society, 2017; National Task force for Glaucoma is being steered by the Glaucoma Service at AIIMS.

Professor Jeewan S. Titiyal attended PK Jain Oration, Corneal Endothelium: Surgeon’s Perspective, 67th Annual Conference of Delhi Ophthalmological Society, April 2016, New Delhi; Felicitation for receiving Padma Award by Government of India by Karnataka Ophthalmological Society, November 2016, Udupi, Karnataka; ERUDIO 2016 Allergan Achievement Awards, January 2017, New Delhi.

Professor Radhika Tandon was President of Eye Bank Association of India, EBAI; Member of Apex Technical Committee, NOTTO; Member of Task Force on Bioengineering, Department of Biotechnology, Ministry of Science and Technology, Government of India; Member, Expert Advisory Committee on Ophthalmology for six new AIIMS being set up under PMSSY; Member of Advisory Committee for the 13th Five Year Plan under National Programme for Control of Blindness (NPCB); appointed as Expert for inspection of Corneal Transplantation and Eye Bank facilities under Transplantation of Human Organs and Tissues Act, 1994, Registration (Renewal) of Dr Shroff’s Charity Eye Hospital, Dr Shroff’s Charity Eye Hospital, 5027, Kedarnath Road, Daryagnaj, New Delhi on 12 April 2016; selected as Member for the Advisory Committee for the 13th Five Year Plan under National Programme for Control of Blindness (NPCB) by Government of India, Ministry of Health and Family Welfare order dated 18 April 2016; selected as Expert and Chairman for the Registration of Dr RML Hospital for Corneal Transplantation Facilities under the Transplantation of Human Organs and Tissues Act, 1994, attended the Meeting on 30 April 2016; appointed as Expert for Inter-ministerial/Interagency Meeting to discuss the strategy to curb the rampant practices of banking and use of stem cell for therapeutic purposes, AJM, Conference Hall, ICMR Hqrs., New Delhi on 28 April 2016; appointed as Expert for Expert Committee Meeting, Chamber of DDG(O) 342, A Wing, Nirman Bhawan, New Delhi on 18 May 2016; appointed as Expert for inspection of Corneal Transplantation and Eye Bank facilities under The Transplantation of Human Organs and Tissues Act, 1994, Registration (Renewal) of VMMC and Safdarjung Hospital, New Delhi for Corneal Transplantation and Eye Bank facilities under The Transplantation of Human Organs and Tissues Act, 1994, VMMC and Safdarjung Hospital, New Delhi on 22 August 2016; appointed as Expert for Corneal Blindness Backlog Free Punjab, Committee Room, 4th Floor, Civil Secretariat-II (Mini Secretariat), Sec-9, Chandigarh on 24 August 2016; appointed as Expert for Project Review Committee Meeting, ICMR Hqrs., New Delhi on 28 September 2016; appointed as Expert for Board of Studies Meeting, AIIMS Jodhpur, Rajasthan on 10 October 2016; Member, Meeting of Advisory Committee to review the existing Scheme and suggest future plan of Action for further implementation of the National Programme for Control of Blindness (NPCB) held on 17 January 2017 at 11:00 AM in Mini Committee Room (153 A), Nirman Bhavan, New Delhi; appointed as Expert for Standing Selection Committee constituted for the recruitment of Faculty in the Department of Ophthalmology AIIMS Bhopal at Saket Nagar, Bhopal, M.P. on 30 January 2017; Expert, Meeting of Apex Technical Committee held on 31 January 2017 at 3.00 pm at NOTTO, 4th Floor, NIOP Building, VMMC and SJH Campus, New Delhi; appointed as Expert for inspection of Corneal Transplantation facilities under The Transplantation of Human Organs and Tissues Act, 1994, Registration (New) of Medanta Mediclinic, (A Unit of Global Health Private Limited), E-18, Defence Colony, New Delhi on 27 February 2017; appointed as External Expert for Standing Selection Committee Meeting of AIIMS Jodhpur, Jodhpur, 21 March 2017.

Chair, EBAI Session, DOSCON 2016, 15–17 April 2016, New Delhi

Convenor, Corneal Calibrations, DOSCON 2016, 15–17 April 2016, New Delhi

Co-Chair, IJO Research Methodology, DOSCON 2016, 15–17 April 2016, New Delhi

Message on eye donation explainable procedure and general awareness (Live programme), Community Service, Public Awareness Campaign during 31st National Eye Donation Fortnight, 25 August 2016, 8:00 AM, AIR Rainbow FM (All India Radio), New Delhi

12. Programme on Corneal Transplantation, Eye Health and Eye Donation Live Programme, recorded and repeat telecast at 6 pm and available online on You Tube, Community Service, Public Awareness Campaign during 31st National Eye Donation Fortnight, 27 August 2016, 8:30 AM–9:30 AM, Doordarshan DD News Total Health Show National Telecast, New Delhi
13. Swasthya Sanjeevani Programme on Eye Care and Donation, Phone in live show, Community Service, Public Awareness Campaign during 31st National Eye Donation Fortnight, 29 August 2016, 7:00 AM to 8:00 AM, All India Radio Telecast Nationally, New Delhi
14. Eye Donation Promotion, Savsthay Sanjivni Phone, in, Programme, 29 August 2016, Prasar Bharti, Akashvani Prasaran Bhawan, New Delhi

Chairman, Annual Conference of All India Ophthalmological Society, 2017 EBAI Session in AIOC 2017, 17 February 2017, JECC Convention Centre, Jaipur

25. Chairperson: Dr Radhika Tandon Management of Visual Axis Opacification, Dr Radhika Tandon, Phacoemulsification Update, 14 & 15 January 2017, LT, 6th floor, R.P. Centre, New Delhi

Professor Mahesh Chandra was appointed to Board of Examiners, Post-Graduate Diploma In Ophthalmology (DO) Examination, Maulana Azad Medical College, New Delhi, 22 April 2016; External Examiner, Mahatma Jyotiba Phule Rohilkhand University, Bareilly, 10–11 June 2016; Examiner, MS Ophthalmology, 19 July 2016, CSJM University, Kanpur; External Examiner, Diploma (Ophthalmology), Dr RML Avadh University, Faizabad, 3 August 2016; Examiner for MBBS 3rd Professional Ophthalmology Annual Examination, November 2016 and supplementary Examination February 2017, Lady Hardinge Medical College, New Delhi; Examiner, 27 February 2017, LHMC, New Delhi; Examiner, 28 February 2017, MAMC, New Delhi; Examiner, 1 March 2017, UCMS, New Delhi; Thesis evaluator, University of Delhi, Master of Surgery (Ophthalmology); U.G. lecture on Ocular Emergencies (Traumatic)

Professor Dilip Shende Chaired Session, 50th Golden Jubilee celebration, Ophthalmic block and resuscitation Workshop/CME, 28 January 2017, Dr R.P. Centre for Ophthalmic Sciences AIIMS New Delhi, Delhi; DA External Examination, Datta Meghe Institute of Medical Sciences, Nagpur, 10–12 June 2016, Jawaharlal Nehru Medical College, Sawangi (Meghe), Wardha, Nagpur; DA Practical Examination, Maharashtra University of Health Science, Nashik, 25 July 2016; Mahatma Gandhi Institute of Medical Sciences, Sewagram, Wardha (M.S.); MD External Examination, Maharashtra University of Health Sciences, Nashik, 11 August 2016, Mahatma Gandhi Institute of Medical Sciences, Sewagram, Wardha (M.S)

Professor Raj Pal was nominated for ACOIN Award Goa 2017 in 75th AIOC Conference.

Professor Namrata Sharma was elected General Secretary, All India Ophthalmological Society; Secretary, Eye Bank Association of India; R.P. Dhanda Award in Corneal Transplantation and Eye Banking, by All India Ophthalmological Society; Sadguru Award for academic Excellence, 2016; Reviewer of Ophthalmology, AJO, BJO, JCRS, JRS, Acta Ophthalmologica, Tissue Engineering Scientific reprints.

Professor Pradeep Venkatesh received State noteworthy academic achievements like academic awards, admission to fellowships of academics etc.; was Reviewer for the following Journals-Seminars in Ophthalmology, Ophthalmic research, Paediatric ophthalmology and strabismus, Journal of Photomedicine and Laser Surgery, Case reports in Ophthalmological Medicine, Indian Journal of Medical Research, Indian Journal of Ophthalmology, Saudi Journal of Ophthalmology, Middle East Journal of Ophthalmology, Journal of Clinical and Experimental Ophthalmology (OMICS group); Editorial Board of following Journals, World J of Ophthalmology, Case reports in Ophthalmological Medicine, Journal of Clinical and Experimental Ophthalmology (OMICS group), Scientific and Academic Publishing, Columbia International Publishing; CME credits from JAMA ophthalmology (for manuscript review).

Professor Praveen Vashist was nominated as a temporary advisor to regional director, SEARO, for the Regional Expert Group consultation, Accelerating Actions for prevention of blindness. He was invited by WHO SEARO in the WHO SEARO Regional expert group consultation, “Accelerating Actions for prevention of blindness” Meeting in Hyderabad from 13 to 15 December 2016 as resource person. He also submitted recommendations to WHO SEARO about “Action Plan for control of Blindness in SEARO Countries”; appointed as member secretary of the National Survey Advisory Committee under NPCB at Ministry of Health and Family Welfare, GOI under the Chairpersonship of Joint Secretary. He attended the Meeting of the committee on 28 June 2016 and presented status of National Trachoma Survey and National Blindness Survey in India; invited for a Meeting on State Action Plan Development: Arunachal Pradesh and planning for the RAAB survey as part of “National Blindness Survey” on 22 April 2016 at Itanagar, Arunachal Pradesh; judged the free paper session on Emerging practices in affective outreach in the Vision 2020 India 12th Annual Conference 2016 at Pune, Maharashtra from 4 & 5 June 2016; attended Technical Committee Meeting for formulation of packages, rates, and empanelment criteria for hospitals and quality indicators for the implementation of proposed National Health Protection Scheme (NHPS) on 26 July 2016 at Ministry of Health and Family Welfare, Nirman Bhawan, chaired by DGHS. He also attended Technical Committee Meeting to finalize the package and packages rates for National Health Protection Scheme (NHPS) on August 3, 2016 at Ministry of Health and Family Welfare, Nirman Bhawan; attended Fourth National ROP Task Force Meeting on 28 July 2016, with Government Officials; participated in the Meeting with WHO SEARO team of Disability, Injury Prevention and rehabilitation on 8 September 2016 and planned the activities of RP Centre about WHO CC for Prevention of Blindness; nominated by Chief Dr R. P. Centre as the investigator for the Diabetic retinopathy study on risk factors and biomarkers in North India; nominated by MOH and FW as member of the committee to decide upon the modification of definition of Blindness under NPCB; invited by Optometrist Association as “Guest of Honor” for the celebrations of “World Sight Day 2016” on 13 October 2016; participated in the Meeting with WHO SEARO New Delhi for consultation of the Collaborating Centres of WHO, Regional Office of South East Asia Region at New Delhi on 20–22 October 2016 and displayed RP Centre for prevention of Blindness in the exhibition; prepared plan for “Cataract blindness

backlog free India” with Deputy Director General, NPCB and submitted to Joint Secretary, MOH and FW; submitted suggestions for Developing Strategic Plan 2017–2021 for VISION 2020, The Right to Sight, India; submitted suggestion for the National Health Policy in relation to Blindness Control strategies and indicators; invited for training of medical officers and optometrists on “vision centres” by Andhra Pradesh Human Resource Department Institute for three day residential training programme. Delivered lecture on “Indian Eye Care, a National Perspective: Challenges and Opportunities” on 2 November 2016 at Bapatla, Vijaywada, Andhra Pradesh; invited for Roundtable Meet: Towards developing a communications campaign aimed at improving awareness for eye health in India at Country Inn and Suites by Carlson, Gurgaon Udyog Vihar; participated in the press release on the Occasion of RPC Golden Jubilee Congress on 10 March 2017; nominated as expert for capacity building in the states for Rashtriya Bal Swasthaya Karyakaram.

Professor Jasbir Kaur received Award for Popularization of Science from PSCST, April 2016, Elected as Executive Council Member of Biotechnology Society of India, Guest Speaker and Chairperson of Technical Session, NCMLS-2016, Faridkot, 11 & 12 April 2016; Continued to be: Member, Institutional Ethical Committee, CARICD, Ministry of AYUSH, Government of India, New Delhi; Reviewer of PLoS One; BMC Genomics; Clinica Chimica Acta; Current Eye Research, Biotechnology Letters (BILE), Journal of Clinical Laboratory Analysis, International Journal of Ophthalmology.

Professor Rohit Saxena was awarded Honorary Fellow of All India Collegium of Ophthalmology (FAICO) in Pediatric Ophthalmology and Strabismus, February 2017; awarded International Ophthalmic Hero of India by All India Ophthalmic Society, February 2017; awarded Fan Favorite Video at the American Academy of Ophthalmology, 2016; awarded Prof A K Khurana Gold Medal for Best paper in indexed publication by SPOSI for the year 2016.

Professor M. Vanathi was Honorary General Secretary of Delhi Ophthalmological Society, 2015–2017; Member, North Zone, Eye Bank Association of India, 2015–2018; Governing Council member of Indian Society of Cornea and Keratorefractive Surgeons, 2015–2018; Organising Secretary of DOST 2016 (Delhi Ophthalmological Society Teaching 2016), teaching programme for ophthalmology residents and fellows from across the country at R P Centre, AIIMS, 11 November 2016 and Ophthalmic Live Surgery from R P Centre OT, 12 November 2016; Organising Secretary of winter DOS 2016: Ophthalmic Vista (midterm DOS Conference), 12 & 13 November 2016; Organising Secretary of the Joint iDOS-COSL 2016 Meeting (International DOS–College of Sri Lanka Meeting 2016) in Colombo, Sri Lanka, 22–24 December 2016; Coordinated organization of RP Centre Golden Jubilee celebrations Scientific Sessions, J L Auditorium, AIIMS, 11 & 12 March 2017; Member of BIS Committee; Elected Member Scientific Committee and Joint Treasurer of All India Ophthalmological Society, 2017–2019.

Dr Parijat Chandra was Examiner—BSc (Optometry) Examination (Pre Final) 2nd year, Ophthalmic Instruments and Appliances, (April 2016); Examiner, MS (Ophthalmology) Delhi University, MAMC, 21–23 April 2016; Examiner, BSc (Optometry) Examination (Final) 2nd year, Ophthalmic Instruments and Appliances (June 2016); Examiner, MS (Ophthalmology) Supplementary, Delhi University, MAMC, 19 October 2016; Examiner, BSc (Optometry) Examination (Supple) 2nd year, Ophthalmic Instruments and Appliances (November 2016); External Examiner, Thesis (MS Ophthalmology), PGIMER Chandigarh, (March 2017); External Examiner, Thesis (MS Ophthalmology), BK Koirala Institute of Health Sciences, Nepal (March 2017); Reviewer, Journal of Postgraduate Medicine; Reviewer, Indian Journal of Ophthalmology; Reviewer, Eye; Reviewer, Journal of Clinical Ophthalmology and Research; Reviewer, Indian Journal of Pediatrics; Reviewer, International Journal of Ophthalmology; Reviewer, Indian Pediatrics; Editorial Board Member (Section Editor Retina/Uvea), DOS Times, Official bulletin of Delhi Ophthalmological Society (2015–2017); Moderator, ROP Revelations Session, Annual Conference of Delhi Ophthalmological Society, Delhi (15–17 April 2016); Session Official, UNICEF sponsored session on ROP, 40th MP State Ophthalmic Conference, Bhopal (21–23 October 2016); Chair, Panel Retina Session, Golden Jubilee Congress of RP Centre, AIIMS, New Delhi (12 March 2017); Evaluator, Instruction Courses (Pediatric), AIOS, Jaipur 2017 (15–18 February 2017); Evaluator, Free Papers (Pediatric), AIOS, Jaipur 2017 (15–18 February 2017); Facilitator, Capacity Building Workshop and Symposium on Quality Improvement. AIIMS, New Delhi (2 & 3 August 2016); Facilitator, Quality Improvement Sensitization Meeting for Nurses, AIIMS, New Delhi (26 August 2016); Member, Expert group Meeting on developing patient safety framework in India. New Delhi (1 & 2 September 2016), Organized by DGHS, MOHFW and WHO; Chapter Leader, AIIMS IHI Chapter on quality improvement; Member Expert working Group, National ROP Task Force for prevention of Blindness due to ROP. Under MOHFW, GOI.

Dr Suraj Singh Senjam was awarded ACOIN Gold Medal for the year 2015–2016 for excellence in Community Eye Care; attended Meeting at Delhi Secretariat on 5 July 2016 to plan Aam Aadmi Mobile Eye and ENT Van in Delhi; was selected as a member of editorial board of Archives of Community Medicine and Public Health; was the Member Secretary of Sports Committee and won the man of the match for football match on RPC Sports Day, 21 February 2016; selected as an editorial board member of BOAJ Ophthalmology, Bio accent Group Publisher Willington USA, Three papers has been reviewed so far; attended Meeting to Revision of Visual Disability Classifications on 25 January 2017 at Ministry of Social Justice and Empowerment, GOI.

Dr Noopur Gupta was awarded T P Agarwal Trophy for best paper presentation at Cornea Session at DOSCON 2016 on 17 April 2016; appointed as WHO Regional Expert for South-East Asia (SEARO) on Prevention of Blindness and promoting eye health; appointed as Ophthalmology Expert for Department of Health Research, Ministry of Health and Family Welfare, Government of India for biomedical research; appointed as Expert for Sub-Committee on Blindness and Visual Impairment, Ministry of Social Justice and Empowerment, Ministry of Health and Family Welfare, Government of India; was invited as Ophthalmology Expert to review, grade and select/short list research proposals for Short term Studentship at Indian Council of Medical Research to promote interest in biomedical research in medical students; Trainer and resource faculty for National PK Instruction Workshop, AIIMS, Sight Life International as part of Surgeon training Initiative; Surgeon Trainer and resource faculty for DALK and DSAEK Instruction Workshop, DOS, Sight Life International as part of Surgeon training Initiative for ophthalmologists from all over the country; As Expert of Dry eye in TFOS Dry Eye interview, Glaring Ocular needs, published in December 2016 as part of Tear Film Ocular Surface Society Global ambassador Programme; As Expert Ophthalmologist and trainer for optometrists and ophthalmologists at Virudhunagar and Madurai, Tamil Nadu for supervision and monitoring of National Blindness Survey, 2015–2018 under NPCB, MoH and FW, Government of India from 21–25 August 2016.

Dr Vivek Gupta was awarded the best physical poster ET Selvam Joint Award for the poster on “Innovative use of WHAT-APP messaging and Free Software for GIS Mapping in Ophthalmic Surveys” in AIOS Jaipur, 2017; was also nominated by Chief Dr R.P. Centre as the investigator for the Diabetic retinopathy study on risk factors and biomarkers in North India.

Professor Tushar Agarwal received First Prize in Cataract Category for poster entitled: “Comparison of IOL Master 500 and Lenstar 900 for IOL power calculation in pediatric cataract surgery” 21st Winter Meeting of the European Society of Cataract and Refractive Surgeons, Maastricht, Netherlands, 10–12 February 2017.

Ocular Pharmacology

1. Dr T Velpandian and his group received Dev Raj Bajaj Award for the development of newer instrument (Gyro-Dot-Optomotor Response Device using Gold Fish for recording visual perception) from Association of Physiologists and Pharmacologists of India for the year 2016.
2. Dr T Velpandian received AIIMS Excellence Research Award (Third Prize) with the cash reward in recognition for his outstanding publication under the category of “Basic Research” for the year 2016.
3. Dr Madhu Nath was awarded International Travel Grant from DST-SERB for attending and presenting paper at ASIA-ARVO, Brisbane, Australia (5–8 February 2017).
4. Moksha Lakshmi was awarded with “Prof PC Dandiya Prize” at 50th Annual Inaugural Golden Jubilee Conference of Indian Pharmacological Society (AIGJCON IPS 2017), held on 14 & 15 February, 2017 at Indira Gandhi Institute Medical Sciences (IGIMS), Patna, India.
5. Ujjwal Das was awarded with “Best E-Podium presentation” at 5th National Conference of Pharmacoeconomics and Outcomes Research held on 3 & 4 March 2017 organized by International Society for Pharmacoeconomics and Outcomes Research (ISPOR) India Chapter, Delhi Pharmaceutical Sciences and Research University (DPSRU).
6. Ujjwal Das was awarded with “Best Poster Prize” in the poster competition at 50th Annual Inaugural Golden Jubilee Conference of Indian Pharmacological Society (AIGJCON IPS 2017), held on 14 & 15 February 2017 at Indira Gandhi Institute Medical Sciences (IGIMS), Patna, India.
7. Hanuman Prasad Sharma was awarded International Travel Grant from DBT to attend the Conference ARVO–2016, Held at Seattle, USA (1–5 May 2016).
8. Hanuman Prasad Sharma was awarded best poster and travel grant in the Conference 23rd Annual Meeting of Indian Eye Research Group, ARVO-INDIA Chapter 30 & 31 July 2016 at Hyderabad, India.
9. Dr Madhu Nath was awarded best PhD student in the Golden Jubilee Celebrations of Dr RP Centre.

Ocular Pathology

1. Neelima Sharma was Awarded 2nd Prize Best Poster presentation during 2nd National Allied Health Professionals’ Conference AHPCON-2016 to be held at AIIMS Hospital, New Delhi.
2. Mansi Bhardwaj was Awarded 1st Prize in Solid Tumour category during 5th Annual Conference of Molecular Pathology Association of India, at Chandigarh.

VISITING SCIENTIST

1. Prof Luca Rossiti, Milan, Italy
2. Prof Tin Aung, Singapore National Eye Centre (SNEC)
3. Foreign Guest Faculty Prof Anand Swaroop, Chief Neurobiology and Degenerative Disorders Lab, NEI, NIH from Bethesda visit on 5 December, 2016
4. Foreign Guest Faculty Prof Arun D Singh from USA visit on 15 February 2017

10.5. Jai Prakash Narayan Apex Trauma Center

Chief

M.C. Misra
(upto 31 January 2017)

Anurag Srivastava
(from 1 February 2017)

Additional Medical Superintendent

Sanjeev K. Bhoi

Professors

Anaesthesiology

Babita Gupta
Chhavi Sawhney

Emergency Medicine

Sanjeev Bhoi

Forensic Medicine

Sanjeev Lalwani
Adarsh Kumar

Laboratory Medicine

Arulselvi S
Purva Mathur

Neurosurgery

Deepak Agrawal
Deepak K Gupta
Sumit Sinha

Orthopaedics

Kamran Farooque
Vijay Sharma
Buddhadev Chowdhry
Vivek Trikhia

Radiodiagnosis

Shivanand G.
Atin Kumar

Surgery

Sushma Sagar Subodh Kumar
Amit Gupta Maneesh Singhal
Biplab Mishra

Associate Professors

Anaesthesiology

Naveen Yadav

Cardiology

Neeraj Parakh

Critical Care

Kapil Dev Soni
Richa Garg

Nephrology

Soumita Bagchi

Neuroanesthesia

Keshav Goyal
Navdeep Sokhal
Ashish Bindra
Gyanendra Pal Singh
Neeraj Kumar

Neurosurgery

GD Satyarthee
Pankaj K Singh

Obstetrics and Gynaecology

Garima Kachawa

Orthopaedics

Samarth Mittal

Paediatric Surgery

Shilpa Sharma

Assistant Professors

Surgery

Pratyusha Priyadarshini
Abhinav Kumar
Narendra Choudhary
Dinesh Kumar Bagaria

Transfusion Medicine

Rahul Chaurasia

Emergency Medicine

Tej Prakash Sinha

HIGHLIGHTS

Jai Prakash Narayan Apex Trauma Centre, AIIMS continued to provide leadership in quality patient care services, research, teaching and training on all aspects of Trauma. All the faculty and staff members are working actively in providing state-of-the-art treatment to the victims of trauma. A total of 69551 patients visited casualty in the year 2016–2017. Among these, 5373 patients were admitted. A total of 40594 patients attended follow up OPD. A total number of 5437 patients were

operated upon. Beside involvement in the undergraduate and postgraduate teaching at AIIMS, the faculty members are actively involved in providing short term and long term training to the medical and paramedical staff of various hospitals and agencies of the country. They are also given training on newer methodology for management of trauma patients including ATLS Protocols, BECC, AUTLS etc. Interactive seminars, CMEs, Symposium, Conferences have been organized to update the knowledge. Over 198 research papers have been published in national and international journals. Faculty members are also involved in various research projects and have also presented the papers based on the research conducted by them in various national and international forums. Use of information technology in patient care related services, installations of newer equipments related to patient care, addition of facility of dialysis, HDU, PAC clinic are the other highlights of functioning of JPNATC. The Trauma Center was awarded the prestigious Asia Pacific Hand Hygiene Excellence Award by the WHO, Asia Pacific Society of Infection Control.

EDUCATION

Biplab Mishra

- Chest injuries, BSc Nursing, LT 1 AIIMS, New Delhi

Deepak Agarwal

- Started online CME for residents and CNE for nurses and which is now mandatory for all residents and nurses across AIIMS. The online modules are developed in house and administered through computer facility, AIIMS
- Initiated and implemented the Quality Assurance module for 360 degree evaluation of residents. This module is fully implemented in Neurosurgery and across 8 departments in AIIMS
- Initiated and implemented live streaming of all CCR/CGR's in AIIMS with archival on you tube. All live operative Workshops in Neurosurgery are also streamed live

Gyanendra Pal Singh

- Basic Life Support (BLS) and Advanced Cardiac Life Support (ACLS) training to faculties, residents and nurses during AHA certified courses at AIIMS
- Basic Emergency Care Course (BECC) training to doctors, nurses and paramedics at JPNATC, AIIMS
- Teaching Airway skills to medical students during Cadaveric Airway Workshop at JPNATC, AIIMS
- Teaching intervention pain techniques to medical students during Cadaveric Pain Workshop at JPNATC, AIIMS
- Moderator for the Seminar and Journal Clubs activities for postgraduate students in the department

Navdeep Sokhal

- Successfully conducted course of "AIIMS Critical Care Course for Surgeons" as core committee Member under Prof Arvind Chaturvedi on 16&17 August 2016. In this course doctors from various disciplines, designations and institutes were trained for using simple principles of applied physiology in care of critically ill and post-operative patients
- Successfully participated in AIIMS Neuroanesthesia update as joint organizing secretary held in AIIMS on 30 September 2016–2 October 2016
- Training for percutaneous tracheostomy (PCT) to residents
- Participated as faculty in AIIMS Neurological Life Support (ANLS) Course on 28&29 January 2017 held at JPNATC, AIIMS, New Delhi
- Participated as faculty in 32nd Indian Society for Study of Pain in February 2017 at Jaipur

Neeraj Kumar

- Teaching Doctors, Nurses and Paramedical staff about basic emergency life care during Basic Emergency Care Course at AIIMS and other cities
- Instructor for ATLS, ANLS, BECC, AUTLS courses
- Teaching Airway skills to medical students during Cadaveric Airway Workshop

Tej Prakash Sinha

- Zanzibar Radiology Emergency Medicine WHO Course, 20–24 February 2017, Manazi Mamoja Hospital, Zanzibar, Tanzania
- Capacity Building Programme for Trauma Care System Development for the State of Haryana, 2–6 May 2016, JPNATC, AIIMS, New Delhi
- Capacity building programme for traumacare system development for the State of Haryana, 16–20 May 2016, JPNATC, AIIMS, New Delhi
- Capacity Building Programme for Trauma Care System Development for the State of Haryana, 28 March 2016–1 April 2016, JPNATC, AIIMS, New Delhi

CMEs/Workshops/Symposia/National and International Conferences

Deepak Agarwal

- Complex Spine Workshop, 7&8 May 2016, JPNA Trauma Centre, AIIMS, New Delhi
- SEUTEH 2016, 3–7 September 2016, JLN Auditorium, AIIMS, New Delhi
- Symposium on Life after Spinal Cord Injury and Disability, 4 June 2016, JPNA Trauma Centre, AIIMS, New Delhi
- AIIMS Advanced Ultrasound Trauma and Life Support Course, 23–27 June 2016, London, U.K.
- SEARO International Workshop on Strengthening Emergency and Trauma Care at Primary Health Care Setting, 22–26 August 2016, Khon Kaen, Thailand
- Emergency Ultrasound Course, 13–19 November 2016, London, U.K.
- 1st AIIMS Live Operative O-Arm Workshop, 4 February 2017, JPNA Trauma Centre, AIIMS, New Delhi
- Demonstration and Hands on Workshop AIIMS, Keep It Simple Sonography (AIIMS-KISS), 25 February 2017, Kasturba Medical College, Manipal University, Manipal
- Workshop on Personality Development Communication and Presentation Skills (PDCP), 27 April 2016, JPNA Trauma Centre, AIIMS, New Delhi
- Workshop on Personality Development Communication and Presentation Skills (PDCP), 25 May 2016, JPNA Trauma Centre, AIIMS, New Delhi
- Workshop on Personality Development Communication and Presentation Skills (PDCP), 20 July 2016, JPNA Trauma Centre, AIIMS, New Delhi
- Workshop on Personality Development Communication and Presentation Skills (PDCP), 8 September 2016, JPNA Trauma Centre, AIIMS, New Delhi
- Workshop on Personality Development Communication and Presentation Skills (PDCP), 5 November 2017, JPNA Trauma Centre, AIIMS, New Delhi
- Workshop on Personality Development Communication and Presentation Skills (PDCP), 18 January 2017, JPNA Trauma Centre, AIIMS, New Delhi
- Workshop on Personality Development Communication and Presentation Skills (PDCP), 22 February 2017, JPNA Trauma Centre, AIIMS, New Delhi
- Workshop on Research Ethics and Publications (REAP), 27 April 2016, K.L. Wig CMET AIIMS, New Delhi
- Workshop on Research Ethics and Publications (REAP), 11 May 2016, K.L. Wig CMET AIIMS, New Delhi
- Workshop on Research Ethics and Publications (REAP), 3 September 2016, K.L. Wig CMET AIIMS, New Delhi
- Workshop on Research Ethics and Publications (REAP), 18 October 2016, K.L. Wig CMET AIIMS, New Delhi
- Workshop on Research Ethics and Publications (REAP), 6 February 2017, K.L. Wig CMET AIIMS, New Delhi
- Workshop on Research Ethics and Publications (REAP), 19 April 2017, K.L. Wig CMET AIIMS, New Delhi

Deepak Gupta

- 1st Paediatric Neurosurgery Educational Operative Workshop (Paediatric NEWS), 19–21 January 2017, AIIMS, New Delhi
- 25th Annual Conference of Neurotrauma Society of India, Neurotrauma 2016, 12–14 August 2016, AIIMS, New Delhi
- Neuroendoscopy in Craniospinal Trauma Cadaveric Workshop, 11 August 2016, AIIMS, New Delhi

Garima Kachhawa

- Preconference Symposium and Annual Conference of the Endocrine Society of India (ESICON 2016), Organized by the Department of Endocrinology and Metabolism and Endocrine Society of India, New Delhi on 20 & 21 October 2016
- National Stakeholders Workshop on Respectful Maternity Care, Organized by ICMR, White Ribbon Alliance India, New Delhi, 20 & 21 April 2017

Navdeep Sokhal

- FAST, ATLS, 8 September 2016, JPNATC, AIIMS, New Delhi
- Musculoskeletal Trauma Assessment and Management, “ATLS”, 9 September 2016, JPNATC, AIIMS, New Delhi
- Triage Scenario, “ATLS”, 9 September 2016, JPNATC, AIIMS, New Delhi
- Airway and Ventilator Management, “ATLS”, 6 October 2016, JPNATC, AIIMS, New Delhi

- Percutaneous Tracheostomy Live, “Airway Management Workshop: Cadaver training and research Facility”, 5 March 2017, JPNATC, AIIMS, New Delhi

Neeraj Parakh

- AIIMS Neuroanesthesia update 2016, 1 & 2 October 2016, at AIIMS, New Delhi
- AIIMS Cadaveric Airway Workshop, 7 August 2016 and 5 March 2017, JPNATC, AIIMS, New Delhi
- AIIMS, CADAVERIC, Interventional Pain Management Workshop, 22 July 2016, JPNATC, AIIMS, New Delhi
- AIIMS-ANLS, 28 & 29 January 2017, JPNATC, AIIMS, New Delhi

Pankaj Singh

- Evolution in management of hangmans fracture, “6th AIIMS Complex Spine Live Operative Workshop”, 7 & 8 May 2016, AIIMS, New Delhi

Purva Mathur

- Workshop on Capacity building to prevent hospital acquired Infection, “AIIMS-CDC-ICMR” 28 February 2017–1 March 2017
- Workshop on infection control, “World Trauma Congress”, August 2017, Vigyan Bhawan, Delhi

S. Arulselvi

- Basics of blood banking techniques, “Workshop for ESI Hospital Technicians”, 31 January 2017, National Training Academy, Dwarka, New Delhi.

Sanjeev K. Bhoi

- AIIMS Ultrasound Trauma Life Support Course for Nurses, Instructor Course, 4 January 2017, JPN Apex Trauma Centre, AIIMS, Delhi
- Emergency Ultrasound in Primary Health Care, 30 December 2016–1 January 2017, JPN Apex Trauma Centre, AIIMS, Delhi
- AIIMS Basic Ultrasound for Surgeons, 27 & 28 January 2017, JPN Apex Trauma Centre, AIIMS, Delhi
- AIIMS Advanced Ultrasound in Trauma and Life Support Course, GAPIO Pre Conf, 6 January 2017, Care Hospital, Hyderabad
- AIIMS Emergency Sonography Course, 6 & 7 February 2017, JPN Apex Trauma Centre, AIIMS, Delhi
- Emergency Ultrasound in Primary Health Care, 15 & 16 February 2017, JPN Apex Trauma Centre, AIIMS, Delhi
- AIIMS Ultrasound Trauma Life Support Course, 19 February 2017, Mumbai, Maharashtra
- AIIMS Ultrasound Trauma Life Support Course, 24 February 2017, Kasturba Hospital, Manipal
- AIIMS Ultrasound Trauma Life Support Course, 4 & 5 March 2017, JPN Apex Trauma Centre, AIIMS, Delhi
- AIIMS Emergency Sonography Course, 6 & 7 March 2017, JPN Apex Trauma Centre, AIIMS, Delhi
- AIIMS Ultrasound Trauma Life Support Course Instructor Course, 5 March 2017, JPN Apex Trauma Centre, AIIMS, Delhi
- Emergency Ultrasound in Primary Health Care, 10 March 2017, JPN Apex Trauma Centre, AIIMS, Delhi
- AIIMS Ultrasound Trauma Life Support Course for Nurses, 27–29 March 2017, JPN Apex Trauma Centre, AIIMS, Delhi
- Ultrasound Guided Nerve in Emergency Care, 3 & 4 April 2017, JPN Apex Trauma Centre, AIIMS, Delhi
- AIIMS Ultrasound Trauma Life Support Course, 15 & 16 April 2017, Jubilee Mission Medical College and Research Institute, Thrissur
- Ultrasound Guided vascular Access-Basic, 16 April 2017, Jubilee Mission Medical College and Research Institute, Thrissur
- AIIMS Disaster Ultrasound Course, Pre Con WADDEM, 4 & 5 May 2016, JPN Apex Trauma Centre, AIIMS, Delhi
- AIIMS Ultrasound Trauma Life Support Course for Nurses, 16 May 2016, JPN Apex Trauma Centre, AIIMS, Delhi
- AIIMS Ultrasound Trauma Life Support Course, HIPA 3, 18 & 19 May 2016, JPN Apex Trauma Centre, AIIMS, Delhi
- AIIMS Ultrasound Trauma Life Support Course, HIPA 3, 18 & 19 May 2016, JPN Apex Trauma Centre, AIIMS, Delhi
- AIIMS Ultrasound Trauma Life Support Course, 12 & 13 June 2016, JPN Apex Trauma Centre, AIIMS, Delhi

- AIIMS Advanced Ultrasound in Trauma and Life Support Course, 25 June 2016, Leicester, UK, United Kingdom
- AIIMS Advanced Ultrasound in Trauma and Life Support Course, 27 June 2016, Basildon, UK, United Kingdom
- AIIMS Advanced Ultrasound in Trauma and Life Support Course, 16 & 17 July 2016, TAMPA, USA
- AIIMS Ultrasound Trauma Life Support Course for Nurses, 29 & 30 July 2016, JPN Apex Trauma Centre, AIIMS, Delhi
- Emergency and Critical Care Sonography for Neuro Surgeons, 11 August 2016, JPN Apex Trauma Centre, AIIMS, Delhi
- AIIMS Ultrasound Trauma Life Support Course, WTC, 16 August 2016, JPN Apex Trauma Centre, AIIMS, Delhi
- Ultrasound in Primary Health Care, 24 August 2016, Khoan Kaen, Thailand
- AIIMS Ultrasound Trauma Life Support Course, CEUTECH, 5–7 September 2016, JPN Apex Trauma Centre, AIIMS, Delhi
- AIIMS Ultrasound Trauma Life Support Course for Nurses, CEUTECH, 5–7 September 2016, JPN Apex Trauma Centre, AIIMS, Delhi
- AIIMS Ultrasound Trauma Life Support Course for Nurses, 19 September 2016, JPN Apex Trauma Centre, AIIMS, Delhi
- AIIMS Ultrasound Trauma Life Support Course for Nurses, 28 & 29 September 2016, JPN Apex Trauma Centre, AIIMS, Delhi
- AIIMS Ultrasound Trauma Life Support Course for Nurses, 20 October 2016, Manipal Hospital, Bengaluru
- AIIMS Paediatric Ultrasound Course, 21 October 2016, Vydehi Hospital, Bengaluru
- AIIMS Ultrasound Trauma Life Support Course for Nurses, 27 & 28 October 2016, JPN Apex Trauma Centre, AIIMS, Delhi
- Ultrasound guided Vascular Access, 27 October 2016, JPN Apex Trauma Centre, AIIMS, Delhi
- AIIMS Advanced Ultrasound in Trauma and Life Support Course, 5 & 6 November 2016, Colombo, Sri Lanka
- AIIMS Disaster Ultrasound Course, 9 November 2016, JPN Apex Trauma Centre, AIIMS, Delhi
- AIIMS Advanced Ultrasound in Trauma and Life Support Course, 13 November 2016, Basildon UK, United Kingdom
- AIIMS Advanced Ultrasound in Trauma and Life Support Course, 17 November 2016, Western super mare, United Kingdom
- Emergency Point of care ultrasound in Adults, “INDUSEM 2016”, October 2016, Bangalore
- Paediatric Emergency Sonography, “INDUSEM”, October 2016, Bangalore

Shivanand Gamangati

- 4 AIIMS-MAMC-PGI Imaging Course Series, 1stcourse: GI andHepatobiliary Imaging, JL Auditorium, 18 & 19 November 2016
- Delhi Imaging Update: Annual Conference of Delhi Branch of Indian Radiological and Imaging Association, JL Auditorium, 3–5 March 2017

Lectures delivered

Adarsh Kumar: 11

Babita Gupta: 7

Deepak Agarwal: 6

GyanendraPal Singh: 4

Navedeep Sokhal: 2

RichaAgrawal: 25

Soumita Bagchi: 4

Sushma Sagar: 8

Ashish Bindra: 10

Biplab Mishra: 10

Deepak Gupta: 8

Kapil D Soni: 27

Neeraj Parakh: 18

S. Arulselvi: 1

Shivanand G.: 12

Vivek Trikha: 46

Atin Kumar: 21

Chhavi Sawhney: 5

Garima Kachhawa: 13

KeshavGoyal: 14

Purva Mathur: 8

Sanjeev K. Bhoi: 3

Subodh Kumar: 21

Adarsh Kumar: 11

1. Disaster victim identification, “Keynote Lecture” on Forensic Odontology, Fromevidence to conclusion, 7 April 2016, Department. of Oral Pathology and Microbiology, Dental College, Jamia Milia Islamia, Delhi
2. Military airplane crash in Delhi, India, “International Academy of Legal Medicine Intersocietal Symposium-2016”, “P5 Medicine andJustice”, 21–24 June 2016, Palazzo del Cinema, and Palazzo del casino LIDO, Venice, Italy
3. Panelist on medico legal issues, “9th IMA State Level Refresher Course”, 17 July 2016, Allahabad, UP

4. Medico legal investigations of custodial deaths and torture in India, An update, “12th Indo Pacific Association of Law Medicine and Science (INPALMS) Congress 2016”, 17–23 September 2016, Bali, Indonesia
5. Medical negligence and defensive medicine, “CME Speaker on Medico legal issues for medical practitioners”, 7 October. 2016, Department of Forensic Medicine, North Eastern Indira Gandhi Regional Institute of Medical Sciences (NEIGRIMS), Shillong, Meghalaya
6. Defensive medicine for medical practitioners, “34th Annual Conference of Associations of Physicians of India (UP APICON 2016)”, 14 & 15 October 2016, Department. of Medicine, MLN Medical College, Allahabad
7. Plagiarism—What it is and how to avoid it, “Resource person/CME Speaker on scientific writing”, 10 & 11 November 2016, Medical Education Unit, Jawaharlal Nehru Institute of Medical Sciences, Imphal, Manipur
8. (a) Custodial death investigation in India: NHRC experience dignified (b) Management of dead in mass disaster, “Resource person/CME Speaker during 24th Annual Conference of Karnataka Medico Legal Society, KAMLSCON-2016, 21 & 22 December 2016, Department of Forensic Medicine, Devraj Urs Medical College, Kolar, Karnataka
9. Dowry death—An extreme form of domestic violence in India, “First International Forensic Conference, FIFC-2017” having theme as “Towards improving forensic education and practice in the Middle-East”, 28–31 January 2017, Kuwait University, Kuwait
10. Current status of forensic toxicology in India, Scope and need of hour for quality research, “National Seminar on Research prospects in Forensic Science”, 20 & 21 February 2017, Department of Forensic Sciences at SHIATS, Allahabad University, Allahabad, UP
11. Age estimation in the Indian perspective, “5th National Forensic Odontology and CDE program and Forensic Workshop International”, 30 & 31 March 2017, Department of Oral Pathology and Microbiology, King George’s Medical University, Lucknow

Ashish Bindra: 10

1. Stellate ganglion block, “AIIMS Cadaveric Chronic Pain Management Course”, 22 July 2016, JPNA Trauma Centre, New Delhi
2. Initiation of mechanical ventilation, “World Trauma Congress”, November 2016, JPNATC, AIIMS, New Delhi
3. Panel: Neurological injuries, “Asia Pacific Critical Care Conference (APCC)”, 18 November 2016, New Delhi
4. Cerebral oxygenation monitors: Do they improve outcome, “64th Annual Conference Indian Society of Anaesthesiology”, 27 November 2016, Punjab Agriculture University, Ludhiana
5. Differential diagnosis of facial pain, “Neuro equilibrium Society of India”, 6 January 2016, AIIMS, Bhubaneswar
6. Management of head trauma, “Advanced Trauma Life Support Course”, 19 & 20 January 2017, JPNATC, AIIMS, New Delhi
7. Management of status epileptics, “AIIMS Neurological Life Support”, 29 January 2016, AIIMS, New Delhi
8. Monitoring in Neuroanesthesia, “PG Assembly”, 21 February 2017”, GB Pant Hospital, New Delhi
9. Multimodal monitoring in Neurocritical Care, “Annual Neurocritical Care Update”, 25 March 2017, Artemis Hospital, Gurgaon
10. Panel: Paediatric neurological injury, “Medanta Neurocritical Care”, 1 April 2017, Medanta, Medicity, Gurgaon

Atin Kumar: 21

1. Imaging of urotrauma, “International Symposium on Urologic Imaging and Intervention”, 27–29 January 2017, AIIMS, New Delhi
2. Imaging protocol for trauma cases, “Annual Conference of Uttarakhand State Chapter of Indian Radiological and Imaging Association”, 25 & 26 March 2017, Jolly Grant Medical College, Dehradun
3. Imaging of CNS and spinal trauma, “Annual Conference of Uttarakhand State Chapter of Indian Radiological and Imaging Association”, 25 & 26 March 2017, Jolly Grant Medical College, Dehradun
4. Imaging of chest trauma, “Annual Conference of Gujarat State Chapter of Indian Radiological and Imaging Association”, 18 & 19 March 2017, Convention Centre, Ahmedabad
5. Imaging of hypoxic ischemic encephalopathy, “Annual Conference of Gujarat State Chapter of Indian Radiological and Imaging Association”, 18 & 19 March 2017, Convention Centre, Ahmedabad.
6. Film reading session, Neuroradiology, “Delhi Imaging Update 2017”, 3–5 March 2017, AIIMS, New Delhi
7. Interventions in non-abdominal trauma, “19th Annual Conference of ISVIR”, 23–26 February 2017, Kolkata
8. Imaging of urotrauma, “International Symposium on Urologic Imaging and Intervention”, 27–29 January 2017, AIIMS, New Delhi

9. Imaging of acute neurological emergency, “AIIMS Neurological Life Support Course”, 28 & 29 January 2017, JPNATC, AIIMS, New Delhi
10. Case in the box, “Winter Symposium, Vascular anomalies, Birthmarks and beyond”, 13 & 14 January 2017, CMC, Vellore
11. Imaging and intervention in peripheral vascular trauma, “Annual Conference of Indian Radiological and Imaging Association”, 5–8 January 2017, Birla Auditorium, Jaipur
12. Imaging and intervention in abdominal trauma, “Annual Conference of Indian Radiological and Imaging Association”, 5–8 January 2017, Birla Auditorium, Jaipur
13. Imaging of abdominal trauma, “4th AIIMS MAMC PGI Imaging course series on GIT and Hepatobiliary Imaging”, November 2016, AIIMS, New Delhi
14. Myelination–normal and abnormal, “Resonance 2016–Paediatric Imaging”, 5 & 6 Nov 2016, Essex farms, New Delhi
15. Imaging of hypoxic ischemic encephalopathy, “CME of Agra Chapter of UP IRIA”, 22 October 2016, Agra
16. Imaging of acute trauma, Our experience at Level 1 trauma centre, “Invited Guest Lecture”, 20 October 2016, Base Hospital, New Delhi
17. Film Reading Session, Neuroradiology, “Resident Education Program”, 10–12 September 2016, MAMC, New Delhi
18. Imaging hemodynamic in trauma and critical care, “RICON 2016, 30th Annual Meeting of UP chapter of IRIA”, 4 September 2016, BHU, Varanasi
19. Imaging of brachial plexus injuries, “3rd KSR-IRIA Friendship Symposium on Emergency and Trauma Radiology”, 23 July 2016, Indian Habitat Centre, New Delhi
20. Workshop on Imaging, “World Trauma Congress 2016”, 16 August 2016, AIIMS, New Delhi
21. Case based Quiz, “AIIMS Radiology Course, CT Guided Interventions”, 9 & 10 April 2016, AIIMS, New Delhi

Babita Gupta: 7

1. Ultrasound guided Infraclavicular Block, “Perioperative Sonography”, 9 July 2016, JPNATC, AIIMS, New Delhi
2. Utility of Ultrasound in Anaesthesia, “Post Graduate Assembly”, 27 August 2016, GTB Hospital, New Delhi
3. Ultrasound in Trauma (FAST), “5th Interventional Perioperative Sonography Workshop”, 25 February 2016, Max Hospital, New Delhi
4. Course Director: Basic Mechanical Ventilation Workshop, “World Trauma Congress 2016”, 17 August 2016, Vigyan Bhawan, New Delhi
5. Ultrasound guided regional anaesthesia, “Indian Society of Anaesthesiologists”, 25 November 2016, DMC, Ludhiana
6. Fluid management in abdominals surgeons, “ISACON 2016”, 25 November 2016, DMC, Ludhiana
7. Damage control resuscitation, “14th Annual Conference of Society of Critical Care Medicine”, 10 September 2016, India Hospital Centre, New Delhi

Biplab Mishra: 10

1. Introduction and overview of MAWE, “Management of Acute Wounds in ED (MAWE) Course”, 19 April 2016, JPNATC, AIIMS, New Delhi
2. Types of wounds, medico-legal aspects and wound infection, “Management of Acute Wounds in ED (MAWE) Course”, 19 April 2016, JPNATC, AIIMS, New Delhi
3. Patient and wound assessment, preparation and anaesthesia, “Management of Acute Wounds in ED (MAWE) Course”, 19 April 2016, JPNATC, AIIMS, New Delhi
4. Complications of wound, “Management of Acute Wounds in ED (MAWE) Course”, 19 April 2016, JPNATC, AIIMS, New Delhi
5. Wound management protocol, “Management of Acute Wounds in ED (MAWE) Course”, 19 April 2016, JPNATC, AIIMS, New Delhi
6. Abdominal Trauma, “ATLS”, 16 June 2016, JPNATC, AIIMS, New Delhi
7. Management of acute wounds, “INDUS EM 2016”, 21–23 October 2016, St. John’s hospital, Bengaluru
8. Access into thoracic cavity, “AIIMS Cadaveric Thoracic Surgery Course (ACTC)”, 25 November 2016, JPNATC, AIIMS, New Delhi
9. Cardiac trauma, “AIIMS Cadaveric Thoracic Surgery Course (ACTC)”, 25 November 2016, JPNATC, AIIMS, New Delhi
10. Thoracic Trauma, “ATLS”, 20 December 2016, JPNATC, AIIMS, New Delhi

Chhavi Sawhney: 5

1. Donor screening and management, “In House Training of Nurses on Deceased Organs and Tissue Donation”, once a month, ORBO AIIMS, New Delhi
2. Conducted Workshop on Perioperative Sonography for Anaesthesiologists, “World Trauma Congress”, 18 August 2016, AIIMS, New Delhi
3. Lectures on Shock, Thoracic Trauma, “Advance Trauma Life Support Course”, 20–22 October 2016, AIIMS, New Delhi
4. Routine haematological investigations as predictors of mortality in geriatric hip trauma, “World Trauma Congress”, 19 August 2016, Vigyan Bhawan, New Delhi
5. Role of aggressive, systematic and focused team approach towards organ retrieval, “World Trauma Congress”, 19 August 2016, Vigyan Bhawan, New Delhi

Deepak Agarwal: 6

1. Neuronursing next level, “25th Annual Conference of Neurotrauma Society of India”, 14 August 2016, AIIMS, New Delhi
2. Gamma knife for paediatric patients less than 12 years, The AIIMS experience, “44th Annual ISPN Meeting 2016”, 25 October 2016, Japan
3. Cost effective implementation of I.T. Hospitals: An AIIMS Experience, “14th Health care Executive Management Development Programme”, 13 January 2017, Jaipur
4. Surgical advances in traumatic brain injury, “19th Annual Conference of Delhi Neurological Association”, 4 February 2017, Indian Habitat Centre, New Delhi
5. How to decide Ruptured Aneurysm, Clipping/Coiling/Conservative treatment? “Indian National Stroke Conference”, 18 March 2017, Amritsar
6. Enhancing service delivery to citizens through technology, “National Conference on Technology and Innovations in Healthcare Delivery”, 20 January 2017, Ph.D. Chamber, New Delhi

Deepak Gupta: 8

1. Multimodality monitoring in neurotrauma, Surgical techniques in neurotrauma, “AO Neuro Course Neurotrauma”, 27–29 May 2016, Mumbai
2. Split cord malformations and congenital brain tumors, “Super Specialty CME, Neurological Society of India”, 1 & 2 July 2016, Coorg
3. Neurotrauma care advances in TBI and surgical guidelines, “XXXII Annual Conference of Marine Medicine and Allied Sciences”, 11 & 12 November 2016, Mumbai
4. Odontoid fixations, Neurotrauma care of TBI, Post traumatic hydrocephalus, Cadaveric training in Neurosurgery, “Extra Conferences in Recife Critical Neurosurgery on Severe Head Trauma: Neurosurgical Approach”, 14 December 2016, Recife, Pernambuco
5. Trauma guidelines in TBI, “19th Annual Conference of Delhi Neurological Association (DNA CON 2017)”, 4 & 5 February 2017, New Delhi
6. Surgical advances in TBI, “6th Annual Conference of Neurological Surgeons’ Society of India (NSSI)”, 16–18 February 2017, PGIMER, Chandigarh
7. Pediatric Head injuries craniosynostosis, “International Neurosurgery Course”, 5–10 March 2017, Malaga, Spain
8. Front orbital advances, Pineal tumor surgery surgical: How I do it, “28th Annual Conference of Indian Society for Pediatric Neurosurgery and 2nd Congress of Asian Australasian Society for Pediatric Neurosurgery”, 24–26 March 2017, Mumbai

Garima Kachhawa: 13

1. Management of IDA in pregnancy, “North Zone Yuva FOGSI”, 2 April 2016, Ghaziabad
2. Subclinical hypothyroidism in pregnancy: Should be treated, “GOAL: Gynaecology Obstetrics Advanced Learning”, 9 & 10 April 2016, New Delhi
3. Lactation in difficult situations, “LEAF 2016 CME, Organized by the Alwar Obstetrics and Gynaecology Society and FOGSI”, 22 April 2016, Rajasthan
4. Laparoscopic management of ectopic pregnancy, “26th WHI Training Course in MAS”, 23 May 2016, Endoscopy Training ROOM, AIIMS, New Delhi
5. Management of hirsutism, “FABCON”, 8–10 July 2016, M G Hospital, Jaipur

6. Injectable progestins, “National Conference on Endometriosis (ENDOMETCON TRICHY-2016)”, 23 & 24 July 2016, Trichy
7. Newer drugs in endometriosis, “ENDOFERT, Annual Conference of DGES”, 5–7 August 2016, J L N Auditorium, AIIMS, New Delhi
8. Atosiban in preterm labour, “Gynae Adcon”, 4 September 2016, New Delhi
9. Endometriosis Recent Advances in Management, “CME on Endometriosis Management”, 1 October 2016, Yamuna Nagar
10. Screening and management of APLA, “National Conference on Saving Mothers (SAVMA-2016)”, 23 October 2016, MLN Medical College, Allahabad
11. Meconium stained liquor, “Conference on Management of Labour”, 18–20 November 2016, Mumbai
12. PCOS: Demystifying insulin resistance, “60th All India Congress of Obstetrics and Gynaecology organized by FOGSI”, 25–29 January 2017, Gujarat University Convention and Exhibition Centre, Ahmedabad
13. Laparoscopic management of ectopic pregnancy, “27th WHI Training Course in MAS”, 20 March 2017 2016, Endoscopy Training ROOM, OT Complex, 9th Floor, AIIMS, New Delhi

Gyanendra Pal Singh: 4

1. Near Infra-Red spectroscopy, “Neurotrauma 2016”, 12–14 August 2016, AIIMS, New Delhi
2. Neuromonitoring, “NSICON 2016”, 15–18 December 2016, Chennai
3. Trigemino-cardiac reflex: Mechanism and Clinical Implications, “ISNACC 2017”, 24–26 February 2017, PGIMER, Chandigarh
4. Keeping up to pace with NOACs and their impact in neurocritical care, “MNCC 2017”, 31 March 2017–2 April 2017, Medanta, Gurgaon

Kapil Dev Soni: 27

1. Skill station USG lung in critical care, “55th Annual ISACON Delhi”, 9 April 2017, AIIMS, New Delhi
2. The Ultrasound and Breathing Assessment Trauma, Breathing + Skill Station, “EM Sono”, 27 April 2017, JPNATC, AIIMS
3. Paediatric trauma, Triage scenario, “Advanced Trauma Life Support (ATLS) Provider Course, Organized in Association with American College of Surgeons–Committee on Trauma”, 24 June 2016, JPNATC, AIIMS, New Delhi
4. Shock, Shock station, “Advanced Trauma Life Support (ATLS) Provider Course, Organized in Association with American College of Surgeons – Committee on Trauma”, 21 July 2016, JPNATC, AIIMS, New Delhi
5. Musculoskeletal trauma, “Advanced Trauma Life Support (ATLS) Provider Course, Organized in Association with American College of Surgeons – Committee on Trauma”, 14 August 2016, JPNATC, AIIMS, New Delhi
6. Surgical skill station (Fast), “Advanced Trauma Life Support (ATLS) Provider Course, Organized in Association with American College of Surgeons – Committee on Trauma”, 15 August 2016, JPNATC, AIIMS, New Delhi
7. The ultrasound and airway assessment trauma, “Advances Ultrasound Trauma Life Support Courses (AUTLS-WTC)”, 16 August 2016, JPNATC, AIIMS, New Delhi
8. The ultrasound and breathing assessment trauma breathing + Skill station, “TLS with Power of USG-CUETECH”, 6 September 2016, JPNATC, AIIMS, New Delhi
9. The ultrasound and breathing assessment trauma breathing + Skill station, “AUTLS INDUS EM”, 21 October 2016, Vydehi Hospital, Bangalore
10. Role of steroids in shock, “INDUSEM”, 23 October 2016, St. John Hospital, Bangalore
11. USG guided central line placement, “AIIMS VASCULAR ACCESS”, 27 October 2016, JPNATC, AIIMS, New Delhi
12. Airway station and lecture, “Advanced Trauma Life Support (ATLS) Provider Course, Organized in Association with American College of Surgeons – Committee on Trauma”, 3 November 2016, JPNATC, AIIMS, New Delhi
13. Airway station and lecture, “Advanced Trauma Life Support (ATLS) Provider Course, Organized in Association with American College of Surgeons – Committee on Trauma”, 8 November, 2016, JPNATC, AIIMS, New Delhi
14. The ultrasound disability assessment, “AIIMS Disaster Ultrasound”, 9 November 2016, JPNATC, AIIMS, New Delhi
15. Spinal injury and spinal cord trauma, “Advanced Trauma Life Support (ATLS) Provider Course, Organized in Association with American College of Surgeons – Committee on Trauma”, 29 November 2016, JPNATC, AIIMS, New Delhi

16. Airway lecture and skill station, “Advanced Trauma Life Support (ATLS) Provider Course, Organized in Association with American College of Surgeons – Committee on Trauma”, 1 December 2016, JIPMER Pondicherry
17. Shock and skill station (FAST), “Advanced Trauma Life Support (ATLS) Provider Course, Organized in Association with American College of Surgeons – Committee on Trauma”, 8 December 2016, Tact Academy, Chennai
18. The ultrasound and circulation, Rush protocol assessment trauma, “EM Sono”, 15 December 2016, JPNATC, AIIMS, New Delhi
19. Musculoskeletal trauma and shock skill station, “Advanced Trauma Life Support (ATLS) Provider Course, Organized in Association with American College of Surgeons – Committee on Trauma”, 21 & 22 December 2016, JPNATC, AIIMS, New Delhi
20. Paediatric trauma lecture and airway skill station, “Advanced Trauma Life Support (ATLS) Provider Course, Organized in Association with American College of Surgeons – Committee on Trauma”, 19 January 2017, JPNATC, AIIMS, New Delhi
21. Lung USG in critical care, “CCILBS 2017”, 24 January 2017, ILBS, New Delhi
22. USG guided airway and lung assessment, “AIIMS BUS”, 27 January 2017, JPNATC, AIIMS, New Delhi
23. The ultrasound and breathing assessment trauma, Breathing + Skill Stations, “EM Sono”, 6 February 2017, JPNATC, AIIMS, New Delhi
24. Shock, Shock station, “Advanced Trauma Life Support (ATLS) Provider Course, Organized in Association with American College of Surgeons – Committee on Trauma”, 9 February 2017, JPNATC, AIIMS, New Delhi
25. Shock, Shock station, “Advanced Trauma Life Support (ATLS) Provider Course, Organized in Association with American College of Surgeons – Committee on Trauma”, 2 March 2017, JPNATC, AIIMS, New Delhi
26. The ultrasound and breathing assessments trauma, “EM Sono”, 6 March 2017, JPNATC, AIIMS, New Delhi
27. Spine and spinal cord trauma, “Advanced Trauma Life Support (ATLS) Provider Course Organized in association with American College of Surgeons–Committee on Trauma”, 23 March 2017, JPNATC, AIIMS

Keshav Goyal: 14

1. AED, Infant and child CPR, Choking adult children and infant and other special scenarios, “Basic Emergency Care Course (BECC)”, 20 April 2016, JPNATC, AIIMS, New Delhi
2. Drowning and other special scenarios, “Basic Emergency Care Course (BECC)”, 23 May 2016, JPNATC, AIIMS, New Delhi
3. Spine and spinal cord trauma, “Advanced Trauma Life Support (ATLS)”, May 2016, JPNATC, AIIMS, New Delhi
4. Airway and ventilation, “Advanced Trauma Life Support”, May and July 2016, JPNATC, AIIMS, New Delhi
5. Musculoskeletal system, “Advanced Trauma Life Support (ATLS)”, June 2016, JPNATC, AIIMS, New Delhi
6. Focussed assessment sonography in trauma (FAST), “Advanced Trauma Life Support (ATLS)”, July 2016, JPNATC, AIIMS, New Delhi
7. Considerations in elderly trauma victims, “Advanced Trauma Life Support (ATLS)”, July 2016, JPNATC, AIIMS, New Delhi
8. Fibre optic bronchoscopy guided intubation: A tool for difficult airway management, “2nd and 3rd Cadaveric Airway Workshop”, August 2016 and March 2017, JPNATC, AIIMS, New Delhi
9. Facet joint block: Considerations and tips, “1st Cadaveric Pain Workshop”, July 2016, JPNATC, AIIMS, New Delhi
10. Non-neurological complications in neurotrauma patients in ICU at Apex Trauma Centre: A prospective observational study, “14th Neurocritical Care Society (NCS) Meeting”, September 2016, Gaylord Convention Centre, Washington DC, USA
11. Status epilepticus: Cases in Neurocritical Care, “ISACON 2016”, November 2016, Ludhiana University, Punjab
12. Traumatic brain injury: Acute Emergency management, “1st AIIMS Neurological Life Support (ANLS)”, January 2016, JPNATC, AIIMS, New Delhi
13. Debate on early interruption of sedation in neurocritical care–Pro, “Annual Neurocritical Care Update (ANCU) 2017”, March 2017, Artemis Hospital, Gurgaon, Haryana
14. Neuromonitoring and TBI, “3rd Medanta Neurocritical Care Conference (MNCC) 2017”, March 2017, Medanta, The Medicity, Gurgaon, Haryana

Navdeep Sokhal: 2

1. Musculoskeletal trauma, “ATLS”, 9 September 2016, JPNATC, AIIMS, New Delhi
2. Airway and ventilation, “ATLS”, 6 October 2016, JPNATC, AIIMS, New Delhi

Neeraj Parakh: 18

1. Vascular access, “AIIMS EM-SONO”, 27 & 28 April 2016, JPNATC, AIIMS, New Delhi
2. Rush protocol, The Pump, Focussed cardiac ultrasound in trauma, “AUTLS”, 4 & 5 May 2016, JPNATC, AIIMS, New Delhi
3. Circulation, “AIIMS-BLS”, 16–20 May 2016, JPNATC, AIIMS, New Delhi
4. Rush protocol, The Pump, Focussed cardiac ultrasound in trauma, “AUTLS”, 18 & 19 May 2016, JPNATC, AIIMS, New Delhi
5. Ultrasound as an aid to airway, “Cadaveric–Airway Management Workshop”, 7 August 2016, JPNATC, AIIMS, New Delhi
6. Child and infant CPR, “AIIMS-BECC”, 8 August, 2016, JPNATC, AIIMS, New Delhi
7. Cardio-respiratory complications in cranio-spinal trauma, “NEUROTRAUMA 2016”, 12–14 August, 2016, AIIMS, New Delhi
8. ECHO: Focussed cardiac ultrasound in trauma, AUTLS, Central venous cannulation, ACCC, “WTC 2016”, 17–20 August 2016, JPNATC, AIIMS, New Delhi
9. Acute trauma care, “ISACONCG-2016”, 24 & 25 September 2016, Medical College, Raigarh (C.G).
10. ONSD, “AIIMS Neuro Anaesthesia Update 2016”, 1&2 October 2016, AIIMS, New Delhi
11. Shock, Ultrasound of airway, “AIIMS–TLS”, 20 & 21 December 2016, Pandri, Raipur
12. Central venous catheterization, “CCILBS-2016”, 24 January 2017, ILBS, New Delhi
13. Traumatic Spine Injury (TSI), “ANLS”, 28 & 29 January 2017, JPNATC, AIIMS, New Delhi
14. Vascular access, “AIIMS EM-SONO”, 6 & 7 February 2017, JPNATC, AIIMS, New Delhi
15. Spinal cord injury, “ATLS Provider Course”, 16–18 February 2017, JPNATC, AIIMS, New Delhi
16. Ultrasound as an aid to airway, “Cadaveric–Airway Management Workshop”, 5 March, 2017, JPNATC, AIIMS, New Delhi
17. Microteaching of participants, “AIIMS–BECC–Instructor Course”, 8 & 9 March 2017, JPNATC, AIIMS, New Delhi
18. Airway and breathing, “AIIMS–BECC”, 10 March 2017, JPNATC, AIIMS, New Delhi

Purva Mathur: 8

8. Hospital infection control: Where do we stand? “Infectious Disease Update”, 2 April 2016, KGMU, Lucknow
9. Surveillance and prevention of AMR healthcare, Associated infections in India, “Association for Physicians of Infection Control”, 11–13 June 2016, Charlotte, USA
10. Practice of blood culture: Can we do better? “Update on Critical Care”, 10 May 2016, India Habitat Centre, New Delhi
11. Hand hygiene programs, “WHO Hand hygiene Talk”, 28 March 2016, AIIMS, New Delhi
12. Infection prevention in India: Challenges and Successes, “Symposium on Infectious Diseases, 2017”, 30 January 2017, Ramalingaswamy board room, AIIMS, New Delhi
13. Setting up an infection control Lab, “National Conference of Hospital Infection Society, India”, 9–11 February 2017, Guwahati Medical College, Assam
14. Hand hygiene initiative, “8th International Congress of the Asia Pacific Society of Infection Control”, 12–15 February 2017, Convention Centre, Centara, Bangkok, Thailand
15. Surveillance of hospital acquired infections, “World Trauma Congress”, 17–20 August 2017, Vigyan Bhawan, New Delhi

Richa Agarwal: 25

1. Airway and ventilation, “Advanced Trauma Life Support Course”, 7 April 2016, JPNA Trauma Centre, AIIMS, New Delhi
2. Airway and breathing, “Basic Emergency and Critical Care Course”, 11 April 2016, JPNA Trauma Centre, AIIMS, New Delhi
3. How to conduct a QI project–Mentor, “Capacity Building Workshop and Symposium on Quality Improvement”, 2 August 2016, AIIMS, New Delhi
4. Airway and ventilation, Trauma in women, FAST in trauma, “Advanced Trauma Life Support Course”, 15 & 16 August 2016, JPNA Trauma Centre, AIIMS, New Delhi
5. Approach to a surgical patient with altered sensorium, “AIIMS Critical Care Course”, 16 August 2016, JPNA Trauma Centre, AIIMS, New Delhi

6. Renal dysfunction in surgical patient, “AIIMS Critical Care Course”, 16 August 2016, JPNA Trauma Centre, AIIMS, New Delhi
7. Electrolyte management in critical care, “AIIMS Critical Care Course”, 17 August 2016, JPNA Trauma Centre, AIIMS, New Delhi
8. Initial assessment of the sick patient, “AIIMS Critical Care Course”, 16 August 2016, JPNA Trauma Centre, AIIMS, New Delhi
9. Sepsis, “AIIMS Critical Care Course”, 17 August 2016, JPNA Trauma Centre, AIIMS, New Delhi
10. Arterial blood gas analysis, “AIIMS Critical Care Course”, 17 August 2016, JPNA Trauma Centre, AIIMS, New Delhi
11. Airway and ventilation, “Advanced Trauma Life Support Course”, 22 September 2016, JPNATC, AIIMS, New Delhi
12. Trauma in women, “Advanced Trauma Life Support Course”, 21 October 2016, JPNA Trauma Centre, AIIMS, New Delhi
13. Triage, “Advanced Trauma Life Support Course”, 21 October 2016, JPNA Trauma Centre, AIIMS, New Delhi
14. Approach to a surgical patient with altered sensorium, “AIIMS Critical Care Course”, 25 November 2016, JPNA Trauma Centre, AIIMS, New Delhi
15. Renal dysfunction in surgical patient, “AIIMS Critical Care Course”, 25 November 2016, JPNA Trauma Centre, AIIMS, New Delhi
16. ABG analysis, “AIIMS Critical Care Course”, 25 November 2016, JPNA Trauma Centre, AIIMS, New Delhi
17. Ventilator management, “AIIMS Critical Care Course”, 25 November 2016, JPNA Trauma Centre, AIIMS, New Delhi
18. Sepsis, “AIIMS Critical Care Course”, 26 November 2016, JPNA Trauma Centre, AIIMS, New Delhi
19. Electrolyte disturbance, “AIIMS Critical Care Course”, 26 November 2016, JPNA Trauma Centre, AIIMS, New Delhi
20. Shock management, “Advanced Trauma Life Support Course”, 20 December 2016, JPNA Trauma Centre, AIIMS, New Delhi
21. How to read a spine x-ray, “Advanced Trauma Life Support Course”, 20 December 2016, JPNA Trauma Centre, AIIMS, New Delhi
22. Management of shock, “Advanced Trauma Life Support Course”, 19 January 2017, JPNA Trauma Centre, AIIMS, New Delhi
23. Shock management, “Advanced Trauma Life Support Course”, 16 February 2017, JPNA Trauma Centre, AIIMS, New Delhi
24. Spine x-ray, “Advanced Trauma Life Support Course”, 17 February 2017, JPNA Trauma Centre, AIIMS, New Delhi
25. Management of burns, “Advanced Trauma Life Support Course”, 17 February 2017, JPNA Trauma Centre, AIIMS, New Delhi

S. Arulselvi: 1

1. Writing the discussion section, Grammar and writing style, “Research Ethics and Publications for Doctors (REAP)”, CMET (once in every 2–3 months), AIIMS, New Delhi

Sanjeev K. Bhoi: 3

1. Ultrasound in undergraduate medical education in India, “INDUSEM-2016”, 18 October 2016, JSS Medical College, Mysore
2. Airway ultrasound, “INDUSEM 2016”, 21 October 2016, Vyedehi Medical College, Bangalore
3. Chairperson of Sono Symposium, “INDUSEM 2016”, 23 October 2016, St Johns Medical College, Bangalore

Soumita Bagchi: 4

1. Dialysate prescription in a cirrhotic patients with acute kidney injury, “National Conference on Critical Care and Infections in Liver Diseases”, 25 January 2017, ILBS, Delhi
2. Image guided renal biopsy: procedure and handling, “Annual Conference of Indian Society of Renal Pathology”, 9 February 2017, AIIMS, New Delhi
3. Conservative management of CKD, “World Kidney Day”, 8 March 2016, AIIMS, Delhi
4. Haemodialysis, “Emergency Nursing Update”, 27 March 2016, AIIMS, Delhi

Shivanand Gamangati: 12

1. CT guided liver ablations, “CME on CT Guided Interventions”, 9 & 10 April 2016, AIIMS, New Delhi
2. Indian registry data for interventions in the management of hepatocellular carcinoma, “European Conference on Interventional Oncology”, 17–20 April 2016, Dublin, Ireland
3. Cryoablation an ablation technique, “Nano Knife IRE Symposium”, 29 & 30 April 2016, PGIMER, Chandigarh
4. HCC response assessment, “Delhi Imaging Update”, 3–5 March 2017, AIIMS, New Delhi
5. Trans arterial radioembolisation in HCC, “Interventional Radiology CME and Workshop”, 5 February 2017, NAMS, New Delhi
6. Imaging of spinal trauma, “70th Annual Conference of IRIA”, 5–8 January, 2017, Jaipur, Rajasthan
7. TIPS, “70th Annual Conference of IRIA”, 5–8 January 2017, Jaipur, Rajasthan
8. Angioembolisation in abdominal trauma, “19th Annual Conference of Indian Society of Vascular and Interventional Radiology”, 23–26 February 2017, Kolkata
9. Angioembolisation in pelvic fractures IR: Panel discussion, “Pelvic Fractures Cadaveric Course”, 6–17 August 2016, JPNATC, AIIMS, New Delhi
10. Imaging and intervention in portal hypertension, “Gastrointestinal and Hepatobiliary Imaging, 4th AIIMS-MAMC-PGI Course Series”, 18–19 November 2016, AIIMS, New Delhi
11. Advances in hepatoradiology, “CPLD 2016”, 26&27 November 2016, PGIMER, Chandigarh
12. Interventions in renal trauma, “ISUII 2017”, 28–30 January 2017, AIIMS, New Delhi

Subodh Kumar: 21

1. Laparoscopy anatomy of groin hernia, “In Training Course in Laparoscopic Hernia Surgery”, 1 April 2016, AIIMS, New Delhi
2. Laparoscopy anatomy of groin hernia, “In Training Course in Laparoscopic Hernia Surgery”, 2–6 May 2016, AIIMS, New Delhi
3. Initial assessment of trauma victim, “Advanced Trauma Life Support Course (ATLS)”, 12–14 May 2016, JPNATC, AIIMS, New Delhi
4. Laparoscopy anatomy of groin hernia, “In Training Course in Laparoscopic Hernia Surgery”, 16–20 May 2016, AIIMS, New Delhi
5. Abdominal trauma, “Advanced Trauma Life Support Course (ATLS)”, 9–11 June 2016, JPNATC, AIIMS, New Delhi
6. Laparoscopy anatomy of groin hernia, “In Training Course in Laparoscopic Hernia Surgery”, 20–24 June 2016, AIIMS, New Delhi
7. Laparoscopy anatomy of groin hernia, “In Training Course in Laparoscopic Hernia Surgery”, 18–22 July 2016, AIIMS, New Delhi
8. Laparoscopy anatomy of groin hernia, “In Training Course in Laparoscopic Hernia Surgery”, 1–5 August 2016, AIIMS, New Delhi
9. Management of cardiac injuries by trauma surgeon, “3rd World Trauma Congress”, 17–20 August 2016, Vigyan Bhawan, New Delhi
10. Journey of ATLS in India, “3rd World Trauma Congress”, 17–20 August 2016, Vigyan Bhawan, New Delhi
11. Initial assessment, “Advanced Trauma Life Support Course (ATLS)”, 8–10 September 2016, JPNATC, AIIMS, New Delhi
12. Initial assessment of Trauma victim, “Advanced Trauma Life Support Course (ATLS)”, 6–8 October 2016, Heathway Charitable Trust, Goa
13. Thoracic trauma, “Advanced Trauma Life Support Course (ATLS)”, 3–5 November 2016, JPNATC, AIIMS, New Delhi
14. Initial assessment of trauma victim, “Advanced Trauma Life Support Course (ATLS)”, 17–19 November 2016, JPNATC, AIIMS, New Delhi
15. Initial assessment of trauma victim, “Advanced Trauma Life Support Course (ATLS)”, JPNATC, AIIMS, New Delhi
16. Abdominal trauma, “Advanced Trauma Life Support Course (ATLS)”, 15–17 December 2016, JPNATC, AIIMS, New Delhi
17. Thoracic trauma, “Advanced Trauma Life Support Course (ATLS)”, 20– 22 December 2016, JPNATC, AIIMS, New Delhi

18. Laparoscopy anatomy of groin hernia, "In Training Course in Laparoscopic Hernia Surgery", 16–20 January 2017, AIIMS, New Delhi
19. Initial assessment of trauma victim, "Advanced Trauma Life Support Course (ATLS)", 2–4 February 2017, KGMU, Lucknow
20. Laparoscopy anatomy of groin hernia, "In Training Course in Laparoscopic Hernia Surgery", 6–10 February 2017, AIIMS, New Delhi
21. Laparoscopy anatomy of groin hernia, "In Training Course in Laparoscopic Hernia Surgery", 27–3 March 2017, AIIMS, New Delhi

Sushma Sagar: 8

1. Basic surviving skills for school children, "School safety initiative National Institute of Disaster Management", 20 May 2016, Pathway School, Faridabad, Haryana
2. Massive maxillofacial trauma: An initial and critical challenge, "3rd World Trauma Congress 2016", 17 & 18 August 2016, Vigyan Bhawan, New Delhi
3. Standard care for adults with lower limb fractures following trauma in India: Protocol for an observational study (AITSC), "3rd World Trauma Congress 2016", 17 & 18 August 2016, Vigyan Bhawan, New Delhi
4. Reproductive health in disasters: Impact and management, "NIDM", 21 September 2016
5. Injuries due to burns and cold, "Advanced Trauma Life Support Course (ATLS)", 20–22 October 2016, JPNATC, AIIMS, New Delhi
6. Antimicrobial stewardship program: AIIMS Trauma Centre Model, "Collaboration Meeting under Joint Secretary working group between India and Sweden", 5–8 October 2016, Sweden
7. Thoracic trauma, "Advanced Trauma Life Support Course (ATLS)", 19–21 October 2016, JPNATC, AIIMS, New Delhi
8. Road safety for by standards, 18 February 2017, IIT, New Delhi

Vivek Trikha: 46

1. Reconstructing the shattered proximal humours in young patients, "North Zone Orthopaedic Association Conference", 11 & 12 February 2017, Ludhiana
2. Polytrauma patient with fractures, Resuscitation and priorities in treatment, "North Zone Orthopaedic Association Conference", 11 & 12 February 2017, Ludhiana
3. Dual plating in proximal tibial fractures: When and how? "North Zone Orthopaedic Association Conference", 11 & 12 February 2017, Ludhiana
4. Transverse Ace tabular fractures: how to choose Approach? "North Zone Orthopaedic Association Conference", 14 January 2017, Ludhiana
5. Ilioinguinal approach, "CGIOACON (Chhattisgarh Ortho Association)", 14–17 December 2016, Raigarh, Chhattisgarh
6. Posterior wall: Tips n Tricks, "CGIOACON", 14–17 December 2016, Raigarh, Chhattisgarh
7. How to write a paper, "IOACON 2016 (Indian Ortho Association)", 14–17 December 2016, Kochi, Kerala
8. Long term prognosis after sacral fractures, Does surgery improve neurological recovery? "IOACON 2016", 14–17 December 2016, Kochi, Kerala
9. Assessment of rotation and alignment in distal femoral fractures intraoperative strategies, "IOACON 2016", 14–17 December 2016, Kochi, Kerala
10. DVT prophylaxis in lower limb surgery (trauma, replacement) pump, aspirin, LMWH, "IOACON 2016", 13 November 2016, Kochi, Kerala
11. Lateral wall burst in intertrochanteric fractures, "VOSCON 2016 (Vidharbha Ortho Association)", 13 November 2016, Nagpur
12. Pilon fracture which plate to use? "VOSCON 2016", 13 November 2016, Nagpur
13. Posterior fixation in pelvis, "VOSCON 2016", 13 November 2016, Nagpur
14. Management of complex acetabular fractures, "VOSCON 2016", 13 November 2016, Nagpur
15. My worst case, "VOSCON 2016", 9–12 November 2016, Nagpur
16. Complex acetabular fractures: how to get them right? "AO Trauma Master Course", 13–16 October 2016, Mumbai
17. Percutaneous iliosacral screw fixation, "AO Trauma Master Course with Specimen", 13–16 October 2016, Bangalore
18. Anterior intra pelvic approach, "AO Trauma Pelvic Course with Specimen", 16 & 17 August 2016, Bengaluru

19. Associated both column fracture, "AIIMS Cadaveric Pelvic Course", 11–14 August 2016, AIIMS, New Delhi
20. Scapula fractures fixation, "TRAUMACON 2016", 11–14 August 2016, Mumbai
21. Proximal humours fracture dislocation management, "TRAUMACON 2016", 11–14 August 2016, Mumbai
22. Morel lavelle lesion, "TRAUMACON 2016", 11–14 August 2016, Mumbai
23. Stoppas approach, "TRAUMACON 2016", 11–14 August 2016, Mumbai
24. Emergent surgical approach for pilon fractures, "TRAUMACON 2016", 11–14 August 2016, Mumbai
25. Sacral fractures, "TRAUMACON 2016", 7 August 2016, Mumbai
26. Fracture of glenoid and the floating shoulder, "Leicester Shoulder Trauma Course", 5–7 August 2016, Kolkata
27. Polytrauma: ATLS principles and approach, "AOTS Trauma Update 2016", 5–7 August 2016, Kolkata
28. Scapular fractures including glenoid fractures—current concepts, "AOTS Trauma Update 2016", 29–31 July 2016, Kolkata
29. Associated both column fractures, "Pelvi-acetabulum Cadaveric Course", 29–31 July 2016, Bengaluru
30. Percutaneous fixation SI dislocation and sacrum, "Pelvi-acetabulum Cadaveric Course", 29–31 July 2016, Bengaluru
31. Modified stoppas approach "Pelvi-acetabulum Cadaveric Course", 29–31 July 2016, Bengaluru
32. Morel lavalles lesion "Pelvi-acetabulum Cadaveric Course", 23&24 July 2016, Bengaluru
33. Talus fracture, "Pune Trauma Course", 23 & 24 July 2016, Pune
34. Acetabulum and pelvis fracture: Iliioinguinal Approach, "Pune Trauma Course", 3 July 2016, Pune
35. ABC fracture management, "DOA Pelvi-acetabular Cadaveric Course", 1 May 2016, AIIMS, New Delhi
36. Calcaneum: Fixation method, "Trauma Conclave", 1 May 2016, New Delhi
37. Extra-articular fracture of proximal tibia, "Trauma Conclave", 1 May 2016, New Delhi
38. Column concept of proximal tibia, "Trauma Conclave", 24 April 2016, New Delhi
39. Principles of treatment of mid foot injuries, "Symposium on Foot Ankle", 24 April 2016, Aurangabad
40. Ankle fractures, management pearls, "Symposium on Foot Ankle", 24 April 2016, Aurangabad
41. Reduction strategies for calcaneal fracture, "Symposium on Foot Ankle", 10 April 2016, Aurangabad
42. MIPO in distal tibia: When and How? "National Workshop on Foot Ankle", 10 April 2016, Patiala
43. Pathoanatomy and classification of calcaneus fractures, "National Workshop on Foot Ankle", 10 April 2016, Patiala
44. Anatomy, approach and treatment options in talus fractures, "National Workshop on Foot Ankle", 5 & 6 April 2016, Patiala
45. Posterior pelvic fixation, "1st AIIMS Pelvi-acetabulum Fracture Course", 5 & 6 April 2016, New Delhi
46. Management of ABC fractures, "1st AIIMS Pelvi-acetabulum Fracture Course", New Delhi

Oral papers/posters presented: 115

1. Kumar A. Aluminium phosphide versus Zinc phosphide lethality, a lurking danger in Indian rural homes, "10th Annual Conference of Indian Society of Toxicology TOXOCON-10", 28 & 29 December 2016, Department of Forensic Medicine and Toxicology, Amrita Institute of Medical Sciences, Kochi, Kerala
2. Kumar A. Delhi Aircraft Crash, Experience of managing closed population disaster, "12th Indo Pacific Association of Law Medicine and Science (INPALMS) Congress 2016", 17–23 September 2016, Bali, Indonesia
3. Kumar A. Profile of fatal poisoning cases brought at tertiary care hospital in India, 15 years retrospective study, "12th Indo Pacific Association of Law Medicine and Science (INPALMS) Congress 2016", 17–23 September 2016, Bali, Indonesia
4. Kumar A. Quantitative estimation and method validation of acetaminophen by RP-HPLC in Biological samples, "10th Annual Conference of Indian Society of Toxicology TOXOCON-10", 28 & 29 December 2016, Department of Forensic Medicine and Toxicology, Amrita Institute of Medical Sciences, Kochi, Kerala
5. Kumar A. *Quantitative estimation and method validation of acetaminophen by RP-HPLC in Biological samples, "10th Annual Conference of Indian Society of Toxicology TOXOCON-10", 28 & 29 December 2016, Department of Forensic Medicine and Toxicology, Amrita Institute of Medical Sciences, Kochi, Kerala
6. Kumar A. Aluminium phosphide versus zinc phosphide lethality, a lurking danger in Indian rural homes, "10th Annual Conference of Indian Society of Toxicology TOXOCON-10", 28 & 29 December 2016, Department of Forensic Medicine and Toxicology, Amrita Institute of Medical Sciences, Kochi, Kerala
7. Kumar A. Delhi aircraft crash, Experience of managing closed population disaster, "12th Indo Pacific Association of Law Medicine and Science (INPALMS) Congress 2016", 17–23 September, 2016, Bali, Indonesia

8. Kumar A. Profile of fatal poisoning cases brought at tertiary care hospital in India, 15 years retrospective study, "12th Indo Pacific Association of Law Medicine and Science (INPALMS) Congress 2016", 17–23 September 2016, Bali, Indonesia
9. Bindra A, Dexmedetomidine in epilepsy surgery: Is it Neuro protective, "Annual Neuroanesthesia Update", September 2016, AIIMS, New Delhi
10. Bindra A, Evaluation of prognostic factors of outcome in severe traumatic brain injury patients following DE compressive craniotomy, "Annual Conference of Indian Society of Neuroanesthesia and Critical Care", 24 January 2017, PGIMER, Chandigarh
11. Bindra A. Evaluation of prognostic factors of outcome in severe traumatic brain injury patients following DE compressive craniotomy, "Annual Neurocritical Care Update", 25 March 2017, Artemis, Gurgaon
12. Bindra A, Goyal K, Kumar N. Mortality analysis of neurotrauma patients in a critical care unit of level I trauma centre, "Annual Neuroanesthesia Update", September 2016, AIIMS, New Delhi
13. Bindra A. Non-neurosurgical complications in traumatic neurosurgical ICU patients: A prospective observational study, "Annual Neurocritical Care Conference", 15–18 September 2016, Washington DC
14. Bindra A. Non-neurosurgical complications in traumatic neurosurgical ICU patients: A prospective observational study, "Annual Conference of Indian Society of Neuroanesthesia and Critical Care", 24 January 2017, PGIMER, Chandigarh
15. Bindra A. Toe gangrene following prolonged dorsalis pedis artery annulation, "World Trauma Conference 2016", 26 November 2016, AIIMS, New Delhi
16. Kumar A. Beyond broken bones: Imaging evaluation of traumatic brachial plexus injuries, "World Trauma Congress 2017", 17–20 August 2016, Vigyan Bhawan, New Delhi
17. Kumar A. Bleeding Mandibular AVM: Description of a Novel Percutaneous Technique As Useful Adjunct To Transarterial Embolization, "19th Annual Conference of the Indian Society of Vascular and Interventional Radiology (ISVIR)", 23–26 February 2016, Kolkata
18. Kumar A. Blunt bladder trauma: What resident should not miss in emergency, "World Trauma Congress 2017", 17–20 August 2016, Vigyan Bhawan, New Delhi
19. Kumar A. Combined hepatocellular cholangiocarcinoma, Clinical and Imaging Findings, "12th International Conference of the Asian Clinical Oncology Society (ACOS)", 8–10 April 2016, New Delhi
20. Kumar A. Evaluation of neck masses using diffusion weighted MRI at 3 Tesla, "IFHNOS (International federation of Head and Neck Oncological Societies) combined Meeting", 12–15 October 2016, New Delhi
21. Kumar A. Interventional radiology in trauma at a tertiary level care centre: Lessons to be learnt by a radiologist, "World Trauma Congress 2017", 17–20 August 2016, Vigyan Bhawan, New Delhi
22. Kumar A. Minimally invasive way of managing penetrating vascular injuries: Role of interventional radiology, "European Congress of Radiology 2017", 1–5 March 2017, Austria Centre, Vienna
23. Kumar A. Role of diffusion weighted MRI in evaluation of response to chemotherapy in gall bladder carcinoma, "ASCO Annual Meeting, 2016", 3–7 June 2016, McCormick Place, Chicago, IL.
24. Kumar A. Role of Sonoelastography in monitoring patients of NAFLD: Comparison with MRI—A prospective study, "102nd Annual Conference of RSNA", November–December 2016, McCormick Place, Chicago
25. Kumar A. Role of volume perfusion CT in diagnosis of pancreatic pathology, "72nd Korean Congress of Radiology 2016", 21–24 September 2016, COEX Convention and Exhibition Centre, Seoul
26. Kumar A. Shear wave elastography for assessment of liver fibrosis in chronic hepatitis: Pilot Work, "24th Annual Scientific Meeting of Indian National Association of Liver (INASL)", 5–7 August 2016, Gurgaon, Delhi, (NCR)
27. Kumar A. Spectrum of peripheral vascular injuries: A comprehensive review of imaging features with surgical correlation, "European Congress of Radiology 2017", 1–5 March 2017, Austria Centre, Vienna
28. Kumar A. Transarterial chemotherapy versus oral chemotherapy in the treatment of unresectable hepatocellular carcinoma with portal vein thrombosis: A randomized controlled trial, "24th Annual Scientific Meeting of Indian National Association of Liver (INASL)", 5–7 August 2016, Gurgaon, Delhi, (NCR)
29. Kumar A. Vascular causes of acute abdomen: A pictorial essay, "70th Annual Conference of Indian Radiological and Imaging Association (IRIA 2017)", 5–8 January 2017, MP Birla Auditorium, Jaipur
30. Kumar A. With or without breaking the spine: A pattern approach for MR imaging of spinal cord injuries, "European Congress of Radiology 2017", 1–5 March 2017, Austria Centre, Vienna
31. Gupta B. Study of NGAL as an early diagnostic marker in trauma patients with acute kidney injury, "Mico Milano Congress", 25 May 2016, Milan, Italy

