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 with the objects to develop patterns of teaching in undergraduate and postgraduate 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 undergraduate and postgraduate levels and awards its own degrees. Teaching and research are conducted in 50 disciplines. In the field of medical research AIIMS is the leader, having more than 1500 research publications by its faculty and researchers in a year. AIIMS also runs a College of Nursing, training students for B. Sc. (Hons.) Nursing nd B. Sc. Nursing (Post-Certificate) degrees.

Twenty-five clinical departments including six super-speciality centres manage practically all types of disease conditions with support from pre-clinical and para-clinical departments. AIIMS also runs a 60-bedded hospital and the Comprehensive Rural Health Centre at Ballabgarh in Haryana and provides health cover to about 7.7 lakh people through the Centre for Community Medicine.
AIIMS AT A GLANCE
2008–2009

Year of establishment 1956

<table>
<thead>
<tr>
<th>Teaching Departments and Centres</th>
<th>50</th>
<th>Medical graduates</th>
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<td>Faculty members (Sanctioned 625)</td>
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<td>Postgraduates</td>
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<td>Non-faculty staff (Sanctioned 9312)</td>
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<td>Nursing graduates</td>
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<tr>
<td>No. of Undergraduate students</td>
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<td>Publications in journals</td>
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<td>No. of Postgraduate students</td>
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HOSPITAL SERVICES

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<th>OPD</th>
<th>Admission</th>
<th>Surgery</th>
<th>Bed (Gen.)</th>
<th>Bed (Pvt.)</th>
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<td>1507786</td>
<td>174353</td>
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<td>Dr.R.P. Centre</td>
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<td>29642</td>
<td>29276</td>
<td>280</td>
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<tr>
<td>Dr.BRA,IRCH</td>
<td>74280</td>
<td>23822</td>
<td>6651</td>
<td>167</td>
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</tr>
<tr>
<td>C.T. Centre</td>
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<td>3477</td>
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<tr>
<td>N.S. Centre</td>
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<td>2741</td>
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<tr>
<td>C.C.M.</td>
<td>166886</td>
<td>29033</td>
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<td>JPNAT Centre</td>
<td>37177</td>
<td>19226</td>
<td>1128</td>
<td>30</td>
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</tr>
</tbody>
</table>

Average bed occupancy 79.9%
Average period of hospital stay 5.9 days
Net death rate 2.7%
Infection rate (Crude) 7.60%
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1. Director’s Review

I am glad to present the Fifty-third Annual Report and audited statement of accounts for the year 2008-2009.

The All India Institute of Medical Sciences (AIIMS) was established in 1956 by an Act of Parliament as an institution of national importance. This was in pursuance to the recommendations made by the Bhore Committee in 1946.

AIIMS has been entrusted to develop patterns of teaching in undergraduate and postgraduate 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 at 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. AIIMS is a deemed university and awards its own degrees. In keeping with the mandate from the Parliament, AIIMS continues to be the torch bearer in the field of medical education, research and patient-care.

AIIMS is fully funded by the Government of India. However, for research activities, grants are also received from various sources including national, intergovernmental and other international funding agencies. While the major part of the hospital services are highly subsidized for the patients coming to the AIIMS hospital, certain categories of patients are charged for treatment/services rendered to them.

During the 2008-2009 academic session (i.e. for the courses commencing in July 2008 and January 2009), 384 students were admitted to various postgraduate, post-doctoral and super-speciality courses, i.e. MD, MS, MDS, MHA, PhD, MCh, DM, and MSc in various specialities. In the year under review, 1023 postgraduate and post-doctoral students were on the rolls in various courses and 252 students qualified for their degrees. AIIMS provides full time postgraduate and post-doctoral courses in 47 disciplines. The guiding principle of postgraduate training is to train students as teachers, researchers and competent doctors, who can investigate, manage and treat patients independently. As always, appropriate consideration was given to students from Scheduled Castes (SC), Scheduled Tribes (ST) and other backward (OBC) in accordance with Government of India guidelines and Twenty-four SC, 4 ST and 37 OBC students were admitted to MD/MS/MDS courses and 2 SC, 2 ST and 8 OBC students were admitted to MSc courses.

This year AIIMS admitted 77 students to its MBBS course (including 11 SC, 6 ST and 19 OBC students), 26 students to the B.Sc. Nursing (post-certificate) course (including 2 SC, 3 ST and 6 OBC students), 64 students to the B.Sc. (Hons) in Nursing course (including 7 SC, 4 ST and 10 OBC students), 15 students to the B.Sc. (Hons.) in Ophthalmic Techniques course (including 1 SC 2 ST and 6 OBC students) and 9 students to the B.Sc. (Hons.) in Medical Technology in Radiography course (including 5 OBC students).

AIIMS also provides short/long term training to doctors and other health-trainees from various organizations and state governments, WHO-in-country fellows and foreign students. Four hundred and sixty three (463) candidates received short/long term training in AIIMS during the year. In
addition, elective training was provided to several candidates, including foreign nationals. The Institute also continued to provide consultancy services to several neighboring countries under bilateral agreements or under the aegis of intergovernmental and other international agencies. During 2008-2009, the Institute trained 60 WHO-sponsored candidates/WHO-in-country fellows to fulfill its international obligations.