32. Agarwal D. Arterial infarcts in severe TBI, “Indian National Stroke Conference”, 17–19 March 2017, Mahabalipuram, Amritsar
33. Agarwal D. Draining vein shielding in intracranial AVM's, “5th Annual Conference of Neurological Surgeons Society of India”, 31 March 2016–2 April 2016, Sher-i-Kashmir International Convention Centre Srinagar, J&K
34. Agarwal D. Draining vein shielding in intracranial AVM's, “65th Annual Conference of the Neurological Society of India”, 15–17 December 2016, Chennai
35. Agarwal D. Draining vein shielding in intracranial AVM's, “65th Annual Conference of the Neurological Society of India”, 16–18 February 2017, Postgraduate Institute of Medical Education and Research, Chandigarh
36. Agarwal D. Early versus late surgery for cervical spinal cord injury, “ISCoS Annual Scientific Meeting”, 14–16 September 2016, Hofburg Convention centre, Vienna, Austria
37. Agarwal D. Gamma knife in paediatric patients, AIIMS experience, “27th Annual Indspn Conference”, 2–4 October 2016, Bangalore
38. Agarwal D. Gamma knife in paediatric patients, AIIMS experience, “2nd Congress of Asian Australasian Society of Paediatric Neurosurgery”, 24–26 March 2017, Juhu, Mumbai
39. Kachhawa G. Complications following laparoscopic mesh procedures in genital prolapse: Case series, “60th All India Congress of Obstetrics and Gynaecology”, 27 January 2017, Gujarat convention centre, Ahmedabad
40. Kachhawa G. Correlation of sFlt1 and PlGF levels in early pregnancy with the development of preeclampsia: A prospective cohort study, “60th All India Congress of Obstetrics and Gynaecology”, 27 January, 2017, Gujarat convention centre, Ahmedabad
41. Kachhawa G. Laparoscopic gonadectomy in patients with disorders of sexual differentiation, “ENDOFERT 2016, Annual Conference of Delhi Gynaecological Endoscopists Society”, 5–7 August 2016, JLN Auditorium, AIIMS, New Delhi
42. Kachhawa G. To study ovarian reserve after laparoscopic endometriotic cystectomy and to correlate the effect of post cystectomy ovarian suppression with fertility outcome: A randomised controlled trial, “60th All India Congress of Obstetrics and Gynaecology”, 27 January 2017, Gujarat Convention Centre, Ahmedabad
43. Singh GP. Clinical indicators of outcome in children with cervical spine injury requiring anaesthetic and intensive care management, “World Congress of Anaesthesiologists 2016”, 28 August 2016–2 September 2016, Hong Kong
44. Singh GP. Efficacy and safety of dexmedetomidine infusion for patients undergoing awake craniotomy: An observational study, “World Congress of Anaesthesiologists 2016”, 28 August 2016–2 September 2016, Hong Kong
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47. Singh GP. Perioperative management and outcome of children with cervical spine injury, A retrospective analysis of 112 cases, “AIIMS Neuroanesthesia Update 2016”, 30 September 2016–2 October 2016, AIIMS, New Delhi
48. Singh GP. Persistent hypertension after posterior fossa surgery: A case series, “ISNACC 2017”, 24–26 February 2017, PGIMER, Chandigarh
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52. Goyal K, Kumar N. Evaluation of prognostic factors of outcome in severe traumatic brain injury patients following decompressive craniectomy, “Annual Neurocritical Care Update (ANCU)”, March 2017, Artemis Hospital, Gurgaon
53. Goyal K. Non-Neurological complications in neurotrauma patients in ICU at apex trauma centre: A prospective observational study, 14th Neurocritical Care Society (NCS) Meeting”, September 2016, Gaylord Convention Centre, Washington DC, USA
54. Goyal K. Non-neurological complication in traumatic neurosurgical ICU patients: A prospective observational study, Annual Conference of Indian Society of Neuroanesthesia and Critical Care (ISNACC), January 2017, PGIMER, Chandigarh

55. Sokhal N. Peri-operative management of Giant Intracranial aneurysm, A case report of 19, "ISNACC 2017", 26 February 2017, PGIMER, Chandigarh
56. Kumar N. A rare cause of delayed recovery from anesthesia after lumbar spine surgery, "AIIMS Neuroanesthesia Update", 1 & 2 October 2016, AIIMS, New Delhi
57. Kumar N. Non-neurological complications in traumatic neurosurgical ICU patients: A prospective observational study, "ISNACC 2017", 24 January 2017, PGIMER, Chandigarh
58. Parakh N. Immunohistopathology of intracoronary thrombus aspirated during primary percutaneous intervention for ST elevation myocardial infarction and its clinical significance, "American College of Cardiology's 66th Annual Scientific Sessions", 19 April 2017, Convention Centre, Washington DC
59. Singh P. Management of paediatric single level vertebral haemangiomas presenting with myelopathy, "25th SNSA Scientific Meeting and 2nd CAANS Continental Congress", 26–29 July 2016, Century City Conference Centre, Cape Town
60. Singh P. Management of paediatric single level vertebral hemangiomas presenting with myelopathy with more than one year follow-up, "ISPNO 2016 Liverpool", 12–15 June 2016, Arena and Convention Centre, Liverpool
61. Singh P. Management of symptomatic paediatric vertebral haemangiomas by an innovative technique, "ECCO 2017", 27–30 January 2017, RAI Amsterdam, Amsterdam
62. Singh P. Management proposal for symptomatic paediatric vertebral haemangioma based on world largest patient experience, "84th AANS Meeting Chicago 2016", 30 April 2016–4 May 2016, McCormick Place West, Chicago
63. Singh P. Surgical outcome of microsurgical excision of brain and spinal cord cavernomas: Our 13 year single centre experience, "ECCO 2017", 27–30 January 2017, RAI Amsterdam, Amsterdam
64. Singh P. Transpedicular corpectomy for traumatic lumbar fractures: A case series of 36 patients, "25th SNSA Scientific Meeting and 2nd CAANS Continental Congress", 26–29 July 2016, Century City Conference Centre, Cape Town
65. Mathur P. A study on HIV, HCV and HbsAg seroprevalence at level-I Trauma Centre, "SYSCON-2016", 26–27 May 2016, AIIMS, New Delhi
66. Mathur P. A study on the epidemiological profile, infections and outcome of chest trauma patients at level-I trauma Centre, "WTC-2016", 17–20 August 2016, Vigyan Bhawan, New Delhi
67. Mathur P. Antimicrobial resistance in beta-haemolytic Streptococci in India, "Indian Association of Medical Microbiologists, Delhi Chapter", (23 April 2016) held at Army Hospital (Research and Referral), Delhi
68. Mathur P. Benchmarking rates of device associated infections for trauma ICUs, "WTC 2016", 17–20 August 2016, Vigyan Bhawan, New Delhi
69. Mathur P. Clinical characteristics of patients with heteroresistant vancomycin intermediate staphylococcus aureus bacteraemia versus those with methicillin resistant *S. aureus* bacteraemia, "World Trauma Congress 2016", 17–20 August 2016
70. Mathur P. Clinical impact of isolation of multi-resistant bacteria in ICU patients: A prospective study, "SYSCON 2016, Recent Advances in Biomedical Research: Strategies and Innovation", 26 & 27 May 2016, AIIMS
71. Mathur P. Clinico-microbiological profile of elderly chest trauma patients at level-I trauma centre, "AAPI-GHS 2016", 28–20 December 2016, RNT Medical College, Udaipur
72. Mathur P. Cytokine producing capacity of monocytes in septic patients in trauma ICU patients of Apex Trauma Centre, "SYSCON 2016, Recent Advances in Biomedical Research: Strategies and Innovation" 26 & 27 May 2016, AIIMS
73. Mathur P. Diagnostic utility of procalcitonin in critically ill trauma patients at risk of invasive fungal infections, a prospective study, "IAMM Annual Chapter 2016"
74. Mathur P. Early prediction of invasive fungal infection (IFI), risk factor assessment and antifungal susceptibility patterns in trauma patients, "World Trauma Congress 2016"
75. Mathur P. Epidemiological profile, infections and outcome of paediatric chest trauma patients at level-I trauma centre, "IAMM-DC held at Army Hospital (Research and Referral), 23 April 2016, New Delhi
76. Mathur P. Epidemiological trends of fatal paediatrics trauma: A Single centre study, "IAMM Delhi Chapter", 25 March 2017, AIIMS, New Delhi
77. Mathur P. Fatal Paediatric Trauma at a Level 1 Trauma Centre of India, "World Trauma Conference", 17–20 August 2016, Vigyan Bhawan, Delhi
78. Mathur P. Impact of a multi-faceted intervention strategy on device associated infections at an Indian Trauma Centre, "FIS/HIS 2016", Scotland
79. Mathur P. Molecular epidemiology of beta-lactamases producing gram negative nosocomial pathogens from an apex trauma centre in India: A two years study, "World Trauma Conference", Vigyan Bhawan, Delhi, 17–20 August 2016

80. Mathur P. Monocytic cytokine activity in severely injured trauma patients, “10th European Mucosal Immunology Group Meeting”, 19–21 October 2016, Copenhagen, Denmark
81. Mathur P. Monocytic cytokine response in severely injured patients leading to post-trauma complications, “3rd Meeting of Middle-European Societies for Immunology and Allergology”, 1–3 December 2016, Budapest, Hungary
82. Mathur P. Occupational exposure to blood and body fluids: Perceptions and preventive practices of healthcare workers at level-1 trauma centre, A cross-sectional study, “IAMM–DC 2016”
83. Mathur P. Procalcitonin (PCT) as a predictor of sepsis and outcome in head injury patients in trauma patients, “Neurotrauma 2016, 25th Annual Conference of Neurotrauma Society of India”, 12–14 August 2016, New Delhi, India
84. Mathur P. Profile of fatal geriatric trauma at a Level-1 trauma centre of India, “World Trauma Conference”, 17–20 August 2016, Vigyan Bhawan, Delhi
85. Mathur P. Prognostication of ventilated trauma patients by bronchoalveolar lavage fluid cytokine bead array profile, “10th European Mucosal Immunology Group Meeting”, 19–21 October 2016, Copenhagen, Denmark
86. Mathur P. Resistance profile of Beta-lactamases producing gram negative nosocomial pathogens from an apex trauma centre in India, “Indian Association of Medical Microbiologists, Delhi Chapter”, 23 April 2016, Army Hospital (Research and Referral), Delhi
87. Mathur P. Role of Chlorhexidine gluconate biopatch in CLABSI rate reduction at level-1 trauma Centre, “IAMM, Delhi Chapter”, 23 April 2016
88. Mathur P. Study of monocytic cytokine activity leading to post-trauma complications in severely injured patients, “World Trauma Conference”, 17–20 August 2016, Vigyan Bhawan, Delhi
89. Mathur P. To study the bronchoalveolar lavage fluid-cytokine profile of ventilated neurotrauma patients using cytokine bead array assay, “Neurotrauma 2016, 25th Annual Conference of Neurotrauma Society of India”, 12–14 August 2016 at New Delhi, India
90. Mathur P. Ventilator associated pneumonia: Trend at a multispecialty trauma centre and impact of multidrug resistant infections on patient’s outcome, “3rd Meeting of Middle-European Societies for Immunology and Allergology”, 1–3 December 2016, Budapest, Hungary
91. Agarwal R. Outcome of trauma patients with acute kidney injury with renal replacement therapy in surgical ICU, “World Trauma Congress”, 18 August 2016, Vigyan Bhawan, New Delhi
92. Arulselvi S. Acute trauma induced coagulopathy and experience of a level-1 trauma centre in North India, “Trauma Conference 2016”, 17–20 August 2016, Vigyan bhawan, New Delhi
93. Arulselvi S. Circulating procoagulant micro particles in isolated severe traumatic brain injury patients and its association with disseminated intravascular coagulation, “ASH-2016 and 21st Annual CME in Haematology”, 19–21 January 2017, Mumbai, India
94. Arulselvi S. Correlation of patients Syndecan-1 marker of endothelial glycocalyx shedding with development of Acute Trauma Induced Coagulopathy (ATIC) and mortality in isolated traumatic brain injury (iSTBI), “Trauma Conference 2016”, 17–20 August 2016, Vigyan Bhawan, New Delhi
95. Arulselvi S. Effect of different aesthetic techniques on inflammatory cytokines in major orthopaedic trauma surgeries, “AAPI International Research Competition 2016”, 28 December 2016, RNT Medical College, Udaipur, Rajasthan
96. Arulselvi S. Efficacy and outcome of bone marrow derived stem cells in acute complete spinal cord injury, A randomized placebo controlled trial, “AAPI International Research Competition 2016”, 28 December 2016, RNT Medical College, Udaipur, Rajasthan
97. Arulselvi S. Fatal pulmonary tumour thrombotic microangiopathy (PTTM) associated with signet ring cell carcinoma of colon diagnosed at autopsy, “PATHCON and LAB EXPO 2016”, 17 & 18 December 2016, India Habitat Centre, New Delhi
98. Arulselvi S. 5 Year review of histopathology experience in a tertiary apex trauma care centre, “Trauma Conference 2016”, 17–20 August 2016, Vigyan Bhawan, New Delhi
99. Arulselvi S. Getting the right blood to the right patient: Near miss event reporting and barrier analysis, “Trauma Conference 2016”, 17–20 August 2016, Vigyan Bhawan, New Delhi
100. Arulselvi S. How reliable is thromboelastography (TEG), A point of care coagulation analyser in predicting Acute Trauma Induced Coagulopathy (ATIC) in Isolated Severe Traumatic Brain Injury (ISTBI), “LMCE 2016 (Laboratory Medicine Congress and Exhibition) and KSLM 57th Annual Meeting”, 26–28 October 2016, Seoul, Korea

101. Arulselvi S. Study of Disseminated intravascular coagulation (DIC) in severely injured trauma patients: Incidence, identification of diagnostic marker, comparison of POC and conventional method, "Trauma Conference 2016", 17–20 August 2016, Vigyan Bhawan, New Delhi
102. Arulselvi S. Study of fibrinogen levels in trauma patients and their association with clinical Prognosis, "ASH-2016 and 21st Annual CME in Haematology", 19–21 January 2017, Mumbai, India
103. Arulselvi S. Study of fresh frozen plasma transfusion in severe isolated traumatic brain injury patients with Acute Trauma Induced coagulopathy (ATIC) and its influence on immediate outcome, "HAEMATOCN-2016: 57th Annual Conference of the Indian Society of Haematology and Blood Transfusion (ISHBT)", 10–13 November 2016, Birla Auditorium, Jaipur
104. Arulselvi S. Utility of serum osmolality as a prognostic marker for trauma patients, "Trauma Conference 2016", 17–20 August 2016, Vigyan Bhawan, New Delhi
105. Arulselvi S. Utility of thromboelastography (TEG) to predict trauma induced disseminated intravascular coagulation (DIC), "HAEMATOCN-2016: 57th Annual Conference of the Indian Society of Haematology and Blood Transfusion (ISHBT)", 10–13 November 2016, Birla Auditorium, Jaipur
106. Arulselvi S. Validation of Intermountain Risk Score (IMRS) in north Indian trauma patients for Mortality risk prediction, within 30 days in-hospital stay, "Trauma Conference 2016", 17–20 August 2016, Vigyan Bhawan, New Delhi
107. Arulselvi S. Validity of the definition to identify acute trauma induced coagulopathy in North Indian, "Trauma Conference 2016", 17–20 August 2016, Vigyan Bhawan, New Delhi
108. Bagchi S. Dengue fever among renal allograft recipients: A case series during 2015 outbreak, "Indian Society of Nephrology Annual Conference-2016, December 2016, Mumbai
109. Bagchi S. Low dose rituximab therapy in resistant idiopathic membranous nephropathy, "American Society of Nephrology Renal Week 2016", 19 November 2016, Chicago Convention Centre, Chicago, USA
110. Sagar S. Knowledge, attitude and practices in management of trauma victims: A questionnaire based study, "TRAUMA 2016", 23 & 24 April 2016, Singapore
111. Trikha V. Analysis of proximal humeral fracture dislocations managed with locked plates, "37th SICOT World Congress (Poster)", 7–10 September 2016, Rome, Italy
112. Trikha V. Challenges of modified stoppa's approach in a developing country: Early Results of a prospective study, "37th SICOT World Congress (Poster)", 7–10 September 2016, Rome, Italy
113. Trikha V. Does surgical delay effect the healing of closed interlocked nailing of isolated femoral shaft fracture, "3rd AO Research Meet and Scientific Congress", 26–28 May 2016, Cheng Du, China
114. Trikha V. Evaluation of prognostic factors of outcome in severe traumatic brain injury patients following DE compressive craniotomy, "Annual Neurocritical Care Update", 25 March 2017, Artemis, Gurgaon
115. Trikha V. Functional outcome of Intra articular distal femur fractures managed with locked plate construct, "37th SICOT World Congress (Poster)", 7–10 September 2016, Rome, Italy

RESEARCH

Funded projects

Ongoing

1. Evaluation of efficacy, safety and outcome of splenic artery embolization in traumatic splenic injuries, Atin Kumar, Intramural, 2 years, 2015–2017, Rs. 5 Lakhs
2. Assessment of effect of cerebral perfusion pressure augmentation in severe head injuries by monitoring of regional energy metabolism by cerebral micro dialysis, Ashish Bindra, AIIMS Intramural, 2 years, 2016–2018, Rs. 4.95 Lakhs
3. Evaluation of plasma and urine Neutrophil Gelatinase-Associated Lipocalin (NGAL) as an early diagnostic marker of Acute Kidney Injury (AKI) in trauma patients in surgical intensive care unit, Babita Gupta, ICMR, 2 years, July 2014–June 2016, Rs. 18 Lakhs
4. Influence of anaesthetic techniques on pro and anti-inflammatory effect in pelvic-ace tabular and femur surgery, Babita Gupta, AIIMS, 2 years, 2015–2017, Rs. 10 Lakhs
5. Early versus delayed decompression for traumatic high cervical spinal cord injury in acute spinal cord injury study, Deepak Agarwal, DST, 4 years, 2014–2018, Rs. 24.52 Lakhs
6. Optic nerve ultrasound in severe traumatic brain injury, Deepak Agarwal, DBT, 3 years, 2015–2017, Rs. 36.07 Lakhs
7. Determination of the reference range for the elevated PT/INR with normal coagulation factor level and its association with plasma transfusion therapy in head injury patients, Deepak Agarwal, ICMR, 2 years, 2015–2017, Rs. 25 Lakhs

8. VEGF: as a potential systemic marker of local angiogenic activity and response to gamma knife surgery” for your consideration, Deepak Agarwal, AIIMS, 1 year, 2016–2017, Rs. 5 Lakhs
9. Approaches and Decisions in Acute Paediatric Traumatic Brain Injury Trial (ADAPT), Deepak Gupta, NIH, USA, 5 years, 2015–2020, Rs. 1.8 Crore
10. Collaborative European neurotrauma effectiveness research in TBI: a prospective longitudinal observational study and collaborative Indian neurotrauma effectiveness research in TBI: a prospective longitudinal observational study (Centre and CINTER–TBI), Deepak Gupta, NIH, 5 years, 2015–2020, Rs. 10 Lakhs
11. European Society of Intensive Care Medicine study of therapeutic hypothermia (32–35°C) for ICP reduction after traumatic brain injury (EUROTHERM), Deepak Gupta, Cambridge University, 5 years, 2012–2017, Rs. 40 Lakhs
12. A Randomized double blind controlled trial to investigate the effects of vitamin D supplementation on maternal and new-born baby’s vitamin D status in Asian-Indian Subjects, Garima Kachhawa, ICMR Extra Mural Project Grant, 3 years, 2013–2016, Rs. 45 Lakhs
13. Assessment of cerebral auto regulation using NIRS in severe traumatic brain injury patients, Keshav Goyal, AIIMS, 2 years, January 2016, Rs. 5 Lakhs
14. Effect of De compressive craniectomy on jugular venous oximetry in patients with severe traumatic brain injury, Navdeep Sokhal, AIIMS, 2 years, 2015–2016, Rs. 5 Lakhs
15. A randomized controlled study of the effects of single dose preoperative vitamin C versus placebo on postoperative morphine consumption after spine surgery, Neeraj Kumar, AIIMS, 1 year, 2014–2015, Rs. 2.8 Lakhs
16. Incidence of posterior vessel wall punctures during ultrasound guided vascular access: Short axis versus long axis approach, Neeraj Kumar, AIIMS, 1 year, 2015–2016, Rs. 3.7 Lakhs
17. Capacity building and strengthening of hospital infection control to detect and prevent antimicrobial resistance in India, Purva Mathur, Centres for Disease Control and Prevention, USA, 5 years, 2015–2020, US\$5 million
18. Molecular epidemiology of carbapenemases at a level-1 trauma centre of India, Purva Mathur, DST, 3 years, 2012–2015, Rs. 23.58 lakhs
19. Role of Th9, Th17 and Th22 in the final outcome of patients with polytrauma, Purva Mathur, Institute Research Grant, 2 years, 2016–2018, Rs. 9.6 lakhs
20. Evaluation of urinary biomarkers TIMP-2 and IGFBP7 for early prediction of acute kidney injury after traumatic crush injuries, Richa Agarwal, Kapil Dev Soni, AIIMS, 1 year (2016)
21. Project on Capacity Building for Advanced Trauma Life Support in India (PPCB-ATLSI), Subodh Kumar, NDMA, 3 years, 2016–2018, Rs. 4.32 Crore
22. Prognostic significance of cytokines and biomarkers in patients with traumatic lung injuries, Subodh Kumar, AIIMS, 2 years, 2014–2016, Rs. 10 Lakhs
23. Identification of novel circulating procoagulant micro particles in traumatic brain injury patients and their involvement in Pathophysiology of Early Trauma Induced Acute Coagulopathy, S Arulselvi, DST, 3 years, 2014–2017, Rs. 49.95 lakhs
24. Utility on novel coated platelets as a marker for early prognostication of neurocognitive impairment following traumatic injury, S Arulselvi, DST, 2 years, 2016–2018, Rs. 37.11 lakhs
25. Evaluation of micro RNA (miRNA) as a marker for bone healing in osteoporotic traumatic proximal femur fractures: Pilot study, S Arulselvi, AIIMS, 1 year, 2016–2017, Rs. 5 lakhs
26. Assessment of platelet functions in patients with acute traumatic injury, S Arulselvi, AIIMS, 1.5 years, 2015–2017, Rs. 3.5 lakhs
27. A randomized control trial to study the impact of Yoga Intervention in lower limb amputees following trauma in relation to postsurgical outcome, behaviour and quality of life at Level–I Trauma Centre, Sushma Sagar, DST, 3 years, 2017–2020, Rs. 54 Lakhs
28. To evaluate results of soft tissue reconstruction and augmentation with structural fat grafting in patients with post traumatic facial disfigurement, Sushma Sagar, DST Women Scientist, 3 years 2015, Rs. 30 Lakhs
29. Study to evaluate safety and efficacy of Centella Asiatica herbal wound healing sheet (Fibro heal) vs. Silver impregnated Centella Asiatica (Fibro heal Ag) on infected and traumatic wounds, Sushma Sagar, Health line Pvt. Ltd., 1 year, 2016–2017, Rs. 2 Lakhs
30. Reducing the burden of injury in India and Australia through development and piloting of improved systems of care, Sushma Sagar, DST, 4 years, 2013–2017, Rs. 2.74 Crore
31. Cleft Lip and Palate anomaly in India: Clinical profile, Risk factors and current status of treatment, Hospital based surveys, Sushma Sagar, ICMR, 5 years, 2013–2017, Rs. 35 Lakhs

32. Temporal expression of serum biochemical markers of bone turnover in femoral shaft fractures operated with intramedullary nailing, Vivek Trikha, AIIMS, 2 years, 2016–2017, Rs. 9.6 Lakhs
33. Analysis of circulating microRNA expression levels in posttraumatic fracture healing process, Vivek Trikha, AOTAP, 1 year, 2016–2017, Rs. 5 Lakhs

Completed

1. To study the cerebroprotective effects of dexmedetomidine in patients undergoing epilepsy surgery, A biomarker guided study, Ashish Bindra, AIIMS, 2 years, 2012–2014, Rs. 2.62 lakhs
2. Monitoring cognition of healthcare workers in emergency and intensive care setting and its relation to medical errors, Deepak Agarwal, DST, 4 years, 2012–2016, Rs. 59.86 lakhs
3. Automated assessment of hand hygiene complication in healthcare settings using Kinect Camera, Deepak Agarwal, DBT, 3 years, 2013–2016, Rs. 24 lakhs
4. Economic and social burden of managing traumatic brain injuries (TBI) in adult aged 18–50 years in India, Deepak Agarwal, DHR, 1 year, 2014–2015, Rs. 8 lakhs
5. Thromboelastometry (TEG): Utility and Cost-effectiveness in diagnosing of infection in Neurosurgery Intensive care unit (ICU) as compared to established biomarkers, Deepak Agarwal, AIIMS, 1 year, 2014, Rs. 10 lakhs
6. Matrix Metalloproteinase (MMPS) (MMPS) as biomarkers for fusion following spinal instrumentation, Deepak Agarwal, AOSPINE, 1 year, 2014, 5500CHF.
7. Indo-US project: Collaborative Head Injury and Adherence to Guidelines (CHIRAG), NIH, 4 years, 2011–2015, Rs. 20 lakhs
8. Role of cerebral micro dialysis in Ischemia vs. Mitochondrial dysfunction in severe traumatic brain injury, AIIMS, 2 years, 2013–2015, Rs. 5 lakhs
9. Comparison of fibre optic endotracheal intubation with and without the use of air-Q as a conduit in patients with cervical spine injury: a pilot study, Gyanendra Pal Singh, AIIMSAIIMS, 1 year, 2015–2016, Rs. 2.16 lakhs
10. Molecular and epidemiological study of Beta-lactamase producing gram negative nosocomial pathogens in India, Purva Mathur, ICMR, 3 years, 2012–2015, Rs. 35.11 lakhs
11. Assessment of post-trauma cytokine producing potential of monocytes for early diagnosis of organ dysfunction and sepsis, Purva Mathur, DBT, 3 years, 2012–2015, Rs. 36.96 lakhs
12. Development and implementation of an automated electronic surveillance system for hospital acquired infections at a tertiary care hospital of India, Purva Mathur, ICMR, 2011–2014, Rs. 15.26 lakhs
13. Molecular characterization of resistant clinical isolates of streptococcus pyogenes from North India, Purva Mathur, ICMR, 2011–2015, Rs. 9.02 lakhs
14. Molecular and epidemiological study of Streptococcus pyogenes at a tertiary care hospital of north India, Purva Mathur, ICMR, 2009–2012, Rs. 17.06 lakhs
15. Does real time ultrasonography during bronchoscopy guided percutaneous tracheostomy confer any benefit; a preliminary randomised controlled trial, Richa Agarwal, AIIMS, 3 years, 2013–2016, Rs. 0.83 lakhs
16. Identification of circulating procoagulant markers in traumatic brain injury patients and their involvement in development of Early Trauma Induced Acute Coagulopathy (ETIC), S Arulselvi, ICMR, 2 years, 2014–2016, Rs. 22.53 lakhs
17. Study of coagulation status in thrombocytopenic head injury patients receiving platelet transfusion using thromboelastography, S Arulselvi, ICMR, 2½ years, 2015–2017, Rs. 16.12 lakhs
18. A comparison of trans jugular liver biopsy and co-axial ultrasound guided plugged percutaneous liver biopsy in patients with impaired coagulation, Shivanand Gamangatti, AIIMS, 2 years, 2015–2017, Rs. 5 lakhs
19. Prospective monitoring of BK virus replication in the first year following renal transplantation in Indian patients, Soumita Bagchi, AIIMS, 2 years, 2014–2016, Rs. 6.20 lakhs

Departmental projects

Ongoing

1. Toxicological analysis and distribution pattern of alcohol and different drugs in various biological samples and their neurobiological effects in suicidal deaths
2. Post-mortem Sperm Retrieval (PMSR): Analysis of survival period of sperm
3. Role of contrast enhanced ultrasound in the diagnosis of hepatocellular carcinoma in patients of cirrhosis and in the assessment of tumour response after percutaneous ablation
4. Imaging of infantile brachial plexopathy

5. Role of contrast enhanced ultrasound in the evaluation of solid organ injuries in blunt abdominal trauma
6. Effects of regional anaesthesia on perioperative inflammatory cytokines alteration and clinical complications
7. Assessment of efficacy of ultrasound guided corner pocket versus two aliquots injection techniques for supraclavicular block in upper limb orthopaedic surgeries: A prospective, randomized study
8. Comparison of resection margins and cosmetic outcome following intra operative ultrasound guided excision versus conventional palpation guided breast conservation surgery in breast cancer, a randomized controlled trial
9. Surgical outcome of pulmonary aspergilloma
10. To study the efficacy of ultrasound guided caudal morphine for providing perioperative analgesia in patients undergoing lumbosacral spine surgery
11. To study the efficacy of serratus anterior plane block for trunk based flap surgeries
12. Stress response to c-mac video laryngoscope versus direct laryngoscopy for tracheal intubation in patients with cervical spine immobilization
13. Diagnostic and Prognostic role of MRI in acute traumatic cervical cord injury
14. Early Gamma Knife with concurrent temozolamide in high grade Gliomas, A controlled study
15. Role of Gamma Knife in Midbrain AVM's
16. PhD on FEA model creation with biomechanical validation of CVJ fixations
17. Hydrocephalus Craniopharyngioma
18. To compare the efficacy, Safety and cost affectivity of intravenous ferric carboxymaltose vs. iron sucrose complex in the management of anaemia in pregnancy
19. To compare the hormonal and metabolic outcomes in Metformin plus Myoinositol vs. Metformin alone and fertility outcome in PCOS women undergoing OVI and IUI
20. To evaluate the efficacy of Cabergoline as compared to GnRH agonist in women with Endometriosis: A Prospective Randomised Controlled Trial
21. Study of association between insulin sensitivity and cardio-vascular risk factors in lean versus overweight subjects with polycystic ovarian syndrome
22. To Compare the Efficacy of Ulipristal acetate versus GnRH agonist in Women with Symptomatic Uterine Myoma and Post treatment follow up: A prospective randomized control study
23. Early and rapid detection of ubiquitin C-terminal hydrolase-1 in serum of brain trauma patients using citrate-capped gold nanoparticles: A novel technique for diagnosing severity of brain injury
24. Randomized trial comparing two techniques of fibre optic orotracheal intubation under general anaesthesia: fibre optic intubation with and without the use of air-Q intubating laryngeal airway
25. To compare the effect of goal directed fluid therapy versus standard fluid regimen on the cuff leak volume in patients undergoing spine surgery
26. Indicators of clinical outcome in patients of diffuse axonal injury, A retrospective analysis
27. Comparison of Propofol versus sevoflurane anaesthesia in subarachnoid haemorrhage patients undergoing clipping for aneurysm
28. Effect of early mobilization in mechanical ventilated patients admitted in surgical trauma ICU: A randomised controlled trial. Evaluation of Urinary Biomarkers TIMP-2 and IGFBP7 for early prediction of acute kidney injury after traumatic crush injuries
29. Intraoperative use of dexmedetomidine in large vascular Meningiomas
30. Cardiovascular complications after traumatic spinal cord injury
31. To study the risk factors and causes of extubation failure in head injury patients
32. Effects of dexmedetomidine for ICU sedation in head injury patients
33. Awake Craniotomy propofol vs Dexmedetomidine
34. Does real time ultrasonography during bronchoscopy guided percutaneous tracheostomy confer any benefit: a preliminary Randomized controlled trial
35. Effect of decompressive craniectomy on jugular venous oximetry (SJVO2) in patients with severe Traumatic brain injury (TBI)
36. Evaluation of effect of intravenous Dexmedetomidine on intraoperative blood loss during intracranial meningioma surgery: A randomized controlled study
37. Measurement of cardiac output using two different techniques in patients undergoing neurosurgical procedures under general anaesthesia, An observational, pilot study

38. Comparison of fibre optic endotracheal intubation with and without the use of air-Q as a conduit in patients with cervical spine injury: a pilot study
39. Comparison of three anaesthetic techniques on emergence and recovery profile in patients undergoing supratentorial craniotomy
40. Use of intratracheal lignocaine to reduce emergence reaction in the patients undergoing endoscopic transphenoidal pituitary surgery: a randomized controlled study
41. Prognostic Significance of Cytokines and Biomarkers in Patients with Traumatic Lung Injuries
42. Role of T-helper cells and neutrophils in the outcome of patients with chest trauma
43. Effect Of phrenic nerve stimulation on diaphragmatic strength and thickness in mechanically ventilated patients
44. Effect of early mobilization in mechanical ventilated patients admitted in surgical trauma ICU: A randomised controlled trial
45. Study of platelet dysfunction in trauma patients requiring platelet transfusion
46. Effects of regional anaesthesia on perioperative inflammatory cytokines alteration and clinical complications in orthopaedic trauma surgery
47. To evaluate the functional outcome, histological and electron microscopic features of the induced membrane in patients of post-traumatic bone defects managed with masque let technique
48. Optimizing blood inventory management at a super speciality blood centre in India, A case study
49. Thromboelastography, a point of care coagulation analyser as a guide for Resuscitation/Transfusion in trauma surgeries
50. To study the safety and efficacy of Estrogen in trauma haemorrhagic shock
51. Study of platelet dysfunction in trauma patients requiring platelet transfusion
52. Role of early markers of coagulation including platelet derived and endothelial derived Micro particles in isolated severe traumatic brain injury
53. Identification of C-spine injury by Point of care Ultrasound
54. Evaluation of acute onset dyspnea by point of care ultrasound
55. To delineate the pattern of biopsy proven renal disease in a tertiary care hospital in India
56. Pulmonary infections in renal transplant recipients: prospective cohort observational study
57. Rituximab use in idiopathic membranous nephropathy (IMN): a retrospective study
58. Effect of virtual reality therapy on lower limb amputee balance ADL and pain
59. Multiple causative factors for the trauma injury and its geospatial distribution.
60. Management and Outcome of Mesh Laparotomy in patient with Abdominal Trauma at Level I Trauma Centre.
61. Role of T-helper cells and neutrophils in the outcome of patients with chest trauma
62. Reconstruction of Post Traumatic Facial Defects using Adipose Tissue derived Mesenchymal Stem Cells seeded on 3D printed Hydroxyapatite Scaffold guided by CAD Models in Zygomatico-Orbito-Maxillary Complex Fractures
63. A Study to Assess Pancreatic Endocrine and Exocrine Functions in Patients with Pancreatic Trauma
64. To study the role of T helper-9, T helper-17, T helper-22, T Regulatory lymphocytes in Post-Trauma Immunopathogenesis
65. Assessment of post-trauma cytokine producing potential of monocytes for early diagnosis of organ dysfunction and sepsis
66. Effect of phrenic nerve stimulation on diaphragm strength and thickness: A Randomized controlled trial
67. To Study the effect of Yoga on Pulmonary functions, Respiratory muscle strength and endurance, chest wall mobility, inflammatory markers and Quality of life in blunt chest trauma patients and their correlation with thoracic trauma severity score at level-I Trauma Centre
68. To study clinical and immunological parameters in predicting short term outcomes in polytrauma patients admitted to Trauma Surgery
69. Role of Mesenchymal Stem Cell in animal model of Hypoxia induced brain injury: Implication for Translation: HIBI initiative
70. Management and Outcome of Mesh Laparostomy in patient with Abdominal Trauma at Level I Trauma Centre
71. Role of T-helper cells and neutrophils in the outcome of patients with chest trauma
72. Reconstruction of Post Traumatic Facial Defects using Adipose Tissue derived Mesenchymal Stem Cells seeded on 3D printed Hydroxyapatite Scaffold guided by CAD Models in Zygomatico-Orbito-Maxillary Complex Fractures
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75. Assessment of post-trauma cytokine producing potential of monocytes for early diagnosis of organ dysfunction and sepsis
76. Effect of phrenic nerve stimulation on diaphragm strength and thickness: A Randomized controlled trial
77. To Study the effect of Yoga on Pulmonary functions, Respiratory muscle strength and endurance, chest wall mobility, inflammatory markers and Quality of life in blunt chest trauma patients and their correlation with thoracic trauma severity score at level-I Trauma Centre
78. Prevalence of exposure to risk factors among the Road Traffic Accident (RTA) victims arrived at Emergency Department of level I Trauma Centre, New Delhi and its geo spatial distribution
79. To study clinical and immunological parameters in predicting short term outcomes in polytrauma patients admitted to Trauma Surgery
80. Effect of virtual reality therapy in improving balance, Gait and Quality of life in lower limb amputation
81. Evaluation of clinical predictors and outcomes in patients with open abdomen (laparotomy) in trauma patients
82. A Prospective Study of Pelvic Fracture Managed In Level 1 Trauma Centre
83. To evaluate the functional outcome, histological and electron microscopic features of the induced membrane in patients of post traumatic bone defects managed with Masquelet technique

Completed

1. Toxicological Findings in death due to hanging reported at Mortuary, AIIMS
2. Study of quantitative determination of aluminium and zinc levels as a tool in fatal phosphide poisoning
3. Role of Dual Phase CT in blunt abdominal Trauma Role of Dual Phase CT in blunt abdominal Trauma
4. Utility of Dual Energy CT Angiography (Combined Bronchial and Pulmonary Protocol) In Haemoptysis
5. Role of MR Enterography in ulcer constrictive diseases of small bowel
6. Role of CT cisternography and MR Cisternography in patients with traumatic CSF rhinorrhoea
7. To study the reduction in intra, and postoperative analgesia requirement and the quality of recovery after pre-emptive Intrathecal morphine in patients with pelvic acetabular injuries undergoing stabilization
8. To study the role of preoperative echocardiography and cardiac evaluation in perioperative management of geriatric patients with hip fracture in a level-1 trauma centre in a developing country: A retrospective study
9. Therapeutic Application of Bone Marrow Derived Stem Cell in Complete Spinal Cord Injury
10. Study of Traumatic brain injury induced secondary gastrointestinal changes
11. Pituitary dysfunction following stereotactic radiosurgery for secretory pituitary adenomas
12. Study of traumatic brain injury induced secondary gastrointestinal changes
13. Identification of circulating procoagulant markers in traumatic brain injury patients and their involvement in development of Early Trauma Induced Acute Coagulopathy
14. Temporal Expression of Serum Biochemical Markers of Bone Turnover In Femoral Shaft Fractures Operated with Intramedullary Nailing
15. Stem cell in complete spinal cord injury—A randomized placebo controlled trial
16. Utility of serum osmolality as a prognostic marker for Trauma patients
17. Role of recombinant human erythropoietin in trauma victims with hemorrhagic shock: An in-vitro approach through stem cell differentiation
18. Clinical relevance of cytokines gene polymorphism in recovery of hemorrhagic shock patients
19. Retrospective study for evaluating the Oxford classification of IgA nephropathy in the Indian population
20. Retrospective study for evaluating the profile of biopsy proven kidney disease in elderly patients in India
21. Retrospective study for evaluating the clinical profile and treatment response and outcome of adult patients with primary FSGS
22. The profile and risk factors of infections requiring hospitalisation in the first year after renal transplantation
23. To delineate the pattern of biopsy proven renal disease in a tertiary care hospital in India
24. To evaluate the pregnancy rate after endometrial scratching in couples with unexplained infertility in ovulation induction and IUI cycles
25. Effect of Intrauterine Perfusion of Granulocyte Colony Stimulating Factor on Endometrial Thickness, Pregnancy Rate and Implantation Rate in Woman Undergoing in Vitro Fertilization: A Randomized Controlled Trial

26. Assessment of Lower Segment Cesarean Scar by Transvaginal Ultrasound and MRI July
27. Clinical indicators of outcome in children with cervical spine injury requiring anaesthetic and intensive care management, A retrospective analysis
28. The effect of sevoflurane-air versus sevoflurane-nitrous oxide anaesthesia on length of ICU and hospital stay in patients undergoing cerebellopontine tumour surgery, A randomised controlled trial
29. Outcome of patients of chest trauma suffering from COPD, our experience at level-1 trauma centre

Collaborative projects

Ongoing

1. Epithelial-to-Mesenchyme Transitions (EMTs) in Ependymoma (Pathology)
2. To study the expression of miRNAs and mRNAs and their correlation with clinical outcomes in terms of survival or death among Trauma-Haemorrhagic shock patients, (Surgery, Neurosurgery)
3. Effect of phrenic nerve stimulation on diaphragmatic strength and thickness in mechanically ventilated patients (Physiotherapy, Surgery)
4. To study the role of gene expression, activation of cellular signalling pathway and its correlation with clinical outcome among trauma haemorrhagic shock patients (Emergency Medicine, Surgery)
5. Effect of Lidocaine infusion on hemodynamic and recovery in patients undergoing endoscopic pituitary surgery: A multicentre, randomized control trial, (Anaesthesiology, Health Sciences Centre, University of Manitoba, Winnipeg, Canada)
6. Prospective study on the effectiveness of chlorhexidine gluconate impregnated patch (BIOPATCH R) in reducing the incidence of central line associated blood stream infection (CLABSI) (Microbiology, JPNATC)
7. Surveillance of blood stream infections (BSI) at a referral Indian hospital Surveillance of blood stream infections (BSI) at a referral Indian hospital (Microbiology, JPNTC)
8. A week in neurocritical care unit: Point prevalence observational study in Neurocritical care: PRINCE Study (Baylor College of Medicine, Houston, Texas)
9. Cardiovascular complications after traumatic spinal cord injury (Neurosurgery)
10. An evaluation of diaphragmatic movement by M-mode sonography as a predictor of successful extubation during routine surgical procedures (Anaesthesia, Radiodiagnosis)
11. Anatomical variations of internal jugular vein in relation to carotid artery and its implication on ultrasound guided cannulation: an observational study (Anaesthesia)
12. To study the impact of Yoga on pulmonary functions, immune response and quality of life in chest trauma patients at level-I trauma centre (Trauma Surgery and Critical care)
13. Handheld non-invasive bilirubin counters for the new born (IIT Kharagpur, NIT Surat, DIMAT Raipur)
14. Study of Bone mass in Asian Indian New born Subjects–A hospital based study (Endocrine and Metabolism)
15. Molecular detection of multidrug resistance in M tuberculosis from slides and filter paper in middle and low income countries (Lab Medicine)
16. Cloning, Expression, Purification and evaluation of a recombinant antigen for diagnosis, prognosis and prediction of MDR/XDR tuberculosis (Lab Medicine)
17. Animal studies of chimeric DNA vaccine for prophylaxis of Leishmaniasis and tuberculosis (Lab Medicine)
18. Alu PCR for detection and differentiation of VL andPKDL strains of Leishmaniam (Lab Medicine)
19. To develop a single step PCR (RT-PCR) for the detection of A-G hepatitis viral infections in patients blood (Lab Medicine)
20. Comparative whole genome sequence analysis of Miltefosine resistant and sensitive strains of L. donovani (Lab Medicine)
21. Proposal for the establishment of a cadaveric dissection facility at the Jai Prakash Narain Apex Trauma Centre, All India Institute of Medical Sciences, New Delhi, India (Neurosurgery)
22. Role of Bone marrow mononuclear cells and Renal Stem cells in renal preservation in Obstructive Renopathy – An Experimental study in mice (Paediatric surgery)
23. To study the role of T-helper lymphocytic response in the final outcome of polytrauma patients with pelvic fractures (Orthopaedics)
24. Immunological disruptions in Indian orthopaedic trauma patients and its role in formulation of damage control orthopaedics guidelines (Orthopaedics)
25. Prospective study of surgical site infection in orthopaedic trauma patients (Orthopaedics)

26. Comparison of bispectral index guided administration of desflurane and TIVA for endoscopic trans nasal transsphenoidal resection of pituitary tumour (Neuroanaesthesia and Critical Care)
27. Analysis of micro RNA expression levels of induced membrane in patients with post traumatic bone defects managed with induced membrane (masquelet) technique (Orthopaedics, Lab Medicine, JPNATC)
28. A randomized controlled study of the effects of single dose preoperative vitamin C versus placebo on postoperative morphine consumption after spine surgery (Neuroanesthesia, Lab Medicine)
29. Histopathology of cardiac conduction system in all sudden death cases (Forensic medicine, Lab Medicine)

Completed

1. Evaluation of vascular functions, bar reflex sensitivity and biochemical factors to investigate Pre eclampsia (Physiology)
2. To study the relationship between polycystic ovarian syndrome, obstructive sleep apnea syndrome and insulin resistance (Medicine)
3. Study of frequency of Hattori's cyst in women aged 35–65 years (Forensic medicine, Lab Medicine)
4. Salivary gland and Blood vessel histopathological changes in hanging cases (Forensic medicine, Lab Medicine)
5. A multicentric, open-label, safety and efficacy study of Fibro heal® (Centella Asiatica herbal wound healing sheet) in split, thickness skin graft donor site treatment and partial thickness wounds caused by Trauma/burns (Health line Pvt. Ltd)
6. Bronchoalveolar lavage fluid cytokine bead array profile for prognostication of ventilated trauma patients (Lab. Medicine)
7. Monitoring cognition of healthcare workers in emergency and intensive care setting and its relation to medical errors (Neurosurgery)

PUBLICATIONS

Journals: 158

Abstracts: 59

Chapters in Books: 15

PATIENT CARE

- I. Total Sanctioned Bed Strength of facility: 186

Ward beds:	120	Triage:	30
ICU beds 2nd floor:	16	ICU beds 3rd floor:	20
Total Functional beds Strength:	176		
Ward Beds:	142		
ICU Beds 2nd floor:	14	ICU Beds 3rd floor:	20
- II. Statistics at a glance

Total no. of patients registered:	69551	Average patient attendance per day:	190
Total no. of admissions:	5373	Average admissions per day:	15
Average length of stay per patient:	10.7 days	Total follow-up OPD cases:	40594
Daily average follow up cases:	137		
- III. Total no. of cases Registered: 69551

Male: 51273	Female: 18259		
Other: 19	MLC: 38706		
NMLC: 30845			
Criticality wise ED Details			
Green: 46998	Yellow: 15677		
Red: 3929	Black: 287		
Age group wise (years)			
0–12	7515	13–20	10055
21–30	22157	31–40	13641
41–50	8177	51–60	4562
>60	3442		

Other Details

OPD reg.: 2341 Radiology reg.: 319

IV. Total no. of admissions: 5373

Regular: 5154 Short: 0228
MLC: 3824 NMLC: 1549
Male: 4276 Female: 1097
Department wise
Orthopaedics: 1417 Neurosurgery: 1851
T Sand CC: 2097 Urology: 0
Pain: 8

V. Total no. of operations performed: 5437

Major: 5216 Minor: 221
Male: 4092 Female: 819
Male child: 351 Female child: 175
Department-wise
Orthopaedics: 1745 Neurosurgery: 1358
TSand CC: 2325 Urology: 9

VI. Total no. of patients discharged: 5018

Orthopaedics: 1349 Neurosurgery: 1719
T Sand CC: 1946 Urology: 0
Pain: 4
Total Days of Care rendered to patients: 53695
Orthopaedics: 15480 Neurosurgery: 18340
TSand CC: 19511 Urology: 0
Pain: 4

VII. Total Follow Up OPD Attendance: 40594

New Registration: 16858 Revisited: 23736
Male: 27592 Female: 8327
Male child: 3204 Female child: 1471
Department-wise
Orthopaedics: 20451 Neurosurgery: 6660
T Sand CC: 12391 Urology: 41
PRS: 1051

VIII. Total Deaths Registered: 756

Brought Dead: 287

Total deaths at JPNATC(756–287): 469
Deaths under 48 hrs: 198 Deaths over 48 hrs.: 271
Male: 614 Female: 98
Male child: 28 Female child: 16
Gross Death Rate: 9% Net Death Rate: 5%
Bed occupancy Rate: 83% Average length of stay: 10 days
Bed turnover rate: 28 patients/bed

Central Registration and Emergency Reception

By virtue of its location, the CRC initiated and undertook the function of emergency Reception of JPNATC approximately 400–450 enquiries are attended daily at first hand and about 90% of these are sorted out at this level. It is providing information regarding patient care; follow up, organizational structure, hospital administration and related services to Patients, Relatives/Attendants, Police, media and General Public. Satisfaction of majority of visitors query at the entrance itself reduces the rush and crowd inside Trauma Centre thus helping in better management of all existing facilities, CRC at present is functioning as a Multifunctional emergency Reception with three separate dedicated counter for (a) Round the Clock Casualty Registration (b) Round the Clock Wards/ICU admission (c) Inquest Papers clearance counter.

Follow-up OPD Registration Counter

In addition to improvements introduced last year regarding queue management system a single window system of disposal was done for Certification of Medical Fitness and Reimbursement claims. Dedicated Brachial Plexus Clinic, Pain Clinic and Pre anaesthetic Clinic was also working well.

Main Medical Record Division

In addition to above **Medical Record Section (MRS) of JPNATC which is the FIRST Government Hospital** who had started Online Registration of Death at NDMC since year 2008 is running successfully and also coordinating the amendments pertaining to deceased after due legal procedures (**name correction 425**). **ICD-10 coding** of all death reported at JPNATC which started long back was done online. MRS is regularly disposing of summons from various Hon'ble Courts in Delhi as well as other neighbouring states. Total **1999 (within Delhi-1662 and 337 outside Delhi)** summons were disposed off during this period. MRS is also handling various insurance policy matters of patients who attended JPNATC in both cases whether alive or dead. Total **36** such cases were disposed off during this period. During the preceding year MRS has entertained **504** Police request for Discharge Record/Bed Head Ticket and also issuing X-rays and coordinating for collection of X-ray from diagnosis unit and handing over to Police. Total **941** such cases were disposed off during this period. MRS is furthermore involved in issuing information (for assistance/compensation etc.) to Delhi State/Central Government pertaining to the patients/victims attended JPNATC during the year. The replies of question raised under Right to Information Act 2005 by various applicants were also provided by MRS in **55** cases. MRS has provided the basic framework as well as continuous inputs to computer facility; so as to computerize whole registration process in phased manner as well as generation of reports of different aspects. The collection of **Electronic MLCs** is done on regular basis. Retrieval of cases files for facilities/residents/nursing staff/lab staff/computer facility as and when requested was done for **1769** cases for research purpose. This division also continues teaching and training of ICD-10 to new and existing MRTs since last year and also conducted and initiated Workshop CME on EMR Status at AIIMS on 5 December 2016 at JPNATC, AIIMS. It conducted unique one day Symposium for spinal cord injury patients titled as "Life after Spinal Cord Injury and Disability" on 4 June 2016 at Seminar Hall, 1st Floor, JPN Apex Trauma Centre, AIIMS, New Delhi; started a Youtube channel for sharing the stories and aggregating relevant videos for use by spinal cord injured patients; wrote and released a Home Care Booklet for Spinal Cord Injury; camp at Leh, Laddakh by Ashoka Mission. September 2016.

Tests Conducted in Laboratory Medicine: 11,22,942

1. Haematology

Haemoglobin:	45895	TLC:	45895
Differential Count:	44389	HCT:	45895
RBC:	45895	MCH:	45895
MCHC:	45895	MCV:	45895
RDW:	45895	Platelet count:	45895
Retic count:	1426	ESR:	3415
RBC Morphology:	5143	Blood parasite:	1243
HPC:	20543	IPF:	1426

Total=4,91,640

Coagulation

PT:	25902	APTT:	25735
TT:	3786	Fibrinogen:	3593
D-dimer:	3275	Thromboelastography:	4193

Total=66,484

2. Clinical pathology

Urine routine and microscopy:	7432	Urine Myoglobin:	793
CSF microscopy:	935	Fat globules:	39

Total= 8,999

Total tests done in haematology section=5,67,123

3. Biochemistry

Sugar:	12585	Urea:	40168
Creatinine:	40168	Calcium:	33716
Phosphorous:	33711	Uric acid:	21296
Sodium :	39250	Potassium:	39250
TBIL:	24631	DBIL:	24631
Total protein:	24596	Albumin:	24596
SGOT:	24578	SGPT:	24578
ALP:	24578	Cholesterol:	3785
Amylase:	3245	HDLD:	767
LDLD:	767	TG:	767
VLDL:	319	CK:	259
Mg:	1052	Lipase:	19
CK-MB:	24	CSF sugar:	776
CSF protein:	749	Peritoneal fluid sugar:	12
Peritoneal fluid protein:	6	Urine sugar:	2
Urine protein:	2	Urinary spot sodium:	76
Urinary calcium:	389	Urinary creatinine:	388
Peritoneal fluid amylase:	30	Peritoneal fluid protein:	10
24hrs.urine protein:	25	24 hrs urine sugar:	25
Urine osmolality:	13	S. osmolality:	5
Drain fluid amylase:	29	Drain fluid protein:	1

ABG

PO₂, PCO₂, pH, H⁺, Potassium (K), Sodium (Na), Calcium (Ca) and CL: 4552 each

Total tests conducted in biochemistry section = 5,15,990

4. Microbiology

Total Culture:	14854	Hospital infection Control:	4519
Serology sample screening:	3068	Serology sample Conformetry:	1912
Procalcitonin:	3003	Total Positive Samples:	3346
Total Sensitive sample:	3346		

Total tests conducted in microbiology section=34,048

5. Histopathology

Haematoxylin and Eosin:	1716	Acid Fast Bacilli staining:	62
Periodic acid and Schiff's staining:	43	Silver Methenamine staining:	6
PAP staining:	32	Specimen processed:	489
No. of blocks:	1565	Total No. of slides:	1868

Total tests conducted in histopathology=5,781

Radiology Department

Month and year	X-ray	Portable	OPD X-ray	Ward X-ray	CT	MRI	DSA	Flouro	US
April 2016	8340	1643	824	145	1485	99	09	08	1666
May 2016	7633	1899	995	127	1678	100	08	04	1762
June 2016	8014	1716	908	128	1546	102	03	10	1853
July 2016	8221	1681	778	134	1767	98	09	04	1973
August 2016	7752	1749	908	162	1708	109	18	08	1911
September 2016	7447	1679	850	150	1550	97	17	03	1869
October 2016	7521	1811	791	164	1723	88	03	12	2105
November 2016	6835	1833	938	163	1671	80	09	05	2129
December 2016	7226	1743	931	154	1575	93	11	21	2130
January 2017	6914	1468	931	166	1721	97	08	19	1928
February 2017	6222	1458	849	126	1539	107	06	12	1869
March 2017	7322	1551	903	145	1598	134	13	16	2133
Total	89447	20231	10606	1764	19561	1204	114	122	23328

Blood Bank

Month	Donor screened	Donor bled	Replacement donors			Voluntary donors			Indoor voluntary donors	Outdoor voluntary donor camp
			Male	Female	Total	Male	Female	Total		
April 2016	731	610	464	8	472	134	4	138	138	nil
May 2016	792	667	499	11	510	148	9	157	157	nil
June 2016	698	598	463	4	467	123	8	131	102	29
July 2016	783	667	557	3	560	103	4	107	107	nil
August 2016	895	778	620	13	633	135	10	145	119	26
September 2016	711	579+1	460	5	465	106	9	115	83	31
October 2016	762	634	530	8	538	88	8	96	96	nil
November 2016	941	771	570	6	576	185	10	195	119	76
December 2016	752	616	506	8	514	98	4	102	102	nil
January 2017	708	598	502	6	508	83	7	90	90	nil
February 2017	804	675	561	3	564	110	1	111	111	nil
March 2017	792	644	557	7	564	76	4	80	80	nil
Total	9369	7838	6289	82	6371	1389	78	1467	1304	162

No. of voluntary blood donation camps: 4

Blood Bank, Component Separation Laboratory

Month	Pack RBC	Fresh frozen plasma	Platelets	Cryoprecipitate	
April 2016	610	579	572	17	
May 2016	667	628	573	31	1% of all units
June 2016	598	552	524	38	1% of all units
July 2016	667	648	635	34	1% of all units
August 2016	778	715	671	33	1% of all units
September 2016	579	574	531	19	1% of all units
October 2016	634	617	585	nil	1% of all units
November 2016	771	712	641	50	1% of all units
December 2016	616	592	585	15	1% of all units
January 2017	598	568	548	26	1% of all units
February 2017	675	626	617	22	1% of all units
March 2017	644	608	589	22	1% of all units
Total	7837	7419	7071	307	

Quality control of blood and components: 1% of all units every month

Blood Bank, Infectious Marker Laboratory

Month	HIV		HBsAg		HCV		VDRL		MP	
	Done	Reactive	Done	Reactive	Done	Reactive	Done	Reactive	Done	Reactive
April 2016	639	2	643	16	640	1	660	2	613	nil
May 2016	703	1	703	9	704	3	709	4	677	nil
June 2016	624	nil	625	10	624	1	639	1	595	nil
July 2016	686	2	689	12	688	1	707	nil	660	nil
August 2016	812	4	810	18	804	4	831	4	775	nil

September 2016	598	2	604	5	601	6	642	2	592	nil
October 2016	646	3	647	7	652	8	680	1	631	nil
November 2016	796	1	798	11	797	5	828	1	777	nil
December 2016	603	nil	604	7	605	4	649	1	596	nil
January 2017	639	3	639	4	636	nil	670	nil	622	nil
February 2017	685	4	683	9	685	4	706	2	657	nil
March 2017	678	1	678	9	676	5	701	nil	648	nil
Total	8109	23	8123	117	8112	42	8422	18	7843	

Blood Bank, Grouping Laboratory

Month	Donor grouping	Patient grouping	Total
April 2016	610	956	1566
May 2016	667	917	1584
June 2016	598	914	1512
July 2016	667	970	1637
August 2016	778	979	1757
September 2016	579	1032	1611
October 2016	634	1100	1734
November 2016	771	1083	1154
December 2016	616	1150	1766
January 2017	598	1049	1647
February 2017	675	1010	1685
March 2017	644	1033	1677
Total	7837	12193	19330

Blood Bank, Emergency issue counter statistics

Month	Samples received	Samples for Cross-match	Cross-matches done	PRBC issued	FFP issued	PRC issued	Cryoprecipitate issued
April 2016	956	842	2435	661	628	568	28
May 2016	917	850	2515	675	381	396	4
June 2016	914	820	2411	593	441	497	24
July 2016	970	905	2751	708	420	504	56
August 2016	979	879	2810	709	480	411	30
September 2016	1032	928	2739	696	548	404	63
October 2016	1100	979	2999	727	458	568	79
November 2016	1083	1013	3079	741	635	497	67
December 2016	1150	1039	3056	706	618	481	44
January 2017	1049	954	2836	623	402	443	53
February 2017	1010	931	2836	697	908	488	22
March 2017	1033	956	2819	656	377	374	20
Total	12193	11096	33286	8192	6296	5631	490

Blood Bank, Emergency issue counter turn around time for blood units issued

Month	Casualty					Wards/OT				
	Saline X-match			Coomb's X-match		Saline X-match		Coomb's X-match		
April 2016	52	nil	nil	24	157	27	8	67	178	159
May 2016	41	2	2	34	175	18	4	51	183	143
June 2016	51	2	nil	31	152	12	nil	54	165	123
July 2016	80	nil	nil	28	172	25	nil	47	188	144
August 2016	87	6	nil	42	183	13	2	42	203	138
September 2016	79	2	6	43	133	22	2	55	218	135
October 2016	57	2	6	25	156	32	2	67	190	167
November 2016	80	2	nil	28	160	13	0	66	220	136
December 2016	42	4	nil	14	141	19	4	48	246	175
January 2017	55	nil	2	26	131	10	2	51	190	156
February 2017	75	nil	2	40	194	15	5	46	173	135
March 2017	62	1	nil	33	181	10	nil	43	183	86
Total	761	21	18	368	1935	216	29	637	2337	1697

Blood Bank, Blood and components issued to other hospitals**(Main AIIMS, CN Centre, GB Pant, LNJP Hospital, ESI, Dr Hedgewar)**

Month	Blood		FFP		PRC		Cryo	
	Issued	Recieved	Issued	Recieved	Issued	Recieved	Issued	Recieved
April 2016	nil	26	170	nil	nil	27	nil	nil
May 2016	4	5	Nil	nil	46	6	nil	nil
June 2016	8	nil	100	nil	15	20	nil	nil
July 2016	7	3	100	nil	125	5	nil	nil
August 2016	5	12	Nil	nil	38	nil	nil	nil
September 2016	4	72	130	nil	30	27	nil	nil
October 2016	30	41	50	nil	40	17	nil	nil
November 2016	14	21	260	nil	140	nil	nil	nil
December 2016	4	33	Nil	nil	16	22	nil	nil
January 2017	12	59	Nil	nil	25	15	nil	nil
February 2017	17	98	550	nil	100	nil	nil	nil
March 2017	43	39	Nil	nil	60	nil	nil	nil
Total	148	409	1360	nil	635	139	nil	nil

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor Adarsh Kumar was awarded for Teaching Excellence by INDUS Foundation during Indo-American Education Summit-2016, New Delhi on 14 September 2016; Fellowship of Indian Society of Toxicology at 10th Annual Conference “TOXOCON-10” held on 28 & 29 December 2016 at AIMS, Kochi, Kerala; was elected as Governing Council Member of Indo-Pacific Association of Law Medicine and Science (INPALMS) for 2016–2019 at Bali, Indonesia; nominated as Board Member of Asia Pacific Medicolegal Association (APMLA) for two years 2016–2018; Medicolegal Expert to National Human Rights Commission; Medicolegal Expert to Central Bureau of Investigation; Member, Editorial Board of various journals—International Editorial Board Member, HSOA Journal of Forensic, Legal and Investigative Sciences (USA), Egyptian Journal of Forensic Sciences, Egypt, Adli Tip Bulletin, Turkey; Associate Editor, Medicolegal Update, Journal of Research in Medical Education and Ethics; Web Editor, International Journal of Health Research and Medicolegal Practice; Member Editorial Board, Journal of Indian Society of Toxicology; Journal of Karnataka Medicolegal Society; Journal of South India Medicolegal Association; Indian Journal of Community and Family Medicine; Indian Journal of Forensic Medicine and Toxicology; Journal of Forensic Chemistry and Toxicology

Dr Ashish Bindra conducted Cadaveric Interventional Pain Management Workshop on 22 July 2016 at Cadaveric Training and Research Facility, JPNA Trauma Centre, New Delhi

Professor Atin Kumar delivered Sir JC Bose oration at 70th Annual Conference of Indian Radiological and Imaging Association held at Jaipur in January 2017; received Fellowship of Indian College of Radiology and Imaging; National Leadership Award by Delhi state chapter of Indian Radiological and Imaging Association.

Professor Chhavi Sawhney Member of National Curriculum Task force for various allied health services (ministry of health and family welfare); Presentation “Ultrasonography assessment of topographic anatomy of brachial plexus at infraclavicular fossa”, Won the best paper award at RSACP con in 2017.

Professor Deepak Agrawal was awarded the International Research Award by American Association of physicians of Indian Origin (1st Prize) at Udaipur 2016; the Dynamic CIO of Health Care of the year (2016) in the 5th Annual Healthcare Summit; the Skotch order of merit award for Top 100 projects in India for AIIMS video consults and e-learning project (2016); Certificate of Appreciation by Director AIIMS for implementation of e-hospital at AIIMS. (2016); the Healthcare leader’s forum, Technology for patient delight award by elects, (2016); Indian Express Public Health awards (2016) for most effective health technology system; Skoch Smart Governance award for online appointment system and patient portal (2016); the Social Media for empowerment award (2016)

Professor Deepak Gupta was invited Guest faculty: Deliberation on Surgical Advances in Traumatic Brain Injury and Impact of evidence based practice in outcome improvement, in recognition and appreciation of his outstanding contribution in Neurosurgery at Annual Conference of the Kairaly Neurosciences Society, 8 April 2017, Trivandrum and was selected as Honorary Secretary of Delhi Neurological Association (2015–2018)

Dr Garima Kachhawa was awarded Best Paper in poster presentation on “Laparoscopic Gonadectomy in patients with Disorders of Sexual Differentiation” at ENDOFERT 2016 Annual Conference of Delhi Gynaecological Endoscopists Society, Organized by Department of Obstetrics and Gynaecology, AIIMS, New Delhi at JLN Auditorium, AIIMS New Delhi on 5–7 August 2016 (Poster Presentation); as co-guide was awarded Mrs Indumati Jhaveri award for the study on official theme titled, “To study ovarian reserve after Laparoscopic Endometriotic Cystectomy and to Correlate the effect of post cystectomy Ovarian Suppression with Fertility Outcome: A Randomised Controlled Trial” (B Girish, G Kachhawa, A Kriplani, S Duttgupta, S Mathur) at the 60th Annual Conference of All India Congress of Obstetricians and Gynaecologists organized by Federation of Obstetrical and Gynaecological society of India and Ahemdabad Obstetrician and Gynaecologists society at Gujarat Convention centre, Ahemdabad from 25–29 January 2017; as co presenter was awarded Mrs Siuli Rudra award on gynae endoscopy for, “Complications following laparoscopic mesh procedures in genital prolapse: case series” (SDS Karthik, Alka Kriplani, Reeta Mahey, Garima Kachhawa) at the 60th Annual Conference of All India Congress of Obstetricians and Gynecologists organized by Federation of Obstetrical and Gynecological society of India and Ahemdabad Obstetrician and Gynecologists society at Gujarat Convention Centre, Ahemdabad from 25–29 January 2017

Dr Kapil Dev Soni was Visiting Fellow Critical Care University of Michigan Ann Arbour.

Dr Keshav Goyal was Member of core Faculties of AIIMS Advanced life care Support (ACLS), Introductory course in September 2015 at JPNATC, New Delhi; Course director of 1st AIIMS Neurological Life Support (ANLS), January 2017 at JPNATC, New Delhi; received Independent Expert status to certify brain stem death at AIIMS (ORBO/CNC/2016/4878/3 August 2016); successfully passed Instructor Course of Emergency Neurological Life Support (ENLS) in April 2016; was invited as an external expert at IRCTC corporate house for purchasing machinery and equipment (Ventilators), under CSR (corporate social responsibility), July 2016

Dr Navdeep Sokhal was Expert for evaluation of NRDC Awards applications

Dr Neeraj Kumar successfully Achieved Instructor status in ATLS course, 16–18 February 2017, JPNATC, AIIMS, New Delhi; was Instructor (Faculty) of–ATLS. ANLS, BECC, AIIMS–EM-SONO, AUTLS Courses; in NEUROTRAUMA 2016 Conference held in AIIMS on 12–14 August 2017, got 2nd prize, from Neurotrauma society of India; was Chair a session on Airway/Maxillofacial Trauma in WTC Congress 2106.

Professor Sanjeev K Bhoi was Member of Board of Studies for Emergency Medicine in BHU, UP, Varanasi; Member Advisory Committee for development of Emergency Medicine and Trauma at Indira Gandhi Institute of Medical Sciences, Patna, Bihar; Member of WHO AIIMS Collaboration in Strengthening Emergency Care and Primary Health Care Setting in South Asian Region, Delhi; Member of Report of Working Group in Emergency Care in India in Ministry of Health; Member for Finalizing of Trauma Care Good Samaritan–Hindi and English Video Spots; Member of Meeting and Specialization of Audio, Video Documentation, Films and Bulk SMS under IEC material for Capacity Building for developing Trauma Care Facilities in Government Hospitals on National Highways; Member for Creating Guidelines for state wise action plans for trauma care; Member for creating operation guidelines for capacity building for developing Trauma Care Facilities on Government Hospital on National Highways; Member of Road Safety Meeting with UN with Rohit Baliya; Member of WHO-AIIMS, Bangladesh; Member Advisory Committee for development of Emergency Medicine and Trauma for the State of Arunachal Pradesh; Member Advisory Committee for development of Emergency Medicine and Trauma for State of Goa; Member Advisory Committee for development of Emergency Medicine and Trauma for the state of Haryana; Ultrasound guided nerve block in Emergency care, New Delhi; AIIMS Critical Care Sonography Course, New Delhi

Professor Subodh Kumar was awarded Fellowship of Royal College of Physicians and Surgeons Glasgow (FRCS) 2016; got First prize for Oral Paper presented by Savita Shokeen, Minju Malhotra, Amulya Rattan, Subodh Kumar et al entitled “Study to analyse the facts causing delay in dispatch of dead bodies declared in OR to mortuary” at 3rd World Trauma Congress from 17–20 August 2016, Vigyan Bhawan, New Delhi; was Organizing Secretary, 3rd World Trauma Congress, 17–20 August 2016, Vigyan Bhawan, New Delhi.

Professor Sushma Sagar was Principal Investigators Meeting of a Bilateral International Research Project under Australia India Strategic Research Fund, 18–25 April 2016, Melbourne, Australia; got Third prize for poster presented by Ms Shallu Chauhan entitled “Comparison of severity of injuries in pedestrian struck by motorized two wheelers and four wheelers”; First prize for poster presented by Sheeja Shaji entitled “Cost comparison of dressing in Hospital versus at home at level I Trauma Centre”; was Core Faculty Member for Breast Cancer Awareness Program organized by Ministry of Health and Family Welfare, Government of India on 14–27 November 2016 at Pragati Maidan, New Delhi; awarded Travel Scholarship by ICRC to attend 30th Surgical Seminar the Management of Patients with War Wounds at Geneva, Switzerland

Professor Vivek Trikha was Associate Editor of Indian Journal of Orthopaedics national Journal of Indian Orthopaedic Association; Merit Award Winning paper presentation “Does surgical delay effect the healing of closed interlocked nailing of isolated femoral shaft fracture” in 3rd AO Research Meet and Scientific Congress, 26–28 May 2016 at Chengdu, China.

10.6. National Drug Dependence Treatment Centre

Chief

R.K. Chadda (from 1.1.2017)

S.K. Khandelwal (up to 31.12.2016)

Professors

Raka Jain
Sonali Jhanjee

Rakesh Lal
Atul Ambekar

Anju Dhawan

Associate Professors

Yantan Pal Singh Balhara
Ashwani K. Mishra

Gauri Shanker Kaloiya
Rachna Bhargava

Ravindra Rao

Assistant Professors

Prabhu Dayal
Rizwana Quraishi

Biswadip Chatterjee
Piyali Mandal
Roshan Bhad

Alok Agrawal
Siddharth Sarkar

Scientist

Monica Mongia (from November 2016)

Medical Social Service Officers

Braham Prakash
Ratnesh Kumar

Deepak Yadav
Dinesh Kumar

Accounts Officer

Meenakshi Dabral

Administrative Officer

Razi Jawaid (up to September 2016)

Ajay Kumar (from October 2016)

Assistant Nursing Superintendent

Manju Arora

Store Officer

Bhawani Ram

HIGHLIGHTS

National Drug Dependence Treatment Centre (NDDTC) continues to be the WHO Collaborating Centre on Substance Abuse. During this period the centre has progressed with regard to treatment, training and research in area of drug abuse. The faculty of the centre acted as a resource person in various training programmes on Opioid Substitution Therapy (OST), training of counselors by State Council for Education Research and Training (SCERT), orientation programmes for various service providers including law enforcement agency, working in the field of substance abuse and also induction training programmes for Drug Treatment Clinics (DTC) scheme. Faculty delivered invited talks in national and international meetings. Many faculty members are technical experts and also holding key positions in National and International professional bodies and editorial boards in prestigious peer reviewed journals. Several faculty members are recipient of professional honors and awards. Currently, National and International agencies are funding ongoing research projects in the centre. A total of 62 articles in various peer reviewed national and international journals and 5 books/chapters in books/ reports have been published during this period.

NDDTC organised a National CME programme, “Alcohol use disorders: contemporary issues” as part of its annual day celebrations on 30 April 2016.

NDDTC, in collaboration with Ministry of Social Justice and Empowerment, Government of India and 10 medical institutes from all across the country, is conducting a national survey on the extent and patterns of substance use in India. NDDTC is also involved in developing and implementing training mechanism for use of Essential Narcotic Drugs (ENDs) for treatment of opioid dependence. This activity is funded by the Department of Revenue, Ministry of Finance, Government of India. NDDTC also offers PhD in addiction psychiatry and first PhD in addiction psychiatry was awarded in February 2017. The Doctorate of Medicine (D.M.) course in addiction psychiatry was introduced at NDDTC from January 2016.

Honourable Minister of Social Justice and Empowerment, Government of India Shri Thawar Chand Gehlot visited the National Drug Dependence Treatment Centre (NDDTC) of AIIMS on 19 May morning. He was accompanied by Ms Anita Agnihotri, Secretary and Ms Ghazala Meenai, Joint Secretary of the Department of Social Justice and Empowerment. During interaction with the staff and students of NDDTC, the Minister underlined the enormous harms being caused by alcohol and drug abuse to the society and stressed the importance of focusing not only on controlling the supply of these substances but also the prevention of drug abuse and treatment of drug users

EDUCATION

Under Graduate: MBBS students are posted for a day in the centre during their psychiatry posting.

Postgraduate: Residents doing MD (Psychiatry) are posted for in the centre for 6 months. Six residents are doing DM in addiction psychiatry.



The following academic activities are conducted at NDDTC*:-

- Journal discussion-weekly
- CCR and CGR two in every semester
- Seminar-weekly
- Case Conference- weekly
- Faculty/Staff presentation- weekly
- Seminars/Journal Club – twice weekly (at NDDTC, GZB)

**Joint activities of the Department of Psychiatry and the Centre*

CMEs/Workshops/Symposia/National and International Conferences

Lectures delivered

R.K. Chadda: 11

Anju Dhawan: 1

Yatan Pal Singh Balhara: 10

Ashwani Mishra: 11

Alok Agarwal: 7

Siddharth Sarkar: 3

Raka Jain: 1

Sonali Jhanjee: 3

Gauri Shankar Kaloiya: 8

Rachna Bhargava: 12

Biswadip Chatterjee: 19

Rakesh Lal: 5

Atul Ambekar: 18

Ravindra Rao: 2

Prabhoo Dayal: 1

Piyali Mandal: 1

R.K. Chadda: 11

1. Treatment resistant schizophrenia, CME of Indian Association of Private Psychiatrists, Delhi chapter, 22 May 2016, New Delhi
2. Non-conventional therapeutic approaches in psychiatry: Lessons from the East, ancient Indian Concepts, International Conference of the Asian Federation of the Psychiatric Associations (AFPA) and 13th Annual Academic Sessions of the Sri Lanka College of Psychiatrists, 27–31 May 2016 Colombo, Sri Lanka
3. Community psychiatry: Training aspects, National Workshop on community psychiatry, 1 & 2 July 2016, Chandigarh
4. Approaches to preventive psychiatry in special populations, panel discussion, National Symposium on Preventive Psychiatry, 11 September 2016, AIIMS-New Delhi
5. Mental health, Annual Rohtak medical students Conference, 26–27 October 2016, PGIMS, Rohtak
6. Symposium on preventive psychiatry in general hospital settings, XXII World Congress of Social Psychiatry, 30 November–4 December 2016, New Delhi
7. Symposium on Mental Health Services in disaster affected population in low resource settings, XXII World Congress of Social Psychiatry, 30 November–4 December 2016, New Delhi
8. Symposium on social support and psychosis, XXII World Congress of Social Psychiatry, 30 November–4 December 2016, New Delhi
9. Role of psychologist in society: Address by the Chief Guest, National seminar on
10. Psychological sciences: Current perspectives and emerging avenues of practice, training and research, 24–26 March 2017, Central University of south Bihar-Patna
11. Principles of Mental Health, Health Awareness Programme by the Ministry Communications 29 March 2017, Soochna Bhawan, New Delhi

Raka Jain: 1

1. Utility of testing drugs of abuse, training Programme for Police Personnels from Central Detective Training School Ghaziabad, 7 March 2017, NDDTC, Ghaziabad

Rakesh Lal: 5

1. Involvement in workplace intervention: Awareness session, 27–28 January 2017, Assam Oil Division of IOL, Digboi, Assam
2. Management of substance abuse, public health perspective, 6th National Conference of Psychiatrist Association of Nepal, 17–18 February 2017, Kathmandu, Nepal
3. Comorbidity in substance abuse, CME organized by Alumni Association of Central Institute of Psychiatry, Ranchi, 3–5 February 2017, Ranchi
4. Co-occurring disorders, management strategies, CME on dual diagnosis: Facing the reality and challenges, 18 March 2017, PGI, Chandigarh
5. Efforts made in India to combat substance abuse, 3rd Informal International Scientific Meeting of WHO, UNODC, 13–14 March 2017, Vienna

Anju Dhawan: 1

1. Prevention of substance use, NAMS National Symposium on Preventive Psychiatry, 11 September 2016, AIIMS, New Delhi

Sonali Jhanjee: 3

1. Brief Interventions, 5A's, WHO, ERS Train the Trainer Workshop in Bangladesh, 8–9 January 2017, NIPSOM, Dhaka, Bangladesh
2. "Drawing parallels between sugar and tobacco: Industry, science and policy", International Symposium on Sugar: is Sugar the new tobacco? Oral Health Perspectives, 11 November 2016, India Habitat Center, New Delhi
3. How to go about tobacco cessation? Public lecture, AIIMS, Tobacco is a killer in all its forms—Stop it before it stops you, 31 May 2016, JLN, Auditorium, AIIMS, New Delhi

Atul Ambekar: 18

1. Policy and legal issues related to treatment of opioid dependence, Annual Conference of Indian Psychiatric Society (IPS), Punjab and Chandigarh, 2 April 2016, Amritsar

2. National policy on alcohol: Current status and way ahead, panel discussion during the National CME, “Alcohol Use Disorders: Contemporary Issues”, 30 April 2016, AIIMS, New Delhi
3. Management of dual diagnosis: Substance use disorders and personality disorders, Annual CME of Indian Association of Private Psychiatry (IAPP), 8 May 2016, Amritsar
4. Opioid substitution therapy: An overview, Training Programme for Policy Makers, and Health Care Providers from Bhutan, 23 June 2016, United Nations Office on Drugs and Crime (UNODC), New Delhi
5. Support. Don’t punish: People who use drugs should no longer be criminalized, Panel Discussion on the Occasion of International Day against drug abuse and illicit trafficking organized by the India HIV/AIDS Alliance, 26 June 2016, India Habitat Centre, New Delhi
6. Delirium Tremens: Assessment and management, PG Development Programme of Indian Psychiatric Society, Central Zone, 8 July 2016, Mussorie
7. Overview of abuse of pharmaceutical drugs containing NDPS in India, National Training for Drug Law Enforcement Officers, 14 July 2016, National Academy of Customs, Excise and Narcotics (NACEN), Faridabad
8. Substance use: An overview, Guest lecture for the students and faculty, 4 August 2016, Amity University, NOIDA
9. Behavioural addictions: Nosology and Biology, Global Conference on Biological Psychiatry, 13 August 2016, Bangalore
10. Substance use: An overview, Guest lecture for the students and faculty, 15 September 2016, Amity University, NOIDA
11. Policy and programme responses to behavioural addictions in India, International Meeting on Policy and Programme Responses to Excessive Use of Internet and Other Communication Devices, WHO (Geneva), 6 September 2016, Hong Kong
12. Management of substance use and co-morbid anxiety disorders, National Conference of Indian Association of Private Psychiatry (IAPP), 6 November 2016, Kolkata
13. Management of drug dependence in India: Policy issues, MEDI, EXPO 2016, 20 November 2016, NSCB Government Medical College, Jabalpur
14. Behavioural addictions: A debatable entity? National CME on Addictions, Indian Psychiatric Society, 6 December 2016, NIMHANS, Bengaluru
15. Abuse of pharmaceutical drugs in South Asia , Training Programme for Department of Narcotics Control, Bangladesh, 8 December 2016, National Academy of Customs, Excise and Narcotics (NACEN), Faridabad
16. Alcohol use disorders: Intervention strategies, Annual National Conference of Indian Society of Gastro-entriology (ISGCON-2016), 16 December 2016, Pullman Aerocity, New Delhi
17. Narcotic Drugs and Psychotropic Substances Act (1985): Why it matters for addiction treatment professionals? International Conference of International Academy of Law and Mental Health (IALMH), 17 December 2016, NIMHANS, Bengaluru
18. Pharmaceutical drug abuse in India, Training Programme for Drug Law Enforcement Officers, 22 February 2017, National Academy of Customs, Excise and Narcotics (NACEN), Faridabad

Yatan Pal Singh Balhara: 10

1. Internet addiction among adolescent students, State of Evidence, XI National Conference of Association of Cough specialists, 26 December 2016, Shaheed Dr Milon Hall, BSMMU, Dhaka, Bangladesh
2. Identification and management of Post-Traumatic Stress Disorder (PTSD), Regional Workshop for Strengthening Capacity and Preparedness on Post-disaster Mental Health and Psychosocial Support organised by World Health Organization, Regional Office for South East Asia (WHO SEAR), 26 July 2016, Dhaka, Bangladesh
3. Introduction to tools and guidelines on addressing mental health in post disaster settings for non-specialist health care providers and disaster management professionals in WHO SEAR, Regional Workshop for Strengthening Capacity and Preparedness on Post-disaster Mental Health And Psychosocial Support organised by World Health Organization, Regional Office for South East Asia (WHO SEAR), 26 July 2016, Dhaka, Bangladesh
4. Common co-occurring mental and medical disorders, UTC of ICCE, Colombo Plan-Training of the Addiction Practitioners in the Khan Hoa Province of Vietnam organised by the Colombo Plan International Centre for Credentialing and Education of Addiction Professionals (ICCE), 22–24 February 2017, Vietnam
5. Basic counselling skills for addiction professionals, UTC of ICCE, Colombo Plan, ‘Training of Trainers’ Workshop for Cambodian National Trainers organised by the Colombo Plan International Centre for Credentialing and Education of Addiction Professionals (ICCE), 20–24 January 2017, Cambodia

6. Common co-occurring mental and medical disorders, UTC of ICCE, Colombo Plan, 'Training of Trainers' Workshop for Vietnamese National Trainers organised by the Colombo Plan International Centre for Credentialing and Education of Addiction Professionals (ICCE), 22–24 November 2016, Hai Phong, Vietnam
7. Basic counselling skills for addiction professionals, UTC of ICCE, Colombo Plan, 'Training of Trainers' Workshop for Vietnamese National Trainers organised by the Colombo Plan International Centre for Credentialing and Education of Addiction Professionals (ICCE), 26–30 November 2016, Hai Phong, Vietnam
8. 'Enhancing Motivational Interviewing Skills'; 'Contingency Management'; and 'Case Management Skills and Practices', Advanced level universal treatment curriculum for substance use disorders, the Colombo Plan International Centre for Credentialing and Education of Addiction Professionals (ICCE), 18–26 May 2016, Bangkok, Thailand
9. Co-occurring psychosis and cannabis use disorders: Experiences and evidence from India, First World Congress of the World Association on Dual disorders (WADD) and 5th International Congress of the Spanish Society on Dual Disorders (SEPD), 26 March 2017, Madrid, Spain

Gauri Shankar Kaloiya: 8

1. Alcohol and drug addiction: Prevention, intervention and rehabilitation, National Seminar on Psychological Sciences, 24–26 March 2017, Central University of South Bihar (CUSB), Patna
2. Cognitive behavioural interventions in substance use disorder, Pre Conference Workshop conducted during International Conference on Cognitive Behavioural Interventions (IACBI-2017), 4 March 2017, AIIMS, New Delhi
3. Life skills training, Workshop for college students under 'RUSA', 2 March 2017, PG Government College (Punjab University), Chandigarh
4. Substance abuse: Awareness and prevention, Two Day Workshop on Drug Abuse Prevention and Counselling Skills, 27–28 February 2017, Department of Social Work, Jamia Millia Islamia, New Delhi
5. Psychosocial management of substance use disorder, Workshop conducted in Annual National Conference of Indian Society of Professional Social Work, 9–11 February 2017, Government Medical College and Hospital (GMCH), Chandigarh
6. Training opportunities in substance use disorder: Current scenario, 43rd National Annual Conference of Indian Association of Clinical Psychologists (NACIACP-2017), 26–29 January 2017, Kovai Vidyashram, Coimbatore
7. Principles of accessibility for disable people and ways of supporting them, Continuing Rehabilitation Education (CRE) sponsored by Rehabilitation Council of India (RCI), 16 November 2016, Institute of Mental Health, PGI, Rohtak
8. Substance use disorders, Advance Diploma in Counselling Psychology, 3–17 September 2016, Department of Psychology, Jamia Millia Islamia, New Delhi

Ravindra Rao: 2

1. Psychosocial rehabilitation in resource limited settings, National Workshop on Psychosocial Rehabilitation organized by World Association of Psychosocial Rehabilitation, 1–2 April 2016, Dharan, Nepal
2. Pharmacotherapy in opioid use disorders, Indian Psychiatric Society National CME in Addiction organized by NIMHANS, 6–7 December 2016, NIMHANS, Bengaluru

Ashwani Mishra: 11

1. Sample size calculation and selecting appropriate test for statistical analysis sample size calculation and selecting appropriate test for statistical analysis, Analytical methods in biostatistics at 3rd Workshop on Biomedical Data Analysis using R, 24 January 2017, National Institute of Pathology, ICMR, New Delhi
2. Hands on training on MS Excel, Operational Research Workshop on research methods, AIIMS Diamond Jubilee Celebrations and CRHSP Ballabgarh Golden Jubilee Celebrations, 19 January 2016, Ballabgarh
3. Implementation of respondent driven sampling in mapping and size estimation of street children who use drugs, Dissemination Meeting at Department of Women and Child Development (DWCD), 11 January 2016, Department of Women and Child Development
4. Statistical aspects of National survey on extent and pattern of substance use in India, National Consultation Workshop on National survey on extent and pattern of substance use in India, 14 October 2016, AIIMS
5. State stratification plan under National survey on extent and pattern of substance use in India, National Consultation Workshop on National survey on extent and pattern of substance use in India, 14 October 2016, AIIMS, Agra
6. Applying parametric and non-parametric test, in the Second-Post Graduate Course on Research Methodology, 29 September 2016, Pune

7. Epidemiological approaches in substance use disorder, Panel Discussion at 91st Foundation Course for All India and Central Civil Services Group A Officers, 1 October 2016, RCVP Noronha Academy of Administration and Management, Bhopal
8. Lecture on parametric and non-parametric test, Post Graduate Course on Research Methodology, Writing and Communication, 28 July 2016, NDDTC, New Delhi
9. Sampling methodology and data analysis plan, CME on National survey on extent and pattern of substance use in India, 25 July 2016, AIIMS, New Delhi
10. Essence of on drug abuse monitoring system, Orientation session to second semester residents for the year 2017, 12 April 2016, NDDTC, AIIMS

Rachna Bhargava: 12

1. Use of mental disorders classification system in clinical practice: Focus on mega countries, 31st International Congress of Psychology, 25 July 2016, Pacifico Yokohama
2. Tertiary prevention in psychiatry in low resource setting, Workshop in National Symposium on Preventive Psychiatry, 11 September 2016, AIIMS, New Delhi
3. Dysgraphia-CME cum Workshop on learning disorders: Identification and assessment, 10 March 2017, PGIMER, Chandigarh
4. Formative field studies for development of ICD 11, ANCIPS, 5–8 January 2017 Dr Shayama Prasada Trade Centre, Raipur
5. Brief intervention, Refresher training program for Delhi Schools, 8 June 2016, SPYM, Delhi
6. Dealing with patients with Crisis-Lecture for Medical Officers, 26 April 2016, JSS Hospital, Ganiyari, Bilaspur
7. Specific learning disorder: Identification issues, Symposium in NAC IACP, 27 February 2017, Kovai Vidyashram, Coimbatore
8. Specific learning disorder: Management, National CME on Child and Adolescent Psychiatry Specialty Section, IPS, 9 June 2016, Kolkata
9. Coping with stress and interpersonal relationships, lecture, 4 April 2016, IIT, Delhi
10. Assertive training-lecture, 4 April 2017, College of Nursing, Lajpat Nagar, New Delhi
11. De-Stress Lecture, 30 January 2017, Sarvodya Vidyalya under North West District Legal Services Authority, New Delhi
12. Psychological First Aid, Public Lecture on World Mental Health Day, 7 October 2016, AIIMS, New Delhi

Prabhoo Dayal: 1

1. Risk factors and complications, internet, and computer game addiction: Current perspective in Indian Scenario, 7 March 2017, BSAMCH, New Delhi

Alok Agarwal: 7

1. Maintenance treatment of opioid dependence using methadone, Training programme on Methadone Maintenance Treatment (MMT) organized by Nossal Institute of Global Health (NIGH), Australia and National AIDS Control Organization, Government of India, 11–15 April 2016, Imphal, Manipur
2. Innovations in cannabis laws elsewhere in the world. Can these be replicated in India? Conference on drug problem in Himachal Pradesh: Searching for truth and solutions organized by Institute for Narcotics Studies and Analysis, New Delhi, 18–20 April 2016, Dev Sadan, Kullu, Himachal Pradesh
3. Addictions as a mental health problem, panel discussion on the occasion of World Mental Health Day, Ministry of Health and Family Welfare, Government of India, 10 October 2016, New Delhi
4. Capacity building for addiction treatment in India: Models and approaches, Annual Conference of the International Society of Addiction Medicine, 2016, 20–22 October 2016, Montreal, Canada
5. Recent technological advances in treatment of opioid use disorders, Annual National Conference of Indian Psychiatric Society (ANCIPS 2017), 5–8 January 2017, Rajyotsav Ground, Raipur, Chhattisgarh
6. National survey on extent and pattern of substance use in India: Methodological issues, Annual National Conference of Indian Psychiatric Society (ANCIPS 2017), 5–8 January 2017, Rajyotsav Ground, Raipur, Chhattisgarh

Biswadip Chatterjee: 19

1. Managing drug-related incidents, 5 Day Orientation Programme for service providers from Sikkim, 13 April 2016, UNODC, New Delhi