The details thereof w.e.f. 01.04.2008 to 31.03.2009 are as under:

1. Short term training 460
2. Long term training 03
3. WHO-in-country fellowship 33
4. WHO-sponsored foreign nationals 27
5. Elective training 62
6. Foreign nationals 22

The MBBS course is completed in 5½ years that is subdivided into four periods. The initial three stages are focused on preclinical (1 year), para-clinical (1½ years) and clinical (2 years) subjects, which are followed by 1-year rotating internship. Para-medical courses like B.Sc (Hons.) in Nursing, Ophthalmic Techniques, Medical Technology in Radiography and Speech and Hearing continued to be popular and attracted students from other countries also. The curricula of these courses are under constant scrutiny by the faculty of the Institute for purposes of improvement. The medical college of the Institute has been adjudged the best in the country for the 8th consecutive year by national surveys published in the popular media.

The institute organized a number of workshops, symposia, conferences and training programmes in collaboration with various national, intergovernmental and other international agencies during the year. Professionals from various institutions all over the country participated in these seminars and workshops and benefited from updates. Also, guest and public lectures were delivered by visiting experts and faculty of AIIMS.

The All India Institute of Medical Sciences is a leader in the field of medical research. Major research projects focus on national priorities. Over 381 research projects were ongoing during this period. Research grants totaling Rs 59 crores (approximately) were received from various intergovernmental, other international and national funding agencies during the year 2008-2009.

During the year 2008-2009, the AIIMS hospital catered to patients from India, neighboring countries such as Nepal, Bangladesh, Sri Lanka, Bhutan and other Asian countries. The main hospital provided care to 1,50,7,786 outpatients and 65,867 in-patients and 108,486 patients with emergent conditions; and 79,578 surgical procedures were performed in the hospital. Due to expansion of facilities like OPD, emergency service, private wards and use of innovated methods, AIIMS main hospital has been able to provide better and efficient patient care. Due to quick turnover of patients, number of indoor admissions and surgery performed, have all increased. The average length of stay is around 5.9 days; the average bed occupancy, 79.9% and the net death rate, 2.7%; which is at par with similar parameters in developed countries. With the use of mechanical cleaning devices and active interaction of Hospital Infection Control Committee (HIFCOM), the general hygiene and sanitation
of the hospital is of a high standard. Medicines are supplied to all patients attending the Emergency services free of cost.

The Cardiothoracic and Neurosciences Centre (CN Centre) provided services to 227,737 outpatients (92,925 in Cardiology, 34,738 in Cardiothoracic and Vascular Surgery, 68,417 in Neurology and 31,657 in Neurosurgery), and 17,010 inpatients; and 6,218 surgeries were performed at the Centre.

The Jai Prakash Narain Trauma Centre has a state-of-the-art emergency room with 8 resuscitation bays, observation and triage areas and facilities for managing 20 critically ill patients. The Centre has two functional operation rooms, two 30-bedded wards, a multislice CT scanner, mobile X-ray units and heavy duty automatic processors for radiography, a 1.5 Tesla MRI, a C-Arm X-ray unit with 3-D facility, colour Doppler and well-equipped laboratories. In the year 2008-2009, the Trauma Centre provided services for 37,177 emergency contacts, of whom 19,226 had to be provided inpatient care and 971 had to be operated. A total of 63,186 radiological investigations were conducted at the Centre.

The Dr. B.R. Ambedkar Institute Rotary Cancer Hospital has 127 beds. The expanded Dr. BRAIRCH has modern, sophisticated machinery and equipment matching international standards. It is currently functioning through 8 disciplines namely Medical Oncology, Radiation Oncology, Surgical Oncology, Laboratory Oncology, Medical Physics, Anesthesiology, Radiodiagnosis and Preventive and Community Oncology. During 2008-2009, Dr. BRAIRCH attended to 74,280 outpatients (87,93 new cases and 65,487 old cases) and 23,822 inpatients (19,036 short admissions and 4,786 regular admissions); while 6,651 patients received surgical procedures (6,019 minor and 632 major).

Dr. Rajendra Prasad Centre for Ophthalmic Sciences attended to 197,928 outpatients in the general OPD, 37,019 emergency contacts, and 165,967 outpatients in specialty clinics, totaling 40,0914 patients during the year 2008-2009. Services were also provided to 29,642 inpatients and surgical procedures were performed on 29,276 patients.

The Organ Retrieval Banking Organization, a national facility and nodal centre for the country at All India Institute of Medical Sciences (AIIMS), New Delhi, was created with the objective of encouraging organ donations and fair and equitable distribution and optimum utilization of human organs. A dedicated four-digit-help line 1060 and the website (www.orbo.org) with the facility to download donor forms and email facility for correspondence, are available for round-the-clock public enquiries regarding organ donation and transplantation.

The Centre for Dental Education and Research is a full-fledged Dental college under the aegis of AIIMS. It conducts an MDS (postgraduate course) in various dental specialties. It is also the nodal centre for the National Oral Health Policy of the Government of India.

The Centre for Behavioural Sciences (National Drug Dependence Treatment Centre), AIIMS, at Ghaziabad is a 50 bedded centre that offers a wide range of services.

Community-based programmes have been integral part of the Institute’s clinical and research activities. The Centre for Community Medicine has a widely acclaimed model of rural health services at Ballabgarh in the neighbouring state of Haryana. Apart from providing comprehensive health services at the doorsteps of people in the covered villages, the centre also provides secondary health care
services through a 50-bedded hospital as Ballabgarh. This hospital provided services to 166,886 outpatients and 7,009 inpatients and for 22,024 emergency contacts. The project has achieved significant successes in terms of improving health of mothers and children of the area. With Zero Maternal Mortality Rate and Crude Death Rate of 7.2, it is well ahead of targets set by Government of India for 2010. The Urban Health Programme and Family Health Exercise programmes of the Centre for Community Medicine cater to some urban slum areas of Delhi with a population of about 60000. These services are provided through a Mobile Health Clinic that visits these slums 5 times in a week and provides preventive, promotive and primary level curative services; and para-medical staff who provide domiciliary services. The Urban Health Programme and Family Health Exercise programmes attended to 25,901 patients in 2008-09. The Centre for Community Medicine also has a Disease Outbreak Response Cell (DORC) for ensuring a rapid response to infectious disease outbreaks like the swine flu (HINI infection); and an AIDS Education and Training Cell for prevention of HIV/AIDS. This cell operates a very popular interactive telephone helpline called ‘Shubhchintak’ and an internet based helpline called ‘e-shubhchintak’ to answer queries of the general public on HIV/AIDS. The Centre for Community Medicine also runs a Sex and Marriage Counselling Clinic (SMCC) in the AIIMS Hospital.

In addition to community services provided by the Centre for Community Medicine, the departments of Obstetrics and Gynecology, Rehabilitation and Physical Medicine, Pediatrics and Dr. Rajendra Prasad Centre for Ophthalmic Sciences serve various rural communities through regular camps.

Despite increasing pressures the Institute has constantly endeavored to demonstrate its commitment to professionalism and service to the common people at an affordable cost. Thousands of patients from all over the country come to AIIMS everyday for succour.

Professor R. C. Deka
Director, AIIMS
2. The Institute and its Committees

INSTITUTE BODY

from 1.4.2008 to 31.3.2009

1. Hon’ble Dr Ambumani Ramadoss
   Union Minister for Health and Family Welfare
   Nirman Bhawan, New Delhi 110011
   President
   (demitted his office)

2. Shri R.K. Dhawan
   Member of Parliament (Rajya Sabha)
   141, Golf Links, New Delhi 110003
   Member

3. Professor Vijay Kumar Malhotra
   Member of Parliament (Lok Sabha)
   6, Dr Bishamber Dass Marg, New Delhi 110001
   Member

4. Dr Karan Singh Yadav
   Member of Parliament (Lok Sabha)
   C-6 MP Flats, Baba Khadak Singh Marg
   New Delhi 110001
   Member

5. Dr Deepak Pental
   Vice Chancellor
   University of Delhi, Delhi 110007
   Member
   (Ex-Officio)

6. Shri Naresh Dayal
   Secretary (Health)
   Ministry of Health and Family Welfare
   Nirman Bhawan, New Delhi 110011
   Member

7. Dr R.K. Srivastava
   Directorate General of Health Services
   Nirman Bhawan, New Delhi 110011
   Member
   (Ex-Officio)

8. Dr Shyam Prasad
   Vice President
   National Board of Examinations, New Delhi
   Member
9. **Dr S.S. Agarwal**  
Member  
Central Drug Research Institute  
Chattar Manzil Palace, Post Box No. 173  
Lucknow 226001 (UP)  
**Dr S.S. Agarwal**  
Former Director, SGPGI  
D-13, Vivekanandpuri, Lucknow 226007 (UP)

10. **Professor B.P. Chatterjee**  
Member  
Department of Biological Chemistry  
Indian Association for the Cultivation of Science  
Jadavpur, Kolkata 700032, West Bengal.

11. **Shri R.P. Agrawal**  
Member  
Secretary  
Department of Secondary Education and Higher Education  
Ministry of Human Resource Development  
Shastri Bhawan, (Gate No.6), New Delhi 110001

12. **Professor K.K. Talwar**  
Member  
Director  
Postgraduate Institute of Medical Education and Research (PGIMER), Chandigarh 160012

13. **Professor Kartar Singh**  
Member  
Director  
Sanjay Gandhi Postgraduate Institute of Medical Sciences (SGPGI), Lucknow, Uttar Pradesh

14. **Professor R. Surendran**  
Member  
Professor and Head Department of Surgical Gastroenterology, Government Stanley Hospital  
Chennai, Tamil Nadu

15. **Dr (Mrs) Nilima Arun Kshirsagar**  
Member  
Dean, Professor and Head  
Department of Clinical Pharmacology  
Seth G.S. Medical College and K.E.M. Hospital  
Mumbai, Maharashtra

16. **Shri Naved Masood**  
Member  
Additional Secretary and Financial Advisor  
Ministry of Health and Family Welfare  
Nirman Bhawan, New Delhi 110011
17. **Professor T.D. Dogra**
   Acting Director, AIIMS
   **Member-Secretary**
   20.12.2007 to 08.05.2008

**Professor P. Venugopal**
   Director, AIIMS
   **Member-Secretary**
   09.05.2008 to 02.07.2008

**Professor T.D. Dogra**
   Acting Director, AIIMS
   **Member-Secretary**
   03.07.2008 to 09.03.2009

**Professor R.C. Deka**
   Director, AIIMS
   **Member-Secretary**
   from 10.03.2009

18. **Shri Raama Murthy**
   Joint Secretary
   **Special Invitee**
   up to 15.04.2008

   Ministry of Health and Family Welfare
   Nirman Bhawan, New Delhi 110011

**Shri Pravin Krishan**
   Joint Secretary
   16.04.2008 to 04.05.2008

**Ms Shalini Prasad**
   Joint Secretary
   05.05.2008 to 22.01.2009

**Shri B.K. Prasad**
   Joint Secretary
   from 23.01.2009

19. **Dean (Academic), AIIMS**
   **Special Invitee**

20. **Dean (Exams), AIIMS**
   **Special Invitee**
GOVERNING BODY

1. **Hon’ble Dr Ambumani Ramadoss**
   Chairperson
   Union Minister for Health and Family Welfare
   Nirman Bhawan, New Delhi 110011

2. **Shri R.K. Dhawan**
   Member
   Member of Parliament (Rajya Sabha)
   (from 21.6.06)
   141, Golf Links, New Delhi 1110003