2. Panel discussion on drug supply and demand reduction, International Conference on Drug and Development, 9 April 2016, University Institute of Legal Studies (UILS), University, Chandigarh (India), Punjab
3. Physiology and pharmacology on drug use, 3 Months Certificate Course on Drug De-addiction and Counseling, 22–26 August 2016, NISD, RK Puram, New Delhi
4. Addiction as a disease: What are psychoactive substances, Classification of psychoactive substances, addiction and the reward circuit and brain communication : Impact of drug on brain/how brain react, methods (routes) of administration: Occasional use, experimental use and dependence, stages of drug dependence, brief intervention, screening and assessment of client, sensitization programme on orientation on drug de-addiction counselling for RRTCs/IRCAS functionaries, 5–9 December 2016, ISTM, New Delhi
5. Sign and symptoms of substance abuse, myth and facts related to substance abuse, cause and consequences, role of parents and teachers in prevention of drug abuse, Training Programme of the Teachers and EVGC Counsellors of Delhi Government schools, 22 November 2016, SCERT Bhawan, Defence Colony, New Delhi
6. Operational issues in managing DTCs, staffing and infrastructure, clinical management, registration and patient flow, Refresher Training for Staff of Drug Treatment Clinics (DTCS) organized by National Drug Dependence Treatment Centre, AIIMS, New Delhi, 10 May 2016, East of Kailash, New Delhi
7. Basics of drugs, Induction Training for Staff of Drug Treatment Clinics (DTCS) organized by National Drug Dependence Treatment Centre, AIIMS, New Delhi, 8 August 2016, New Delhi
8. Drug use vulnerability and drug use disorders, Induction Training for Staff of Drug Treatment Clinics (DTCS) organized by National Drug Dependence Treatment Centre, AIIMS, New Delhi, 8 August 2016, New Delhi
9. Drug abuse management strategies, Induction Training for Staff of Drug Treatment Clinics (DTCS) organized by National Drug Dependence Treatment Centre, AIIMS, New Delhi, 8 August 2016, New Delhi
10. Treatment principles of substance use disorders, Induction Training for Staff of Drug Treatment Clinics (DTCS) organized by National Drug Dependence Treatment Centre, AIIMS, New Delhi, 8 August 2016, New Delhi
11. Assessment and diagnosis in substance use disorders, Induction Training for Staff of Drug Treatment Clinics (DTCS) organized by National Drug Dependence Treatment Centre, AIIMS, New Delhi, 8 August 2016, New Delhi
12. Operational issues in managing DTCs, staffing and infrastructure, clinical management, registration and patient flow, Induction Training for Staff of Drug Treatment Clinics (DTCS) organized by, National Drug Dependence Treatment Centre, AIIMS, New Delhi, 8 August 2016, New Delhi
13. Management of opioid dependence, detoxification and antagonist maintenance, Induction Training for Staff of Drug Treatment Clinics (DTCS) organized by Regional Institute of Medical Sciences, Imphal, Manipur, 3 August 2016, Department of Psychiatry, Regional Institute of Medical Sciences, Imphal, Manipur
14. Management of opioid dependence, substitution treatment with Buprenorphine (with std. practice), Induction Training for Staff of Drug Treatment Clinics (DTCS) organized by Regional Institute of Medical Sciences, Imphal, Manipur, 3 August 2016, Department of Psychiatry, Regional Institute of Medical Sciences, Imphal, Manipur
15. Management of opioid dependence, substitution treatment with Methadone (with std. practice), Induction Training for Staff of Drug Treatment Clinics (DTCS) organized by Regional Institute of Medical Sciences, Imphal, Manipur, 3 August 2016, Department of Psychiatry, Regional Institute of Medical Sciences, Imphal, Manipur
16. Management of alcohol dependence, practice guidelines for deterrence treatment, Induction Training for Staff of Drug Treatment Clinics (DTCS) organized by Regional Institute of Medical Sciences, Imphal, Manipur, 3 August 2016, Department of Psychiatry, Regional Institute of Medical Sciences, Imphal, Manipur
17. ASSIST and brief intervention for alcohol abuse, Induction Training for Staff of Drug Treatment Clinics (DTCS) organized by Regional Institute of Medical Sciences, Imphal, Manipur, 4 August 2016, Department of Psychiatry, Regional Institute of Medical Sciences, Imphal, Manipur
18. Stock management and medication dispensing in DTCs, Induction Training for Staff of Drug Treatment Clinics (DTCS) organized by Regional Institute of Medical Sciences, Imphal, Manipur, 4 August 2016, Department of Psychiatry, Regional Institute of Medical Sciences, Imphal, Manipur
19. Management of DTC functioning, funding and accounting, procurement and supplies (medicines and equipment) other administrative issues, Induction Training for Staff of Drug Treatment Clinics (DTCS) organized by Regional Institute of Medical Sciences, Imphal, Manipur, 5 August 2016, Department of Psychiatry, Regional Institute of Medical Sciences, Imphal, Manipur

Piyali Mandal: 1

1. Overview of NDDTC, Training Programme for Police Personnels from Central Detective Training School Ghaziabad, 7 March 2017, NDDTC, Ghaziabad

Siddharth Sarkar: 3

1. Psychotic disorders and co-occurring substance use, dual diagnosis: Facing the reality and the challenges, 18 March 2017, PGIMER, Chandigarh
2. Prevalence and phenomenology, internet and computer game addiction: Current perspective in Indian scenario, 7 March 2017, BSAMCH, Delhi
3. Disability in patients with dual diagnosis and time for a paradigm shift in care, 22 World Congress of Social Psychiatry, 30 November 2016, AIIMS, New Delhi

Oral papers/posters presented: 57

1. Ambekar A, Rao R, Mohan A. Access to opioid medications in India: A confused and entangled policy framework, Annual Conference of International Society for the Study of Drug Policy (ISSDP 2016), 16 April 2016, National Drug and Alcohol Research Centre, Sydney, Australia
2. Ambekar A, Singh T, Mishra A, Rao R, Agrawal A, Kumar R, Kumar M. Factors associated with risk of transition to injecting among non-injecting opioid users in India: A multi-site study from North India, Annual Conference of International Society of Addiction Medicine (ISAM 2016), 20 October 2016, Montreal, Canada
3. Ambekar A. Innovative methods for capacity building in addiction treatment in India, Online OST training, Annual Conference of International Society of Addiction Medicine (ISAM 2016), 20 October 2016, Montreal, Canada
4. Ambekar A, Mishra A, Rao R, Agrawal A. National Survey on extent and pattern of substance use in India: Methodology and operational issues, Annual National Conference of Indian Psychiatric Society (ANCIPS), 6 January 2017, Raipur
5. Ambekar A, Agrawal A, Bhuyan A, Singh P. Technological advances in the pharmacological management of addictions, Annual National Conference of Indian Psychiatric Society (ANCIPS), 8 January 2017, Raipur
6. Ambekar A. Managing pain in palliative care with opioids: Perspective of an addiction treatment provider, Annual Conference of Indian Association of Palliative Care (IAPCON 2017), 11 February 2017, Coimbatore
7. Ambekar A. Behavioral addictions: Concepts and controversies, Annual Conference of Psychiatrists Association of Nepal (PANCON), 17 February 2017, Kathmandu
8. Balhara YPS. Moving from addiction disorders to dual disorders: Implications for training health professional in Low and Middle Income Countries (LMICS), First World Congress of the World Association on Dual Disorders (WADD) and 5th International Congress of the Spanish Society on Dual Disorders (SEPD), 24 March 2017, Madrid, Spain
9. Balhara YPS, Sarkar S, Tripathi R, Shalini S. A comparative study of pathways to care among patients with substance use disorders with and without co-occurring psychiatric disorders, First World Congress of the World Association on Dual Disorders (WADD) and 5th International Congress of the Spanish Society on Dual Disorders (SEPD), 26 March 2017, Madrid, Spain
10. Bagra I, Rao R, Dhawan A, Agrawal A. A cross-sectional study of Cannabis use among opioid dependent patients maintained on Buprenorphine in a community based Drug Treatment Clinic, Annual Conference of the International Society of Addiction Medicine, 2016, 20–22 October 2016, Montreal, Canada
11. Bhattacharjee S, Kumar R, Agrawal A, O'Grady KE, Jones HE. Emerging substance use patterns among children in India, NIDA International Forum, 10–13 June 2016, California
12. Bhargava R, Dhawan A, Sagar R, Shah R. Adolescents mental health issues and management in tertiary care hospital setting in Indian context, Symposium in WASP, 30 November 2016, New Delhi
13. Bhargava R, Mandal P, Patnaik K P, Gupta A, Dhawan A. Substance use and psychosocial profile among children and adolescents attending a tertiary National Drug Dependence Treatment Centre: An Indian study, Conference of Royal College of Psychiatrists, 27 June 2016, Excel, London
14. Bhargava R, Mandal P, Patnaik K P, Gupta A, Dhawan A. Treatment compliance and their correlates among children and adolescents seeking treatment in tertiary hospital in North India, 22nd World Congress of Social Psychiatry (WASP), 30 November–4 December 2016, New Delhi
15. Chatterjee B. Technological aspects of e-cigarettes in Symposium entitled “E- Cigarettes Use: Is It an Acceptable Alternative?” 22nd World Congress of Social Psychiatry (WASP), 30 November–4 December 2016, New Delhi
16. Dayal P, Balhara YPS, Prasad S. Heroin use among married females: Are they unwilling victims? 22nd World Congress of Social Psychiatry (WASP), 30 November–4 December 2016, New Delhi
17. Dhawan A. Capacity building and linkage with health services in the Symposium by the training and Academic Committee ISAM, Conference of the International Society of Addiction Medicine 2016, 21 October 2016, Montreal

18. Dhawan A. Specialized training programmes for health professionals in the Symposium capacity building and quality assurance on addiction treatment in India: Models and approaches, Conference of the International Society of Addiction Medicine 2016, 20 October 2016, Montreal
19. Ganesh R, Chatterjee B. Cannabis use disorder: Review of treatment options, 22nd World Congress of Social Psychiatry (WASP), 30 November–4 December 2016, New Delhi, India
20. Gyawali S, Saini V, Singh S, Balhara YPS, Sarkar S. Relationship of stigma with disability among treatment seeking substance users, ANCIPS 2017, 5–8 January 2017, Dr Shyama Prasad Mukherjee Trade Center, Raipur
21. Gyawali S, Saini V, Singh S, Balhara YPS, Sarkar S. Perceived and internalized stigma among substance users: An exploratory study, ANCIPS 2017, 5–8 January 2017, Dr Shyama Prasad Mukherjee Trade Center, Raipur
22. Jain R. Stability of substance use in urine spotted on filter paper at various storage conditions over a 12 weeks period, 12th Indo Pacific Association of Law, Medicine and Science (INPALMS Congress 2016), 17–23 September 2016, Bali, Indonesia
23. Jain R. Current understanding of the neurobiology of the nicotine dependence: The role of NAcRs and dopamine and their treatment implications. In Symposium entitled “Role of non-nicotinic acetylcholine receptors in nicotine dependence: Implications for smoking cessation treatment,” 34th Annual Meeting of Indian Academy of Neurosciences, 19–21 October 2016, National Brain Research Centre, Gurgaon District, Haryana
24. Jain R. Safety of e-cigarettes, evidence from toxicological studies. In Symposium entitled “E- Cigarettes Use: Is It an Acceptable Alternative?” 22nd World Congress of Social Psychiatry (WASP), 30 November 2016, Board Room, AIIMS, Delhi
25. Jhanjee S. Treatment of nicotine dependence, issues and challenges for head-neck surgeons, IFHNOS 2016, 15 October 2016, Delhi
26. Jhanjee S, Lal R, Mishra A, Yadav D. Tobacco use characteristics amongst women in an urban community, ISAM, CSAM, 2016, 22 October 2016, Canada
27. Jhanjee S. Can e-cigarette be considered a safe alternative to smoking what’s the consensus in Symposium entitled “E- Cigarettes Use: Is It an Acceptable Alternative?” 22nd World Congress of Social Psychiatry (WASP), 30 November 2016, Board Room, AIIMS, Delhi
28. Kalojia GS. Managing alcohol and drug abuse in youth, 26th Annual Conference of National Academy of Psychology (NOAP-2016), 28–31 December 2016, IIT, Madras, Chennai
29. Kalojia GS, Singh G. Cognitive distortions and effect of cognitive therapy on persons with ADS, International Congress of Behavioural Medicine (ICBM), 7–10 December 2016, Melbourne
30. Kamran A, Garg H, Varshney M, Agrawal A, Dayal P, Mandal P, Ambekar A. Iatrogenic opioid use disorder in a young woman: A case report with unique clinical characteristics, ANCIPS 2017, 5–8 January 2017, Raipur
31. Mandal P. The role of the glutamate and cannabinoid neurotransmitter systems in nicotine dependence and their treatment implications, 34th Annual Meeting of Indian Academy of Neurosciences, 19 October 2016, National Brain Research Centre
32. Mandal P, Chatterjee B, Sagar R, Prakash S. Stigma towards mentally ill among health care staffs in India and way forward, 22nd World Congress of Social Psychiatry (WASP), 3 December 2016, New Delhi
33. Mandal P. Do e-cigarettes help to quit tobacco use, what is the evidence? In Symposium entitled “E- Cigarettes Use: Is it an acceptable alternative?” 22nd World Congress of Social Psychiatry (WASP), 3 December 2016, New Delhi
34. Mishra AK. Dimension reduction techniques: An overview 25th International Conference on Mathematics, Statistics and Computational Techniques, Forum for Interdisciplinary Mathematics (FIM), 22–24 December 2016, Manipal University, Jaipur
35. Mishra AK, Balhara YPS, Kedia S, Khandelwal SK. Application of geographical information system for understanding epidemiology of substance use in India, Joint Conference: ISAM and CSAM-SMCA XXVII, Annual Meeting and Scientific Conference, Montreal, Canada, 20–22 October 2016, Canada, Montreal
36. Patil V, Balhara YPS, Dayal P. A comparative study of psychiatric co-morbidity and high-risk behavior among persons with injecting prescription opioid dependence and injecting heroin dependence, ANCIPS, 5–8 January 2017, Raipur,
37. Quraishi R. Feasibility of using filter paper as a matrix for drug screening in urine of substance users, 49th Annual Conference of Indian Pharmacological Society, 20–23 October 2016, PGIMER, Chandigarh
38. Quraishi R. Association of alcohol use pattern with liver enzyme levels. Report from Tertiary Care Treatment Center in India, 22nd World Congress of Social Psychiatry (WASP), 30 November–4 December 2016, Delhi

39. Raghav R, Jain R, Roy TS, Dhawan A, Kumar P, Chronic Co. Administration of Nalbuphine is effective in decreasing the rewarding effects of morphine in rats, 49th Annual Conference of Indian Pharmacological Society, 20–23 October 2016, PGIMER, Chandigarh
40. Raghav R, Jain R, Roy TS, Dhawan A, Kumar P. Regulation of tyrosine hydroxylase in response to co-administration of Nalbuphine in opiate dependent rats, 46th Annual Meeting of Society for Neuroscience, 12–16 November 2016, Convention Centre, San Diego, USA.
41. Raghav R, Jain R, Roy TS, Dhawan A, Kumar P. Nalbuphine could decrease the rewarding effects of morphine in rats, 34th Annual Conference of Indian Academy of Neurosciences, 19–21 October 2016, National Brain Research Centre, Manesar
42. Rao R, Kedia S, Ambekar A, Agrawal A, Khandelwal SK. Long-term effectiveness of standardized drug-treatment training on participant knowledge, A 12-month follow-up study, ANCIPS 2017, 5–8 January 2017, Rajyotsav Ground, Raipur, Chhattisgarh
43. Sahu A, Bhargava R, Patil V, Balhara YPS. A systematic review of cognitive behaviour approaches for the management of internet addiction, International Conference on Cognitive Behavioural Interventions, 5–8 March 2017, AIIMS, New Delhi
44. Sahu A, Bhargava R, Sagar R, Mehta M. Impact of home-based intervention in specific learning disorder: A pre-post study, 54th Annual International Conference of Learning Disability Association of America (LDA), 16–19 February 2017, Baltimore, MD, USA
45. Sahu A, Bhargava R, Sagar R. Utility of home-based intervention for specific learning disorder: A pilot study, National Annual Conference of Indian Association of Clinical Psychologists (NACIACP), 27–29 January 2017, Kovai Vidyashram, Coimbatore
46. Sahu S, Sarkar S, Bhargava R, Sagar R. A systematic review and meta-analysis of parent implemented interventions for reading disorder (Dyslexia), National Annual Conference of Indian Association of Clinical Psychologists (NACIACP), 27–29 January 2017, Kovai Vidyashram, Coimbatore
47. Sahu A, Bhargava R, Sagar R, Mehta M. Home-based intervention for specific learning disorder: A Case Series, 22nd World Congress of Social Psychiatry (WASP), 30 November–4 December 2016, New Delhi
48. Sahu A, Bhargava R, Sagar R, Mehta M. Psychopathological co-morbidities in specific learning disorders: A Cross-sectional Study, 22nd World Congress of Social Psychiatry (WASP), 30 November–4 December 2016, New Delhi
49. Sahu A, Bhargava R, Sagar R, Mehta M. Feasibility of home-based intervention module for specific learning disorder in Indian Context, 22nd International Association for Child and Adolescent Psychiatry and Allied Professions World Congress (IACAPAP), 18–22 September 2016, TELUS Convention Centre, Calgary
50. Sayal A, Lal R, Balhara YPS, Sarkar S. Prevalence and characteristics of dual diagnosis among patients admitted to a de-addiction treatment facility, ANCIPS 2017, 5–8 January 2017, Dr Shyama Prasad Mukherjee Trade Center, Raipur
51. Singh K, Singh D, Mitra S, Junnarkar M, Dayal P. Effect on well-being of spiritual practices among elderly rural women, Mid-year Conference on Psychology, Spirituality and Religion, Society for the Psychology of Religion and Spirituality (APA Div. 36), 11–12 March 2016, New York, USA
52. Singh V, Kalojiya GS, Ambekar A. Family interventions addressing expressed emotions in opioid dependent individual caregivers and its feasibility, a case study, International Conference on Cognitive Behavioural Interventions (IACBI-2017), 6–8 March 2017, AIIMS, New Delhi
53. Tewari A, Singh J, Gautam N, Balhara YPS, Sarkar S. Reasons of disciplinary discharges from a Tertiary Care De-addiction Setting in India, ANCIPS 2017, 5–8 January 2017, Dr Shyama Prasad Mukherjee Trade Center, Raipur
54. Verma A, Jain R, Dhawan A, Lakshmy R. Socio-demographic and biochemical profile of adolescent inhalant users seeking treatment at a Tertiary Care Centre of India, 22nd World Congress of Social Psychiatry (WASP), 30 November–4 December 2016, New Delhi
55. Verma A, Jain R, Dhawan A, Lakshmy R. Elevated levels of serum tumor necrosis factor (TNF), α among adolescent inhalant users, 49th Annual Conference of Indian Pharmacological Society, 20–23 October 2016, PGIMER, Chandigarh
56. Verma A, Jain R, Dhawan A, Lakshmy R. Evaluation of oxidative stress markers among adolescent inhalant users seeking treatment at a Tertiary Care Centre in North India, 12th Indo-Pacific Association of Law, Medicine and Science Congress 2016 (INPALMS 2016), 17–23 September 2016, Bali, Indonesia,
57. Vikram NV, Yoosuf S, Pandey RM, Ranjan P, Kumar N, Bhargava R. Psychosocial co-morbidities among obese patients in a Tertiary Health Care Centre in India, 22nd World Congress of Social Psychiatry (WASP), 30 November–4 December 2016, New Delhi

RESEARCH

Funded projects

Ongoing

1. Role of Delphinium Denudatum (Jadwar) in a rat model of Nicotine Dependence, R Jain, AYUSH, 3 years, 2017–2019, Rs. 29.16 lakhs
2. National survey on extent and pattern of substance use in India, A. Ambekar, Ministry of Social Justice and Empowerment, Government of India, 2 years, 2017–2018, Rs. 30.85 crores
3. A comparative study of status of reproductive and sexual health and prevalence of sexual dysfunction among young individuals with mental and substance use disorder related disability, Balhara YPS, ICMR, 2015–2017, Rs. 8.04 lakhs
4. Development of cognitive retraining module for improving cognitive deficits of abstinent patients with alcohol dependence syndrome, cannabis dependence syndrome and opioid dependence syndrome in a Tertiary Care De-Addiction Centre of Northern India, Kaloiya GS, DST, 3 years, Rs. 18.49 lakhs
5. Portrayal of psychoactive substance use in bollywood movies: A mixed methods study, Rao R, AIIMS, 1.5 years, 2016–2018, Rs. 1.45 lakhs
6. Relationship of serotonin pathway polymorphisms with self-harm behaviour among patients with opioid dependence, Sarkar S, DST, 2 years, 2017–2019, Rs. 19 lakhs
7. Serum BDNF levels in patients with opioid dependence during the early withdrawal period: A case control study, Sarkar S, AIIMS, 2016–2017, Rs. 3 lakhs

Completed

1. Mapping and size estimation of street children who use drugs in Delhi, Dhawan A, Department of Women and Child Development, Government of Delhi, 1 year, 2015–2016, Rs. 18.18 lakhs
2. Developing and testing an online training programme on implementing Opioid Substitution Therapy (OST), Ambekar A, Public Health Foundation of India (PHFI), 2 years, 2014–2016, Rs. 12.7 lakhs
3. Cognitive behavioural based intervention in group setting for Tobacco Cessation in Tertiary De-Addiction Centre in Northern India, Kaloiya GS, ICMR, 1 year, 2015–2016, Rs. 4.37 lakhs

Departmental projects

Ongoing

1. A comparative study of ethyl glucuronide (EtG) and fatty acid ethyl ester (FAEE) with other conventional biomarkers in alcohol dependent subjects
2. A cross-sectional, community based comparative study of patients maintained on methadone versus buprenorphine on substance use, psychiatric comorbidity and quality of life
3. An exploratory study to assess the association between nicotine metabolite ratio (NMR) and smokeless tobacco use parameters
4. Assessment of substance use and factors associated with tobacco use in female college going students: An exploratory study
5. Patterns of use and psychosocial consequences of cannabis use in a community setting
6. Risk behaviors of young injection drug users (IDU) in community setting
7. Effect of smoking on platelets monoamine oxidase B activity levels in opioid dependent patients on maintenance treatment: An exploratory study
8. Serum BDNF levels in patients with alcohol dependence during withdrawal (Thesis)
9. A study on the prevalence of co-occurring psychiatric disorders among patients with substance use disorder seeking in-patient treatment at a Tertiary Care Center. (Thesis)
10. A prospective study to assess retention rate and predictors of treatment retention among patients with opioid use disorders
11. An observational study to assess stigma among patients with substance use disorders, and its Association with Quality of Life, Help-seeking and Disability
12. Patient and caregiver perspectives on ethical issues in mental health care: An exploratory study from India
13. An empirical study to evaluate the impact of change in formulation of buprenorphine, Naloxone on prescription pattern and patient satisfaction
14. Intravenous Naloxone on Opioid Agonist effects of Intravenous Buprenorphine: A double-blind, within-subject, randomized, cross-over study among opioid dependent subjects

15. A comparative study of alcohol biomarkers and their clinical applicability in alcohol dependence
16. Family interventions addressing expressed emotions in treatment seeking men with opioid dependence
17. Cognitive representation and efficacy of Cognitive Therapy in individuals with Alcohol Dependence Syndrome
18. Oral methadone versus sublingual buprenorphine for treatment of Acute Opioid Withdrawal: A randomized, double-blind, double-dummy, controlled Study
19. Effect of concurrent administration of intravenous Naloxone on Opioid Agonist Effects of Intravenous Buprenorphine: A double-blind, within-subject, randomized, cross-over study among opioid dependent subjects
20. Association between C reactive protein level and alcohol consumption among patients of alcohol use disorder: A cross sectional exploratory study
21. A cross-sectional observational study to assess help seeking behaviour for alcohol use disorders among patients with alcoholic liver diseases
22. Knowledge, risk factors and experience of non-fatal overdose among injecting drug users: A community-based, cross-sectional study
23. Oral methadone versus sublingual buprenorphine for treatment of acute opioid withdrawal: a randomized, double-blind, double-dummy, controlled study
24. Effect of concurrent administration of intravenous naloxone on opioid agonist effects of intravenous buprenorphine: A double-blind, within-subject, randomized, cross-over study among opioid dependent subjects
25. Association between serum C-reactive protein level and alcohol consumption among patients of alcohol use disorders: a cross-sectional, exploratory study
26. Out-patient management of acute opioid withdrawal with buprenorphine in community-based setting: A retrospective chart review
27. Cognitive representations and feasibility of cognitive therapy among individuals with alcohol dependence syndrome
28. Development of cognitive behaviour based intervention module for adolescents in conflict with law
29. FMRI changes associated with cue-induced craving in tobacco smokers
30. Assessment of substance use and factors associated with tobacco use in an urban college going women students: An exploratory study
31. A comparative study of pattern and severity of substance use and comorbidity among outpatient youth and older adult opioid users
32. Study of sleep parameters in opioid dependent patients maintained on buprenorphine
33. Stress, coping and strain among family members of patients with substance use disorder and its correlation with patient's treatment outcome: A prospective study from India
34. A prospective study to evaluate the effectiveness of Alcohol Use Disorders Identification Test (AUDIT) assisted brief intervention for alcohol use disorders at primary care setting in India
35. Translation, adaptation and validation of entire Alcohol Use Disorders Identification Test (AUDIT) manual (including questionnaire) in Hindi language (agreement executed between WHO and NDDTC)
36. A naturalistic comparison of retention in treatment among young adults entering naltrexone and buprenorphine treatment for opioid dependence
37. A prospective study to assess retention rate and predictors of treatment retention among patients with opioid use disorders
38. Cognitive representation and effects of Cognitive Therapy on individuals with Alcohol Dependence Syndrome.
39. Family interventions addressing expressed emotions in treatment seeking men with opioid dependence.
40. Association between C-reactive protein level and alcohol consumption among patients of Alcohol use Disorders: A cross sectional exploratory study (Thesis)
41. Knowledge, risk factor and experience of non-fatal overdose among injecting drug users: A community-based, cross-sectional study
42. An observational study of treatment seeking users of natural opiates (opium and poppy husk) at a Tertiary Care Centre
43. A comparative study of pattern and severity of substance use and co-morbidity among outpatient youth and older adult opioid users
44. Oral methadone versus sublingual buprenorphine for treatment of acute opioid withdrawal: A randomized, double-blind, double-dummy, controlled study
45. Urinalysis based evaluation of compliance and pattern of drug use among opioid dependent subjects prescribed tramadol at a Tertiary Care Treatment Centre.

46. An efficient method for simultaneous detection of cotinine, pentazocine and pheniramine in urine of substance users by gas-chromatography, Nitrogen phosphorus detector
47. Effect of smoking on platelets monoamine oxidase B activity levels in opioid dependent patients on maintenance treatment: An exploratory study.
48. A study of serum BDNF levels in patients with alcohol dependence during withdrawal
49. Assessment of biochemical measures in adolescent inhalant users
50. A comparative study of ethyl glucuronide (EtG) and fatty acid ethyl ester (FAEE) with other conventional biomarkers in alcohol dependent subjects
51. Development of cognitive behavioral based psychological intervention model for adolescents in conflict with law
52. Development of home-based intervention for specific learning disorder
53. Assessment of substance use and associated factors in urban college going women students: An exploratory study
54. To study the psychiatric morbidity and cognitive functioning in children and adolescents with bronchial asthma
55. Cross-sectional, controlled fMRI study on neural correlates of dissociation in dissociative convulsions
56. Development of psychological intervention module among adolescents with dissociative disorder
57. A study to assess personality, psychological distress and adjustment difficulties among nursing students at AIIMS

Completed

1. A cross-sectional comparative study of cannabis use among patients on Buprenorphine, based Opioid Substitution Therapy
2. A cross-sectional comparative study on personality profile and mental-health among young people who use drugs
3. A retrospective chart review of treatment completers versus non-completers among in, patients at a Tertiary Care Drug Dependence Treatment Centre in India
4. Comparative study of individual versus group trans-diagnostic cognitive behavior therapy in adolescents with headache and anxiety disorder
5. Economic analysis of Opioid Substitution Therapy under National AIDS Control Programme, a cross-sectional comparative study
6. Effect of nalbuphine on opiate withdrawal in rats: Behavioural, biochemical and molecular study
7. Effect of repetitive transcranial magnetic stimulation on cognitive functioning in moderate traumatic brain injury
8. Effectiveness of screening and brief intervention for moderate/high risk alcohol use among patients on buprenorphine maintenance: A clinical and alcohol-biomarker study
9. Effectiveness of smoking cessation intervention in opioid dependent subjects on against maintenance treatment
10. Magnitude of psychiatric comorbidity in patients with obesity in a Tertiary Care Centre
11. Need assessment survey about consultation liaison psychiatry amongst the clinical faculty members at AIIMS, New Delhi
12. Neurochemical correlates of cognitive functions in patients with bipolar disorder in euthymic state
13. Pilot study to assess problem gambling among substance users at a de-addiction centre
14. Platelets monoamine oxidase B activity levels and cognitive functions in patients with alcohol dependence
15. Prefrontal cortical activity in children with ADHD: A Functional near infrared spectroscopy (fNIRS) study

Collaborative projects

Ongoing

1. An observational study to assess stigma among patients with substance use disorders, and its association with quality of life, help-seeking and disability (Hospital Administration)
2. Study on the association of polymorphism, methylation and expression status of the genes of monoamine pathways in alcohol dependence (Anatomy)
3. Study of aspirin and clopidogrel resistance by platelet aggregation and its association with adverse outcomes in Indian stable coronary artery disease patients (Cardiology)
4. National survey on extent and patterns of substance use in India (Ministry of Social Justice and Empowerment, Government of India and 10 medical institutes from all across the country)
5. Developing and implementing training mechanism for use of Essential Narcotic Drugs (ENDs) for treatment of opioid dependence (Department of Revenue, Ministry of Finance, Government of India, KEM Hospital, Mumbai and Regional Institute of Medical Sciences, Imphal)

6. Proteomics of CSF for the identification of protein signatures in the dopamine dictated states of Schizophrenia and Parkinson's disease (Biostatistics)

Completed

1. Anxiety disorder amongst adolescents in rural Ballabgarh, A community-based study (Centre for Community Medicine)
2. Punjab opioid dependence survey (Society for promotion of youth and masses and Ministry of Social Justice and Empowerment, Government of India)
3. Mapping and size estimation of street children who use drugs in Delhi (Department of Women and Child Development, Government of NCT of Delhi and Ministry of Social Justice and Empowerment, Government of India)
4. Capacity building of clinical staff of IDU interventions under the National AIDS Control Programme (National Technical Training Centre (NTTC), National AIDS Control Organization, Government of India and Emmanuel Hospital Association)
5. A rapid situation assessment of availability and pattern of use of opioid drugs in Rajasthan (Society for Promotion of Youth and Masses, New Delhi)
6. A cross sectional study on professional stress, depression, Alcohol use and Quality of life among IT/ITES Professionals in selected companies in NCR area (Swami Shraddhanand College, Delhi University)

PUBLICATIONS

Journals: 61

Abstracts: 12

Chapters in books: 2

Books: 2

PATIENT CARE

I. Out-Patient Services

OPD	New cases	Follow-up visits	Total
1. GENERAL OPD, NDDTC	8953	47168	56121
2. SPECIALTY OPDs			
i) Children and Adolescents Clinic	96	313	409
ii) Dual Diagnosis Clinic	74	558	632
iii) Tobacco Cessation Clinic	24	629	653
iv) Women Clinic	15	74	89
Total for Specialty OPDs	209	1574	1783
3. COMMUNITY CLINICS			
i) Trilok Puri, New Delhi	331	21374	21705
ii) Sunder Nagri, New Delhi	350	47014	47364
iii) Kotla Mubarakpur, New Delhi	82	54	136
Total for Community Clinics	763	68442	69205
4. GRAND TOTAL (1+2+3)	9925	117184	127109

II. Ward Services

1. Total no. of admissions	1224
2. Total no. of discharges	1158
3. Bed occupancy	94%
4. Average length of ward stay	12 Days
5. Total no. of patients visiting day care ward	358

III. Other Patient Care Statistics

1. Total no. of deaths	NIL
2. Average no. of admissions per working day	04
3. Average no. of OPD attendance per working day - NDDTC (new patients)	30
4. Average no. of OPD attendance per working day - NDDTC (old patients)	158
5. Average no. of OPD attendance per working day – Trilok Puri community clinic (new patients)	2.21
6. Average no. of OPD attendance per working day – Trilok Puri community clinic (old patients)	72
7. Average no. of OPD attendance per working day - Sunder Nagri community clinic (new patients)	1.4
8. Average no. of OPD attendance per working day - Sunder Nagri community clinic (old patients)	158
9. Average no. of OPD attendance per working day – Kotla Mubarakpur community clinic (new patients)	8.2
10. Average no. of OPD attendance per working day – Kotla Mubarakpur community clinic (old patients)	2.16

Yearly record of Biochemistry Laboratory (April 2016 to March 2017)

1. Biochemistry Tests	=	31895
2. Hematological	=	17810
3. HIV Investigations	=	151

Yearly record of Drug Screen Laboratory (April 2016 to March 2017)

Drugs	Nos.
1. Morphine Test	3946
2. Codeine Test	2596
3. Buprenorphine Test	3311
4. Proxyvon Test	2736
5. Avil Test	2899
6. Naltrexone Test	2651
7. Pentazocine Test	2899
8. Benzodiazepines Test	5667
9. Cotinine Test	503
10. Cannabis Test	1185
11. Barbiturate Test	25
12. Cocaine Test	40
13. Inhalant Test	30
14. Promethazine	29
15. Tramadol	2668
Total number of drugs tested in urine	31,185

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor RK Chadda was awarded Hon Fellowship of the World Association for Social Psychiatry. He was chair, organizing committee, XXII World Congress of Social Psychiatry; chair, Technical Resource Group on injection drug users; member, executive committee, National Academy of Medical Sciences (India); acting treasurer, National Academy of Medical Sciences (India), September 2016 onwards; member, editorial board, BJP International; chairperson, Indian Psychiatric Society Task Force on Mental Health Legislation. He was awarded NN De Oration, Indian Association for Social Psychiatry.

Professor Reka Jain attended the “Thirty-eighth Meeting of the Expert Committee on Drug Dependence (ECDD)” as an Expert Committee member of the WHO Expert Advisory Panel on Drug Dependence (Dependence Liability Evaluation) held at Geneva, Switzerland. She was convener and chaired the Symposium entitled “Role of non-nicotinic Acetylcholine receptors in nicotine dependence: Implications for smoking cessation treatment” In, XXXIV Annual Meeting of Indian Academy of Neurosciences, National Brain Research Centre, Manesar, Haryana; chaired Symposium entitled adoption of “E-Health and Novel Approaches in Prevention of Drug Abuse and Promotion of Mental Health” in 22nd World Congress of Social Psychiatry (WASP2016) held at New Delhi.

Professor Rakesh Lal was member, Informal Scientific Network of UNODC for reducing harms due to drug use. Attended the hearing in New York; part of the expert working group of Colombo Plan; part of the coordinating council for implementation of WHO Global Strategy to reduce harmful use of alcohol. Attended Meeting held at Ljubljana, Slovenia.

Professor Anju Dhawan was awarded membership of the International Society of Addiction Medicine Education and Training Committee (2015–2016). She was member, advisory group on promotion of positive mental health in schools constituted by NCPCR.

Professor Sonali Jhanjee was section head, Society for Research on Nicotine and Tobacco (SRNT) “Global Curriculum Review Board” to work for SRNT’s Global Certification Program. She was part of expert group to finalize course modules on “Tobacco Quit Line Services” under MOH and FW.

Professor Atul Ambekar was awarded “JJ Memorial Oration on Mental Health”: Government Grant Medical College, Mumbai; was winner of “BMJ Awards South Asia 2016” for the category, “Non-Communicable Disease Initiative of the Year”; member, National Consultative Committee on Drug De-addiction and Rehabilitation, Ministry of Social Justice and Empowerment, Government of India; member, Global Burden of Disease (GBD), India Mental and Neurological Health Expert Group, Public Health Foundation of India; member, Steering Committee for Alcohol Control and Health, Ministry of Health and Family Welfare, Government of India; member, Drafting Committee for National Policy on Alcohol Control, Ministry of Social Justice and Empowerment, Government of India; member, Subject Expert Committee (Psychiatry and Neurology), Central Drug Standards Control Organization, Government of India; member, Editorial Board, Journal of Addiction and Dependence.

Dr Yatan Pal Singh Balhara was awarded the fellowship to attend the Global Health Research Training Institute organized by Fogarty’s Center for Global Health Studies (CGHS) at the U.S. National Institutes of Health; selected for the Tilak Venkoba Rao Oration Award of the Indian Psychiatric Society (for the year 2018); served as Global Trainer, Colombo Plan Drug Advisory Programme (CPDAP); Regional Mentor, International Programme in Addiction Studies, Master of Science in Addiction Studies offered by King’s College London, UK; University of Adelaide, Australia; Virginia Commonwealth University, USA; nominated as zonal representative of World Association of Dual Disorders (WADD); served as member, expert working group for finalising the advanced level Universal Treatment Curriculum (UTC) for substance use disorders of the Colombo Plan Drug Advisory Programme (CPDAP); member, Advisory Panel on Cyber Awareness Ambassador Program, South-East District, Delhi Police; member, Expert Committee for Regional Strategy on Autism Spectrum Disorders of World Health Organisation, South East Asia Regional Office (WHO–SEARO); member, Education Core Committee, World Psychiatric Association (WPA); member, Education Committee, International Society for Bipolar Disorders (ISBD); member, preventive psychiatry section of WPA; member, addiction psychiatry section of WPA; collaborative member, Gulbenkian Global Mental Health Platform; Global Mental Health Scholar, WHO and Columbia University, USA; member, task force on developing standard treatment guidelines of Ministry of Health and Family Welfare, Government of India; member, addiction psychiatry section of Indian Psychiatric Society (IPS). Technical reviewer, mental health fact sheet from GSHS version 2 for World Health Organization, Regional Office for South East Asia (WHO–SEAR); substantive expert, technical review team for the Final In-Depth Evaluation of prevention of transmission of HIV among drug users in the SAARC countries, Phase II for UNODC; Technical Advisor, AIIMS, Bhubaneswar on setting up of State De-addiction Centre at AIIMS, Bhubaneswar; reviewer, e-MHGAP prototype for World Health Organization.

Dr Gauri Shanker Kaloyia was member of Expert Working Group (EWG) to develop a standardized training module for training of Psychologists under National Mental Health Program (NMHP) by Directorate General of Health Services, department of Health and Family Welfare, MoHFW, Government of India, academic counsellor for MA in clinical psychology, IGNOU.

Dr Ravindra Rao delivered Tilak Venkoba Rao Oration Titled at Annual National Conference of Indian Psychiatric Society (ANCIPS), held at Raipur. He was awarded Certificate of Commendation for research paper by at AIIMS, New Delhi. He was member, Accreditation Committee for accreditation of Integrated Rehabilitation Centres for Addicts (IRCAs) run by Non-Governmental Organisations (NGOs) and supported through Ministry of Social Justice and Empowerment, Government of India.

Dr Ashwani Kumar Mishra was elected member for the International Statistical Institute (ISI) and International Association for Statistical Education (IASE); life member of Indian Society for Medical Statistics (ISMS) and Indian Association for Study of Population (IASP).

Dr Prabhoo Dayal was member, International Network on brief interventions for alcohol and other drugs; member, sub-committees WASP 2016.

Dr Alok Agrawal was awarded Certificate of Commendation for research paper by at AIIMS, New Delhi Co, authored the article titled “Pattern of Drug Use and Associated Behaviors Among Female Injecting Drug Users From Northeast India: A Multi-Centric, Cross-Sectional, Comparative Study” which received the *Best Research Publication Award* on the occasion of Institute Day. He was co-recipient of the *BMJ South Asia Award 2016 in the category Non-Communicable Disease Initiative of the Year* for the Strengthening of Drug Deaddiction Programme funded by the Ministry of Health and family Welfare, Government of India. He was member, Editorial Board, National Journal of Social Defence, National Institute of Social Defence, Ministry of Social Justice and Empowerment, Government of India; member, committee on Accreditation of Integration Rehabilitation Centre for Addicts (IRCAs), Ministry of Social Justice and Empowerment, Government of India

Dr Biswadip Chatterjee was awarded BMJ South Asia Award 2016 as a team member for “Scheme for Strengthening DDAP: Establishment of DTCs. Ministry of Health and Family Welfare, Drug De Addiction Programme (DDAP)” under the category Non-Communicable Disease Initiative of the year. He was member, organizing committee of the “National Symposium of Preventive Psychiatry”; organized by Department of Psychiatry, AIIMS; member, organizing committee of the Annual CME on substance use disorders titled “Alcohol Use Disorders: Contemporary Issues” organized by National Drug Dependence Treatment Centre, AIIMS; member, organizing committee of the “XXII World Congress of the World Association for Social Psychiatry”. He was invited as external resource person for induction training for staff of Drug Treatment Clinics (DTCs), 3–5 August 2016, at Department of Psychiatry, Regional Institute of Medical Sciences, Imphal, Manipur

Dr Piyali Mandal was member, organizing committee of the “National Symposium of Preventive Psychiatry”; organized by Department of Psychiatry, AIIMS; member, organizing committee of the Annual CME on substance use disorders titled “Alcohol Use Disorders: Contemporary Issues” organized by National Drug Dependence Treatment Centre, AIIMS; member, organizing committee of the “XXII World Congress of the World Association for Social Psychiatry”; chaired one of the free paper sessions in the “XXII World Congress of the World Association for Social Psychiatry”. She was peer-reviewer for “Journal of mental health and human behaviour” and “National Medical Journal of India”

Dr Siddharth Sarkar was awarded Young Psychiatrist Award of Indian Psychiatric Society.

VISITING SCIENTIST

UNODC representative for South Asia, Mr Sergey Kapinos visited NDDTC along with other UNODC officials and interacted with the faculty members. Discussion on future collaborative work took place.

10.7. Neurosciences Centre

Chief

A.K. Mahapatra

Neurology

Professor and Head

Kameshwar Prasad

Professors

M.V. Padma Srivastava

Achal Srivastava

Manjari Tripathi

Garima Shukla

Mamta Bhushan Singh

Vinay Goyal

Rohit Bhatia

Associate Professors

Deepti Vibha

Assistant Professors

Vishnu V.Y.

Awadh Kishor Pandit

Roopa Rajan

Deepa Dash

Rajesh Kumar Singh

Neurosurgery

Professor and Head

Bhawani Shankar Sharma

Emeritus Professors

Prakash Narain Tandon

Ajit K. Banerji

Professors

Ashok Kumar Mahapatra (re-joined after deputation from 13 October 2016)

Shashank Sharad Kale

Rajinder Kumar

Deepak Gupta (JPNATC)

P. Sarat Chandra

Manmohan Singh

Ashish Suri

Deepak Agrawal (JPNATC)

Sumit Sinha (JPNATC)

Associate Professors

Gurudutt Satyarthee
(JPNATC)

Vivek Tandon

Pankaj Kumar
Singh (JPNATC)

Sachin Borkar

Assistant Professors

Hitesh Gurjar

Rajeev Sharma

Dattaraj Sawarkar

Amol Raheja

Aman Jagdeewan

Shweta Kedia

Kanwaljeet Garg

Satish Verma

Shashwat Mishra

Ramesh Doddamani

Manoj Phalak

Rajesh Meena

Neuroanaesthesiology

Professor and Head

Arvind Chaturvedi

Professors

Mihir Prakash Pandia
Girija Prasad Rath

Rajendra Singh Chouhan
Hemanshu Prabhakar

Associate Professors

Gyaninder Pal Singh
(JPNATC)
Keshav Goyal (JPNATC)
Indu Kapoor

Ashish Bindra
(JPNATC)
Navdeep Sokhal
(JPNATC)
Surya Kumar Dube

Niraj Kumar (JPNATC)
Charu Mahajan

Neuroimaging and Interventional Neuroradiology

Professor and Head

S.B. Gaikwad

Professor

Ajay Garg

Associate Professor

S. Leve Joseph Devarajan

Assistant Professor

Anuj Prabhakar

Clinical Neuro-psychology

Additional Professor

Ashima Nehra

Neurobiochemistry

Assistant Professor

Ashok Sharma

Neuropathology

Professors

Chitra Sarkar

Mihir Chand Sharma

Additional Professor

Vaishali Suri

Hospital Administration

I.B. Singh

Chief Medical Officer

Dr Anjali Hazarika

Neurology

HIGHLIGHTS

The Department of Neurology is committed to help poor patients and continues to innovate for building new knowledge and improving quality of care. The main highlight is our efforts to provide patients with easy and early access to care providers and investigations. The department has reduced the video EEG waiting list from 7–8 years to 2–4 months. The introduction of ‘tatkāl’ system of registration for patients seeking consultation earlier than online appointment is a testimony to our commitment of improving access to poor patients. To mitigate the problem faced by patients to find the location of various laboratory investigations, the department has introduced patient guidance chart for laboratory investigation services available at AIIMS. To improve the quality of life for patients with multiple sclerosis, we have initiated hematopoietic stem cell transplantation that has injected much hope and enthusiasm among patients. To fill in the gaps in our knowledge regarding stroke and cognitive decline, the department is actively contributing to ongoing AIIMS Cohort study. The critical requirement to improve access as well as to build new knowledge is adequate human resource. In this aspect the department has added 12 positions of academic neurology residents and 4 assistant professors of neurology.

EDUCATION

To improve the neurology training programme at AIIMS and to ease the workload on residents and improve the quality of residency programme the strength of residents has been increased to 33. To inculcate the principles of evidence based clinical practice into our residents, we have started a new rotation on ‘Research and Evidence Based Clinical Practice’. The neurology training programme has been improved systematically by developing standard operating procedures for various academic activities like journal club, seminar, case sheet record maintenance and ward rounds. It also includes a structured format for case writing as well as residents’ evaluation. As part of department’s ongoing effort to develop various neurology subspecialty training programmes, stroke fellowship programme has been initiated with three stroke fellows sanctioned per year.

CMEs/Workshops/Symposia/National and International Conferences

1. World Multiple Sclerosis Day—Public Awareness Programme, 21 May 2016, AIIMS, New Delhi
2. World Stroke Day—Public Awareness Programme, 29 October 2016, AIIMS, New Delhi

Lectures delivered

Kameshwar Prasad: 16	M.V. Padma Srivastava: 22	Manjari Tripathi: 16
Vinay Goyal: 13	Achal Srivastava: 10	Garima Shukla: 18
Rohit Bhatia: 7	Mamta Bhushan Singh: 3	Deepthi Vibha: 15
Deepa Dash: 3	Awadh Kishor Pandit: 1	

Kameshwar Prasad: 16

1. Research priorities in stroke in India, 11th Indian National Stroke Conference, 17–19 March 2017, Amritsar
2. P value and confidence interval Randomized controlled trial Sample size and Power Critical appraisal of a journal article Meta-analysis-Workshop on Research Methodology, 5 March 2017, Jawahar Med College, Aligarh
3. Seizure after stroke: Can we predict and prevent, ECON 2017, 17–19 February 2017, Patna
4. Development and finalization of the Hospital Based Stroke Registry, Workshop on Development and finalization of the Hospital Based Stroke Registry, National Stroke Registry, 13 February 2017, Medanta, The Medicity, Gurgaon
5. Misconceptions in the treatment of multiple sclerosis and Gullain, Basic Syndrome, 6th MP and CG Neurcon Conference MP, 18–19 January 2016, Neuroclub, Bhopal
6. Stroke Awareness (Paralysis/Lakwa/Pakshaghat), Public lecture, 17 November 2016, Jawahar Lal Auditorium, AIIMS.
7. Adapting Evidence-based Neurotherapeutics in low-cost settings, IANCON 2016, 10–13 November 2016, Kolkata
8. How to critically appraise research papers? Convenor: Care in a resource limited setting, Essential stroke care
9. Systems for triage WSO guidelines, 10th World Stroke Congress, 26–29 October 2016, International Convention Centre, Hyderabad
10. Most effective intervention for the management of Stroke, National Stroke Update 2016, 8 October 2016, GSVM Medical College, Kanpur
11. Introduction to evidence based medicine: How to find current best evidence? Critical appraisal of a therapy paper, Critical appraisal of a meta-analysis paper, Workshop on Meta Analysis and Evidence Based Medicine, 7–9 July 2016, AIIMS, Rishikesh
12. How to choose correct type of study in your clinical setting? Workshop on Research and Publication, 14–15 May 2016, Delhi

13. How to grade evidence and move from evidence to treatment recommendation, Workshop on EBM, 26–28 March 2017, Gulf Medical University, Ajman, United Arab Emirates
14. Confounding and interactions: Distortions or truth, 15th Asia Pacific Evidence Based and Nursing Conference, 20–24 February 2017, National University Hospital, Singapore
15. Establishing a cohort study in India: Challenges and opportunities, Neuroepiomics course “Epidemiology of vascular and Brain aging in cohorts with large scale imaging and omics data, 23–26 September 2016, Boston University Medical Centre, Boston, USA
16. Heterogeneity in meta analysis effect measures used in RCTs Critical appraisal of a therapy paper, McMaster Evidence Based Clinical Practice Workshop, 6–10 June 2016, McMaster University, Canada

M.V. Padma Srivastava: 22

1. Improving stroke care in India: The challenges and solutions, Indian Medical Association, Telangana Branch for the WHO Day 7 April, Hyderabad
2. Cerebral venous thrombosis and Acute reperfusion strategies in AIS, Neuroupdate, 16 April, IGIMS, Patna
3. Newer advances in management of AIS, UP chapter of APICON, 24 April, Jhansi
4. Current guidelines for bridging therapy in AIS, NEUROSONOCON, 26 April, Ahmedabad
5. IEC activities and improving stroke awareness, NCD, NPCDCS, 8 July, Agra
6. Role of IV thrombolysis in current era of AIS management, Neurology update, 31 July, Lucknow
7. Setting up Stroke Unit and comprehensive stroke center, Centenary year celebrations in BHU, 9 August, BHU, Varanasi
8. Update on management of AIS, Stroke prevention and Improving stroke outcomes, Stroke Workshop organized by the NCD Cell, Kerala, 11 August 2016, Thiruvananthapuram
9. The ABC of stroke care possible at secondary health care delivery system, 2nd Healthcare Summit, 23 September, 2016, Jaipur
10. Stroke Prevention, Invited faculty for IEC Activities in District Hospital, Leh, 26–27 September 2016, Leh
11. Pregnancy and stroke, World Stroke Congress, 26–29 October, Hyderabad
12. Telestroke in India, World Stroke Congress, 26–29 October, Hyderabad
13. Stroke prevention in a case with multiple etiologies, World Stroke Congress, 26–29 October, Hyderabad
14. Ischemic stroke, AF and carotid Stenosis, World Stroke Congress, 26–29 October, Hyderabad
15. Migraine and stroke, Headache Update, 4 December 2016, Cochin
16. Stroke genetics in India, NSICON, 15 December 2016, Chennai
17. MS Summit, MS in India, 18 December 2016, New Delhi
18. Annual DNA Conference, NOACs in India, IHC, New Delhi
19. INSPIRE, Examination of INSPIRE faculty performance, 3 & 4 February 2017, ISER, Pune
20. Healthcare Sabha organized by the Health Ministry of AP, Stroke care in India: How do we improve the outcomes? 10 February 2017, Vishakhapatnam
21. Annual Conference of the ISA, IV thrombolysis with Alteplase: The gold standard: for the motion, 17–19 March, Amritsar
22. INTROPICON, Acyclovir must be given to all patients with Acute Encephalitis: Against the motion, 26 March 2017, Mumbai

Manjari Tripathi: 16

1. Psychogenic seizures could be diagnosed by home videos (T), 11th World Congress on Controversies in Neurology, 23–26 March 2017, Athens, Greece
2. Reversible Dementia, (T), 15th Asian-Oceania Congress of Neurology, 18–21 August 2016, Kuala Lumpur, Malaysia
3. Diagnosis of Epilepsy and Treatment Course (D.L), International League Against Epilepsy Combodian, 25 July 2016, Thimphu, Bhutan
4. SEEG principles, Asian Oceania Symposium on Epilepsy and EEG, 11 & 12 June 2016, Tokyo, Japan
5. Epileptology of neurological intensive care, 11th Asian and Oceania Epilepsy Congress, 13–16 May 2016, Hong Kong
6. Sleep Disorders, Workshop Series on Sleep Disorders, 5 March 2017, Andhra Medical College, Vishakhapatnam

7. Role of FMRI in epilepsy, 3rd TSS NIMHANS Knowledge Conclave, 23 February 2017, NIMHANS, Bangalore
8. Recognition and treatment of NCSE, ECON Patna 2017, 17–19 February 2017, Patna
9. Seizure semiology, Indian Epilepsy School, 26 November 2016, Dayanand Medical College, Ludhiana
10. AMPA blockers and role in epilepsy, 24th Annual Conference of the Indian Academy of Neurology, 10–12 November 2016, Kolkata
11. Case presentation, Workshop on Advanced Techniques in Epilepsy Surgery, 4 November 2016, Kochi
12. Post Traumatic Epilepsy and role of CEEG and EEG in Neurotrauma (I.S.), NEUROTRAUMA WORKSHOP, 12–14 Aug 2016, Trauma Centre, New Delhi
13. Definitions, classifications and approach to patients with epilepsy (I.S.), Epilepsy Update, 6–7 August 2016, Surat
14. Discuss cases (I.S.), ICTRIMS, 4 & 5 June 2016, Mangalore
15. Recommendations for the withdrawal of AEDs (Panelist), EPILEPSY CONCLAVE 2016, 28 & 29 May 2016, Pune
16. Management of emergencies in epilepsy (I.S.), National Epilepsy Update Neurovision, 7 & 8 May 2016, Patna

Vinay Goyal: 13

1. Botulinum toxin in movement disorder, 16th MP and CG Neurocon Conference, 19 June 2016, Bhopal
2. Workshop on Botulinum toxin, 16th MP and CG Neurocon Conference, 19 Jun 2016, Bhopal
3. MCI in PD, 65th Annual Conference of the Neurological Society of India, NSICON 2016, 15–18 December 2016, NOVOTEL, Hyderabad
4. Moderator: Neurology Symposium, 65th Annual Conference of the Neurological Society of India, NSICON 2016, 15–18 December 2016, NOVOTEL, Hyderabad
5. PD: Whats new? 39th Annual Conference of Association of Physicians of Gujrat, APGCON 2016, 16 & 17 December 2016, Surat, Gujarat
6. Challenges in Medicak Management of advanced Parkinson's disease, 2nd Annual Conference of MDSI, 6–8 January 2017, NIHMANS, Bangalore
7. Post DBS complications, 2nd Annual Conference of MDSI, 6–8 January 2017, NIHMANS, Bangalore
8. Is there a role of surgery in non-thymomatous myasthenia gravis: Against contemporary practices in surgery, Symposium on Thorasic Surgery, Department of Surgery, 21st January, 2017, AIIMS, New Delhi
9. DBS in other movement disorders, 19th Annual Conference of DNA, DNACON 2017, 5 January 2017, IHC, New Delhi
10. Management of advanced Parkinson's disease, 25th Annual Medicine Update 2012 Physician's Forum, 26 February 2017, IMA, Jalandhar (Punjab)
11. Selection of medical teachers-symposium, 6 February, 2017, ESI Medical College Hyderabad, Hyderabad
12. When does one use only Zinc in Wilson's disease, Hepaticon 2017, 25 March 2017, Nehru Planatarium, Mumbai
13. Panelist for Taskforce: "INSL consensus Meeting on Wilson's disease", Hepaticon 2017, 26 March 2017, Mumbai

Achal Srivastava: 10

1. CT Negative Coma, 34th Annual Conference of Associations of Physicians of India UP Chapter, 16 October 2016, Allahabad
2. Neuroimaging of Cerebellar Ataxias', 24th Annual Conference of Indian Academy of Neurology (IANCON 2016), 11 November 2016, Kolkata
3. Montage placement and reading EEG, National Epilepsy Symposium, 16 November 2016, KN Udappa Auditorium BHU, Varanasi, Varanasi
4. Diagnosing seizure with EEG, National Epilepsy Symposium, 16 November 2016, KN Udappa Auditorium BHU, Varanasi, Varanasi
5. Rehabilitation in patients with Parkinson's disease, 5th International Conference of Physical Therapy, 10 December 2016, JLN Auditorium, AIIMS, New Delhi
6. Approach to Vertigo, 7th Annual Conference of Uttarakhand Chapter of Association of Physicians of India, 17 December 2016, Haridwar
7. Childhood Ataxia, 2nd Annual Conference of Movement Disorder Society of India MDSICON, 2017, 8 January 2017, NIMHANS, Bengaluru, Bengaluru
8. Parkinsonism: Update, Annual Conference of Kerala Chapter of Association of Physicians of India at Alappuzha, Kerala, 25 February 2017, Alappuzha, Alappuzha

9. CT Negative coma, 2nd RIMACON 2016, 4 March 2017, Raebareli Club, Raebareli, Raebareli, UP
10. Hereditary Ataxia: Overview and Indian Scenario, 1st Annual Conference of Telanghara Neuro Society, 5 March 2017, Hyderabad

Garima Shukla: 18

1. Approach towards diagnosis and management of epilepsy—Nuances of the art, Epiquest 2016, May 2016, Medanta Medicity, Gurgaon
2. Localizing the focus for epilepsy through history and video, EEG, Epilepsy Conclave, 29 May 2016, Pune
3. 'Seizures and epilepsy—Definition, diagnosis and classification', First Gujarat EEG Workshop and Epilepsy Conference, 23 June 2016, Sumandeep Vidyapeeth, Vadodara
4. The complex sleep apnea syndrome, RESPICON 2016, 7 August 2016, NDMC Convention Center, New Delhi
5. Sleep apnea, Implications in Cardio, cerebro, vascular morbidity, 16th North India Medical Clinics, 25 September 2016, Mussoorie, Uttarakhand
6. False localizing seizures—Case based discussion, Epilepsy in Clinical Practice, 4–6 November 2016, The Chancery Pavilion, Bengaluru, Karnataka
7. Quality of life in persons with epilepsy—short term and long term, pre, and post epilepsy surgery: A critical appraisal, Epilepsy in Clinical Practice, 4–6 November 2016, The Chancery Pavilion, Bengaluru, Karnataka
8. Sleep related morbidity in epilepsy in symposium titled 'Epilepsy beyond seizures', IANCON 2016, Annual Meeting of the Indian Academy of Neurology, 10–13 November 2016, Kolkata, Bengal
9. Diagnosing and treating sleep disorders in persons with epilepsy, Indian Academy of Neurology Epilepsy School, 27 November 2016, Dayanand Medical College, Ludhiana, Punjab
10. Evaluation of a patient in the Sleep clinic—What technologists need to know, Sleep Technologists Workshop, 28–30 November 2016, Department of Neurology, AIIMS, New Delhi
11. Movement scoring rules in Polysomnography, Sleep Technologists Workshop, 28–30 November 2016, Department of Neurology, AIIMS, New Delhi
12. REM parasomnias, National Sleep Medicine Course, 2016, 3 December 2016, Himalayan Institute of Medical Sciences, Dehradun, Uttarakhand
13. Episodic headache plus the migraine epilepsy spectrum, Headache Master Class, 12 December 2016, New Delhi
14. RLS and RBD in Parkinson's disease, MDSICON 2017, 6–8 January 2017, NIMHANS Convention Center, Bengaluru, Karnataka
15. Etiological factors among adult patients with epilepsy—Implications on management, DNAICON 2017, 4 February 2017, India Habitat Center, New Delhi
16. Sleep disorders and Stroke risk, Indian National Stroke Congress, 17 March 2017, Amritsar, Punjab
17. Quality of life in Refractory Epilepsy, pre and post epilepsy surgery, Lecture delivered as Visiting Professor, 21 February 2017, Queen's University, Canada
18. Paroxysmal events in sleep differentiating seizures from non -epileptic events, Workshop conducted as Visiting Professor, 21 February 2017, Queen's University, Canada

Rohit Bhatia: 7

1. Multiple sclerosis: Gender issues, Annual Meeting of the Indian Academy of Neurology, October 2016, Kolkata
2. Epidemiology of ICH in India, World Stroke Organization, World Stroke Congress, October 2016, Hyderabad
3. Endovascular stroke therapy: Challenges for implementation in the developing world, World Stroke Organization, World Stroke Congress, October 2016, Hyderabad
4. Management of acute stroke: Changing paradigms, CME Army RR Hospital New Delhi, January 2017, Army RR Hospital, Delhi
5. Decompressive Craniectomy in malignant MCA stroke: Often missed the deadline, Annual Meeting of the Indian Stroke Association, Indian National Stroke Congress, March 2017, Amritsar
6. Future clinical trials of stroke, Annual Meeting of the Indian Stroke Association, Indian National Stroke Congress, March 2017, Amritsar
7. Systems of care in developing countries, Challenges and solutions, 5 T Stroke Conference, March 2017, Banff, Canada

Mamta Bhushan Singh: 3

1. Epilepsy care in the community: Lessons learnt, Annual Meeting of the Indian Academy of Neurology, 11 November 2016, Kolkata
2. How not to treat epilepsy, XXXV Annual Refresher Course of IMA, Kanpur, 10 April 2017, GSVM Medical College, Kanpur
3. The role of investigations in primary care of epilepsy, CME Department of Medicine Kanpur, 11 April 2017, Department of Medicine, Auditorium, GSVM Medical College, Kanpur

Deepti Vibha: 15

1. Understanding variables, Physicians Research Foundation: Research and Publication Workshop, 14 & 15 May 2016, New Delhi
2. Nuts and Bolts: How to write a paper: Title, Abstract and Introduction, Physicians Research Foundation: Research and Publication Workshop, 14 & 15 May 2016, New Delhi
3. Epidemiology of stroke, National Stroke Update, 2016, 8 October 2016, GSVM Medical College, Kanpur
4. Stroke in pregnancy, National Stroke Update, 2016, 8 October 2016, GSVM Medical College, Kanpur
5. AF use of conventional anticoagulants, Public Awareness Programme on Stroke, 23 October 2016, Apollo Hospital, New Delhi
6. IgG4 related neurological disorders, IANCON 2016, 10 November 2016, Kolkata
7. Cirrhotic with grade 3 encephalopathy, 1st National Congress on Critical Care and Infectious Liver Disease, 25 January 2017, ILBS, New Delhi
8. Acute ischemic stroke, AIIMS Neurological Life Support (ANLS) Provider Course, 28 January 2017, JPNA Trauma Center, New Delhi
9. Supportive management of acute stroke in ICU, DNAICON, 4 February 2017, Indian Habitat Center, New Delhi
10. Treatment concepts of basilar artery stroke, DNAICON, 5 February 2017, Indian Habitat Center, New Delhi
11. Types of studies: observational and experimental studies, Workshop on Research Methodology, 4 March 2017, JLN Medical College, Aligarh
12. Cross sectional studies, Workshop on Research Methodology, 4 March 2017, JLN Medical College, Aligarh
13. Questionnaire design, Workshop on Research Methodology, 5 March 2017, JLN Medical College, Aligarh
14. Literature search, Workshop on Research Methodology, 5 March 2017, JLN Medical College, Aligarh
15. Neurological emergencies, Medical Surgical Nursing Update, 28 March 2017, CMET, AIIMS, New Delhi

Deepa Dash: 3

1. Classification criteria for major cognitive disorder and Minor Cognitive disorder, CME on Neurological Application of PET and SPECT, 25 October 2016, AIIMS, New Delhi, Delhi
2. Clinical spectrum and treatment outcomes of patients with anti LGI, 1 Associated encephalitis, Delhi Neurology Association Monthly Meet, 4 March 2017, AIIMS Delhi, Delhi
3. Approach to a patient with Non Traumatic Weakness, AIIMS Neurological Life Support (ANLS) Provider C, 29 January 2017, AIIMS Delhi, Delhi

Awadh Kishor Pandit: 1

1. Meningitis and Encephalitis, AIIMS Neurological Life Support (ANLS) Provider Course, 28 & 29 January 2017, JPN Apex Trauma Centre, AIIMS, New Delhi, New Delhi

Oral papers/posters presented: 33

1. Talwar P, Kumar A, Kushwaha S, Misra S, Prasad K. Accuracy of Serum Glial Fibrillary Acidic Protein in differentiating intracerebral hemorrhage and ischemic stroke patients and its role as a biomarker: A meta-analysis, International Journal of Stroke, 10th World Stroke Congress, 20-26 October 2016, Convention Centre, Hyderabad, India
2. Raj R, Kumar A, Misra S, Prasad K. Association between troponin levels and mortality after intracerebral hemorrhage: A meta-analysis, International Journal of Stroke, 10th World Stroke Congress, 26-29 October 2016, Convention Centre, Hyderabad, India
3. Sharma R, Misra S, Kaul B, Kumar A, Prasad K. Association of circulating copeptin levels with mortality and World Federation of Neurological Surgeons (WFNS) Grade in aneurysmal subarachnoid hemorrhage patients: A meta-analysis, International Journal of Stroke, 10th World Stroke Congress, 26-29 October 2016, Convention Centre, Hyderabad, India

4. Vardhan G, Kumar A, Gorthi SP, Gill S, Misra S, Prasad K. Association between elevated serum levels of 100B and risk of stroke: A meta-analysis, International Journal of Stroke, 10th World Stroke Congress, 26–29 October 2016, Convention Centre, Hyderabad, India
5. Bhatia R, Bali P, Sisodia P, Garg A, Warriar A, Sharique M, Padma MV, Prasad K, Vishnubhatla S, Vivekanandan S. Role of blood biomarkers to differentiate between ischemic stroke and intracerebral hemorrhage, Annual Meeting of the Indian Stroke Association, Indian National Stroke Congress, March 2017, Amritsar
6. Bhatia R, Sharma G, Roy A, Patel C, Garg A, Bali P, Sisodia P, Padma MV, Prasad K. Symptomatic and asymptomatic coronary artery disease in patients with stroke and transient ischemic attacks, World Stroke Organization, World Stroke Congress, October 2016, Hyderabad
7. Jali V, Prasad K, Shashikant, Vibha D, Dwivedi SN, et al. Prevalence of cerebral microbleeds in apparently healthy, elderly population: A meta analysis, World Stroke Congress, 26–29 October 2016, Hyderabad
8. Kathuria P, Prasad K, Shashikant, Vibha D, Dwivedi SN, et al. Relationship between periodontitis and stroke: A meta analysis, World Stroke Congress, 26–29 October 2016, Hyderabad
9. Nair P, Prasad K, Shashikant, Vibha D, Dwivedi SN, et al. Vascular risk factor profile: Baseline results from AIIMS Cohort Study, World Stroke Congress, 26–29 October 2016, Hyderabad
10. Nair P, Prasad K, Shashikant, Vibha D, Dwivedi SN, et al. Association between physical activity, sleep duration and daytime sleepiness in in Community Dwelling Adults Aged 50 years and older: AIIMS Cohort Study, World Stroke Congress, 26–29 October 2016, Hyderabad
11. Kumar A, Prasad K, Shashikant, Vibha D, Dwivedi SN, et al. Comparison of Hindi version of MMSE with its English version: A hospital based study, World Stroke Congress, 26–29 October 2016, Hyderabad
12. Kumar A, Prasad K, Shashikant, Vibha D, Dwivedi SN, et al. Excessive day time sleepiness as assessed by Modified Epworth Sleepiness Scale among urban elderly population: Result from first 582 participants of AIIMS Cohort Study, World Stroke Congress, 26–29 October 2016, Hyderabad
13. Angira L, Prasad K, Shashikant, Vibha D, Dwivedi SN, et al. AIIMS Cohort Study: An assessment of Dietary habits in elderly population, World Stroke Congress, 26–29 October 2016, Hyderabad
14. Damake R, Prasad K, Shashikant, Vibha D, Dwivedi SN, et al. Estimation of morning/evening activeness among >50 years old participant in AIIMS Cohort Study for stroke and dementia, World Stroke Congress, 26–29 October 2016, Hyderabad
15. Thakur B, Prasad K, Shashikant, Vibha D, Dwivedi SN, et al. Quality improvement with PDCA cycle: Involving first 353 participants of AIIMS cohort study, World Stroke Congress, 26–29 October 2016, Hyderabad
16. Thakur B, Prasad K, Shashikant, Vibha D, Dwivedi SN, et al. Prevalence of multilingualism in Indian urban community: Results from baseline data of 225 participants of AIIMS Cohort Study, World Stroke Congress, 26–29 October 2016, Hyderabad
17. Thakur B, Prasad K, Shashikant, Vibha D, Dwivedi SN, et al. Baseline assessment of sleep quality index in urban elderly population: Data on first 583 participants of AIIMS cohort study, World Stroke Congress, 26–29 October 2016, Hyderabad
18. Yadav A, Prasad K, Shashikant, Vibha D, Dwivedi SN, et al. AIIMS Cohort Study for stroke and dementia: Methodological approach for development of questionnaire, World Stroke Congress, 26–29 October 2016, Hyderabad
19. Gulati A, Prasad K, Shashikant, Vibha D, Dwivedi SN, et al. Lack of applicability of some response options in Morningness, Eveningness question: Field experience in AIIMS Cohort Study, World Stroke Congress, 26–29 October 2016, Hyderabad
20. Singh M, Samant S, Agavane V, Patterson V, Jain Y. No Problem: Computer naïve health workers can use a tablet based epilepsy diagnosis app, 11th Asian Oceanian Epilepsy Congress, 16 May 2016, Convention Centre, Hong Kong
21. Shukla G, Gupta A, Agarwal P, Poornima S. Behavioral effects and somnolence due to Levetiracetam versus Oxcarbazepine, a retrospective comparison study of North Indian patients with refractory epilepsy, 11th Asian and Oceanian Epilepsy Congress, 13–17 May 2016, Hong Kong Convention Center, Hong Kong
22. Shukla G, Gupta A, Agarwal P, Katoch J. Responses to dopaminergic treatment of primary Restless legs syndrome: Audit of 192 Indian patients, SLEEP 2016, Annual Meeting of the Associated Professional Sleep Societies, June 2016, Colorado Convention Center, Denver, CO, USA
23. Poornima S, Shukla G, Gupta A, Afsar M, Agarwal P. Multi-pronged treatment of Insomnia—Outcomes from an apex Sleep clinic in India, IANCON 2016, The Annual Meeting of the Indian Academy of Neurology, 10–13 November 2016, Kolkata, West Bengal

24. Gupta A, Shukla G, Chakraverty K. Does loss of REM associated atonia have a protective role in focal epilepsy? Observations from an EEG, Polysomnography study, IANCON 2016, the Annual Meeting of the Indian Academy of Neurology, 10–13 November 2016, Kolkata, Bengal
25. Takkar A, Ahmed I, Shakya S, Suroliya V, Singh R, Sonkar A, Srivastava AK, et al. Clinico-genetic correlation in Indian spinocerebellar ataxia (SCA1) patients, 20th International Congress of Parkinson's Disease and Movement Disorders in 19–23 June 2016, Berlin, Germany
26. Srivastava AK, Shakya S, Faruq M, Suroliya V, Goyal V, Prasad K. Co-occurrence of two triplet repeat associated SCA mutations: A dilemma in clinical diagnosis, prognosis and genetic counselling and clinical significance, 20th International Congress of Parkinson's Disease and Movement Disorders in 19–23 June 2016 Berlin, Germany
27. Srivastava AK, Sonkar AK, Shakya S, Suroliya V, Takkar A, Ahmad I, et al. A largest case series study of spinocerebellar ataxia type 2 (SCA2) from India: Do SCA2 clinical subtypes exists? 20th International Congress of Parkinson's Disease and Movement Disorders in 19–23 June 2016, Berlin, Germany
28. Shakya S, Kumari R, Srivastava AK, Dash D, Takkar A, Singh I, et al. Clinical and analytical validation of novel autosomal recessive ataxia mutations identified from whole exome sequencing, 20th International Congress of Parkinson's Disease and Movement Disorders in 19–23 June 2016, Berlin, Germany
29. Suroliya V, Faruq M, Srivastava AK. AFG3L2 gene mutations in Indian cerebellar ataxia patients, 2nd Annual Conference of the Movement Disorder Society of India (MDSICON) 2017, 6–8 January 2017, NIMHANS, Bangalore, India
30. Singh RK, Singh I, Shakya S, Faruq M, Ahmad I, Shukla G, Goyal V, Padma MV, Srivastava AK. Association of hemochromatosis (HFE) mutation p.H63D in Friedreich Ataxia (FRDA) disease and peripheral neuropathy in an Indian cohort, 2nd Annual Conference of the Movement Disorder Society of India (MDSICON) 2017, 6–8 January 2017, NIMHANS, Bangalore, India
31. Narang MK, Srivastava AK, Singh MB, Pandit AK, Rajan R, Vibha D, et al. Electrophysiological characteristics of tremor in SCA 12, 2nd Annual Conference of the Movement Disorder Society of India (MDSICON) 2017, 6–8 January 2017, NIMHANS, Bangalore, India
32. Kumar D, Sonkar AK, Ahmad I, Takkar A, Faruq M, Mukerji M, Singh I, Swarup V, Srivastava AK. SCA 3: A study in context of North India, 2nd Annual Conference of the Movement Disorder Society of India (MDSICON) 2017, 6–8 January 2017, NIMHANS, Bangalore, India
33. Shakya S, Srivastava AK, Faruq M, Takkar A, Singh I, Swarup V, et al. Autosomal Dominant Cerebellar Ataxias: Tandem Repeats beyond the clinical diagnosis, 2nd Annual Conference of the Movement Disorder Society of India (MDSICON) 2017, 6–8 January 2017, NIMHANS, Bangalore, India

RESEARCH

Funded projects

Ongoing

1. Next generation gene sequencing to determine association between certain functional exonic variations and young onset ischemic stroke, Kameshwar Prasad, ICMR, 3 years, 2017–2020, Rs. 7 lakhs
2. Identification of genetic contribution to ischemic stroke by screening single nucleotide polymorphism of genes associated with inflammation: A case control study, Kameshwar Prasad, ICMR, 2 years, 2017–2019, Rs. 3.6 lakhs.
3. A population based prospective Cohort study to unravel the causes of stroke and cognitive decline: A cross cultural perspective, Kameshwar Prasad, DBT, 8 years, 2014–2022, Rs. 316.38 lakhs
4. Deciphering the genetic etiology of stroke in Indians using whole exome sequencing using an established and already externally fully funded multicentric Indian stroke biobank, Kameshwar Prasad, DBT, 5 years, 2013–2018, Rs. 197 lakhs
5. Identification of genetic risk factors of stroke in Indian population, Kameshwar Prasad, DBT, 5 years, 2013–2018, Rs 64.44 lakhs
6. Biomarkers to enhance predictive power for short-term and long term outcome after spontaneous intracerebral hemorrhage, Kameshwar Prasad, DBT, 5 years, 2013–2018, Rs. 119.4 lakhs
7. Hyposmia in Parkinsonism, Vinay Goyal, DBT, 4.5 years, 2014, Rs. 46 lakhs
8. FDG PET and rTMS in PD, Vinay Goyal, AIIMS, 1 year, 2017, Rs. 5 Lakhs
9. Prevalence of symptomatic and asymptomatic CAD in patients with stroke and TIA's, Rohit Bhatia, ICMR, 3 years, 2014–2017, Rs. 32 Lakhs
10. Genetic and clinical factors associated with aspirin resistance in Indian population with Ischemic Stroke, Rohit Bhatia, DBT, 3 years, 2017–2020, Rs. 80 lakhs

11. Effects of non ionizing electro magnetic field (EMF) on human heal, M.V. Padma, ICMR, 2010–2017, Rs. 19.66 lakhs
12. Study of paracrine mechanisms of autologous stem cells transplantation in stroke using biofunctional markers, DST, M.V. Padma, 2013–2018, Rs 35 lakhs
13. Development of diagnostic grid for prediction of infarction in patients with Tuberculous meningitis, DST, M.V. Padma, 2015–2018, Rs 59.99 lakhs
14. Randomized, double-blind evaluation in secondary stroke prevention comparing the efficacy and safety of the thrombin inhibitor dabigatranetexilate 110 or 150 mg (twice daily) versus acetylsalicylic acid (100 mg once daily) in patients with embolic stroke of undetermined source (ESUS 1160.189), M.V. Padma, Boehringer Ingelheim Pvt Ltd 2016–2019, Rs 11.53 lakhs
15. Effect of dual, task exercise in conjunction with fluoxetine and transcranial direct current stimulation (tDCS) on postural stability and gait in stroke patients, M.V. Padma, ICMR, 2017–2019, Rs 50.60 lakhs
16. Mapping, researching and addressing the gaps in scientific awareness & health practices regarding stroke in Hp: Applying Novel, Interactive/Demonstrative, M.V. Padma, DST, 2016–2019, Rs. 40.45 lakhs
17. An international multi-centre, open parallel group, prospective, randomized, controlled trial to determine the effectiveness of treatment with continuous positive airways pressure (CPAP) in addition to standard care in reducing cardiovascular (CV) severe obstructive sleep apnea (OSA), Manjari Tripathi, George Institute for International Health, India, 5 years, 2010–2017, Rs. 13.02 lakhs
18. Sleep quality and circadian sleep rhythm abnormalities among children suffering from autism spectrum disorders: a case-control study, Garima Shukla, DHR, 3 years, 2014–2017, Rs. 73 lakhs
19. Elucidation of molecular pathogenesis in SCAs using IPS cell model and next gen sequencing, Achal Kumar Srivastava, CSIR, 5 years, 2012–2017, Rs. 4 Crore
20. Identification of microRNAs signatures and their target genes modulating spinocerebellar ataxia type-2 (SCA-2) pathogenesis, Achal Kumar Srivastava, DBT, 3 years, 2015–2018, Rs. 86.95 lakhs
21. Deep targeted clinical sequencing of mitochondrial genome and exomes to unravel the causal and modifier variations in patients with cerebellar ataxias, Achal Kumar Srivastava, DHR, 3 years, 2016–2019, Rs. 80 lakhs

Completed

1. Towards a sustainable resource in stroke genetics from the four corners of India: the 4i study, Kameshwar Prasad, UK India Education Research Initiative (UKIERI), 2 years, 2013–2015, Rs. 2,75,000
2. Role of blood biomarkers to differentiate ischemic stroke and ICH and their association with outcomes, Rohit Bhatia, AIIMS, 2 years, 2015–2017, Rs. 10 Lakhs
3. Quantitative analysis of neurodegenerative phenotype in spinocerebellar ataxia disorder: an integrative approach to search for monomorphic to complex phenotype by neurological, radioimaging, neuropsychiatric and kinematic assessment of ataxia, Prof Achal Kumar Srivastava, CSIR, Three years, April 2013–April 2016, Rs. 20 lacs
4. CSF testosterone in motor neuron disease, Prof Achal Kumar Srivastava, AIIMS, One year plus, 2014–2016, Rs. 4 lacs
5. Identification of genetic causal and risk alleles in Amyotrophic lateral sclerosis and ALS, frontotemporal dementia, Deepti Vibha, Intramural AIIMS, 2 years, 2016–2017, Rs. 4 lacs

Departmental projects

Ongoing

1. Association between gender, involved hemisphere and outcome after stroke and influence of socioeconomic status on stroke outcome: An ambispective cohort study
2. Effectiveness of neurofeedback using near infrared spectroscopy to enhance the efficacy of motor imagery-based rehabilitation in stroke patients
3. Frequency of persistent disease activity after 9 months of ATT in CNS tuberculosis
4. Hyposmia in Parkinsonism
5. FDG PET and rTMS in PD
6. Clinical profile of MUSK
7. f-Dopa PET in early PD
8. Movement disorders in SCA
9. Blood and saliva biomarkers in PD with NMR spectroscopy
10. fMRI in MCI in PD

11. rTMS in PD
12. CSF biomarkers in PD and schizophrenia
13. Mitochondrial mutation in parkinsonism
14. Yoga as an add on therapy in migraine. (CONTAIN). Randomised control trial.
15. Leukoaraiosis and microbleeds and relationship to hematoma expansion and outcome.
16. Reasons for which epilepsy patients present to the clinic at AIIMS: A cross-sectional study
17. A long-term follow-up of epilepsy patients after a single visit with a neurologist
18. Clinical and electrophysiology profile of patients with polyneuropathy at a tertiary care center
19. Effect of mobile and internet use on headache: A cross-sectional study
20. Predictive model for the development of infarction in patients with Tuberculous meningitis
21. To determine the frequency of cardiac enzyme elevation, ECG changes and echocardiographic changes in cases of acute stroke
22. Citicoline in acute stroke, A randomized control trial
23. Immunogenetic mechanisms in epilepsy patients taking anti-epileptic medications
24. Ketogenic diet in patients with epilepsy
25. Interventions for stigma for persons in epilepsy in India.
26. Role of setrin protein and its therapeutic implication in neurodegenerative disease.
27. Electrophysiological Characterization of Yoga Nidra and it's role in primary insomnia patients
28. Role of setrin protein and its therapeutic implication in neurodegenerative disease. 2013 session.
29. Efficacy of modified atkins diet versus ketogenic diet in children with refractory epilepsy aged from 1 year to 18 yearsA series of five pragmatic randomised controlled trials comparing the effectiveness of levetiracetam versus lamotrigine, carbamazepine and sodium valproate for untreated epilepsy: the EpiNet-First trialsS1.
30. New onset RLS in patient with acute neurological illnesses
31. Cognitive, behavioral and sleep related adverse effects due to antiepileptic drugs in difficult to treat epilepsy
32. Association of epileptic focus location and focal epilepsy etiology with predilection of seizures to occur during sleep/wake states
33. To study the molecular correlation of Friedreich's Ataxia phenotype through mitochondrial genome and transcriptome analysis
34. Decovolution of autosomal recessive cerebellar ataxias in India: A clinical genetic approach and phenotypic-genotypic correlation
35. Characterization of tremor and gait in Spinocerebellar Ataxia type 12
36. Role of microRNAs in pathophysiology of neurodegenerative disorder: Spinocerebellar Ataxia type 2
37. Identification of novel unstable tandem nucleotide repeat loci by genome wide screening and their implication in the pathogenesis of genetically uncharacterized progressive cerebellar ataxias
38. To identify functional genetic elements in triplet repeat flanked haplotype region and mitochondrial genome in spinocerebellar ataxias
39. To study the molecular pathophysiology of neurodegenerative disease Spinocerebellar ataxia type 12
40. Evaluation of clinical profile and VEGF in relation with disease progression in ALS
41. Evaluation of autonomic dysfunction in patients with multiple system atrophy
42. Clinical radiological and histopathological features of neurological mitochondrial disorders

Completed

1. Study of cognition and Quality of life in Chronic Intractable Epilepsy using Functional Magnetic Resonance Imaging (fMRI).
2. A Randomized Controlled Trial (RCT) of Early verses Late Surgery in childhood intractable Epilepsy
 1. Clinical classification of epilepsy into focal and generalized: A cross-sectional study
 1. Stroke related education to Emergency Department (ED) Staff, an acute Stroke care quality improvement initiative.

Collaborative projects

1. Genetic studies in patients with ALS. (IIT Delhi)
2. Understanding pathobiology of multiple sclerosis: Biomarkers, genetic and phenotypic signatures.

3. Radio-Surgery or open surgery for epilepsy trial (ROSE) (NIH)
4. Center for excellence (COE) (DBT)
5. Prevalence of subclinical seizures in patients with Idiopathic Hypoparathyroidism, a Clinical-Electroencephalographic
6. An evaluation of the psychosocial effect of epilepsy in marriage
7. A randomized, multi-centric, double-blind, placebo-controlled clinical trial of Nardostachys jatamansi and Withania somnifera formulation as add-on therapy in patients of chronic insomniac (ICMR)
8. Evaluation of autonomic function in patients of SCA types 1, 2 and 3 and comparison with morphological changes in brain (Physiology)
9. To evaluate the structural and functional changes in retina and optic nerve in cases of Alzheimer's disease (Ophthalmology)

PUBLICATIONS

Journals: 98

Abstracts: 4

Chapters in books: 9

PATIENT CARE

The department of neurology had conducted public awareness programmes on stroke and multiple sclerosis. Experts in epilepsy have been conducting weekend epilepsy clinics once every month in very remote rural locations. Epilepsy primary care workshops were also conducted at each of these locations. The department of neurology was involved in the healthcare associated infection surveillance (HCAI). Faculties from our department have participated in various medical camps as Neurology experts at various locations including Kargil.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor Kameshwar Prasad was Member of Royal College of Physicians, Edinburgh, Member of the World Stroke Organization, Member of the World Federation of Neurology, Member, International Advisory Committee, Asia Pacific Forum for Quality Improvement in Healthcare, Member of the Infectious Diseases and ARI Review Group of the International Cochrane Collaboration, Member of the International Clinical Epidemiology Network, Member of the New York Academy of Sciences, Member of the American Academy of Neurology, Member, Cochrane Epilepsy Review Group, Member, Cochrane Neurological Network, Member of the Task Force on Chronic Disease Biology of the Department of Biotechnology, Govt. of India, Member of the Executive Council of Assam University, Silchar (2010–13), Director, Clinical Epidemiology Unit, AIIMS, New Delhi, Chairman, Neurosciences Centre OPD Committee of AIIMS, New Delhi, Editor, Edinburgh-based Cochrane Stroke Group and Amsterdam-based Cochrane ARI Group, Editorial Board Member, British Medical Journal, Practical Neurology, Cochrane ARI Review Group, Australia; Neurology India, Annals of Indian Academy of Neurology, Reviewer for the medical journals, British Medical Journal, Stroke, Canadian Medical Association Journal, Journal of Epidemiology and Community Health, Journal of Antimicrobials and Chemotherapy, CNS Drugs, Cochrane Stroke, Neurology India, Annals of Indian Academy of Neurology, Journal of Association of Physicians of India, National Medical Journal of India

Professor M.V. Padma Srivastava was Co Chair, Scientific Committee for the World Stroke Conference, 2016. She was awarded the National Award for Science and Technology Communication from DST, Govt. of India for the year 2017. Prof Padma was also awarded the Mridula Kambhoj Oration by NASI for the year 2016 and Excellence in Innovations for Health Care Improvement by NCD, Rajasthan for the year 2016. She continues as Fellow of National Academy of Medical Sciences (FAMS), Fellow of the National Academy of Sciences, Allahabad, (F.N.A.Sc), Neurological Society of India (NSI), Indian Epilepsy Association (IEA), Indian Epilepsy Society (IES), Indian Academy of Neurology (IAN), Member of World Stroke Organization (WSO), Invited Member of the Geriatric Society of India, Delhi Neurological Association, Member of the Publication Committee of NAMS, Member of the Speciality Advisory Board for Neurology by the NBE, Govt. of India, Member Task Force Neurosciences in DBT, Govt. of India; Member of the Standing Committee for the CME Programme Committee for NAMS; Member of the Standing Committee for the Publication Advisory Committee for NAMS; Member of the Task Force for Neurosciences for ICMR, Govt. of India; Member, Building Committee, NAMS, Govt. of India; Member, FIST Committee, DST, Govt. of India; Member, Dean Committee, AIIMS; Member, Staff Council, AIIMS; Member, Drug Selection Committee, AIIMS; Member Task Force for Translational Neurosciences, for ICMR, Govt. of India; Member Scientific Advisory Board for Thrombosis Research Institute Bangalore; Member – Expert Advisory Panel, for Regenerative medicine and Toxicology for Fellowship to NAMS; Member of Institute Body of SCTIMS; Mentor for the Neurology departments of Indira Gandhi Medical College Shimla and R.P. G Medical College Tanda, Govt. of Himachal Pradesh; Member, Academic Committee, NIMHANS, Bangalore; Member, Selection Committee, NIMHANS, Bangalore; Awarded Fellowship to the National Academy of Sciences, India, 2013.

Professor Manjari Tripathi received Outstanding Achievement Epilepsy Award for extraordinary contribution to Epilepsy at the 11th Asian and Oceanic Epilepsy Congress, Hong Kong, 2016.

Professor Achal Srivastava won the 3rd prize (best poster award) for work entitled ‘Co-occurrence of two SCA genes: A strange scenario for prognosis and genetic counselling’ and 2nd Prize for work entitled ‘Electrophysiological characteristics of tremor in SCA 12’. He also delivered prestigious Prof P Dhairyavan an oration on ‘Hereditary Ataxia: Overview and Indian Scenario’ during 1st Annual Conference of Telanghana Neuro-society at Hyderabad in March 2017.

Professor Garima Shukla was invited to deliver the prestigious ISDA oration at the Annual Meeting of the Indian Sleep Disorders Association, for the year 2017. She was also invited as Workshop Director for Workshop on ‘Hypersomnias’ at Sleepcon 2017, the Annual Meeting of the Indian Sleep Disorders Association, held in April 2017.

Professor Rohit Bhatia was the Lead in the CNS TB group for developing National guidelines for extrapulmonary tuberculosis in India. He was the member of Institute Ethics Committee for postgraduate research, Dean Research Committee AIIMS and Centre for Integrative Medicine and Research, AIIMS.

Professor Mamta Bhushan Singh was awarded the 2016 Kenneth M Viste Patient Advocate of the Year Award by the American Academy of Neurology in April 2016

Dr Deepti Vibha was the Resource person for Workshop on Research Methodology, AMU, Aligarh, March 2017. She was also the expert for National Board of Examinations for Work Place Based Clinical Assessment

Dr Roopa Rajan received the Early Career Research Award from DST-SERB for the project “Automated hand-drawn spiral analysis system as a tool to differentiate tremor syndromes”.

VISITING SCIENTISTS

Shri Kant Mishra is professor of Neurology, and co-ordinator of Integrative Medicine Program at Keck School of Medicine. Dr Mishra is a Neurologist with special interest in Neuro-muscular disorders. Dr Misra visited our department and delivered a lecture on “Inflammatory myopathies” and also interacted with neurology residents during case discussions.