3. **Dr Karan Singh Yadav**
   Member
   Member of Parliament (Lok Sabha)
   C-6 M.P. Flats, Baba Khadak Singh Marg
   New Delhi 110001

4. **Shri Naresh Dayal**
   Member
   Secretary (Health)
   Ministry of Health and Family Welfare
   Nirman Bhawan, New Delhi 110011

5. **Dr R.K. Srivastava**
   Member
   (Ex-Officio)
   Directorate General of Health Services
   Nirman Bhawan, New Delhi 110011

6. **Shri Naved Masood**
   Member
   Additional Secretary and Financial Advisor
   Ministry of Health and Family Welfare
   Nirman Bhawan, New Delhi 110011

7. **Dr Shyam Prasad**
   Member
   Vice President
   National Board of Examinations, New Delhi

8. **Professor K.K. Talwar**
   Member
   Director
   Postgraduate Institute of Medical Education and Research, Chandigarh

9. **Professor Kartar Singh**
   Member
   Director
   Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow (UP)

10. **Professor R. Surendran**
    Member
    Professor and Head of the Department of Surgical Gastroenterology, Government Stanley Hospital, Chennai
11. **Professor T.D. Dogram**
   Acting Director, AIIMS
   Member-Secretary up to 08.05.2008

**Professor P. Venugopal**
Director, AIIMS
Member-Secretary 09.05.2008 to 02.07.2008

**Professor T.D. Dogra**
Acting Director, AIIMS
Member-Secretary 03.07.2008 to 09.03.2009

**Professor R.C. Deka**
Director, AIIMS
Member-Secretary from 10.03.2009

12. **Shri Raama Murthy**
   Joint Secretary
   Special Invitee up to 15.04.2008

   Ministry of Health and Family Welfare
   Nirman Bhawan, New Delhi 110011

   **Shri Pravin Krishan**, Joint Secretary
   16.04.2008 to 04.05.2008

   **Ms Shalini Prasad**, Joint Secretary
   05.05.2008 to 22.01.2009

   **Shri B.K. Prasad**, Joint Secretary
   from 23.01.2009

13. **Dean (Academic), AIIMS**
    Special Invitee

14. **Dean (Examinations), AIIMS, New Delhi**
    Special Invitee
**STANDING FINANCE COMMITTEE**

1. Shri Naresh Dayal, Chairperson
2. Professor Vijay Kumar Malhotra, Member
3. Shri R.K. Dhawan, Member
4. Dr R.K. Srivastava, Member
5. Shri Naved Masood, Member
6. Dr Shyam Prasad, Member
7. Shri R.P. Agrawal, Member
8. Dr S.S. Agarwal, Member
9. Professor T.D. Dogra, Member-Secretary (up to 08.05.2008)
   Professor P. Venugopal, Member-Secretary (09.05.2008 to 02.07.2008)
   Professor T.D. Dogra, Member-Secretary (03.07.2008 to 09.03.2009)
   Professor R.C. Deka, Member-Secretary (from 10.03.2009)
10. Dean, Academic, Special Invitee
11. Sh. Raama Murthy, Special Invitee (up to 15.04.2008)
   Shri Pravin Krishan, Joint Secretary (16.04.2008 to 04.05.2008)
   Ms Shalini Prasad, Joint Secretary (05.05.2008 to 22.01.2009)
   Shri B.K. Prasad, Joint Secretary (from 23.01.2009)

**ESTATE COMMITTEE**

1. Professor Vijay Kumar Malhotra, Chairperson
2. Professor Karan Singh Yadav, Member
3. Dr R.K. Srivastava, Member
4. Dr S.S. Agarwal, Member
5. Shri Naresh Dayal, Member
6. Professor Deepak Pental, Member
7. Shri Naved Masood, Member
8. Shri R.P. Agrawal, Member
9. Professor T.D. Dogra, Member-Secretary (up to 08.05.2008)
   Professor P. Venugopal, Member-Secretary (09.05.2008 to 02.07.2008)
   Professor T.D. Dogra, Member-Secretary (03.07.2008 to 09.03.2009)
   Professor R.C. Deka, Member-Secretary (from 10.03.2009)

**ACADEMIC COMMITTEE**

1. Professor Nilima Arun Kshirsagar, Chairperson
2. Professor R. Surendran, Member
3. Professor Kartar Singh, Member
4. Professor K.K. Talwar, Member
5. Dr R.K. Srivastava, Member
6. Dr Shyam Prasad, Member
7. Professor B.P. Chatterjee, Member
8. Shri R.P. Agrawal, Member
9. Professor T.D. Dogra, Member-Secretary (up to 08.05.2008)
HOSPITAL AFFAIRS COMMITTEE
1. Professor S.S. Agarwal Chairperson (up to 18.06.2008)
   Shri R.K. Dhawan Chairperson (19.06.2008 to 18.09.2008)
   Professor S.S. Agarwal Chairperson (from 19.09.2009)
2. Shri R.K. Dhawan Member
3. Professor Karan Singh Yadav Member
4. Dr R.K. Srivastava Member
5. Shri Naresh Dayal Member
6. Shri Naved Masood Member
7. Professor Nilima Arun Kshirsagar Member
8. Professor K.K. Talwar Member
   Dr Shyam Prasad Member
9. Professor T.D. Dogra Member-Secretary (up to 08.05.2008)
   Professor P. Venugopal Member-Secretary (09.05.2008 to 02.07.2008)
   Professor T.D. Dogra Member-Secretary (03.07.2008 to 09.03.2009)
   Professor R.C. Deka Member-Secretary (from 10.03.2009)