Neurosurgery

HIGHLIGHTS

The department organized many Workshops, CMEs and Conferences. These were focused on specialty branches of neurosurgery, and stalwarts from various parts of the world came to AIIMS to perform surgeries with us and teach. We have also tried to completely digitize the patient and resident training records. This has also improved our patient care and research. We had acquired ROSA robot and we performed many robot assisted neurosurgical procedures. Prof A.K. Mahapatra returned after completing his tenure as Director of AIIMS, at Bhubaneswar. He became the chief of neurosciences center. Prof B.S. Sharma took voluntary retirement. He will complete his illustrious tenure at AIIMS in April 2017. Prof P.S. Chandra delivered the prestigious Dr Sehgal Oration at the Indian Epilepsy Congress. He also went to Morocco and Malaysia as visiting Professor. Prof Ashish Suri received the National Academy of Sciences India, NASI Reliance Industries Platinum Jubilee Award 2016. He went to Chicago and Minnesota universities as visiting Professor. Dr Deepak Agarwal was awarded the international research award by American physicians of Indian origin at Udaipur. He also received the dynamic CIO of health care of the year at the 5th Annual Healthcare Summit. Dr Deepak Gupta was selected as honorary secretary of Delhi Neurological Association. Dr Vivek Tandon received the Indo American cancer association’s prestigious John N Kapoor fellowship to attend an observership program in Neuro-oncology in America. Dr Sachin Borkar received Next Gen award during International Neurosurgery Update and was also awarded the AO spine India national fellowship.

EDUCATION

Undergraduate

1. Brain Death class for V semester students, Dr Vivek Tandon
2. Brachial Plexus Class for V semester students, Dr Sachin Borkar
3. Case presentations in Histopathology and clinical sciences for VI semester, Dr Vivek Tandon

Nursing

Our faculty members took more than 20 lectures in college of nursing to teach nursing students. Apart from that, ward and clinical teaching of these students was facilitated by our MCh students and faculty.

Postgraduate

On weekly basis, seminar/journal club/case presentation/mortality presentations were organized for the MCh residents.

Innovative training programs

1. **Neurosurgery Skills Training Facility**, Department of Neurosurgery organizes regular skills training program for all its residents in DHR+DST+DBT Neurosurgery Skills Training Facility at the Central Animal Facility for development of complex neurosurgical skills training. Prof Ashish Suri has been instrumental in organizing these sessions. Following programs were organized-
 - Simulation-based neurosurgery skills training sessions: 1242
 - Simulation-based short term neurosurgery skills training = 29
 - 4 weeks short term training = 6
 - 2 weeks short term training = 23
 - ICMR neurosurgery skull base and skills training post-doctoral fellowship = 2
2. **Cadaver Training and Research Facility (CTRF) Courses, Number of courses conducted at CTRF facility that was managed by Dr Sumit Sinha are as under-**

Activities by the department

1. Dr Manmohan Singh, January 2017, 19th AIIMS Annual Microneurosurgery Workshop
2. Dr Deepak Gupta, January 2017, Organizing Secretary: 1st Pediatric Neurosurgery Educational Operative Workshop (Pediatric NEWS)
3. Dr Deepak Gupta, August 2016, Conference of Neurotrauma Society of India, Neurotrauma 2016, Craniospinal Trauma Cadaveric Workshop
4. Dr Sumit Sinha, October 2016, 6th AIIMS Annual Spine Surgery Workshop
5. Dr Vivek Tandon, September 2016, Epilepsy Surgery Workshop
6. Dr Pankaj K Singh, May 2016, Complex Spine Surgery Workshop
7. Prof Ashish Suri, February 2017, Japan-India Advanced Skull Base and Neurovascular Workshop

Lectures delivered

A.K. Mahapatra: 12

Ashish Suri: 43

Deepak Agrawal: 6

Sachin Anil Borkar: 3

Manoj Phalak: 4

S.S. Kale: 7

Manmohan Singh: 10

Pankaj Kumar Singh: 1

Hitesh Gurjar: 2

Shweta Kedia: 5

P.S. Chandra: 16

Deepak Gupta: 8

Vivek Tandon: 6

Shashwat Mishra: 1

Dattaraj Sawarkar: 2

A.K. Mahapatra: 12

1. European Congress of Pediatric Neurosurgery, 8–12 May 2016, Paris.
2. 25th Annual Conference of Indian Society of Neurotrauma at AIIMS, New Delhi, 12–14 August 2016.
3. Neurosurgery Update at Eluru Medical College, Eluru, AP, 20–21 August 2016.
4. AIIMS Spine Conference, Chairman, 17–19 October 2016.
5. Neuro-oncology Update at AIIMS BBSR, 5 & 6 November 2016, Bhubaneswar.
6. Neurosurgery Update at G.B. Pant Hospital, 17 & 18 October 2016.
7. Neurosurgery Update, Neurovision, 6 November 2016, Bhubaneswar.
8. 39th Annual Conference of NES India at BBSR, 5 & 6 January 2017.
9. 6th Annual Conference NSSI at PGIMER Chandigarh, 16–18 February 2017.
10. 19th DNA Meeting at India Habitat Centre, New Delhi, 5 & 6 February 2017.
11. Indian Express Health Mela, Visakhapatnam, 9–11 February 2017.
12. AIIMS Microneurosurgery Workshop, Chairman, 16–18 February 2017.

S.S. Kale: 7

1. Syndromic cervical kyphosis a short series, 1st international and 5th Annual Conference of Nepalese Society of Neurosurgeons, 8–11 March 2017, Kathmandu, Nepal
2. Syndromic cervical kyphosis, 6th Annual Conference of Neurological Surgeon's Society of India, 16–18 February 2017, Chandigarh
3. Syndromic cervical kyphosis a short series, 30th Annual Conference of Association of Spine Surgeons of India, 26–29 January 2017, Hyderabad

4. Controversies in Neurosurgery, 56th Annual Conference of the Neurological Society of India (NSICON 2016), 15–18 December 2016, Chennai
5. Complication of odontoid Screw fixation, 10th Annual Meeting Asia Pacific Cervical Spine Society, 10–12 November 2016, Seoul, Korea
6. Complications in CV Junction Surgery, Nepalese Society of Neurosurgeons (NESON), 1 & 2 October 2016, Kathmandu, Nepal
7. Thoracic spine surgery, Annual Conference of Neuro-Spinal Association of India, 16–18 September 2016, Kolkata

P.S. Chandra: 16

1. Trans laminar screw fixation and occipito-cervical fixation
2. The technique of DCER for cranio-vertebral junction anomalies surgery, 23 & 24 April 2016, PGIMER, Chandigarh
3. Endoscopic applications in epilepsy surgery
4. Localizing epileptogenic networks for planning surgical strategy, 17–19 April 2016, 5th Symposium of World Federation of Neurosurgical Societies (WFNS) and MASSIN interim Meeting, Tehran, Iran
5. Basilar invagination, incidence and management
6. Complication avoidance in cranio, vertebral junction surgery with case vignettes, March 2016, Spine Summit (Joint Congress of CNS, NASA) Orlando, US
7. A new technique to reduce basilar invagination and atlanto axial dislocation. Plenary session: Overcoming barriers of epilepsy surgery in resource poor countries, March 2016, 11th Asian Congress of Neurosurgeons Society (ACNS), Surabaya, Indonesia
8. Demonstrated Live Surgery of DCER in congenital basilar invagination and atlanto axial dislocation, March 2016, Live Annual Microneurosurgery Workshop, AIIMS, New Delhi
9. Dr AD Sehgal Oration; Annual Epilepsy Congress (Indian Epilepsy Society): Creating cost effective and efficacious strategies for Epilepsy Surgery for India, February 2016, Annual Epilepsy Congress (Indian Epilepsy Society), Vishakapatnam
10. Guest lecture: Endoscopic epilepsy surgery, December 2015, Annual Congress of Neurological Society of India, Hyderabad
11. Guest lecture: Complication avoidance in craniovertebral junction surgery, December 2015, Annual Congress of Spinal Surgeons of India, Goa
12. Guest lecture: The technique of DCER to reduce basilar invagination and atlanto axial dislocation through a posterior only approach, 16–18 November 2015, Annual Skull Base Congress, Bangalore
13. Guest lecture: Applying the law of levers to reduce basilar invagination and atlanto axial dislocation, May 2015, ANEICON, ORISSA
14. Guest lecture: Applying the law of levers to reduce basilar invagination and atlanto-axial dislocation: Description of a new technique, April 2015, Asian Australasian Congress of Neurological Surgeons, Juju Island, Korea
15. Disconnective epilepsy surgery: paper presented as invited faculty at the Epilepsy Conclave, April 2015, Hyderabad
16. Pondicherry neurosciences club, presented an oration on “Creating a successful epilepsy surgery program, 4th January, 2015, Pondicherry

Ashish Suri: 43

1. Strategies for clipping aneurysms, 2nd International Neurosurgery Course, 7–10 March, 2017, Magala, Spain,
2. Foramen Magnum meningioma, 2nd International Neurosurgery Course, 7–10 March 2017, Magala, Spain,
3. Lecture and 3D Video, Upper brainstem lesions: Surgical approaches, 3D Neuroanatomy and Neurosurgical Approaches Course, 2–6 March 2017, Alicante, Spain,
4. Surgery for central skull base lesions: Challenges and controversies, Japan India Neurosurgical Collaboration Project (ENIN), 30 September–7 October 2016, Fukuoka and Osaka, Japan,
5. Special considerations in giant pituitary adenomas, 7th International Congress of the World Federation of Skull Base Societies, 15–18 June 2016, Osaka City, Japan,
6. Simulation based skills training in skull base surgery, 7th International Congress of the World Federation of Skull Base Societies, 15–18 June 2016, Osaka City, Japan,
7. Surgery for cavernous sinus lesions, 7th International Congress of the World Federation of Skull Base Societies, 15–18 June 2016, Osaka City, Japan,
8. Endoscopic treatment of giant pituitary adenoma, 18th Hands-on Workshop for Endoscopic Transnasal Approaches to the Skull Base, 6–8 April 2016, Trier, Germany

9. Surgery for central skull base lesions: Challenges and controversies, Visiting Professor: University of Minnesota, Minneapolis, USA, 24 & 25 March 2016, University of Minnesota, Minneapolis, USA
10. Simulation Training in Neurosurgery Residency, Visiting Professor: University of Minnesota, Minneapolis, USA, 24 & 25 March 2016, University of Minnesota, Minneapolis, USA
11. Awake Craniotomy for Neurosurgical Procedures, Perioperative Issues, Visiting Professor: University of Minnesota, Minneapolis, USA, 24 & 25 March 2016, University of Minnesota, Minneapolis, USA
12. Anterior Transpetrous approach, Joint Saudi-Indian-Egyptian Neurosurgical Conference (SANS), 28 February–3 March 2016, Riyadh, Saudi Arabia
13. Trans-cavernous approach, Joint Saudi-Indian-Egyptian Neurosurgical Conference (SANS), 28 February–3 March 2016, Riyadh, Saudi Arabia
14. Extradural anterior clinoidectomy, Joint Saudi-Indian-Egyptian Neurosurgical Conference (SANS), 28 February–3 March 2016, Riyadh, Saudi Arabia
15. Fronto temporal orbito, zygomatic craniotomy, Joint Saudi-Indian-Egyptian Neurosurgical Conference (SANS), 28 February–3 March 2016, Riyadh, Saudi Arabia
16. Central Skull Base: Dos & Dents, Joint Saudi-Indian-Egyptian Neurosurgical Conference (SANS), 28 February–3 March 2016, Riyadh, Saudi Arabia
17. Spinal Simulation Training in Indian Residency Training, Joint Meeting on Disorder of the Spine and Peripheral Nerves, 2016 of American Association of Neurological Surgeons and Congress of Neurological Surgeons (AANS/CNS), 16–19 March 2016, Orlando, Florida, USA
18. Surgery for central skull base lesions: Challenges and controversies, Kluwer Foundation Guest Professor: University of Chicago School of Medicine, Chicago, USA, 21–23 March 2016, Chicago, IL, USA
19. Simulation Training in Neurosurgery Residency, Kluwer Foundation Guest Professor: University of Chicago School of Medicine, Chicago, USA, 21–23 March 2016, Chicago, IL, USA
20. Cadaver Demo: i) Trans cavernous approach ii) Anterior trans petrous approach, Kluwer Foundation Guest Professor: University of Chicago School of Medicine, Chicago, USA, 21–23 March 2016, Chicago, IL, USA
21. Surgery for central skull base lesions: Challenges and controversies, Visiting Professor, University of Minnesota, Minneapolis, USA, 24 & 25 March 2016, Minneapolis, Minnesota, USA
22. Simulation Training in Neurosurgery Residency, Visiting Professor, University of Minnesota, Minneapolis, USA, 24 & 25 March 2016, Minneapolis, Minnesota, USA
23. Awake Craniotomy for Neurosurgical Procedures, Perioperative Issues, Visiting Professor, University of Minnesota, Minneapolis, USA, 24 & 25 March 2016, Minneapolis, Minnesota, USA
24. ETV, Complications and Outcome, 4th Annual Conference of Neuroendoscopy Society of India, 7–9 April 2017, Jaipur, Jaipur, Rajasthan
25. Giant pituitary adenomas, surgical challenges, 4th Annual Conference of Neuroendoscopy Society of India, 7–9 April 2017, Jaipur, Jaipur, Rajasthan
26. Extended endoscopic endonasal approaches to chordomas, Video Session, 4th Annual Conference of Neuroendoscopy Society of India, 7–9 April 2017, Jaipur, Jaipur, Rajasthan
27. AASPN Video session, How I Do It: ETV, 2nd Congress of Asian Australasian Society for Pediatric Neurosurgery and INDSPN 2017, 28th Annual Conference of Indian Society for Pediatric Neurosurgery, 24–26 March 2017, Mumbai, Maharashtra
28. Interactive video session with experts: Moya Moya disease: Surgical technique, 2nd Congress of Asian Australasian Society for Pediatric Neurosurgery and INDSPN 2017, 28th Annual Conference of Indian Society for Pediatric Neurosurgery, 24–26 March 2017, Mumbai, Maharashtra
29. Approaches to cavernous sinus: Challenges and controversies, Neurotology and Lateral Skull Base Surgery Workshop, 24–26 February 2017, Nanavati Hospital, Mumbai, Maharashtra
30. Anterior transpetrosal approach, Neurotology and Lateral Skull Base Surgery Workshop, 24–26 February 2017, Nanavati Hospital, Mumbai, Mumbai, Maharashtra
31. Anterior transpetrosal approach, Japan India Advanced Skull Base and Neurovascular Workshop, 13–15 February 2017, AIIMS, New Delhi
32. Intraventricular endoscopy, Japan India Advanced Skull Base and Neurovascular Workshop, 13–15 February 2017, AIIMS, New Delhi
33. CNS revascularization: Surgical techniques, Japan India Advanced Skull Base and Neurovascular Workshop, 13–15 February 2017, AIIMS, New Delhi

34. Endoscopic third ventriculostomy: Complications and long term outcome in adults and children, Annual Meeting of Delhi Neurological Association DNACON, 2017, 4 & 5 February 2017, India Habitat Centre, New Delhi
35. Anterior transpetrosal: Clinical applications, Anatomy and Techniques, 3D Neurofest, 26–28 January 2017, Narayana Multispecialty Hospital, Jaipur, Rajasthan
36. Approaches to cavernous sinus, 3D Video demonstration on cadavers, 65th Annual Conference of the Neurological Society of India (NSICON-2016), 4–18 December 2016, Chennai, Tamil Nadu
37. Endoscopic third ventriculostomy: Complications and long term outcome in adults and children, 65th Annual Conference of the Neurological Society of India (NSICON-2016), 14–18 December 2016, Chennai, Tamil Nadu
38. Simulation based skills training in neurosurgery, National Academy of Sciences (India) (NASI) Reliance Industries Platinum Jubilee Award 2016 for Application Oriented Innovation in Biological Sciences, 2–4 December 2016, Dehradun, Uttarakhand
39. Teaching neurosurgery skills: Change in the wind, 6th International Neurosurgery Update 4 & 5 June 2016, Mumbai, Maharashtra
40. Setting up of the skill development and training program for neurosurgeons, Annual Meeting of Bombay Neurological Association, 24 April 2016, Mumbai, Maharashtra
41. Special consideration in giant pituitary adenomas, 3rd Annual Conference of Neuroendoscopy Society (India), 15–17 April 2016, AIIMS, New Delhi,
42. Trans cavernous anterior transpetrosal approach: 3D Cadaver Video Demonstration, 12th International Conference of Cerebrovascular Surgery and 1st Interim Meeting of Asian Australian Society of Neurological Surgeons, 26 February 2016, Mumbai, Maharashtra
43. Central skull base, Dos & Don'ts, Annual Meeting of Malabar Neurocon 2016, 6 & 7 February 2016, Calicut, Kerala

Manmohan Singh: 10

1. Current management of brain AVMs, 5th Annual Meeting of NSSI, 31 March–2 April 2016, SICC, Srinagar, J&K
2. ECA-MCA artery sub-mandibular bypass, 5th Annual Meeting of NSSI, 31 March–2 April 2016, SICC, Srinagar, J&K
3. Gamma knife radiosurgery in large AVMs-SNVICON 2016, 10–12 June 2016, Pune, Maharashtra
4. Intracranial extracranial bypass surgery, 3rd Walter Dandy Educational Course and 2nd Microvascular Anastomosis Workshop, 14–16 July 2016, Udaipur, Rajasthan
5. Clinical neurological examination, NSI foundation course, 6 & 7 August 2016, SMS Medical College, Jaipur, Rajasthan
6. Gamma knife stereotactic radiosurgery in the management of large cerebral AVMs, Annual CNS Meeting, 23–28 September 2016, San Diego Convention Center, California, USA
7. Stereotactic principles, NSI Foundation course, 28–29 January 2017, Tamil Nadu Government Multi Super Speciality Hospital, Chennai, Tamil Nadu
8. Pitfall in skull base surgery, 15th Live Endoscopic Surgery and Hands on Cadaveric Workshop, 6–10 February 2017, NSCB Medical College, Jabalpur, MP
9. Management of cavernous sinus lesions, 1st International and 5th Annual Conference of Nepalese Society of Neurosurgeons, 8–11 March 2017, Kathmandu, Nepal
10. Gamma knife radiosurgery in brain AVMS, Radiation Oncology and Neuro Summit, 25 February 2017, New Delhi

Deepak Gupta: 8

1. Multimodality monitoring in neurotrauma: Surgical techniques in neurotrauma, AO Neuro Course Neurotrauma, 27–29 May 2016, Mumbai
2. Split cord malformations and congenital brain tumors, Super Specialty CME, Neurological Society of India, 1 & 2 July 2016, Coorg
3. Neurotrauma care advances in TBI and surgical guidelines, XXXII Annual Conference of Marine Medicine & Allied Sciences, 11 & 12 November 2016, Mumbai
4. Odontoid fixations: Neurotrauma care of TBI, Post traumatic hydrocephalus, Cadaveric Training in Neurosurgery, Extra Conferences in Recife Critical Neurosurgery on Severe Head Trauma: Neurosurgical Approach, 14 December 2016, Recife, Pernambuco
5. Trauma guidelines in TBI, 19th Annual Conference of Delhi Neurological Association (DNACON 2017), 4 & 5 February 2017, New Delhi

6. Surgical advances in TBI, 6th Annual Conference of Neurological Surgeons' Society of India (NSSI), 16–18 February 2017, PGIMER, Chandigarh
7. Pediatric head injuries craniostomosis, International Neurosurgery Course, 5–10 March 2017, Malaga, Spain
8. Frontoorbital advances, pineal tumor surgery surgical: How I do it, 28th Annual Conference of Indian Society for Pediatric Neurosurgery and 2nd Congress of Asian Australasian Society for Pediatric Neurosurgery, 24–26 March 2017, Mumbai

Deepak Agrawal: 6

1. Neuronursing next level, 25th Annual Conference of Neurotrauma Society of India, 14 August 2016, AIIMS, New Delhi
2. Gamma knife for pediatric patients less than 12 years: The AIIMS experience, 44th Annual ISPN Meeting 2016, 25 October 2016, Japan
3. Cost effective implementation of I. T. Hospitals: An AIIMS experience, 14th Health Care Executive Management Development Program, 13 January 2017, Jaipur
4. Surgical advances in traumatic brain injury, 19th Annual Conference of Delhi Neurological Association, 4 February 2017, Indian Habitat Centre, New Delhi
5. How to decide ruptured aneurysm, clipping/coiling/conservative treatment? Indian National Stroke Conference, 18 March 2017, Amritsar
6. Enhancing service delivery to citizens through technology, National Conference on Technology and Innovations in Healthcare Delivery, 20 January 2017, PhD Chamber, New Delhi

Pankaj Kumar Singh: 1

1. Evolution in management of hangmans fracture, 6th AIIMS Complex Spine Live Operative Workshop, 7 & 8 May 2016, AIIMS, Delhi

Vivek Tandon: 6

1. Antiepileptic drugs in posttraumatic epilepsy, National Neurotrauma Conference, 12 August 2016, AIIMS, Delhi
2. Role of CSF leak and sealants, Symposium on Role of Sealants and Hemostats in Neurosurgery, 27 August 2016, India Habitat Center, Delhi
3. Vivek Tandon and P. Sarat Chandra, Epilepsy Workshop and its impact, CCR at AIIMS, 19 August 2016, AIIMS, Delhi
4. CSF diversion, shunt types, complications and advances, Wilkins, Barrick SNO International Outreach Course in Collaboration with the Annual Academic Session of Neurosurgeons Association of Sri Lanka, 22 January 2017, Colombo
5. EMF effects, myths and facts, Public Health and Mobile Technologies: Latest Scientific Evidence, 23 March 2017, India Habitat Center, New Delhi
6. Pediatric brain tumor imaging, Neurosurgery Live TV, 28 August 2017, AIIMS, New Delhi

Sachin Anil Borkar: 3

1. Delhi Neurological Association Meeting, 4 March 2017, AIIMS, New Delhi
2. European Cancer Congress, 27–30 January 2017, Amsterdam
3. International Neurosurgery Update, 4 & 5 June 2016, Mumbai, India

Hitesh Gurjar: 2

1. Decompressive craniectomy: management of complications, Neurotrauma 2016 (Neurotrauma society of India), 14 August 2016, JLN auditorium, AIIMS, Delhi
2. Management of traumatic brain injury, Medical Surgical Nursing Update 2017, 28 March 2017, CMET, AIIMS, Delhi

Shashwat Mishra: 1

1. S Mishra, Bhawani S Sharma. Simplifying ACOM aneurysm surgery: The lessons learnt, Annual Conference of Neurological Society of India 2016, 15–17 December 2016, Chennai

Manoj Phalak: 4

1. Decompressive craniectomy: Current status, 25th Annual Conference of Neurotrauma Society of India, 13 August 2016, AIIMS, New Delhi

2. Topical hemostats in trauma setting neurosurgery: Indications and uses, 25th Annual Conference of Neurotrauma Society of India, 13 August 2016, AIIMS, New Delhi
3. Cervical spine kyphosis: Case based discussion, 6th AIIMS Complex Spine Workshop, 6 May 2016, JPNATC, AIIMS, New Delhi
4. Intraoperative video angiographic treatment of spinal dural AVF, Monthly Meeting of Delhi Neurological Association, 4 March 2017, AIIMS, New Delhi

Shweta Kedia: 5

1. Head injury, Advanced Trauma Life Support (ATLS), 7 October, JPNATC, AIIMS, New Delhi
2. Head injury, Advanced Trauma Life Support (ATLS), 21 October, JPNATC, AIIMS, New Delhi
3. Head injury, Advanced Trauma Life Support (ATLS), 4 November, JPNATC, AIIMS, New Delhi
4. Raised intra cranial pressure management, 1st AIIMS Neurological Life Support (ANLS), January 2017, JPNATC, AIIMS, New Delhi
5. Our first haircut in neurosurgery and journey from abnormal to normal: Judwa/twin brothers saga, Clinical Combined Round, March 2017, JLN Auditorium, New Delhi

Dattaraj Sawarkar: 2

1. O arm guided management of odontoid fractures, 1st AIIMS operative Workshop on O-arm, 2 April 2017, AIIMS, Delhi
2. Current concept in the management of odontoid fractures, Neurotrauma 2016, 14 August 2016, AIIMS, Delhi

Oral papers/posters presented: 31

1. Agrawal D, Bose R, Singh MM, Kale SS. Draining vein shielding in intracranial AVM's, 5th Annual Conference of Neurological Surgeons Society of India, 31 March–2 April 2016, Sher-i-Kashmir International Convention Centre, Srinagar, Jammu & Kashmir
2. Agrawal D, Singh MM, Kale SS. Gamma knife in pediatric patients—AIIMS experience, 27th Annual Indspn Conference, 2–4 October 2016, Bangalore,
3. Agrawal D, Bose R, Singh MM, Kale SS. Draining vein shielding in intracranial AVM's, 65th Annual Conference of the Neurological Society of India, 15–17 December 2016, Chennai
4. Agrawal D, Bose R, Singh MM, Kale SS. Draining vein shielding in intracranial AVM's, 6th Annual Conference of Neurological Surgeons Society of India, 16–18 February 2017, Postgraduate Institute of Medical Education and Research, Chandigarh
5. Agrawal D, Singh MM, Kale SS. Gamma knife in pediatric patients—AIIMS experience, 2nd Congress of Asian Australasian Society of Pediatric Neurosurgery, 24–26 March 2017, Juhu, Mumbai
6. Agrawal D, Sinha S, Gupta D, Singh PK. Early versus late surgery for cervical spinal cord injury, ISCoS Annual Scientific Meeting, 14–16 September 2016, Hofburg Convention Center, Vienna, Austria
8. Agrawal D. Arterial infarcts in severe TBI, Indian National Stroke Conference, 17–19 March 2017, Mahabalipuram, Amritsar
9. Singh PK, Sawarkar DS, Chandra PS, Kale SS, Sharma BS. Management proposal for symptomatic paediatric vertebral hemangiomas based on world largest patient experience, 84th AANS Meeting Chicago 2016, 30 April–4 May 2016, McCormick Place West, Chicago
10. Singh PK, Sawarkar DS, Chandra PS, Kale SS, Sharma BS. Management of paediatric single level vertebral hemangiomas presenting with myelopathy with more than one year follow-up, ISPNO 2016 Liverpool, 12–15 June 2016, Arena and Convention Centre, Liverpool
15. Singh PK, Sawarkar DS, Chandra PS, Kale SS, Sharma BS. Management of paediatric single level vertebral hemangiomas presenting with myelopathy, 25th SNSA Scientific Meeting and 2nd CAANS Continental Congress, 26–29 July 2016, Century City Conference Centre, Cape town
16. Garg M, Jagdevan A, Singh PK, Mahalangikar R, Agarwal D, Satyarthi GD, Sinha S, Gupta D, Kale SS, Sharma BS. Transpedicular corpectomy for traumatic lumbar fractures: A case series of 36 patients, 25th SNSA Scientific Meeting and 2nd CAANS Continental Congress, 26–29 July 2016, Century City Conference Centre, Cape town
17. Singh PK, Sawarkar DS, Chandra PS, Kale SS, Sharma BS, Mahapatra AK. Management of symptomatic paediatric vertebral haemangiomas by an innovative technique, ECCO 2017, 27–30 January 2017, RAI Amsterdam, Amsterdam
18. Sawarkar DS, Singh PK, thailalying RK, Chandra PS, Kale SS, Sharma BS, Mahapatra AK. Surgical outcome of microsurgical excision of brain and spinal cord cavernomas: Our 13 year single center experience, ECCO 2017, 27–30 January 2017, RAI Amsterdam, Amsterdam

19. Tandon V, Raheja A, Suri A, Chandra S et al. Utility of intraoperative MRI in pituitary surgery, NSSI Conference, 15 February 2016, PGI, Chandigarh
20. Tandon V, Raheja A, Suri A, Chandra S et al. Utility of intraoperative MRI in pituitary surgery, NESON Conference, 11 March 2016, Kathmandu, Nepal
21. Tandon V, Raghvendra, Gupta D et al. Post-traumatic hydrocephalous ETV vs shunts, National Neurotrauma Conference, 13 August 2016, AIIMS, New Delhi
22. Tandon V, Chandra PS et al. Is edema a matter of concern after laser ablation in epilepsy patients? NSI, 15 December, 2017, Chennai
23. Complex spinal deformities: Challenges, opportunities and outcome, (oral), Delhi Neurological Association Meeting, 4 March 2017, AIIMS, New Delhi
24. Prediction of facial nerve position in large vestibular schwannoma using diffusion tensor imaging tractography and its intraoperative correlation, (E-poster), European Cancer Congress, 27–30 January 2017, Amsterdam
25. Prediction of facial nerve position in large vestibular schwannoma using diffusion tensor imaging tractography and its intraoperative correlation, Awarded Neurosurgery NEXTGEN Award) (oral), International Neurosurgery Update, 4 & 5 June 2016, Mumbai, India.
26. Sawarkar D, Kumar R, Singh PK, Agrawal D, Sinha S, Gupta D, Sathyarthee G, Singh M, Suri A, Chandra PS, Kale SS, Sharma BS. Surgical outcome of microsurgical excision of brain and spinal cord cavernomas: Our 13 year single center experience, ECCO 2017, 29 January 2017, RAI Amsterdam, Amsterdam
27. Sawarkar D, Sinha S, Sharma BS, Kale SS, Mahapatra AK. Clinical presentations and surgical outcome of peripheral nerve sheath tumors: Our single center experience, ISPNS 2017, 5 March 2017, PGI Chandigarh, Chandigarh
28. Raheja A, Bowers CA, MacDonald JD, Shelton C, Gurgel RK, Brimley C et al. Middle fossa approach for vestibular schwannoma: Good hearing and facial nerve outcomes with low morbidity, 84th Annual AANS Meeting, 1 May 2016, McCormick Convention Center, Chicago
29. Raheja A, Sinha S, Samson N, Bhoi S, Subramanian A, Sharma P et al. Serum biomarkers as predictors of long-term outcome in severe traumatic brain injury: Analysis from a randomised placebo-controlled phase II clinical trial, 84th Annual AANS Meeting, 3 May 2016, McCormick Convention Center, Chicago
30. Raheja A, Bowers CA, MacDonald JD, Shelton C, Gurgel RK, Brimley C et al. Middle fossa approach for vestibular schwannoma: Good hearing and facial nerve outcomes with low morbidity, 12th Annual Heilbrun Symposium, 9 June 2016, University of Utah, Salt Lake City
31. Verma SK, Agrawal D, Singh PK, Satyarthee G, Sumit Sinha, Deepak Gupta, Sharma BS. O-arm with navigation versus C-arm: A review of screw placement over 3 years at a major trauma center, SCEUTH (Role of navigation systems in spinal surgeries.), 4 February 2017, JPNATC, New Delhi

RESEARCH

Funded projects

Ongoing

1. Early gamma knife with concurrent temozolamide in high grade Gliomas: A controlled study, S.S. Kale
2. Role of gamma knife in midbrain AVM's, S.S. Kale
3. Neurosurgery skills training facility with 3D endoscopic and 3D microscopic facility and central repository server for archival, streaming and teleconferencing, Ashish Suri, DST+CSE, IIT, 5 years, 2013–2018, Rs. 650 Lakhs
4. Development of 3D/stereoscopy based virtual reality simulation platform for endoscopic neurosurgery training and pre-operative neurosurgical planning, Ashish Suri, DHR, ICMR+CSE, IIT, 3 years, 2014–2017, Rs. 211 Lakhs
5. Support to Indian institutes to conduct training programme in the area of Operational Research Neurosurgery Skills Training, Ashish Suri, DHR, ICMR+CSE, IIT, 5 years, 2016–2020, Rs. 99 Lakhs
6. National bioscience award for career development 2015, Ashish Suri, DBT, 3 years, 2016–2018, Rs. 17 Lakhs
7. TATA Innovation Fellowship Award 2015, Ashish Suri, DBT, 5 years 2016–2020, Rs. 45 Lakhs
8. Early versus delayed decompression for traumatic high cervical spinal cord injury in acute spinal cord injury study, Deepak Agrawal, DST, 4 years, 2014–2018, Rs. 24.52 lakhs
9. Optic Nerve Ultrasound in Severe Traumatic Brain Injury, Deepak Agrawal, DBT, 3 years, 2015–2017, Rs. 36.07 lakhs
10. Determination of the reference range for the elevated PT/INR with normal coagulation factor level and its association with plasma transfusion therapy in head injury patients, Deepak Agrawal, ICMR, 2 years, 2015–2017, Rs. 25 lakhs
11. VEGF: As a potential systemic marker of local angiogenic activity and response to gamma knife surgery, Deepak Agrawal, AIIMS, 1 year, 2016–2017, Rs. 5 lakhs

12. Approaches and decisions in acute pediatric traumatic brain injury trial (ADAPT), NIH, USA, Deepak Gupta, 5 years, 2015–2020, Rs. 1.8 crores
13. Collaborative European neurotrauma effectiveness research in TBI: A prospective longitudinal observational study and collaborative Indian neurotrauma effectiveness research in TBI: A prospective longitudinal observational study (Centre and CINTER-TBI), NIH, Deepak Gupta, 5 years, 2015–2020, Rs. 10 lakhs
14. European Society of Intensive Care Medicine study of therapeutic hypothermia (32–35°C) for ICP reduction after traumatic brain injury (EUROTHERM), Cambridge University, Deepak Gupta, 5 years, 2012–2017, Rs. 40 lakhs
15. Radiological and microsurgical comparison of the operative exposures obtained through far-lateral and transcondylar approaches in injected cadaveric human heads, Shashwat Mishra, AIIMS grant, 1 year, 2015–2016, Rs. 3.82 lakhs
16. Deciphering the role of Histone deacetylases in mesial temporal lobe epilepsy, Ramesh Sharanappa Doddamani, DST, 2 years, 2016–2017, Rs. 5 lakhs

Completed

1. Design and development of cost effective multipurpose research phantom, simulating patient for high resolution stereotactic imaging and precise radio-surgery, S.S. Kale, AIIMS, 2 years, 2014–2016, Rs. 4.5 lakhs
2. Injury mechanisms in blast and blunt traumatic brain injuries: A comparative study based on clinical data and numerical analysis, S.S. Kale, Office of Science and Technology, Officer of Naval Research Global, US, 2 years, 2015–2017, Rs. 28.79 lakhs
3. Radiosurgery vs lobectomy for temporal lobe epilepsy(rse): A phase III clinical trail, S.S. Kale, Iprocess Clinical Marketing Pvt Ltd., 3 years, 2011–2016, Rs. 247.5 lakhs
4. Evaluation of development of neurosurgery skills by hands-on skills training and interactive virtual training modules (web based, tele-education and real time evaluation), Ashish Suri, ICMR + CSE, IIT, 4 years, 2012–2016, Rs. 184 Lakhs
5. Development of low-cost versatile endoscopic equipment system for neurosurgery, Prof Ashish Suri, DST-IDP, India, AIIMS+BME, IIT, 4 years, 2012–2016, Rs. 86 Lakhs
6. Center of Excellence for Epilepsy Research, P Sarat Chandra, DBT, 5 years, 2012–2016
7. Monitoring cognition of healthcare workers in emergency and intensive care setting and its relation to medical errors, Deepak Agrawal, DST, 4 years, 2012–2016, Rs. 59.86 lakhs
8. Automated assessment of hand hygiene complication in healthcare settings using Kinect Camera, Deepak Agrawal, DBT, 3 years, 2013–2016, Rs. 24 lakhs
9. Economic and Social burden of Managing Traumatic brain injuries (TBI) in adult aged 18–50 years in India, Deepak Agrawal, DHR, 1 year, 2014–2015, Rs. 8 lakhs
10. Thromboelastometry (TEG): Utility and cost-effectiveness in diagnosing of infection in neurosurgery Intensive Care Unit (ICU) as compared to established biomarkers, Deepak Agrawal, AIIMS, 1 year, 2014, Rs. 10 lakhs
11. Matrix Metalloproteinase (MMPS) (MMPS) as biomarkers for fusion following spinal instrumentation, Deepak Agrawal, AOSPINE, 1 year, 2014, 5500 CHF
12. Indo-US Project: Collaborative head injury and adherence to guidelines (CHIRAG), NIH, Deepak Gupta, 4 years, 2011–2015, Rs. 20 lakhs
13. Role of cerebral microdialysis in Ischemia vs. Mitochondrial dysfunction in severe Traumatic Brain injury, AIIMS, Deepak Gupta, 2 years, 2013–2015, Rs. 5 lakhs
14. Study of MicroRNA in long term epilepsy associated tumors and focal cortical dysplasia, Vivek Tandon, AIIMS, 1 year, 2015–2016,
15. Cervical rotation before and after hinge-door cervical laminoplasty for cervical spondylotic myelopathy and its relation to post-operative axial neck symptoms, Sachin Borkar, AO Spine India, 2 years, 2014–2016, Rs. 3.96 lakhs
16. Assessment of Cerebral Autoregulation using NIRS in severe traumatic brain injury patients, Keshav Goyal, AIIMS, 2 years, January 2016, Rs. 5 lakhs

Departmental projects

Ongoing

1. Molecular and genetic variations of Oligodendrogliomas
2. Moya Moya disease
3. Outcome of surgery in spontaneous hypertensive basal ganglia bleed
4. Outcome and complications of brain AVMs planned with DSA/MRI vs MRI alone

Completed

1. Surgical management of Cushings disease
2. Modified anterior transpetrosal rhomboid approach
3. Cadaver based study of silicone standardization
4. Fractionated radiosurgery in brain lesions, Dr Manmohan Singh

Departmental projects

Ongoing

1. Early gamma knife with concurrent temozolamide in high grade Gliomas, A controlled study
2. Role of gamma knife in midbrain AVM's
3. FEA model creation with biomechanical validation of CVJ fixations
4. Hydrocephalus
5. Cranopharyngiomas
6. Effectiveness of preoperative facial nerve diffusion tensor imaging tractography for preservation of facial nerve function in surgery for large vestibular schwannomas: A prospective randomized study
7. Long term outcome of acoustic schwannomas following gamma knife
8. Outcome of mid brain AVMs following gamma knife
9. "Standard MRI imaging is inadequate in drug resistant epilepsy": Retrospective analysis.
10. A study on the effect of GABA: A receptor alterations in cortical dysplasias
11. Radiosurgical outcome of AVM planned on DSA and MRI versus MRI alone

Completed

1. Therapeutic Application of Bone Marrow Derived Stem Cell in Complete Spinal Cord Injury, Prof Deepak Agrawal
2. Study of traumatic brain injury induced secondary gastrointestinal changes, Prof Deepak Agrawal
3. Pituitary dysfunction following stereotactic radiosurgery for secretory pituitary adenomas, Prof Deepak Agrawal
4. Role of 3D CT angiography in CV junction anomalies and perioperative correlation, Prof Sachin Borkar

Collaborative

Ongoing

1. Neurosurgery skills training facility with 3D endoscopic and 3D microscopic facility and central repository server for archival, streaming and teleconferencing, AIIMS (Anatomy, Forensic Medicine IIT-D: CSE)
2. Development of 3D/stereoscopy based virtual reality simulation platform for endoscopic neurosurgery training and pre-operative neurosurgical planning, AIIMS (Anatomy, Forensic Medicine IIT-D: CSE)
3. Elucidation of possible cross-talk among matrix metalloproteinase and heat shock proteins in glioma (BioMedical engineering, Indian Institute of Technology, Kharagpur)
4. Radiological and microsurgical comparison of the far-lateral and transcondylar transtubercular approach (along with vertebral artery mobilisation) with regards to the surgical exposure of the lower clivus and vertebral PICA complex in silicone-injected cadaver heads in Indian population (Anatomy)

Completed

1. Evaluation of development of neurosurgery skills by hands-on skills training and interactive virtual training modules (web based, tele-education and real time evaluation), AIIMS: Anatomy, Forensic Medicine (IIT-D: CSE)
2. Development of Low-Cost Versatile Endoscopic Equipment System for Neurosurgery (IIT-D: CBME)

PUBLICATIONS

Journals: 137

Abstracts: 3

Chapters in books: 3

Books: 1

PATIENT CARE

Department of Neurosurgery has two units with general neurosurgical ward under each unit (35 X 2 beds). There are two ICUs with 23 beds. There are now seven elective operation theatres and one exclusive operation theatre in trauma centre. We offer world class neurosurgical facilities in all neurosurgical sub-specialties, which include vascular surgery, epilepsy surgery, minimally invasive cranial and spinal neurosurgery, pediatric neurosurgery, functional neurosurgery, neuro-oncosurgery, skull base and complex spinal surgeries. Following number of patients were treated by us during the year 2016–2017:

S. no.	Treatment facility	Number
1.	Outpatient department	
	a) Total new cases	15218
	b) Total old cases	35154
	c) Pediatric new cases	1992
	d) Pediatric old cases	5417
	e) Total cases	50372
2.	Gamma knife performed	510
3.	Total number of surgeries CNC	3375
4.	Total Number of cases in Brain Suite	320
5.	Number of elective surgeries (JPNATC)	1367
6.	Total number of surgeries	5062

Professor S.S. Kale wrote and released a **Home Care Booklet For Spinal Cord Injury**

Professor Deepak Agrawal: (i) Set up **Stem Cell Translational and Neurosciences Laboratory (STN Lab)** approximately 100 square feet of laboratory space at Jai Prakash Apex Trauma Center, All India Institute of Medical Sciences, New Delhi, India. This includes a neurotrauma translational lab, molecular lab, stem cell processing lab and immunology lab. PhD Scholars, Graduate students and research associates and nurses have separate desks in the main laboratory area; Conducted Unique one day symposium for spinal cord injury patients titled “Life After Spinal Cord Injury and Disability” on 4 June 2016 at Seminar Hall, 1st Floor, JPN Apex Trauma Center, AIIMS, New Delhi; Started a Youtube channel for sharing the stories and aggregating relevant videos for use by spinal cord injured patients; Wrote and released a **Home Care Booklet for Spinal Cord Injury**

Dr Vivek Tandon’s contributions towards patient care activities are as under: (i) PACS and images made available online; (ii) All Operation theatre equipment’s now synced with existing PACS; (iii) Residents quality assurance module implemented; (iv) Intraoperative MRI suite was repaired after damage in accidental fire; (v) Package store being maintained and services being provided at the lowest possible costs

Dr Dattaraj Sawarkar was Part of special clinics like Spine clinic on every Saturday in AIIMS and Brachial plexus clinic on every Friday in JPNA trauma center; Took part in public ‘Head Injury Awareness Program’ during Neurotrauma 2016 in Delhi.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor A.K. Mahapatra was awarded Bata Shreeksheeta Samman 2016 for contribution in Medical Sciences in Odisha on 29 May 2016; Utkalmani Gopabanda Seva Samman by Rashtriya Kisan Singh on 9 October 2016, Cuttack; Dr Kabi Prasad Mishra International Award on 4 November 2016; Prof B. Kakati Oration on 12 November 2016 at Neuroupdate, Gawahati Medical College, Assam; Honoris Causa (Doctor in Science DSc) Utkal University on 3 February 2017; Prof P. P. Karnik Oration, 6 January, at 38th Annual Conference NES India at Bhubaneswar, India. He has been visiting professor to NISER, Bhubaneswar, 3–6 November 2016. He is also member of editorial board for following journals: Chief Editor, Indian J. Neurosurgery; Neurology India; International Journal of Nutrition and Health Sciences; Annals of Medicine and Surgery, London; International Medical Science Journal (JIMSA); Anti Infective drug Discovery; Indian Journal of Neurotrauma. He has also handled following executive appointments: Dean Research, AIIMS, New Delhi; Brand Ambassador, “Swachha Bharat” Mission, Govt. of Odisha, 2016–2017; Member of Jury, S.S. Bhatnagar Award, CSIR. 2016; Member of Odisha Innovative Council, 2016–2017; Member of Advisory Committee, Odisha Higher Education, 2016; Jury Odisha Citizen Award, September, 2016; Member of IPC, headed by Secretary Ministry of Health, Govt. of India, 2015–2016, for purchase of Equipment for all 6 New AIIMS; Member of Faculty, Selection Committee, NEIGRIMS, Shillong, November 2016.

Professor P.S. Chandra has been Secretary of Skull Base Surgery Society of India, Elected; Hon’ble Treasurer of Neurological Society of India; Member, sub commission of pediatric epilepsy surgery, ILAE; Visiting Professor, University of Rabat, Morocco; Visting Professor, University of Kuala Lumpur, Malaysia. He delivered Dr Sehgal oration, Indian Epilepsy Society Annual Congress

Professor Ashish Suri received following honors: National Academy of Sciences India, NASI, Reliance Industries Platinum Jubilee Award, 2016; National Academy of Sciences India, NASI, Platinum Jubilee Oration, 2016; Adjunct Professor, School of Information Technology, Indian Institute of Technology, Delhi; Executive Member, NSI, Neurological Society of India;

Executive Member, World Federation of Neurosurgical Societies, Skull Base Committee; Executive Member, N.E.S (I) Neuroendoscopy Society of India; Convener CNS, NSI (Congress of Neurological Surgeons, Neurological Society of India) Simulation Workshop; Expert, DBT, Bio-Engineering Task Force; Expert, ICMR, Neuroscience Translational Research Task Force; Visiting Professor, Kluwer Foundation Guest Professor, Department of Neurosurgery, University of Chicago School of Medicine, Chicago, USA; Visiting Professor, Department of Neurosurgery, University of Minnesota, Minneapolis, USA

Professor Deepak Agrawal was awarded the International Research Award by American Association of physicians of Indian Origin (1st Prize) at Udaipur, 2016; the Dynamic CIO of Health Care of the year (2016) in the 5th Annual Healthcare Summit; the Skotch order of merit award for Top 100 projects in India for AIIMS video consults and e-learning project, (2016); Certificate of Appreciation by Director AIIMS for implementation of e-hospital at AIIMS, (2016); the Healthcare leader's forum, Technology for patient delight award by elets. (2016); Indian Express Public Health awards (2016) for most effective health technology system; Skoch Smart Governance award for online appointment system and patient portal. (2016); the Social Media for empowerment award (2016).

Professor Deepak Gupta was Selected as Honorary Secretary of Delhi Neurological Association (2015–2018)

Dr Sachin Borkar received Neurosurgery NEXT GEN award (1st prize) during International Neurosurgery Update, 4 & 5 June 2016; Mumbai, India (cash prize INR 2 lakhs) and AO Spine India National Fellowship in Spine for the year 2016.

Dr Vivek Tandon received the prestigious John N. Kapoor Indo American fellowship for a month's observerhip in neuro-oncology at MD Anderson Cancer Center at Houston, USA.

Dr Dattaraj Sawarkar was selected at Executive Committee (EC) member for Indian Society of Peripheral Nerve Surgery (ISPNS) in March 2017 and was Invited as a guest faculty to perform and demonstrate the technique of endoscopic endonasal skull base approaches and endoscopic discectomy in the live operative Workshop held at NSCB medical college Jabalpur under Neuroendoscopy Fellowship program in February 2017, and as a course faculty coordinated cadaver endoscopic endonasal skull base Workshop in the AIIMS organized by AIIMS Cadaver Training and Research facility (CTRF).

Social Service

Dr Manmohan Singh attended 1 week annual AIIMS camp at LEH, LADAKH to treat impoverished patients of remote areas.

Neuroanaesthesiology and Critical Care

HIGHLIGHTS

Two candidates were awarded D.M. (Neuroanaesthesiology) degree. Five new candidates joined D.M. course. Twenty one postgraduate students and 15 senior residents from other anaesthesia departments received neuro-anaesthesia training.

Seventeen research projects (2 funded, 14 departmental and 1 collaborative) were completed while 32 research projects (8 funded, 22 departmental and 12 collaborative) were going on.

The department successfully organized AIIMS Neuroanaesthesia Update-2015 and AIIMS Cadaveric Airway Workshop. Eighty nine lectures were delivered by the faculty members of the department in various national and international conferences. They also presented 17 research papers in various conferences. Faculty and residents published 58 articles in various national and international scientific journals. Twelve abstracts were published in international scientific journals. Twenty chapters in books were written by faculty. One book was written/edited by a faculty member.

One faculty continued to be chief editor and 2 faculty members continued to be executive editors of a national journal.

EDUCATION

Twenty one MD-Anaesthesiology students (12 from Anaesthesiology department, AIIMS and 9 from LHMC) received neuroanaesthesiology training in the department as an integral part of their curriculum.

1. Ten Senior Residents (9 from Department of Anaesthesia and 6 from Department of Oncoanaesthesia) received training in Neuroanaesthesiology for variable periods as a part of interdepartmental rotation on mutual exchange basis.
2. Thrice a week (Mondays, Tuesdays, Saturdays) Seminars, Journal club and case presentations (for one hour at a time) were organized as a part of departmental teaching program.

CME, Conferences, Seminars, Workshops organized by the department

1. AIIMS Neuroanesthesia Update 2016, 1 & 2 October 2016 at AIIMS, New Delhi
2. AIIMS Cadaveric Airway Workshop, 7 August 2016 and 5 March 2017, JPNATC, AIIMS, New Delhi

3. AIIMS, CADAVERIC, Interventional pain management Workshop, 22 July 2016, JPNATC, AIIMS, New Delhi
4. AIIMS, ANLS, 28–29 January 2017, JPNATC, AIIMS, New Delhi

Lectures delivered

Arvind Chaturvedi: 3

Hemanshu Prabhakar: 1

Niraj Kumar: 17

Charu Mahajan: 4

Rajendra Singh Chouhan: 2

Gyninder Pal Singh: 4

Keshav Goyal: 14

Surya Kumar Dube: 8

Girija Prasad Rath: 7

Ashish Bindra: 10

Navdeep Sokhal: 8

Arvind Chaturvedi: 3

1. Anaesthetic management of craniosynostosis, AIIMS Paediatric Neurosurgery Workshop, 19 January 2017, AIIMS, New Delhi
2. Anaesthetic management of posterior fossa neurosurgery, ISA North Zone PG Assembly, 5 March 2017, RML Institute, Lucknow
3. Dexmedetomidine in trans-sphenoidal pituitary surgery (Paper as Co-author), ISNACC Chicago, 20 & 21 October 2016, Chicago, IL, Chicago, IL

Rajendra Singh Chouhan: 2

1. In Annual AIIMS Neuroanaesthesia Update held at New Delhi, India from 30 September to 2 October 2016.
2. In 18th Annual Conference of Indian Society of Neuroanesthesiology and Critical Care held at PGIMER, Chandigarh, India from 24–26 February 2017.

Girija Prasad Rath: 7

1. Anticoagulants or antiplatelet aggregation agents and neurosurgical or neuroangioradiology procedures, 9th International Update on Neuro-Anesthesia and Neuro-Intensive Care (EURONEURO 2016), 14–16 April 2016, Barcelona, Spain
2. Paediatric awake craniotomy, 16th World Congress of Anaesthesiologists (WCA 2016), 28 August–2 September 2016, Hong Kong Convention and Exhibition Centre (HCEC), Hong Kong
3. Screening and optimization of brain-dead organ donors, Training of Resident Doctors on Deceased Organ and Tissue Donation, 15 January 2017, CMET, AIIMS, New Delhi, India
4. Clinical Applications of TCD-NIMHANS TCD Workshop, 25 January 2017, NIMHANS, Bengaluru, India
5. Cerebral microdialysis, Annual Conference of Indian Society of Neuroanaesthesiology and Critical Care (ISNACC 2017), 24–26 February 2017, PGIMER, Chandigarh, India
6. Transcranial Doppler (TCD), Presymposium Neuromonitoring Workshop of Neuroanaesthesia Symposium (NAS) 2017, 31 March 2017, Kuching, Sarawak Malaysia
7. Near Infrared Spectroscopy (NIRS), Presymposium Neuromonitoring Workshop of Neuroanaesthesia Symposium (NAS 2017), 31 March 2017, Kuching, Sarawak Malaysia

Hemanshu Prabhakar: 1

1. Biomarkers in acute brain injury, Euroneuro 2016, 14 April 2016, Barcelona

Gyninder Pal Singh: 4

1. Near infra red spectroscopy, Neurotrauma 2016, 12–14 August 2016, AIIMS, New Delhi
2. Neuromonitoring, NSICON 2016, 15–18 December 2016, Chennai
3. Trigemino-cardiac reflex: Mechanism and clinical implications, ISNACC 2017, 24–26 February 2017, PGIMER, Chandigarh
4. Keeping up to pace with NOACs and their impact in neurocritical care, MNCC 2017, 31 March–2 April 2017, Medanta, Gurugram

Ashish Bindra: 10

1. Stellate ganglion block, AIIMS Cadaveric Chronic Pain Management Course, 22 July 2016, JPNA Trauma Centre, New Delhi
2. Initiation of mechanical ventilation, World Trauma Congress, November 2016, JPNA Trauma Centre, New Delhi
3. Panel: Neurological injuries, Asia Pacific Critical Care Conference (APCC), 18 November 2016, New Delhi

4. Cerebral oxygenation monitors: Do they improve outcome, 64th Annual Conference, Indian Society of Anesthesiology, 27 November 2016, Punjab Agriculture University, Ludhiana
5. Differential diagnosis of facial pain, Neuro Equilibrium Society of India, 6 January 2016, AIIMS, Bhubaneswar
6. Management of head trauma, Advanced Trauma Life Support Course, 19 & 20 January 2017, JPNATC, AIIMS, New Delhi
7. Management of status epilepticus, AIIMS Neurological Life Support, 29 January 2016, AIIMS, New Delhi
8. Monitoring in neuroanaesthesia, PG Assembly, 21 February 2017, GB Pant Hospital, New Delhi
9. Multimodal monitoring in neurocritical care, Annual Neurocritical Care Update, 25 March 2017, Artemis Hospital, Gurgaon
10. Panel: Pediatric neurological injury, Medanta Neurocritical Care, 1 April 2017, Medanta, Medicity, Gurgaon

Niraj Kumar: 17

1. Vascular access, AIIMS EM-SONO, 27 & 28 April 2016, JPNATC, AIIMS, New Delhi
2. Circulation, AIIMS, BLS, 16–20 May 2016, JPNATC, AIIMS, New Delhi
3. Rush Protocol, The Pump, Focussed Cardiac Ultrasound in Trauma, AUTLS, 18 & 19 May 2016, JPNATC, AIIMS, New Delhi
4. Ultrasound as an aid to airway, *Course Director, Cadaveric, Airway Management Workshop, 7 August 2016, JPNATC, AIIMS, New Delhi
5. Child and infant CPR, AIIMS, BECC, 8 August 2016, JPNATC, AIIMS, New Delhi
6. Cardio-respiratory complications in cranio-spinal trauma, Neurotrauma 2016, 12–14 August 2016, AIIMS, New Delhi
7. ECHO: Focussed cardiac ultrasound in trauma, AUTLS, Central Venous Cannulation, ACCC, WTC 2016, 17–20 August 2016, JPNATC, AIIMS, New Delhi
8. Acute trauma care, ISACONCG 2016, 24 & 25 September 2016, Medical College, Raigarh (C.G.)
9. ONSD, AIIMS Neuro Anaesthesia Update 2016, 1 & 2 October 2016, AIIMS, New Delhi
10. Shock, Ultrasound of Airway, AIIMS, TLS, 20 & 21 December 2016, Pandri, Raipur
11. Central venous catheterization, CCILBS, 2017, 24 January 2017, ILBS, New Delhi
12. Traumatic Spine Injury (TSI), ANLS, 28 & 29 January 2017, JPNATC, AIIMS, New Delhi
13. Vascular access, AIIMS EM-SONO, 6 & 7 February 2017, JPNATC, AIIMS, New Delhi
14. Spinal cord injury, ATLS Provider Course, 16–18 February 2017, JPNATC, AIIMS, New Delhi
15. Ultrasound as an aid to airway, *Course Director –Cadaveric, Airway Management Workshop, 5 March 2017, JPNATC, AIIMS, New Delhi
16. Microteaching of participants, AIIMS, BECC, Instructor Course, 8 & 9 March 2017, JPNATC, AIIMS, New Delhi
17. Airway and breathing, *Course Director, AIIMS, BECC, 10 March 2017, JPNATC, AIIMS, New Delhi

Keshav Goyal: 14

1. AED, infant and child CPR: Choking adult children and infant and other special scenarios, *Course Director, Basic Emergency Care Course (BECC), 20 April 2016, JPNATC, AIIMS, New Delhi
2. Drowning and other special scenarios, Basic Emergency Care Course (BECC), 23 May 2016, JPNATC, AIIMS, New Delhi
3. Spine and spinal cord trauma, Advanced Trauma Life Support (ATLS), May 2016, JPNATC, AIIMS, New Delhi
4. Airway and ventilation, Advanced Trauma Life Support, May and July 2016, JPNATC, AIIMS, New Delhi
5. Musculoskeletal system, Advanced Trauma Life Support (ATLS), June 2016, JPNATC, AIIMS, New Delhi
6. Focussed assessment sonography in trauma (FAST), Advanced Trauma Life Support (ATLS), July 2016, JPNATC, AIIMS, New Delhi
7. Considerations in elderly trauma victims, Advanced Trauma Life Support (ATLS), July 2016, JPNATC, AIIMS, New Delhi
8. Fiberoptic bronchoscopy guided intubation: A tool for difficult airway management, 2nd and 3rd Cadaveric Airway Workshop, August 2016 and March 2017, JPNATC, AIIMS, New Delhi
9. Facet joint block: Considerations and tips, 1st Cadaveric Pain Workshop, July 2016, JPNATC, AIIMS, New Delhi
10. Non neurological complications in neurotrauma patients in ICU at Apex Trauma Centre: A prospective observational study, 14th Neurocritical Care Society (NCS) Meeting, September 2016, Gaylord Convention Centre, Washington DC, USA

11. Status Epilepticus: Cases in Neurocritical Care, ISACON 2016, November 2016, Ludhiana University, Ludhiana, Punjab
12. Traumatic brain injury: Acute emergency management, *Course Director and Coordinator, 1st AIIMS Neurological Life Support (ANLS), January 2017, JPNATC, AIIMS, New Delhi
13. Debate on early interruption of sedation in neurocritical care, Pro-Annual Neurocritical Care Update (ANCU) 2017, March 2017, Artemis Hospital, Gurgaon, Haryana
14. Neuromonitoring and TBI, 3rd Medanta Neurocritical Care Conference (MNCC) 2017, March 2017, Medanta, The Medicity, Gurgaon, Haryana

Navdeep Sokhal: 8

1. Musculoskeletal trauma, ATLS, 9 September 2016, JPNATC, New Delhi
2. Airway and ventilation, ATLS, 6 October 2016, JPNATC, New Delhi
3. Percutaneous tracheostomy, Airway Management Workshop: Cadaver Training and Research Facility, 5 March 2017, JPNATC, New Delhi.
4. FAST, Skill station/Workshop, ATLS, 8 September 2016, JPNATC, New Delhi
5. Musculoskeletal trauma assessment and management, Skill stations/Workshop, ATLS, 9 September 2016, JPNATC, New Delhi
6. Triage scenario, Skill stations/Workshop, ATLS, 9 September 2016, JPNATC, New Delhi
7. Airway and ventilator management, Skill stations/Workshop, ATLS, 6 October 2016, JPNATC, New Delhi
8. Percutaneous tracheostomy live, Airway Management Workshop: Cadaver Training and Research Facility, 5 March 2017, JPNATC, New Delhi

Charu Mahajan: 4

1. Microdialysis, AIIMS Neuroanaesthesia Update 2017, 30 September–2 October 2016, AIIMS, New Delhi
2. Anaesthetic management of a case of posterior fossa tumour, Postgraduate Anaesthesiology Refresher Course 2017, 18–20 March 2017, SGPGIMS, Lucknow
3. Anaesthetic management of a child with hydrocephalous, Postgraduate Anaesthesiology Refresher Course 2017, 18–20 March 2017, SGPGIMS, Lucknow
4. Microdialysis, Medanta Neuro Critical Care Conference, 2017 (MNCC-2017), 31 March–02 April 2017, Medanta Hospital, Gurgaon

Surya Kumar Dube: 8

1. Keynote lecture, EEG monitoring, AIIMS Neuroanesthesia Update 2016, 30 September–2 October 2016, AIIMS, New Delhi
2. Brain death diagnosis and certification, Service Training Course of Nurses on Deceased Organ and Tissue Donation organized by ORBO, AIIMS, 20 April–23 August 2016, AIIMS, New Delhi
3. Donor screening and optimization, Service Training Course of Resident doctors and Nurses on Deceased Organ and Tissue Donation organized by ORBO, AIIMS, 15 March and 23 March 2017, AIIMS, New Delhi
4. Double lumen tube, AIIMS Cadaveric Airway Workshop, 7 August 2016 and 5 March 2017, JPNATC, AIIMS, New Delhi
5. Lumbar sympathetic block, AIIMS Cadaveric Pain Management Workshop, 22 July 2016, JPNATC, AIIMS, New Delhi
6. Neuromonitoring, Post Graduate Student Class, 19 October 2016, Department of Anesthesiology, Intensive care and pain management, AIIMS, New Delhi
7. Posterior fossa surgery: PG poster evaluation, ISAMIDKON 2017, 25 & 26 March 2017, Thrissur, Kerala
8. Trans Cranial Doppler, 3rd Annual Medanta Neurocritical Care Conference (MNCC-2017), 31 March 2017, Medanta, The Medicity, Gurugram, Haryana

Oral papers/posters presented: 32

1. Lamsel R, Kumar N, Goyal K, Sokhal N, Singh GP, Bindra A. Toe gangrene following prolonged dorsalis pedis artery cannulation, World Trauma Conference 2016, 26 November 2016, AIIMS, New Delhi
2. Banik S, Rath GP, Sinha S, Prabhakar H, Bithal PK. Intracranial pressure monitoring in children with severe traumatic brain injury: a Retrospective study, World Congress of Anaesthesiologists (WCA 2016), 28 August–2 September 2016, Honk Kong Convention and Exhibition Centre (HCEC), Hong Kong

3. Barkha B, Bindra A, Kumar N, Goyal K, Rath GP, Lalwani S, Gupta D. Morality analysis of neurotrauma patients in a critical care unit of level 1 trauma centre, Annual Neuroanaesthesia Update 2016, September 2016, JLN Auditorium, New Delhi
4. Bindra A, Banik S, Mitra R, Rath GP. Effect of Dexmedetomidine for ICU Sedation in Head Injury Patients, 9th International Update on Neuro-Anesthesia and Neuro-Intensive Care (EURONEURO 2016), 14–16 April 2016, Barcelona, Spain
5. Bindu B, Bindra A, Kumar N, Goyal K, Rath GP, Lalwani S, Gupta D. Mortality analysis on neurotrauma patients in a critical care unit of level 1 trauma centre, AIIMS Neuroanaesthesia Update, 1–2 October 2016, AIIMS, New Delhi
6. Bindu B, Mitra R, Singh GP, Phalak M. Persistent hypertension after posterior fossa surgery: A case series, ISNACC 2017, 24–26 February 2017, PGIMER, Chandigarh
7. Chauhan V, Singh GP, Rath GP, Tomar GS. Perioperative management and outcome of children with cervical spine injury, A retrospective analysis of 112 cases, AIIMS Neuroanaesthesia Update 2016, 30 September–2 October 2016, AIIMS, New Delhi
8. Chauhan V, Singh GP, Rath GP. Anesthetic management of children with cervical spine injury: A retrospective,* AIIMS Neuroanaesthesia Update 2016, 30 September–2 October 2016, JLN Auditorium, New Delhi, India
9. Dube S, Hooda B, Chouhan R, Rath G, Bithal P. Incidence and predictors of postoperative pulmonary complications in patients undergoing craniotomy and excision of posterior fossa tumours, 44th Annual Meeting of Society of Anesthesiology for Neuroscience and Critical Care (SNACC), 20 & 21 October 2016, Inter Continental Chicago Magnificent Mile, Chicago, USA
10. Dube SK, Mishra N, Kapoor I, Rath GP, Mohapatra S. Anaesthetic management for Tetralogy of Fallot (TOF) with cerebral abscess: A retrospective review of 52 children, ASA Annual Meeting (Anesthesiology 2016), 22 October 2016, Chicago, USA
11. Goyal K, Hazarika A, Sokhal N, Bindra A, Kumar N, Rath GP, Bithal P. Non-neurosurgical complications in traumatic neurosurgical ICU patients: A prospective observational study, Annual Neurocritical Care Conference, 15–18 September 2016, Gaylord National Harbor, Washington DC
12. Kaushal A, Bindra A, Kumar N, Goyal K, Rath GP. Evaluation of prognostic factors of outcome in severe traumatic brain injury patients following decompressive craniectomy, 18th Annual Conference of Indian Society of Neuroanaesthesiology and Critical Care (ISNACC 2017), 24–26 February 2017, PGIMER, Chandigarh, India
13. Kaushal A, Bindra A, Kumar N, Goyal K, Rath GP. Evaluation of prognostic factors of outcome in severe traumatic brain injury patients following decompressive craniectomy, Annual Neurocritical Care Update, 25 March 2017, Artemis, Gurgaon
14. Kaushal A, Bindra A, Kumar N, Rath GP. Evaluation of prognostic factors of outcome in severe traumatic brain injury patients following decompressive craniectomy, ISNACC 2017, 24 January 2017, PGIMER, Chandigarh
15. Kaushal A, Bindra A, Prabhakar H, Chaturvedi A, Chandra PS, Tripathi M. Dexmedetomidine in epilepsy surgery: Is it neuroprotective, Annual Neuroanaesthesia Update, September 2016, AIIMS, New Delhi
16. Khandelwal A, Goyal K, Hazarika A, Sokhal N, Bindra A, Kumar N, Rath GP, Bithal P. Non-neurosurgical complications in traumatic neurosurgical ICU patients: a prospective observational study, 18th Annual Conference of Indian Society of Neuroanaesthesiology and Critical Care (ISNACC 2017), 24–26 February 2017, Bhargava Auditorium, PGIMER, Chandigarh, India
17. Khandelwal A, Goyal K, Hazarika A, Sokhal N, Bindra A, Kumar N, Rath GP, Bithal P. *Awarded among best papers, Non-Neurological complication in traumatic neurosurgical ICU patients: A prospective observational Study, Annual Conference of Indian Society of Neuroanaesthesia and Critical Care (ISNACC), January 2017, PGIMER, Chandigarh
18. Khandelwal A, Prabhakar H, Kapoor I, Mahajan C. Effect of peak end expiratory pressure on optic nerve sheath diameter in pediatric patients suffering from traumatic brain injury, Neurocritical Care Update, 2017, Artimis Hospital, New Delhi
19. Khendalwal A, Kumar N, Singh GP. Hypermobile laryngeal granulomas as a cause of false negative cuff test: A case report, AIIMS Neuroanaesthesia Update 2016, 30 September–2 October 2016, AIIMS, New Delhi
20. Lamsal R, Mishra RK, Kumar N. A rare cause of delayed recovery from anesthesia after lumbar spine surgery, AIIMS Neuroanaesthesia Update, 1 & 2 October 2016, AIIMS, New Delhi
21. Mohapatra S, Agarwal R, Rath GP, Gupta D, Kapil A. Active surveillance of health care associated infection in neurosurgical patients, 9th International Update on Neuro-Anesthesia and Neuro-Intensive Care (EURONEURO 2016), 14–16 April 2016, Barcelona, Spain
22. Prabhakar H, Mahajan C, Kapoor I, Bithal P. Effect of nitrous oxide on bispectral index values at equi-MAC concentrations of sevoflurane and desflurane, SNACC 2016, 20 & 21 October 2016, Magnificent Mile, Chicago

23. Prabhakar H, Mahajan C, Kapoor I. Effect of Nitrous oxide on bispectral index at equi-minimal alveolar concentration of sevoflurane and desflurane, ISACON, November 2016, ISACON, Ludhiana, Punjab
24. Prabhakar H, Rath G, Mitra R, Bithal P. A comparative study between intra-operative low dose ketamine and dexmedetomidine, as anesthetic adjuvant in lumbar spine instrumentation surgery for post-operative analgesia requirement, 44th Annual Meeting of Society of Anesthesiology for Neuroscience and Critical Care (SNACC), 20 & 21 October 2016, Inter Continental Chicago Magnificent Mile, Chicago, USA
25. Rath GP, Banik S, Prabhakar H, Bithal PK. Dexmedetomidine does not affect cerebral autoregulation and carbon dioxide reactivity during sevoflurane anaesthesia, 9th International Update on Neuro, Anesthesia and Neuro-Intensive Care (EURONEURO 2016), 14–16 April 2016, Barcelona, Spain
26. Rath GP, Mahajan C, Singh GP. Efficacy and safety of dexmedetomidine in patients undergoing awake craniotomy: an observational study, World Congress of Anaesthesiologists (WCA 2016), 28 August–02 September 2016, Hong Kong Convention and Exhibition Centre (HCEC), Hong Kong
27. Singh GP, Chauhan V, Rath GP, Bindu B. Clinical Indicators of Outcome in Children with Cervical Spine Injury Requiring Anaesthetic and Intensive Care Management A Retrospective Analysis, World Congress of Anaesthesiologists (WCA 2016), 28 August–02 September 2016, Hong Kong Convention and Exhibition Centre (HCEC), Hong Kong
28. Sokhal S, Mishra RK, Rath GP, Sokhal N. Perioperative management of giant intracranial aneurysms: A clinical report of 19 cases, 18th Annual Conference of Indian Society of Neuroanaesthesiology and Critical Care (ISNACC 2017), 24–26 February 2017, Bhargava Auditorium, PGIMER, Chandigarh, India
29. Sokhal S, Mishra RK, Rath GP, Sokhal N. Peri-operative management of giant intracranial aneurysm: A case report of 19-ISNACC 2017, 26 February 2017, PGIMER, Chandigarh
30. Sokhal S, Singh GP, Sokhal N, Roy H. Spontaneous pneumo-mediastinum during craniotomy in prone position: a rare cause for intraoperative brain bulge, AIIMS Neuroanaesthesia Update 2016, 30 September–2 October 2016, AIIMS, New Delhi
31. Tomar G, Rath G, Singh G, Chauhan V. Perioperative management and outcome of children with cervical spine injury: A retrospective analysis of 112 cases, 44th Annual Meeting of Society of Anesthesiology for Neuroscience and Critical Care (SNACC), 20 & 21 October 2016, Inter Continental Chicago Magnificent Mile, Chicago, USA
32. Tomar GS, Singh GP, Bithal PK. To compare the effect of two different techniques of chest physiotherapy on intracranial pressure in traumatic brain injury patients: A randomized cross over study, AIIMS Neuroanaesthesia Update 2016, 30 September–2 October 2016, AIIMS, New Delhi

RESEARCH

Funded projects

Ongoing

1. Use of indirect calorimetry to assess outcome in stroke patients: A comparison of standard versus weight-based formula, Girija Prasad Rath, GE Health Care Pvt Ltd, 2 years, 2016–2018, Equipment
2. Comparison of fibreoptic endotracheal intubation with and without the use of air-Q as a conduit in patients with cervical spine injury: a pilot study, Gyaninder Pal Singh, AIIMS, 1 year, 2015–2016, Rs. 2.16 lakhs
3. Assessment of effect of cerebral perfusion pressure augmentation in severe head injuries by monitoring of regional energy metabolism by cerebral microdialysis, Ashish Bindra, AIIMS 2 years, 2016–2018, Rs. 4.95 Lakhs
4. A randomized controlled study of the effects of single dose preoperative vitamin C versus placebo on postoperative morphine consumption after spine surgery, Niraj Kumar, AIIMS, 1 year, 2014–2015, Rs. 2.8 lakhs
5. Incidence of posterior vessel wall punctures during ultrasound guided vascular access: short axis versus long axis approach, Niraj Kumar, AIIMS, 1 year, 2015–2016, Rs. 3.7 lakhs
6. Assessment of cerebral autoregulation using NIRS in severe traumatic brain injury patients, Keshav Goyal, AIIMS, 2 years, 2016, Rs. 5 lakhs
7. Effect of decompressive craniectomy on jugular venous oximetry in patients with severe traumatic brain injury, Navdeep Sokhal, AIIMS, 2 years, 2015–2016, Rs. 5 lakhs
8. Effect of magnesium and lignocaine on postcraniotomy pain: a comparative, randomised, double-blinded, placebo-controlled study, Charu Mahajan, AIIMS, 2 years, 2015–ongoing, Rs. 0.75 lakhs
9. Use of indirect calorimetry to assess outcome in stroke patients: a comparison with standard weight-based formula, Parmod Bithal, 2 years, 2016–2018
10. Comparison of fiber-optic endotracheal intubation with and without the use of air-Q as a conduit in patients with cervical spine injury: A pilot study, Gyaninder Pal Singh, AIIMS, 2 years, 2015–2017, Rs. 2.16 lakhs

Departmental projects

Ongoing

1. Comparison of three anaesthetic techniques on emergence and recovery profile in patients undergoing supratentorial craniotomy
2. A randomized controlled trial to compare the effect of sevoflurane/nitrous oxide versus sevoflurane/air in patients undergoing cerebellopontine angle tumour surgery
3. Comparison of propofol versus sevoflurane anaesthesia in subarachnoid haemorrhage patients undergoing clipping for aneurysm
4. Evaluation of intratracheal lignocaine as compared to normal saline to reduce emergence reactions in the patients undergoing endoscopic transphenoidal pituitary surgery: A double blind randomized controlled trial.
5. The effect of anaesthetic exposure in presurgical period on delayed cerebral ischemia and neurological outcome in patients with aneurysmal subarachnoid haemorrhage undergoing clipping of aneurysm: A prospective observational study
6. Risk factor for massive blood loss in patients undergoing craniotomy for tumor excision a retrospective study
7. A comparison of the effectiveness of dexmedetomidine versus propofol infusion for sedation during awake craniotomy
8. Effect of goal directed intraoperative fluid therapy on hospital stay in patients undergoing excision of large intracranial tumours
9. Perioperative management of pediatric brain tumors: a retrospective analysis
10. Effect of dexmedetomidine on dynamic cerebral autoregulation in patients with supratentorial tumors under sevoflurane anesthesia
11. Effect of neuroradiologic interventions on regional cerebral oxygenation in patients with anterior circulation aneurysm : an observational study
12. Anaesthetic management in patients with Tetralogy of Fallot (TOF) with cerebral abscess: A retrospective study
13. Comparison of Bispectral Index-guided administration of desflurane and total intravenous anaesthesia for endoscopic transnasal transphenoidal resection of pituitary tumors
14. Effect of two anaesthetic regimens with dexmedetomidine as adjuvant on transcranial electrical motor evoked potentials during spine surgery: A pilot study
15. Early and rapid detection of ubiquitin C-terminal hydrolase-1 in serum of brain trauma patients using citrate-capped gold nanoparticles: A novel technique for diagnosing severity of brain injury.
16. Randomized trial comparing two techniques of fiberoptic orotracheal intubation under general anaesthesia: Fiberoptic intubation with and without the use of air, Q intubating laryngeal airway.
17. To compare the effect of goal directed fluid therapy versus standard fluid regimen on the cuff leak volume in patients undergoing spine surgery
18. Indicators of clinical outcome in patients of diffuse axonal injury, A retrospective analysis
19. Comparison of Propofol versus sevoflurane anaesthesia in subarachnoid haemorrhage patients undergoing clipping for aneurysm
20. Comparison of three anaesthetic techniques on emergence and recovery profile in patients undergoing supratentorial craniotomy
21. Use of intratracheal lignocaine to reduce emergence reaction in the patients undergoing endoscopic transphenoidal pituitary surgery: a randomized controlled study
22. Intraoperative use of dexmedetomidine in large vascular Meningiomas.
23. Cardiovascular complications after traumatic spinal cord injury.
24. To study the risk factors and causes of extubation failure in head injury patients.
25. Effects of dexmedetomidine for ICU sedation in head injury patients.
26. Awake Craniotomy propofol vs Dexmedetomidine

Completed

1. Effect of transcutaneous electrical nerve stimulation (TENS) on intraoperative fentanyl and propofol consumption in patients undergoing lumbar discectomy
2. Effect of intraoperative aneurysm rupture (IAR) on perioperative complications and neurological outcome in adult patients undergoing surgical clipping for aneurysmal subarachnoid haemorrhage

3. Clinical indicators of outcome in children with cervical spine injury requiring anaesthetic and intensive care management, A retrospective analysis
4. The effect of sevoflurane-air versus sevoflurane-nitrous oxide anaesthesia on length of ICU and hospital stay in patients undergoing cerebellopontine tumour surgery, A randomised controlled trial

Collaborative projects

Ongoing

1. Cardiovascular complications after traumatic spinal cord injury (Neurosurgery)
2. An evaluation of diaphragmatic movement by M-mode sonography as a predictor of successful extubation during routine surgical procedures (Anesthesia, Radiodiagnosis)
3. Anatomical variations of internal jugular vein in relation to carotid artery and its implication on ultrasound guided cannulation: an observational study (Anesthesia)
4. Effect of Lidocaine infusion on hemodynamics and recovery in patients undergoing endoscopic pituitary surgery: A multicentre, randomized control trial (Anesthesiology, Health Sciences Centre, University of Manitoba, Winnipeg, Canada)
5. Prospective study on the effectiveness of chlorhexidine gluconate impregnated patch (BIOPATCH R) in reducing the incidence of central line associated blood stream infection (CLABSI) (Microbiology, JPNATC)
6. Surveillance of blood stream infections (BSI) at a referral Indian hospital Surveillance of blood stream infections (BSI) at a referral Indian hospital (Microbiology, JPNTC)
7. A week in neurocritical care unit: Point prevalence observational study in Neurocritical care: PRINCE Study. (Baylor College of Medicine, Houston, Texas)

PUBLICATIONS

Journals: 25

Abstracts: 30

Chapters in Books: 6

Books: 1

PATIENT CARE

We run dedicated pain clinic and Pre-anesthesia Clinic apart from routine ICU and operation theatre care of patients. Anaesthetic management for 4444 (3073 at the Neurosciences centre and 1371 at the JPNATC) neurosurgical procedures was performed. Anaesthetic management for 480 neuroradiological procedures was performed.

Anaesthesia care was provided to 10 patients undergoing gamma knife treatment for brain lesions. Intensive care management of 4904 ICU patients (3487-NSC; 1417-TC3 ICU, JPNATC) was performed. A total of 3573 patients (2588 new and 985 old) were seen in Pre-Anaesthesia Check-up (PAC) clinic OPD at NSC.

A total of 543 patients (134 new and 409 old) were seen in pain clinic OPD, NSC and 322 of them were treated with nerve blocks.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor Arvind Chaturvedi became CPIO (Central Public Information Officer) of Neuroscience Centre, AIIMS; was elected as Executive council member of ISNACC in February 2017; was appointed as Reviewer of Sultan Quaboos University Medical journal (SQUMJ) Muscat, Oman; Reviewer of Journal of Neuroanaesthesiology and critical care, India; Reviewer of Journal of Anaesthesiology and Clinical pharmacology; and was also appointed DM/PDCC Neuroanaesthesiology and critical care in PGI Chandigarh, BHU Varanasi, NIMHANS Bangalore

Professor Girija Prasad Rath organized the 'AIIMS Neuroanaesthesia Update 2016' as the Organizing Secretary and was also the Course Co-ordinator for the 'Neuromonitoring Workshop'. He continued to hold the post of Web Editor, Indian Society of Neuroanaesthesiology and Critical Care (ISNACC), Executive Editor, Journal of Neuroanaesthesiology and Critical Care (JNACC), Editorial Board Member of Indian Journal of Anaesthesia (IJA) Northern Journal of ISA (NJISA), and World Journal of Anaesthesiology (WJA), Associate Editor of Indian Journal of Clinical Anaesthesia (IJCA). He continued to serve as the International Advisory Board Member of Anesthesia Essays and Researches (AER) and Anesthesiology and Pain Medicine (AAPM), and peer-reviewer of reputed international journals such as Minerva Anestesiologica, Journal of Neurosurgical Anesthesiology, Neurocritical Care, and Journal of Clinical Anesthesia. He was also involved (Core faculty) in the in-service training programme (Organised by ORBO, AIIMS) of nurses and resident doctors for deceased organ and tissue donation. He was invited speaker for the international scientific events such as EURO NEURO 2016 at Barcelona, 16th Meeting of World Congress of Anaesthesiologists (WCA 2016) at Hong Kong, and Neuroanaesthesia Symposium (NAS 2017) at Kuching, Sarawak, Malaysia.

Dr Ashish Bindra conducted Cadaveric Interventional Pain Management Workshop on 22 July 2016 at Cadaveric Training and Research Facility, JPNA Trauma Centre, New Delhi.

Dr Niraj Kumar successfully achieved Instructor status in ATLS course, 16–18 February 2017, JPNATC, AIIMS, New Delhi; Instructor (Faculty) of—ATLS, ANLS, BECC, AIIMS–EM-SONO, AUTLS Courses in NEUROTRAUMA 2016 Conference held in AIIMS on 12–14 August 2017; got 2nd prize from Neurotrauma Society of India; remained Course Director of Cadaveric Airway Management Course (7 August 2016 and 5 March 2017) at JPNATC, New Delhi, BECC, (10 March 2017) at JPNATC, New Delhi; Executive member of organizing committee of AIIMS neuranaesthesia update and ANLS, AIIMS Neurological life support.

Dr Keshav Goyal was Member of core Faculties of AIIMS Advanced life care Support (ACLS). Introductory course in September 2015 at JPNATC, New Delhi; Course Director of 1st AIIMS Neurological Life Support (ANLS) January 2017 at JPNATC, New Delhi; received Independent Expert status to certify brain stem death at AIIMS (ORBO/CNC/2016/4878/3 August 2016); successfully passed Instructor Course of Emergency Neurological Life Support (ENLS) in April 2016; was invited as an external expert at IRCTC corporate house for purchasing machinery and equipment (Ventilators) under CSR (corporate social responsibility) July 2016. He has been Executive member of organizing committee of AIIMS Neuroanaesthesia update 2016; World Trauma Congress 2016; 2nd and 3rd Cadaveric difficult airway Workshop; 1st Cadaveric chronic pain Workshop and 1st AIIMS Neurological Life Support (ANLS): Course Director and Coordinator.

Dr Navdeep Sokhal was an expert for evaluation of National Research Development Corporation NRDC Awards applications on 8–12 February 2017.

Neuro-imaging and Interventional Neuro-radiology

HIGHLIGHTS

- A state-of-the-art 128 slice dual energy CT scanner installed replacing the 10-year-old 6-slice CT scanner.
- With the new CT low-dose CT protocols with modelled iterative reconstruction, a dose reduction potential of up to 60% and faster acquisition in clinical routine are now possible with the best image quality ensured. This has enhanced patient compliance, especially in children and where breath hold acquisition is required.
- CT Fluoroscopy to help guided, biopsies and CT perfusion to assess cerebral perfusion especially in acute stroke have been started with the installation of the new CT scanner.
- The existing 1.5T MR was upgraded to ‘silent MR’ system which has helped perform silent MR protocols which reduce patient’s anxiety during scan; reduce scan time and incidence of rescans as the patients are relaxed and cooperate to stay still during long examinations. The high gradient coil switching noise of previous system was a serious bother for many patients, especially during high-end acquisition techniques. With the upgrade, this irritant is largely removed and wide bore of the magnet has reduced claustrophobia in patients significantly.
- PACS network is operational in wards and OPD rooms of NSC with upgrade of the PACS server and installation of viewing stations in wards, ICUs and thin clients in OPD rooms with Wi-Fi access. Reporting of all neuro-imaging procedures made on-line with improved organization of the reporting room, making it easier to report, edit, sign out and network all studies on-line. Auto-requisitioning enabled from NSC wards on-line for CTs, MRIs, US and DSAs etc. Auto fetching of case records from PACS enabled for neuroradiology conferences. Private imaging films are digitized and integrated into PACS on registration of patient UHID.

EDUCATION

Undergraduates: Materials and guidance to faculty for UG lectures and seminars for 6th semester MBBS students are provided on topics: Introduction to Neuroradiology Techniques, Basics of Brain Tumour Imaging, Stroke Imaging and Congenital Anomalies of the CNS. Basics of neuro imaging interpretation is taught during their elective posting in neuroradiology.

Postgraduates: Postgraduate students of MD Radiology posted in the department of Neuroradiology on rotation are trained on reporting neuro-imaging (CT & MRI) and introduced to all neuro-imaging protocols and are encouraged to perform them under supervision of the faculty. DM (Neuroradiology) students are trained to perform all neuro-imaging procedures and assist in interventional therapeutic neuro-radiology procedures, which are then discussed with them on daily basis. They are also trained to take post procedure care and management of patients undergoing neuro-interventional therapeutic procedures in the ICUs and wards. Seminars, journal clubs and case discussions are organized routinely for their orientation to the current developments and improve their iterative skills. Senior residents regularly present neuro-radiological findings in interdepartmental conferences with Neurology and Neurosurgery departments daily which allow them to understand clinical neuro-imaging interpretation skills and the art of presentation. They are posted in the biplane Neuro-interventional suites for at least one year on a rotational basis and are trained on neuro-angiographic and neuro-interventional skills.

CMEs/Workshops/Symposia/National and International Conferences

Lectures delivered

S.B. Gaikwad: 13

Ajay Garg: 15

Leve Joseph Devarajan: 7

S.B. Gaikwad: 13

1. Embolization in spinal vascular malformation, stroke and advanced neurovascular intervention (SAANVI-2016), 9–10 April 2016, Kolkata
2. Carotid stenting: Case Series, ICCA STROKE 2016, 22 & 23 April 2016, University Hospital, Prague, Czech Republic
3. Neuro complications, 13th Annual Monsoon Meeting, 29 September–2nd October 2016, Goa
4. Carotid stenting: AIIMS experience, AIIMS Neuroradiology Update, 12–14 December 2016, AIIMS, New Delhi
5. Embryology and segmental agenesis of internal carotid artery, Winter Symposium, 2017, 13 & 14 January 2017, CMC Auditorium, Vellore, Tamil Nadu
6. Newer sequences in MRI, DNACON 2017, 4 & 5 February 2017, Indian Habitat Centre, New Delhi
7. Mechanical thrombectomy: Step by step, ICCK 1st Focus Summit on Carotid, Stroke and Exotic Peripheral Interventions, 11 & 12 February 2017, Kochi, Kerala
8. Moderate session on carotid stenting, ICCK 1st Focus Summit on Carotid, Stroke And Exotic Peripheral Interventions, 11 & 12 February 2017, Kochi, Kerala
9. Glue: When and why, 2nd Annual Congress of Society of Therapeutic Neurointerventions, 2–4 March 2017, Kovai Medical Centre and Hospital, Coimbatore, Tamil Nadu
10. Onyx/liquid embolic agents: Conventional, 2nd Annual Congress of Society of Therapeutic Neurointerventions, 2–4 March 2017, Kovai Medical Centre and Hospital, Coimbatore, Tamil Nadu
11. Our rapid stroke pathway, New Delhi, ICCA STROKE 2017, 24 & 25 March 2017, Vishnevsky Institute of Surgery of the Ministry of Public Health, Moscow, Russia
12. Moderator: Getting access to the carotids and carotid stenting, Step by step, ICCA STROKE 2017, 24 & 25 March 2017, Vishnevsky Institute of Surgery of the Ministry of Public Health, Moscow, Russia
13. Challenging stent case, ICCA STROKE 2017, 24 & 25 March 2017, Vishnevsky Institute of Surgery of the Ministry of Public Health, Moscow, Russia

Ajay Garg: 15

1. CME on Neurological Applications of PET and 25 October 2016, AIIMS, New Delhi
2. Approach to ring-enhancing lesions, AIIMS Neuroradiology Update, 12–14 December 2016, AIIMS, New Delhi
3. 2016 WHO classification of CNS tumors: How is it going to change neuroradiology practice? AIIMS Neuroradiology Update, 12–14 December 2016, AIIMS, New Delhi
4. Imaging in encephalitis, NSICON 2016, 15–18 December 2016, Chennai, Tamil Nadu
5. Imaging in encephalitis, Indian Radiological and Imaging Association IRIA 2017, 5–8 January 2017, Birla Auditorium, Jaipur, Rajasthan
6. Approach to ring-enhancing lesions, DNACON 2017, 4 & 5 February 2017, Indian Habitat Centre, New Delhi
7. Quiz: Neuroimaging in epilepsy, ECON 2017, Jointly by Indian Epilepsy Association (Bihar Chapter) and Department of Neurology (IGIMS, Patna), 17–19 February 2017, Patna
8. Aunt Minnie of movement disorders, SHINE 2017, 25 & 26 February 2017, Institute of Neurology, Chennai, Tamil Nadu
9. Clinicopathological Meeting: Radiology Discussant, SHINE 2017, 25 & 26 February 2017, Institute of Neurology, Chennai, Tamil Nadu
10. Aunt Minnie of white matter/SOL/granuloma, SHINE 2017, 25 & 26 February 2017, Institute of Neurology, Chennai, Tamil Nadu
11. 2016 WHO classification of CNS tumors: How is it going to change neuroradiology practice? 9th Annual Conference Indian Society of Neuro-Oncology, 10–12 March 2017, NIMHANS Convention Centre, Bangalore
12. Clinicopathological Meeting: Radiology Discussant, Brain & Mind, 27 August 2016, Institute of Neurology, Chennai, Tamil Nadu
13. CME on Neurological Applications of PET and 25 October 2016, Conference Hall, AIIMS, New Delhi
14. MR imaging in epilepsy, CME on Neurological Applications of PET and SPECT: Epilepsy and Dementia (Part I), 25 October 2016, AIIMS, New Delhi

15. Single and multiple granulomas, 24th Annual Conference of the Indian Academy of Neurology, 10–12 November 2016, Kolkata, West Bengal

Leve Joseph Devarajan: 7

1. Non-traumatic neurological, emergencies: Basics of radiological evaluation and intervention, 1st AIIMS Neurological Life Support (ANLS) Course, 28 & 29 January 2017, ATLS Lab, JPNATC, AIIMS, New Delhi
2. Imaging in craniosynostosis, 1st AIIMS Paediatric Neurosurgery Workshop, 19 & 20 January 2017, AIIMS, New Delhi
3. Spinal cord arterio-venous shunts, AIIMS Neuroradiology Update, 12–14 December 2016, AIIMS, New Delhi
4. Quiz, AIIMS Neuroradiology Update, 12–14 December 2016, AIIMS, New Delhi
5. Cross sectional anatomy of brain: CT and MRI, CME on Neurological Applications of PET and SPECT: Epilepsy and Dementia (Part I) R, 25 October 2016, AIIMS, New Delhi
6. Intracranial AVMs, Dr R.K. Goulatia CME (IRIA), 17 & 18 September 2016, Madurai
7. Spinal Vascular Malformations, Dr R.K. Goulatia CME (IRIA), 17 & 18 September, 2016, Madurai, 25 October 2016

Oral papers/posters presented: 6

1. Biswas S, Joseph LS, Agarwal H, Prabhakar A, Garg A, Gaikwad S. Spinal vascular malformation: An overview of the nomenclature and evolution of classification schemes, AIIMS Neuroradiology Update, 12–15 December 2016, AIIMS, New Delhi
2. Balasundaram P, Joseph LS, Agarwal H, Prabhakar A, Garg A, Gaikwad S. Educational exhibit: Focal cortical dysplasia, AIIMS Neuroradiology Update, 12–15 December 2016, AIIMS, New Delhi
3. Balasundaram P, Joseph LS, Agarwal H, Prabhakar A, Garg A, Gaikwad S. Educational exhibit: Tumors related with epilepsy, Part I, AIIMS Neuroradiology Update, 12–15 December 2016, AIIMS, New Delhi
4. Balasundaram P, Joseph LS, Agarwal H, Prabhakar A, Garg A, Gaikwad S. Educational exhibit: Tumors related with epilepsy, Part II, AIIMS Neuroradiology Update, 12–15 December 2016, AIIMS, New Delhi
5. Shambanduram S, Joseph LS, Agarwal H, Prabhakar A, Garg A, Gaikwad S. Intracranial dural AVFs, AIIMS Neuroradiology Update, 12–15 December 2016, AIIMS, New Delhi
6. Jain N, Joseph LS, Agarwal H, Prabhakar A, Garg A, Gaikwad S. Intracranial pial AVFs, AIIMS Neuroradiology Update, 12–15 December 2016, AIIMS, New Delhi

RESEARCH

Funded projects

Ongoing

1. Efficacy of imaging assessment of neoangiogenesis and permeability to differentiate treatment related changes from tumor recurrence in high-grade glioma, Ajay Garg, ICMR, 3 years, 2014–17, Rs. 14 lakhs

Departmental projects

Ongoing

1. Role of computed tomography perfusion in differentiation of post treatment effects from tumor recurrence in patients with high grade gliomas: A prospective descriptive study
2. Role of pseudocontinuous arterial spin labelling in the evaluation of resting state cerebral perfusion in patients with critical cervical ICA stenosis before and after carotid artery stenting

Completed

1. Cerebral pial arteriovenous fistulae: A retrospective analysis
2. Role of perfusion MRI in pre-therapeutic grading of gliomas

Collaborative projects

Ongoing

1. Unraveling the causes of stroke and cognitive decline in the general population: A cross-cultural perspective study (Neurology)
2. Prevalence of symptomatic and asymptomatic coronary artery disease in patients with stroke and transient ischemic attacks (Neurology)
3. Intra-arterial chemotherapy for retinoblastoma (RP Centre)

PUBLICATIONS

Chapters in books: 1

PATIENT CARE

The department works 24X7, 365 days for patient care work, and regularly attends to emergencies like subarachnoid haemorrhage, stroke, acute encephalopathies, myelopathies, traumatic or iatrogenic cerebro-vascular injuries etc. All requests for CT scan from out patients and in-patients are done the same day and often immediately, so that decision can be promptly taken for patient management. There is no waiting for CT scans in this department. DSAs are regularly done for cerebral and spinal vascular studies for patients attending the Neurosciences Centre and also other departments like ENT and Ophthalmology. Similarly Neurointerventional therapeutic management is routinely carried out for patients of the Neurosciences Centre as well as those referred from ENT, Ophthalmology, Paediatrics, Cardiology, Orthopaedics amongst others. Besides, CT scans are done in the ICUs for patients on life support or ventilator using the mobile CT scanner. Bedsides x-rays are routinely done using digital portable x-ray unit or CR unit and images are uploaded to the PACS network. Portable ultrasound is done whenever required for sick and immobile patients in the wards and ICUs of the Neurosciences Centre. All consultants and residents access PACS images through IP enabled protocol and hence can view the images from home or anywhere using internet or even using their smart phones. The departmental conference room has been upgraded for multimodality image viewing using high resolution Dicom compatible projection system, so that clinical consultants and residents can easily see their patient's images in chronological sequence and in comparison mode on the large projection screen. Even old images and scanned private images can be viewed efficiently instantaneously which helps quick decision making.

Neuro-imaging and Interventional procedures done

CT Scans	Routine	13293
	Emergency	2319
	CT Angiography	595
	Image Guided	731
	Mobile CT	1388
	Perfusion	28
	HRCT	19
	Total	19381
Digital Subtraction Angiography	Cerebral & Spinal DSAs	930
	Therapeutic Neuro-Interventional procedures (Cerebra Aneurysms, Cerebral & Spinal AVM embolizations, Carotid revascularization etc.)	523
	Chemical Angioplasty for cerebral vasospasm (in SAH)	31
	Cerebral Intra-arterial Thrombolysis/clot retrieval in stroke	14
	Total	1077
Ultrasound Examinations/Doppler studies/US guided biopsies		2201
MRIs	NSC MRI 1711	
	Gama knife planning	831
	Intra-operative MRI (OT)	43
	NMR facility	1985
	Total	4570
X Rays		19800
Total for the year = 66,755		

Cases discussed and reviewed in Neuro-radiology conferences for patient care

Conference	No. of cases	Weekly Frequency	Total
Epilepsy Case	@ 10	1	10/week
Neurosurgery	@ 25	4	100/week
Neurology	@ 15	6	90/week
Neuropathology	@ 4	Bi-weekly	8/week
		Total	208/week

Total = 60,944 cases / yr

VISITING SCIENTIST

1. Dr J. de Vries, Neurosurgical Centre, Canisius-Wilhelmina-Hospital (CWZ) and the University Medical Center, St. Radboud, Nijmegen, Holland
2. Dr Gyula Gal-University Hospital, Odense, Denmark
3. Dr Naci Kocer, Istanbul University, Istanbul, Turkey

Neuropathology

EDUCATION

Lectures delivered

Vaishali Suri: 5

Mehar C Sharma: 9

Chitra Sarkar: 27

Vaishali Suri: 5

1. Gliomas: WHO 2016 modification of classification, 24th Annual Conference of Indian Association of Pathologists and Microbiologists, UP Chapter, 22 & 23 October 2016, MLB Medical College, Jhansi
2. Recent advances in WHO 2016 classification of adult and pediatric gliomas, Pre Conference CME APCON 2016: An Update on Neuro Oncopathology Including Muscle Biopsy, 29 November 2016, Sawai Man Singh Medical College, Jaipur
3. Molecular characteristics of pediatric meningiomas, 65th Annual Conference of Neurological Society of India, 15–18 December 2016, Chennai.
4. DNA sequencing, 9th Annual Conference of Indian Society of Neurooncology, 10–12 March 2017, NIMHANS, Bengaluru.
5. Molecular markers in routine reporting of gliomas: Necessary or not, 2nd Annual Conference of Neuropathology Society of India, 21–23 April 2017, NIMHANS, Bengaluru

Mehar C Sharma: 9

1. Study of clinical features, hormonal immunoexpression and loss of ATRX/DAXX expression in pancreatic neuroendocrine tumours, IXth ACPN Conference Vth SACH and IXth ACPN Conference, 22–25 March 2017, Kathmandu, Nepal.
2. Revised WHO classification of central nervous tumours, CME Program of PAN e network Project Telemedicine, 31 August 2016, AIIMS
3. Revised 2016 classification of lymphoma, CME on Recent Updates in Lymphoma Diagnosis and Management, 11 September 2016, Patna, Bihar
4. Molecular markers of CNS tumours and their impact on revised 2016 WHO classification, The VIII Congress of the Association of Clinical Pathologist of Nepal (ACPN) and the 4th Congress of the SAARC Academy of Cytopathology and Histopathology, 15–18 September 2016, Dharan, Nepal
5. Approach to muscular dystrophies, 65th Annual Conference of IAPM and Annual Conference of IAP-ID, 30 November, 1–4 December 2016, Sawai Man Singh Medical College, Jaipur, Rajasthan
6. C11ORF95, RELA fusions in supratentorial ependymomas correlate with upregulated NF, κ B signalling, VEGF and nestin expression., 11th European Congress of Neuropathology, 6–9 July 2016, Bordeaux, France
7. Slide seminar: Interesting case presentation, 11th European Congress of Neuropathology, 6–9 July 2016, Bordeaux, France
8. Consensus classification and recent advances in ependymomas, 9th Annual Conference of Indian Society of Neurooncology, 10–12 March 2017, NIMHANS, Bangalore
9. Molecular biology and genetics of ependymomas, 5th Annual Conference of Neurological Surgeon Society of India, 31 March–2 April 2016, Srinagar, J&K.

Chitra Sarkar: 27

1. Revised classification of CNS embryonal tumors (other than medulloblastomas), ISNOCON, 1–3 April 2016, Hyderabad
2. Minimal pathology reporting in Indian context, ISNOCON, 1–3 April 2016, Hyderabad
3. Molecular pathology in diagnosis and prognostication of CNS tumors, ACOS, 10 April 2016, Delhi
4. Molecular subtypes of medulloblastoma, CME in Neuro-Oncology, 25 June 2016, Mumbai
5. Minimal pathology reporting, CME in Neuro-Oncology, 25 June 2016, Mumbai

6. Diffuse adult gliomas: Approach to diagnosis as per updated 2016 WHO classification, Neuro-Oncology Update, 4 & 5 September 2016, PGIMER, Kolkata
7. Embryonal tumors, WHO 2016: Concepts and classification, Neuro-Oncology Update, 4 & 5 September 2016, PGIMER, Kolkata
8. Genetics of pediatric low grade gliomas, Neuro-Oncology Update, 4 & 5 September 2016, PGIMER, Kolkata
9. Current histomolecular approach to diagnosis of adult and pediatric gliomas: Clinical implications, CME on Brain Tumors. 17 September 2016, Rainbow Hospital, Agra
10. Introduction to the updated 2016 WHO classification of CNS tumors, CME on Brain Tumors, 17 September 2016, Rainbow Hospital, Agra
11. Revised classification of medulloblastomas and integrated approach to their diagnosis and clinical management, CME on Brain Tumors, 17 September 2016, Rainbow Hospital, Agra
12. Updated WHO classification of medulloblastomas: How to implement in routine clinical practice, Annual Conference of ISPN, 1–4 October 2016, NIMHANS, Bangalore
13. Exploiting molecular biology for diagnosis and management of gliomas (Keynote address), Annual Conference of Neurosciences Society of India, 19–21 October 2016, NBRC, Manesar
14. Approach to diagnosis of CNS tumors with clear cell morphology, November 2016, CME in Neuropathology, 5 November 2016, AIIMS, Bhubaneswar
15. Introduction to WHO 2016 classification and revised approach to diagnosis of gliomas, CME in Neuropathology, 5 November 2016, AIIMS, Bhubaneswar
16. WHO 2016 Classification of Embryonal Tumors and Approach to their diagnosis, CME in Neuropathology, 5 November 2016, AIIMS, Bhubaneswar
17. Pathology of drug resistant epilepsy: Neurovision, Neurovision, 6 November 2016, Bhubaneswar
18. Impact of WHO 2016 integrated classification of gliomas in clinical practice, Neurovision, 6 November 2016, Bhubaneswar
19. Updated WHO 2016 classification of medulloblastoma: Clinical relevance and implementation in routine practice, CME in Neuropathology, 6 November 2016, Bhubaneswar
20. Updated WHO 2016 classification of CNS tumors with special reference to gliomas, Delhi Chapter of IAPM, 26 November 2016, SJ Hospital, Delhi
21. Revised classification of medulloblastomas and integrated approach to the diagnosis, Pre-Conference CME, APCON 2016, 30 November 2016, Sawai Man Singh Medical College, Jaipur
22. Medulloblastoma and other embryonal tumors, Annual Conference of NSI, 15–18 December 2016, Chennai
23. Gliomas: Updated classification and molecular markers, DNACON, 4 & 5 February 2017.
24. Indian Habitat Centre New Delhi
25. WHO 2016 classification of gliomas: An approach to diagnosis, International Conference on Frontiers in Molecular Diagnostics and Pathology of Human Diseases, Molecular Pathology Association of India, 10 & 11 February 2017, KIIT University, Bhubaneswar
26. Recent WHO classification of gliomas and molecular biology of gliomas, Annual Conference of NSSI, 16 & 17 February 2017, PGI, Chandigarh
27. ISNO guidelines for adult diffuse gliomas (Keynote address), Annual Conference of ISNO, 10–12 March 2017, NIMHANS, Bangalore

Oral papers/posters presented: 10

1. Kumar A, Suri V, Sarkar C, Sharma MC. BRAF and RKT alterations in oligodendrogliomas: Correlation with mapk/mtor pathway activation and clinicopathological characteristics, 8th Annual Conference of ISNOCON, 1–3 April 2016, Hyderabad
2. Malgulwar PB, Sharma MC, Sarkar C, Suri V. Synergistic association of C11 or f95-RELA/NF-kB and Notch1 in transcriptional regulation of the snail and slug genes during epithelial-to-mesenchymal transitions (EMTs) in ependymomas, 8th Annual Conference of ISNOCON, 1–3 April 2016, Hyderabad
3. Sharma V, Sarkar C, Sharma MC, Suri V. *Genome wide analysis of EZH2 mediated H3K27me3 target gene profile using ChIP-seq highlights differences between low and high grade astrocytic tumors as well as identifies SLC25A23 as a novel prognostic marker glioblastoma, *Award for Best presentation, 8th Indian Society on Neuro-oncology (ISNO Annual Conference), 1–3 April 2016, Hyderabad

4. Malgulwar PB, Sharma MC, Sarkar C, Suri V. Gain of FAL1: An oncogenic long noncoding RNA mapping to chromosome 1q is associated with dysregulated BMI1/p21 axis and an adverse event in intracranial ependymomas, 9th Annual Conference of Indian Society of Neurooncology, 10–12 March 2017, NIMHANS, Bengaluru.
5. Sharma V, Sarkar C, Sharma MC, Suri V. Global deregulation of polycomb repressive proteins in astrocytic tumors, 9th Annual Conference of Indian Society of Neurooncology, 10–12 March 2017, NIMHANS, Bengaluru.
6. Kumar A, Suri V, Sarkar C, Sharma MC. Concomitant downregulation of miR-379/miR-656 cluster and MEG3 at 14q32.2 by epigenetic mechanisms in oligodendroglioma, 9th Annual Conference of Indian Society of Neurooncology, 10–12 March 2017, NIMHANS, Bengaluru.
7. Kaur K, Sarkar C, Sharma MC, Suri V. *Adult medulloblastomas: A clinicopathological and molecular genetic study highlighting differences from their pediatric counterparts, Dr V. Ramalingaswami Award, 32th Annual Conference of DAPCON 2017, 26 March 2017, Lady Hardinge Medical College, New Delhi
8. Khanna G, Suri VS, Sarkar C, Sharma MC. *Epithelioid glioblastoma: A recently described rare entity: Series of seven cases, *Third prize for poster, 32th Annual Conference of DAPCON 2017, 26 March 2017, Lady Hardinge Medical College, New Delhi
9. Sinha K, Sarkar C, Sharma MC, Suri V. Diagnostic revision of grade II and grade II astrocytomas using molecular markers: A study of 138 cases using WHO 2016 classification, 2nd Annual Conference of Neuropathology Society of India, 21–23 April 2017, NIMHANS, Bengaluru
10. Kaur K, Suri V, Sarkar C, Sharma MC. H3K27M mutations in midline gliomas from children and young adults, 2nd Annual Conference of Neuropathology Society of India, 21–23 April 2017, NIMHANS, Bengaluru

RESEARCH

Funded projects

Ongoing

1. Unraveling glioma development and progression through whole exome sequencing, Chitra Sarkar, DBT, 4 years, 2013–2017, Rs. 99 Lakhs (approx.)
2. A multi-centric study to develop comprehensive molecular genetic panels for glioblastoma personalized therapy, Chitra Sarkar, DBT, 5 years, 2016–2021, Rs. 50 Lakhs (approx.)
3. JC Bose Research Fellowship, Chitra Sarkar, DST, 5 years, 2016–2020, Rs. 10 lakhs per year
4. Establishment of rapid and economical methods for molecular subgrouping and risk stratification of medulloblastomas for routine clinical practice in developing countries, Vaishali Suri, AIIMS, 2 years, 2016–2018, Rs. 10 lakhs
5. Unravelling the functional relevance of snail paralogs in the pathogenesis of pediatric ependymoma, MC Sharma, DST, 3 years, 2017–2020, Rs. 42 lakhs

Completed

1. A clinicopathological and molecular genetic study of polycomb repressive complexes in gliomas, Chitra Sarkar, ICMR, 4 years, 2012–2016, Rs. 50 Lakhs (approx)
2. Genomic and functional approaches to decipher the role of a large imprinted miRNA cluster in glioblastoma multiforme, Chitra Sarkar, DBT, 4 years, 2012–2016, Rs. 50 Lakhs (approx.)

Departmental projects

Ongoing

1. miRNA profiling in oligodendrogliomas
2. Epilepsy associated tumors, study of genetic alterations and micro RNA profiling
3. Alterations in BRAF and PI3K/MTOR pathway in oligodendrogliomas
4. A study of EMT in meningiomas and its correlation with WNT/b catenin pathway
5. Adult medulloblastomas, molecular subtyping and clinicopathological correlation, Alterations in BRAF and PI3K/MTOR pathway in oligodendrogliomas
6. Study of 1L-6 in Hodgkins lymphoma
7. Study of immunohistochemical and molecular analysis of CNS PNET
8. Study of NF-2 and MTOR pathway in spinal ependymoma

Completed

1. Pediatric meningiomas: A study of clinicopathological features, hormonal profile and genetic alterations
2. Adult medulloblastomas, molecular subtyping and clinicopathological correlation

3. Study of RELA fusions in ependymoma
4. Study of nucleophosmin in ependymoma
5. Study of Hamartin, tuberlin, Wnt/B Catenin, M-TOR signaling and stem cell markers in focal cortical dysplasia

Collaborative projects

Ongoing

1. Regulation of FAT1 gene expression in gliomas (Biochemistry)
2. Centre of excellence in epilepsy with special reference to “Difficult to treat Epilepsy” (Neurosurgery)

PUBLICATIONS

Journals: 39

Chapters in books: 4

PATIENT CARE

Patient care/supportive activities include information regarding: (a) facilities available in the department (including special clinics and/or special laboratory facilities (b) community services/camps etc.

NEUROPATHOLOGY LAB

Total Specimens	2331	Frozen Section	262
Immunohistochemistry			
Routine IHC	7296	Research IHC	600
Muscle IHC	2640		
Total Muscle Received	362		
Muscle Enzyme-histochemistry	1430		
Fluorescence in situ hybridization			
Diagnostic	85	Routine	112
EM Facility			
Total muscle sample	362	Total nerve sample	67

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor Chitra Sarkar was Vice President of the International Society of Neuropathology; Secretary, Neuropathology Society of India; Selection committee member for Ranbaxy Awards; Member of Sectional committee (Health Sciences) of INSA; Chairperson of the AIIMS Intramural research committee (Basic Sciences); Member, Editorial Board of journal Neuropathology (published from Japan); Member, Assessment Committee for scientists' promotions of ICMR; Member of the Governing Body and Scientific Advisory Committee of National Brain Research Centre, Manesar; Member of the Scientific Advisory Committee of Institute of Pathology, New Delhi; Co-chairperson of Human Ethics Committee of National Institute of Immunology, New Delhi; Member of Human Ethics Committee of Dr Ambedkar Centre of Biomedical Research, New Delhi; Member of Task Force of Neurosciences, Department of Biotechnology, Govt. of India; Co-author of the following chapters in the updated WHO classification of tumours of the central nervous system to be published in May 2016: (i) CNS embryonal tumor, NOS; (ii) Embryonal tumor with multilayered rosettes, C19 MC-altered and NOS

Professor M.C. Sharma was Co-author of the following chapters in the updated WHO classification of tumours of the central nervous system to be published in May 2016: (i) Tuberous Sclerosis complex and (ii) Subependymal giant cell astrocytoma

Resident Awards

1. Vikas Sharma was awarded President's Annual Award for best presentation in Basic Neuro-Oncology group for his paper entitled “Genome wide analysis of EZH2 mediated H3K27me3 target gene profile using ChIP-seq highlights differences between low and high grade astrocytic tumors as well as identifies SLC25A23 as a novel prognostic marker in glioblastoma” at 8th Annual Conference of Indian Society on Neuro-oncology(ISNO) held at Hyderabad 1–3 April 2016.
2. Kaveet Kaur got Dr V Ramalingaswami Award for paper entitled “Adult medulloblastomas: A clinicopathological and molecular genetic study highlighting differences from their pediatric counterparts” at 32nd Annual Conference of DAPCON 2017 held on 26 of March, organised by Department of Pathology, Lady Hardinge Medical College, New Delhi.

3. Kalpana Sinha got Dr H.D. Tandon Award for Best Poster Presentation at 32nd Annual Conference of DAPCON 2017 held on 26 of March, organised by Department of Pathology, Lady Hardinge Medical College, New Delhi.
4. Gaurav Khanna got third prize for the poster entitled “Epithelioid Glioblastoma, a recently described rare entity: Series of seven cases” at 32nd Annual Conference of DAPCON 2017 held on 26 of March, organised by Department of Pathology, Lady Hardinge Medical College, New Delhi

Clinical Neuropsychology

HIGHLIGHTS

Clinical Neuropsychology (CNP), Neurosciences Center received Multiple Awards i.e. International Travel Grant/Complimentary Registration Bursary Awards; Best Paper Presentation; Best Oral Paper Presentation; Gandhi Scholarship Award etc. won by the students including Dr Satish Gulati Bharatji Gulati Oration which was conferred upon the faculty by the Geriatric Society of India and Clinical Neuropsychology. CNP also participated in multiple projects; Published papers in International and National Journals; Edited Psychology Core section in book titled: ‘Essentials of Neurointensive Care’ by Oxford University; Wrote book chapters for International and National books; presented at workshops and symposiums etc. Division of Clinical psychology was created on 17 January 2017.

EDUCATION

Undergraduate Teaching

- Psychology Course Syllabi of BSc (Hons.) Ist Yr
- BSc (Hons./Post Certificate) Nursing

Postgraduate Teaching

- MD, MCh, DM, MSc (Nursing) Thesis: AIIMS
- PhD Thesis: AIIMS
- Short Term Training (Clinical Neuro Psychology): AIIMS

CMEs/Workshops/Symposia/National and International Conferences

Lectures delivered

Ashima Nehra: 10

1. Importance of neuropsychological rehabilitation in neurological conditions : AIIMS experience
2. Multidisciplinary Health Care Conference, AIIMS, 2016, 4–6 November, 2016, Jawahar Lal Nehru Auditorium, AIIMS, New Delhi, India.
3. Metabolic phenotype on F-18 FDG PET/CT and sleep architecture in mild cognitive impairment, Annual Meeting. Society of Nuclear Medicine and Molecular Imaging. SNMMI 2016, 11–15 June 2016, San Diego (USA)
4. Does cognitive rehabilitation have long term sustainability in patients with early Alzheimer’s disease? (Oral), Indian Ageing Congress 2016, 10 October 2016, at AIIMS, New Delhi
5. Cognitive neuropsychological processing of language in post-stroke aphasia, International Conference on Contemporary Trends in Clinical Psychology: Training Research and Practice (ICCTCP-2016), 18 November 2016, NIMHANS, Bangalore, India
6. Representation of linguistic rules in the brain: evidence from comprehensive neuropsychological rehabilitation of aphasia patients, International Convention of Psychological Science (ICPS), 25 March 2017, Austria Center Vienna, Vienna, Austria
7. Doctor my person with epilepsy is not responding to medicines is there any hope? (Role of Clinical Neuropsychology in Epilepsy) (Invited), CGR, 20 September 2016, LT-1, AIIMS, New Delhi, India
8. Taking stroke patients back to society: A neuropsychological perspective, (Invited), National Stroke Update 2016, 7 & 8 October 2016, Medical College, Kanpur, India
9. Eating disorder in patients requiring bariatric surgery: Neuropsychological perspective, BARICON 2016, 1st International Conference of FORMS, CME cum Live Operative Workshop, 1–3 December 2016, 2 December 2016, Aerocity, New Delhi, India
10. Invited Symposium on (DAY-2) 02:21 PM–03:00 PM Falls (Preventable Falls by Dr Mateen Ansari and Neurological Causes), 13th International Conference on Geriatrics and Gerontology, GSICON 2016, Vallabhbbhai Patel Chest Institute, 10 & 11 December 2016, Delhi University, North Campus, Delhi, India

Oral papers/posters presented: 22

1. Nehra A. Unmasking malingering: Does neuropsychology play a role? (oral), 25th Neurotrauma Conference, 2016, 12–14 August 2016, JLN, AIIMS, New Delhi.
2. Nehra A, Kaur H, Bajpai S, Sreenivas V. Standardization of the Indian aphasia battery against western aphasia battery, 10th World Stroke Congress, 26–29 October 2016, International Convention Center, NOVOTEL, Hyderabad, India
3. Does cognitive rehabilitation have long term sustainability in patients with early Alzheimer's disease? (Oral), Indian Ageing Congress 2016, 10 October 2016 at AIIMS, New Delhi
4. Is memory retraining effective in Alzheimer disease? A clinical view (Poster), Indian Ageing Congress 2016, 10 October 2016, at AIIMS, New Delhi
5. Language processing in post-stroke aphasia using fMRI (Oral), 10th World Stroke Congress, 26–29 October 2016, International Convention Center, NOVOTEL, Hyderabad, India
6. Validation of Ninds-Csn harmonisation battery for vascular cognitive impairment across different languages, literacy levels and cultures S. (Oral), 10th World Stroke Congress, 26–29 October 2016, International Convention Center, NOVOTEL, Hyderabad, India
7. Development and standardisation of a comprehensive neuropsychological rehabilitation with aphasia therapy for post-stroke aphasia: A home based approach (Poster), 10th World Stroke Congress, 26–29 October 2016, International Convention Center, NOVOTEL, Hyderabad, India
8. Establishment and initiation of AIIMS cohort study: Baseline data of first 582 participants (Poster). 10th World Stroke Congress, 26–29 October 2016, International Convention Center, NOVOTEL, Hyderabad, India
9. Effectiveness of using a home-based comprehensive neuropsychological rehabilitation with aphasia therapy in patients with post-stroke aphasia: A preliminary study (Poster), 10th World Stroke Congress, 26–29 October 2016, International Convention Center, NOVOTEL, Hyderabad, India
10. Standardization of the indian aphasia battery against western aphasia battery, 10th World Stroke Congress, 26–29 October 2016, International Convention Center, NOVOTEL, Hyderabad, India
11. Development and standardisation of a comprehensive neuropsychological rehabilitation with aphasia therapy for post stroke aphasia: A home based approach, 10th World Stroke Congress, 27 October 2016, Hyderabad, India
12. Effectiveness of using a home-based comprehensive neuropsychological rehabilitation with aphasia therapy in patients with post stroke aphasia: A preliminary study, 10th World Stroke Congress, 28 October 2016, Hyderabad, India
13. Standardization of the indian aphasia battery against western aphasia battery, 10th World Stroke Congress, 28 October 2016, Hyderabad, India
14. Cognitive stimulation and creativity: Correlates of successful aging (Paper won a best oral paper presentation award), 13th International Conference on Geriatrics and Gerontology, GSICON 2016, from 10 & 11 December 2016, Vallabhbhai Patel Chest Institute, North Campus, Delhi, India, Delhi University, India
15. Nehra A. Importance of neuropsychological rehabilitation in neurological conditions: AIIMS experience, Multidisciplinary Health Care Conference, AIIMS, 2016, 4–6 November 2016, Jawahar Lal Nehru Auditorium, AIIMS, New Delhi, India.
16. Nehra A. Eating disorder in patients requiring bariatric surgery: Neuropsychological perspective, BARICON 2016, 1st International Conference of FORMS, CME cum Live Operative Workshop, 1–3 December 2016, 2 December 2016, Aerocity, New Delhi, India
17. Nehra A. Epilepsy and psychopathology: Neuropsychological implications of the relationship (oral), 22nd World Congress of Social Psychiatry, WASP 2016, 4 December 2016, New Delhi, India
18. Visual memory activations post traumatic brain injury, effect of cognitive rehabilitation: A functioning imaging study. (Poster Presentation), International Convention of Psychological Science (ICPS), (Awarded the ICPS Travel Grant and complimentary registration), 23–25 March 2017, Austria Center Vienna, Austria
19. Representation of linguistic rules in the brain: Evidence from comprehensive neuropsychological rehabilitation of aphasia patients. (Poster Presentation), International Convention of Psychological Science (ICPS) (Awarded with the Travel Grant), 23–25 March 2017, Austria Center Vienna, Vienna, Austria.
20. Efficacy of a home-based comprehensive neuropsychological rehabilitation for post, stroke aphasia using fMRI: A randomized controlled trial” (Poster Presentation), Indian Federation of Neurorehabilitation-2017, 31 March–2 April 2017, MET, Mumbai, India
21. Chopra S, Kumaran S, Sinha S, Pandey RM, Kumar A, Kaur H, Nehra A. Effect of Cognitive Rehabilitation after Traumatic Brain Injury: Assessment of Working Memory using Functional MRI. Poster Presentation at International Conference on Contemporary Trends in Clinical Psychology, Training, Research and Practice. Celebrating 60 years

of training in Clinical Psychology. 17–19 November 2016, NIMHANS, Bangalore, India. (Awarded Best Paper Presentation),

22. Shivani Sharma, Ashima Nehra. Cognitive Stimulation and Creativity: Correlates of Successful Aging” 13th International Conference on Geriatrics and Gerontology, GSICON 2016, held at Vallabhbhai Patel Chest Institute, 10-11 December 2016; Delhi University, (Awarded Best Oral Paper Presentation)

RESEARCH

Funded projects

Ongoing

1. Development of a computerized neurocognitive remediation package and phase II trial for assessment of its efficacy in cognitive function among patients with schizophrenia, Ashima Nehra, DST Cognitive Science Research Initiative, 2015, 3 years, 2015–2017, Rs. 17 lakhs.

Completed

1. Preclinical predictors of progression of cognitive decline in MCI and AD using a multitasking paradigm. Ashima Nehra Wadhawan, DST, 3 years, 2013–2016, Rs. 37 lakhs

Departmental projects

Ongoing

1. To study the effectiveness of cognitive rehabilitation on memory, language, attention and quality of life in patients with mild Alzheimer disease as compared to standard pharmacological treatment: A randomized controlled clinical trial.
2. Development and effectiveness of ‘Holistic and Integrated Neuropsychological Rehabilitation’ for improving cognitive and psychological functioning in patients with mild and moderate traumatic brain injury: A randomized controlled clinical trial
3. Development and effectiveness of ‘Comprehensive Neuropsychological Rehabilitation’ as an adjunct to standard pharmacological treatment for improving language and quality of life in patients with post stroke aphasia: A randomized controlled clinical trial
4. Development of a neurocognitive remediation package and phase II trial for assessment of its efficacy in cognitive functions among patients with schizophrenia.

Collaborative projects

Ongoing

1. A population based prospective cohort study to unravel the causes of stroke and cognitive decline: A cross cultural perspective (Neurology)
2. Efficacy, safety and tolerability of modified Atkins diet (MAD) in adolescence and adults with drug resistant epilepsy: Randomized controlled trial (Neurology, Pediatrics)
3. Cognitive impairment in spinocerebellar ataxia type 12 (Neurology)
4. Effect of anti epileptic drugs (AEDs) on metabolic parameters in obese persons with epilepsy (PWEs): A cross sectional, comparative study (Neurology, Pharmacology)
5. Impact of nutritional and lifestyle modification in subjects with BMI 25–29.9 kg/m² vs 30–34.9 kg/m² and to assess the effect of bariatric surgery in BMI ≥35 kg/m² (General Surgery, Dietetics, Biostatistics, Physiology)
6. Stress and its contribution in persons with mild cognitive impairment and dementia (Biophysics, Neurology, Psychiatry)
7. Quantitative EEG correlates of emotions induced changes in normal healthy volunteers (Physiology)
8. Comparison of bidirectional superior cavopulmonary anastomosis with or without cardiopulmonary bypass-cardiothoracic surgery (Cardiac Biochemistry, Cardiac Anaesthesia)
9. Study to evaluate the feasibility of reduced dose whole brain radiotherapy in patients of newly diagnosed primary CNS lymphoma after complete response to methotrexate based polychemotherapy (Radiation Oncology, Medical Oncology, Pathology, Biostatistics, Neurosurgery, Neuroradiology)
10. Effect of high-frequency repetitive transcranial magnetic stimulation on negative symptoms and cognitive functioning in schizophrenia (Psychiatry)
11. Anti stigma intervention for Indian persons with epilepsy (Neurology, Psychiatry)

12. Is high-intensity statin use associated with memory impairment? A Prospective observational study (Cardiology, Neurology)
13. Quantitative EEG correlates of cognitive performance in mild cognitive impairment and Alzheimer's disease (Physiology, Biostatistics)
14. Assessment of risk factors associated with obesity and intervention of nutritional and lifestyle modification with or without bariatric surgery amongst adult population. A non randomized controlled clinical trial (Dietetics, General Surgery, Physiology)
15. Study of clock genes in rat model of mania, like behavior (Cardiac Biochemistry, Psychiatry)
16. Neural correlates of cognitive performance in glaucoma: A quantitative EEG study (Physiology, Ophthalmology, Biostatistics)
17. Neural processing of congruency and affective valence during binocular rivalry: A QEEG study (Physiology, Biostatistics)
18. Neural processing of cognition in glaucoma: A quantitative EEG study (Physiology, Ophthalmology)

PUBLICATIONS

Journals: 6

Abstracts: 7

Chapters in books: 6

PATIENT CARE

- a) Facilities: The division is a specialized referral service which focuses on clinical application, including diagnostic formulation, assessment, cognitive retraining in brain functioning following brain attack/insult/injury. Psychological assessment includes neuropsychological assessment/evaluation including clinical diagnosis, comprehensive interview; behavioural observations, assessment with series of neuropsychological tests, interpretation, report writing neuropsychological formulation including General Intellect (hemispheric assessment), Cognition, Higher Level Executive Skills (e.g. problem solving, reasoning) Attention and Concentration, Memory and Learning, Motor and Sensory Skills, Perceptuo-motor Functioning/Visuo-spatial skills, Mood and Personality (Orbito Frontal Functions), Language /Aphasia Assessment. Neuropsychological retraining including basic function approach to improve the functional skills improving basic pre morbid functions of persons daily life; neuropsychological reorganization including compensation for the deficit when deficient function can neither be reorganized nor restored, clinic based therapy; home based therapy. Neuropsychological retraining including basic function approach to improve the functional skills improving basic pre morbid functions of persons daily life; neuropsychological reorganization including compensation for the deficit when deficient function can neither be reorganized nor restored, clinic based therapy; home based therapy.
- b) Community services/camps: Neuropsychological Rehabilitation, Vocational Guidance, Supportive Psychotherapy, Directive Counselling to the patients and family members. All these services are covered under the specialized clinics of Neuropsychological Rehabilitation (NR) and Cognitive Disorders and Memory Clinic (CD&M)

Outpatient service (OPD): 4 Clinical Neuropsychology OPDs/week, with 3 registries:

1. Clinical Neuropsychology (CNP) Clinic

2. Specialized Clinics:

a. Neuropsychological Rehabilitation (NR) Clinic

- Cognitive Retraining/Restructuring
- Basics Skill Training
- Functional Re-training
- Speech and Language Rehabilitation
- Psychosocial Therapy
- Guidance and Counselling
- Individual Therapy
- Family Therapy
- Vocational Guidance
- Holistic/eclectic Approach Therapy (depending on the patient's needs)

b. Cognitive Disorders and Memory (CDM) Clinic

- Memory Assessment
- Screening for Cognitive Decline
- Cognitive Rehabilitation for Dementia/ Alzheimer's Dementia

- Cognitive Re-training for decline in Memory/Executive Functioning
- Management of Cognitive/ Memory Disorders
- Identify and treat pseudo-dementia
- Education: patients, carers, trainees, colleagues, and the general public.
- Family guidance
- Monitoring of progress and response to therapy

Referrals

Patients are referred from Neurology, Paediatric Neurology, Neurosurgery, Psychiatry, JPN Trauma Centre, Gamma Knife Unit, Neuroanaesthesia, Physical rehabilitation and medicine(PMR), ENT, Nephrology, Dermatology, Gynaecology, Endocrinology, Nuclear Medicine, Medical superintendent's office (for medico legal cases), etc.

Referrals are given to establish a 'baseline' of skills/weaknesses in order to measure change in the future, to identify strengths and weaknesses in specific areas, to differentiate among illnesses, which can then direct appropriate treatment, to plan for treatment to use strengths to compensate for weaknesses, to assess everyday functional skills to plan for assistance or treatment, etc.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Dr Ashima Nehra delivered the Dr Satish Gulati Bharatji Gulati Oration at 13th International Conference on Geriatrics and Gerontology, GSICON 2016, Vallabhbhai Patel Chest Institute, 10-11 December 2016, Delhi University, titled: Elderly Care: Neuropsychological Perspective. The faculty had an honor to be invited as a Chairperson at Conferences e.g. at the 22nd World Congress of Social Psychiatry (WASP) 2016; and present as an Invited speaker in this conference and many more. Participated as Moderator of Special Session on, 'Panel discussion on crime; society and mental health, Multidisciplinary Perspectives and Implications for CB Interventions' The International Conference on Cognitive Behavioral Interventions (ICCBI-2017); held Symposium at the NACIACP Conference.; Chaired a Symposium of Neuropsychology Organized by Indian Federation of NeuroRehabilitation-17 on Inter professional Education and Practice Neuro Rehabilitation on, 'Cognitive Rehabilitation'; got affiliated to World Non-Communicable Diseases Federation and Neurotrauma Society of India besides continuing with the existing work/ responsibility (patient care, teaching and research). A talk was organized by CNP where an International Faculty was invited to present Long-Term Outcomes Following Traumatic Brain Injury (newer international trends in Neuropsychology) as a part of Continuing Medical Education (Neuropsychology).

Harsimarpreet Kaur received **Gandhi Scholarship Award** of the year 2017 at 5th Annual Conference of Indian Federation of Neurorehabilitation, Mumbai, 31 March–2 April, 2017 was given to.

VISITING SCIENTIST

Dr Mel Kaushansky, PhD from Vancouver, British Columbia; titled 'Long-Term Outcomes Following Traumatic Brain Injury', 18 February 2017

Neurobiochemistry

HIGHLIGHTS

Three MSc students finished their dissertation. Neuronal antigen profiling has been started. The Gene Sequencer Dx3500 ABI for sequencing based diagnostics has been standardized and will also start analysis of different cancer genes neurological gene panel testing and MLPA based diagnostic by using it for both patient services as well as research. Patient-care services have been improved through interfacing of all the laboratory equipments with the hospital information system. Seminar presentation series for CNC lab staff members in lab meeting has started.

EDUCATION

Theory as well as practical classes for graduate, postgraduate (MBBS, MSc and MD) students. Also participate in Biotechnology Department academic activities.

CMEs/Workshops/Symposia/National and International Conferences

Lectures delivered

Ashok Sharma: 1

1. Epigenetic alterations and Cancer Testis/Germline POTE antigen activation in Epithelial Ovarian Cancer, All India Cell Biology Conference and International Symposium on Functional Genomics and Epigenomics, 17–19 November 2016, Jiwaji University, Gwalior

Oral papers/posters presented: 1

1. Arora M, Zhang W, Klinkebeil D, Karpf AR and Sharma A. POTE antigen expression and epigenetic regulation in human epithelial ovarian cancer. All India Cell Biology Conference and International Symposium on Functional Genomics and Epigenomics, 17–19 November 2016, Jiwaji University, Gwalior

RESEARCH

Funded projects

Ongoing

1. Genome-Wide DNA methylation and genomic instability profiling and evaluating its potential as a biomarker and immunotherapeutic target for ovarian cancer, Ashok Sharma, DBT, Ramalingaswami Project, 5 years, 2015–2020, Rs. 32.5 lakhs
2. Nuclear architecture as an epigenetic regulator in pericentromeric localized Cancer, Testis/Germline antigen POTE expression in ovarian cancer, Ashok Sharma, DST, 3 years, 2017–2020, Rs. 54 lakhs
3. Estimate the serum levels of cancer, Testis antigen POTE as a biomarker in epithelial ovarian cancer, Ashok Sharma, AIIMS, 2 years, 2016–2018, Rs. 10 lakhs

Departmental projects

Ongoing

1. Effect of DNA methylation in expression of cancer, Testis/Germline gene POTE in ovarian cancer
2. DNA methylation effect on POTE expression in epithelial ovarian cancer

Completed

1. Cancer, Testis/germline antigen POTE expression analysis in ovarian cancer

Collaborative projects

Ongoing

1. Role of PARP1 and γ -Glutamylcysteine synthetase inhibitor in cisplatin sensitivity and correlation with DNA methylation in ovarian cancer (IRCH)
2. Impact of yoga and meditation on epigenetic profile in rheumatoid arthritis (Anatomy)

PATIENT CARE

The CNC Neurobiochemistry Centralized laboratory caters to OPD and ward patients of the Centre. It also provides facility for some diagnostic tests in patients from other departments of AIIMS as well as for referral patients of other hospitals. The ward samples are received through pneumatic tube system. The list of tests being done are as follows:

S. no.	Disease/Group of tests	Investigation
1.	Therapeutic drug monitoring tests	Carbamazepine (CBZ), Phenobarbital, Phenytoin (DPH), Valproic acid (VLP)
2.	Tests for Wilson's disease	Serum copper, Ceruloplasmin, Urine copper (Restarted)
3.	Tests for multiple sclerosis	Myelin Basic Protein, NMO-IgG (Neuro Myelitis optica), Oligoclonal bands of IgG (OCB)
4.	Test for myasthenia gravis	AChR-Ab
5.	Ganglioside profile	Ganglioside IgG, IgM
6.	Test for pheochromocytoma	Urine VMA, Serum adrenaline, Serum noradrenaline, Urine adrenaline, Urine noradrenaline
7.	Routine haematology tests	Haemoglobin, Packed cell volume, Red blood cell count, Reticulocyte count, Platelet count, White blood cell count, Differential count, Absolute eosinophils, Blood film morphology, ESR, MCV, MCH, MCHC, RDW, MPV, PDW, Prothrombin time, Activated partial thromboplastin (APTT)

8.	Routine test of clinical chemistry	HbA1c, Glucose fasting, post prandial and random, Glucose tolerance test, Urea, Creatinine, Calcium, Phosphate, Uric acid, Sodium, Potassium, Bilirubin, Total Protein, Albumin, SGOT (AST), SGPT (ALT), Alk Phos (ALP), Total cholesterol, Acid Phosphatase (ACP), Amylase
9.	Serum lipids	Total Cholesterol, LDL cholesterol, HDL cholesterol, VLDL cholesterol, LDL/HDL ratio, Triglyceride
10.	Hormone profile	Thyroid profile, GH (Growth hormone), ACTH, Cortisol, Prolactin, LH, FSH, Vitamin D, PTH
11.	Special tests	Vitamin B 12, Homocysteine, Neuronal Antigen Profiling

Various tests done:

CATECHOLAMINES:	600	VMA:	431
Vitamin D:	3749	PTH:	580
HbA1C:	7307	NMO	649
Ward haematology:	48050	OPD Haematology:	35242
PT:	54673	APTT:	2005

Centralised Laboratory, CNC

Ward and OPD Chemistry tests done

S.no	Description	No. of tests (Ward)	No. of tests (OPD)
1	Glucose	50,200	86,588
2	Urea	61,500	81,400
3	Creatinine	62,500	80,200
4	Calcium	52,500	58,500
5	Phosphorous	52,500	56,450
6	Uric Acid	55,000	58,300
7	Sodium	65,000	75,000
8	Potassium	65,000	75,000
9	Bilirubin	60,300	73,200
10	Direct Bilirubin	58,400	58,400
11	Total Protein	58,500	62,200
12	Albumin	58,400	62,200
13	AST	61,500	67,500
14	ALT	61,500	67,500
15	ALP	63,000	70,000
16	Cholesterol	50,000	67,200,
17	Amylase	45,000	30,420
18	Cyclosporin	690	NA

Annual statement of Hormones, Drugs and other Neurological tests done

Hormones			
Description	No. of test	Description	No. of test
T3	18000	GH	2500
T4	18000	Cortisol	2800
TSH	20000	LH	2500
Prolactin	2500		
FSH	2500		
ACTH	2000		

Drugs			
Description	No. of test	Description	No. of test
Phenytoin	2000	Phenobarbitone	500
Valporate	2000	Carbamazepine	500
Others			
Description	No. of test	Description	No. of test
Vit B12	10000	Serum Copper	500
Folate	8000	Urine Copper	500
Homocysteine	2500	ACHR	250
Ferritin	500	OCB	250
Ceruloplasmin	600		

Lipids and Enzymes

Description	Total numbers of test	Description	Total numbers of test
LIPID PROFILE	64,300	ASLO	3750
CK-NAC	13,100	CRP	26,300
CK-MB	4400	DIGOXIN	732
LDH	16,800		

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Dr Ashok Sharma is Life member of *Indian Society of Cell Biology* (ISCB) and Indian Association for Cancer Research (IACR) (2016); Content provider for Biophysics subject in ePG-Pathshala, an MHRD, National Mission on Education through ICT (NME-ICT) venture; DBT-Ramalingaswami Fellowship and DST-Ramanujan Fellowship from Govt. of India.

11.1. B.B. Dikshit Library

Professor In-Charge, Library Committee

S. Rajeshwari

Chief Librarian

S. Siva Chidambaram

HIGHLIGHTS

Dr BB Dikshit Library (BBDL) has over 150,000 books and other documents such as bound journals, and pamphlets, etc. Even though this library is an Academic and Research Library for doctors, recently it has developed a collection of around 2200 Hindi books. It is well equipped with modern facilities to support medical education and research. The library subscribes to and maintains about 1370 periodicals/journals including online journals and database. In addition, BBDL also subscribes to **Up-to-date and BMJ Best Practice systematic review database** and 112 **E-books**. These online databases and journals/periodicals can be accessed through IP enabled mode on the campus wide network. Some society-based journals may also be accessed through username and password. Necessary guidance for access to database/information is circulated time to time from the library and these circulars are also available on AIIMS Website: <http://www.aiims.edu/en/library.html>.

Library Committee is an advisory body for the management of library. It advises through the Chief Librarian regarding procurements of books and subscription of journals/periodicals, and databases. The present committee consists of a Professor-in-charge as Chairperson, seven Professors, two Associate Professors from various divisions as members and Chief Librarian as Coordinator.

The Library has an in-house information technology and management system consisting of 3 Servers and 46 PCs. The library use LibsysPremia automation software system that supports data entry and retrieval in Hindi as well. All documentation/bibliographic services and membership as well as certain library operations have been computerized using this integrated library management software. Information on all books and other documents received in the library are available online through intranet within the campus through Web OPAC and it is being updated regularly. Library provides *Current Awareness Services: List of new additions*. Recently, library started the **AIIMS Institutional Repository Bulletin**. It can be browsed by readers for bibliographic details of papers/articles published by the faculty members and research scholars in different national and international journals.

Despite space and staff shortage, the library is being kept open round the clock (24 hours) on all days of the week including Sundays and holidays. It caters to and fulfills the need of around 3000 regular members, and an average of 300 readers visit the library everyday.

Library has been providing electronic resource access management through AIIMS website, database search facility through internet Wi-Fi and remote access mode. Reprography/printout (colour) of monographs and articles services. Book bank facility for UG students.

During this year library subscribed 1552 periodicals and i-Thenticate (Pro-edition): An anti-plagiarism web tool, NEJM Journal Watch, HS Talk Lecture Series, Web of Science, *Uptodate: A systematic review database*, *BMJ best practice*, *BMJ case report* and *Access Medicine database* which includes around 76 basic reference medical books with multimedia option.

Due to shortage of space, library decided to shift the Abstracting and Indexing and duplicate journals to off-site record management firm of AIIMS at Gurgaon. We have sent around 7000 bound volumes of abstracting and indexing journals and other documents this year. This is an initiation of weed out process in library, in forthcoming years, if there is no requirement of these journals from any doctors/users, by default these documents will be weeded out directly from the store of the site. To reduce the shelving space and preservation of old documents, library installed two major compactors (moving shelves) on both sides of the staircase at the ground floor.

CME/Workshop/Seminar/Conferences organized by Dr BB Dikshit Library

1. One Day National Seminar, Web Scale Discovery Service: A New Avatar in Medical Information Retrieval, 4 April 2016
2. One Day Seminar, Empowering clinical leaders with knowledge based system, 21 June 2016
3. One Day Seminar, Role of libraries in Clinical Research, 27 July 2016.
4. Celebrated 60 years of library services on occasion of birthday of the founder director Dr B B Dikshit on 7 September 2016
5. Two days Workshop, Institutional Digital Repository and Medical Metadata Engineering, 20–21 October 2016 jointly organized by BB Dikshit Library, AIIMS, New Delhi in collaboration with IIT Kharagpur under National Digital Library Project sponsored by MHRD, GOI

Lectures delivered

S. Siva Chidambaram: 8

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1. Primer on role of library in clinical research, AIIMS, New Delhi, 27 July 2016, organized by B.B. Dikshit Library
2. Role of libraries in clinical research, Evidence based practice: Uncertain to certain in CEUTEH 2016 (Cost Effective Use of Technology in e Healthcare) Conference, AIIMS, New Delhi, 9 September 2016
3. Open source software for library and information services, Workshop on Leveraging ICT Tools for Knowledge Management in ICMR Library and Information Centres for Heads of Libraries and Senior Library Professionals of ICMR Institutes/Centres, 24–25 November 2016, NIV, Pune
4. Library networking for the repository service, Workshop on Leveraging ICT Tools for Knowledge Management in ICMR Library and Information Centres for Heads of Libraries and Senior Library Professionals of ICMR Institutes/Centres, 24–25 November 2016, NIV, Pune
5. Medical information resources and institutional repository and e-content management, 28 May 2016, Refresher Course in Library and Information Sciences by UGC-HRDC, Bharathidasan University, Tiruchirappalli, Tamil Nadu
6. Panel discussion on “Now or Never: Making Connections, Collaboration and Services the hallmark of Libraries and Information Centres”, Seminar on Reinventing Libraries for the New Generation of Library Users, 8 August 2016, DELNET, JNU Campus, New Delhi
7. Discussant, Seminar on ‘The Environment: Challenges and opportunities of e-resources’, Delhi Library Association and UNIC; 16 September 2016, New Delhi
8. Discussant, International Seminar on “New and Innovative and Information Services” held on 22 February 2017 at JNU, New Delhi

PUBLICATIONS

Paper/book published

1. Edited Book “Access to Medical Literature in Electronic Environment” ISBN 978-93-82059-45-5.
2. Empowering Clinical leaders with Dr B.B. Dikshit Library E-Resources monograph
3. At the workshop on “Role of Libraries in Clinical Research” at Conference Hall, AIIMS, New Delhi on 27 July, 2016 the following working papers were released:
 - (a) Primer on Role of Libraries in Clinical Research
 - (b) AIIMS Directors’ Research Papers; (1956 TO 2016) – A bibliography
 - (c) Top 60 Research Papers published by AIIMS Faculty Members; (1956 TO 2016) – A bibliography
4. Tools and components of knowledge organization in Web Scale Discovery Services: A Case Study on Establishing Single Point Search in B.B. Dikshit Library. In: International Conference on Knowledge Resources and Library Technologies; 2017: 28–36.

Conference/Seminars attended

S. Siva Chidambaram

1. International Conference Library and Information Professionals Summit (LIPS) 2016 on ‘From Ownership to Access: Leveraging the Digital Paradigm’, 19–20 May 2016, Ambedkar University, Delhi
2. Participated in Seminar on ‘Universal Access to Information for Underserved Communities in South Asia as a Means to Achieve the SDGs’, 28 September 2016, UNESCO, New Delhi
3. Global Conference on ‘Emerging Trends in Business Librarianship’ jointly organized by IIM, Ahmedabad and ISB, Mohali, 4–7 December 2016, Indian School of Business, Mohali, Punjab
4. Committee member in International Conference on Digital Libraries (ICDL 2016) organized by The Energy and Resources Institute (TERI), 13–16 December 2016, New Delhi
5. Chair, International Conference on Knowledge Resources and Library Technologies, 24–25 February 2017, Bharathidasan University, Tiruchirappalli, Tamil Nadu

Mr M.K. Vishwakarma

1. Attended one-day seminar of International Day for Universal Access to Information for underserved communities in South Asia as a means to achieve the SDGs on 28 September 2016, organized by UNESCO, New Delhi

2. Attended DELNET Annual Lecture on “Digital and Physical Preservation Management: Best Practices and Strategies” on 13 December 2016
3. Presented a research paper titled “Changing Library Services in E-learning Environment at AIIMS, New Delhi”. Paper published in Proceeding of National Conference on Library Innovation for Excellence, 2017, 16 & 17 February 2017, IISER, Pune

Mr Jahangir Khan

1. Attended one-day seminar of International Day for Universal Access to Information for underserved communities in South Asia as a means to achieve the SDGs on 28 September 2016, organized by UNESCO New Delhi
2. Attended Two-day National Conference on Library Innovations for Excellence (LIFE-2017) held on 16 & 17 February 2017, Indian Institute of Science Education and Research, Pune

Mr Prashant Shrivastava

1. The Environment: Challenges and opportunities of E-resources, organized by United Nations Information Centre for India and Bhutan, National Social Science Documentation Centre (ICSSR) and Delhi Library Association on 16 September 2016 in New Delhi
2. Presented a paper titled “National Level ETD Efforts: A Comparative Analysis” at 3rd iETD National Conference organized by INFLIBNET on 5–7 October 2016 at Gandhi Nagar Gujarat. This paper has been hosted on INFLIBNET Institutional Repository for open readership
3. International Conference on Digital Libraries (ICDL) 2016 from 13–16 December 2016, organized by the TERI, New Delhi

Mr Ajay Kumar Saroha

1. The Environment: Challenges and opportunities of E-resources, organized by United Nations Information Centre for India and Bhutan, National Social Science Documentation Centre (ICSSR) and Delhi Library Association on 16 September 2016 in New Delhi
2. Attended 3rd iETD National Conference Organized by INFLIBNET on 5–7 October 2016 at Gandhi Nagar Gujarat

Mr Deepak Shukla participated in One-day International Seminar on “New and Innovative Library Services” on 22 February 2017, organized by Central Library, JNU, New Delhi

Ms Neetu Priya participated as a Rapporteur in ‘International Conference on Digital Libraries: Smart Future: Knowledge Trends that will change the world’, 13–16 December 2016, New Delhi

11.2. Cafeteria

Chairperson

M. Bajpai

Member Secretary

Sushma Sagar

Accounts Officer

Meenakshi Dabral

General Manager

S.K. Kaushik

Deputy General Manager

K.K. Sharma

The cafeteria is being run at no-profit-no-loss basis, to provide wholesome food to employees at AIIMS without any financial assistance from the Institute for Equipment, Furniture, Utensils and other basic requirement of Café.

MANAGEMENT COMMITTEE

A Management Committee is constituted by the Director of AIIMS for policy decisions that pertain to the Cafeteria Department time to time. The following are the members:

Dr M. Bajpai	Chairperson
Dr Neena Malhotra	Member
Dr Binod Kumar Khaitan	Member
Dr Vanlalnghka Darlong	Member
Dr Rajesh Khadgawat	Member
Dr Sumit Sinha	Member
Representative of FAIIMS	Member
Representative of RDA	Member
Representative of Officer Association	Member
Representative of Nurses Union	Member
Representative of Karamchhari Union	Member
Dr Sushma Sagar	Member Secretary
Shri S. K. Kaushik General Manager, Cafe	Co-coordinator

SERVICE FACILITIES

The Cafeteria runs 10 units for services to more than 10,000 employees of AIIMS.

1. Main Cafeteria (24 hours services) situated near Jawahar Lal Nehru Auditorium
2. Main Operation Theater Cafeteria situated at 9th Floor of the Main Hospital
3. CNC Cafeteria, situated at 2nd Floor of the Center
4. Dr R.P. Centre OT Cafeteria situated at 5th Floor of the center/Ground Floor
5. Center for Dental Education and Research
6. Dr B.R. Ambedkar Institute Rotary Cancer Hospital
7. Faculty Room Cafeteria situated near Main Cafeteria
8. AIIMS Outreach OPD, Village Badsa, Jhajjar, Haryana
9. Tea/Coffee outlet near computer facility and daily service at Ortho OT
10. AIIMS OPD Canteen established under the management of AIIMS Cafeteria to cater the need of patients and their relatives round the clock

In addition cafeteria provides hospitality services to all higher officers and faculty members on day-to-day requirement, as well as special requirements for important official meetings, Workshop, Symposia, etc.

STAFF STRENGTH

92 employees are appointed in the Cafeteria Department on regular as well as Adhoc/Temporary Status/Contractual basis.

DEVELOPMENT ACTIVITIES

Multi-story Cafeteria block has been constructed and likely to be functional by 15 August 2017

FUTURE PLAN

Considering massive expansion in the requirement for catering services at the Institute as a result of tremendous increase in AIIMS staff strength and in view of upcoming blocks in AIIMS campus, the need of highly skilled professional catering/cafeteria services in campus for faculty, resident doctors, nursing staff, other staff and visitors has been felt. Therefore, there is a proposal for outsourcing the cafeteria/catering services at the Institute.

11.3. Central Animal Facility

Professor-In-Charge

S.K. Maulik

Senior Veterinary Officer

P.K. Yadav

During the year 2016–2017, only rats, mice, rabbits, guinea pigs and hamsters were maintained in our Central Animal Facility (CAF).

Small Animal (Rodents)

The number of different animals maintained during the year were:

- | | |
|----------------------------------|------|
| 1. Rats (Wistar): | 1732 |
| 2. Rats (Sprague Dawley): | 516 |
| 3. Mice (Swiss): | 435 |
| 4. Rabbits (New Zealand): | 103 |
| 5. Guinea Pigs (Dunkin Hartley): | 49 |

The total number of small animals that were supplied to various departments of the Institute was 3642 (rats: 2821; mice: 716; rabbit: 97 and guinea pigs: 8) and some animals were also sold to sister institutions in Delhi and outside Delhi (rats: 1545; mice: 103; rabbits: 6 and guinea pigs: 12).

Experimental Surgery

Thirty-one surgical procedures were performed by faculty, investigators and students from various departments in the Central Animals Facility of the Institute. The departments include Surgery, Biomedical Engineering Unit, Neuro-Surgery, Pediatric Surgery, Laboratory Medicine, Biotechnology, Stem Cell Facility and Pathology.

Institutional Animal Ethics Committee

The Institutional Animal Ethics Committee (IAEC) is approved by the Committee for the Purpose of Control and Supervision of Experiments on Animals (CPCSEA) under the Ministry of Environment, Forests and Climate Change (Government of India). The AIIMS CPCSEA registration no. is 10/GO/ERebi/SL/99/CPCSEA. The Institutional Animal Ethics Committee (IAEC) cleared 63 projects on small animals (Rodents) of various investigators of Institute during the year.

Services Provided

The CAF has been maintaining the animals belonging to the departments of Microbiology, Biomedical Engineering Unit, Biochemistry, Biotechnology, Anatomy, Pathology, Laboratory Medicine, Stem Cell Facility, Neurology and Neurosurgery, Paediatric Surgery, Biophysics, Geriatric Medicine, Surgical Discipline and Neurobiochemistry. This facility housed experimental animals that numbered as following: Rats 217, mice 209, rabbits 16, guinea pigs 16 and hamsters 4, belonging to the above departments.

The CAF provided laboratory facilities to various investigators, like vacuum drying of sera, and storage of serum samples, hematology, clinical biochemistry, microscopic investigation and X-ray facility.

The facilities for research with immunodeficient animals (Nude and SCID mice) are in the final stage and will be functional soon.

Educational Programme

1. Dr P.K. Yadav has delivered invited lectures in ‘Three Days Training Programmes of Nominees of CPCSEA’ organized by the Committee for the Purpose of Control and Supervision of Experiments on Animals (CPCSEA), 7–9 March 2017 under Government of India, Ministry of Environment, Forest and Climate Change, Committee for the Purpose of Control and Supervision of Experiments on Animals (CPCSEA), New Delhi.

11.4. Central Workshop

Faculty Coordinator

Dr Ganga Prasad
Professor, Department of Anaesthesiology, Pain Medicine and Critical Care

Chief Technical Officer

Kalu Ram

Senior Technical Officer

Harinder Pal
(Mechanical Section)

Nitin Srivastava
(Electrical and Electronics)

OBJECTIVES

The Central Workshop was established in 1964. It plays an important role in providing smooth and complete patient care. It carries out the repair and maintenance of various equipments from different departments. It also fabricates the items to be used for medical education, scientific research and patient care in the AIIMS. This department provides innovative design and solutions for the researchers too. Being the only technical department it also provides technical guidance to various purchase committees of the Institute.

Location and Timings

The Central Workshop is located on the basement, ground floor and first floor in a building adjacent to the laundry and the mortuary. It also has its extended centre at 7th floor of the Hospital main building. This extension centre (mini workshop) repairs on urgent basis and also has the advantage of its location, which saves time and labour of the person carrying the item for repair.

Strength of employees

A skilled team of technicians and officers is available at the department to provide the above stated operations. The team provides an efficient support in maintaining various equipments in the hospital in a good working condition. There are various sections in the Department of Central Workshop headed by a Senior Technical Officer/Technical Officer with supporting staff members. The strength of staff in the Central Workshop is as follows:

- Chief Technical Officer: 1
- Senior Technical Officer: 2
- Technical Officer: 3
- Technician (Grade I): 6
- Technician (Grade II): 9
- Workshop Assistant: 1
- Office Superintendent: 1
- Store Clerk (UDC): 1
- Khalasi: 6

Services available

The Central Workshop provides the following services to the entire hospital, centers, institutes, NDDTC Ghaziabad and CRHSP Ballabhgarh:

1. Repair and maintenance

There are different sections in the Department of Central Workshop to carry out repair and maintenance of various equipments. A total of 8819 (Eight Thousand Eight Hundred and Nineteen) jobs had been received and completed by the Central Workshop during the year. The section wise descriptions of repaired items are:

S. no.	Section	Number of jobs	Items
1	Electronics	420	Patient Monitors, Infusion Pumps, Regulated Power Supplies, Electronic Weighing machine, Paper Shredding machines, Light sources, ECG machines, Sealing machines, Ultrasonic nebulizer, DVT pumps, Blue LED light, Stabilizers, Induction heater, Nebulizers, Public address systems, Operation Table Electronic, Microscopes, Microwave Ovens, Colour Televisions, Humidifier, Foetal Doppler, Air Mattress Pump, etc.
2	Electrical	1428	Autoclave machine, Bone Cutters, Bullseye lamp, Boiler, Centrifuge machine, Suction machines, Floor Cleaning Machine, Fly killer machine, Fumigator, Gauge/Plaster Cutters, Grinders, Hot Case, Hot Air Ovens, Hot display counter, Hot Plates, Incubators, Laminar Flow, Mayo stand, Mixer Grinder, Magnetic stirrer, Needle Destroyers, O.T. Lights, Spot Light, Steam Bath, Sterilizers, U.V. Lights, Vacuum Cleaners, X-Ray View Box, Vortex Shaker, Water Bath, Wax Bath etc.
3	Mechanical	3762	Surgical Instruments, Tr. Tube, Spray Pumps, Vapor Jet Cleaning Machines, Scissors (Gauge Cutting), Bed Side Lockers, I.V. Stands, Patient Trolleys, Patient Beds, Wheel Chairs, Loading Trolleys, Food Trolleys, Side Screens, Instrument Trolleys, Basin Stand, Foot Step, Surgical Drums, Push Cart, Pt. Examination Tables, Hydraulic Trolleys, Test Tube Stands, Revolving Stools etc.
4	Fine Instrument	1993	Digital B.P. Instrument, Micro Balances, Dial B.P. Instrument, Stethoscopes, Weighing machine, Compressors, Flow Meters, Oxygen Regulators, Hydraulic Tables, Laryngoscopes, etc.
5	Refrigeration	274	Visi Coolers, Deep Freezers, Chilling Unit, Ice Cream Cabinet, Refrigerators, Cold Display Counters, Minicold, Refrigerated BOD Incubator etc.
6	Painting	742	All office and hospital furniture items like Beds, I.V. stands, all type of Trolleys, Wheel chairs, Benches, Footsteps, Patient Side Lockers, Pigeon Lockers, Patient Examination Tables, Push Carts, Almirahs, Racks etc.
7	Carpentry & Upholstery	200	All types of stools, sofas, settees, chairs, tables, trolley mattress, patient couch mattress etc. and their upholstery work. Splints, wooden stools and other wooden item jobs etc.
	Total	8819	

2. Fabrication and guidance

In spite of gradually increasing load of repair and maintenance activities, Central Workshop has been able to help in research activities of the institute with design and fabrication of useful gadgets as per specifications provided by the various departments. A total of 733 (Seven Hundred and Thirty-Three) items were fabricated by the Central Workshop during the year. These were:

S. no.	Item description	Quantity	Department
1	Flexible Endoscope Stand	2	ENT
2	Stand Delivery System	2	CTVS OT
3	Sweat Testing Machine	10	Children OPD
4	Camera Stand	1	CTVS OT
5	I.V. Stand	13	Surgery
6	Logistical Support	1	Physiology
7	Eye tracking Machine	1	Physiology
8	Tracheostomy Device	1	Anaesthesiology
9	Flamingo Balance	1	Orthopaedics
10	Balance Board	1	Orthopaedics
11	Stock Balance Stand	1	Orthopaedics

12	Beam Test set-up	1	Physiology
13	Appointment stand	2	IRCH
14	Flask Cap	1	Biochemistry
15	Door Panel	1	D5 ICU
16	Rat Chamber	2	Neurosurgery
17	Tray Clamp	7	NMR, D2
18	Sample Tube Box	1	D7 HDU
19	Sample Tray	2	Main Hospital
20	Blood Donor Mattress	3	JPNATC, Emergency
21	Wooden Chuck	4	JPNATC
22	PCNL Roll	2	Orthopaedics
23	Tracheostomy Tube	3	NS 2
24	OT Table Mattress	6	Main OT
25	Handle for Surgical Equipment	35	Orthopaedics OT, Surgery, JPNATC OT, Main OT
26	Stylets	31	NS4, Emergency
27	Temp Chart Holder	166	Main Hospital
28	Donation Token	132	Anatomy
29	Splint	300	JPNATC, Emergency
	Total	733	

3. Short-term training

The Workshop is actively involved in providing guidance and imparting short term training (4–6 weeks) to the diploma/ undergraduate students of various engineering colleges.

Achievements

The Workshop has received appreciation letter from Cardiovascular Surgery Department AIIMS for providing innovative solution for an equipment.

11.5. Computer Facility

Professor in-charge

S.C. Sharma

Chairman, Computerisation Committee

Deepak Agrawal

System Analysts

S.N. Ragu Kumar

Satish Prasad

Sushil Kumar Meher

Senior Programmers

Sanjay Gupta
Pawan Sharma

Vinay Pande

Hari Shankar
Shyamal Barua

Programmers

Tripta Sharma
Ankita Saini

Sanjeev Kumar
Geetika Gupta

Amit
Raghvendra Gupta

Nursing Informatics Specialist

Metilda Robin & Team

EDUCATION

Postgraduate

Computer programming classes, covering both theory and practical aspects, were conducted for postgraduate students of the Department of Biotechnology and College of Nursing.

Undergraduate

A three-month course on basics of computers, internet, windows applications, computer-aided learning, database, etc. was conducted for first year students of BSc (Hons) Nursing and BSc Nursing (Post-certificate). Computer Orientation Program for MBBS students were also organized.

E-learning module launched in 1 September 2015 with the objective to provide online continuous medical education for nurses came up with lot of interesting e-learning modules during the last year such as care of unconscious patient, CPR, critical care, oral hygiene and mechanical ventilation. Nurse's e-newsletter was started in April 2016 to showcase the efforts and achievements of nurses of AIIMS.

SERVICES

Online appointment system initiated as a part of Digital India Initiatives by Honorable Prime Minister Shri Narendra Modi is running with 100% compliance in AIIMS, New Delhi. For this purpose, 52 counters are operational in, Patient Reception Center (PRC). Single Window Exit Counter (SWEC), which is functioning at RAK OPD is also facilitating follow-up online appointment among patients.

SNOMED CT or SNOMED Clinical Terms is a systematically organized computer processable collection of medical terms providing codes, terms, synonyms and definitions used in clinical documentation and reporting. SNOMED CT is the most comprehensive, multilingual clinical healthcare terminology in the world. All the SWEC counters of RAK OPD integrated with SNOMED CT.

Q-management is an initiative taken to reduce the waiting time among patients. As per this management, the person who has taken the appointment first will get the top priority to consult their doctor, so that unnecessary waiting time can be reduced. In addition, patient will be able to predict when their turn will come to meet the doctor. At present this system is working in pediatric OPD.

Staggering is a rush management method initiated in all OPDs. As per this management, the patient who has taken appointment first, needs to report at 8 am in the morning for the OPD. The patient who has taken appointment late will get another time slot in the morning for the same OPD. This way crowd and rush in the OPD can be managed.

Summary of total appointment taken through various appointment methods during the time period of March 2016–March 2017 is given below.

Method of appointment	New appointment	Follow-up appointment
Call Centre	47759	63187
ORS Mobile apps	5878	0
E-hospital	1680835	1446626
AVC	204	62
IVRS	3759	30841
Mobile apps	18875	53427
AIIMS portal	18072	119027
ORS	256897	0
Kiosk	240606	168770

Biometric Attendance with Duty Roster: Biometric punching system which started in June 2015 enrolled more employees who all are working in AIIMS during the last year. This punching system helps to ensure punctuality and it will help the employees to see their duty in and exit punching along with available off/leaves.

Hospital Computerization

E-office: A new module of electronic file system for file tracking where all leaves and letters are sent through e-office with an e-office number. 100% compliance from all departments enables easy file tracking. This file tracking system also enables the electronic movement and the tracking of files, and the archival and retrieval of data. The vision of e-office is

to achieve a simplified, responsive, effective and transparent working of all government offices. The computer facility in AIIMS has created government e-mail id and password for all official users of e-office with the help of NIS team members.

AIIMS Video Consult (AVC): It is a platform which allows patients across the country to have consultation with doctors in the premier institute. This method utilizes the latest technologies and gives patients alternatives to traditional consultations with video consult. Computer facility of AIIMS has launched AVC on 14 November 2016. Those who need expert opinion or consultation have it at home with the help of valid Gmail id and internet connection.

Nurse Initiated Follow-up Tele-consultation (NIFT): AIIMS video consultation by nurses is an extension to the existing video consults which is offered for all feasible patients who are getting discharged from AIIMS. Under this initiative, NIS book a tele/video consultation with every discharged patient within 48 hours of his/her discharge and go over the discharge instructions as well as answer any queries he patient may have. Currently patients are given appointment by NIS through AIIMS app/portal. Provision to implement automatic appointment for all discharged patients is under process and it will be implemented soon.

PACS integration with e-hospital: This helps to send the requisition for radiological investigations such as x-ray, CT, MRI etc. via online.

Systems application product (SAP): It is a software product to be implemented by TCS in AIIMS. It mainly deals with seven different modules such as finance module (it deals with the financial system in AIIMS), material management module (it deals with stores and inventories of AIIMS), plan and maintenance module (it deals with comprehensive annual maintenance) project module/engineering module (it deals with engineering section activities of AIIMS), HR module (it deals with human resource management in AIIMS), Basis (it is for the configuration of system) and Abap (it is for the software coding purpose). This project started on 14 October 2016 and it will be implemented soon in AIIMS.

In-House Modules

1. **Online anaesthesia register:** This software is developed by engineers of computer facility to update the OT case details by the anesthetist. This software helps to retrieve needed information easily. This software enables users to save and retrieve information related to surgery such as type of surgery, starting time, duration of surgery, main anesthetist, main surgeon, major events during surgery etc.
2. **National drug repository (NDR):** SNOMED coded national drug repository developed by computer facility AIIMS in collaboration with Ministry of Health and Family Welfare. This register promotes the use of same code for a particular medicine across the country. This will be released nationwide.
3. **Online admission slip:** While providing admission to the patient in a real platform based upon the availability of beds under different department doctor can fill online appointment slip. This helps to avoid manual filling of admission slip. This centralized system made admission procedure easy.
4. **QR code in medical and fitness certificate:** This initiative helps to decrease the increased incidence of submitting fake medical and fitness certificate by employees. Under this new initiative all the medical and fitness certificate will have QR code. The recipient can scan it to reach the AIIMS website and verify whether the certificate is authentic or not. This was implemented on 1 June 2017.
5. **E-grievance module:** The present manual system of grievance redressal for any grievance had many flaws where a complaint registered get resolved in its own pace with no provision left for the complainant to speed up the process rather than repeatedly phoning up the concerned person. A tracking system where the status of complaint can be checked by the complainant was a dire need, which in turn could improve the efficiency of whole process. Grievance module of AIIMS is live since June 2017. It is easily accessible through intranet portal where a link to the grievance module is given.
6. **National Death Registry India (NDRI):** The Union Health Ministry in collaboration with AIIMS came up with a National Death Registry which has data about deaths, including their causes, in hospitals across the country. It is a SNOMED CT integrated online death module launched in 2016. It is a model that is available in cloud and it can be adopted for other hospitals. The objective is to have a nationwide database about the causes of deaths occurring in hospitals in various regions of India. This will help policy makers have a better understanding of disease outbreaks to optimize the resources and healthcare facilities in respective regions.

IT Infrastructure and Networking, Internet and Intranet Management Activities

This unit of Computer Facility provides network management facilities including high speed internet connectivity to various users of AIIMS through NKN connectivity from NIC. This unit also maintains the AIIMS website at aiims.edu and aiims.ac.in and various other servers of AIIMS. Following are the activities done by this unit during 2016–2017.

1. 800 new internet connections have been provided to faculty, officers and staff of AIIMS.

2. Provided high speed NKN internet connectivity for various Seminars/Conferences/Video conferences etc. to worldwide locations i.e. UK, USA etc.
3. Continued maintenance of following modules in the aiims.edu website:
 - i) Breaking News
 - ii) Live Streaming
 - iii) AIIMS Channel
 - iv) Awards
 - v) Single point search facility enabled for online journal search.
4. The total number of pages updated, created and uploaded on AIIMS website is approx. 3900.
5. The total number of visitors to AIIMS website was approx. 75 lakh during 2016–2017.
6. Bilingual website creation process continued.
7. Continued management of Unified Threat Management (UTM) firewall done for security of computer networks and application for management at gateway level Anti-virus, Anti-spam, IPS/IDS, load balancing and content filtering.
8. Continued management of successful implementation of the wireless networking zones around 18 hostel locations, creating Wi-Fi zones for internet, information and online journals access to students and resident doctors. So far approximately 6500 students have availed this facility. Currently 1300 users are registered for this facility.
9. Continued BBDL OPAC Services and enhancement of library online resources subscribed through BB Dixit library through AIIMS website.
10. Continued management of Wi-Fi zone at BB Dikshit Library for internet and online journal access for students.
11. The website of www.aiims.edu, www.aiims.ac.in is being maintained.
12. High speed internet facility through NKN lease line for faculty and students is being maintained on 24x7 basis on the AIIMS network at around 8000 nodes.
13. Maintenance of Web server, Proxy server and Mail server 24x7x365 days.
14. Facility management and call maintenance for internet and network user's complaints and resolution on 24x7x365 days.
15. VPN based access mechanism for e-Hospital Module, CPRS access from outside AIIMS continued management for Ballabgarh, AIIMS centers.
16. Continued management of IPsec tunnel for connecting NDDTC, JPNATC, and Centre for excellence in Epilepsy and Brain Research Center's Gurgaon.
17. MAC ID based authentication provided to AIIMS faculty, scientists and nursing staff for Wi-Fi based access to e-hospital software's and internet at wards, OPD, ICU and OTs etc.
18. Continued maintenance and support for OPD, IPD and Store Information Systems module at CRHSP Ballabgarh and its PHCs done.
19. Installation of revamped LAN networking for faculty and students of NDDTC Ghaziabad, installation of Cyberoam UTM firewall for internet gateway management.
20. Created approx. 100 ids for SSL vpn access.
21. Created approx. 80 email ids on aiims.edu and aiims.ac.in.
22. Fiber backbone connectivity provided to Nuclear Medicine and Hostels.
23. E-mail sent to all faculty regarding various conference, seminars etc.
24. Approximately 400 wi-fi mac addresses configured for internet access.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Dr Deepak Agrawal was awarded the Dynamic CIO of Health Care of the year 2016 in the 5th Annual Healthcare Summit; Received the Skoch Order of Merit Award for Top 100 projects in India for AIIMS video consults and e-learning project and Skoch Smart Governance Award for online appointment system and patient portal (2016); Appreciated by Director AIIMS for implementation of e-hospital at AIIMS (2016); Received award from the Healthcare leader's forum-Technology for Patient Delight Award by elets. (2016) and Indian Express Public Health awards (2016) for most effective health technology system; Awarded the order of merit in Social Media for empowerment award for the project 'Appointment system in AIIMS' (2016); started online CME for residents and CNE for nurses and which is now mandatory for all residents and nurses across AIIMS. The online modules are developed in house and administered through computer facility, AIIMS; initiative to implement the Quality Assurance module for 360-degree evaluation of residents. This module is fully implemented in Neurosurgery and across 8 departments in AIIMS; initiative to implement live streaming of all CCR/CGR's in AIIMS with archival on YouTube; All live operative workshops in Neurosurgery are also streamed live; delivered a talk on Cost Effective Implementation of I.T. Hospitals: An AIIMS Experience on the occasion of 14th Healthcare Executive Management Development Programme at Jaipur.

Mr S.N. Ragu Kumar and Mr Hari Shanker were actively involved in training undergraduate and postgraduate students of AIIMS from college of nursing and MBBS. They have also delivered lectures and gave demonstrations to postgraduate students from Indian Red Cross Society at AIIMS Telemedicine Centre. Both were involved in IPsec tunnel configured between AIIMS and TCS cloud server and IPsec tunnel configured between AIIMS and Siemens server for management of PACS server. Involved in WiFi access points installation in PRC, Wards, OTs and Hostels. Facilitated high speed NKN direct connectivity to CRHSP Ballabgarh from NKN. NIC firewall rules created for remote access and other purposes; Nominated as core committee member and coordinator for HR module of SAP implementation at AIIMS.

Mr Satish Prasad was involved with monitoring and maintaining the finance server (Novell)/administrative server (Windows) for financial applications and web based administrative/financial/engineering applications. Supervised the administrative LAN (Novel Netware server) which caters to the administration and financial system and maintaining software for AIIMS Finance/Administration; coordinated and trained personnel for the e office Project (NIC) implemented at AIIMS and also involved in the implementation of SAP at AIIMS; acting as course coordinator and teaching faculty of MSc, BSc and Post Certificate students for Information Technology classes of College of Nursing, AIIMS. He has taken IT related classes for Disaster Management course for Indian Red Cross Society (Master's course affiliated to IP University); designated as Central Assistant Public Information Officer (CAPIO) for Computer Facility.

Mr S.K. Meher has taken a major role in implementing gastroenterology module E-hospital implementation, Jhajjar (Haryana) and designing developing and implementing SAP project system module; also involved in teaching activities of undergraduate and postgraduate students; taken part in making specification and evaluation of tenders, member of condemnation committee for CNC and some other departments and chairman of inspection committee for computer related items; reviewer for many journals and member of many professional bodies; paper presentations in many national and international conferences.

Mr Sanjay Gupta implemented software such as e-hospital, EHS software, e-office and diet module; integral part in the implementation of biometric attendance system in AIIMS; taking part in the SAP project which needs to be implemented by TCS; Chief Coordinator/Nodal Officer for SAP Project implementation at AIIMS to understand the user requirement related to various modules of SAP.

Mr Vinay Pande studied, designed and developed system for the implementation of 7th Pay Commission at AIIMS New Delhi; member of the SAP implementation team at AIIMS (looking after payroll module and undergoing ABAP training); invited by Indian Red Cross Society to deliver lectures on ICT, MIS, cyber terrorism and security etc. for their PG course on Disaster Management (affiliated to GGSIP University, Delhi); conducted many classes for undergraduate and postgraduate students of College of Nursing, AIIMS.

Mr Shyamal Barua is looking after OPD module and stores procurement files. Managing PACs/RIS and its integration with other vendors PACS. Working as nodal officer for GeM (Government e-Marketplace), e-procurement and implementation of online ACR portal of NIC in AIIMS; working as coordinating officer for implementation of Bharat QR code in AIIMS and actively involved in managing and supervising the CCTV installation in AIIMS; working as key person in Material Management Module of ERP (SAP) implementation and software customization as per the new requirement of user; involved in managing and maintaining cheque printing, ORBO Donor form, RPC pathology and Haematology reporting software. Currently acting as member secretary of Technical committee for the department.

Nursing Informatics Specialist (NIS) integrates nursing science with multiple information management and analytical sciences to identify, define, manage, and communicate data, information, knowledge, and wisdom in health practice, thereby helps realign the services to the ever changing organizational needs of AIIMS, New Delhi. Total of 60 NIS under the leadership of Ms Metilda Robin have been posted at all centres of AIIMS and are actively involved in education, patient care, research and computerization activities. NIS played an important role in digitization and workflow optimization of AIIMS. NIS organized a number of workshops on Research ethics and publications and personality development and communication skills (PDCP); NIS coordinated with MoHFW in Indian International Trade Fair-2016 in which AIIMS digitalisation project was highlighted and appreciated; Awarded Skoch Order of Merit Award for Top 50 projects in India for Nursing Informatics specialist (2017); The MoHFW also appreciated the efforts of NIS during its launch of e-hospital modules at AIIMS and had recommended the option of similar cadres in all hospitals of India; The work of NIS was highlighted and appreciated in the book Innovations released by the Prime Minister of India on Civil Service Day 2017.

Ms Metilda Robin was appointed as the Nodal Officer for SNOMED CT project at AIIMS by Ministry of Health and Family Welfare; Attended the NI 2016 Conference held in Geneva, Switzerland from 23 to 26 June 2016; Won the AIIMS Onians Best Nurse-Administration, 2015 from Honorable Union Health Minister Shri JP Nadda on AIIMS Institute Day on September 2016.

11.6. Electron Microscope Facility

Professor

T.C. Nag

Assistant Professor

Subhash C. Yadav

Senior Technical Officer

Sandeep Arya

EDUCATION

1. Thirteen M. Biotech students of the Department of Biotechnology, AIIMS, received two weeks training from 13 to 31 August 2016 (as part of their 1st Semester Cell Biology Practical).
2. EM classes (theory as well as practical, Fridays only) for Anatomy postgraduates were conducted on 13 January–17 February 2017.

CME/Workshops/Symposium/National and International Conferences

1. The 32nd National Training Program in Electron Microscopy for Scientific Investigators was held from 21 November to 3 December 2016. Twenty-two candidates from different parts of the country participated in the training program. Twelve lectures were delivered by AIIMS faculty staffs and external experts to the participants.
2. The summer training course in Electron Microscopy for technical personnel was held from 16 May to 25 June 2016. Eleven candidates were trained in sample processing, ultramicrotomy, CPD, sputter coating, TEM and SEM viewing and routine maintenance of microscopes.
3. Seven MBBS students from SCB Medical College, Odisha, visited EM facility on 19 September 2016 and were instructed on principles of EM and processing of biological samples for EM observation.
4. Four MSc 2nd year students from the Department of Physiology, University of Calcutta visited EM facility on 1 March 2017 under the guidance of Prof TK Ghosh and were instructed on principles of EM and processing of biological samples for EM observation.
5. Ten MSc students with two faculties from the Department of Zoology, Cooch Behar Panchanan Barma University, Cooch Behar, West Bengal visited EM facility on 22 March 2017 and were instructed on principles of EM and processing of biological samples for EM observation.

Lectures delivered

T.C. Nag: 4

T.C. Nag: 4

1. Oxidative stress and oxidative stress responses in aging human retina, 18th Biennial Conference of the Association of Gerontology (Indian Ageing Congress 2016), 10 November 2016; AIIMS, New Delhi
2. Morphological alterations in ageing human choriocapillaris, 64th Annual Meeting of Anatomical Society of India (NATCON-64); 29 November 2016, AIIMS, Jodhpur
3. Mechanisms of cone cell death in aging human retina, International Symposium on Neurodegenerative Disorders, 30 March 2017, NIMHANS, Bengaluru
4. Principles and practice of EM, National Seminar on Biophysics “Biophysika, 2017”, 16 March 2017, Jamia Millia Islamia, New Delhi

RESEARCH

Funded projects

Ongoing

1. To study the role of Th (T helper), 17 cells in arthritis patients in Indian population, Late TK Das (Now steered by A. Shariff), ICMR, 3 years, 2015–2018, Rs. 40 lakhs
2. Expression patterns of iron regulatory proteins in rat retina with ageing and in experimental iron overload, TC Nag, CSIR, 3 years, 2015–2017, Rs. 22.8 lakhs

3. Ultrastructural and immunohistochemical analysis of human choroidal vessels with normal ageing, TC Nag, ICMR, 3 years, 2015–2018, Rs. 21.4 lakhs
4. Development of Nano-drug delivery system for Brimonidine for treatment of open angle glaucoma with lower dose, higher efficacy and prolonged action, Subhash Chandra Yadav, AIIMS, 2 years, 2016–2018, Rs. 9 lakhs
5. Simple, quick and onsite early diagnostic kit for pathogen detection in asymptomatic stage, Subhash Chandra Yadav, DBT, 3 years, 2016–2019, Rs. 50.21 lakhs

Completed

1. Morphological and biochemical changes in neonatal chick retina following exposure to variable photoperiods, TC Nag, SERB, 3 years, 2013–2016, Rs. 33.6 lakhs

Departmental projects

Ongoing

1. Epigenetic regulation of Brain Derived Neurotrophic Factor (BDNF) in the central auditory pathway and hippocampus of neonatal chicks exposed to prenatal sound stimulation
2. Expression patterns of iron regulatory proteins in rat retina with aging and in experimental iron overload
3. Light-induced oxidative stress and endogenous neuroprotective mechanisms in post-hatch chick retina
4. Light-induced outer retinal damage and its consequences in inner retina

Completed

1. Expression of calbindin D-28k, calretinin and parvalbumin in neonatal chick retina exposed to light of variable photoperiods
2. Morphological and biochemical changes in neonatal chick retina following exposure to variable photoperiods

PUBLICATIONS

Journals: 16

PATIENT CARE

Special laboratory facilities

S. no.	Facility	User number		Specimens analyzed	
		Internal	External	Internal	External
1.	Transmission Electron Microscope	184	253	900	1614
2.	Scanning electron microscope	22	71	108	374

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor T.C. Nag reviewed manuscripts from PLoS One, Indian Heart Journal, and DST research projects for financial support.

Dr Subhash C. Yadav reviewed manuscript from Nanoscale, Colloids and surfaces, B-Biointerface, Journal of Colloidal Chemistry.

11.7. Hostel Section

Superintendent of Hostels

Dr S.K. Khandelwal
(up to December 2016)

Dr K.K. Deepak
(from January 2017)

Deputy Superintendent of Hostels

Dr S. Datta Gupta
Dr Tanuj Dada
Dr K.H. Reeta
Dr Kapil Yadav

Dr Neerja Bhatla
Dr Raj Kumar Yadav
Dr Vijay Kumar
Dr Kamlesh Kumari Sharma

Dr S.K. Maulik
Dr Rakesh Kumar
Dr Partha Halder
Mrs Bimlesh Kumari

Senior Administrative Officer (Hostels)

Shri Manoj Kumar Jha

Store Officer (Hostels)

Shri Narendra Kumar

Account Officer (Hostels)

Shri Trilok Chand

Senior Warden

Shri Shashi Prakash Pandey

Warden

Mrs Remani Thomas

Mr Mohan Sharma

Deputy Warden

Mrs Seema Pruthi

Mr Satprakash Kalia

Mrs Suchita Kumari

Assistant Warden

Mr Sukhpal Mallick

Mrs Tripta Sharma

Ms Rani Varghese

Junior Warden

Mr Babu Lal Meena
Mr Rajesh Rawat

Mr Dinesh Desai

Mrs Nirmala
Mrs Sunil Devi

Ministerial Staff

There are seven ministerial staff in the hostel section.

Subordinate Staff

Six male and 18 female office attendants are posted in different hostels. There are several halls of residence with a capacity of 1351 single/double rooms, 145 married accommodations, 404 accommodations for nursing students/staff nurses and 21 guest rooms. These are spread over different hostels and residences in the Main Campus, Masjid Moth, Ayurvigyan Nagar, and Trauma Centre (Raj Nagar).