SELECTION COMMITTEE
1. Professor R. Surendran Chairperson
2. Professor Karan Singh Yadav Member
3. Dr R.K. Srivastava Member
4. Professor K.K. Talwar Member
5. Professor Kartar Singh Member
6. Shri R.P. Agrawal Member
7. Professor Nilima Arun Kshirsagar Member
8. Dr Shyam Prasad Member
9. Professor T.D. Dogra Member-Secretary (up to 08.05.2008)
   Professor P. Venugopal Member-Secretary (09.05.2008 to 02.07.2008)
   Professor T.D. Dogra Member-Secretary (03.07.2008 to 09.03.2009)
   Professor R.C. Deka Member-Secretary (from 10.03.2009)
3. Academic Section

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
<th>Start Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dean</td>
<td>R.C. Deka</td>
<td>01.01.2008</td>
<td>24.03.2009</td>
</tr>
<tr>
<td>Sub-Dean</td>
<td>Sunil Chumber</td>
<td>01.01.2008</td>
<td>24.03.2009</td>
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<tr>
<td>Registrar</td>
<td>L.R. Murmu</td>
<td>01.01.2008</td>
<td>07.07.2008</td>
</tr>
<tr>
<td></td>
<td>V.P. Gupta</td>
<td>16.05.2008 and</td>
<td>08.07.2008</td>
</tr>
<tr>
<td></td>
<td></td>
<td>with full powers</td>
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</tr>
</tbody>
</table>

EDUCATION

The Academic Section develops policy, plans and executes academic activities. It also administers intramural research projects. 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. The courses include MB, BS, BSc (Hons) in paramedical courses such as Medical Technology in Radiography and Ophthalmic Techniques, and BSc Nursing (Post-certificate) and BSc (Hons) Nursing courses.

Bachelor of Medicine and Bachelor of Surgery (MB, BS)

The pattern of education at the undergraduate level was reviewed and implemented from July 2004. The duration of the MB, BS course continues to be 5½ years, including one year compulsory internship training. The training during this period is as follows:

- One year: Pre-clinical training
- One-and-a-half years: Paraclinical training
- Two years: Clinical training
- One year: Rotating internship (compulsory)

From August 2008, 27 seats of MB, BS students are increased and now MB, BS seats are 77. Out of 77 seats, 5 seats are reserved for foreign nationals and the screening and admissions for these 5 seats is done on the recommendation of the Ministry of External Affairs, Government of India. For the remaining 72 seats (11 for Scheduled Caste, 6 for Scheduled Tribe, 19 OBC and 36 general category candidates), students are selected on the basis of their performance in an All-India Entrance Examination. Further, 3% seats are reserved for orthopaedic physically handicapped candidates on horizontal basis. During the year, there were 54,276 applicants, and 36,567 candidates appeared in the entrance examination for these 77 seats. The total number of undergraduate students as on 31 March 2009 was 328 including 47 interns.
Merit scholarships of Rs 750 per month and Rs 500 per month were awarded to 6 students who secured first and second position in the 1st, 2nd and final MB, BS examination.

Summer fellowships were awarded to nil for research in selected areas. These students were given a stipend of Rs 500 per month. They worked under the supervision of a member of the faculty.

**Paramedical and Nursing Education**

All activities pertaining to the admission and training of paramedical and nursing students are handled by this cell. A batch of 64 students was admitted for BSc (Hons) Nursing in August 2008. The current student strength for the nursing and paramedical courses is as follows:

<table>
<thead>
<tr>
<th>Nursing courses</th>
<th>Number of students</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSc Nursing (Post-certificate)</td>
<td>45</td>
</tr>
<tr>
<td>BSc (Hons) Nursing</td>
<td>218</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Paramedical courses</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BSc (Hons) Ophthalmic Techniques</td>
<td>39</td>
</tr>
<tr>
<td>BSc (Hons) Medical Technology in Radiography</td>
<td>22</td>
</tr>
</tbody>
</table>

**POSTGRADUATE EDUCATION**

The Academic Section looks after all the activities pertaining to admission, selection and training of postgraduate students including junior and senior residents. It also deals with all service matters relating to senior residents. It handles all activities of the PhD, DM, MCh, MD, MS, MDS, MHA, MSc and MBiotech courses in different disciplines.

The admission to all postgraduate courses is done by an All-India entrance examination that is held twice a year. Foreign nationals are also admitted through an entrance examination. Postgraduate students from Nepal are admitted under a bilateral agreement between the Governments of India and Nepal.

A total of 384 students, including 15 state-sponsored and 14 foreign nationals, were admitted to the above-mentioned courses during the year under review. The total number of postgraduate and doctoral students on 31 March 2009 was 1023. The discipline-wise distribution of postgraduate students is given below.

A total of 252 postgraduate students who completed degree courses in MS/MS/MDS/DM/MCh/PhD/MSc/MBiotech passed out during the year 2008–2009.