Details of Hostels

S. no.	Name of hostels	Single room	Two to eight seaters	Guest room	Total strength
<i>Gents Hostel</i>					
1	Hostel No. 1 (Charak)	62	$3 \times 2 = 6$	0	68
2	Hostel No. 2 (Jivak)	55	$2 \times 2 = 4$	1	60
3	Hostel No. 3 (Sushruta)	70	$6 \times 2 = 12$	1	83
4	Hostel No. 4 (Madhava)	52	$7 \times 2 = 14$	0	66
5	Hostel No. 5 (Nagarjuna)	52	$5 \times 2 = 10$	0	62
6	Hostel No. 6 (Vagbhatta)	69	$6 \times 2 = 12$	0	81
7	Hostel No. 7 (Ashwini)	108		1	109
8	Hostel No. 8 (Bharadwaj)	108		1	109
9	Masjid Moth Resident doctors	154		6	160
10	JPN Apex Trauma Centre	57		2	59
11	RP Centre-I (Dhanwantri Hostel)	72		1	73
	Total	859	58	13	930
<i>Ladies Hostel</i>					
12	Hostel No. IX (Parvati)	62	$16+2+0+1 (32+6+5)$	1	106
13	Hostel No. X (Saraswati)	107	$3+0+1+0+0+1 (6+4+8)$	1	126
14	Hostel No. XI	24	$3+1+2+0 (6+3+8)$	0	41
15	RP Centre-II (Laxmi)	20	$13+1+0+0+1 (26+3+6)$	1	56
16	Masjid Moth Resident Hostel No.2		$54 \times 2 = 108$	2	110
	Total	213	221	5	439
<i>Nursing Students/Staff Nurses Hostel</i>					
17	New Nurses Hostel /MM	160	$76+14+4+0+0 (152+42+16)$	3	372
	Staff nurses	34			34
	Total	194	210	3	407
<i>Hostel Accommodation for the Married</i>					
18	F- Type	17	0		17
19	MMRDH	42	0		42
20	A.V.Nagar Type III	80	0		80
21	JPNATC	6	0		6
		145	Total		145
			Total 930+439+407+145	Grand Total	1921

Significant events

1. Hostel Rule Book was finalized and approved by Director, Dean (Academic) and Deputy Director (Administration)
2. Fourteen rooms in Hostel Nos. VII and VIII renovated.
3. A new Guest room has been made in Hostel No. VIII
4. JPNATC mess kitchen was renovated and new dining tables have been installed.

Future plans

1. Expansion/Construction of New Hostels with modern amenities to accommodate sanctioned strength of Students, Resident Doctors and PhD scholars.
2. Three new hostels are being built for residents/students.
3. Renovation of the remaining rooms of Gents Hostels No. VII & VIII.
4. A new big security booth is to be made in Resident Doctors Hostel, Masjid Moth.
5. Renovation of all common wash rooms of Resident Doctors Hostel, Masjid Moth
6. Renovation of Type III Hostel married accommodation in A.V. Nagar.
7. Common Washroom, Visitors room, Reception and Boundary wall to be made in New Ladies Hostel MMRH
8. Renovation of two guest rooms in New Nurses Hostel, Masjid Moth.
9. Renovation of first floor mess in Hostel Nos. VIII, RPC-I & RPC-II.
10. Replacement of chimneys in mess kitchen in JPNATC hostel.

11.8. Ethics Committee

- **The number of meetings of Institute Ethics Committee was as follows:**
 - Institute Ethics Committee: 12
 - Institute Ethics Committee for post graduate research for basic and clinical sciences: 11
- **The number of projects reviewed by the Institute Ethics Committee was as follows:**
 - New projects: 564
 - Old projects: 163
- **The number of projects reviewed by the Institute Ethics Committee for postgraduate research for basic and clinical science was as follows:**
 - New thesis: 550
 - Review thesis: 318
 - Old thesis: 46

In addition, the Institute Ethics Committee continues to receive notifications of serious adverse reactions, serious adverse events, six monthly progress reports and completion reports, etc.

The Institute Ethics Committee's Standard Operating Procedures (SOP's) were modified as per the need and are available on the AIIMS website.

The Institute Ethics Committee and Institute Ethics Committee for Post Graduate Research for Basic and Clinical Science were registered with DCGI and FWA

11.9. K. L. Wig Centre for Medical Education, Technology and Innovation (CMET-i)

Chief

O.P. Kharbanda

Professor-In-Charge

(For Faculty Development of Basic Sciences)

K.K. Deepak

Professor-In-Charge

(For Faculty Development of Clinical Faculty of Medicine and Allied discipline)

Rita Sood

Professor-In-Charge

(For Faculty Development of Surgical disciplines)

Anurag Srivastava

Education Media Generalist

Yogesh Kumar

PPS

Usha Tohan (up to 18 June 2016)

Manager (HRD)

Sourav Sarkar

Lecturer in English and Communication Skills

Dr Ila

HIGHLIGHTS

- **61st Institute Day Exhibition:** CMET played a key role in organizing the Institute Exhibition from 24 to 26 September 2016.
 - Theme of the exhibition was: “**Six Decades of AIIMS**”
 - Hon’ble Health Minister, GoI inaugurated the exhibition on 25 September 2016 at 11:00 am which was participated by the Faculty and Staff of AIIMS.
 - Significant posters: Old and rare photographs of the visit of Her Majesty Queen Elizabeth and Ms. Jacqueline Lee Kennedy, picture of the first Health Minister of Independent India, Raj Kumari Amrit Kaur and extract of her speech in the Parliament.
 - Posters on AIIMS Act, Description of AIIMS Logo, glimpses of making of AIIMS, pictures of previous convocations and visits of other dignitaries.
 - Poster of the awardees (Padma awardees and Shanti Swaroop Bhatnagar awardees) conferred to the AIIMS Faculty.
 - Presented posters on the present status of AIIMS in Education Research and Health Care including facilities available and future expansion plan.
 - Posters of 52 departments/centres were prepared depicting their history since inception and major achievements in the last 60 years.
 - Exhibition designed using easily portable pannel display system and had been designed in such a way that not a single nail and screw were used.
 - A total number of 120 posters of 42 × 72 inch were prepared and 6 video stations were placed on display.
 - The exhibition was organised successfully. Due to this, it was extended for next 4 months instead of just 3–4 days as in the case of previous years.
 - On 28 April 2016, in “Autism Awareness: Together we can” exhibition CMET-i designed 38 posters.

- On 10 March 2017, in “RPC Day Exhibition” CMET-i designed 39 posters.
- On 21 March 2017, in “World Oral Health Day” exhibition CMET-i designed 26 posters.
- 81 In-house Training programmes were conducted during the year.
- For AIIMS Faculty: **(5 for Faculty)**
 - Basic Course in Medical and Health Professions’ Education for medical, nursing and dental faculty to enhance their skills in teaching methodology and understanding towards medical education. 30 faculty members from different disciplines attended the program.
- For faculty, residents, students and health professionals: **(56 programmes conducted)**
 - 24 training programs were organized on different topics with special emphasis on topics like Information retrieval, Bibliography management, Tools for Scientific Writing in MS Word, Designing Effective Presentation, Animation in Power point and Medical Photography.
 - 4 workshops were conducted for MSc Nursing Students on Information Retrieval and Bibliography management, Tools for Scientific Writing in MS Word, Designing Posters and Pamphlets, Creativity.
- Staff Development Activities: **(20 for Staff of AIIMS)**
 - Three half-day Nursing Induction Program for each batch (total 17 batches); No. of Participants: 534
 - One training programme on “File Management and Record Management” conducted for the Staff of Main Hospital
 - One training programme on “RTI Act, 2005” for the staff of AIIMS
 - One training programme on “Disciplinary proceedings” for the staff of AIIMS
- A six monthly (CMET Training) calendar was distributed well in advance to the faculty, residents and staff of AIIMS which resulted in better turnout of the participants.

EDUCATION

CME/Workshops/Symposium/National and International Conferences

A total number of 81 workshops were held during the year as detailed below:

S. no.	Topic of workshop	Target group	Date
Faculty Development Activities (5 Programmes)			
1.	Concept of item analysis, question bank and computerization		7 April 2016
2.	How to Make MCQs		6 May 2016
3.	How to develop contents, resources and manage and create the E-learning platform		24 August 2016
4.	Grant Writing		20 September 2016
5.	Basic Course in Medical Education	Faculty	15–17 February 2017
Residents and Health Professionals’ Skill Development Activities (30 programmes)			
6.	Presentation Skills	Residents and Health Professionals	5 April 2016
7.	Introduction to Medical Photography	Residents and Health Professionals	19 April 2016
8.	Excel in MS Excel	Residents and Health Professionals	3 May 2016
9.	Comic design workshop for Health Professionals	Residents and Health Professionals	1 & 2 July 2016
10.	Excel in Excel	Residents and Health Professionals	19 & 20 July 2016
11.	Writing a Research Paper	Residents and Health Professionals	18 & 19 August 2016
12.	Information Retrieval in Health Sciences and Bibliography Management	Residents and Health Professionals	4 October 2016
13.	Microscopy and Microphotography for basic Medical Researcher	Residents and Health Professionals	6 October 2016
14.	Meta Analysis	Residents and Health Professionals	14 October 2016
15.	Tools for Scientific Writing in MS Word	Residents and Health Professionals	18 October 2016
16.	Stress Management and Empathy Development	Residents and Health Professionals	21 October 2016
17.	Designing Effective Presentation	Residents and Health Professionals	8 November 2016

18.	EBM on systematic reviews and Critical appraisal of articles	Residents and Health Professionals	1 December 2016
19.	Animation in Power-point	Residents and Health Professionals	6 December 2016
20.	Information Retrieval in Health Sciences and Bibliography Management	Residents and Health Professionals	24 January 2017
21.	Know your Laboratory	Residents and Health Professionals	2 February 2017
22.	Comic design workshop for Health Professionals	Residents and Health Professionals	3 & 4 February 2017
23.	Preparing for an Outstanding Journal Club presentation	Residents and Health Professionals	8 February 2017
24.	Tools for Scientific Writing in MS word	Residents and Health Professionals	14 February 2017
25.	Excel in Excel	Residents and Health Professionals	21 February 2017
26.	IT Implementation at AIIMS	Residents and Health Professionals	1 March 2017
27.	Bioethics in Healthcare and research	Residents and Health Professionals	9 & 10 March 2017
28.	Information Retrieval in Health Sciences and Bibliography Management	MSc Nursing Students	11 March 2017
29.	Animation in Power point	Residents and Health Professionals	14 March 2017
30.	Tools for Scientific Writing in MS word	MSc Nursing Students	18 March 2017
31.	Writing a Research Paper	Residents and Health Professionals	24 & 25 March 2017
32.	Designing Effective Presentation	Residents and Health Professionals	28 March 2017
33.	Wound care and Pressure Sore Prevention	Nurses	29 March 2017
34.	Designing Posters and Pamphlet in MS Office	MSc Nursing Students	30 March 2017
35.	Workshop on Creativity	MSc Nursing Students	31 March 2017
Staff Development Activities (20 programmes)			
36-52.	Three half-day Nursing Induction Programme for each batch (total 17 batches) No. of Participants = 534	Newly Joined Sis. Gr. II Nurses	7 July–9 September 2016
53.	Training Programme on “File Management and Record Management” No. of participants = 23	Administrative Staff of Main Hospital	11 November 2016
54.	One and half day Training Programme on “RTI Act, 2005” No. of participants = 25	Administrative Staff of AIIMS	6 & 7 December 2016
55.	Two days training programme on “Disciplinary Proceedings” No. of participants = 22	Administrative Staff of AIIMS	14 & 15 December 2016

- **BLS and ACLS Provider Course for doctors and nurses conducted by AIIMS ITC in collaboration with KL Wig CMET-i: (7)**

S. no.	Topic of workshop	Date
1.	Provider Course	25–27 April 2016
2.	Provider Course	1–3 August 2016
3.	Provider Course	29 September–1 October 2016
4.	Provider Course	7–9 November 2016
5.	Provider Course	30 January–1 February 2017
6.	Provider Course	20–22 March 2017
7.	Instructor Course	22–23 December 2016

- Under the aegis of Clinical Epidemiology Unit and in collaboration with KL Wig CMETi, Fellowship Programme in “Clinical Research and Evidence Based Medicine” is going on.
- During the year, 15 lectures were conducted for Faculty, Residents and PhD Students of AIIMS.

S. no.	Topic of workshop	Date
1.	Evidence Based Medicine: An Introduction	10 August 2016
2.	Key Step in Meta-Analysis: Critical Appraisal of Therapy Paper	24 August 2016
3.	Critical Appraisal of Therapy Paper: Hands on Exercise	31 August 2016
4.	Essential Meta-Analysis	14 September 2016
5.	What is translational Research	9 November 2016
6.	Principles and Practical Aspects of Randomization	16 November 2016
7.	Randomized Controlled Trials: Study Design and Related Classification	23 November 2016
8.	Inclusion/Exclusion Criteria in Randomized Trials	4 January 2017
9.	Principles of Compliance in Randomized Trials	11 January 2017
10.	Ethical Aspects of Clinical Research	1 February 2017
11.	Ethical Aspects of Clinical Research	8 February 2017
12.	Sample Size in Randomized Trials	15 February 2017
13.	Data Monitoring and Analysis in Randomized Trials	8 March 2017
14.	Biostatistics for Clinical Researcher—An Introduction	22 March 2017
15.	Measures of Association in Various Study Designs	29 March, 2017

Training Programme on ‘Deceased Organ and Tissue Donation’ was conducted by ORBO in collaboration with KL Wig CMETi (4 programmes)

S. no.	Topic of workshop	Target group	Date
1.	Deceased Organ and Tissue Donation	Residents	25 January 2017
2.	Deceased Organ and Tissue Donation	Nurses	22 February 2017
3.	Deceased Organ and Tissue Donation	Residents	15 March 2017
4.	Deceased Organ and Tissue Donation	Residents	23 March 2017

Facilities Extended

- CMET extended logistic support to various departments of AIIMS to organize workshops/CME apart from its own programme. In this financial year CMET facility was booked for 164 days.
- CMET provided venue, technical support including audio-visual and computer facilities to the other departments for conducting these CMET/activity.

Lectures delivered

K.K. Deepak: 1

Rita Sood: 1

Yogesh Kumar: 24

K.K. Deepak: 1

1. Basic Course in Medical Education, 16 & 17 February 2017, Faculty, CMET

Rita Sood: 1

1. Basic Course in Medical Education, 16 & 17 February 2017, Faculty, CMET

Yogesh Kumar: 24

1. Presentation skills, Residents and Health Professionals, 5 April 2016
2. Introduction to medical photography, Residents and Health Professionals, 19 April 2016
3. Excel in MS Excel, Residents and Health Professionals, 3 May 2016
4. Excel in MS Excel, Residents and Health Professionals, 19 & 20 July 2016
5. Three half-day Nursing Induction Program for each batch (total 17 batches), Newly Joined Sis. Gr. II Nurses; No. of Participants=534, 7 July–9 September 2016

6. Information Retrieval in Health Sciences and Bibliography Management and Effective Presentation, Faculty and Residents of AIIMS, Bhopal, MP, 27 August 2017
7. Information Retrieval in Health Sciences and Bibliography Management, Residents and Health Professionals, 4 October 2016
8. Microscopy and Microphotography for Basic Medical Researcher, Residents and Health Professionals, 13 October 2016
9. Tools for Scientific Writing in MS Word, Residents and Health Professionals, 18 October 2016
10. Designing Effective Presentation, Residents and Health Professionals, 8 November 2016
11. Animation in Powerpoint, Residents and Health Professionals, 6 December 2016
12. Designing Effective Presentation, Conference of the Pediatric Research and Education Society of India, 14 January 2017
13. Information Retrieval in Health Sciences and Bibliography Management, Residents and Health Professionals, 24 January 2017
14. Tools for Scientific Writing in MS Word, Residents and Health Professionals, 14 February 2017
15. Basic Course in Medical Education, Faculty, 15–17 February 2017
16. Excel in MS Excel, Residents and Health Professionals, 21 February 2017
17. Information Retrieval in Health Sciences, Residents of Biophysics Department, 22 February 2017
18. Computer Applications for Medical Professionals, Faculty and Residents of PGI Chandigarh 4 & 5 March 2017
19. Information Retrieval in Health Sciences and Bibliography Management, MSc Nursing Students, 11 March 2017
20. Tools for Scientific Writing in MS Word, MSc Nursing Students, 18 March 2017
21. Animation in Powerpoint, Residents and Health Professionals, 14 March 2017
22. Designing Effective Presentation, Residents and Health Professionals, 28 March 2017
23. Designing Posters and Pamphlet in MS Office, MSc Nursing Students, 30 March 2017
24. Workshop on Creativity, MSc Nursing Students, 31 March 2017

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor Anurag Srivastava developed teaching video on ‘Breast Self Examination for ASHA workers’ and ‘Clinical Breast Examination for Nurses and Medical Officers’ at Virtual Education Studio of AIIMS with Professor Manoj Singh.

Details of Media Production for the year

Particulars	Total number
Clinical Photography and Digital Photocopy	29471
X-ray scan, CT MRI Normal scan and Slide scan	14113
Video recording, editing and digitisation	547
Designing/printing of large format posters, certificates, booklet, on screen presentation	1916
Color photocopy A3 and A4 and Photo prints	1142

11.10. Media and Protocol Division

Chairperson Dr Neerja Bhatla	Spokesperson Dr Amit Gupta
Mr Sushil Kumar	Mr Bishwanath Acharya
JRO	

Public Lecture Series Program

These lectures were conducted as per the following schedule and Press Conferences were conducted before each lecture with concerned faculty members.

S. no.	Date	Public lecture	Coordinating department	Associated departments
1.	07 April 2016	Diabetes: Beware of the New Epidemic	Endocrinology	Endocrinology, Surgery, Ophthalmology, Nephrology, Obst. & Gyne. Neurology, Cardiology, Dietetics
2.	09 May 2016	Dengue, Chikungunya, Zika: Can new mosquito control strategies conquer new foes?	Medicine	Surgery, Medicine, CCM, Microbiology
3.	31 May 2016	Tobacco is a killer in all its forms. Stop it before it stops you!	CDER	ENT, CDER, Surgery, CCM, Dr. BRAIRCH, Cardiology, NDDTC, WHO (SEARO)
4.	19 June 2016	Yoga and Well-being	Cardiology	Surgery, Cardiology, Pulmonary Medicine, Endocrinology, Orthopaedics
5.	15 July 2016	Polycystic Ovary Syndrome (PCOS)—A multi-specialty, multi-system galloping Epidemic	Endocrinology	Surgery, Endocrinology, Obstetrics and Gynaecology, Cardiology, Pulmonary, Endocrinology and Metabolism, Cardiology, Paediatrics
6.	28 July 2016	Hepatitis: Causes, Treatment and Prevention	Gastroenterology and Human Nutrition	Surgery, Gastroenterology and Human Nutrition
7.	23 September 2016	Chikungunya and Dengue Fever	Medicine	Surgery, Medicine, Paediatrics, Microbiology, Centre for Community Medicine
8.	07 October 2016	Dignity & First Aid in Mental Health	Psychiatry	Surgery, Psychiatry, National Drug Dependence Treatment Centre, College of Nursing
9.	17 October 2016	Road Safety- Creating Safe Road Users	Trauma Surgery	Surgery, Trauma Surgery, Neurosurgery
10.	26 October 2016	Preventing & Tackling Obesity - Diet & More	Dietetics	Dietetics, Cardiology, Paediatrics, Surgery
11.	17 November 2016	Stroke awareness: (Paralysis/Lakwa/Pakshaghat)	Neurology	Neurology
12.	30 November 2016	Lack of Sleep: A Public Health Issue Today	Physiology	Physiology, Surgery, Neurology
13.	07 December 2016	Child with Birth Defect: Mother, Family and Society	Pediatrics	Pediatrics, Surgery, CDER, Hematology, Cardiology, Obstetrics and Gynaecology, Orthopaedics
14.	21 March 2017	Dental Health: 32 Facts, Myths & More	CDER	CDER, Cardio-Thoracic Centre, Neurosurgery, Obstetrics and Gynaecology
15.	29 March 2017	Exercise for Good Health	Physiology	Physiology, Orthopaedics, PMR, Paediatrics, Cardiology, CCM, Dietetics

Coverage of Press Conferences/Press Release/Workshop/Symposium/Seminars/organized at AIIMS

S. no.	Date	Topic
1.	15 March 2016	AIIMS sign MoU on Academic Cooperation with Swami Vivekananda Yoga and AnusandhanaSamsthana (S-VYASA) for collaboration in Medical Education, Clinical Research and Training
2.	17 March 2016	Press Conference on T.B. Control
3.	18 March 2016	Press Statement of Hon. Anil Kumar Singh Gayan Minister of Health and Quality of Life, Govt. of the Republic of Mauritius visits AIIMS.
4.	21 March 2016	Press Conference on Dental Health
5.	23 March 2016	Press Conference on Knee Joint Replacement
6.	29 March 2016	Press Conference on Exercise for good health
7.	4 April 2016	Media Coverage for inauguration of “Fetal Medicine Fellowship Program”
8.	4 April 2016	National Seminar on Web Scale Discovery Service
9.	7 April 2016	Development and implementation of acute stroke care pathway in a tertiary care hospital in India
10.	19 April 2016	Permission to shoot documentary at outreach clinic, Trilokpuri
11.	26 April 2016	Press Statement of Smt. SushmaSwaraj, External Affairs Minister
12.	28 April 2016	Press Conference on Autism
13.	30 April 2016	Press Release on alcoholic disorders
14.	10 May 2016	Press Conference on Systemic Lupus Erythematosus
15.	18 May 2016	Visit of Shri T.C. Gehlot, Honorable Minister for Social Justice and Empowerment, Government of India to NDDTC, Ghaziabad.
16.	20 May 2016	Press Conference Kaya Kalp–Swachh Bharat Abhiyan
17.	7 June 2016	Press Conference invite, 07.06.2016 at AIIMS on Breakthrough research findings – Novel nanocarrier for oral Hepatitis B vaccine
18.	16 June 2016	Press Release regarding results of AIIMS, MBBS-2016 Entrance Examination
19.	19 June 2016	Press Invite on Yoga and Well Being
20.	22 June 2016	Press invite on Inauguration of Research Centre at AIIMS
21.	23 June 2016	Media Coverage on Role of Libraries in Clinical Research
22.	12 July 2016	Press Conference on Research Epilepsy Diagnosis and Treatment
23.	14 July 2016	Press Conference on Research on Diabetes
24.	28 July 2016	Press Conference on Hepatitis
25.	28 July 2016	Press Note for World Hepatitis Day
26.	10 August 2016	Press Conference on INDEX – TB guidelines
27.	11 August 2016	Press Conference on novel solution to Traumatic Brain Injuries and Spinal Trauma
28.	14 August 2016	Intimation to take part in ‘Kaisehainaap’ program with DD Kisan Channel
29.	22 August 2016	Permission for media converge on Dengue update and workshop-2016
30.	30 August 2016	Eye donation fortnight at AIIMS
31.	6 October 2016	Inauguration of Indo-Dutch AIIMS Cohort Study Centre
32.	7 October 2016	Heart attacks and Heart disease
33.	7 October 2016	Dignity and First Aid in Mental Health
34.	14 October 2016	Public Awareness Programme on Arthritis
35.	14 October 2016	Press Conference on Arthritis
36.	26 October 2016	Preventing and Tracking Obesity–Diet and More
37.	29 October 2016	Press Conference on World Stroke Day
38.	30 October 2016	Awareness amongst college and public at large through media to donate blood voluntarily and to not enter in any financial transactions for the same
39.	1 November 2016	Success of 50 Heart Transplants
40.	8 November 2016	Meeting for arrangement of 44th Institute Annual Convocation

41.	9 November 2016	Intergenerational empowerment
42.	24 November 2016	Inaugural function of NANOBIOTECK -2016
43.	30 November 2016	Social Psychiatry in Rapidly Changing World
44.	30 November 2016	Press Conference on Sleep Disorder
45.	7 December 2016	Press Conference on Genetic Disorder in Kids
46.	7 December 2016	Press Conference on Child with Birth Defect
47.	15 December 2016	Requesting for Media Support on Childhood Cancer Day
48.	16 December 2016	Cashless AIIMS Digital Means for Financial Transactions
49.	17 December 2016	Media Coverage for sound4all workshop at AIIMS
50.	22 December 2016	Press Conference on Robotic Surgery
51.	6 March 2017	Press Statement regarding LateHonourable Chief Minister Tamil Nadu
52.	10 March 2017	Media Converge of Golden Jubilee celebrations of Dr R.P. Centre
53.	18 April 2017	Media and Press release of Catalyst- 2017

The division facilitated visits of several International and National delegationslisted below:

S. no.	Institution/Country	Remarks
1	Myanmar	Medical Services along with 9 senior medical professors
2	Stanford University, USA	Signing of MoU between AIIMS and Stanford University, USA
3	Bangladesh	Meeting with Defence Adviser of Bangladesh High Commission along with delegation
4	USA	Delegation of Roseman University of Health Sciences, Henderson, USA
5	Minak (Republic of Belarus)	Agreement for Academic and Sciences Co-operation and Exchange between Belarusian State Medical University, Minak(Republic of Belarus) and AIIMS
6	UK	To know about the outcomes of exiting UKIERI projects and explore more collaboration opportunity
7	China	Coordination of the presentation for delegates from China
8	Ambassador of the Republic of South Sudan	The ambassador wanted to observe the training of doctors at AIIMS
9	Switzerland	To expose the delegation to how a large public hospital functions in India and the AIIMS
10	South Africa	Delegation from Witwatersrand University wished to visit to the AIIMS
11	Belgian	Leuven Midgates Mission

12. Publications

Journals

1. Neck swelling due to skull base (pseudo)meningocele protruding through a congenital skull base bone defect: a case report. *Child's Nervous System*, 2017, 33, Issue 2, 369–37.
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Abstracts

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13.1. Budget and Finance

ALL INDIA INSTITUTE OF MEDICAL SCIENCES (MAIN) BALANCE SHEET AS AT 31-03-2017

(Amount-Rs.)

CORPUS/CAPITAL FUND AND LIABILITIES	Schedule	2016-17	2015-16
CORPUS/CAPITAL FUND	1	27266998170	21618023488
RESERVES AND SURPLUS	2	2440747333	2053142621
EARMARKED/ ENDOWMENT FUNDS	3	67966668	65084858
SECURED LOANS AND BORROWINGS	4	0	0
UNSECURED LOANS AND BORROWINGS	5	0	0
DEFERRED CREDIT LIABILITIES	6	0	0
CURRENT LIABILITIES AND PROVISIONS	7	2184369181	1227208836
TOTAL		31960081352	24963459803
<u>ASSETS</u>			
FIXED ASSETS	8	25952060618	17903185859
INVESTMENTS-FROM EARMARKED/ENDOWMENT FUNDS	9	50510000	50000000
INVESTMENTS-OTHERS	10	233253424	233253424
CURRENT ASSETS, LOAN & ADVANCES ETC	11	5724257310	6777020520
MISCELLANEOUS EXPENDITURE (to the extent not written off or adjusted)			
TOTAL		31960081352	24963459803
Accounting policies and notes forming part of accounts	24		

Accounts Officer

Financial Advisor

Sr. Financial Advisor

Director

ALL INDIA INSTITUTE OF MEDICAL SCIENCES (MAIN)
INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31- 03-2017

		(Amount-Rs.)	
INCOME	Schedule	2016-17	2015-16
Income from Sales/Services	12	273186203	251843801
Grants/Subsidies	13	10695465086	9708267985
Fees/Subscriptions	14	107785622	95638101
Income from Investments (Income on Invest. From earmeked/endow.Funds transferred to funds)	15	0	0
Income for Royalty, Publication etc.	16	0	0
Interest Earned	17	121772721	60472616
Other Income	18	563984900	621842503
Increase/(decrease) in stock of Finished goods and works-in-progress	19	0	0
TOTAL (A)		11762194532	10738065006
EXPENDITURE			
Establishment Expenses	20	7331838386	6432377057
Other Administrative Expenses etc.	21	908430060	861371296
Material and supply	21B	3132874030	2654532894
Expenditure on Grants, Subsidies etc.	22	0	0
Interest	23	1447344	0
Depreciation (Net Total at the year-end - corresponding to Schedule 8)			
TOTAL (B)		11374589820	9948281247
Balance being excess of Income over Expenditure (A-B)			
Transfer to Special Reserve (Specify each)		387604712	789783759
Transfer to /from General Reserve			
BALANCE BEING SURPLUS/(DEFICIT) CARRIED TO CORPUS/ CAPITAL FUND		387604712	789783759
TOTAL		11762194532	10738065006

Accounts Officer

Financial Advisor

Sr. Financial Advisor

Director

ALL INDIA INSTITUTE OF MEDICAL SCIENCES
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2017

(Amount-Rs.)

SCHEDULE 1- CORPUS/CAPITAL FUND:	2016-17	2015-16
Balances as at the beginning of the year	21618023488	19168177578
Add : Contributions towards Corpus/Capital Fund	5749509499	2804025944
Less Condemnation during the year	100534817	354180034
BALANCE AS AT THE YEAR-END	27266998170	21618023488

SCHEDULE 2- RESERVES AND SURPLUS:	2016-17	2015-16
1. Capital Reserve:		
As per last Account		
Addition during the year		
Less: Deductions during the year		
2. Revaluation Reserve		
As per last Account		
Addition during the year		
Less: Deductions during the year		
3. Special Reserves		
As per last Account		
Addition during the year		
Less: Deductions during the year		
4. General Reserve		
As per last Account	2053142621	1313738462
Addition during the year	387604712	789783759
Less: Deductions during the year	0	50379600
TOTAL	2440747333	2053142621

Accounts Officer

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ALL INDIA INSTITUTE OF MEDICAL SCIENCES
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2017

(Amount-Rs.)

SCHEDULE 3 - EARMARKED/ENDOWMENT FUNDS	2016-17	2015-16
a) Opening balance of the funds	65084858	
b) Additions to the Funds:		
i. Donations/grants	3449595	63637514
ii. Income from investments made on account of funds	29284	1447344
iii. Other additions (specify nature)		
TOTAL (a+b)	68563737	65084858
c) Utilisation/Expenditure towards objectives of funds	597069	
i. <u>Capital Expenditure</u>		
- Fixed Assets		
- Others		
ii. <u>Revenue Expenditure</u>		
- Salaries, Wages and allowances etc.		
- Rent		
- Other Administrative expenses		
<u>Total</u>	597069	0
NET BALANCE AS AT THE YEAR-END (a+b-c)	67966668	65084858

Accounts Officer

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ALL INDIA INSTITUTE OF MEDICAL SCIENCES
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2017

		(Amount-Rs.)	
SCHEDULE 5 - UNSECURED LOANS AND BORROWING		2016-17	2015-16
1. Central Government			
2. State Government			
3. Financial Institutions			
4. Banks:			
a) Term Loans			
b) Other Loans (specify)			
5. Other Institutions and Agencies			
6. Debentures and Bonds			
7. Fixed Deposits			
8. Others (Specify)			
TOTAL		0	0

Note: Amounts due within one year

		2016-17	2015-16
SCHEDULE 6 - DEFERRED CREDIT LIABILITIES:			
a) Acceptances secured by hypothecation of capital equipment and other assets			
b) Others			
TOTAL		0	0

Note: Amount due within one year

Accounts Officer

Financial Advisor

ALL INDIA INSTITUTE OF MEDICAL SCIENCES
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2017

(Amount -Rs.)			
		2016-17	2015-16
SCHEDULE 7 - CURRENT LIABILITIES AND PROVISIONS			
<u>A. CURRENT LIABILITIES AND PROVISIONS</u>			
1. Acceptances			
2. Sundry Creditors:			
a) For Goods			
a) Others (Custom Duty to be paid)	45935488		67122133
3. Advances Received			
4. Interest accrued but not due on:			
a) Secured Loans/borrowings			
a) Unsecured Loans/borrowings			
5. Statutory Liabilities:			
a) Overdue			
a) Others			
6. Other current Liabilities	2138433693		1160086703
TOTAL (A)	2184369181		1227208836
<u>B. PROVISIONS</u>			
1. For Taxation			
2. Gratuity			
3. Superannuation/Pension			
6. Accumulated Leave Encashment			
6. Trade Warranties/Claims			
6. Others (specify)			
TOTAL (B)			
TOTAL (A+B)	2184369181		1227208836

Accounts Officer

Financial Advisor

ALL INDIA INSTITUTE OF MEDICAL SCIENCES (MAIN)
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2017

SCHEDULE 8 FIXED ASSETS DISCRIPTION		GROSS BLOCK				DEPRICIATION			NET BLOCK	
		Cost/valuation As at beginning of the year	Additions during the year	Deductions during the year	Cost/ Valuation at the year end	As at the beginning of the year	On additions during the year	On Deductions during the year	Total up to the year-end	
A. FIXED ASSETS:										
1	LAND:									
	a) Freehold / Leasehold	841194087	0	0	841194087	0	0	0	0	841194087
2	BUILDINGS:									
	a) On Freehold Land	6679738129	6939998466	0	13619736595	0	0	0	0	6679738129
	b) On Leasehold Land				0					0
	c) Ownership Flats/ Premises				0					0
	d) Superstructures on Land not belonging to the entity				0					0
3	PLANT MACHINERY & EQUIPMENT	9588702825	943624696	96732152	10435595369				0	9588702825
4	VEHICLES	38857277	3062572	3799805	38120044				0	38857277
5	FURNITURE, FIXTURES				0					0
6	OFFICE EQUIPMENT				0					0
7	COMPUTER/PERIPHERALS	16768580	94917482	0	111686062	0	0	0	0	16768580
8	ELECTRIC INSTALLATIONS				0					0
9	LIBRARY BOOKS	737924961	167806360	2860	905728461				0	737924961
10	TUBEWELLS & W. SUPPLY				0				0	0
11	OTHER FIXED ASSETS		0	0	0				0	0
TOTAL OF CURRENT YEAR		17903185859	8149409576	100534817	25952060618	0	0	0	0	17903185859

(Amount - Rs.)

Accounts Officer

Financial Advisor

AIH INDIA INSTITUTE OF MEDICAL SCIENCES
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2017

(Amount-Rs.)

SCHECULE 9 - INVESTMENTS FROM EARMARKED / ENDOWMENT FUNDS	2016-17	2015-16
1. In Government Securities		
2. Other approved Securities		
3. Shares		
4. Debenutres and Bonds		
5. Subsidiaries and Joint Venutres		
6. Others Fixed Deposits (Endowment fund)	50500000	50000000
7. Seed money for opening of Bank Account (Donation)	10000	
<u>TOTAL</u>	50510000	50000000

SCHECULE 10 - INVESTMENTS - OTHERS	2016-17	2015-16
1. In Government Securities		
2. Other approved Securities		
3. Shares		
4. Debenutres and Bonds		
5. Subsidiaries and Joint Venutres		
6. Others (NPS Fixed Deposit)	220000000	220000000
7. Investment of Donations	13253424	13253424
<u>TOTAL</u>	233253424	233253424

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AII INDIA INSTITUTE OF MEDICAL SCIENCES
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2017

		(Amount in Rs.)	
		2016-17	2015-16
SCHEDULE II - CURRENT ASSETS, LOANS, ADVANCES ETC.			
A CURRENT ASSETS:			
1. <u>Inventories:</u>			
a) Stores and Spares			
b) Loose Tools			
c) Stock-in-trade			
Finished Goods			
Work-in-progress			
Raw Material			
2. <u>Sundry Debtors:</u>			
a) Debts Outstanding			
b) Others (outside recoveries)			
c) Misc. recoveries receivable from Centres (Engg.			
3. Cash balances in hand (including cheques/ drafts and imprest)			
4. <u>Bank Balances:</u>			
a) <u>With Scheduled Banks:</u>			
On Current Accounts			
On Deposit Accounts (includes margin money)			
On Savings Accounts			
b) <u>With non-Scheduled Banks:</u>			
On Current Accounts			
On Deposit Accounts			
On Savings Accounts			
5. <u>Post Office - Savings Accounts</u>			
TOTAL (A)		2928395549	2291791162

Accounts Officer

Financial Advisor

ALL INDIA INSTITUTE OF MEDICAL SCIENCES
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2017

		(Amount in Rs.)	
		2016-17	2015-16
SCHEDULE II - CURRENT ASSETS, LOANS, ADVANCES ETC. (Contd.)			
B LOANS, ADVANCES AND OTHER ASSETS			
1. <u>Loans:</u>			
a) Staff		9820900	12467068
b) Other Entities engaged in activities/objectives similar to that of Entity			
c) Other (Adv for purchase of iron and steel)		2340588	2340588
2. <u>Advances and other amounts recoverable in cash or in kind or for value to be received:</u>			
a) On Capital Account			
b) Prepayments			
c) Others (Advance Payments)		2783700273	4470421702
3. <u>Income Accrued:</u>			
a) On Investments from Earmarked / Endowment Funds			
b) On Investments - Others			
c) On Loans and Advances			
d) Others			
(includes income due unrealised - Rs.)			
4. <u>Claims Receivable:</u>			
TOTAL (B)		2795861761	4485229358
TOTAL (A + B)		5724257310	6777020520

Accounts Officer

Financial Advisor

ALL INDIA INSTITUTE OF MEDICAL SCIENCES
SCHEDULES FORMING PART OF INCOME AND EXPENDITURE FOR THE YEAR ENDED 31-03-2017

		(Amount - Rs.)	
SCHECULE 12 - INCOME FROM SALES / SERVICES		2016-17	2015-16
1) Income from Sales			
1. Sale of Finished Goods			
2. Sale of Raw Material			
3. Sale of Scraps			
2) Income from Services			
a) Hospital receipts			
b) Professional / Consultancy Services			
c) Agency Commission and Brokerage			
d) Maintenance Services (Equipment/Property)			
e) Others (Specify) Hospital Receipt			
TOTAL		273186203	251843801

		2016-17	2015-16
SCHECULE 13 - GRANTS /SUBSIDIES			
(Irrevocable Grants & Subsidies Received)			
1. Central Government			
2. State Government(s)			
3. Government Agencies			
4. Institutions/ Welfare Bodies			
5. International Organisations			
6. Others (Specify)			
TOTAL		10695465086	9708267985

Accounts Officer

Financial Advisor

ALL INDIA INSTITUTE OF MEDICAL SCIENCES

SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE PERIOD/YEAR ENDED 31-03-2017

SCHEDULE 14 - FEES/SUBSCRIPTIONS		(Amount-Rs.)	
		2016-17	2015-16
1. Tuition & Examination Fee		22168709	20993114
2. Licence Fee		41814065	31898648
3. Seminar/Program Fees			
4. Exam. Receipt			
5. Others (Specify) EHS		43802848	42746339
TOTAL		107785622	95638101
Note- Accounting Policies towards each item are to be disclosed			
SCHEDULE 15 - INCOME FROM INVESTMENTS		Investment from Earmarked Fund	
		Investment-Others	
		2016-17	2015-16
(Income on Invest. From Earmarked/Endowment Funds transferred to Funds)			
1. Interest			
a) On Govt. Securities			
a) Other Bonds/Debentures			
2. Dividends:			
a) On Shares			
a) On Mutual Fund Securities			
3. Rents			
4. Others (Specify)			
TOTAL		0	0
TRANSFERRED TO EARMARKED/EDNOWNMENT FUNDS			

Accounts Officer

Financial Advisor

ALL INDIA INSTITUTE OF MEDICAL SCIENCES
SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE PERIOD/YEAR ENDED 31-03-2017

(Amount-Rs.)

SCHEDULE 16 - INCOME FROM ROYALTY, PUBLICATION ETC.	2016-17	2015-16
1. Income from Royalty		
2. Income from Publications		
3. Others (specify)		
<u>TOTAL</u>		0

SCHEDULE 17 - INTEREST EARNED	2016-17	2015-16
1. On Term Deposits:		
a) With Scheduled Banks	121772721	58618843
b) With Non-Scheduled Banks		
c) With Institutions		
d) Others		
2. On Savings Accounts:		
a) With Scheduled Banks		
b) With Non-Scheduled Banks		
c) Post Office Savings Accounts		
d) Others		
3. On Loans:		
a) Employees/Staff	0	1853773
b) Others		
4. Interest on Debtors and other Receivables		
<u>TOTAL</u>	121772721	60472616

Note - Tax deducted at source to be indicated

Accounts Officer

Financial Advisor

ALL INDIA INSTITUTE OF MEDICAL SCIENCES
SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE YEAR ENDED 31-03-2017

(Amount-Rs.)		
SCHEDULE 18 - OTHERS INCOME	2016-17	2015-16
1. Misc. Receipt	22659311	491265737
2. Estb. Receipt (Scheme)	68525943	70018744
3. Exam Section Receipt	472522018	60558022
4. General Donations	277628	0
TOTAL	563984900	621842503

SCHEDULE 19 - INCREASE/(DECREASE) IN STOCK OF FINISHED GOODS & WORK IN PROGRESS	2016-17	2015-16
a) Closing stock		
- Finished Goods		
- Work-in-progress		
b) Less: Opening Stock		
- Finished Goods		
- Work-in-progress		
NET INCREASE/(DECREASE) [a+b]		0

SCHEDULE 20 - ESTABLISHMENT EXPENSES	2016-17	2015-16
Salaries and Wages	6023452879	5082956939
Travelling Allowance	31441494	20283787
Contribution to Provident Fund		
Contribution to Other Fund (Scheme Cell)	24833257	24954491
Staff Welfare Expenses (DLIS)	660000	960000
Expenses on Employees "Retirement and Terminal Benefits"	1080648710	1159778558
Others (NPS)	169998912	142530091
Leave Salary Pension Contribution	803134	913191
TOTAL	7331838386	6432377057

Accounts Officer

Financial Advisor

ALL INDIA INSTITUTE OF MEDICAL SCIENCES
SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE YEAR ENDED 31-03-2017
(Amount-Rs.)

SCHEDULE 21 - OTHER ADMINISTRATIVE EXPENSES ETC.	2016-17	2015-16
a) Purchases of hospital stores		
b) Labour and processing expenses		
c) Cartage and Carriage Inwards		
d) Electricity and power	554030030	561588612
e) Water charges	43722812	58139891
f) Insurance		
g) Repairs and maintenance (AMC/CAMC)	27105849	15739165
h) Repairs and maintenance of Buildings	185037792	122353385
i) Rent, Rates and Taxes		
j) Vehicles, Running and Maintenance		
k) Postage, Telephone and Communication Charges		
l) Printing and Stationary		
m) Travelling and Conveyance Expenses	55269068	46646771
n) Expenses on Seminar/Workshops		
o) Subscription Expenses	3744	
p) Expenses on Fees		
q) bAuditors Remuneration		
r) Hospitality Expenses		
s) Professional Charges		
t) Provision for Bad and Doubtful Debts/Advances		
u) Irrecoverable Balances Written-off		
v) Packing Charges		
w) Freight and Forwarding Expenses		
x) Distribution Expenses		
y) Advertisement and Publicity		
z) Others (specify)(Contingency charge)	43260765	56903472
TOTAL	908430060	861371296

Accounts Officer

Financial Advisor

ALL INDIA INSTITUTE OF MEDICAL SCIENCES
SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE YEAR ENDED 31-03-2017
(Amount-Rs.)

SCHEDULE 21B - Material and Supplies	2016-17	2015-16
Hospital stores	3132874030	2654532894
Total	3132874030	2654532894

Accounts Officer

Financial Advisor

ALL INDIA INSTITUTE OF MEDICAL SCIENCES (MAIN)
SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE PERIOD/YEAR ENDED 31-03-2017
(Amount-Rs.)

SCHEDULE 22- EXPENDITURE ON GRANTS, SUBSIDIES ETC.	2016-17	2015-16
a). Grants given to Institutions/Organizations		
b). Subsidies given to Institutions/organisations	0	0
Total		
Note - name of the Entities, their activities along with the amount of grants/subsidies are to be disclosed.		

SCHEDULE 23- INTEREST	2016-17	2015-16
a) On fixed Loans		
b) On other Loans (including Bank charges)	1447344	0
c) Others(Specify) Endowment intrest transfer to Research Section	1447344	0
Total		

Accounts Officer

Financial Advisor

ALL INDIA INSTITUTE OF MEDICAL SCIENCES, NEW DELHI
RECEIPTS AND PAYMENTS FOR THE PERIOD/YEAR ENDED 31.03.2017

RECEIPTS		2016-17	2015-16	PAYMENTS		2016-17	2015-16
							(Amount in Rs.)
I. Opening Balance				I. Expenses			
a) Cash in Hand		1106150		a) Establishment Expenses (Scheduled 20A)		7307005129	6407422566
b) Bank Balances				b) Others Administrative Expenses (Scheduled 21A)		898084256	814304546
i) In current accounts		2212748834	2354553191	c) Purchase of Hospital stores		3120836647	2621742495
ii) In deposit accounts		6275770	6455666				
iii) saving accounts							
II. Grants Received from Govt. of India				II. Expenditure on Fixed Assets & Capital Work-in-Progress			
PLAN				a) Purchase of Fixed Assets		1259525270	1769458157
i) Revenue		4250000000	3900000000	b) Advance on Capital Work in progress		5245523594	2034373986
ii) Capital		5750000000	3100000000				
NON PLAN				IV Govt. Grants transferred to Centres			
i) Revenue		12880000000	11200000000	Dr. R.P. Centre			
ii) Capital				PLAN			
Over Sight Committee				0 a) Capital Assets		269100000	226400000
i) Revenue		0	50000000	b) Grant in Aid Salary		875000000	78000000
ii) Capital		850000000	3100000000	c) Grant in Aid General		85000000	84629000
NDDTC				Non-Plan			
i) Revenue		134000000	155000000	a) Grant in Aid Salary		643269000	570000000
ii) Capital		0	15000000	b) Grant in Aid General		310000000	150000000
III Grants received for specific purpose				C.N. Centre			
a) Scheme Cell		1038258930	802450971	Plan			
b) Grants received in patient treatment A/c		86185232	105811678	a) Capital Assets		366766000	218000000
				b) Grant in Aid Salary		450000000	400973000
				c) Grant in Aid General		200000000	190000000
IV. Endowment/Donation				Non Plan			
a) Poor patient A/c		3008570	1707958	a) Grant in Aid Salary		1630378000	1340000000
b) Endowment fund		2949595	50000000	b) Grant in Aid General		365000000	300000000
V. Income on Investments from				N.D.D.T.C.			
Endowment fund (Infosys)		29284	1447344	Grant Transfer to NDDTC		134000000	170000000
NPS (Interest)		16341074	16888605	Loan to NDDTC		39000000	
VI Interest Received							
a) On Bank deposits		131978632	64829884	Dr.B.R.A.I.R.C.H.			
b) Loans, Advances etc.			1853773	Plan			
VII RECEIPTS				a) Capital Assets		110955000	68000000
a) GPF		479366077	480837144	b) Grant in Aid Salary		207000000	18550000
b) Out side recoveries		942672754	799517198	c) Grant in Aid General		90000000	81000000
c) Deposit work				Non-Plan			
Power Grid Corporation		50418200	158000000	a) Grant in Aid Salary		632734000	529100000
d) Revolving Funds		110907000	85855000	b) Grant in Aid General		340000000	290000000

RECEIPTS	2016-17	2015-16	PAYMENTS	2016-17	2015-16
			J.P.N. APEX TRAUMA CENTRE		
e) Receipt Legacy date (NPS)	57683579	51990494	Plan		
f) FD Maturity Accounts (NPS)	220000000	825000000	i)Capital Assets	73676936	80958686
			ii)Grant in Aid (General)	574987914	590580782
			ii)Grant in Aid (Salary)	829466000	701625233
VIII. Other Income			CENTRE FOR DENTAL EDUCATION & RESEARCH		
a) Misc Receipts	22659311	551823759	Plan		
b) Examination Receipt	472522018		i)Capital Assets	30000000	12642638
c) Hospital Receipts	240065321	237035862	ii) Grant in Aid General	85000000	65000000
d) Tuition Fee	22168709	20993114	ii)Grant in Aid Salary	40500000	28474000
e) Licence Fee	41814065	31898648	OTHERS PAYMENTS		
f) Employees Health Scheme (EHS)	43802848	42746339	a) Payment against specific grant (Scheme Cell)	872269713	803773554
			b) Payment for patient treatment A/c	93219800	72969598
			c) Poor patient A/c	1343445	313713
			d) GPF	479366077	480837144
IX. Other Receipts			e) Outside recoveries	939207940	806073890
a) Fund Received for specific purpose	691641699	104356250	f) Deposit Work (Power Grid Corporation)	37000000	150000000
b) Cochlear Implant Patient Treatment	37078600	36254000	III Other misc payments	81568955	92137753
c) Others	128226580	165951235	Seed money for open of Donation Bank Account	10000	102981840
Custom Duty Accounts	150000000	4000000	Cochlear Implant Patient Treatment	35505000	34704500
PD Accounts	3500000		Custom Duty Accounts (Payment)	139518051	198023057
student union	1000000		PD Accounts	5100600	2809622
			Revolving Funds	87521292	81055000
AIIMS Donation Accounts	277628		NPS ACCOUNTS		
			i) Payment Legacy data	55161133	33437024
			ii)Bank charges	173	
			Investment made	220000000	855000000
			FDR (Karnal Bucksee)	500000	
			Endowment fund	1447344	
			Investment (FD)	0	50000000
			Bank charges	69	
			Expenditure	597000	
			V. Closing Balances		
			a)Cash in Hand	1037150	1106150
			b) Bank Balances		
			i) In Current accounts	2783029202	2212748834
			ii) In Deposit accounts	6275770	6275770
Total	31078686460	25825482538	Total	31078686460	25825482538

Accounts Officer

Financial Advisor

Sr. Financial Advisor

Director

ALL INDIA INSTITUTE OF MEDICAL SCIENCES, NEW DELHI
SCHEDULES FORMING PART OF RECEIPTS AND PAYMENTS FOR THE PERIOD/YEAR ENDED 31.03.2017
ESTABLISHMENT EXPENSES

Scheduled 20 A		(Amount-Rs.)	
		2016-17	2015-16
a)	Salaries and Wages	6023452879	5082956939
b)	Travelling Allowance (TA)	31441494	20283787
c)	Leave Salary Pension Contribution		
	Payment	803134	
	less Receipts	0	913191
d)	Expenses on Employees ":Retirement and Terminal Benefits"	1080648710	1159778558
e)	Deposit Linked Insurance Scheme	660000	960000
f)	Others		0
i)	New Pension Scheme		
	Deposit to National Securities Depository Ltd.	293700292	
	Deposit to NPS A/c	37125000	
	Less Receipts (NPS) from the employees	169998912	142530091
	TOTAL	7307005129	6407422566

Accounts Officer

Financial Advisor

ALL INDIA INSTITUTE OF MEDICAL SCIENCES, NEW DELHI
SCHEDULES FORMING PART OF RECEIPTS AND PAYMENTS FOR THE PERIOD/YEAR ENDED 31.03.2017
OTHERS ADMINISTRATIVE EXPENSES

(Amount-Rs.)		
Scheduled 21A	2016-17	2015-16
a) Repairs and maintenance	211103862	138084300
b) Travelling and conveyance Expenses	55269068	46646771
c) Contingency office	33954740	9844972
d) Electricity and power	554030030	561588612
e) Water charges	43722812	58139891
d) Others (Bank Charges)	3744	0
TOTAL	898084256	814304546

Accounts Officer

Financial Advisor

All India Institute of Medical Sciences, New Delhi

**Receipts and Payments accounts of General Provident Funds for the Financial year
2016-17**

Receipts	Amount	Payments	Amount
Opening Balance	44065934	GPF Withdrawals	669020230
Subscription/Receipts	750949784	Investment during the year	1973494132
Interest	325249643	Bank Charges	7624
Investment Maturity	1635000000	Closing Balance	112743375
Total	2755265361	Total	2755265361

Income and Expenditure Accounts for the Financial Year 2016-17

Expenditure	Amount	Income	Amount
Interest on subscription	385757779	Interest received	325249643
Bank Charges	7624	Excess of exp over income	60515760
Total	385765403	Total	385765403

Balance sheet of General Provident Funds of AIIMS as on 31st March 2017

Liability		Amount	Assets		Amount
Opening Balance (GPF)	4771411153		Investment		
Add: GPF Subscriptions	750949784		Opening Balance	4824938830	
Add: GPF Interest credited	385757779		Addition during the year	1973494132	
Less: Withdrawal	669020230	5239098486	Less: Maturity during the year	1635000000	5163432962
Surplus			Bank Balance		112743375
Cumulative Excess of income over expenditure					
Opening Balance	97593611				
Less: Excess of Exp over income during the year	60515760	37077851			
Total		5276176337	Total		5276176337

HOSPITAL BILLING SECTION(AIIMS)
STATEMENT OF ACCOUNT OF RECEIPTS AND PAYMENTS
NATIONAL ILLNESS ASSISTANCE FUND (NIAF) : 2016-17

	RECEIPTS	2016-17	2015-16	PAYMENT	2016-17	2015-16
1	Opening balance of Grant with the bank as on 1.4.2017	263236165	174542464	Payment made during the year	128091687	147413937
2	Grant received during the year	159198950	227944865	Bank clearing charges debited by the bank during the year	460	51
3	Interest received from Bank during the year	14532147	8162824	Closing balance as on 31.3.2017	308875115	263236165
	Total	436967262	410650153		436967262	410650153

STATEMENT OF ACCOUNT OF RECEIPTS AND PAYMENTS
(GRANT/FINANCIAL ASSISTANCE)
DELHI AROGYA KOSH : 2016-17

	RECEIPTS	2016-17	2015-16	PAYMENT	2016-17	2015-16
1	Opening balance of Grant with the bank as on 1.4.2016	16840115	4674908	Payment made during the year	8690163	8849466
2	Grant received during the year	10507560	21017873	Bank clearing charges debited by the bank during the year	632.5	3200
3	Interest received from Bank during the year	0	0	Closing balance as on 31.3.2017	18656879.5	16840115
	Total	27347675	25692781		27347675	25692781

Accounts Officer

Medical Supdt.

SCHEDULE 24

Accounting Policies and Notes forming part of Accounts

1. The Activities of the Institute is mainly funded from the grants from Government of India and Accounts of the Institute are prepared in accordance with Generally accepted Accounting principles.
2. The accounts have been prepared on cash basis i.e. on actual Receipt and Payments basis.
3. No depreciation on Assets i.e. Machinery & Equipments, vehicles, buildings etc have been provided in the accounts and assets are carried out at the historical cost. Assets at the time of condemnation on completion of useful life are removed from the Assets as well as from the capital corpus.
4. No provisions for liability of Gratuity, pension and leave encashment etc have been made in the accounts as the grants from the Government of India are received for actual expenditure. The payment of Gratuity, pension and leave encashment etc are accounted in the accounts only at the time of actual payments.
5. No closing stock of Store and supplies at the end of accounting period is incorporated in the accounts as all expenditure on stores and supplies are treated as final expenditure at the time of payments in the accounts.
6. Income of the Institute is exempted from Income-Tax under Section 11 of the Income Tax Act, 1961.
7. All Assets (Machinery & Equipments, vehicles etc) funded from the grants for the Research projects are used for the activities of the Research projects and are not included in the assets of the Institute. Such Assets (Machinery & Equipments, vehicles etc,) are either returned to the funding agencies or used in the Departments after the completions of the projects as per sanction of the funding agencies.
8. A statement showing the expenditure made by various Project Investigators for Research Projects during 2016-17 and balance amount lying with the Institute as on 31-03-2017 is attached with the Accounts.
9. GPF Account as on 31-03-2017 is annexed with the Accounts.
10. Accounts of various centre's of the Institute as on 31-03-2017 are annexed with the Accounts.
11. Accounts for the year ended 31-03-2017 are prepared in the new format and grouping and regrouping and classification, wherever necessary have been changed/adopted for better presentation.
12. Assets of the Institute in every Departments/Centre's are physically verified once in year by the faculty/ officer nominated for the purpose and no significant/major deviations have been reported.
13. Stores and supplies of the Institute in every Departments/Centre's are physically verified once in year by the faculty/officer nominated for the purpose and no significant/major deviations have been reported.
14. Institute is maintaining various Revolving funds for test/procedures required for patients care and same are included in the concerned Accounts of the Institute.
15. Donations/receipts from various sources without any attached conditions are treated as income of the concerned centre or of Institute as the case may be.
16. All Accounting policies and Notes Forming Part of Accounts listed above are also applied in the preparation of the Accounts of the Centers also.

Accounts Officer

Financial Advisor

Sr. Financial Advisor

Director

Cardio-Thoracic & Neuro Sciences Centre (Consolidate)
Receipts and Payments for the year ended 31.03.2017

Receipts	2016-17	2015-16	Payments	2016-17	2015-16
I. Opening balances			I. Expenses		
a) cash in Hand	61,000	61,000	a) Establishment Expenses (corresponding to schedule 21)	2,071,109,232	1,729,077,526
b) Bank Balances		-	b) Administrative Expenses (corresponding to Schedule 22)	213,252,814	169,404,034
(i) In current Account			c) Material & Supply	845,755,375	780,684,886
CNC Main	145,525,430	59,783,863			
Gamma Knife	55,123,472	116,772,660			
Angio Pts. A/c	7,707,731	25,556,493			
Neuro Surgery Pts. A/c	13,507,299	2,995,284			
C.T. Pts. A/c	39,768,636	23,177,532			
Aiims Neuro Sciences Poor Pts. A/c	208,532	210,162			
(ii) In Deposit Account		-			
(iii) In Savings Account		-			
c) Fixed Deposits					
Fixed Deposits (Gamma Knife)	170,000,000	70,000,000			
Fixed Deposits (Angio Pts. A/c)	109,800,000	109,800,000			
Fixed Deposits (Neuro Surgery Pts. A/c)	31,800,000	31,800,000			
II. Grant Received		-	II. Payments made against funds for various Projects		
a) From Government of India--Through Aiims Main		-	NSC Poor Patients (corresponding to Schedule 22 (A))	2,213,081	1,738,590
Capital (Assets New)					
(i) Grant in Aid (Plan)	366,766,000	218,000,000			
Revenue General (Plan)			II. Payments made against funds for various Projects		
(ii) Grant in Aid- (Salary)	450,000,000	400,973,000			
(iii) Grant in Aid- (General)	200,000,000	190,000,000			
(-) Transfer to CT. Patient A/c	2,750,799				
Non Plan					
(iii) Grant in Aid- (General)	365,000,000	300,000,000			

Receipts	2016-17	2015-16	Payments	2016-17	2015-16
(ii) Grant in Aid- (Salary)	1,630,378,000	1,340,000,000			
b) From State Government					
c) From Other Sources (details)					
(Grant for capital and Revenue expenditure to shown separately)					
III. Income on Investments From			III. Investments and deposits made		
a) Earmarked Funds/ Endowments funds			a) Out of Earmarked/Endowment funds		
b) Revolving Fund			b) Revolving Fund		
i) Blood Test/Lab Test	10,038,556	10,941,260	i) Blood Test/Lab Test	4,980,922	3,250
ii) Cardiac Test	5,065,470	4,952,640	ii) Cardiac Test	1,085,222	757,927
iii) Stress Thallium	3,636,750	4,097,000	iii) Stress Thallium	4,432,250	5,807,292
IV) Neurology Patients Fund	15,110,788	23,353,278	IV) Neurology Patients Fund	5,953,213	21,167,254
Trf. Of fund from Neurology Patient to various Account			Trf. Of fund from Neurology Patient to various Account	1,230,407	3,542,779
V) MRI Charges	4,110,250	3,102,000	V) MRI Charges		303,950
c) Own Funds (Other Investments)		-	c) Out of Own Funds (Investments-Others)		
IV. Interest Received		0	IV. Expenditure on Fixed Assets & Capital		
a) On Bank Deposits (CNC Main)	12,216,060	12570374	Work-in-Progress		
On Bank Deposits (Gamma Knife)	13,560,973	10201356	a) Purchase of Fixed Assets	227,650,787	172,838,434
On Bank Deposits (Angio Pts. A/c)	7,847,110	9711422	b) Expenditure on Capital Work-in-progress	-	41,450,993
On Bank Deposits (Neuro Surgery Pts. A/c)	2,885,354	3066041	c) Letter of Credit (M&E)	177,476,916	58,429,787
On Bank Deposits (C.T. Pts. A/c)	292,882	687320	V. Refund of surplus money/Loans		
			a) To the Government of India		
b) loans And Advances etc.	1,368,972	1925947	b) To the State Government		
V. Other Income		0	c) To other providers of funds		
Licence Fee Recovery		1398729	VI. Finance Charges (Interest)		
Miscellaneous Receipt	1,552,546	1077484	Bank Charges (CNC Main)	25,317	14,734
Hospital Receipt (CNC Main)	49,816,811	54591737	Bank Charges (Gamma Knife)	2,434	1,984
Hospital Receipt (Gamma Knife)	44139326	30139961	Bank Charges (Angio Pts. A/c)	71,332	9,453
(Less) Patient Refund (Angio Pts. A/c)	1005000		Bank Charges (Neuro Surgery Pts. A/c)	38,618	7,338
Hospital Receipt (Angio Pts. A/c)	208071587	176,956,060			
(Less) Patient Refund (Angio Pts. A/c)	28891224		Bank Charges (C.T. Pts. A/c)	84,166	11,711
Hospital Receipt (C.T. Pts. A/c)	359710540		Bank Charges (Aims Neuro Sciences Poor Pts. A/c)	632	630
(Less) Patient Refund (C.T. Pts. A/c)	65557639	246358459			
Hospital Receipt (Neuro Surgery Pts. A/c)	106549328	78470847			
(Less) Patient Refund (NS Pts. A/c)	14530417	92,018,911			
Hospital Receipt (Aims Neuro Sciences Poor Pts. A/c)					
VI. Amount Borrowed					

Receipts	2016-17	2015-16	Payments	2016-17	2015-16
VII. Any Other Receipts (Give Details)					
a) Donation	603,601	310000	VII. Other Payments (Specify)		
c) Earnest Money Deposits	7,372,000	9116500	Donation/Grant		
Employee Recovery			Earnest Money Deposits	4,000,590	4,991,000
1. AIIMS Recoveries	10,721,311		Employee Recovery		
2. Outside Recoveries	287,764,451		1. AIIMS Recoveries	9,329,718	
3. GPF (Subscription & Advance)	133,617,251	430066570	2. Outside Recoveries	287,764,451	430063420
4. NPS Recovery	75,240,556		3. GPF (Subscription & Advance)	133,617,251	
Loan, Advances & Other Assets/Recovery			4. NPS Recovery	75,240,556	
Computer Advance Recovery	855,202	935700	Loan, Advances & Other Assets/Recovery		
Conveyance Advance Recovery	332,948	430396	Computer Advance	390,000	720,000
House Building Advance Recovery	881,000	926420	Conveyance Advance	60,000	330,000
Festival Advance Recovery	1,643,850	1776620	House Building Advance	-	-
Festival Advance AIIMS - Last Year	-		Festival Advance	1,363,500	1,723,500
Recovery/Deduction (Engg. Works)	4,634,190			3,150	
Return RTGS	-	6171278	Recovery/Deduction (Engg. Works)	10,805,468	
Patient Treatment (CGHS)	66,674	22827163	Return RTGS	-	23,461,775
		1027463	Patient Treatment (CGHS)		
			Advance Paid to DAVP	2,220,207	2,775,672
Custom Duty		1500000	Custom Duty	60,000,000	15,000,000
PDA			PDA	1,000,000	
Grant received from Aiiims CNC (Angio Pts. A/c)		1147756	Grant Transfer to (Angio Pts. A/c)		1,147,756
Grant received from Aiiims CNC (C.T. Pts. A/c)	2,750,799	7,468,372	Grant Transfer to (CT Pts. A/c)	-	7,468,372
Grant received from Aiiims CNC (Neuro Surgery Pts. A/c)		2782983	Grant Transfer to (Neuro Surgery Pts. A/c)		2,782,983
			Transferred to Aiiims CT Pts. A/c (Angio Pts. A/c)		
			VIII. Closing Balances		
			a) Cash in hand	66,000	61,000
			b) Bank Balances		-
			(i) In current Account (CNC Main)		
			CNC Main	161,723,947	145,525,430
			Gamma Knife	40,477,909	55,123,472
			Angio Pts. A/c	15,438,301	7,707,731
			Neuro Surgery Pts. A/c	37,151,884	13,507,299
			C.T. Pts. A/c	67,544,607	39,768,636
			Aiiims Neuro Sciences Poor Pts. A/c	207,900	208,532
			ii) In deposit accounts		
			iii) Savings accounts		-

Receipts	2016-17	2015-16	Payments	2016-17	2015-16
			c) Fixed Deposits		
			Fixed Deposits (Gamma Knife)	240,000,000	170,000,000
			Fixed Deposits (Angio Pts. A/c)	109,800,000	109,800,000
			Fixed Deposits (Neuro Surgery Pts. A/c)	31,800,000	31,800,000
Total	4,845,368,157	4,049,219,130	Total	4,845,368,157	4,049,219,130

Financial Advisor, AIIMS

F & CAO, CNC

Cardio-Thoracic & Neuro Sciences Centre (Consolidate)
Balance Sheet as at 31.03.2017

CORPUS/CAPITAL FUND AND LIABILITIES		Schedule		Current Year	Previous Year
		1		6,159,775,288	5,720,458,799
Corpus/Capital Fund		2		478,608,581	338,984,608
Reserves and Surplus		3		2,955,153	2,351,552
Earmarked/ Endowment Funds		4		93,451,021	73,171,221
Revolving Funds		5		-	-
Secured Loans and Borrowings		6		-	-
Unsecured Loans and Borrowings		7		-	-
Deferred Credit Liabilities		8		54,865,911	56,277,336
Current Liabilities and Provisions					
TOTAL				6,789,655,954	6,191,243,516
ASSETS					
Fixed Assets		9		5,756,366,092	5,351,153,142
Investments-From Earmarked/Endowment Funds		10		-	-
Investment-Others		11		381,600,000	311,600,000
Current Assets, Loans, Advances Etc.		12		651,689,862	528,490,374
Miscellaneous Expenditure				-	-
(To the extent not written off or adjusted)					
Balance of excess of expenditure over income					
TOTAL				6,789,655,954	6,191,243,516
Significant Accounting Policies		25			
Contingent Liabilities and Notes on Accounts		26			

CHIEF, CTC

CHIEF, NSC

F& CAO, CNC

Cardio-Thoracic & Neuro Sciences Centre

Income and Expenditure Account for the year ending on 31.03.2017

(Amount Rs.)					
<u>INCOME</u>	<u>Schedule</u>	<u>Current Year</u>	<u>Pervious Year</u>		
Income from Sales/services	13	663,057,637	598,726,367		
Grants/Subsidies	14	2,570,076,712	2,113,173,785		
Fees/Subscriptions	15	-	-		
Income from Investments (Income on Invest. From earmarked/endow. Funds Transferred to Funds)	16	-	-		
Income from Royalty, publications etc.	17	-	-		
Interest Earned	18	38,171,351	38,162,460		
Other Income	19	1,552,546	2,476,213		
Increase/(decrease) of Finished goods and works-in-progress	20	-	-		
TOTAL (A)		3,272,858,246	2,752,538,825		
<u>EXPENDITURE</u>					
Establishment Expenses	21	2,071,109,232	1,729,077,526		
Other Administrative Expenses etc.	22	213,252,814	169,403,034		
Payment made against fund for various projects	22 (A)	2,213,081	1,738,590		
Material & Supply	23	846,436,647	780,684,886		
Expenditure on Grants, Subsidies Etc.	24	-	-		
Interest & Finance Expenses	25	222,498	45,849		
Depreciation (Net Total at the year-end-corresponding to Schedule 11)					
TOTAL (B)		3,133,234,272	2,680,949,885		
Balance being excess of Income over Expenditure (A-B)					
Transfer to Special Reserve (Specify each)		139,623,974	71,588,940		
Transfer to/from General Reserve		-	-		
Balance being surplus/(deficit) carried to corpus/capital fund		139,623,974	71,588,940		
Significant Accounting Policies	25				
Contingent Liabilities and Notes on Accounts	26				

CHIEF, CTC

CHIEF, NSC

F& CAO, CNC

Cardio-Thoracic & Neuro Sciences Centre

Schedules forming part of the Balance Sheet as at 31.03.2017

<u>Schedule 1 – Corpus/ Capital Funds</u>	(Amount in Rs.)	
	Current Year	Pervious Year
Balance as at the beginning of the year (CNC Main)	5,669,067,096	-
<u>Add:</u> Contributions towards Corpus/Capital Fund (Through Aiiims Main)	439,316,489	5,669,067,096
<u>Add:</u> Corpus/Capital Created out of Donation	51,391,703	51,391,703
<u>Add/Deduct:</u> Balance of net income /(expenditure) transferred from the Income and Expenditure Account	-	-
Balance as at the end of the year	6,159,775,288	5,720,458,799

<u>Schedule 2 – Reserves and Surplus</u>	(Amount Rs.)	
	Current Year	Pervious Year
<u>1. Capital Reserve</u>		
Balance as at the beginning of the year		
CNC Main	(91,967,087)	(91,967,087)
Gamma Knife Pt. A/c	225,123,472	225,123,472
Angio Pts. A/c	120,753,172	120,753,172
C.T. Pts. A/c	39,768,637	39,768,637
Neuro Surgery A/c	45,307,299	45,307,299
Aiiims Neuro Sciences Poor Pts. A/c	(885)	(885)
<u>Add:</u> Additions during the year		
CNC Main	25,119,043	-
Gamma Knife Pt. A/c	55,354,438	
Angio Pts. A/c	7,730,570	
C.T. Pts. A/c	27,775,970	
Neuro Surgery A/c	23,644,585	
Aiiims Neuro Sciences Poor Pts. A/c	(632)	-
2. Revaluation Reserves		
Balance as at the beginning of the year	-	-
<u>Add:</u> Additions during the year	-	-
<u>Less:</u> Deductions during the year	-	-
3. Special Reserve		
Balance as at the beginning of the year	-	-
<u>Add:</u> Additions during the year	-	-
<u>Less:</u> Deductions during the year	-	-
4. General Reserve		
Balance as at the beginning of the year	-	-
<u>Add:</u> Additions during the year	-	-
<u>Less:</u> Deductions during the year	-	-
5. Excess of income over expenditure	-	-
TOTAL	478,608,581	338,984,608

Schedule -3 Earmarked/ Endowment Funds							(Amount in Rs.)	
	Cardiology	CTVS	Neurology	Neuro-Surgery	Other	Current Year Total	Previous Year	
							Total	
a) Opening balance of the funds								
b) Additions to the Funds								
i. Donations/grants	61,806	188,750	984,591	1,116,405		2,351,552	-	-
ii. Income from Investments made on account of funds	-	-	-	415,000	186,101	603,601	-	-
iii. Received from patients	2,500	-	-	-	-	-	-	-
iv. Other additions (specify nature)	-	-	-	-	-	-	-	-
TOTAL (a+b)	64,306	188,750	984,591	1,531,405	186,101	2,955,153		
c) Utilisation/Expenditure towards objectives of funds								
i. Capital Expenditure								
Fixed Assets	-					-	-	-
Others	-					-	-	-
TOTAL (c.i)	-					-		
ii. Revenue Expenditure								
Salaries, Wages and allowances etc.	-					-	-	-
Rent	-					-	-	-
Bank Charges	-					-	-	-
Other Administrative expenses	-					-	-	-
TOTAL c (ii)	-					-		
TOTAL (c)	-					-		
d) Refunds to Patients								
NET BALANCE AS AT THE YEAR-END (a+b-c-d)	64,306	188,750	984,591	1,531,405	186,101	2,955,153		2,351,552

Schedule -4 Revolving Fund	Current Year						(Amount in Rs.)	
	Lab Test	Cardiac Test	Stress Thallium	MRI	Neurology Pt. Fund	Total	Previous Year	
a) Opening balance of the funds	17,904,761	15,364,455	4,131,124	3,538,880	32,232,001	73,171,221	73,171,221	
b) Additions to the Funds								
i. Received From Patients	10,038,556	5,065,470	3,636,750	4,110,250	15,110,788	37,961,814		
ii. Grant Receive (16-17)	-	-	-	-	-	-		
TOTAL (a+b)	27,943,317	20,429,925	7,767,874	7,649,130	47,342,789	111,133,035	73,171,221	
c) Utilisation/Expenditure towards objectives of funds								
i. Capital Expenditure								
Fixed Assets	-	-	-	-	-	-		
Others (Specify)	-	-	-	-	-	-		
TOTAL (c.i)	-	-	-	-	-	-	-	
ii. Revenue Expenditure								
Material & Supply	-	-	-	-	-	-		
Others (Specify)	4,980,922	1,085,222	4,432,250	-	5,953,213	16,451,607		
Transfer to various pts. A/c					1,230,407			
TOTAL (c.ii)	4,980,922	1,085,222	4,432,250	-	7,183,620	17,682,014	-	
TOTAL (c)	4,980,922	1,085,222	4,432,250	-	7,183,620	17,682,014	-	
Balance as at the end of the year (a+b-c)	22,962,395	19,344,703	3,335,624	7,649,130	40,159,169	93,451,021	73,171,221	

Schedule 5 – Secured Loans And Borrowings			(Amount in Rs.)
	Current Year	Previous Year	
1. Capital Government	-	-	
2. State Government (Specify)	-	-	
3. Financial Institutions			
a) Term Loans	-	-	
b) Interest accrued and due	-	-	
4. Banks			
a) Term Loans			
- Interest accrued and due	-	-	
b) Other Loans (specify)			
- Interest accrued and due	-	-	
5. Other Institutions and Agencies	-	-	
6. Debentures and Bonds	-	-	
7. Others (specify)	-	-	
TOTAL	-	-	
Note: Amounts due within one year			

Schedule 6-Unsecured Loans And Borrowings			(Amount in Rs.)	
	Current Year	Previous Year		
1. Capital Government	-	-		
2. State Government (Specify)	-	-		
3. Financial Institutions				
a) Term Loans	-	-		
b) Interest accrued and due	-	-		
4. Banks				
a) Term Loans				
- Interest accrued and due	-	-		
b) Other Loans (specify)				
- Interest accrued and due	-	-		
5. Other Institutions and Agencies	-	-		
6. Debentures and Bonds	-	-		
7. Others (specify)	-	-		
TOTAL	-	-		
Note: Amounts due within one year				

Schedule 7- Deferred Credit Liabilities			(Amount in Rs.)	
	Current Year	Previous Year		
a) Acceptance secured by hypothecation of capital equipment and other assets	-	-		
b) Others	-	-		
TOTAL	-	-		
Note: Amount due within one year				

(Amount in Rs.)

<u>Schedule 8-Current Liabilities</u>	Current Year	Pervious Year
<u>A. Current Liabilities</u>		
1. <i>Acceptances</i>	-	-
2. <i>Sundry Creditors</i>		
a) For Goods	-	-
b) Others		
3. <i>Advances Received</i>	-	-
4. <i>Interest accrued but not due on</i>		
a) Secured Loans/borrowings	-	-
b) Unsecured Loans/borrowings	-	-
5. <i>Statutory Liabilities</i>		
a) Overdue	-	-
b) Others	-	-
6. <i>Other Current Liabilities</i>	1,694,638	6,477,473
7. <i>EMD</i>	52,863,604	49,492,194
8. <i>Return RTGS</i>	78,252	78,252
9. <i>Imprest</i>	20,000	20,000
10. <i>Aiims Neuro Sciences Poor Pts. A/c</i>	209,417	209,417
TOTAL (A)	54,865,911	56,277,336
<u>B. Provisions</u>		
1. For Taxation	-	-
2. Gratuity	-	-
3. Superannuation/ Pension	-	-
4. Accumulated Leave Encashment	-	-
5. Trade Warranties/ Claims	-	-
6. Accumulated Depreciation		
7. Others	-	-
TOTAL (B)	-	-
TOTAL (A)+(B)	54,865,911	56,277,336

SCHEDULE 9 - FIXED ASSETS (Amount in Rs.)

Particulars	GROSS BLOCK						DEPRECIATION			NET BLOCK			
	Cost/Valuation as at beginning of the year	Additions during the year	Deductions during the year	Additions during the year (Letter of Credit)	Additions during the year (PDA)	Additions during the year (Custom Duty)	Cost/Valuation at the year-end	As at the begin. of the year	For the year	On ded. during the year	Total up to the year-end	As at the current year-end	As at the previous year-end
FIXED ASSETS												As at the current year-end	
LAND													
a) Freehold	-	-	-				-	-	-	-	-	-	-
b) Leasehold	-	-	-				-	-	-	-	-	-	-
BUILDINGS													
a) On Freehold Land	-	-	-				-	-	-	-	-	-	-
b) On Leasehold Land	-	-	-				-	-	-	-	-	-	-
c) Ownership Flats/Premises	-	-	-				-	-	-	-	-	-	-
d) Superstructures on Land not belonging to the entity	-	-	-				-	-	-	-	-	-	-
INTANGIBLE FIXED ASSETS													
a) Software	-	-	-				-	-	-	-	-	-	-
PLANT, MACHINERY & EQUIPMENT*	4,820,751,205	151,265,144		148,504,429	336,905	28,720,829	5,149,578,512	-	-	-	-	5,149,578,512	4,820,751,205
Spare & Accessories (CTC)	19,692,029	32,035,388					51,727,417					51,727,417	19,692,029
Spare & Accessories (NSC)	32,310,790	36,866,909					69,177,699					69,177,699	32,310,790
Letter of Credit Spare & Accessories (NSC)	7,139,000	3,091,776					10,230,776					10,230,776	7,139,000
Letter of Credit Spare & Accessories (CTC)	-	556,416					556,416					556,416	-
VEHICLES	2,845,951	1,536,038	-				4,381,989	-	-	-	-	4,381,989	2,845,951
FURNITURE, FIXTURES	5,173,241	763,435	-				5,936,676		-	-	-	5,936,676	5,173,241
COMPUTER / PERIPHERALS	2,937,226	1,535,681					4,472,907	-	-	-	-	4,472,907	2,937,226
ELECTRIC INSTALLATIONS	-		-					-	-	-	-	-	-
LIBRARY BOOKS	-		-					-	-	-	-	-	-
Tube well & Water-supply	-	-	-				-	-	-	-	-	-	-
OFFICE EQUIPMENT	-	-	-				-	-	-	-	-	-	-
TOTAL OF CURRENT YEAR	4,890,849,442	227,650,787	-				5,296,062,392	-	-	-	-	5,296,062,392	4,890,849,442
PREVIOUS YEAR	-	-	-				-	-	-	-	-	-	-
CAPITAL WORK-IN-PROGRESS	460,303,700						460,303,700	-	-	-	-	460,303,700	460,303,700
TOTAL	5,351,153,142	227,650,787	-	148,504,429	336,905	28,720,829	5,756,366,092	-	-	-	-	5,756,366,092	5,351,153,142
(Date to be given to cost of assets on hire purchase basis included above)													

(Date to be given to cost of assets on hire purchase basis included above)

Schedule 10 - Investments from Earmarked/Endowment Funds			(Amount in Rs.)	
	Current Year	Previous Year		
1. In Government Securities	-	-		
2. Other approved Securities	-	-		
3. Shares	-	-		
4. Debentures and Bonds	-	-		
5. Subsidiaries and Joint Ventures	-	-		
6. Others (to be specified)	-	-		
TOTAL	-	-		

Schedule 11 - Investments Others			(Amount in Rs.)	
	Current Year	Previous Year		
1. In Government Securities	-	-		
2. Other approved Securities	-	-		
3. Shares	-	-		
4. Debentures and Bonds	-	-		
5. Subsidiaries and Joint Ventures	-	-		
6. Others (to be specified)	-	-		
i. Fixed Deposit (Gamma Knife)	240,000,000	170,000,000		
ii. Fixed Deposit (Angio Pts. A/c)	109,800,000	109,800,000		
iii. Fixed Deposit (Neuro Surgery Pts. A/c)	31,800,000	31,800,000		
TOTAL	381,600,000.00	311,600,000.00		

(Amount in Rs.)

Schedule 12-Current Assets, Loans, Advances Etc.	Current Year	Previous Year
A. Current Assets		
1. Inventories		
a) Stores and Spares	-	-
b) Loose Tools	-	-
c) Stock in trade		
Finished Goods	-	-
Work-in-progress	-	-
Raw Materials	-	-
2. Sundry Debtors		
a) Debts outstanding for a period exceeding six months		
b) Others	3,245,441	3,245,441
3. Cash balances in hand (Including cheques/drafts and imprest)		
a) Imprest	66,000	61,000
4. Bank Balances		
a) With Scheduled Banks:		
-On Current Accounts	161,723,947	145,525,430
Gamma Knife	40,477,909	55,123,472
Angio Pts. A/c	15,438,301	7,707,731
C.T. Pts. A/c	67,544,607	39,768,636
Neuro Surgery Pts. A/c	37,151,884	13,507,299
Aaims Neuro Sciences Poor Pts. A/c	207,900	208,532
-On Deposit Accounts (Includes margin money)	-	-
-On Savings Accounts	-	-
b) With Non-Scheduled Banks:		
-On Current Accounts	-	-
-On Deposit Accounts	-	-
-On Savings Accounts	-	-
5. Post Office - Savings Accounts	-	-
TOTAL (A)	325,855,989	265,147,542

(Amount in Rs.)

SCHEDULE 12-CURRENT ASSETS LOANS, ADVANCES ETC. (CONTD.)	Current Year	Pervious Year
B. LOANS, ADVANCES AND OTHER ASSETS		
<i>1. Loans</i>		
a) Staff	4,229,275	6,128,775
b) Other Entities engaged in activities/objectives similar to that of the Entity		
c) Other (Patient Treatment- CGHS)		
<i>2. Advances and other amounts recoverable in cash or in kind or for value to be received</i>		
a) On Capital Accounts		
b) Prepayments		
c) Temporary Contingent Advances		
d) Others		
<i>3. Income Accrued</i>		
a) On Investments fro Earmarked / Endowment Funds		
b) On Investments-Others		
c) On Loans and Advances		
d) Others		
(Includes income due unrealized-Rs.....)		
<i>4. Claims Receivable</i>		
<i>5. Letter of Credit</i>	43,477,618	14,505,131
<i>6. Custom Duty</i>	43,429,109	12,831,210
<i>7. Pre-Deposits Advance</i>	793,503	130,408
<i>8. TDR Issued</i>		
<i>9. Advance Against Work</i>	174,596,762	174,596,762
<i>10. Advance Payment DAVP</i>	4,995,879	2,775,672
<i>11. Mach. & Equipt Trf From CT Patients A/c</i>	49,025,000	49,025,000
<i>12. Patient Treatment (CGHS)</i>	5,286,727	3,349,874
TOTAL (B)	325,833,873	263,342,832
TOTAL (A)+(B)	651,689,862	528,490,374

(Amount in Rs.)

SCHEDULE 13-INCOME FROM SALES/SERVICE	Current Year	Previous Year
1) <u>Income from sales</u>		
a) Sales of Finished Goods	-	-
b) Sales of Raw Material	-	-
c) Sales of Scraps	-	-
2) <u>Income from Services</u>		
a) Labour and Processing Charges		
b) Professional/Consultancy Service	-	-
c) Agency Commission and Brokerage	-	-
d) Maintenance Services (Equipment/Property)	-	-
e) Hospital Receipts (CNC Main)	49,816,811	54,591,737
f) Hospital Receipts (Gamma Knife)	43,134,326	30,139,961
g) Hospital Receipts (Angio Patients A/c)	179,180,363	178,103,816
h) Hospital Receipts (C.T. Pts. A/c)	296,903,699	253,826,831
i) Hospital Receipts (Neuro Surgery Pts. A/c)	92,018,911	81,253,830
j) Patient Treatment CGHS	2,003,527	810,192
k) Others (Specify) Suspense Receipt	-	-
TOTAL	663,057,637	598,726,367

SCHEDULE 14-GRANTS/SUBSIDIES	Current Year	Current Year
(Irrevocable Grant & Subsidies Received)-Through Aiims Main		
1) Central Government	-	-
Revenue General (Plan)		
(ii) Grant in Aid- (Salary)	450,000,000	400,973,000
(iii) Grant in Aid- (General)	124,698,712	72,200,785
Non Plan		
(iii) Grant in Aid- (General)	365,000,000	300,000,000
(ii) Grant in Aid- (Salary)	1,630,378,000	1,340,000,000
2) State Government(s)		-
3) Governments Agencies	-	-
4) Institutions/Welfare Bodies	-	-
5) International Organisations	-	-
6) Others (Specify)	-	-
TOTAL	2,570,076,712	2,113,173,785

SCHEDULE 15-FEES/SUBSCRIPTIONS		(Amount in Rs.)	
	Current Year	Previous Year	
1) Entrance Fees	-	-	
2) Annual Fees/Subscriptions	-	-	
3) Seminar/Program Fees	-	-	
4) Consultancy Fees	-	-	
5) Tender Fees	-	-	
TOTAL	-	-	
Note- Accounting Policies towards each item are to be disclosed			

SCHEDULE 16- INCOME FROM INVESTMENTS					(Amount in Rs.)	
(Income on Invest. Earmarked/Endowment Funds transferred to Funds)						
1) Interest		Investment from Earmark Fund		Investment Other		
		Current Year	Previous Year	Current Year	Previous Year	
a) On Govt. Securities		-	-	-	-	-
b) Other Bonds/Debentures		-	-	-	-	-
2) Dividends		-	-	-	-	-
a) On Shares		-	-	-	-	-
b) On Mutual Fund Securities		-	-	-	-	-
3) Rents		-	-	-	-	-
4) Other (Specify)		-	-	-	-	-
TOTAL		-	-	-	-	-
Note- Transferred to earmarked/endowment funds						

(Amount in Rs.)		
SCHEDULE 17- INCOME FROM ROYALTY, PUBLICATION ETC.		
	Current Year	Previous Year
1) Income from Royalty	-	-
2) Income from Publications	-	-
3) Others (Specify)	-	-
TOTAL	-	-

(Amount in Rs.)		
SCHEDULE 18- INTEREST EARNED		
	Current Year	Previous Year
1) On Term Deposits		
a) with Schedule Banks (CNC Main)	12,216,060	12,570,374
with Schedule Banks (Gamma Knife)	13,560,973	10,201,356
with Schedule Banks (Angio Pts. A/c)	7,847,110	9,711,422
with Schedule Banks (C.T. Pts. A/c)	292,882	687,320
with Schedule Banks (Neuro Surgery Pts. A/c)	2,885,354	3,066,041
b) With Non-Scheduled Banks	-	-
c) With Institutions	-	-
d) Others	-	-
2) On Savings Accounts		
a) with Schedule Banks	-	-
b) With Non-Scheduled Banks	-	-
c) With Institutions	-	-
d) Others	-	-
3) On Loans		
a) Employee/Staff	1,368,972	1,925,947
b) Others	-	-
4) Interest on Debtors and Other Receivables		
TOTAL	38,171,351	38,162,460
Note- Tax deducted at source to be indicated		

(Amount in Rs.)

<u>SCHEDULE 19- OTHER INCOME</u>	Current Year	Previous Year
1) Profit on Sale/disposal of Assets		
a) Owned assets	-	-
b) Assets acquired out of grants, or received free of cost	-	-
2) Export Incentives realized		
a) Liquid Damage	-	-
3) Fees for Miscellaneous Services	-	-
4) Miscellaneous Receipt	1,552,546	1,077,484
5) Lic. Fee Recovery		1,398,729
TOTAL	1,552,546	2,476,213

(Amount in Rs.)

<u>SCHEDULE 20- INCREASE/(DECREASE) IN STOCK OF FINISHED GOODS & WORK IN PROGRESS</u>	Current Year	Previous Year
a) Closing stock		
Finished Goods	-	-
Work-In-Progress	-	-
b) Less: Opening Stock		
Finished Goods	-	-
Work-In-Progress	-	-
NET INCREASE/(DECREASE) [a-b]	-	-

(Amount in Rs.)

<u>SCHEDULE 21- ESTABLISHMENT EXPENSES</u>	Current Year	Previous Year
a) Salaries and Wages (Plan)	399,304,268	400,973,043
b) Salaries and Wages (Non-Plan)	1,598,589,040	1,271,503,521
c) Contribution to Provident Fund		
d) Contribution to Other Fund - (NPS)	67,666,812	51,135,814
e) Staff Welfare Expenses	-	-
f) Expenses on Employees Retirement and Terminal Benefits	-	-
g) Travelling and Conveyance Expenses	5,549,112	5,465,148
h) Others (specify)	-	-
TOTAL	2,071,109,232	1,729,077,526

(Amount in Rs.)

SCHEDULE 22- OTHER ADMINISTRATIVE EXPENSES ETC.	Current Year	Previous Year
Labour and processing expenses	-	-
Cartage and Carriage Inwards	-	-
Office Maintenance Exp.	3,060,713	9323271
Delegation Fee	1,080,192	
Gas Charges	178,312	
Vehicles Running and Maintenance	565,331	
Postage, Telephone and Communication Charges	208,581	
Water charges	-	-
Surgery & Disposal	-	
Repairs and maintenance of Building	25,632,914	32005824
Repairs and maintenance of Machinery	3,617,011	4637983
Vehicles Running and Maintenance		
Maintenance of Minor Works	34,221,391	
Printing and Stationary		
Expenses on Seminar/Workshops		
Cardiology for Fee Procedure		
Professional Charges		
Packing Charges		
Freight and Forwarding Expenses		
Distributions Expenses		
Advertisement and Publicity		
Security Services	28,038,015	27243562
Manpower Outsourcing Charges	40,148,754	30592854
Sanitation Service	34,420,427	30919234
Poor/BPL Patient Treatment Expenditure (Angio Pts. A/c)	2,155,762	1147756
Free Procedure (Angio Pts. A/c)	28,941,580	23281195
Poor/BPL Patient Treatment Expenditure (C.T. Pts. A/c)	9,513,650	7468372
Poor/BPL Patient Treatment Expenditure (Neuro Surgery Pts. A/c)	1,470,181	2782983
Others (specify)		
TOTAL	213,252,814	169403034

SCHEDULE 22 (A) PAYMENTS MADE AGAINST FUNDS FOR VARIOUS PROJECTS			(Amount in Rs.)
	Current Year	Previous Year	
NSC Poor Patients	2,213,081	1,738,590	
Others (specify)			
TOTAL	2,213,081	1738590	

SCHEDULE 23- Material & Supply			(Amount in Rs.)
	Current Year	Previous Year	
Material & Supply	317,972,481	257,058,462	
Exp. Of Consumable and Regent used to M & E	49,411,563	38912083	
Material & Supply (Gamma Knife)	1,338,428	1,988,522	
Material & Supply (Angio Pts. A/c)	148,128,229	181,225,596	
Material & Supply (C.T. Pts. A/c)	259,822,795	230,442,963	
Material & Supply (Neuro Surgery A/c)	69,750,881	71,017,535	
Material & Supply (ORBO)	12,270	39,725	
TOTAL	846,436,647	780,684,886	

SCHEDULE 24- EXPENDITURE ON GRANTS SUBSIDIES ETC.			(Amount in Rs.)
	Current Year	Previous Year	
a) Grants given to Institutions/Organisations	-	-	
b) Subsidies given to Institutions/Organisations	-	-	
TOTAL	-	-	
Note- Name of the Entities, their Activities along with the amount of Grants/Subsidies are to be disclosed.			

SCHEDULE 25- INTEREST & FINANCE EXPENSES			(Amount in Rs.)
	Current Year	Previous Year	
a) On Fixed Loans	-	-	
b) On Other Loans (including Bank Charges)	-	-	
c) Bank Charges (CNC Main)	25,317	14,734	
c) Bank Charges (Gamma Knife)	2,434	1,984	
c) Bank Charges (Angio Pts. A/c)	71,332	9,453	
c) Bank Charges (C.T. Pts. A/c)	84,166	11,711	
c) Bank Charges (Neuro Surgery A/c)	38,618	7,338	
c) Bank Charges (Poor Pts. A/c)	632	630	
d) Others (specify)	-	-	
TOTAL	222,498	45,849	

All India Institute of Medical Sciences, New Delhi
Dr. Rajendra Prasad Centre for Ophthalmic Sciences
BALANCE SHEET AS AT 31-03-2017

(Amount in Rupees)			
	Schedule	2016-17	2015-16
CORPUS/CAPITAL FUND AND LIABILITIES			
CORPUS/CAPITAL FUND	1	2966471076	2697371076
RESERVES AND SURPLUS	2	252599633	164620595
EARMARKED/ ENDOWMENT FUNDS	3	10035278	11692753
SECURED LOANS AND BORROWINGS	4		
UNSECURED LOANS AND BORROWINGS	5		
DEFERRED CREDIT LIABILITIES	6		
CURRENT LIABILITIES AND PROVISIONS	7	16973000	14102065
TOTAL		3246078987	2887786489
ASSETS			
FIXED ASSETS	8	2858571618	2498844990
INVESTMENTS-FROM EARMARKED/ENDOWMENT FUNDS	9		
INVESTMENTS-OTHERS	10		
CURRENT ASSETS, LOANS , ADVANCES ETC.	11	387507369	388941499
MISCELLANEOUS EXPENDITURE (to the extent not written off or adjusted)			
TOTAL		3246078987	2887786489

ACCOUNTS OFFICER

CHIEF, RPC

All India Institute of Medical Sciences, New Delhi
Dr. Rajendra Prasad Centre for Ophthalmic Sciences
INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31-03-2017

(Amount in Rupees)			
	Schedule	2016-17	2015-16
INCOME			
Income from Sales/Services (Hospital Receipts)	12	255223255	220334012
Grants/Subsidies	13	1125769000	882629000
Fees/Subscriptions	14		
Income from Investments (Income on Invest. From earmeked/endow. Funds transferred to funds)	15		
Income for Royalty, Publication etc.	16		
Interest Earned	17	14356407	23338805
Other Income	18	232924	1012769
Increase/(decrease) in stock of Finished goods and works-in-progress	19		
TOTAL (A)		1395581586	1127314586
EXPENDITURE			
Establishment Expenses	20	741209610	655773341
Other Administrative Expenses etc.	21	566392938	438387781
Expenditure on Grants, Subsidies etc.	22		
Interest	23		
Depreciation (Net Total at the year-end - corresponding to Schedule 8)			
TOTAL (B)		1307602548	1094161122
Balance being excess of Income over Expenditure (A-B)			
Transfer to Special Reserve (Specify each)		87979038	33153464
Transfer to /from General Reserve			
BALANCE BEING SURPLUS/(DEFICIT) CARRIED TO CORPUS/ CAPITAL FUND		1395581586	1127314586

ACCOUNTS OFFICER

CHIEF, RPC

All India Institute of Medical Sciences, New Delhi
Dr. Rajendra Prasad Centre for Ophthalmic Sciences
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2017

	(Amount in Rupees)		
	2016-17	2015-16	
<u>SCHEDULE 1- CORPUS/CAPITAL FUND:</u>			
Balances as at the beginning of the year	2697371076	2471832848	
Add : Contributions towards Corpus/Capital Fund	269100000	226400000	
Less : Fixed Assets Condemned during the year	0	861772	2697371076
BALANCE AS AT THE YEAR-END		2966471076	2697371076

	Current Year		Pervious Year	
<u>SCHEDULE 2- RESERVES AND SURPLUS:</u>				
1. <u>Capital Reserve:</u>				
As per last Account				
Addition during the year				
Less: Deductions during the year				
2. <u>Revaluation Reserve</u>				
As per last Account				
Addition during the year				
Less: Deductions during the year				
3. <u>Special Reserves</u>				
As per last Account				
Addition during the year				
Less: Deductions during the year				
4. <u>General Reserve</u>				
As per last Account	164620595		131467131	
Addition during the year	87979038	252599633	33153464	164620595
Less: Deductions during the year				
<u>TOTAL</u>	0	252599633	0	164620595

ACCOUNTS OFFICER

All India Institute of Medical Sciences, New Delhi
Dr. Rajendra Prasad Centre for Ophthalmic Sciences
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2017

(Amount in Rupees)

<u>SCHEDULE 3 - EARMARKED/ENDOWMENT FUNDS</u>	Scheme Non-RPC		TOTALS	
	Scheme Non-RPC		2016-17	2015-16
a) Opening balance of the funds	11692753			
b) Additions to the Funds:				
i. Donations/grants	13093983			
ii. Income from investments made on account of funds	0			
iii. Other additions (specify nature)				
iv Less Expenditure during the year	14751458		10035278	11692753
TOTAL (a+b)			10035278	11692753
c) Utilisation/Expenditure towards objectives of funds				
i. <u>Capital Expenditure</u>				
- Fixed Assets				
- Others				
ii. <u>Revenue Expenditure</u>				
- Salaries, Wages and allowances etc.				
- Rent				
- Other Administrative expenses				
<u>Total</u>				
TOTAL (c)			0	0
<u>NET BALANCE AS AT THE YEAR-END (a+b-c)</u>			10035278	11692753

ACCOUNTS OFFICER

All India Institute of Medical Sciences, New Delhi
Dr. Rajendra Prasad Centre for Ophthalmic Sciences
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2017

(Amount in Rupees)

SCHEDULE 4-SECURED LOANS AND BORROWINGS:	2016-17		2015-16	
1. Central Government				
2. State Government				
3. Financial Institutions				
a) Term Loans				
b) Interest accrued and due				
4. Banks:				
a) Term Loans				
- Interest accrued and due				
b) Other Loans (specify)				
- Interest accrued and due				
5. Other Institutions and Agencies				
6. Debentures and Bonds				
7. Others (Specify)				
<u>TOTAL</u>	0	0	0	0

ACCOUNTS OFFICER

All India Institute of Medical Sciences, New Delhi
Dr. Rajendra Prasad Centre for Ophthalmic Sciences
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2017

(Amount in Rupees)

SCHEDULE 5 - UNSECURED LOANS AND BORROWING	2016-17	2015-16
1. Central Government 2. State Government 3. Financial Institutions 4. Banks: a) Term Loans b) Other Loans (specify) 5. Other Institutions and Agencies 6. Debentures and Bonds 7. Fixed Deposits 8. Others (Specify)		
<u>TOTAL</u>	0	0

SCHEDULE 6 - DEFERRED CREDIT LIABILITIES:	Current Year	Previous Year
a) Acceptances secured by hypothecation of capital equipment and other assets b) Others		
<u>TOTAL</u>	0	0

ACCOUNTS OFFICER

All India Institute of Medical Sciences, New Delhi
Dr. Rajendra Prasad Centre for Ophthalmic Sciences
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2017

(Amount in Rupees)

SCHEDULE 7 - CURRENT LIABILITIES AND PROVISIONS	2016-17		2015-16	
A. CURRENT LIABILITIES AND PROVISIONS				
1. Acceptances				
2. Sundry Creditors:				
a) For Goods				
a) Others				
3. Advances Received for patients from Govt Agencies				
i) NIAF				
Opening Balance	1374459			
Received during the year	207808			
Expenditure during the year	66000	1516267		1374459
4. Projects Grants				
ii) NPCB		827		827
5. Interest accrued but not due on:				
a) Secured Loans/borrowings				
a) Unsecured Loans/borrowings				
6. Statutory Liabilities:				
a) Overdue				
a) Others				
7. Security Deposits (EMD)				
Opening Balance	9382306		10348306	
Received during the year	2887500		2434000	
Refund during the year	1198000	11071806	3400000	9382306
6. Other current Liabilities		227078		227078
9. Amt against recoveries to be remitted to AIIMS (MAIN)		0		3117395
Opening Balance	3117395			
Less : Remitted to AIIMS (MAIN)	3117395	0		
10. Custom Duty to be paid to Store (D.O.)		4157022		
TOTAL (A)		16973000		14102065
B. PROVISIONS				
1. For Taxation				
2. Gratuity				
3. Superannuation/Pension				
6. Accumulated Leave Encashment				
6. Trade Warranties/Claims				
6. Others (specify)				
TOTAL (B)				
TOTAL (A+B)		16973000		14102065

ACCOUNTS OFFICER

All India Institute of Medical Sciences, New Delhi
Dr. Rajendra Prasad Centre for Ophthalmic Sciences
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2017

SCHEDULE 8-FIXED ASSETS			GROSS BLOCK					DEPRECIATION			(Amount in Rupees)	
DISCRIPTION			Cost/valuation As at beginning of the year	Additions during the year	Deductions during the year	Cost/ Valuation at the year end	As at the beginning of the year	On additions during the year	On Deductions during the year	Total up to the year-end	As at the Current year-end	As at the Previous year-end
A.	FIXED ASSETS:											
1	LAND:											
	a)Freehold											
	b)Leasehold											
2	BUILDINGS:											
	a) On Freehold Land		233443859	0	0	233443859	0	0	0	0	233443859	233443859
	b) On Leasehold Land											
	c) Ownership Flats/ Premises											
	d) Superstructures on Land not belonging to the entity											
	PLANT MACHINERY & EQUIPMENT		2241314584	358291219	0	2599605803	0	0	0	0	2599605803	2241314584
3	VEHICLES		7689572	0	0	7689572	0	0	0	0	7689572	7689572
4	FURNITURE, FIXTURES		16396975	1435409	0	17832384	0	0	0	0	17832384	16396975
5	OFFICE EQUIPMENT											
6	COMPUTER/PERIPHERALS											
7	ELECTRIC INSTALLATIONS											
8	LIBRARY BOOKS											
9	TUBEWELLS & W. SUPPLY											
10	OTHER FIXED ASSETS											
11												
TOTAL OF CURRENT YEAR			2498844990	359726628	0	2858571618	0	0	0	0	2858571618	2498844990
PREVIOUS YEAR												
B.	CAPITAL WORK-IN-PROGRESS											
	TOTAL											

ACCOUNTS OFFICER

All India Institute of Medical Sciences, New Delhi
Dr. Rajendra Prasad Centre for Ophthalmic Sciences
All India Institute of Medical Sciences, New Delhi

(Amount in Rupees)		
<u>SCHECULE 9 - INVESTMENTS FROM EARMARKED / ENDOWMENT FUNDS</u>	<u>2016-17</u>	<u>2015-16</u>
1. In Government Securities		
2. Other approved Securities		
3. Shares		
4. Debenutres and Bonds		
5. Subsidiaries and Joint Venutres		
6. Others (to be specified)		0
<u>TOTAL</u>	0	0

<u>SCHECULE 10 - INVESTMENTS - OTHERS</u>	<u>2016-17</u>	<u>2015-16</u>
1. In Government Securities		
2. Other approved Securities		
3. Shares		
4. Debenutres and Bonds		
5. Subsidiaries and Joint Venutres		
6. Others (to be specified)		
<u>TOTAL</u>	0	0

ACCOUNTS OFFICER

All India Institute of Medical Sciences, New Delhi
Dr. Rajendra Prasad Centre for Ophthalmic Sciences
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2017

SCHEDULE 11 - CURRENT ASSETS, LOANS, ADVANCES ETC.		(Amount in Rupees)		
		2016-17	2015-16	
A	CURRENT ASSETS:			
1. <u>Advances for Procurement</u>				
a) M&E Foreign Purchases	Opening Balance	134612169	5663039	
	Addition during the year	48757414	134612169	
	Adjusted during the year	134778415	5663039	134612169
b) Material and Supply	Opening Balance	16774728	15511535	
	Addition during the year	11650800	6992629	
	Adjusted during the year	6992629	5729436	16774728
c) Stock-in-trade				
	Finished Goods			
	Work-in-progress			
	Raw Material			
2. <u>Sundry Debtors:</u>				
a) Debts Outstanding for a period exceeding six months				76253
b) Others		76253		
3. <u>Cash balances in hand (including cheques/ drafts and imprest)</u>		26500		21500
4. <u>Bank Balances:</u>				
a) <u>With Scheduled Banks:</u>				
	On Current Accounts			
	On Deposit Accounts (includes margin money)			
	On Savings Accounts	316189138		235854683
b) <u>With non-Scheduled Banks:</u>				
	On Current Accounts			
	On Deposit Accounts			
	On Savings Accounts			
5. <u>PDA Advance</u>	opening balance	900470		900470
	adjusted during the year	448605	451865	
TOTAL (A)		386767823		388239803

ACCOUNTS OFFICER

All India Institute of Medical Sciences, New Delhi
Dr. Rajendra Prasad Centre for Ophthalmic Sciences
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2017

SCHEDULE 11 - CURRENT ASSETS, LOANS, ADVANCES ETC. (Contd.)		(Amount in Rupees)	
		2016-17	2015-16
B	LOANS, ADVANCES AND OTHER ASSETS		
1. <u>Loans:</u>			
a) Staff			
i) Motor car	Opening Balance Less : Recovered during the year	2564 1325	2564
ii) House Building Advance	Opening Balance Less : Recovered during the year	10804 6000	10804
iii) Computer Advance	Opening Balance Less : Recovered during the year Add: Addition during the year	154000 77000 150000	154000
iv) Festival Advance	Opening Balance Less : Recovered during the year Add: Addition during the year	534328 824325 796500	534328
2. <u>Advances and other amounts recoverable in cash or in kind or for value to be received:</u>			
a) On Capital Account			
b) Prepayments			
c) Others			
3. <u>Income Accrued:</u>			
a) On Investments from Earmarked / Endowment Funds			
b) On Investments - Others			
c) On Loans and Advances			
d) Others			
4. <u>Claims Receivable:</u>	(includes income due unrealised - Rs.....)		
TOTAL (B)		739546	701696
TOTAL (A + B)		387507369	388941499

ACCOUNTS OFFICER

All India Institute of Medical Sciences, New Delhi
Dr. Rajendra Prasad Centre for Ophthalmic Sciences
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2017

(Amount in Rupees)		
	2016-17	2015-16
SCHEDULE 12 - INVESTMENTS FROM EARMARKED / ENDOWMENT FUNDS		
1) Income from Sales		
1. Hospital receipts		219605563
2. Administrative charges (Projects)	254323707	728449
3. Sale of Scraps	899548	
2) Income from Services		
a) Labour and Processing Charges		
b) Professional / Consultancy Services		
c) Agency Commission and Brokerage		
d) Maintenance Services (Equipment/Property)		
e) Others (Specify) Hospital Receipt		
TOTAL	255223255	220334012

	2016-17	2015-16
SCHEDULE 13 - GRANTS /SUBSIDIES		
1) Income from Sales (Irrevocable Grants & Subsidies Received)		
1. Central Government (Through AIIMS Main)		882629000
2. State Government(s)	1125769000	
3. Government Agencies		
4. Institutions/ Welfare Bodies		
5. International Organisations		
6. Others (Specify)		
TOTAL	1125769000	882629000

ACCOUNTS OFFICER

All India Institute of Medical Sciences, New Delhi
Dr. Rajendra Prasad Centre for Ophthalmic Sciences

SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE YEAR ENDED 31-03-2017

<u>SCHEDULE 14 - FEES/SUBSCRIPTIONS</u>	(Amount in Rupees)	
	2016-17	2015-16
1. Tuition & Examination Fee		
2. Licence Fee		
3. Seminar/Program Fees		
4. Consultancy Fees		
5. Others (Specify) EHS		
<u>TOTAL</u>	0	0

<u>SCHEDULE 15 - INCOME FROM INVESTMENTS</u>	Investment from Earmarked Fund		Investment-Others	
	2016-17	2015-16	2016-17	2015-16
(Income on Invest. From Earmarked/Endowment Funds transferred to Funds)				
1. Interest				
a) On Govt. Securities				
a) Other Bonds/Debentures				
2. Dividends:				
a) On Shares				
a) On Mutual Fund Securities				
3. Rents				
4. Others (Specify)				
<u>TOTAL</u>				
TRANSFERRED TO EARMARKED/EDNOWNMENT FUNDS	0	0	0	0

ACCOUNTS OFFICER

All India Institute of Medical Sciences, New Delhi
Dr. Rajendra Prasad Centre for Ophthalmic Sciences
SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE YEAR ENDED 31-03-2017

(Amount in Rupees)

<u>SCHEDULE 16 - INCOME FROM ROYALTY, PUBLICATION ETC.</u>	2016-17	2015-16
1. Income from Royalty		
2. Income from Publications		
3. Others (specify)		
<u>TOTAL</u>	0	0

<u>SCHEDULE 17 - INTEREST EARNED</u>	2016-17	2015-16
1. On Term Deposits:		
a) With Scheduled Banks	13850476	23248224
b) With Non-Scheduled Banks		
c) With Institutions		
d) Others		
2. On Savings Accounts:		
a) With Scheduled Banks		
b) With Non-Scheduled Banks		
c) Post Office Savings Accounts		
d) Others		
3. On Loans:		
a) Employees/Staff	505931	90581
b) Others		
4. Interest on Debtors and other Receivables		
<u>TOTAL</u>	14356407	23338805

ACCOUNTS OFFICER

All India Institute of Medical Sciences, New Delhi
Dr. Rajendra Prasad Centre for Ophthalmic Sciences

SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE YEAR ENDED 31-03-2017

<u>SCHEDULE 18 - OTHERS INCOME</u>			<u>(Amount in Rupees)</u>	
	2016-17	2015-16		
1. Misc. Receipt				
2. Estb. Receipt (Scheme)	232924	1012769		
3. Others (specify)				
TOTAL	232924	1012769		

<u>SCHEDULE 19 - INCREASE/(DECREASE) IN STOCK OF FINISHED GOODS & WORK IN PROGRESS</u>			2016-17	2015-16
a) Closing stock				
- Finished Goods				
- Work-in-progress				
b) Less: Opening Stock				
- Finished Goods				
- Work-in-progress				
NET INCREASE/(DECREASE) [a+b]			0	0

<u>SCHEDULE 20 - ESTABLISHMENT EXPENSES</u>			Current Year	Previous Year
Salaries and Wages			718575995	637709575
Allowances and Bonus				
Travelling Allowances			8338087	7074951
Contribution to NPS			14295528	10988815
Contribution to Other Fund (Scheme Cell)				
Staff Welfare Expenses				
Expenses on Employees "Retirement and Terminal Benefits"				
Others (NPS & LSPC)				
TOTAL			741209610	655773341

ACCOUNTS OFFICER

All India Institute of Medical Sciences, New Delhi
Dr. Rajendra Prasad Centre for Ophthalmic Sciences
SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE YEAR ENDED 31-03-2017

(Amount in Rupees)		
SCHEDULE 21 - OTHER ADMINISTRATIVE EXPENSES ETC.	2016-17	2015-16
a) Purchases (Material and Supply)	423166589	297247722
Material received against advance paid during last years	6992629	
b) Office Expenses	6369170	37137264
c) Securities	17505284	..
d) Other Outsourcing Agency	7400173	..
e) Administrative Charges (Projects)	480592	527540
f) Insurance		
g) Repairs and maintenance (M&E)	1755413	1446378
h) Excise Duty		
i) Rent, Rates and Taxes		
j) Vehicles, Running and Maintenance		
k) Postage, Telephone and Communication Charges		
l) Printing and Stationary		
m) Travelling and Conveyance Expenses		
n) Expenses on Seminar/Workshops		
o) Subscription Expenses		
p) Expenses on Sanitation	21661419	21602174
q) Maintaince of Buildings (Minor Work RG)	15838519	26047710
r) Maintaince of M&E (CAMC/AMC)	47500580	40096283
s) Maintaince of Building (Non-plan)	17352096	13852090
t) Provision for Bad and Doubtful Debts/Advances		
u) Irrecoverable Balances Written-off		
v) Swap Charges (IDBI Debit/Credit Card Commission)	370474	430620
w) Freight and Forwarding Expenses		
x) Distribution Expenses		
y) Advertisement and Publicity		
z) Others (specify)(Contingency charge)		
TOTAL	566392938	438387781

ACCOUNTS OFFICER

All India Institute of Medical Sciences, New Delhi
Dr. Rajendra Prasad Centre for Ophthalmic Sciences
SCHEDULES FORMING PART OF RECEIPT & PAYMENT FOR THE YEAR ENDED 31-03-2017

(Amount in Rupees)

<u>SCHEDULE 21 - OTHER ADMINISTRATIVE EXPENSES ETC.</u>	2016-17	2015-16
a) Purchases (Material and Supply) 425540100	423166589	291518286
b) Office Expenses	6369170	37137264
c) Securities	17505284	..
d) Other Outsourcing Agency	7400173	..
e) Administrative Charges (Projects)		
f) Insurance		
g) Repairs and maintenance (M&E)	1755413	1446378
h) Excise Duty		
i) Rent, Rates and Taxes		
j) Vehicles, Running and Maintenance		
k) Postage, Telephone and Communication Charges		
l) Printing and Stationary		
m) Travelling and Conveyance Expenses		
n) Expenses on Seminar/Workshops		
o) Subscription Expenses		
p) Expenses on Sanitation	21661419	21602174
q) Maintenance of Buildings (Minor Work RG)	15838519	22930315
r) Maintenance of M&E (CAMC/AMC)	47500580	40096283
s) Maintenance of Building (Non-plan)	17352096	13852090
t) Provision for Bad and Doubtful Debts/Advances		
u) Irrecoverable Balances Written-off		
v) Swap Charges/Bank charges (IDBI Debit/Credit Card Commission)	370474	430620
w) Freight and Forwarding Expenses		
x) Distribution Expenses		
y) Advertisement and Publicity		
z) Others (specify)(Contingency charge)		
<u>TOTAL</u>	558919717	429013410

ACCOUNTS OFFICER

All India Institute of Medical Sciences, New Delhi
Dr. Rajendra Prasad Centre for Ophthalmic Sciences
SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE YEAR ENDED 31-03-2017

(Amount in Rupees)

<u>SCHEDULE 22- EXPENDITURE ON GRANTS, SUBSIDIES ETC.</u>	2016-17	2015-16
a). Grants given to Institutions/Organizations		
b). Subsidies given to Institutions/organisations		
<u>Total</u>	0	0

<u>SCHEDULE 23-INTEREST</u>	2016-17	2015-16
a) On fixed Loans		
b) On other Loans (including Bank charges)		
c) Others(Specify)		
<u>Total</u>	0	0

ACCOUNTS OFFICER

All India Institute of Medical Sciences, New Delhi
Dr. Rajendra Prasad Centre for Ophthalmic Sciences
RECEIPT AND PAYMENTS FOR THE YEAR ENDED 31-03-2017

		(Amount in Rupees)				(Amount in Rupees)			
Receipts		2016-17	2015-16	Payments		2016-17	2015-16		
1. Opening Balances				1. Expenses					
(a) Cash in Hand		21500		(a) Establishment Expenses (corresponding to schedule 20)		741209610	655773341		
(b) Bank Balances		235854683	222577695	(b) Administrative Expenses (Corresponding to schedule 21A)		558919717	429013410		
(i) In current accounts									
(ii) In deposit accounts				2. Payments made against funds for various projects		15232050	22093440		
(iii) In saving accounts									
2. Grant Received				3. Investments and deposits made					
(a) From Government of India through AIIMS (Main)				(a) Out of Earmarked/Endowment Funds					
(i) Grant in Aid (Plan) (Capital Assets)		269100000	226400000	(b) Out of Own funds (Investments-others)					
(ii) Grant In Aid (General) (Plan)		85000000	84629000						
(iii) Grant in Aid (Salary) (Plan)		87500000	78000000	4. Expenditure on Fixed Assets & Capital Work-in-Progress					
(iv) Grant in Aid (Salary) (Non-Plan)		643269000	570000000	(a) Purchase of Fixed Assets		220342586	112416512		
(v) Grant in Aid (General) (Non-Plan)		310000000	150000000	(b) Expenditure on capital work-in-progress		48757414	135512639		
(b) From state Government									
(c) From other sources (Schemes)		13993531	23141377	5. Refund of surplus money/loans					
3. Income on Investment from				(a) To the Government of India					
(a) Earmarked/Endow. Funds				(b) To the State Government					
(b) Own funds (Oth. Investments)				(c) To other providers of funds					
4. Interest received				6. Finance Charges (Interest)		0	0		
(a) On bank deposits		13850476	23248224	7. Other Payments					
(b) Loans, Advances etc.				NIAF		66000	0		
Car		38293	13252	Refund of Earnest Money Deposit		1198000	3400000		
HBA		466638	60160	Employees Recovery payment					
Computer		1000	11069	Recoveries from employees remitted to AIIMS (Main)		3709760	3610861		
Scooter		0	6100	Outside Recoveries		113063528	93295928		
5. Other Income				iii) GPF (Subscription and Advances)		68949890	70368810		
(i) Hospital Receipts		254323707	219605563	iv) NPS Recovery		14295528	10988815		
(ii) Misc Receipts		232924	1012769	v) NPS Recovery (without PRAN)		604425	905216		

6. Amount Borrowed				Loan, Advances and Other Assets		
				Advance payment for purchase of Material and Supply	11650800	6992629
7. Any other receipts				Computer Advance	150000	120000
(a) NIAF		207808		Festival Advance	796500	866408
(b) Earnest Money Deposits		2887500		Recovery/Deductions (Engg Works)	6080911	0
(c) Employees Recovery				Recovery/Deductions (other than Engg Works)	1435366	1439383
i) Recoveries from employees		3709760				
ii) Outside Recoveries		113063528				
iii) GPF (Subscription and Advances)		68949890				
iv) NPS Recovery		14295528		8. Closing Balances		
v) NPS Recovery (without PRAN)		604425		(a) Cash in hand	26500	21500
				(b) Bank Balances		
Loan, Advances and Other Assets/Recovery				(i) In current accounts	316189138	235854683
Car Advance Recovery		1325		(ii) In deposit accounts		
Computer Advance Recovery		77000		(iii) In saving accounts		
House Building Advance Recovery		6000				
Festival Advance Recovery		824325				
Recovery/Deductions (Engg Works)		2963516				
Recovery/Deductions (other than Engg Works)		1435366				
Total	2122677723		1782673575	Total	2122677723	1782673575

ACCOUNTS OFFICER

CHIEF, RPC

ALL INDIA INSTITUTE OF MEDICAL SCIENCE
DR. RAJENDRA PRASAD CENTRE FOR OPHTHALMIC SCIENCES

Receipt & Payment Account for the year 2016-17 (Poor Patient Fund A/c)

RECEIPTS	AMOUNT	PAYMENTS	AMOUNT
1. Opening Balance as on 1-4-16	320079.22	Expenditure incurred on Treatment of Poor Patient During the year 2016-17	418628.00
2. Donation Received during the year 2016-17	534324.00	Closing balance as on	456904.22
3. Interest Received during the year 2016-17	16129.00		
4. Suspense Amount	5000.00		
G.TOTAL	875532.22	G.TOTAL	875532.22

ACCOUNTS OFFICER (RPC)

Dr. Bhim Rao Ambedkar Institute Rotary Cancer Hospital
BALANCE SHEET AS AT 31st March - 2017

(Amount in Rs.)

<u>CORPUS/CAPITAL FUND AND LIABILITIES</u>	Schedule	Current Year 2016-17	Previous Year 2015-16
CORPUS/CAPITAL FUND	1	2,394,279,753	2,304,526,381
RESERVES AND SURPLUS	2	20,565,301	-
earmarked/endowment funds	3	109,387,803	72,338,093
SECURED LOANS AND ABORROWINGS	4	-	-
UNSECURED LOANS AND BORROWINGS	5	-	-
DEFERRED CRDIT LIABILITIES	6	.....	.....
CURRENT LIABILITIES AND PROVISIONS	7	2,332,820	25,643,323
TOTAL		2,526,565,677	2,402,507,797
<u>ASSETS</u>			
FIXED ASSETS	8	2,066,588,433	1,977,426,324
INVESTMENTS – FROM EARMARKED/ENDOWMENT FUNDS	9	-	-
INVESTMENTS – OTHERS	10	-	-
CURRENT ASSETS, LOANS, ADVANCES ETC.	11	459,977,244	415,541,711
MISCELLANEOUS EXPENDITURE (Balance of excess of expenditure over income) (to the extent not written off or adjusted)		-	9,539,762
TOTAL		2,526,565,677	2,402,507,797
SIGNIFICANT ACCOUNTING POLICIES	24		
CONTINGENT LIABILITIES AND NOTES ON ACCOUNTS	25		

Dr. Bhim Rao Ambedkar Institute Rotary Cancer Hospital
INCOME AND EXPENDITURE ACCOUNT FOR THE PERIOD/YEAR ENDED 2016-17

		(Amount in Rs.)	
<u>INCOME</u>	<u>Schedule</u>	<u>Current Year 2016-17</u>	<u>Previous Year 2015-16</u>
Income from sales/services	12	20,445,665	20,172,025
Grants/Subsidies	13	1,083,434,000	918,650,000
Fees/Subscriptions	14	-	-
Income from Investments (Income on Invest, from earmarked/endow. Fund transferred to Funds)	15	-	-
Income from Royalty, Publication etc.	16	-	-
Interest Earned	17	2,541,248	4,895,285
Other Income	18	-	-
Increase/(decrease) in stock of Finished goods and works-in-progress	19	-	-
TOTAL(A)		1,106,420,913	943,717,310
<u>EXPENDITURE</u>			
Establishment Expenses	20	640,290,018	531,422,187
Other Administrative Expenses etc.	21	436,025,832	376,030,653
Expenditure on Grants, Subsidies etc.	22	-	-
Interest	23	-	-
Depreciation (Net Total at the year-end – corresponding to schedule 8)		-	-
TOTAL(B)		1,076,315,850	907,452,840
Balance being excess of Income over Expenditure (A-B)		30,105,063	36,264,470
Transfer to Special Reserve (Specify each)			
Transfer to /from General Reserve			
BALANCE BEING SURPLUS/(DEFICIT) (Adjusted in Income & Expenditure)		30,105,063	36,264,470
SIGNIFICANT ACCOUNTING POLICIES	24		
CONTINGENT LIABILITIES AND NOTES ON ACCOUNTS	25		

Dr. Bhim Rao Ambedkar Institute Rotary Cancer Hospital
RECEIPTS AND PAYMENTS FOR THE PERIOD/YEAR ENDED 2016-17

RECEIPTS		Current Year 2016-17	Previous Year 2015-16	PAYMENTS	Current Year 2016-17	Previous Year 2015-16
I. Balances (Opening)				I. Expenses		
(a) Cash In hand				a) Establishment Expenses (corresponding to schedule 20)	640,290,018	531,422,187
(b) Bank Balances				b) Administrative Expenses (corresponding to schedule 21A)	436,025,832	373,837,968
(i) Current Accounts		59,942,453	65,488,953			
(ii) Deposit Account						
(iii) Saving Accounts						
II. Grant Received				II. Payments made against funds for various projects		
(a) From Government of India through AIIMS (Main)				a) Out of Earmarked/Endowment funds		
(i) Grant in Aid (Plan) (Capital Assets)		110,955,000	68,000,000	b) Revolving funds		
(ii) Grant In Aid (General) (Plan)		90,000,000	81,000,000	(i) R T Revolving Fund		96,920
(iii) Grant in Aid (Salary) (Plan)		20,700,000	18,550,000	(ii) Medical Oncology Fund		
(iv) Grant in Aid (Salary) (Non-Plan)		632,734,000	529,100,000	(iii) Poor Patient A/c	1,408,686	1,774,392
(v) Grant in Aid (General) (Non-Plan)		340,000,000	290,000,000	(iv) Patient Treatment A/c	99,051,883	90,668,207
(b) State Government				(v) HMCPE A/c	2,209,197	2,075,789
(c) Other sources (details)				(vi) ICMR	-	100,000
(b) From State Government						....
(c) From Other Sources				III. Investments and deposits made		
(For Capital & Revenue to be Shown Separately)						
III. On Investments from				IV. Expenditure on Fixed Assets & Capital Work-in-progress		
(a) Earmarked/Endow. Funds				a) Purchase of Fixed Assets	72,444,296	
(b) Revolving Funds				b) Expenditure on Capital Work-in-progress	23,261,539	106,665,254
(i) R T Revolving Fund		7,003,305	2,255,250	c) Custome duty advance	433,291	
(ii) Medical Oncology Fund		393,080	523,500			
(iii) Poor Patient A/c		872,891	2,655,440	V. Refund of surplus money/Loans		
(iv) Patient Treatment A/c				a) To the Government of India		
(v) HMCPE A/c				b) To the State Government		
(vi) ICMR				c) To other providers of fund		
		96,972,675	81,147,320	VI. Finance Charges (Interest)		
		4,000,000	4,367			
		-	100,000			

Dr. Bhim Rao Ambedkar Institute Rotary Cancer Hospital
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31st March - 2017

(Amount in Rs.)

	Current Year 2016-17		Previous Year 2015-16	
<u>SCHEDULE 1 -CORPUS/CAPITAL FUND:</u>				
Balance as at the beginning of the year		2,304,526,381		2,257,956,334
Add: Contributions towards Corpus/Capital Fund	110,955,000		68,000,000	
Less: M & E Condemned	21,201,628		214,429,953	
Less: Excess Capitalized	-		-	
Add/ (Deduct) : Balance of net income/(expenditure)	-	89,753,372	-	46,570,047
Transferred from the Income and Expenditure Account				
BALANCE AS AT THE YEAR-END		2,394,279,753		2,304,526,381

	Current Year 2016-17		Previous Year 2015-16	
<u>SCHEDULE 2 -RESERVES AND SURPLUS:</u>				
1. Capital Reserve :				
As per last Account	....		....
Additional during the year	....		....
Less : Deductions during the year	(..)		(..)	
	_____	_____
2. Revaluation Reserve :				
As per last Account	....		....
Additional during the year	....		....
Less : Deductions during the year	(..)		(..)	
	_____	_____
3. Special Reserves :				
As per last Account	....		....
Additional during the year	....		....
Less : Deductions during the year	(..)		(..)	
	_____	_____
4. General Reserves :				
As per last Account	....		....
Additional during the year	-		....
Less : Deductions during the year	-		(...)	
	_____	_____
5. Excess of Income over Expenditure				
As per last Account	-			
Additional during the year	9,539,762			
Less : Deductions during the year	30,105,063	20,565,301		
	-	-		
TOTAL		20,565,301		-

Dr. Bhim Rao Ambedkar Institute Rotary Cancer Hospital_
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31st March - 2017

(Amount in Rs.)

SCHEDULE 3 - EARMARKED/ENDOWMENT FUNDS	FUND-WISE BREAK UP			TOTALS			
	R.T. Revolving Fund	Medical Oonology Revolving Fund	Poor Patient A/c Fund	Patient Treatment A/c Fund	HMCPF	Current Year	Previous Year
a) Opening balance of the funds	2,707,218	1,971,139	1,968,343	65,680,484	10,909	72,338,093	73,848,570
b) Additions to the Funds:							
i Donations/grants	7,003,305	393,080	872,891	96,972,675	4,000,000	109,241,951	76,251,617
ii Income from investments made on account of funds	-	-				-	
iii Other additions (specify nature)			477,525		-	477,525	16,853,214
TOTAL (a+b)	9,710,523	2,364,219	3,318,759	162,653,159	4,010,909	182,057,569	166,953,401
a) Utilization/Expenditure towards objectives of funds							
i Capital Expenditure	-	-					
- Fixed Assets	-	-					
- Others	-	-					
Total	-	-	1,398,686	69,046,981	2,209,140	72,654,807	94,615,308
ii Revenue Expenditure							
- Salaries, Wages and allowances etc.	-	-				-	
- Rent	-	-				-	
- Other Administrative expenses	-	-	10,000	4,902	57	14,959	
Total	-	-	10,000	4,902		14,959	-
TOTAL (c)	-	-	1,418,686	69,051,883	2,209,197	72,669,766	94,615,308
NET BALANCE AS AT THE YEAR- END (a+b+c)	9,710,523	2,364,219	1,900,073	93,601,276	1,801,712	109,387,803	72,338,093
Notes							
1. Disclosures shall be made under relevant heads based on conditions attaching to the grants							
2. Plan fund received from Central/State Governments are to be shown as separate Funds and not be mixed up with any other funds.							

Dr. Bhim Rao Ambedkar Institute Rotary Cancer Hospital_
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31st March - 2017

		(Amount in Rs.)	
		Current Year 2016-17	Previous Year 2015-16
SCHEDULE 4 - SECURED LOANS AND BORROWINGS:			
1. Central Government		
2. State Government (Specify)		
3. Financial Institutions		
a) Terms Loans		
b) Interest accrued and due	
4. Banks:			
a) Term Loans	
- Interest accrued and due	
b) Other Loans (Specify)	
- Interest accrued and due	
5. Other Institutions and Agencies		
6. Debentures and Bonds		
7. Others (Specify)			
TOTAL			
Note : Amounts due within one year			

Dr. Bhim Rao Ambedkar Institute Rotary Cancer Hospital
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31st March - 2017

(Amount in Rs.)		
	Current Year 2016-17	Previous Year 2015-16
<u>SCHEDULE 5 - UNSECURED LOANS AND BORROWINGS:</u>		
1. Central Government
2. State Government (Specify)
3. Financial Institutions
4. Banks:
a) Term Loans
b) Other Loans (Specify)
5. Other Institutions and Agencies
6. Debentures and Bonds
7. Fixed Deposits
8. Others (Specify)
Total		
Note : Amounts due within one year		

	Current Year 2016-17	Previous Year 2015-16
<u>SCHEDULE 6 - DEFERRED CREDIT LIABILITIES:</u>		
a) Acceptances secured by hypothecation of capital equipment and other assets
b) Others		
TOTAL
Note : Amounts due within one year		

Dr. Bhim Rao Ambedkar Institute Rotary Cancer Hospital
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31st March - 2017

<u>SCHEDULE 7 – CURRENT LIABILITIES AND PROVISIONS</u>		(Amount in Rs.)	
		Current Year 2016-17	Previous Year 2015-16
A. CURRENT LIABILITIES			
1. Acceptance			
2. Sundry Creditors:			
a) For Goods	.....		.....
b) Others			
3. Advances Received			.....
4. Interest accrued but not due on:			.....
a) Secured Loans/borrowings			
b) Unsecured Loans/borrowings			.....
5. Statutory Liabilities:			
a) Overdue			.....
b) Others			
Opening Balance : Payment towards Engg			
Less : Paid during the year		0	
Other current liabilities			
6. a) Bank Overdraft (as per Cash Book)			21,717,283
b) EMD/ Security Deposits			2,280,820
c) FDR Issued		2,332,820	-
TOTAL (A)		2,332,820	25,643,323
A. PROVISIONS			
1. For Taxation		.....	-
2. Gratuity		.....
3. Superannuation/Pension			
4. Accumulated Leave Encashment			
5. Trade Warranties/Claims			
Others (Specify)			-
TOTAL (B)			-
TOTAL (A+B)		2,332,820	25,643,323

Dr. Bhim Rao Ambedkar Institute Rotary Cancer Hospital
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31st March - 2017

(Amount in Rs.)

SCHEDULE 8 – FIXED ASSETS										
DESCRIPTION										
	GROSS BLOCK				DEPRECIATION			NET BLOCK		
	Cost/valuation as at beginning of the year	Additions during the year	Deductions during the year	Cost/valuation at the year-end	As at the beginning of the year	On Additions during the year	On Deductions during the year	Total up to the year-end	As at the Current year-end	As at the previous year-end
A. FIXED ASSETS:										
1. LAND:										
a) Freehold										
b) Leasehold										
2. BUILDINGS:										
a) On Freehold Land	339,060,768			339,060,768				-	339,060,768	339,060,768
b) On Leasehold Land										
c) Ownership Flats/Premises										
d) Superstructures on Land										
Not belonging to the entity										
3. PLANT MACHINERY & EQUIPMENT	1,624,825,875	109,417,982	21,201,628	1,713,042,229				-	1,713,042,229	1,624,825,875
4. VEHICLES	2,699,309	864,679		3,563,988				-	3,563,988	2,699,309
5. FURNITURE, DIXTURES	10,840,372	81,076		10,921,448				-	10,921,448	10,840,372
6. OFFICE EQUIPMENT										
7. COMPUTER/PERIPHERALS										
8. ELECTRIC INSTALLATIONS										
9. LIBRARY BOOKS										
10. TUBEWELLS & W.SUPPLY										
11. OTHER FIXED ASSETS										
TOTAL OF CAURRENT YEAR	1,977,426,324	110,363,737	21,201,628	2,066,588,433	-	-	-	-	2,066,588,433	1,977,426,324
PREVIOUS YEAR	1,781,127,146	217,729,131	21,429,953	1,977,426,324					1,977,426,324	1,677,208,740
B. CAPITAL WORK-IN-PROGRESS										
TOTAL										

(Note to be given as to cost of assets on hire purchase basis include above)

Dr. Bhim Rao Ambedkar Institute Rotary Cancer Hospital
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31st March - 2017

(Amount in Rs.)

<u>SCHEDULE 9 – INVESTMENTS FROM EARMARKED/ENDOWMENT FUNDS</u>		Current Year 2016-17	Previous Year 2015-16
1. In Government Securities		
2. Other approved Securities		
3. Shares		
4. Debentures and Bonds		
5. Subsidiaries and joint Ventures		
6. Others (to be specified)		
<u>TOTAL</u>		

<u>SCHEDULE 10 – INVESTMENTS - OTHERS</u>		Current Year 2016-17	Previous Year 2015-16
1. In Government Securities		
2. Other approved Securities		
3. Shares		
4. Debentures and Bonds		
5. Subsidiaries and joint Ventures		
6. Others (to be specified)		
<u>TOTAL</u>		

Dr. Bhim Rao Ambedkar Institute Rotary Cancer Hospital
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31st March - 2017

SCHEDULE 11 – CURRENT ASSETS, LOANS, ADVANCES ETC.		(Amount in Rs.)	
		Current Year 2016-17	Previous Year 2015-16
A. CURRENT ASSETS:			
1. Inventors:			
a) Stores and Spares		-	-
b) Loose Tools		-	-
c) Stock-in-trade		-	-
	Finished Goods	-	-
	Work-in-progress	-	-
	Raw Materials	-	-
2. Sundry Debtors:			
a) Debts Outstanding for a period exceeding six months		-	-
b) Others			61,659,736
3. Cash balance in hand (including cheques/drafts and imprest)			61,659,736
4. Bank Balances:			
a) With Scheduled banks:			
-On Current Accounts (IRCH)		49,128,941	-
-On Current Accounts (PATIENT TREATMENT A/C)		57,601,276	-
-On Current Accounts (POOR PATIENT A/C)		1,910,073	-
-On Current Accounts (HMCPE)		1,801,712	-
-On Deposit Accounts (includes margin Money)		36,000,000	26,000,000
-On Saving Accounts		-	-
b) With non-Scheduled Banks:			
-On Current Accounts		-	-
-On Deposit Accounts		-	-
-On Saving Accounts		-	-
5. Post Office Saving Accounts		146,442,002	26,000,000
TOTAL (A)		146,442,002	87,659,736

Dr. Bhim Rao Ambedkar Institute Rotary Cancer Hospital_
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31st March - 2017

SCHEDULE 11 – CURRENT ASSETS, LOANS, ADVANCES ETC. (Contd.)		(Amount in Rs.)	
		Current Year 2016-17	Previous Year 2015-16
B. LOANS, ADVANCES AND OTHER ASSETS			
1. Loans:			
a) Staff	425,143	547,265	547,265
b) Other Entities engaged in activities/objectives similar to that of the Entity	-	-	-
c) Other (Specify)	-	425,143	-
2. Advances and other amounts recoverable in cash or in kind or for value to be received:			
a) On Capital Account			
Machinery and Equipment			
Opening Balance	266,731,778		
Add: Addition during the year	23,261,539		
Less : Adjusted during the year	35,667,541	254,325,776	
Customer Duty/PDA Advance			
Opening Balance	57,976,932		324,708,710
Add: Addition during the year	433,291		
Less : Adjusted during the year	2,251,900	56,158,323	
b) NDMC		2,626,000	2,626,000
c) Others	-	-	-
3. Income Accrued:			
a) On Investments from Earmarked/Endowment Funds	-	-	-
b) On Investments – Others	-	-	-
c) On Loans and Advances	-	-	-
d) Others	-	-	-
(includes income due unrealized Rs....)			
4. Claims Receivable	-	-	-
<u>TOTAL (B)</u>		313,535,242	327,881,975
<u>TOTAL (A+B)</u>		459,977,244	415,541,711

Dr. Bhim Rao Ambedkar Institute Rotary Cancer Hospital
SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE PERIOD/YEAR ENDED 2016-17

(Amount in Rs.)

SCHEDULE 12 – INCOME FROM SALES/SERVICES		Current Year 2016-17	Previous Year 2015-16
1) Income from Sales			
a) Sale of Finished Goods			
b) Sale of Raw Material			
c) Sale of Scraps			
2) Income from Services			
a) Hospital Receipts		20,445,665	20,172,025
b) Professional/Consultancy Services			
c) Agency Commission and Brokerage			
d) Maintenance Services (Equipment/property)			
e) Others (Specify)			
TOTAL		20,445,665	20,172,025

SCHEDULE 13 – GRANTS/SUBSIDIES		Current Year 2016-17	Previous Year 2015-16
(Irrevocable Grants & Subsidies Received)			
1) Central Government (Through AIIMS Main)		1,083,434,000	918,650,000
2) State Government(s)			
3) Government Agencies			
4) Institutions/Welfare Bodies			
5) International Organizations			
6) Others (Specify)			
TOTAL		1,083,434,000	918,650,000

Dr. Bhim Rao Ambedkar Institute Rotary Cancer Hospital
SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE PERIOD/YEAR ENDED 2016-17

(Amount in Rs.)

<u>SCHEDULE 14 – FEES/SUBSCRIPTIONS</u>	Current Year 2016-17	Previous Year 2015-16
1) Entrance Fees		
2) Annual Fees/subscriptions		
3) Seminar/Program Fees		
4) Consultancy Fees		
5) Others (Specify)		
TOTAL		
Note – Accounting Policies towards each item are to be disclosed		

<u>SCHEDULE 15 – INCOME FROM INVESTMENTS</u>	Investment from Earmarked Fund			Investment - Others		
(Income on Invest. From Earmarked/Endowment Funds transferred to funds)	Current Year 2016-17	Previous Year 2015-16	Current Year 2016-17	Current Year 2016-17	Previous Year 2015-16	Previous Year 2015-16
1) Interest	....	....	....	....	....	....
a) On Govt. Securities	....	....	....	....	....	....
b) Other Bonds/Debentures	....	....	....	....	....	....
2) Dividends:	....	....	....	....	....	....
a) On Shares	....	....	....	....	....	....
b) On Mutual Fund Securities	....	....	....	....	....	....
3) Rents	....	....	....	....	....	....
4) Others (Specify)	....	....	....	....	....	....
TOTAL						
TRANSFERRED TO EARMARKED/ENDOWMENT FUNDS						

Dr. Bhim Rao Ambedkar Institute Rotary Cancer Hospital
SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE PERIOD/YEAR ENDED 2016-17

(Amount in Rs.)

<u>SCHEDULE 16 – INCOME FROM ROYALTY, PUBLICATIONS ETC.</u>	Current Year 2016-17	Previous Year 2015-16
1) Income from Royalty		
2) Income from Publications		
3) Others (Specify)		
<u>TOTAL</u>		

Dr. Bhim Rao Ambedkar Institute Rotary Cancer Hospital
SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE PERIOD/YEAR ENDED 2016-17

<u>SCHEDULE 17 – INTEREST EARNED</u>	Current Year 2016-17	Previous Year 2015-16
1) On Term Deposits:		
a) With Scheduled Banks	2,541,248	4,895,285
b) With Non-Scheduled Banks		
c) With Institutions		
d) Others		
2) On Savings Accounts:		
a) With Scheduled Banks		
b) With Non-Scheduled Banks		
c) Post Office Savings Accounts		
d) Others		
3) On Loans:		
a) Employees/Staff		
b) Others		
4) Interest on Debtors and Other Receivables		
<u>TOTAL</u>	2,541,248	4,895,285

Note – Tax deducted at source to be indicated

Dr. Bhim Rao Ambedkar Institute Rotary Cancer Hospital
SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE PERIOD/YEAR ENDED 2016-17

(Amount in Rs.)		
<u>SCHEDULE 18 – OTHER INCOME</u>	Current Year 2016-17	Previous Year 2015-16
1) Profit on sale/disposal of Assets:		
a) Owned assets		
b) Assets acquired out of grants, or received free of cost		
2) Export Incentives realized		
3) Fees for Miscellaneous Services		
4) Miscellaneous		
<u>TOTAL</u>	-	
<u>SCHEDULE 19 – INCREASE/(DECREASE) IN STOCK OF FINISHED GOODS & WORK IN PROGRESS</u>	Current Year 2016-17	Previous Year 2015-16
a) Closing Stock		
-Finished Goods		
-Work-in-progress		
b) Less: Opening Stock		
-Finished Goods		
-Work-in-progress		
NET INCREASE/(DECREASE) (a+b)		
<u>SCHEDULE 20 – ESTABLISHMENT EXPENSES</u>	Current Year 2016-17	Previous Year 2015-16
a) Salaries and Wages	628,344,406	522,831,744
b) Travelling Allowance	11,945,612	8,590,443
c) Contribution to Provident Fund		.....
d) Contribution to Other Fund (Specify)	.....	.....
e) Staff Welfare Expenses	.....	.....
f) Expenses on Employees Retirement and Terminal Benefits	...	.....
g) Others (specify) Adv.	.....	.....
<u>TOTAL</u>	640,290,018	531,422,187

Dr. Bhim Rao Ambedkar Institute Rotary Cancer Hospital
SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE PERIOD/YEAR ENDED 2016-17

SCHEDULE 21 – OTHER ADMINISTRATIVE EXPENSIVE ETC.		(Amount in Rs.)	
		Current Year 2016-17	Previous Year 2015-16
a) Purchase (Material and Supply)		281,626,245	268,475,538
b) Regents		20,344,643	20,270,641
c) Hiring of Manpower		42,366,401	25,950,300
d) Minor Works (Engineering)		10,091,231	11,195,260
e) Sanitation Expenses		16,868,592	10,364,681
f) Maintenance of Building		13,641,698	10,719,270
g) Repairs and maintenance (M&E)		7,106,750	5,562,972
h) CAMC		41,139,548	15,508,711
i) Rent, Rates and Taxes			
j) Vehicles Running and Maintenance			
k) Postage, Telephone and Communication Charges			
l) Printing and Stationary			
m) Travelling and Conveyance Expense			
n) Expense on Seminar/Workshops			
o) Subscription Expenses			
p) Expenses on Fees			
q) Auditors Remuneration			
r) Hospitality Expenses			
s) Professional charges			
t) Provision for Bad and Doubtful Debts/Advances			
u) Irrecoverable Balances Written-off			
v) Packing Charges		2,840,724	5,790,595
w) Others (specify) Contingency Bill			547,465
Clening and Forwarding for the Previous Year 2014-15		-	1,645,220
Engg. Work Misc. recovery to be remitted to AIIMS (MAIN)			
TOTAL		436,025,832	376,030,653

Dr. Bhim Rao Ambedkar Institute Rotary Cancer Hospital
SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE PERIOD/YEAR ENDED 2016-17

		(Amount in Rs.)	
		Current Year 2016-17	Previous Year 2015-16
<u>SCHEDULE 22 – EXPENDITURE ON GRANTS, SUBSIDIES ETC.</u>			
a)	Grants given to Institutions/Organisations		
b)	Subsidies given to Institutions/Organisations		
<u>TOTAL</u>			

Note – Name of the Entities, their Activities along with the amount of Grants/subsidies are to be disclosed.

		Current Year 2016-17	Previous Year 2015-16
<u>SCHEDULE 23 – INTEREST</u>			
a)	On Fixed Loans		
b)	On Other Loans (including bank Charges)		
c)	Others (specify)		
<u>TOTAL</u>			

FORM OF FINANCIAL STATEMENTS
ALL INDIA INSTITUTE OF MEDICAL SCIENCE
JAI PRAKASH NARAYAN APEX TRAUMA CENTRE

BALANCE SHEET as at 31st March, 2017

CORPUS / CAPITAL FUND AND LIABILITIES	Schedule	Current Year	Previous Year
CORPUS / CAPITAL FUND	1	2,856,911,795.00	2,817,852,700.00
RESERVE AND SURPLUS	2	153,308,315.00	127,230,198.00
EARMARKED / ENDOWMENT FUNDS			
SECURED LOANS AND BORROWINGS			
UNSECURED LOANS AND BORROWINGS			
DEFERRED CREDIT LIABILITIES			
CURRENT LIABILITIES AND PROVISIONS	3	30,659,297.00	26,594,895.00
Total Capital Fund and Liabilities		3,040,879,407.00	2,971,677,793.00
ASSETS			
FIXED ASSETS			
INVESTMENTS - FROM EARMARKED / ENDOWMENT FUNDS	4	2,822,157,928.00	2,749,722,781.00
INVESTMENTS - OTHERS			
CURRENT ASSETS, LOANS, ADVANCES ETC.	5	218,721,479.00	221,955,012.00
MISCELLANEOUS EXPENDITURE			
(to the extent not written off or adjusted)			
Total Assets		3,040,879,407.00	2,971,677,793.00

Accounts officer
JPNATC

Chief, (TC)

FORM OF FINANCIAL STATEMENTS
ALL INDIA INSTITUTE OF MEDICAL SCIENCE
JAI PRAKASH NARAYAN APEX TRAUMA CENTRE

INCOME AND EXPENDITURE ACCOUNT
FOR THE YEAR ENDED ON 31st MARCH, 2017

INCOME	SCHEDULE	Current Year	Previous Year
Income from Services	6	10,603,220.00	13,006,046.00
Grants/Subsidies	7	1,404,453,914.00	1,292,206,015.00
Fees/Subscriptions	8	305,996.00	100,368.00
Income from Investments (Income on Investment from earmarked/endow. Funds)			
Income from Royalty, Publication			
Interest Earned	9	15,562,341.00	13,560,528.00
Other Income	10		
Total (A)		1,430,925,471.00	1,318,872,957.00
EXPENDITURE			
Establishment Expenses	11	829,487,983.00	701,625,233.00
Other Administrative Expenses	12	575,359,256.00	590,153,438.00
Expenditure on Grants, Subsidies			
Bank Charges	13	115.00	26,865.00
Depreciation			
Total (B)		1,404,847,354.00	1,291,805,536.00
Balance being excess of Income over Expenditure (A-B)			
Transfer to Special Reserve (Specify Each)		26,078,117.00	27,067,421.00
Transfer to General Reserve			
Balance Being Surplus/ Deficit carried to Corpus Fund		26,078,117.00	27,067,421.00

Accounts officer
JPNATC

Chief, (TC)

FORM OF FINANCIAL STATEMENTS

**ALL INDIA INSTITUTE OF MEDICAL SCIENCE
JAI PRAKASH NARAYAN APEX TRAUMA CENTRE**

**RECEIPTS AND PAYMENT ACCOUNT
FOR THE YEAR ENDED ON 31st MARCH, 2017**

RECEIPTS	CURRENT YEAR	PREVIOUS YEAR	PAYMENTS	CURRENT YEAR	PREVIOUS YEAR
I. Opening Balance			I. Expenses		
a) Cash in hand			a) Establishment Expenses	829,487,983.00	701,625,233.00
b) Bank Balances			b) Administrative Expenses	446,042,313.00	449,248,089.00
(i) In current accounts	122,626,639.93	94,126,364.00			
(ii) In deposit accounts			II. Payments made against Funds for various Projects		
(iii) Savings accounts			a) AITSC	3,555,724.00	5,095,106.00
II. Grants Received			b) RIA Lab	5,025.00	2,825.00
a) From Government of India (AIIMS)	1,524,466,000.00	1,455,650,000.00	c) ATLS	1,580,068.00	-
b) From State Government			d) INCPT		
c) From other sources			III. Investments and Deposits made		
Dr. Karan Singh (MP LED Fund)	-	8,395,972.00	a) Out of Earmarked/ Endowment funds		
III. Income on Investments from			b) Out of Own Funds		
a) Earmarked/Endow. Funds			IV. Expenditure on Fixed Assets & Capital Work-in-Progress		
b) Own Funds			a) Purchase of Fixed Assets	73,676,936.00	80,958,686.00
IV. Interest Received			b) Expenditure on Capital Work-in-Progress		
a) On Bank Deposits	15,562,341.00	13,560,528.00	V. Refund of Grant Received		
b) Loans, Advances etc.			a) To the Government of India (AIIMS)	46,335,150.00	82,485,299.00
V. Other Income			i) GIA-General	Rs. 45012086	
a) Hospital Receipts	6,600,485.00	9,681,068.00	ii) Capital Assets New	Rs. 1323064	
b) Misc. Receipts	4,439,731.00	3,425,346.00	VI. Finance Charges	115.00	978.00
c) Cancelled Cheque	1,087,349.00		VII. Other Payments		
VI. Amount Borrowed			a) Engg. Maintanances	113,900,493.00	130,555,944.00
Earnest Money Deposit	5,437,000.00	7,116,000.00	b) Minor Works.	15,044,993.00	10,375,292.00
VII. Any other receipts			c) IGL Advances	-	30,000.00
a) Imprest	-	85,000.00	d) Festival Advance Paid	234,000.00	315,000.00
b) AITSC	10,290,938.00	3,769,198.00	e) M&S Advance Adjusted	-	371,457.00
c) ATLS	520,000.00	-	f) Earnest Money Deposit	6,435,000.00	4,147,000.00
d) Patient Receipts	2,172,960.00	2,262,500.00	g) Ambulance (Dr. Karan Singh MP LED Fund)	-	8,395,972.00
e) RIA Lab	40,700.00	8,800.00	h) Patient Treatment	1,694,465.00	1,974,506.00
f) Festival Advance	248,850.00	200,250.00	i) Advances paid as Custom Duty	-	-
g) Computer Advance	7,000.00	12,000.00	j) Director AIIMS (Engg. Amount)	2,345,263.00	-
i) Other Misc.			i) Other Misc.		
VIII. Closing Balances			VIII. Closing Balances		
			a) Cash in hand	-	85,000.00
			b) Bank Balances		

				i) In Current accounts		153,162,465.93	122,626,639.00
				ii) In Deposit accounts			
				iii) Savings accounts			
			1,693,499,993.93		1,598,293,026.00	1,693,499,993.93	1,598,293,026.00

Accounts officer
JPNATC

Chief, (TC)

FORM OF FINANCIAL STATEMENTS
ALL INDIA INSTITUTE OF MEDICAL SCIENCE
JAI PRAKASH NARAYAN APEX TRAUMA CENTRE

Schedule 1 - CORPUS/ CAPITAL FUND	CURRENT YEAR	PREVIOUS YEAR
Balance as at the beginning of the year	2,817,852,700.00	2,736,479,662.00
Add : Contribution towards Corpus/Capital Fund	73,676,936.00	80,958,686.00
Add/ (Deduct) : Capital Assets Condemned/ taken rest of service	34,617,841.00	(7,981,620.00)
Add : MP LED Fund		8,395,972.00
Balance as at the Year End	2,856,911,795.00	2,817,852,700.00

FORM OF FINANCIAL STATEMENTS
ALL INDIA INSTITUTE OF MEDICAL SCIENCE
JAI PRAKASH NARAYAN APEX TRAUMA CENTRE

Schedule 2 - Reserve and Surplus	CURRENT YEAR		PREVIOUS YEAR	
1. Capital Reserve :				
As per last Account				
Addition during the year				
Less : Deduction During the year				
2. Revaluation Reserve :				
As per last Account				
Addition during the year				
Less : Deduction During the year				
3. Special Reserves :				
As per last Account				
Addition during the year				
Less : Deduction During the year				
4. General Reserve :				
As per last Account	127,230,198.00		102,508,040.00	
Add:- Excess of income over Expenditure	26,078,117.00		24,722,158.00	
Less : Deduction During the year				
Balance as at the Year End		153,308,315.00		127,230,198.00

FORM OF FINANCIAL STATEMENTS

**ALL INDIA INSTITUTE OF MEDICAL SCIENCE
JAI PRAKASH NARAYAN APEX TRAUMA CENTRE**

Schedule -3 Liabilities and Provisions		Current Year		Previous Year	
Current Liabilities					
1. Acceptances					
2. Sundry Creditors:					
a) For Goods					
b) Others					
i) Earnest Money Deposit					
Opening	10,708,968.00			7,739,968.00	
Add- Received During the Year	5,437,000.00			7,116,000.00	
Less- Refund During the Year	6,435,000.00			4,147,000.00	
			9,710,968.00		10,708,968.00
3. Advances Received					
4. Interest Accrued but not due on :					
a) Secured Loans / Borrowings					
b) Unsecured Loans/ Borrowings					
5. Statutory Liabilities :					
a) Overdue					
b) Others					
i) Patient ATLS					
Opening	11,043,930.00			10,755,936.00	
Add - Received During the Year	2,172,960.00			2,262,500.00	
Less- Refund During the Year	1,694,465.00			1,974,506.00	
			11,522,425.00		11,043,930.00

ii) AITSC					
Opening		800,952.00			2,126,860.00
Add - Received During the Year		10,290,938.00			3,769,198.00
Less- Refund During the Year		3,555,724.00			5,095,106.00
			7,536,166.00		800,952.00
iii) RIA Lab					
Opening		5,975.00			
Add - Received During the Year		40,700.00			8,800.00
Less- Refund During the Year		5,025.00			2,825.00
			41,650.00		5,975.00
iv) ATLS					
Opening		1,689,807.00			
Add - Received During the Year		520,000.00			
Less- Refund During the Year		1,580,068.00			
			629,739.00		1,689,807.00
v) Misc. Recoveries (Engg.) remitted to AIIMS (Main)					
Opening		2,345,263.00			
Add-During the year					
Less- Paid during the year		2,345,263.00	-		2,345,263.00
Canal Cheque during the year			1087349		
Performance Bank Guarantee			131000		
Provisions					
1. Taxations					
2. Gratuity					
3. Superannuation / Pension					
4. Accumulated Leave Encashment					
5. Trade Warranties/ Claims					
6. Others					
Balance as at the Year End			30,659,297.00		26,594,895.00

FORM OF FINANCIAL STATEMENTS

**ALL INDIA INSTITUTE OF MEDICAL SCIENCE
JAI PRAKASH NARAYAN APEX TRAUMA CENTRE**

Schedule-4 Fixed Assets:	Annexure from	Gross Block			Depreciation			Net Block			
		Valuation as at beginning of the year	Additions during the year	Deduction during the year	Valuation at the year end	As at the beginning of the year	On Additions during the year	On deduction during the year	Total up to the year end	Current year end	Previous year end
1. Land											
a) Freehold		54,310,794.00	-	-	54,310,794.00	-			-	54,310,794.00	54,310,794.00
b) Leasehold											
2. Building:		689,076,549.00	-	-	689,076,549.00					689,076,549.00	689,076,549.00
3. Plant Machinery & Equipment		1,986,570,350.00	105,902,606.00	34,617,841.00	2,057,855,115.00	-			-	2,057,855,115.00	1,986,570,350.00
4. Vehicles		8,395,972.00			8,395,972.00	-				8,395,972.00	8,395,972.00
5. Furniture & Fixtures		11,369,116.00	1,150,382.00	-	12,519,498.00	-				12,519,498.00	11,369,116.00
6. Office Equipment					-					-	-
7. Computer Peripherals					-					-	-
8. Electric Installations					-					-	-
9. Other Fixed Assets					-					-	-
Total of Current Year		2,749,722,781.00	107,052,988.00	34,617,841.00	2,822,157,928.00	-	-	-	-	2,822,157,928.00	2,749,722,781.00
Total of Previous Year											

Notes:-

Plant, Machinery & Equipment:-	
Purchased during the year	38,020,121.00
Purchased against L. C. Margin	49,658,652.00
Custom Duty on Import of Machinery	17,636,018.00
PDA on M&E	587,815.00
Total M&E purchased	105,902,606.00

Accounts Officer

FORM OF FINANCIAL STATEMENTS

**ALL INDIA INSTITUTE OF MEDICAL SCIENCE
JAI PRAKASH NARAYAN APEX TRAUMA CENTRE**

Schedule 5 Current Assets, Loans, Advances		Current Year		Previous Year	
1. Cash in hand (including cheques/drafts and imprest)					
2. Bank Balances:					
a) Current Account			153,162,465.00		122,626,639.00
b) Deposit Account (Fixed Deposit)					
3. Loans:					
a) To Employees of Entity					
i) Festival Advances					
Opening Balance	174,000.00			59,250.00	
Add- Paid during the year	234,000.00			315,000.00	
Less- Amount recovered during the year	248,850.00			200,250.00	
Closing Advance		159,150.00			174,000.00
ii) Computer Advances					
Opening Balance	7,000.00			19,000.00	
Add- Paid during the year	-			-	
Less- Amount recovered during the year	7,000.00			12,000.00	
Closing Advance		-			7,000.00
b) To Others					
4. Advances against M&E					
Opening Advance Payment to Foreign Purchase	20,576,801.00			84,410,332.00	
Add- L.C. Advance during the year	34,506,433.00			20,576,801.00	
Less- Adjusted Advance Payment to Foreign Purchase	49,658,652.00			84,410,332.00	
Advance against M&E at the year end		5,424,582.00			20,576,801.00
5.M&S Foreign Purchase					
Opening Advance Payment to Foreign Purchase	371,457.00			-	
Add - During the year	-			-	
Less- Adjusted Advance Payment to Foreign Purchase	371,457.00			371,457.00	
Advance against M&S at the year end		-			371,457.00

6. Custom Duty Advance								
Opening Advance					54,620,915.00			
Add-During the year					-			
Less- Adjusted Advance during the year					-			
Custom Duty Advance at the year end					17,636,018.00	36,984,897.00		54,620,915.00
7. PDA Advance								
Opening Advance					8,594,520.00			
Add-During the year					-			
Less- Adjusted Advance during the year					587,815.00			
PDA Advance at the year end						8,006,705.00		8,594,520.00
8. Advances and Other amounts recoverable:								
a) From Employees of Entity								
b) From Others								
M/S HSCC						6,500,000.00		6,500,000.00
NDMC						5,979,000.00		5,979,000.00
IGL						1,304,680.00		1,304,680.00
TRIGEN						1,170,000.00		1,170,000.00
IGL						30,000.00		30,000.00
9. Others								
Balance as at the Year End						218,721,479.00		221,955,012.00

Accounts Officer

FORM OF FINANCIAL STATEMENTS
ALL INDIA INSTITUTE OF MEDICAL SCIENCE
JAI PRAKASH NARAYAN APEX TRAUMA CENTRE

Schedule 6 - Income from Services	Current Year	Previous Year
a) Hospital Receipts	6,600,485.00	9,681,068.00
b) Others	4,002,735.00	3,324,978.00
Total	10,603,220.00	13,006,046.00

Accounts Officer

FORM OF FINANCIAL STATEMENTS
ALL INDIA INSTITUTE OF MEDICAL SCIENCE
JAI PRAKASH NARAYAN APEX TRAUMA CENTRE

Schedule 7 - Grants and Subsidies	Current Year	Previous Year
a) From Central Government (Through AIIMS Main)	1,404,453,914.00	1,292,206,015.00
i) GIA- Salary Rs. 829466000		
ii) GIA- Genaral Rs. 574987914		
Total	1,404,453,914.00	1,292,206,015.00

FORM OF FINANCIAL STATEMENTS
ALL INDIA INSTITUTE OF MEDICAL SCIENCE
JAI PRAKASH NARAYAN APEX TRAUMA CENTRE

Schedule 8 - Fees / Subscriptions	Current Year	Previous Year
a) Duplicate ID Card Fees	1,950.00	1,040.00
b) Right to Information Fees	4,046.00	1,828.00
c) Entrance Fees		
d) Annual Fees / Subscriptions		
e) Seminar / Program Fees	300,000.00	97,500.00
f) Consultancy Fees		
g) Others		
Total	305,996.00	100,368.00

FORM OF FINANCIAL STATEMENTS
ALL INDIA INSTITUTE OF MEDICAL SCIENCE
JAI PRAKASH NARAYAN APEX TRAUMA CENTRE

Schedule 9 - Interest Earned	Current Year	Previous Year
1. On term Deposits:		
a) on Fixed Deposit Account	15,562,341.00	13,560,528.00
b) Others		
Total	15,562,341.00	13,560,528.00

FORM OF FINANCIAL STATEMENTS
ALL INDIA INSTITUTE OF MEDICAL SCIENCE
JAI PRAKASH NARAYAN APEX TRAUMA CENTRE

Schedule 11 - Establishment Expenses	Current Year	Previous Year
a) Salaries and Wages		
Arrear Pay 101-02-001	13,211,931.00	8,807,954.00
Basic Pay 101-02-002	278,350,640.00	222,680,512.00
Dearness Pay 101-02-003	2,413,863.00	1,931,090.00
Deputation Pay 101-02-004		
Personal Pay 101-02-005	235,631.00	214,210.00
Special Pay 101-02-006	465,605.00	423,277.00
b) Allowances and Bonus		
Annual Allowance 101-04-002	4,861,890.00	4,419,900.00
Bonus 101-04-003	2,065,920.00	1,878,109.00
Conveyance Allowance 101-04-005	37,887,561.00	34,443,237.00
Dearness Allowance 101-04-007	326,596,531.00	261,277,225.00
Dearness Allowance - Arrears 101-04-008	6,294,174.00	6,235,339.00
Handicapped Allowance 101-04-011	79,182.00	71,984.00
Hospital Patient Care Allowance 101-04-014	3,340,011.00	3,036,374.00
House Rent Allowance 101-04-015	60,548,858.00	54,998,393.00
Learning Resource Allowance 101-04-017	2,960,244.00	2,691,131.00
Leave Encashment 101-04-018	978,230.00	889,300.00
Leave Travel Concession(LTC) 101-04-019	14,739,018.00	5,115,870.00
Medical Reimbursement 101-04-020	276,051.00	250,956.00
Non Practicing Allowance 101-04-021	17,809,267.00	16,190,243.00
Nursing Allowance 101-04-022	29,024,985.00	26,339,766.00
Overtime Allowance 101-04-023	36,732.00	33,393.00
Transport Allowance 101-04-026	10,136,426.00	9,214,933.00
Travelling Allowance 101-04-027	2,593,929.00	2,409,205.00
Tuition Fee Allowance 101-04-028	6,155,282.00	5,595,712.00
Uniform Allowance 101-04-029	4,514,432.00	4,104,029.00
Washing Allowance 101-04-030	3,103,918.00	2,821,744.00
Telephone Bill Reimbursed to Employees 103-12-003	708,672.00	644,247.00
Book Allowance 103-14-001	99,000.00	201,000.00
Miscellaneous Allowance		24,706,100.00
Gross Salary	829,487,983.00	701,625,233.00

FORM OF FINANCIAL STATEMENTS
ALL INDIA INSTITUTE OF MEDICAL SCIENCE
JAI PRAKASH NARAYAN APEX TRAUMA CENTRE

Schedule 12- Other Administrative Expenses Etc.		Current Year	Previous Year
Material & Supplies		328,840,937.00	
General Stores 102-01-002	8,001,311.00		4,777,734.00
Linen & Stationery Stores 102-01-003	8,449,804.00		7,119,765.00
Medicine Stores 102-01-004	97,416,339.00		117,855,105.00
M & S Consumable Other (Specify) 102-01-006	89,085,078.00		87,968,944.00
Surgical Stores 102-01-005	125,888,405.00		135,924,116.00
Outsourced		89,513,766.00	
Security Services Charges 103-27-019	32,053,822.00		57,214,439.00
Sanitation 103-27-013	41,401,323.00		22,198,656.00
Others Services	16,058,621.00		698,821.00
Central Trauma Services 303-01-002		706,166.00	
Delegation Fees 103-14-002		1,574,535.00	1,362,298.00
Fee for Legal Consultancy 103-14-004		253,950.00	44,424.00
Honorarium 103-14-005		69,000.00	108,000.00
Miscellaneous Expenditure Other 406-01-003		6,849,406.00	9,164,793.00
New Paper Bill Subscription Expenses 103-27-014		2,868.00	23,745.00
Post., Tele., and Comm. Charges- Other 103-12-005		77,622.00	75,487.00
Telephone Expenses 103-12-004		2,025,563.00	2,035,218.00
Vehicle Run. & Maint. - Hospital 103-26-001		577,633.00	421,700.00
Petrol, Oil and Lubricants 103-27-016		20,178,871.00	21,182,186.00
Water Charges 103-04-001		13,793,242.00	13,336,241.00
Electricity and Power Expenses 103-02-001		59,597,423.00	64,157,336.00
Rep. & Maint. - Others (Specify) 103-21-008		51,298,274.00	44,484,430.00
Total		575,359,256.00	590,153,438.00

FORM OF FINANCIAL STATEMENTS
ALL INDIA INSTITUTE OF MEDICAL SCIENCE
JAI PRAKASH NARAYAN APEX TRAUMA CENTRE

Schedule 13- Bank Charges	Current Year	Previous Year
RTGS Charges	115	26865
Total	115	26865

**All India Institute of Medical Science
Ansari Nagar, New Delhi-29**

**Balance Sheet
as on 31st March, 2017**

Capital Fund and Liabilities	Schedule	AMOUNT
Corpus Capital	1	
Reserve & Surplus	2	702,018.67
Non Current Liabilities	3	
Current Liabilities	4	30,000.00
Total		732,018.67
Assets		
Non Current Assets	5	
Current Assets	6	732018.67
Total		732018.67

ACCOUNTS OFFICER

Financial Advisor

All India Institute of Medical Science
Ansari Nagar, New Delhi-29

INCOME AND EXPENDITURE ACCOUNT
as on 31st March, 2017

RECEIPTS	AMOUNT	PAYMENTS	AMOUNT
To Adopt A Patient Expenditure	243,750.00	By Receipts	872,979.00
		By Unknown Patient Receipts	72,789.67
To Excess of Income over Expenditure	702,018.67		
	945,768.67		945,768.67

ACCOUNTS OFFICER

Financial Advisor

Schedule -1

Nil

Schedule - 2 Reserve & Surplus		
Excess of Expenditure over Income		702,018.67

Schedule -3

Nil

Schedule - 4 Current Liabilities		
Cancel Cheque of Pt.Nisha Kumari		30,000.00

Schedule -5

Nil

Schedule - 6 Current Assets		
Bank Balance		732,018.67

ACCOUNTS OFFICER

All India Institute of Medical Science
Ansari Nagar, New Delhi-29

Receipt and Payment Account
as on 31st March, 2017

RECEIPTS	AMOUNT	PAYMENTS	AMOUNT
To Opening Balance		By Patient Expenditure	213,750.00
To Receipts	872,979.00		
By Unknown Patient Recei	72,789.67	By Closing Balance	732018.67
	945,768.67		945,768.67

Account Officer

Financial Advisor

FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)
Name of Entity CENTRE FOR DENTAL EDUCATION & RESEARCH
BALANCE SHEET AS AT 31-03-2017

		(Amount-Rs.)	
		Current Year	Pervious Year
CORPUS/CAPITAL FUND AND LIABILITIES	Schedule		
CORPUS/CAPITAL FUND	1	582,439,092	552,439,092
RESERVES AND SURPLUS	2	22,225,853	22,065,526
EARMARKED/ ENDOWMENT FUNDS	3	3,543,996	7,701,697
SECURED LOANS AND BORROWINGS	4	-	-
UNSECURED LOANS AND BORROWINGS	5	-	-
DEFERRED CREDIT LIABILITIES	6	-	-
CURRENT LIABILITIES AND PROVISIONS	7	13,333,656	10,564,484
TOTAL		621,542,597	592,770,799
ASSETS			
FIXED ASSETS	8	571,464,075	550,190,445
INVESTMENTS-FROM EARMARKED/ENDOWMENT FUNDS	9	-	-
INVESTMENTS-OTHERS	10	-	-
CURRENT ASSETS, LOANS , ADVANCES ETC.	11	50,078,522	42,580,354
MISCELLANEOUS EXPENDITURE (to the extent not written off or adjusted)			
TOTAL		621,542,597	592,770,799
SIGIFICANT ACCOUNTING POLICIES	24		
CONTINGENT LIABILITIES AND NOTES ON ACCOUNTS	25		

(Accounts Officer)
CDER

FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)

Name of Entity CENTRE FOR DENTAL EDUCATION & RESEARCH

INCOME AND EXPENDITURE ACCOUNT FOR THE PERIOD/YEAR ENDED 31-03-2017

INCOME	Schedule	Current Year	Previous Year
Hospital Receipts	12	2209290	2,007,610
Grants/Subsidies	13	125500000	93,474,000
Fees/Subscriptions	14	0	-
Income from Investments (Income on Invest. From earneked/endow. Funds transferred to funds)	15	0	-
Income for Royalty, Publication etc.	16	0	-
Interest Earned	17	1468647	1,682,066
Other Income	18	501468	40,815
Increase/(decrease) in stock of Finished goods and works-in-progress	19	0	-
TOTAL (A)		129679405	97,204,491
EXPENDITURE			
Establishment Expenses	20	40454671	28,473,723
Other Administrative Expenses etc.	21	89061735	66,515,848
Expenditure on Grants, Subsidies etc.	22	0	-
Interest	23	2672	4,318
Depreciation (Net Total at the year-end - corresponding to Schedule 8)			
TOTAL (B)		129519078	94,993,889
Balance being excess of Income over Expenditure (A-B)			
Transfer to Special Reserve (Specify each)		160327	2,210,602
Transfer to /from General Reserve			
BALANCE BEING SURPLUS/(DEFICIT) CARRIED TO CORPUS/ CAPITAL FUND			
SIGNIFICANT ACCOUNTING POLICIES	24		
CONTINGENT LIABILITIES AND NOTES ON ACCOUNTS	25		

(Accounts Officer)
CDER

CENTRE FOR DENTAL EDUCATION & RESEARCH
ALL INDIA INSTITUTE OF MEDICAL SCIENCES, NEW DELHI
RECEIPTS AND PAYMENTS FOR THE PERIOD/YEAR ENDED 31.03.2017

RECEIPTS	2016-17	2015-16	PAYMENTS	2016-17	2015-16
<u>I. Opening Balance</u>			<u>I. Expenses</u>		
a) Cash in Hand	5000	5000	a) Establishment Expenses (Schedule 20)	40454671	28473723
b) Bank Balances			b) Administrative Expenses (Schedule 21A)	89061735	66515848
i) In current accounts	36741383	25130322			
ii) In deposit accounts					
iii) saving accounts					
<u>II. Grants Received</u>			<u>II. Payment made against funds for various projects</u>		
a) From Government of India (Through AIIMS Main)					
PLAN			<u>III. Investments and deposits made</u>		
i) Revenue (Grant in Aid General)	85000000	65000000	a) out of Earmarked/Endow. Funds		
ii) Capital	30000000	12642638	Project NOHP	4753312	2639569
NON PLAN			Project WHO		927612
i) Revenue (Grant in Aid Salary)	40500000	28474000	b) out of Own Funds(Oth. Investment)		
ii) Capital					
Over Sight Committee			<u>IV. Expenditure on Fixed Assets & Capital Work-in-Progress</u>		
i) Revenue			a) Purchase of Fixed Assets	21273630	12344873
ii) Capital			b) Expenditure on Capital Work-in-Progress		
NDDTC			c) Letter of Credit	7750238	0
i) Revenue			<u>V. Refund of Surplus money/loans</u>		
ii) Capital			a) To the Government of India		
b) From State Government			b) To the State Government		
c) From other sources			c) To other providers of funds		
Grants received for specific purpose					
Grants received for patient treatment			<u>VI. Finance Charges (Interest)</u>	2672	4318
Grants received for poor patient treatment					
<u>III. Income on Investments from</u>			<u>VII. Other Payments</u>		
a) Earmarked/Endow. Funds					
Project NOHP	595611	10341266	EMD Refund	1171890	2054985
Project WHO	0	927612			
b) Own Funds(Oth. Investment)			Material & Supply		
			Office Expenses		
			Payment to AIIMS Main for Engg outstanding last year	1847482	0
<u>IV. Interst Received</u>					
a) On Bank deposits	1468647	1682066	<u>VIII. Closing Balances</u>		
b) Loans, Advances etc.			a) Cash in Hand	5000	5000
<u>V. Other Income</u>			b) Bank Balances		

Hospital Receipt	2209290	2007610	i) In current accounts	36489313	36741383
Miscellaneous Receipt (Tender fee etc.)	501468	40815	ii) In deposit accounts		
			iii) saving accounts		
<u>VI. Amount Borrowed</u>					
<u>VII. Any other receipts</u>					
Employee Recovery	11016856	6691607	Employee Recovery	11016856	6691607
Outside Recovery	561346	576466	Outside Recovery	561346	576466
Engg. Recovery	3347544	1847482			
EMD	2441000	1608500			
TDR					
TOTAL	214388145	156975384		214388145	156975384

Accounts Officer
(CDER)

FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)
Name of Entity CENTRE FOR DENTAL EDUCATION & RESEARCH
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2017

(Amount-Rs.)

<u>SCHEDULE 1- CORPUS/CAPITAL FUND:</u>	Current Year		Previous Year	
Balances as at the beginning of the year		552,439,092		552,439,092
Add : Contributions towards Corpus/Capital Fund		30,000,000		
Less : Fixed Assets Condemned during the year				
<u>BALANCE AS AT THE YEAR-END</u>		582,439,092		552,439,092

<u>SCHEDULE 2- RESERVES AND SURPLUS:</u>	Current Year		Pervious Year	
1. Capital Reserve:				
As per last Account				
Addition during the year				
Less: Deductions during the year				
2. Revaluation Reserve				
As per last Account				
Addition during the year				
Less: Deductions during the year				
3. Special Reserves				
As per last Account				
Addition during the year				
Less: Deductions during the year				
4. General Reserve				
As per last Account		22065526		22065526
Addition during the year		160327		
Less: Deductions during the year		22,225,853		
<u>TOTAL</u>		22,225,853		22065526

FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)
Name of Entity **CENTRE FOR DENTAL EDUCATION & RESEARCH**
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2017

(Amount-Rs.)						
SCHEDULE 3 - EARMARKED/ENDOWMENT FUNDS	FUND-WISE BREAK UP			TOTALS		
	NOHP	Fund XX	Fund YY	Fund ZZ	Current Year	Previous Year
a) Opening balance of the funds	7,701,697				7,701,697	
b) Additions to the Funds:						
i. Donations/grants	595,611				-	10341266
ii. Income from investments made on account of funds					595,611	
iii. Other additions (specify nature)					-	
TOTAL (a+b)	8,297,308				8,297,308	10341266
c) Utilisation/Expenditure towards objectives of funds						
i. <u>Capital Expenditure</u>						
- Fixed Assets					-	
- Others					-	
ii. <u>Revenue Expenditure</u>						
- Salaries, Wages and allowances etc.					-	
- Rent					-	
- Other Administrative expenses					-	
<u>Total</u>	4,753,312				4,753,312	2639569
TOTAL (c)	4,753,312				4,753,312	2,639,569
NET BALANCE AS AT THE YEAR-END (a+b-c)	3,543,996				3,543,996	7,701,697
Notes 1) Disclosures shall be made under relevant heads based on conditions attaching to the grants. 2) Plan Funds received from the Central/State Governments are to be shown as separate Funds and not to be mixed up with any other Funds.						

FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)
Name of Entity CENTRE FOR DENTAL EDUCATION & RESEARCH
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2017

		(Amount -Rs.)	
		Current Year	Previous Year
SCHEDULE 7 - CURRENT LIABILITIES AND PROVISIONS			
A. CURRENT LIABILITIES AND PROVISIONS			
1. Acceptances			
2. Sundry Creditors:			
a) For Goods			
a) Others			
3. Advances Received			
4. Interest accrued but not due on:			
a) Secured Loans/borrowings			
a) Unsecured Loans/borrowings			
5. Statutory Liabilities:			
a) Overdue			
a) Others			
6. Other current Liabilities (Amount to be reimbursed to AIIMS Main)			
Less: Paid during the year	1,847,482		
Addition : Created during the year	1,847,482		
7. Security Deposits (Opening Balance)	3,347,544	3,347,544	1,847,482
Add: Received during the year	8717002		
Less: Refunded during the year	2441000		
	1171890	9,986,112	8,717,002
TOTAL (A)		13,333,656	10,564,484
B. PROVISIONS			
1. For Taxation			
2. Gratuity			
3. Superannuation/Pension			
6. Accumulated Leave Encashment			
6. Trade Warranties/Claims			
6. Others (specify)			
TOTAL (B)		-	0
TOTAL (A+B)		13,333,656	10,564,484

FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)
Name of Entity CENTRE FOR DENTAL EDUCATION & RESEARCH
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2017

(Amount - Rs.)

SCHEDULE 8-FIXED ASSETS		GROSS BLOCK				DEPRECIATION				NET BLOCK	
DISCRIPTION		Cost/valuation As at beginning of the year	Additions during the year	Deductions during the year	Cost/ Valuation at the year end	As at the beginning of the year	On additions during the year	On Deductions during the year	Total up to the year-end	As at the Current year-end	As at the Previous year-end
A. <u>FIXED ASSETS:</u>											
1	LAND:										
	a) Freehold										
	b) Leasehold										
2	BUILDINGS:										
	a) On Freehold Land	308,762,005	-		308,762,005					308,762,005	308,762,005
	b) On Leasehold Land										
	c) Ownership Flats/ Premises										
	d) Superstructures on Land not belonging to the entity										
	PLANT MACHINERY & EQUIPMENT	241,428,440	21,273,630		262,702,070					262,702,070	241,428,440
3	EQUIPMENT										
4	VEHICLES										
5	FURNITURE, FIXTURES										
6	OFFICE EQUIPMENT										
7	COMPUTER/PERIPHERALS										
8	ELECTRIC INSTALLATIONS										
9	LIBRARY BOOKS										
10	TUBEWELLS & W. SUPPLY										
11	OTHER FIXED ASSETS										
TOTAL OF CURRENT YEAR		550,190,445	21,273,630	-	571,464,075	-	-	-	-	571,464,075	550,190,445
PREVIOUS YEAR											
B. <u>CAPITAL WORK-IN-PROGRESS</u>											
TOTAL		550,190,445	21,273,630		571,464,075					571,464,075	550,190,445

(Note to be given as to cost of assets on hire purchase basis included above)

FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)

Name of Entity **CENTRE FOR DENTAL EDUCATION & RESEARCH**

SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2017

		(Amount - Rs.)	
		<u>Current Year</u>	<u>Previous Year</u>
<u>SCHEDULE II - CURRENT ASSETS, LOANS, ADVANCES ETC.</u>			
A <u>CURRENT ASSETS:</u>			
1. <u>Inventories:</u>			
a) Stores and Spares			
b) Loose Tools			
c) Stock-in-trade			
Finished Goods			
Work-in-progress			
Raw Material			
2. <u>Sundry Debtors:</u>			
a) Debts Outstanding for a period exceeding six months			
b) Others			
3. <u>Cash balances in hand (including cheques/ drafts and imprest)</u>			
5,000.00			
4. <u>Bank Balances:</u>			
a) <u>With Scheduled Banks:</u>			
On Current Accounts			
On Deposit Accounts (includes margin money)			
On Savings Accounts			
b) <u>With non-Scheduled Banks:</u>			
On Current Accounts			
On Deposit Accounts			
On Savings Accounts			
5. <u>Post Office - Savings Accounts</u>			
36489313			
5,000.00			
36741383			
TOTAL (A)		36494313	36746383

FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)
ALL INDIA INSTITUTE OF MEDICAL SCIENCES
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2017

		(Amount - Rs.)	
		Current Year	Previous Year
SCHEDULE II - CURRENT ASSETS, LOANS, ADVANCES ETC. (Contd.)			
B	LOANS, ADVANCES AND OTHER ASSETS		
	1. <u>Loans:</u>		
	a) Staff		
	b) Other Entities engaged in activities/objectives similar to that of Entity		
	c) Other (specify) Advance to Iron & steel and Hindustan steel		
	2. <u>Advances and other amounts recoverable in cash or in kind or for value to be received:</u>		
	a) On Capital Account	7750238	0
	b) Prepayments		
	c) Others		
	3. <u>Income Accrued:</u>		
	a) On Investments from Earmarked / Endowment Funds		
	b) On Investments - Others		
	c) On Loans and Advances		
	d) Others		
	(includes income due unrealised - Rs.....)		
	4. <u>Claims Receivable:</u>		
	5. <u>Other Advance</u>		
	i. Advance Paid to NDMC	2364500	2364500
	ii. Security Deposit to NDMC	3000000	3000000
	iii. Advance paid to DGS&D	469471	469471
	iv. Letter of Credit		
	<u>TOTAL (B)</u>	13584209	5833971
	<u>TOTAL (A + B)</u>	50078522	42580354

FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)
Name of Entity CENTRE FOR DENTAL EDUCATION & RESEARCH
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2017

(Amount - Rs.)		
<u>SCHEDULE 12 - INVESTMENTS FROM EARMARKED / ENDOWMENT FUNDS</u>	<u>Current Year</u>	<u>Previous Year</u>
<u>1) Income from Sales</u>		
1. Sale of Finished Goods		
2. Sale of Raw Material		
3. Sale of Scraps		
<u>2) Income from Services</u>		
a) Labour and Processing Charges		
b) Professional / Consultancy Services		
c) Agency Commission and Brokerage		
d) Maintenance Services (Equipment/Property)		
e) Others (Specify) Hospital Receipt	2209290	2007610
<u>TOTAL</u>	<u>2209290</u>	<u>2007610</u>
<u>SCHEDULE 13 - GRANTS /SUBSIDIES</u>	<u>Current Year</u>	<u>Previous Year</u>
<u>1) Income from Sales</u>		
(Irrevocable Grants & Subsidies Received)		
1. Central Government		
2. State Government(s)		
3. Government Agencies		
Grant in Aid (Salary)	40500000	28474000
Grant in Aid (General)	85000000	65000000
4. Institutions/ Welfare Bodies		
5. International Organisations		
6. Others (Specify)		
<u>TOTAL</u>	<u>125500000</u>	<u>93474000</u>

FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)
Name of Entity CENTRE FOR DENTAL EDUCATION & RESEARCH
SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE PERIOD/YEAR ENDED 31-03-2017

SCHEDULE 16 - INCOME FROM ROYALTY, PUBLICATION ETC.		(Amount-Rs.)	
		Current Year	Previous Year
1. Income from Royalty			
2. Income from Publications			
3. Others (specify)			
TOTAL		0	0

SCHEDULE 17 - INTEREST EARNED		Current Year	Previous Year
1. On Term Deposits: a) With Scheduled Banks b) With Non-Scheduled Banks c) With Institutions d) Others		1468647	1682066
2. On Savings Accounts: a) With Scheduled Banks b) With Non-Scheduled Banks c) Post Office Savings Accounts d) Others			
3. On Loans: a) Employees/Staff b) Others			
4. Interest on Debtors and other Receivables			
TOTAL		1468647	1682066
Note - Tax deducted at source to be indicated			

FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)

Name of Entity **CENTRE FOR DENTAL EDUCATION & RESEARCH**

SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE PERIOD/YEAR ENDED 31-03-2017

(Amount-Rs.)