<table>
<thead>
<tr>
<th>PhD</th>
<th>General</th>
<th>Sponsored</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anatomy</td>
<td>12</td>
<td>–</td>
</tr>
<tr>
<td>Biochemistry</td>
<td>42</td>
<td>–</td>
</tr>
<tr>
<td>Biophysics</td>
<td>21</td>
<td>–</td>
</tr>
<tr>
<td>Biostatistics</td>
<td>1</td>
<td>1 (in service)</td>
</tr>
<tr>
<td>Biotechnology</td>
<td>18</td>
<td>–</td>
</tr>
<tr>
<td>Cardiology</td>
<td>3</td>
<td>–</td>
</tr>
<tr>
<td>Cardiac Biochemistry</td>
<td>2</td>
<td>–</td>
</tr>
<tr>
<td>Forensic Medicine</td>
<td>1</td>
<td>–</td>
</tr>
<tr>
<td>Gastroenterology</td>
<td>8</td>
<td>–</td>
</tr>
<tr>
<td>Subject</td>
<td>General</td>
<td>Sponsored</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>---------</td>
<td>-----------</td>
</tr>
<tr>
<td>Neurosurgery</td>
<td>1</td>
<td>–</td>
</tr>
<tr>
<td>Obstetrics and Gynaecology</td>
<td>–</td>
<td>2 (in service)</td>
</tr>
<tr>
<td>Haematology</td>
<td>10</td>
<td>1 (in service)</td>
</tr>
<tr>
<td>CTVS</td>
<td>4</td>
<td>–</td>
</tr>
<tr>
<td>Laboratory Medicine</td>
<td>10</td>
<td>–</td>
</tr>
<tr>
<td>Medical Oncology</td>
<td>5</td>
<td>–</td>
</tr>
<tr>
<td>Medical Physics</td>
<td>3</td>
<td>–</td>
</tr>
<tr>
<td>Medicine</td>
<td>10</td>
<td>–</td>
</tr>
<tr>
<td>Microbiology</td>
<td>30</td>
<td>–</td>
</tr>
<tr>
<td>Neurology</td>
<td>10</td>
<td>–</td>
</tr>
<tr>
<td>Nuclear Magnetic Resonance</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Nuclear Medicine</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Otorhinolaryngology (ENT)</td>
<td>1</td>
<td>–</td>
</tr>
<tr>
<td>Ophthalmology</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Ocular Pharmacology</td>
<td>5</td>
<td>–</td>
</tr>
<tr>
<td>Ocular Microbiology</td>
<td>4</td>
<td>–</td>
</tr>
<tr>
<td>Community Ophthalmology</td>
<td>1</td>
<td>–</td>
</tr>
<tr>
<td>Ocular Pathology</td>
<td>2</td>
<td>–</td>
</tr>
<tr>
<td>Ocular Biochemistry</td>
<td>3</td>
<td>–</td>
</tr>
<tr>
<td>Paediatrics</td>
<td>10</td>
<td>–</td>
</tr>
<tr>
<td>Pathology</td>
<td>11</td>
<td>–</td>
</tr>
<tr>
<td>Centre for Community Medicine</td>
<td>2</td>
<td>–</td>
</tr>
<tr>
<td>Endocrinology</td>
<td>7</td>
<td>–</td>
</tr>
<tr>
<td>Paediatric Surgery</td>
<td>2</td>
<td>–</td>
</tr>
<tr>
<td>Neuro-Biochemistry</td>
<td>5</td>
<td>–</td>
</tr>
<tr>
<td>Pharmacology</td>
<td>14</td>
<td>–</td>
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<tr>
<td>Physiology</td>
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<tr>
<td>Psychiatry</td>
<td>5</td>
<td>–</td>
</tr>
<tr>
<td>Radiation Oncology</td>
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<td>–</td>
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<tr>
<td>Reproductive Biology</td>
<td>4</td>
<td>–</td>
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<tr>
<td>Transplant Immunology and Immunogenetics</td>
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**DM General Sponsored**

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<tr>
<td>Clinical Haematology</td>
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<td>Endocrinology</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Gastroenterology</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>Haematology-Pathology</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Medical Oncology</td>
<td>12</td>
<td>–</td>
</tr>
<tr>
<td>Neonatology</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Nephrology</td>
<td>8</td>
<td>4</td>
</tr>
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<td>General</td>
<td>Sponsored</td>
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<tr>
<td>-------------------------------------------</td>
<td>---------</td>
<td>-----------</td>
</tr>
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<td>Paediatric Neurology</td>
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<tr>
<td>Clinical Pharmacology</td>
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</tr>
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<td><strong>Total 133</strong></td>
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<td><strong>MCh</strong></td>
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<td>Cardiothoracic &amp; Vascular Surgery</td>
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<td>Biochemistry</td>
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<td></td>
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<td>Biophysics</td>
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<td>Community Medicine</td>
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<td>Hospital Administration</td>
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</tr>
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<td>Obstetrics and Gynaecology</td>
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<td>19</td>
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</tr>
<tr>
<td>Pharmacology</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Physical Medicine and Rehabilitation</td>
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</tr>
<tr>
<td>Physiology</td>
<td>13</td>
<td></td>
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<tr>
<td>Psychiatry</td>
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<tr>
<td>Radiodiagnosis</td>
<td>17</td>
<td>3</td>
</tr>
<tr>
<td>Radiotherapy</td>
<td>7</td>
<td>1</td>
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<tr>
<td><strong>MS</strong></td>
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<td></td>
</tr>
<tr>
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<td>2</td>
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<td>Otorhinolaryngology</td>
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<td></td>
</tr>
<tr>
<td>Surgery</td>
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<td><strong>MDS</strong></td>
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<td></td>
</tr>
<tr>
<td>Conservative Dentistry and Endodontics</td>
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<td></td>
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<tr>
<td>Orthodontics</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Prosthodontics</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Oral and Maxillofacial surgery</td>
<td>5</td>
<td></td>
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<tr>
<td><strong>Total 458</strong></td>
<td><strong>434</strong></td>
<td><strong>24</strong></td>
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</table>
### MSc

<table>
<thead>
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<tbody>
<tr>
<td>Anatomy</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Biochemistry</td>
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<td>1</td>
</tr>
<tr>
<td>Biophysics</td>
<td>2</td>
<td>–</td>
</tr>
<tr>
<td>Perfusion Technology</td>
<td>4</td>
<td>–</td>
</tr>
<tr>
<td>Biotechnology</td>
<td>11</td>
<td>1</td>
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<tr>
<td>Nuclear Medicine Technology</td>
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<tr>
<td>Pharmacology</td>
<td>5</td>
<td>–</td>
</tr>
<tr>
<td>Physiology</td>
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</tr>
</tbody>
</table>

### Nursing

<table>
<thead>
<tr>
<th>Course</th>
<th>General</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Oncological Nursing</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Cardiological/CTVS Nursing</td>
<td>3</td>
<td>–</td>
</tr>
<tr>
<td>Nephrological Nursing</td>
<td>2</td>
<td>–</td>
</tr>
<tr>
<td>Neurosciences Nursing</td>
<td>2</td>
<td>–</td>
</tr>
<tr>
<td>Paediatric Nursing</td>
<td>3</td>
<td>–</td>
</tr>
<tr>
<td>Psychiatric Nursing</td>
<td>3</td>
<td>–</td>
</tr>
<tr>
<td>Critical Care Nursing</td>
<td>3</td>
<td>–</td>
</tr>
</tbody>
</table>

**TOTAL 47**

**43**

**4**

**Salaries:** The present salary of residents, as recommended by the Sixth Pay Commission is:
- Junior Residents Rs 15600–39100 + (GP Rs 5400) plus allowances as per rules.
- Senior Residents Rs 15600–39100 + (GP Rs 6000) plus allowances as per rules.

### SHORT-AND LONG-TERM TRAINING PROGRAMMES

The Section handles activities regarding training programmes of short- and long-term duration for both medical and paramedical personnel. During the year, the Institute had 460 short- and 3 long-term trainees. In addition, 27 WHO Fellows (FN) under WHO fellowship programme and 22 foreign trainees and 33 WHO Fellows (Indian national) for WHO-In-Country Fellowship training programme (2008–2009) were imparted training in various departments. The section also handles the elective posting of foreign undergraduate medical students. During the year 62 foreign undergraduate medical students underwent elective training.

### COMMITTEE MEETINGS

The Academic Section is responsible for arranging the meetings of the Academic committee, Staff Council, Faculty Meetings and Dean’s Committee. The details of the meetings held during the year are as under:

- **Academic Committee**: 7
- **Staff Council**: 1
- **Dean’s Committee**: Nil
- **Faculty Meetings**: 7
RESEARCH
The intramural research funds and its allocation is handled by the Section. The details of intramural research conducted during the year is given in Appendix I.

1. The research grant allocated to faculty members ranges from Rs 50,000 to Rs 1,00,000 per annum depending on the research project.
2. Project review by specially review groups—15 March.
3. Final recommendations of the Research Committee—31 March.

ORATION’S
The Academic Section organized the following Orations during 2008–2009.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Name of Oration</th>
<th>Name of Orator</th>
<th>Date of Oration, Time &amp; Venue</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Nineteenth Sarveshwari Memorial Oration</td>
<td>Professor Anil Nanda, Chairperson, Department of Neurosurgery, LSU Health Science Centre, Louisiana State University Medical Centre</td>
<td>On Thursday the 19 February 2009 at 4.00 pm. in LT-II, AIIMS</td>
</tr>
</tbody>
</table>

CONVOCATION
The Annual Convocation of the Institute was held on 7 January 2009. Dr R.K. Pachauri, Chairman, Intergovernmental Panel on Climate Change (IPCC) (UN) and Director, The Energy and Research Institute (TERI) addressed the Convocation. The Chief Guest distributed Institute Medals/Awards to the outstanding students and addressed the gathering. The President, AIIMS and Hon’ble Minister of Health and Family Welfare distributed the degrees.
## Appendix I

### ACADEMIC SECTION II

(Nursing and Paramedical Cell)