SCHEDULE 18 - OTHERS INCOME		Current Year	Previous Year
1. Misc. Receipt			
2. Estb. Receipt (Scheme)		501468	40815
3. Others (specify)			
TOTAL		501468	40815

SCHEDULE 19 - INCREASE/(DECREASE) IN STOCK OF FINISHED GOODS & WORK IN PROGRESS	Current Year	Previous Year
a) Closing stock		
- Finished Goods		
- Work-in-progress		
b) Less: Opening Stock		
- Finished Goods		
- Work-in-progress		
NET INCREASE/(DECREASE) [a+b]	0	0

SCHEDULE 20 - ESTABLISHMENT EXPENSES	Current Year	Previous Year
Salaries and Wages		
Allowances and Bonus	40454671	28473723
Contribution to Provident Fund		
Contribution to Other Fund (Scheme Cell)		
Staff Welfare Expenses		
Expenses on Employees "Retirement and Terminal Benefits"		
Others (NPS & LSPC)		
TOTAL	40454671	28473723

FORM OF FINANCIAL STATMENTS (NON-PROFIT ORGANISATIONS)

Name of Entity **CENTRE FOR DENTAL EDUCATION & RESEARCH**

SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE PERIOD/YEAR ENDED 31-03-2017

(Amount-Rs.)

<u>SCHEDULE 21 - OTHER ADMINISTRATIVE EXPENSES ETC.</u>	Current Year	Previous Year
a) Purchases of Material & Supply	25333726	45981709
b) Labour and processing expenses		
c) Cartage and Carriage Inwards		
d) Electricity and power		
e) Water charges		
f) Insurance		
g) Out sourced manpower services		
i) Security services	7122641	
ii) Sanitation services	7497616	
iii) Other Services	8734488	
g) Repairs and maintenance	38451904	19100060
h) Excise Duty		
i) Rent, Rates and Taxes		
j) Vehicles, Running and Maintenance		
k) Postage, Telephone and Communication Charges		
l) Printing and Stationary		
m) Travelling and Conveyance Expenses		
n) Expenses on Seminar/Workshops		
o) Subscription Expenses		
p) Expenses on Fees		
r) Hospitality Expenses		
s) Professional Charges		
t) Provision for Bad and Doubtful Debts/Advances		
u) Irrecoverable Balances Written-off		
v) Packing Charges		
w) Freight and Forwarding Expenses		
x) Distribution Expenses		
y) Advertisement and Publicity		
z) Others (specify)(Contingency charge)	1921360	1434079
<u>TOTAL</u>	89061735	66515848

FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)

Name of Entity **CENTRE FOR DENTAL EDUCATION & RESEARCH**

SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE PERIOD/YEAR ENDED 31-03-2017

(Amount-Rs.)

<u>SCHEDULE 22- EXPENDITURE ON GRANTS, SUBSIDIES ETC.</u>	Current Year	Previous Year
a). Grants given to Institutions/Organizations		
b). Subsidies given to Institutions/organisations		
<u>Total</u>	0	0
<u>Note</u> - name of the Entities, their activities along with the amount of grants/subsidies are to be disclosed.		

<u>SCHEDULE 23- INTEREST</u>	Current Year	Previous year.
a) On fixed Loans		
b) On other Loans (including Bank charges)	2672	4318
c) Others(Specify)		
<u>Total</u>	2672	4318

National Drug Dependence Treatment Centre
RECEIPT AND PAYMENTS FOR THE YEAR ENDED 31-03-2017

Receipts	2016-17	2015-16	Payments	2016-17	2015-16
1. Opening Balances			1. Expenses		
(a) Cash in Hand			(a) Establishment Expenses (Schedule 20)	99028920	94243314
(b) Bank Balances			(b) Administrative Expenses (Schedule 21A)	51291073	59578414
(i) In current accounts	21741356	21490377			
(ii) In deposit accounts			2. Advance payment		
(iii) In saving accounts			i) Material and Supply	233641	16120
			ii) Temp adv for training programme	5178519	6582962
2. Grant Received			3. Investments and deposits made		
(a) From Government of India (Ministry of H&FW)			(a) Out of Earmarked/Endowment Funds		
Grant in Aid (Capital Assets)		15000000	(b) Out of Own funds (Investments-others)		
Grant in Aid (Plan)	50000000	65000000			
Grant in Aid Salaries	84000000	90000000	4. Expenditure on Fixed Assets & Capital Work-in-Progress		
(b) From state Government			(a) Purchase of Fixed Assets	17328704	10120936
(c) From other sources(Schemes)			(b) Expenditure on capital work-in-progress	0	0
3. Income on Investment from			5. Refund of surplus money/loans		
(a) Earmarked/Endow. Funds	0	0	(a) To the Government of India		
(b) Own funds (Oth. Investments)	0	0	(b) To the State Government		
			(c) To other providers of funds		
4. Interest received					
(a) On bank deposits	0	0	6. Finance Charges (Interest)		
(b) Loans, Advances etc.	0	0			
			7. Other Payments (Specify)		
5. Income from Hospital Services			Outside Recoveries (GPF, NPS, HBA, Income Tax, License Fee etc.)		
Hospital Receipts	293112	477048	(a) Projects	0	0
6. Other Income			(b) Refund of Earnest Money Deposit	0	0
Misc. Receipts	15002	315677	(c) Employees Recovery payment		
			i) Recoveries from employees remitted to AIIMS (Main)	557258	700270
7. Amount Borrowed					
Loan from AIIMS (Main)	39000000	0	ii) Outside Recoveries	14731423	13130389
Loan from UNDCP	1800000	0	iii) GPF (Subscription and Advances)	9481710	9671500
			iv) NPS Recovery	3224962	2775653
8. Any other receipts			v) NPS Recovery (without PRAN)		
(a) Projects					
(b) Earnest Money Deposits			Loan, Advances and Other Assets		
(c) Employees Recovery			Advance payment for purchase of Material and Supply		

National Drug Dependence Treatment Centre
RECEIPT AND PAYMENTS FOR THE YEAR ENDED 31-03-2017

Receipts	2016-17	2015-16	Payments	2016-17	2015-16
i) Recoveries from employees	595780	700270	Computer Advance		
ii) Outside Recoveries	14741956	13130389	Festival Advance		
iii) GPF (Subscription and Advances)	9481710	9671500	Recovery/Deductions (Engg Works)		
iv) NPS Recovery	3224962	2775653	Recovery/Deductions (other than Engg Works)	247127	244161
v) NPS Recovery (without PRAN)			Repayment of loan (UNDCP)	1800000	0
			8. Closing Balances		
Loan, Advances and Other Assets/Recovery			(a) Cash in hand		
Car Advance Recovery	0	0	(b) Bank Balances		
Computer Advance Recovery	0	0	(i) In currents accounts	22037668	21741356
House Building Advance Recovery	0	0	(ii) In deposit accounts		
Festival Advance Recovery	0	0	(iii) In saving accounts		
Recovery/Deductions (Engg Works)	0	0			
Recovery/Deductions (other than Engg Works)	247127	244161			
Total	225141005	218805075	Total	225141005	218805075

National Drug Dependence Treatment Centre
INCOME AND EXPENDITURE ACCOUNT FOR THE PERIOD/YEAR ENDED 31-03-2017

INCOME	Schedule	2016-17	2015-16
Income from Sales/Services (Hospital Receipts)	12	293112	477048
Grants/Subsidies	13	134000000	155000000
Fees/Subscriptions	14		
Income from Investments (Income on Invest. From earmarked/endow. Funds transferred to funds)	15		
Income for Royalty, Publication etc.	16		
Interest Earned	17	0	0
Other Income	18	15002	315677
Increase/(decrease) in stock of Finished goods and works-in-progress	19		
TOTAL (A)		134308114	155792725
EXPENDITURE			
Establishment Expenses	20	99028920	94243314
Other Administrative Expenses etc.	21	51490026	59604414
Expenditure on Grants, Subsidies etc.	22		
Interest	23		
Depreciation (Net Total at the year-end - corresponding to Schedule 8)			
TOTAL (B)		150518946	153847728
Balance being excess of Expenditure over income (B-A)			
Transfer to Special Reserve (Specify each)		-16210832	1944997
Transfer to /from General Reserve			
BALANCE BEING SURPLUS/(DEFICIT) CARRIED TO CORPUS/ CAPITAL FUND		134308114	155792725

NATIONAL DURG DEPENDENCE TREATMENT CENTRE
BALANCE SHEET AS AT 31-03-2017

(Amount in Rupees)

CORPUS/CAPITAL FUND AND LIABILITIES	Schedule	2016-17	2015-16
CORPUS/CAPITAL FUND	1	226672470	221793406
RESERVES AND SURPLUS	2	6005383	22216215
EARMARKED/ ENDOWMENT FUNDS	3	0	0
SECURED LOANS AND BORROWINGS	4	0	0
UNSECURED LOANS AND BORROWINGS	5	0	0
DEFERRED CREDIT LIABILITIES	6	0	0
CURRENT LIABILITIES AND PROVISIONS	7	39497902	5327911
TOTAL		272175755	249337532
ASSETS			
FIXED ASSETS	8	233938090	216609386
INVESTMENTS-FROM EARMARKED/ENDOWMENT FUNDS	9	0	0
INVESTMENTS-OTHERS	10	0	0
CURRENT ASSETS, LOANS , ADVANCES ETC.	11	38237665	32728146
MISCELLANEOUS EXPENDITURE (to the extent not written off or adjusted)			
TOTAL		272175755	249337532

National Drug Dependence Treatment Centre
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2017

SCHEDULE 1- CORPUS/CAPITAL FUND:		(Amount-Rs.)	
		2016-17	2015-16
Balances as at the beginning of the year		221793406	
Add : Contributions towards Corpus/Capital Fund		4879064	
Less : Fixed Assets Condemned during the year		226672470	221793406
BALANCE AS AT THE YEAR-END		226672470	221793406

SCHEDULE 2- RESERVES AND SURPLUS:		2016-2017	2015-2016
1. <u>Capital Reserve:</u>			
As per last Account			
Addition during the year			
Less: Deductions during the year			
2. Revaluation Reserve			
As per last Account			
Addition during the year			
Less: Deductions during the year			
3. Special Reserves			
As per last Account			
Addition during the year			
Less: Deductions during the year (AIIMS LOAN REVERSE)			
4. General Reserve			
As per last Account		22216215	22216215
Adjusted during the year		-16210832	
		6005383	
TOTAL		0	0
		6005383	22216215

National Drug Dependence Treatment Centre
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2017

(Amount-Rs.)

SCHEDULE 3 - EARMARKED/ENDOWMENT FUNDS		Scheme Non		TOTALS	
	Scheme			2015-16	2014-15
a) Opening balance of the funds					
b) Additions to the Funds:					
i. Donations/grants					
ii. Income from investments made on account of funds		0			
iii. Other additions (specify nature)					
iv. Less Expenditure during the year				0	
TOTAL (a+b)				0	0
c) Utilisation/Expenditure towards objectives of funds					
i. <u>Capital Expenditure</u>					
- Fixed Assets					
- Others					
ii. <u>Revenue Expenditure</u>					
- Salaries, Wages and allowances etc.					
- Rent					
- Other Administrative expenses					
<u>Total</u>					
TOTAL (c)				0	0
NET BALANCE AS AT THE YEAR-END (a+b-c)					0

National Drug Dependence Treatment Centre
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2017

(Amount-Rs.)

SCHEDULE 4-SECURED LOANS AND BORROWINGS:	2015-16		2014-15	
1. Central Government				
2. State Government				
3. Financial Institutions				
a) Term Loans				
b) Interest accrued and due				
4. Banks:				
a) Term Loans				
- Interest accrued and due				
b) Other Loans (specify)				
- Interest accrued and due				
5. Other Institutions and Agencies				
6. Debentures and Bonds				
7. Others (Specify)				
<u>TOTAL</u>	0	0	0	0
Note : Amounts due within one year				

National Drug Dependence Treatment Centre
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2017

(Amount-Rs.)

SCHEDULE 5 - UNSECURED LOANS AND BORROWING	2016-17	2015-16
1. Central Government		
2. State Government		
3. Financial Institutions		
4. Banks:		
a) Term Loans		
b) Other Loans (specify)		
5. Other Institutions and Agencies		
6. Debentures and Bonds		
7. Fixed Deposits		
8. Others (Specify)		
<u>TOTAL</u>	0	0
Note: Amounts due within one year		

SCHEDULE 6 - DEFERRED CREDIT LIABILITIES:	2016-17	2015-16
a) Acceptances secured by hypothecation of capital equipment and other assets		
b) Others		
<u>TOTAL</u>	0	0
Note: Amount due within one year		

National Drug Dependence Treatment Centre
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2017

(Amount -Rs.)

<u>SCHEDULE 7 - CURRENT LIABILITIES AND PROVISIONS</u>	2016-17		2015-16	
<u>A. CURRENT LIABILITIES AND PROVISIONS</u>				
1. Acceptances				
2. Sundry Creditors:				
a) For Goods				
b) Others (Outside recoveries to be paid to AIIMS (main)				
i) AIIMS Employes	38522			
ii) Outside recoveries	10533	49055		
3. Advances Received for patients from Govt Agencies				
i) NIAF				
4. Projects Grants				
ii) NPCB				
5. Interest accrued but not due on:				
a) Secured Loans/borrowings				
a) Unsecured Loans/borrowings				
6. Statutory Liabilities:				
a) Overdue				
a) Others				
7. Security Deposits (EMD)				
Opening Balance	335000			
Received during the year	0			
Refund during the year	0	335000		335000
6. Other current Liabilities		113847		113847
9. Excess grant to be refunded to Ministry (OB)	4879064			
Less : Adjusted during the year	4879064	0		4879064
10. Loan from AIIMS (Main)		39000000		
TOTAL (A)		39497902		5327911
<u>B. PROVISIONS</u>				
1. For Taxation				
2. Gratuity				
3. Superannuation/Pension				
6. Accumulated Leave Encashment				
6. Trade Warranties/Claims				
6. Others (specify)				
TOTAL (B)				
TOTAL (A+B)		39497902		5327911

NATIONAL DRUG DEPENDENCE TREATMENT CENTRE
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 2015-16
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2017

(Amount in Rs.)

SCHEDULE 8 – FIXED ASSETS										
DESCRIPTION	GROSS BLOCK			DEPRECIATION				NET BLOCK		
	Cost/ valuation as at beginning of the year	Additions during the year	Deductions during the year	Cost/ valuation at the year-end	As at the beginning of the year	On Additions during the year	On Deductions during the year	Total up to the year-end	As at the Current year-end 16-17	As at the previous year-end 15-16
A. FIXED ASSETS:										
1. LAND:										
a) Freehold										
b) Leasehold										
2. BUILDINGS:										
a) On Freehold Land (construction)	109834047	5491948		115325995		-	-	-	115325995	109834047
b) On Leasehold Land										
c) Ownership Flats/Premises										
d) Superstructures on Land										
Not belonging to the entity										
3. PLANT MACHINERY & EQUIPMENT	47212386	7271774		54484160					54484160	47212386
4. VEHICLES	12241608	0		12241608					12241608	12241608
5. FURNITURE, DIXTURES	9523678	80546		9604224					9604224	9523678
6. OFFICE EQUIPMENT										
7. COMPUTER/PERIPHERALS										
8. ELECTRIC INSTALLATIONS										
9. LIBRARY BOOKS	37797667	4484436		42282103					42282103	37797667
10. TUBEWELLS & W.SUPPLY										
11. OTHER FIXED ASSETS										
TOTAL OF CAURENT YEAR	216609386	17328704	0	233938090	0	0	0	0	233938090	216609386
PREVIOUS YEAR										
B. CAPITAL WORK-IN-PROGRESS	0	0	0	0	0	0	0	0	0	0
TOTAL	216609386	17328704	0	233938090	0	0	0	0	233938090	216609386

National Drug Dependence Treatment Centre
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2017

		(Amount - Rs.)	
SCHEDULE 9 - INVESTMENTS FROM EARMARKED / ENDOWMENT FUNDS		2016-17	2015-16
1. In Government Securities			
2. Other approved Securities			
3. Shares			
4. Debentures and Bonds			
5. Subsidiaries and Joint Venutres			
6. Others (to be specified)			0
TOTAL		0	0

		(Amount - Rs.)	
SCHEDULE 10 - INVESTMENTS - OTHERS		2016-17	2015-16
1. In Government Securities			
2. Other approved Securities			
3. Shares			
4. Debentures and Bonds			
5. Subsidiaries and Joint Venutres			
6. Others (to be specified)			
TOTAL		0	0

National Drug Dependence Treatment Centre
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2017

		(Amount - Rs.)	
SCHEDULE 11 - CURRENT ASSETS, LOANS, ADVANCES ETC.		2016-17	2015-16
A			
CURRENT ASSETS:			
1. <u>Advances for Procurement</u>			
a) Material and Supply	Opening Balance	271120	271120
	Addition during the year	233641	
	Adjusted during the year	168953	335808
b) Machinery and Equipment	Opening Balance	0	
	Addition during the year	0	
	Adjusted during the year	0	0
2. Advance for training Programme			
	Opening Balance	10254962	
	Addition during the year	5178519	
	Adjusted during the year	10000	15423481
3. <u>Sundry Debtors:</u>			
a) Debts Outstanding for a period exceeding six months			
b) Others			
Imprest	Opening balance	20000	20000
	Adjusted during the year	20000	0
4. Cash balances in hand (including cheques/ drafts and imprest)			
5. <u>Bank Balances:</u>			
a) <u>With Scheduled Banks:</u>			
	On Current Accounts		
	On Deposit Accounts (includes margin money)		
	On Savings Accounts	22037668	21741356
b) <u>With non-Scheduled Banks:</u>			
	On Current Accounts		
	On Deposit Accounts		
	On Savings Accounts		
6. <u>Customs Duty Advance</u>			
7. <u>Outside Recovery 2013-14</u>			
		400000	400000
		40708	40708
TOTAL (A)		38237665	32728146

National Drug Dependence Treatment Centre

SCHEDULE 11 - CURRENT ASSETS, LOANS, ADVANCES ETC. (Contd.)		2016-17	2015-16	(Amount - Rs.)
B	LOANS, ADVANCES AND OTHER ASSETS			
	1. <u>Loans:</u>			
	a) Staff			
	i) Motor car			
	ii) House Building Advance			
	iii) Computer Advance			
	iv) Festival Advance			
	2. <u>Advances and other amounts recoverable in cash or in kind or for value to be received:</u>			
	a) On Capital Account			
	b) Prepayments			
	c) Others			
	3. <u>Income Accrued:</u>			
	a) On Investments from Earmarked / Endowment Funds			
	b) On Investments - Others			
	c) On Loans and Advances			
	d) Others (includes income due unrealised - Rs.)			
	4. <u>Claims Receivable:</u>			
	TOTAL (B)	0		0
	TOTAL (A + B)	38237665		32728146

National Drug Dependence Treatment Centre

SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE PERIOD/YEAR ENDED 31-03-2017

(Amount - Rs.)

<u>SCHEDULE 12 - INVESTMENTS FROM EARMARKED / ENDOWMENT FUNDS</u>		<u>2016-17</u>	<u>2015-16</u>
<u>1) Income from Sales</u>			
1. Hospital receipts		293112	477048
2. Administrative charges (Projects)			
3. Sale of Scraps			
<u>2) Income from Services</u>			
a) Labour and Processing Charges			
b) Professional / Consultancy Services			
c) Agency Commission and Brokerage			
d) Maintenance Services (Equipment/Property)			
e) Others (Specify) Hospital Receipt			
<u>TOTAL</u>		293112	477048

<u>SCHEDULE 13 - GRANTS / SUBSIDIES</u>		<u>2015-16</u>	<u>2014-16</u>
<u>1) Income from Sales</u>			
(Irrevocable Grants & Subsidies Received)			
1. Central Government		134000000	155000000
2. State Government(s)			
3. Government Agencies			
4. Institutions/ Welfare Bodies			
5. International Organisations			
6. Others (Specify) LOAN FROM AIIMS			
<u>TOTAL</u>		134000000	155000000

National Drug Dependence Treatment Centre
SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE YEAR ENDED 31-03-2017
(Amount-Rs.)

<u>SCHEDULE 14 - FEES/SUBSCRIPTIONS</u>		2016-17	2015-16
1. Tuition & Examination Fee			
2. Licence Fee			
3. Seminar/Program Fees			
4. Consultancy Fees			
5. Others (Specify) EHS			
<u>TOTAL</u>		0	0
Note- Accounting Policies towards each item are to be disclosed			

<u>SCHEDULE 15 - INCOME FROM INVESTMENTS</u>		Investment from Earmarked Fund		Investment-Others	
(Income on Invest. From Earmarked/Endowment Funds transferred to Funds)		2016-17	2015-16	2016-17	2015-16
1. Interest					
a) On Govt. Securities					
a) Other Bonds/Debentures					
2. Dividends:					
a) On Shares					
a) On Mutual Fund Securities					
3. Rents					
4. Others (Specify)					
<u>TOTAL</u>					
<u>TRANSFERRED TO EARMARKED/EDNOWNMENT FUNDS</u>					

National Drug Dependence Treatment Centre
SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE YEAR ENDED 31-03-2017

(Amount-Rs.)

<u>SCHEDULE 16 - INCOME FROM ROYALTY, PUBLICATION ETC.</u>	2016-17	2015-16
1. Income from Royalty		
2. Income from Publications		
3. Others (specify)		
<u>TOTAL</u>	0	0

<u>SCHEDULE 17 - INTEREST EARNED</u>	2016-17	2015-16
1. On Term Deposits:		
a) With Scheduled Banks		
b) With Non-Scheduled Banks		
c) With Institutions		
d) Others		
2. On Savings Accounts:		
a) With Scheduled Banks		
b) With Non-Scheduled Banks		
c) Post Office Savings Accounts		
d) Others		
3. On Loans:		
a) Employees/Staff		
b) Others		
4. Interest on Debtors and other Receivables		
<u>TOTAL</u>	0	0

National Drug Dependence Treatment Centre
SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE YEAR ENDED 31-03-2017

<u>SCHEDULE 18 - OTHERS INCOME</u>	2016-17	2015-16
1. Misc. Receipt		
2. Estb. Receipt (Scheme)	15002	315677
3. Others (specify)		
<u>TOTAL</u>	15002	315677

<u>SCHEDULE 19 - INCREASE/(DECREASE) IN STOCK OF FINISHED GOODS & WORK IN PROGRESS</u>	2016-17	2015-16
a) Closing stock		
- Finished Goods		
- Work-in-progress		
b) Less: Opening Stock		
- Finished Goods		
- Work-in-progress		
<u>NET INCREASE/(DECREASE) [a+b]</u>	0	0

<u>SCHEDULE 20 - ESTABLISHMENT EXPENSES</u>	2016-17	2015-16
Salaries	96075163	91740602
Allowances and Bonus		
Contribution to NPS	2953757	2502712
Contribution to Other Fund (Scheme Cell)		
Staff Welfare Expenses		
Expenses on Employees "Retirement and Terminal Benefits"		
Others (NPS & LSPC)		
<u>TOTAL</u>	99028920	94243314

National Drug Dependence Treatment Centre
SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE YEAR ENDED 31-03-2017

(Amount-Rs.)

SCHEDULE 21 - OTHER ADMINISTRATIVE EXPENSES ETC.	2016-17	2015-16
a) Purchases (Material and Supply)	33878367	42757904
b) wages for outsourced services	17323407	16660731
c) Misc expenditure (Adj. of advances)	168953	15000
d) Electricity and power		
e) Misc Exp from Imprest	89299	159779
f) Imrest adjusted (16-17) Misc expenditure	20000	0
g) Repairs and maintenance (M&E)		
h) Excise Duty		
i) Rent, Rates and Taxes		
j) Vehicles, Running and Maintenance		
k) Postage, Telephone and Communication Charges		
l) Printing and Stationary		
m) Travelling and Conveyance Expenses		
n) Expenses on Seminar/Workshops		
o) Subscription Expenses		
p) Expenses on Sanitation		
q) Maintenance of Buildings (Minor Work RG)		
r) Maintenance of M&E (CAMC/AMC)		
s) Maintenance of Building (Non-plan)		
t) Provision for Bad and Doubtful Debts/Advances		
u) Irrecoverable Balances Written-off		
v) Swap Charges (IDBI Debit/Credit Card Commission)		
w) Freight and Forwarding Expenses		
x) Distribution Expenses		
y) Advertisement and Publicity		
z) Others (specify) Training programme	10000	11000
TOTAL	51490026	59604414

National Drug Dependence Treatment Centre
SCHEDULES FORMING PART OF RECEIPTS & PAYMENT FOR THE YEAR ENDED 31-03-2017

(Amount-Rs.)

<u>SCHEDULE 21A - OTHER ADMINISTRATIVE EXPENSES ETC.</u>	2016-17	2015-16
a) Purchases (Material and Supply)	33878367	42757904
b) wages for outsourced services	17323407	16660731
c) Misc expenditure (Adj. of advances)		
d) Electricity and power		
e) Water charges		
f) Interest adjusted (16-17)	89299	159779
g) Repairs and maintenance (M&E)		
h) Excise Duty		
i) Rent, Rates and Taxes		
j) Vehicles, Running and Maintenance		
k) Postage, Telephone and Communication Charges		
l) Printing and Stationary		
m) Travelling and Conveyance Expenses		
n) Expenses on Seminar/Workshops		
o) Subscription Expenses		
p) Expenses on Sanitation		
q) Maintenance of Buildings (Minor Work RG)		
r) Maintenance of M&E (CAMC/AMC)		
s) Maintenance of Building (Non-plan)		
t) Provision for Bad and Doubtful Debts/Advances		
u) Irrecoverable Balances Written-off		
v) Swap Charges (IDBI Debit/Credit Card Commission)		
w) Freight and Forwarding Expenses		
x) Distribution Expenses		
y) Advertisement and Publicity		
z) Others (specify)(Contingency charge)(Adj. of advances)		
<u>TOTAL</u>	51291073	59578414

National Drug Dependence Treatment Centre
SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE YEAR ENDED 31-03-2017

(Amount-Rs.)

<u>SCHEDULE 22- EXPENDITURE ON GRANTS, SUBSIDIES ETC.</u>	2016-17	2015-16
a) Grants given to Institutions/Organizations		
b) Subsidies given to Institutions/organisations		
<u>Total</u>	0	0
<u>Note</u> - name of the Entities, their activities along with the amount of grants/subsidies are to be disclosed.		

<u>SCHEDULE 23- INTEREST</u>	2016-17	2015-16
a) On fixed Loans		
b) On other Loans (including Bank charges)		
c) Others(Specify)		
<u>Total</u>	0	0

FORM OF FINANCIAL STATEMENTS
UNDCP
ALL INDIA INSTITUTE OF MEDICAL SCIENCE
RECEIPTS AND PAYMENT ACCOUNT
FOR THE YEAR ENDED ON 31st MARCH,2017

RECEIPTS	2016-17	2015-16	PAYMENTS	2016-17	2015-16
I. Opening Balance			I. Expenses		
a) Cash in hand			a) Establishment Expenses		
b) Bank Balances			b) Administrative Expenses	155957	42358
(i) In current accounts	1773388	2810826	c) loan to NDDTC	1800000	
(ii) In deposit accounts			V. Refund of Surplus Money/Loans		
(iii) Savings accounts			a) To the Government of India		
II. Grants Received			b) Grant refund to WHO	56875	1787994
a) From WHO	658295	597000	c) To other providers of Funds		
b) From State Government			VI. Finance Charges		
c) Repayment of loan by NDDTC	1800000				
V. Other Income			VII. Other Payments		
a) Hospital Receipts			a) Engg. Maintenances		
b) Misc. Receipts		195914	b) Minor Works.		
VII. Any other receipts			c) IGL Advances		
a) Imprest			d) Festival Advance Paid		
b) AITSC			h) Patient Treatment		
c) INCPT			i) Advances paid as Custom Duty		
d) Other Misc.			VIII. Closing Balances		
			a) Cash in hand		
			b) Bank Balances		
			i) In Current accounts	2218851	1773388
			ii) In Deposit accounts		
			iii) Savings accounts		
	4231683	3603740		4231683	3603740

ALL INDIA INSTITUTE OF MEDICAL SCIENCE
UNDCP
INCOME AND EXPENDITURE ACCOUNT
FOR THE YEAR ENDED ON 31st MARCH,2017

INCOME	SCHEDULE	2016-17	2015-16
Income from Services	3		195,914
Grants/Subsidies	4	601,420	597,000
Fees/Subscriptions			
Income from Investments (Income on Investment from earmarked/endow. Funds)			
Income from Royalty, Publication			
Intrest Earned			
Other Income			
Total (A)		601,420	792,914
EXPENDITURE			
Establishment Expenses			
Other Administrative Expenses	5	155,325	676,678
Expenditure on Grants, Subsidies			
Bank Charges	6	632	680
Depreciation			
Others	8	0	
Total (B)		155,957	677,358
Balance being excess of Income over Expenditure (A-B)		445,463	115,556
Transfer to Special Reserve (Specify Each)			
Transfer to General Reserve			
Balance Being Surplus/ Deficit carried to General Reserve		445,463	115,556
Total		601,420	792,914

FORM OF FINANCIAL STATEMENTS
UNDCP
ALL INDIA INSTITUTE OF MEDICAL SCIENCE
BALANCE SHEET as at 31st March, 2017

CORPUS / CAPITAL FUND AND LIABILITIES	Schedule	2016-17	2015-16
CORPUS / CAPITAL FUND			
RESERVE AND SURPLUS	1	4,169,483.00	3,724,020.00
EARMARKED / ENDOWMENT FUNDS			
SECURED LOANS AND BORROWINGS			
UNSECURED LOANS AND BORROWINGS			
DEFERRED CREDIT LIABILITIES			
CURRENT LIABILITIES AND PROVISIONS			
Total Capital Fund and Liabilities		4,169,483.00	3,724,020.00
ASSETS			
FIXED ASSETS			
INVESTMENTS - FROM EARMARKED / ENDOWMENT FUNDS			
INVESTMENTS - OTHERS			
CURRENT ASSETS, LOANS, ADVANCES ETC.	2	4,169,483.00	3,724,020.00
MISCELLANEOUS EXPENDITURE			
(to the extent not written off or adjusted)			
Total Assets		4,169,483.00	3,724,020.00

**ALL INDIA INSTITUTE OF MEDICAL SCIENCE
UNDCP**

Schedule 1 - Reserve and Surplus		2016-17		2015-16
1. Capital Reserve :				
As per last Account				
Addition during the year				
Less : Deduction During the year				
2. Revaluation Reserve :				
As per last Account				
Addition during the year				
Less : Deduction During the year				
3. Special Reserves :				
As per last Account				
Addition during the year				
Less : Deduction During the year				
4. General Reserve :				
As per last Account	3,724,020.00		5,396,458.00	
Less:- Excess of Expenditure over Income				
Add :- Excess of Income over Expenditure	445,463.00		115,556.00	
Less : Grant refund to ministry		4,169,483.00	1,787,994.00	
Closing Balance		4,169,483.00		3,724,020.00

FORM OF FINANCIAL STATEMENTS
ALL INDIA INSTITUTE OF MEDICAL SCIENCE

Schedule 2 Current Assets, Loans, Advances		2016-17		2015-16
1. Cash in hand (including cheques/drafts and imprest)				
2. Bank Balances:				
a) Current Account		2,218,851.00		1,773,388.00
b) Deposit Account (Fixed Deposit)				
3. Loans:				
a) To Employees of Entity				
5. Advances and Other amounts recoverable:				
a) From Employees of Entity				
b) From Others (NDDTC)		632.00		632.00
6. Others				
Advance for training upto 2016-17		1,950,000.00	2,585,000.00	
Less- Advance adjust during the year			635,000.00	1,950,000.00
Balance as at the Year End		4,169,483.00		3,724,020.00

FORM OF FINANCIAL STATEMENTS
ALL INDIA INSTITUTE OF MEDICAL SCIENCE

Schedule 3 - Income from Services	2016-17	2015-16
a) Hospital Receipts		
b) Others		195,914.00
Total	-	195,914.00

FORM OF FINANCIAL STATEMENTS
ALL INDIA INSTITUTE OF MEDICAL SCIENCE

Schedule 4 - Grants and Subsidies	2016-17	2015-16
a) From WHO 658295		
Less Refunded to WHO during the year 56875	601,420.00	597,000.00
Total	601,420.00	597,000.00

**FORM OF FINANCIAL STATEMENTS
ALL INDIA INSTITUTE OF MEDICAL SCIENCE**

Schedule 5- Other Administrative Expenses Etc.	2016-17	2015-16
Hospitality(National survey to assess extent and pattern of abuse)	155,325.00	
Contingency Expenditure		3,350.00
Add:- Adjustment of Advance during the year 2015-16		635,000.00
Transport Expenses		29,641.00
Travelling Allowances		8,687.00
Total	155,325.00	676,678.00

**FORM OF FINANCIAL STATEMENTS
ALL INDIA INSTITUTE OF MEDICAL SCIENCE**

Schedule 6- Bank Charges	2016-17	2015-16
Bank Charges	632	680
Total	632	680

Accounts of UNDCP for the financial year 2016-2017

Opening Balance		Receipts		Expenditure		Closing Balance	
Cash at Bank as on 01.04.2016	Out standing Advances as on 01.04.2016	Grants received during the year	Hospital Receipts	Other Administrative Expenses	Grant refunded to Ministry	Cash at Bank as on 31.03.2017	Out standing Advances as on 31.03.2017
1773388	1950632	658295	0	155957	56875	2218851	1950632

ALL INDIA INSTITUTE OF MEDICAL SCIENCES													
RESEARCH SECTION													
STATEMENT SHOWING THE EXPENDITURE OF THE GRANT RECEIVED FOR THE VARIOUS RESEARCH PROJECTS FOR THE YEAR 2016-17													
S. No.	Funding Agency	Opening Balance		Receipt	Total Receipt	Expend	Estd	Expenditure	Adjustments		Credit	Debit	
		Credit	Debit						Credit	Debit			
1	Institute Research Grant	18,167,919.00	-	50,000,000.00	68,167,919.00	22,198,439.00		22,198,439.00			45,969,480.00		
2	Abbot health care Pvt Ltd	-	(218,305.00)	974,872.00	756,567.00	58,141.00	34,010.00	92,151.00			664,416.00		
3	Abbott Vascular, USA	482,902.00	-		482,902.00			-			482,902.00		
4	Access Health International AP	-	(141,320.00)		(141,320.00)	333,760.00		333,760.00			15,116.00		(475,080.00)
5	Ace Pharmaceuticals BV	15,116.00	-		15,116.00			-					
6	Actelion Pharmaceuticals Ltd Switzerland	-	-		-			-			-		-
7	Aimil Pharmaceutical India Ltd	-	(331.00)		(331.00)			-					(331.00)
8	Ajinomoto Co JAPAN	73,953.00	-		73,953.00			-			73,953.00		
9	Albert David Ltd	-	-		-			-			-		-
10	American Academy of Paediatrics	78,450.00	-	3,125,119.00	3,203,569.00	2,584,751.00		2,584,751.00			618,818.00		
11	Amgen Technology Private Limited	1,486,697.00	-		1,486,697.00			-			1,486,697.00		
12	Antisense Pharma GmbH, GERMANY	-	(347.00)		(347.00)			-					(347.00)
13	AO spine india	173,853.00	-	203,220.00	377,073.00	426,281.00	20,322.00	446,603.00					(69,530.00)
14	AO spine international, hongkong	-	(674,428.00)		(674,428.00)	43,470.00		43,470.00					(717,898.00)
15	AO Spine International, USA	380,192.00	-		380,192.00	113,198.00		113,198.00			266,994.00		
16	AO Trauma Asia Pacific			531,801.00	531,801.00	53,180.00		53,180.00			478,621.00		
17	Appasamy Associates, Chennai	136,072.00	-		136,072.00	37,260.00		37,260.00			98,812.00		
18	Appothecaries Pvt Ltd	642,895.00	-		642,895.00			-			642,895.00		
19	Astra Seneca Singapore Pvt Ltd. Singapore				-	41,952.00		41,952.00					(41,952.00)
20	Atomic Energy Regulatory Board	409,629.00	-		409,629.00	74,444.00		74,444.00			335,185.00		
21	Auxilium Technical & Management Services Pvt Ltd	400.00	-		400.00			-			400.00		
22	Avents Pharmaceuticals, USA	14,135.00	-		14,135.00			-			14,135.00		
23	Ayush Govt of India			499,920.00	499,920.00	329,857.00	-	329,857.00			170,063.00		
24	BARC	477,447.00	-		477,447.00			-			477,447.00		
25	Beijing Toshibi Pharmaceuticals Co Ltd	180,235.00	-		180,235.00			-			180,235.00		
26	Bharat Biotech International Ltd	12,241.00	-		12,241.00			-			12,241.00		
27	Bharti Serums and Vaccines Ltd	-	(10,000.00)		(10,000.00)			-					(10,000.00)
28	bigtree private limited	80,620.00		225,000.00	305,620.00	161,610.00	22,500.00	184,110.00			121,510.00		
29	Bill & Melinda Gates Foundation, USA			1,449,582.00	1,449,582.00	-	144,958.00	144,958.00			1,304,624.00		
30	Bill & Melinda Gates Foundation, USA	1,354,992.00	-		1,354,992.00			-			1,354,992.00		
31	Biogen Idec Limited, UK	653,436.50	-	208,977.90	862,414.40	20,975.00	20,898.00	41,873.00			820,541.40		
32	Biomerieux India (P)Ltd	12,011.00	-		12,011.00			-			12,011.00		
33	Boehringer ingelheim India Pvt Ltd	97,306.00	-	1,093,961.00	1,191,267.00	1,273,035.00	109,400.00	1,382,435.00					(191,168.00)

S. No.	Funding Agency	Opening Balance		Receipt	Total Receipt	Expend	Estd	Expenditure	Adjustments		Debit
		Credit	Debit						Credit	Debit	
34	BONE & JOINT DECADE INDIA	130.00	-		130.00			-			130.00
35	Brains Gate Ltd ISRAEL	132.00	-		132.00			-			132.00
36	BRIDGES, USA	83,429.00	-		83,429.00			-			83,429.00
37	Bristol Meyer Squibb India Pvt Ltd	220,480.60	-	466,900.00	687,380.60		46,691.00	46,691.00			640,689.60
38	Bristol Myer Squibb (BMS), USA	-	(15,191.00)		(15,191.00)			-			(15,191.00)
39	BRITISH COUNCIL, UK	2,453,790.00	-	700,000.00	3,153,790.00	1,852,959.00	35,000.00	1,887,959.00			1,265,831.00
40	British Heart Foundation, UK			1,018,723.00	1,018,723.00	232,722.00	50,936.00	283,658.00			735,065.00
41	BRNS,Mumbai	34,187,380.00	-		34,187,380.00			-			34,187,380.00
42	Cadia Health care Ltd	529,735.00	-	1,715,700.00	2,245,435.00	2,040,186.00	171,571.00	2,211,757.00			33,678.00
43	Cadia Pharmaceuticals Ltd	99,666.00	-		99,666.00			-			99,666.00
44	Canadian Institutes of Health Research, Canada	-	(40,613.00)		(40,613.00)			-			(40,613.00)
45	CANNECTIN, Canada	80,186.00	-		80,186.00			-			80,186.00
46	CCDC			24,020,129.00	24,020,129.00	15,165,864.00	2,098,651.00	17,264,515.00			6,755,614.00
47	CD Pharma India Pvt Ltd	972,426.00	-	1,165,857.00	2,138,283.00	516,182.00	116,586.00	632,768.00			1,505,515.00
48	CDAC	1,153,741.00	-	2,500,000.00	3,653,741.00	188,681.00	250,000.00	438,681.00			3,215,060.00
49	Celfpra, French	1,755,000.00	-		1,755,000.00	488,008.00		488,008.00			1,266,992.00
50	Centers for Disease Control, New Delhi			54,362,932.00	54,362,932.00	41,954,973.00	3,540,564.00	45,495,537.00			8,867,395.00
51	Centocor Research & Development, USA	4,797.00	-		4,797.00			-			4,797.00
52	Central Council for Research in Ayurveda & Sidha	1,362,119.00	-	276,584.00	1,638,703.00	1,394,510.00	13,829.00	1,408,339.00			230,364.00
53	Central Council for Research in Homoeopathy (CCRH), Janak Puri, New Delhi	-	(102,952.00)	555,455.00	452,503.00	-	27,773.00	27,773.00			424,730.00
54	Central Council for Research in Unani Medicine	1,903,652.00	-	1,036,033.00	2,939,685.00	1,619,266.00	51,802.00	1,671,068.00			1,268,617.00
55	Central Council for Research in Yoga	-	(280,735.00)	353,030.00	72,295.00	914,978.00	17,652.00	932,630.00			(860,335.00)
56	And Naturopathy Central Scientific Instruments Organisation	135,557.00	-		135,557.00			-			135,557.00
57	Centre For Chronic Disease Control	122,879.00	-	420,508.00	543,387.00		21,026.00	21,026.00			522,361.00
58	Centre For Disease Control, New Delhi	2,612,296.00	-		2,612,296.00	909,994.00		909,994.00			1,702,302.00
59	Centre Franco-Indien Pour La Preomotion De La Recherche Advance (CEFIPRA), France	-	(199,205.00)		(199,205.00)	433,993.00		433,993.00			(633,198.00)
60	Charak Pharma (P)Ltd	1,144.00	-		1,144.00			-			1,144.00
61	Christian Medical collage vellore	-	(11,571.00)		(11,571.00)			-			(11,571.00)
62	Christofel Bindemission (CBM) India			2,500,000.00	2,500,000.00	1,616,826.00	250,000.00	1,866,826.00			633,174.00
63	CLINCYTE, USA	665.00	-		665.00			-			665.00
64	Clinical Marketing Pvt Ltd	-	(137,722.00)	100,000.00	(37,722.00)	102,221.00	10,000.00	112,221.00			(149,943.00)
65	Clingene International Pvt Ltd	1,144,531.00	-		1,144,531.00			-			1,144,531.00

S. No.	Funding Agency	Opening Balance		Receipt	Total Receipt	Expend	Estd	Expenditure	Adjustments	
		Credit	Debit						Credit	Debit
66	CLINIRX RESEARCH PVT LTD GURGAON, HARYANA	71,079.00	-		71,079.00			-		
67	CODMAN & SHURTLEFF, INC, USA	42,138.00	-		42,138.00			-		
68	Coloplast	-	(5,775.00)		(5,775.00)			-		(5,775.00)
69	CONARD, USA	591.00	-		591.00			-		591.00
70	Convatec Saybb	2,328.00	-		2,328.00			-		2,328.00
71	CORVENTIS, USA	-	(337,562.00)		(337,562.00)	246,205.00		246,205.00		(583,767.00)
72	CPWW Jerusalem	6,534.00	-		6,534.00			-		6,534.00
73	Criterium	17,100.00	-		17,100.00	889.00		889.00		16,211.00
74	CSIR	-	(12,281,157.00)	16,102,647.00	3,821,490.00	19,705,913.00	22,000.00	19,727,913.00		(15,906,423.00)
75	CTC/ICDS			264,153.00	264,153.00					
76	Cuddles Foundation			334,359.00	334,359.00					
77	Curehealth Diagnostic Pvt Ltd	2,273,820.00	-		2,273,820.00	177,385.00	33,435.00	210,820.00		
78	Cystic Fibrosis/World Wide, USA	14,605.00	-		14,605.00	1,348,848.00		1,348,848.00		
79	Dabur Research & development Centre	-	(362,463.00)	57,522.00	(304,941.00)	323,548.00	5,752.00	329,300.00		(634,241.00)
80	Dabur Research Foundation	1,095,999.00	-		1,095,999.00			-		1,095,999.00
81	DANIDA RESEARCH COUNCIL	19.00	-		19.00			-		19.00
82	DBT	130,592,899.00	-	292,543,043.00	423,135,942.00	174,874,235.00	14,165,688.00	189,039,923.00		234,096,019.00
83	Delhi State Control Society/AIDS	100,905.00	-	596,992.00	697,897.00	865,378.00	-	865,378.00		(167,481.00)
84	DELHI TAPEDEK UNMULAN SAMITI	10,824.00	-		10,824.00			-		10,824.00
85	Department of CSIO, Chandigarh	-	(135,557.00)		(135,557.00)			-		(135,557.00)
86	Department of Health and Human Services Centers for disease control, USA	-	(12,927,984.49)	80,883,612.00	67,955,627.51	58,708,755.00	6,339,425.00	65,048,180.00		2,907,447.51
87	Department of health Research	5,216,288.00	-		5,216,288.00	1,089,042.00		1,089,042.00		4,127,246.00
88	DEPTT OF ELECTRONICS	1,418,506.00	-		1,418,506.00			-		1,418,506.00
89	Deptt of Information Technology	-	(1,038,275.00)		(1,038,275.00)			-		(1,038,275.00)
90	Deptt of Pharmaceuticals	2,979,015.00	-		2,979,015.00	423,890.00		423,890.00		2,555,125.00
91	Deptt Of woman & child Development	1,714,771.00	-		1,714,771.00			-		1,714,771.00
92	DIGENE CORPORATION, USA	42,184.00	-		42,184.00			-		42,184.00
93	Directorate General of Health Services	-	(57,267.00)		(57,267.00)			-		(57,267.00)
94	Directorate of Education (NSS)	74,647.00	-		74,647.00	53,481.00		53,481.00		21,166.00
95	Donations/Grant				-			-		-
96	Dr Reddys Lab Pvt Ltd	93,741.90	-		93,741.90			-		93,741.90
97	DRDE(Gwallior)	855,954.00	-		855,954.00			-		855,954.00
98	DRDO	-	(796,525.00)	1,324,600.00	528,075.00	455,634.00	66,230.00	521,864.00		6,211.00
99	DST	-	(10,918,664.00)	103,322,550.00	92,403,886.00	82,955,413.00	4,357,713.00	87,313,126.00		5,090,760.00
100	Eli Lilly	-	(346,109.00)		(346,109.00)			-		(346,109.00)
101	Emure Pharmaceutical Ltd	-	(6,380.00)		(6,380.00)			-		(6,380.00)

S. No.	Funding Agency	Opening Balance		Receipt	Total Receipt	Expend	Estd	Expenditure	Adjustments		Debit	Credit
		Credit	Debit						Credit	Debit		
102	EMMES Corporation, Maryland, USA	3,297.00	-		3,297.00			-				3,297.00
103	Endronic Society of India	-	(4,500.00)	100,000.00	95,500.00		10,000.00	10,000.00				85,500.00
104	European Commission	7,142,929.00	-		7,142,929.00	5,605,198.00		5,605,198.00				1,537,731.00
105	Federation of Obstetric & Gynaecological	-	(276.00)		(276.00)			-				(276.00)
106	Flamentera AG, Switzerland	48,193.00	-		48,193.00			-				48,193.00
107	Fogarty International Centre, NIH, USA	5,807.00	-		5,807.00			-				5,807.00
108	Fondazione Angelo Bianchi Bonomi, Milano- Italy	106,888.00	-		106,888.00			-				106,888.00
109	Ford Foundation	458,594.00	-		458,594.00			-				458,594.00
110	FREEDOM TRIAL	86,253.00	-		86,253.00			-				86,253.00
111	Fulford India Ltd	112,403.00	-		112,403.00			-				112,403.00
112	George Institute for Global Health, India			157,500.00	157,500.00	82,480.00	13,500.00	95,980.00				61,520.00
113	GIL EAD Sciences, Inc., California			576,085.00	576,085.00		29,929.00	29,929.00				546,156.00
114	Glaxo India Ltd	217,377.00	-		217,377.00			-				217,377.00
115	Glaxo Smith Kline	253,108.50	-	147,235.19	400,343.69	25,000.00	14,724.00	39,724.00				360,619.69
116	GlaxoSmith Kline Asia Private Ltd	192,012.00	-		192,012.00	188,370.00		188,370.00				3,642.00
117	Global Cancer Concern India	3,647.00	-		3,647.00			-				3,647.00
118	GW Pharma Ltd UK	19,381.00	-		19,381.00	10,000.00		10,000.00				9,381.00
119	Hamilton Health Sciences & McMaster University, Canada	-	(942,920.00)		(942,920.00)			-				(942,920.00)
120	Hamilton Health Sciences Corporation, Canada	1,202,517.00	-		1,202,517.00	286,272.00		286,272.00				916,245.00
121	Helpage India	-	(284,978.00)		(284,978.00)			-				(284,978.00)
122	Himalaya Drug Co	1,366,236.00	-		1,366,236.00			-				1,366,236.00
123	Hindustan Latex Family Planning Promotion	-	(7,020.00)		(7,020.00)	130,993.00		130,993.00				(138,013.00)
124	Hindustan Latex Limited	203,443.00	-	720,000.00	923,443.00		68,000.00	68,000.00				855,443.00
125	Horiba India Pvt Ltd	-	(117,301.00)		(117,301.00)	34,648.00		34,648.00				(151,949.00)
126	IADVL	249,814.00	-		249,814.00	16,123.00		16,123.00				233,691.00
127	ICCSR	-	(74,861.00)		(74,861.00)			-				(74,861.00)
128	ICGE&B	613,494.00	-		613,494.00			-				613,494.00
129	ICMR	70,692,674.00	-	196,926,451.00	267,619,125.00	182,454,090.00	7,799,872.00	190,253,962.00				77,365,163.00
130	ICSSR	-	(79,411.00)		(79,411.00)			-				(79,411.00)
131	Imperial Life Sciences(P) Ltd	66,552.00	-		66,552.00			-				66,552.00
132	INCLIN	-	(118,368.00)	11,728,440.00	11,610,072.00	3,472,599.00	541,033.00	4,013,632.00				7,596,440.00
133	INCLIN & USAID	24.00	-		24.00			-				24.00
134	INCTR USA	-	(99,699.00)		(99,699.00)			-				(99,699.00)
135	India Medtronic Pvt Ltd	457,224.00	-	1,365,859.00	1,823,083.00	890,724.00	136,586.00	1,027,310.00				795,773.00
136	Indian Council of Agriculture Research	772,404.00	-	1,155,669.00	1,928,073.00	1,600,447.00	57,783.00	1,658,230.00				269,843.00

S. No.	Funding Agency	Opening Balance		Receipt	Total Receipt	Expend	Estd	Expenditure	Adjustments		Debit	Credit	Debit
		Credit	Debit						Credit	Debit			
137	Indian council of Philosophical Research	-	(176,320.00)		(176,320.00)			-					(176,320.00)
138	Indian Heart Rhythm Society	2,560.00	-		2,560.00			-				2,560.00	
139	Indian Institute of public health, Hydrabad	2,478,064.00	-	2,608,487.00	5,086,551.00	2,015,969.00	130,424.00	2,146,393.00				2,940,158.00	
140	Indian Institute of Technology	-	(257,018.00)		(257,018.00)			-					(257,018.00)
141	Indian Society for bone & Mineral Research	-	(60,000.00)		(60,000.00)			-					(60,000.00)
142	Indo German Science & Technology centre	1,629,000.00	-	3,649,900.00	5,278,900.00	525,686.00	182,495.00	708,181.00				4,570,719.00	
143	INDO-US	749,033.00	-		749,033.00			-				749,033.00	
144	Indo-US Science & Technology Forum	803,703.00	-		803,703.00	662,037.00		662,037.00				141,666.00	
145	INMAS (DRDO)												
146	INSA	137,539.00	-	648,466.00	786,005.00	845,842.00		845,842.00				409,651.00	(845,842.00)
147	Institute De Recherches Internationales Servier (IRIS), France	-	(2,034.00)		(2,034.00)			-					(2,034.00)
148	Institute of Cancer Research UK co-ordination Committee	-	(7,209.00)		(7,209.00)			-					(7,209.00)
149	Institute of Genomics & Integrative Biology	1,035,458.00	-	1,916,567.00	2,952,025.00		57,497.00	57,497.00				2,894,528.00	
150	Intas BIOPHARMACEUTICALS Ltd	-	(50,063.00)		(50,063.00)			-					(50,063.00)
151	International Union Against Tuberculosis and Lung Diseases	17,557.00	-	150,000.00	167,557.00	134,582.00	15,000.00	149,582.00				17,975.00	
152	International Atomic Energy Agency	2,240,856.00	-	429,428.00	2,670,284.00	2,035,293.00	42,943.00	2,078,236.00				592,048.00	
153	International Atomic Energy Agency				-	283,165.00		283,165.00					(283,165.00)
154	International Atomic Energy Agency				-	557,365.00		557,365.00					(557,365.00)
155	International Paediatrics Nephrology Association	462,959.00	-		462,959.00			-				462,959.00	
156	International Union Against Cancer (UICC)	95,273.00	-		95,273.00			-				95,273.00	
157	Invictus Oncology	477,443.00	-	592,416.00	1,069,859.00	413,197.00	59,242.00	472,439.00				597,420.00	
158	Ipea laboratoris	866,116.00	-		866,116.00	1,178,777.00		1,178,777.00					(312,661.00)
159	ISHTM	-	(21,171.00)	3,710,000.00	3,688,829.00	2,400,148.00	371,000.00	2,771,148.00				917,681.00	
160	JIV DAYA FOUNDATION	1,155,661.50	-	351,249.00	1,506,910.50	1,932,459.00	17,562.00	1,950,021.00					(443,110.50)
161	JOHN HOPKINS BLOOMBERG SCHOOL OF PUBLIC HEALTH (JHBSPH)	260,845.00	-		260,845.00			-				260,845.00	
162	Johnson & Johnson	217,681.31	-	100,000.00	317,681.31		10,000.00	10,000.00				307,681.31	
163	KHANDELWAL LABORATORIES LTD	805.00	-		805.00			-				805.00	
164	KLPF,USA	16,473.00	-		16,473.00			-				16,473.00	
165	KOBE, JAPAN	10,221.00	-		10,221.00			-				10,221.00	
166	Lab India Healthcare			1,199,217.00	1,199,217.00	317,527.00	119,922.00	437,449.00				761,768.00	
167	Lady Tata Memorial Trust	353,072.00	-	800,000.00	1,153,072.00	554,877.00	40,000.00	594,877.00				558,195.00	
168	Lady Tata Memorial Trust				-	304,014.00		304,014.00					(304,014.00)

S. No.	Funding Agency	Opening Balance		Receipt	Total Receipt	Expend	Extd	Expenditure	Adjustments		Credit	Debit
		Credit	Debit						Credit	Debit		
169	Lajolla Pharmaceutical Company, California	487.00	-		487.00			-			487.00	
170	Lambdia Therapeutic Research Ltd			645,858.00	645,858.00		56,954.00	56,954.00			588,904.00	
171	Lebara Foundation	1,741,280.00	-	2,083,977.00	3,825,257.00	2,815,107.00	208,397.00	3,023,504.00			801,753.00	
172	LG Chemicals India Pvt Ltd	-	(668.00)		(668.00)			-				(668.00)
173	LG Life Sciences India Pvt Ltd	70,267.00	-	388,440.00	458,707.00		38,844.00	38,844.00			419,863.00	
174	Liver Foundation	63,986.00	-	504,000.00	567,986.00	324,165.00	33,600.00	357,765.00			210,221.00	
175	London School of Hygiene & Tropical Medicine, UK	146,225.00	-		146,225.00			-			146,225.00	
176	Lupin Limited	18,386.00	-		18,386.00			-			18,386.00	
177	M/s ARCHIMEDES DEVELOPMENT LTD, UK	47,204.00	-		47,204.00			-			47,204.00	
178	M/S ASPREVA PHARMACEUTICAL CORPORATION, CANADA	-	(41,266.00)		(41,266.00)			-				(41,266.00)
179	M/s Gilead Sciences Inc USA	5,334,853.00	-	2,426,143.00	7,760,996.00	68,438.00	259,174.00	327,612.00			7,433,384.00	
180	M/s janacare solution pvt Ltd	630,019.00	-	797,522.00	1,427,541.00	1,789,171.00	79,752.00	1,868,923.00				(441,382.00)
181	M/S Markansas Research Division	-	(4,745.00)		(4,745.00)			-				(4,745.00)
182	M/s Merck Sharp & Dohme Corp, USA			131,220.00	131,220.00	57,509.00	13,122.00	70,631.00			60,589.00	
183	M/s Merck Sharp & Dohme Corporation USA	166,017.00	-		166,017.00	1,520,481.00		1,520,481.00				(1,354,464.00)
184	Macleods Pharmaceutical Ltd	18.00	-		18.00			-			18.00	
185	Maharishi Ayurveda	-	(6,352.00)		(6,352.00)			-				(6,352.00)
186	Max Neeman International	993,796.00	-		993,796.00			-			993,796.00	
187	MBI Ktis	8,867.00	-		8,867.00			-			8,867.00	
188	McMaster University, Canada	99,233.00	-	400,732.00	499,965.00	243,387.00	20,037.00	263,424.00			236,541.00	
189	Media Lab Asia	-	(11,301.00)		(11,301.00)			-				(11,301.00)
190	Medpace			100,001.00	100,001.00		10,000.00	10,000.00			90,001.00	
191	Medtronic India Pvt Ltd	63,550.00	-	56,250.00	119,800.00	79,053.00	5,625.00	84,678.00			35,122.00	
192	Merck Pharmaceuticals Ltd	-	(429,945.00)		(429,945.00)			-				(429,945.00)
193	MERCK SERONO INTERNATIONAL SA, SWITZERLAND	217,685.00	-		217,685.00			-			217,685.00	
194	Meril Life Sciences Pvt Ltd	196,202.00	-		196,202.00			-			196,202.00	
195	MERK & CO, INC USA	1,024,849.80	-	330,750.00	1,355,599.80	564,524.00	16,538.00	581,062.00			774,537.80	
196	Merz Pharmaceuticals GmbH, Germany	-	(67,291.00)		(67,291.00)			-				(67,291.00)
197	Ministry of Chemical and petrochemicals	-	(14,820.00)		(14,820.00)			-				(14,820.00)
198	Ministry of Communication and Information & Technology	12,017,583.00	-		12,017,583.00	4,558,290.00		4,558,290.00			7,459,293.00	
199	Ministry of Defence (DRDO)	65,850.00	-		65,850.00			-			65,850.00	
200	Ministry of Earth Science	184,977.00	-		184,977.00			-			184,977.00	
201	Ministry of Environment & Forest	-	(11,225.00)		(11,225.00)	31,158.00		31,158.00				(42,383.00)

S. No.	Funding Agency	Opening Balance		Receipt	Total Receipt	Expend	Extd	Expenditure	Adjustments		Debit
		Credit	Debit						Credit	Debit	
202	Ministry of Environment Forest										
203	Ministry of Health And Family Welfare(NACO)	3,822,254.00	-	2,174,428.00	5,996,682.00	5,799,441.00		5,799,441.00			-
204	Ministry of Health and Family Welfare& Ayush	14,829,279.00	-	38,372,096.00	53,201,375.00	52,066,676.00	574,173.00	52,640,849.00			560,526.00
205	Ministry of Social Justice and Empowerment	107,491.00	-	21,000,000.00	21,107,491.00	20,149,411.00	1,050,000.00	21,199,411.00			(91,920.00)
206	Ministry of Welfare	2,100.00	-		2,100.00			-			2,100.00
207	Morphotek Inc USA	98,823.58	-		98,823.58			-			98,823.58
208	MSD (India) Pvt Ltd	236,463.00	-		236,463.00			-			236,463.00
209	Nag foundation, pune			500,000.00	500,000.00		50,000.00	50,000.00			450,000.00
210	NAIP	-	(59,810.00)		(59,810.00)			-			(59,810.00)
211	NAMS	-	(39,516.00)	52,500.00	12,984.00	243,989.00	-	243,989.00			(231,005.00)
212	National disaster management authority			10,653,000.00	10,653,000.00	6,100,000.00	532,650.00	6,632,650.00			4,020,350.00
213	NATCO Pharma India	110,079.00	-		110,079.00			-			110,079.00
214	National AIDS Control Organisation	-	(265,079.00)		(265,079.00)	52,500.00		52,500.00			(317,579.00)
215	National Commission for Protection of Child Rights				-	30,200.00		30,200.00			(30,200.00)
216	National Commission for protection of child Rights	-	(428,502.00)		(428,502.00)	65,948.00		65,948.00			(494,450.00)
217	National Health and Medical Research Council , Australia	308,785.00	-	263,934.00	572,719.00		26,393.00	26,393.00			546,326.00
218	National Information Centre	1,899,547.00	-		1,899,547.00	1,851,802.00		1,851,802.00			47,745.00
219	National Innovation Foundation				-			-			-
220	NATIONAL INSTITUTE OF HEALTH, USA	13,255,379.00	-		13,255,379.00	175,341.00		175,341.00			13,080,038.00
221	NATIONAL INSTITUTE OF Mental HEALTH, NIH USA	346,649.00	-	2,482,359.00	2,829,008.00	1,713,980.00	248,236.00	1,962,216.00			866,792.00
222	National Institute of Nutrition (NIN) Hyderabad	109.00	-		109.00			-			109.00
223	National Institute of pharmaceutical Education & Research	12,439.00	-		12,439.00			-			12,439.00
224	National Knowledge Commission	331,672.00	-		331,672.00			-			331,672.00
225	National Perinatal Epidemiology Unit, University of Oxford, UK	594,035.55	-		594,035.55			-			594,035.55
226	National Thalassemia Welfare Society	-	(1,781.00)		(1,781.00)			-			(1,781.00)
227	NCBIR			88,708.00	88,708.00		-	-			88,708.00
228	NCPvt Ltd	37,117.00	-		37,117.00			-			37,117.00
229	NCT	33,584.00	-		33,584.00			-			33,584.00
230	Neeman Medical International Asia Ltd	237,385.00	-		237,385.00			-			237,385.00
231	Newcastle University, UK	-	(717.00)		(717.00)			-			(717.00)
232	Next Gen Pharma India Pvt. Ltd			522,900.00	522,900.00		52,290.00	52,290.00			470,610.00
233	NIE	112,122,568.66	-	68,525,943.25	180,648,511.91	24,833,257.14	-	24,833,257.14			155,815,254.77
234	NIPER, New Delhi 110001			9,137,280.00	9,137,280.00	1,430,118.00	228,432.00	1,658,550.00			7,478,730.00

S. No.	Funding Agency	Opening Balance		Receipt	Total Receipt	Expend	Estd	Expenditure	Adjustments		Debit	Credit	Debit
		Credit	Debit						Credit	Debit			
235	Nova Nordisk India Pvt Ltd	248,183.00	-	2,017,621.00	2,265,804.00	1,306,999.00	170,558.00	1,477,557.00				788,247.00	
236	NovaBay Pharmaceuticals Inc, USA	54,353.69	-		54,353.69			-				54,353.69	
237	Novartis Health Care Pvt Ltd	236,181.25	-	496,800.00	732,981.25	85,847.00	69,120.00	154,967.00				578,014.25	
238	Novartis			1,132,758.25	1,132,758.25	874,163.00	106,588.00	980,751.00				152,007.25	
239	Novartis India Ltd	1,016,376.12	-	113,490.00	1,129,866.12		9,280.00	9,280.00				1,120,586.12	
240	NRDC	319,872.00	-		319,872.00	290,362.00		290,362.00				29,510.00	
241	NSD (Security Deposit)	2,973,194.00	-		2,973,194.00			-				2,973,194.00	
242	Office of Science & Technology officer of naval research golbal, USA	2,671,205.00	-		2,671,205.00	1,357,508.00		1,357,508.00				1,313,697.00	
243	Ovation Pharmaceuticals, USA	37,222.00	-		37,222.00			-				37,222.00	
244	Overseas associates	190.00	-		190.00			-				190.00	
245	Oxford University, UK	-	(46,072.75)	453,010.00	406,937.25	407,978.00	13,590.00	421,568.00					(14,630.75)
246	OXIGENE, USA	215,126.84	-		215,126.84			-				215,126.84	
247	Ozone pharmaceuticals ltd	239.00	-		239.00			-				239.00	
248	Panacea biotech Ltd	8,084.00	-		8,084.00			-				8,084.00	
249	Parveel International Clinical Research Pvt. Ltd			51,750.00	51,750.00	10,000.00	5,175.00	15,175.00				36,575.00	
250	PAREXEL INTERNATIONAL LTD, UK	1,154,017.27	-		1,154,017.27	59,832.00		59,832.00				1,094,185.27	
251	Path/One world Health	663,585.00	-		663,585.00	698,014.00		698,014.00					(34,429.00)
252	Peregrine Pharmaceuticals, USA	-	(26,577.00)		(26,577.00)			-					(26,577.00)
253	Pfizer Ltd	94,768.35	-	630,000.00	724,768.35	660,498.00	63,000.00	723,498.00				1,270.35	
254	Pharmacia India Pvt Ltd	837.00	-		837.00			-				837.00	
255	Pharmacosmos A/S, Denmark	-	(900.00)		(900.00)			-					(900.00)
256	PHARM-OLAM INTERNATIONAL, LTD	16,923.00	-		16,923.00			-				16,923.00	
257	PHFI	3,996,519.00	-		3,996,519.00	1,121,713.00		1,121,713.00				2,874,806.00	
258	Phonemix Cardic	35,065.00	-	468,000.00	503,065.00	430,891.00	46,800.00	477,691.00				25,374.00	
259	PHRI, ONTARIO CANADA			1,233,848.00	1,233,848.00	294,708.00	86,469.00	381,177.00				852,671.00	
260	Piramal Healthcare Ltd	210,987.00	-		210,987.00			-				210,987.00	
261	Piramal Life Sciences	36,211.00	-		36,211.00			-				36,211.00	
262	PPD Pharmaceutical Development India Pvt Ltd	-	(22,668.00)		(22,668.00)			-					(22,668.00)
263	PRA India Pvt Ltd	-	-		-			-				-	-
264	QED PHARMACEUTICAL SERVICES PVT LTD	577,043.00	-		577,043.00			-				577,043.00	
265	Qiagen Inc India	3,709.00	-		3,709.00			-				3,709.00	
266	Quintiles Spectral India	2,849,756.16	-	347,190.30	3,196,946.46	351,188.00	13,808.00	364,996.00				2,831,950.46	
267	Rajiv Gandhi Foundation	-	(989.00)		(989.00)			-					(989.00)
268	Ranbaxy Jellilly & company pvt Ltd	1,885,468.00	-		1,885,468.00	33,568.00		33,568.00				1,851,900.00	
269	Raptram Research Ltd	671,004.00	-		671,004.00	386,907.00		386,907.00				284,097.00	
271	Reliance Clinical Research Services (P) Ltd				-			-				-	-

S. No.	Funding Agency	Opening Balance		Receipt	Total Receipt	Expend	Est'd	Expenditure	Adjustments		Debit
		Credit	Debit						Credit	Debit	
272	Reliance Clinical Research Services (P) Ltd	628,806.50	-		628,806.50	62,213.00		62,213.00			566,593.50
273	Reliys Medical Devices Ltd	-	(3,433.00)		(3,433.00)						(3,433.00)
274	Revolving Funds for Drugs / SNMC	195,710.00	-		195,710.00			-			195,710.00
275	ROCHE Products(India) Pvt Ltd	230,958.00	-		230,958.00	62,515.00		62,515.00			168,443.00
276	Russian Pharma Ltd Mumbai	433,750.00	-		433,750.00						433,750.00
277	REC Power distribution company Ltd.			1,248,310.00	1,248,310.00		12,483.00	12,483.00			1,235,827.00
278	Sanat Product Ltd	-	(77,996.00)		(77,996.00)			-			(77,996.00)
279	Sanofi Pasteur India Pvt Ltd	123,346.00	-		123,346.00			-			123,346.00
280	SANOFL-AVENTIS	35,743.00	-		35,743.00			-			35,743.00
281	Sarabhai Chemicals	-	(4,868.00)		(4,868.00)			-			(4,868.00)
282	Saveer Biotech.limited			480,000.00	480,000.00	274,794.00	48,000.00	322,794.00			157,206.00
283	SAVING NEWBORN LIVES, USA	-	(10,898.00)		(10,898.00)			-			(10,898.00)
284	SCA Global hygien products india pvt Ltd	138,652.00	-		138,652.00			-			138,652.00
285	SERICARE	-	(182,191.00)		(182,191.00)			-			(182,191.00)
286	Shania Biotechies Pvt Ltd	115,794.00	-	473,350.00	589,144.00	436,247.00	47,335.00	483,582.00			105,562.00
287	Shastri Indo- candian Institute	161,250.00	-	255,000.00	416,250.00	182,180.00	25,500.00	207,680.00			208,570.00
288	Shire Human Genetic Therapies, Inc, USA	1,114,905.40	-		1,114,905.40			-			1,114,905.40
289	Siemens Ltd	191,308.00	-	509,520.00	700,828.00	330,324.00	50,952.00	381,276.00			319,552.00
290	Sight savers	1,118,219.00	-	4,331,659.00	5,449,878.00	5,223,322.00	216,582.00	5,439,904.00			9,974.00
291	Singapore Clinical Research Institute, Singapore	-	(13,228.00)	531,944.00	518,716.00	251,342.00	33,209.00	284,551.00			234,165.00
292	SIRO CLIN PHARMA PVT LTD	-	(35,171.00)		(35,171.00)			-			(35,171.00)
293	SMB Corporation of India	81,620.00	-	250,000.00	331,620.00	333,243.00	25,000.00	358,243.00			(26,623.00)
294	Smith & Nephew Health care pvt lt	5,443.00	-		5,443.00			-			5,443.00
295	Society of American Gastrointestinal and Endoscopic Surgeons	7,001.00	-		7,001.00			-			7,001.00
296	Solumiks Herbaceuticals Limited	13.00	-		13.00			-			13.00
297	Solvey Pharma Ltd	13,465.00	-		13,465.00			-			13,465.00
298	SRB-Clinical Pharmacology	-	(3,154,100.00)		(3,154,100.00)			-			(3,154,100.00)
299	St Jhon Medical College Bangalore	-	-		-			-			-
300	St Jude Medical Hong Kong	-	(5,014.00)		(5,014.00)			-			(5,014.00)
301	ST Jude Medical India Pvt Ltd	451,992.00	-	55,094.00	507,086.00	312,860.00	5,509.00	318,369.00			188,717.00
302	Stempeutics Research Pvt Ltd	-	(17,088.00)	477,728.00	460,640.00	460,309.00	-	460,309.00			331.00
303	Sterling Synergy System (P) Ltd	58,580.00	-		58,580.00			-			58,580.00
304	Sun Pharmaceuticals	3,384.00	-		3,384.00			-			3,384.00
305	Swami Sivamanda Memorial Institute			1,000,000.00	1,000,000.00	350,000.00	50,000.00	400,000.00			600,000.00
306	Synergy Network India Pvt Ltd,	551.00	-		551.00			-			551.00
307	Texas A&M Research Foundation (TAMRF) USA	16,237.00	-		16,237.00			-			16,237.00
308	The Cancer Foundation	44,245.00	-		44,245.00			-			44,245.00

S. No.	Funding Agency	Opening Balance		Receipt	Total Receipt	Expend	Estd	Expenditure	Adjustments		Debit
		Credit	Debit						Credit	Debit	
309	The Energy and Resources Institute	7,775.00	-		7,775.00			-			7,775.00
310	The George Institute for International Health, Australia	777,334.32	-	497,826.00	1,275,160.32	597,920.00	49,840.00	647,760.00			627,400.32
311	The International Society for Paediatric Neurosurgery (ISPNE)	408.00	-		408.00			-			408.00
312	The Media Lab Asia	632,452.00	-		632,452.00	534,010.00		534,010.00			98,442.00
313	The Medical Research Council, UK	3,592.00	-		3,592.00			-			3,592.00
314	THE MICRONUTRIENT INITIATIVE, ASIA	-	(4,702.00)		(4,702.00)			-			(4,702.00)
315	The Service de Dermatologie, France	-	(8,445.00)		(8,445.00)			-			(8,445.00)
316	The University of Alabama, USA	-	(2,729,270.00)		(2,729,270.00)			-			(2,729,270.00)
317	The University of Edinburgh and NHS Lothian	18,226.00	-	91,339.00	109,565.00	85,850.00	9,134.00	94,984.00			14,581.00
318	THRESHOLD PHARMACEUTICALS, USA	-	(3,136.00)		(3,136.00)			-			(3,136.00)
319	Torrent Pharmaceutical Ltd	5,688,296.00	-	1,800,000.00	7,488,296.00	6,566,419.00	180,000.00	6,746,419.00			741,877.00
320	Troika Pharmaceutical Ltd			26,565.00	26,565.00	-	2,565.00	2,565.00			24,000.00
321	Troika Pharmaceutical Ltd	26,393.00	-		26,393.00			-			26,393.00
322	UGC	-	(3,497,311.00)	4,030,000.00	532,689.00	2,571,181.00	-	2,571,181.00			(2,038,492.00)
323	UN International Drug and crime Control Programme	53,106.00	-		53,106.00			-			53,106.00
324	UNICEF	-	(1,410,896.12)	2,556,599.00	1,145,702.88	881,795.00	227,519.00	1,109,314.00			36,388.88
325	Universitair Ziekenhuis Antwerpen (UZ), Belgium			329,502.00	329,502.00	127,142.00	32,950.00	160,092.00			169,410.00
326	University of Bergen, Norway	655,163.00	-		655,163.00	285,960.00		285,960.00			369,203.00
327	UNIVERSITY OF CALGARY, CANADA	57,187.00	-		57,187.00			-			57,187.00
328	University of California San Francisco	516,941.00	-		516,941.00	516,734.00		516,734.00			207.00
329	University of Maryland	90,282.00	-		90,282.00			-			90,282.00
330	University of Nottingham, UK	1,974.00	-		1,974.00			-			1,974.00
331	University of Warwick UK	-	(1,061.00)		(1,061.00)			-			(1,061.00)
332	UNM HSC	235,682.00	-		235,682.00	166,590.00		166,590.00			69,092.00
333	Unique Biotech Ltd.			1,800,000.00	1,800,000.00	1,288,083.00	180,000.00	1,468,083.00			331,917.00
334	US Science & Technology Forum, USA	399,323.00	-		399,323.00			-			399,323.00
335	Venus Remedies Ltd	24,300.00	-		24,300.00	9,970.00		9,970.00			14,330.00
336	Vulimiri Ramalingaswami Foundation			180,000.00	180,000.00	18,000.00	18,000.00	18,000.00			162,000.00
337	Vulimiri Ramalingaswami Foundation	-	(6,508.00)		(6,508.00)			-			(6,508.00)
338	Vyome Bioscience pvt Ltd	87,495.00	-		87,495.00	29,900.00		29,900.00			57,595.00
339	Walter Bushnell	329,796.00	-	868,824.00	1,198,620.00	890,624.00	86,882.00	977,506.00			221,114.00
340	Welcome Trust London, UK	2,431,494.00	-	8,869,880.00	11,301,374.00	7,897,810.00	456,147.00	8,353,957.00			2,947,417.00
341	WHO	14,557,210.00	-	14,955,871.25	29,513,081.25	10,307,385.00	726,684.00	11,034,069.00			18,479,012.25
342	Wockhardt, Mumbai	1,176,899.00	-		1,176,899.00			-			1,176,899.00
343	Wyeth Pharmaceuticals Inc	-	(538,244.00)		(538,244.00)			-			(538,244.00)

S. No.	Funding Agency	Opening Balance		Receipt	Total Receipt	Expend	Estd	Expenditure	Adjustments		Debit
		Credit	Debit						Credit	Debit	
344	Zenotech	32,037.00	-		32,037.00			-			32,037.00
345	Zimmer India Pvt Ltd			90,659.00	90,659.00		9,066.00	9,066.00			81,593.00
346	Zuventus	146,250.00	-		146,250.00			-			146,250.00
347	Zydus Healthcare Ltd	-	(398.00)		(398.00)			-			(398.00)
	TOTAL	542,236,578.80	(56,533,770.36)	1,088,258,930.14	1,573,961,738.58	823,597,385.14	48,488,328.00	872,085,713.14	-	-	741,618,188.69
											(39,742,163.25)

ACCOUNT OFFICER
Research Section

13.2. Audit Report

Separate Audit Report of the Comptroller & Auditor General of India on the Accounts of the All India Institute of Medical Sciences (AIIMS), New Delhi for the year ended 31 March 2017

1. We have audited the attached Balance Sheet of the All India Institute of Medical Sciences (AIIMS), New Delhi, as at 31 March, 2017 the Income & Expenditure Account and Receipts & Payments Account for the year ended on that date under section 19 (2) of the Comptroller and Auditor General's (Duties, Powers & Conditions of Service) Act, 1971 read with section 18 (2) of the AIIMS Act, 1956. These financial statements are the responsibility of the AIIMS management. Our responsibility is to express an opinion on these financial statements based on our audit.
2. This separate Audit Report contains the comments of the Comptroller and Auditor General (CAG) of India on the accounting treatment only with regard to classification, conformity with the best accounting practices, accounting standards and disclosure norms etc. Audit observations on financial transactions with regard to compliance with the Law, Rules & Regulations (Propriety and Regularity) and efficiency-cum-performance aspects etc., if any, are reported through Inspection Reports/CAG's Audit Reports separately.
3. We have conducted our audit in accordance with auditing standards generally accepted in India. These standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatements. An audit includes examining, on a test basis, evidence supporting the amounts and disclosure in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management as well as evaluating the overall presentation of financial statements. We believe that our audit provides a reasonable basis for our opinion.
4. Based on our audit, we report that:
 - i. We have obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purpose of our audit;
 - ii. The Balance Sheet, Income & Expenditure Account and Receipts & Payments Accounts dealt with by this report have been drawn up in the uniform format of accounts approved by the Ministry of Finance, Government of India.
 - iii. In our opinion, proper books of accounts on double entry system of accounting and other relevant records have been maintained by the AIIMS, in so far, as it appears from our examination of such books.
 - iv. We further report that:

A.1 Assets

A.1.1. Current Assets Loans & Advances

A.1.1.1. AIIMS (Main) (Schedule 11) ₹57242.57 lakhs

As per Schedule 11 of AIIMS Main accounts, Sundry debtors under debts outstanding amount shown as ₹787.42 lakh in which ₹397.42 lakh were more than 5–6 years old and represented negative balance under Schemes, run by Research Section. Neither review of overdue debtors nor provisions of the same has been made in the account.

A.1.1.2 Centre for Dental Education & Research (CDER) ₹135.84 lakh (Schedule– 11B)

In schedule 11-B of balance sheet of CDER, the centre has shown several advances which included the advance paid to NDMC of ₹23.65 lakh, security deposits to NDMC of ₹30.00 lakh and advance paid to DGS&D of ₹4.69 lakh. These advances were more than five years old. Neither review of overdue debtors nor provision for the same made in the accounts.

B. GENERAL

B.1 There were huge un-reconciled balances in the bank (as on 31.03.2017) reconciliation statements of AIIMS (Main) and UNDCP as detailed below:

('in crore)		
Particulars	Amount as on 31.03.2017	Amount as on 31.08.2017
Cheque issued but no debited	152.04	18.99
Cheque deposited but not credited	11.62	2.09
Cheque not issued but excess debited	0.40	0.40
Excess credited by bank	0.68	0.68

The matter should be taken with bank to reconcile the remaining differences promptly.

B.2 No depreciation has been charged by the Institute on Fixed Assets of ₹398008.43 lakh i.e., Machinery and Equipment, vehicles, Building and Library Books etc. as per required under AS 6 of ICAI.

B.3 The provision for retirement benefits had not been made in the accounts on actuarial basis as required under Auditing Standard (AS-16) of ICAI.

B.4 AIIMS has eight centres including AIIMS (Mains) which are maintaining separate accounts. However, the notes and instructions for compilation of financial statement should prescribe the information whether all the accounts are consolidated or not.

B.5 Difference in figures

- a) As per Balance Sheet of General Provident Funds of AIIMS, an addition of Assets during the year 2016-17 depicted as ₹1973494132/- whereas balance shown in GPF ledger of ₹1979587316/-. The difference of ₹6093184/- may be reconciled.
- b) As per schedule 21 – others (specify)(Contingency charge) under Other Administrative Expenses Etc. of the Centre for Dental Education and Research, an amount of ₹1921360 was shown however the amount was depicted as ₹1896360 in the ledger. The difference may be reconciled.
- c) An amount of ₹1093.87 lakh has been shown under Schedule – 3 in Balance Sheet of accounts of BRAIRCH, however, in Schedule – 3 an amount of ₹793.87 lakh has been depicted. The difference of ₹300.00 lakh between two set of figures needs to be reconciled.
- d) An amount of ₹23.33 lakh has been shown under Schedule – 7 in Balance Sheet of accounts of BRAIRCH, however, in Schedule – 7 an amount of ₹323.33 lakh has been depicted. The difference of Rs. 300.00 lakh between two set of figures need to be reconciled.

C. Grants-in-aid

During the year 2016-17 AIIMS received grants of ₹238640.00 lakh {Plan: ₹100000.00 lakh and Non-Plan: ₹128800.00 lakh, Oversight committee (Plan) ₹8500.00 lakh and National Drug Dependence Treatment Centre (NDDTC): ₹1340.00 lakh (Plan)}. It had an unspent balance of ₹1763.42 lakh of the previous year and also had its own income of ₹14118.37 lakh. The total expenditure incurred by AIIMS was ₹255887.03 lakh (Plan Capital: ₹59645.89 lakh, Plan Revenue ₹41999.13 lakh, Non Plan: ₹144062.39 lakh, Oversight Committee (Plan) ₹8501.14 lakh and NDDTC: ₹1678.48 lakh). The excess expenditure was met by AIIMS from the reserve created out of surplus receipt of previous years. Besides the AIIMS received grants for various schemes amounting to ₹10382.59 lakh and incurred an expenditure of ₹8722.70 lakh.

D. Management Letter

Deficiencies which have not been included in the audit report have been brought to the notice of the AIIMS Management through a management letter issued separately for remedial/corrective action.

- v. Subject to our observations in the preceding paragraph we report that the Balance Sheet, Income & Expenditure Account and Receipts & Payments Account dealt with by this report in agreement with the books of accounts.
- vi. In our opinion and to the best of our information and according to the explanation given to us, the said financial statements read together with the Accounting Policies and Notes on Accounts and subject to the significant matters stated above and other matters mentioned in Annexure I to this Audit Report give a true and fair view in conformity with accounting principles generally accepted in India.
 - a. In so far as it relates to the Balance Sheet of the state of affairs of the All India Institute of Medical Sciences as at 31 March, 2017; and
 - b. In so far as it relates to Income & Expenditure Account of the surplus for the year ended on that date.

For and on behalf of the C&AG of India

**Director General of Audit
(Central Expenditure)**

Place: New Delhi

Date: 22.11.17

Annexure-I

1. Adequacy of internal audit system:

During 2016-17, out of total number of 144 units, only 29 units were planned and audited by the internal wing of the AIIMS. There was no internal audit manual.

2. Adequacy of Internal Control System

- a) The internal control system of the AIIMS was adequate in areas seen by the audit.
- b) In schedule 8 – 'Fixed Assets', the balance sheet of the AIIMS (Main) and various centres of the Institute disclosed assets valued at ₹398008.43 lakh as on 31st March, 2017. An Assets Register required to be maintained under General Financial Rules in Form GFR-40 was not maintained by the Institute. In the absence of Assets Register, the value of assets of ₹398008.43 lakh could not be verified in audit.
- c) In Schedule-11 of balance sheet of AIIMS (Main), the Institute has shown an advance of ₹23.40 lakh for purchase of iron and steel. The details of these old advances were not made available to audit.

3. System of Physical verification of fixed assets

- a) The physical verification of fixed assets had not been conducted during 2016-17.
- b) The following assets were appearing in the annual income as an addition of the assets of the AIIMS (Main) and other centres during the year. Due to non-maintenance of consolidated asset register, the balances of assets appearing in the Balance Sheet could not be verified from the asset register.

(₹ in lakh)		
Name of unit	Assets	Amount
AIIMS (Main)	Plant, Machinery & Equipment	104355.95
	Building	136197.36
	Land	8411.94
	Computer	1116.86
	Library Books	9057.28
	Vehicles	381.20
Dr. R.P. Centre	Machinery Equipment	25996.06
	Furniture & Fixtures	178.32
C N Centre	Machinery and Equipment	51495.79
BRAIRCH	Machinery and Equipment	17130.42
	Furniture & Fixtures	109.21
	Vehicles	35.64
JPN Apex Trauma Centre	Machinery and Equipment	20578.55
	Furniture & Fixtures	125.19
CDER	Machinery and Equipment	2627.02
NDDTC	Plant, Machinery and equipment	544.84
	Library Books	422.82
	Furniture & Fixtures	96.04
	Total	378860.49

4. System of physical verification of inventory

The physical verification of books and publications and consumables and stationery had not been conducted during 2016-17.

5. Regularity in payment of statutory dues

As per accounts, no payment over six months in respect of statutory dues was outstanding as on 31 March 2017.

Replies to Separate Audit Report of the Comptroller & Auditor General of India on the Accounts of AIIMS for the year ending 31 March 2017.

A.1.1.1. AIIMS (Main) (Schedule 11) Rs. 57,242.57 lakhs

An amount of Rs. 397.42 lakh shown as debtors' pertains to Research Project. Research Section, AIIMS incurred the expenditure under respective project in anticipation of receipt of funds from various funding agencies, i.e. DST/DBT/ICMR etc. so that salary and other allowances can be paid to project staff/outourced staff working under respective project timely. This is a regular practice adopted in Research Section for smooth working and to achieve intended objective of the project in scheduled time. Efforts are being made to recover the outstanding amount from funding agencies, which are mostly Government Bodies. This will be reviewed in current year. If there is any contingency regarding non-recovery, the same will be provided in the accounts. However presently these are considered as recoverable.

A.1.1.2. Centre for Dental Education and Research Rs. 135.84 lakhs (Schedule 11B)

The advances shown in Balance Sheet of CDER as other advances Rs. 58.33 lakhs which include the advance paid to NDMC (Rs. 23,64,500/-), Security Deposit to NDMC (Rs. 30,00,000/-) are mainly deposit. The original receipts and corresponding files are being traced and would be shown to audit and correction if any required also would be done under intimation to Audit.

B.1 Major amount of outstanding cheques has been reconciled as evident from figures of 31.03.17 and on 31.08.17. The efforts are being made for settlement of remaining outstanding un-reconciled bank balances. The special efforts are being made in this regard and matter has been taken up at the zonal level for providing complete detail of debit by the bank so that the same could be reconciled.

B.2 The observation of Audit has been noted for future compliance. It is further submitted that the Depreciation policy has been framed and approved by the competent authority. This would be adopted simultaneously with adoption of accrual system of accounting.

B.3 The observation of Audit has been noted for future compliance. Provisions will be made once the accounts of the Institute are prepared on accrual basis.

B.4 The accounts of the AIIMS (Main) and various centres are being maintained separately and are not consolidated. This fact would be suitably disclosed in note forming part of accounts.

B.5 (a) & (b) Efforts are being made to reconcile the difference and necessary corrections will be carried in accounts of next Financial Year.

The observation of audit has been noted for future compliance.

C. Grants-in-aid

Factual information, hence no comments.

D. Management Letter

Deficiencies included in the management letter are being reviewed for taking suitable remedial/corrective action.