Intramural research grants for the year 2008–2009

<table>
<thead>
<tr>
<th>S No</th>
<th>Name of the investigator</th>
<th>Title of the project</th>
<th>Amount sanctioned</th>
<th>Duration years</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Dr Nand Kumar Assistant Professor Dept. of Psychiatry</td>
<td>To observe for association between a catechol-O-methyltransferase polymorphism G158A and OCD in Indian subjects and its correlation with neuropsychological findings</td>
<td>1,00,000</td>
<td>2</td>
</tr>
<tr>
<td>2.</td>
<td>Dr S. Rastogi Professor Dept. of Orthopaedics</td>
<td>Prognostic factors in the management of Osteosarcoma: A clinical study</td>
<td>1,00,000</td>
<td>2</td>
</tr>
<tr>
<td>3.</td>
<td>Dr Raju Sharma Additional Professor Dept. of Radiodiagnosis</td>
<td>Diagnostic accuracy of coronal whole body diffusion-weighted MRI in oncologic imaging: Comparison with whole body STIR-MRI and FDG-PET-CT.</td>
<td>60,000</td>
<td>2</td>
</tr>
<tr>
<td>4.</td>
<td>Dr Shah Alam Khan Assistant Professor Dept. of Orthopaedics</td>
<td>Evaluation of VEGF expression in Osteosarcoma and its correlation with DCE-MRI and FDG-PET-CT Scan as surrogate markers of angiogenesis</td>
<td>1,00,000</td>
<td>1</td>
</tr>
<tr>
<td>5.</td>
<td>Dr Sandeep Guleria Additional Professor Dept. of Surgical Disciplines</td>
<td>To study the incidence and assess the risk factors for New Onset Diabetes Mellitus</td>
<td>90,000</td>
<td>1½</td>
</tr>
<tr>
<td>6.</td>
<td>Dr Purva Mathur Assistant Professor Dept. of Laboratory Medicine</td>
<td>Evaluation of serum procalcitonin levels for diagnosis of sepsis in trauma patients admitted to intensive care units</td>
<td>1,00,000</td>
<td>1</td>
</tr>
<tr>
<td>7.</td>
<td>Dr Sushma Bhatnagar Associate Professor Dept. of Anaesthesiology IRCH</td>
<td>Evaluating the correlation of plasma levels of morphine and its metabolites on pain control in cancer patients</td>
<td>1,00,000</td>
<td>1</td>
</tr>
<tr>
<td>8.</td>
<td>Dr Tulika Seth Assistant Professor Dept. of Haematology</td>
<td>Effect of genetic factors on variable clinical severity of HbE/B thalassaemia</td>
<td>1,00,000</td>
<td>2</td>
</tr>
<tr>
<td>No.</td>
<td>Name</td>
<td>Department/Position</td>
<td>Title</td>
<td>Budget</td>
</tr>
<tr>
<td>-----</td>
<td>-----------------------------</td>
<td>----------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>9</td>
<td>Dr Neeta Singh</td>
<td>Assistant Professor Dept. of Obstetrics and Gynaecology</td>
<td>To evaluate the role of endometrial and sub endometrial blood flows in the prediction of pregnancy during in-vitro fertilization treatment</td>
<td>1,00,000</td>
</tr>
<tr>
<td>10</td>
<td>Dr Sumit Sinha</td>
<td>Assistant Professor Dept. of Neurosurgery</td>
<td>Role of simvastatin in prevention of vasospasm and improving functional outcome after aneurysmal sub-arachnoid hemorrhage: A randomized double-blind placebo-controlled trial</td>
<td>90,000</td>
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<tr>
<td>11</td>
<td>Dr Vandana Jain</td>
<td>Assistant Professor Dept. of Paediatrics</td>
<td>Growth, puberty and carbohydrate metabolism in children and adolescents with cystic fibrosis</td>
<td>1,00,000</td>
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<td>12</td>
<td>Dr Sachin Talwar</td>
<td>Assistant Professor Dept. of CTVS</td>
<td>Effect of CPB on the serum thyroid hormone profile in paediatric patients weighting &lt;10kg</td>
<td>1,00,000</td>
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<td>13</td>
<td>Dr Sandeep Mahajan</td>
<td>Assistant Professor Dept. of Nephrology</td>
<td>Spectrum of bone disease in chronic kidney disease patients on haemodialysis and its course subsequent to successful renal transplant</td>
<td>1,00,000</td>
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<tr>
<td>14</td>
<td>Dr V. Devagourou</td>
<td>Assistant Professor Dept. of CTVS</td>
<td>A single prophylactic dose of pentoxifylline in patients undergoing valve replacement: A prospective double-blind randomized controlled study</td>
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<td>15</td>
<td>Dr S. Senthil Kumaran</td>
<td>Assistant Professor Dept. of NMR</td>
<td>Neurocognitive changes associated with visualization of perception, spatial orientation and braille reading in visually challenged subjects, using functional magnetic resonance imaging (fMRI)</td>
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<td>16</td>
<td>Dr R. Goswami</td>
<td>Associate Professor Dept. of Endocrinology and Metabolism</td>
<td>Intestinal calcium absorption in apparently healthy subjects before and after vitamin D supplementation</td>
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<td>17</td>
<td>Dr Sandeep Agarwala</td>
<td>Associate Professor Dept. of Paediatric Surgery</td>
<td>Genetic parameters of neuroblastoma: A study on fine needle aspiration cultures</td>
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<td>18</td>
<td>Dr Ramesh Agarwal</td>
<td>Dept. of Paediatrics</td>
<td>Determination of mesenchymal stem cell concentration in umbilical cord blood at birth and their correlation with gestation</td>
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<td>19</td>
<td>Dr Mamta Sood</td>
<td>Dept. of Psychiatry</td>
<td>Prospective longitudinal study on duration of untreated psychosis in patients with first episode of psychosis</td>
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<td>Dr Raj Kumar Yadav</td>
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<td>Adiponectin concentrations in serum and peritoneal fluid of patients with endometriosis</td>
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<td>21</td>
<td>Dr Naval K. Vikram</td>
<td>Dept. of Medicine</td>
<td>Oxidized low-density lipoprotein antibodies: Pathogenic implications for vascular involvement in patients with autoimmune disease and type 2 diabetes mellitus</td>
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<td>22</td>
<td>Dr Y. K. Gupta</td>
<td>Dept. of Pharmacology</td>
<td>Effects of atorvastatin and pioglitazone on endothelial dysfunction in non-diabetic normolipidemic stable angina patients</td>
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<td>23</td>
<td>Dr Sheffali Gulati</td>
<td>Dept. of Paediatrics/Child Neurology Division</td>
<td>Randomized placebo-controlled trial of valproate in children with spinal muscular atrophy</td>
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<td>24</td>
<td>Dr Ranju Ralhan</td>
<td>Dept. of Biochemistry</td>
<td>Diagnostic significance of aberrantly methylated genes in breast cancer</td>
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<td>25</td>
<td>Dr Kalpana Luthra</td>
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<td>Genetic characteristics of HIV-1 subtype C envelopes inducing V3 antibodies</td>
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<td>26</td>
<td>Dr D.S. Arya</td>
<td>Dept. of Pharmacology</td>
<td>Pharmacological studies on terminalia chebula in experimentally induced myocardial infarction in rats</td>
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<td>27</td>
<td>Dr Tanuj Dada</td>
<td>Dr R.P. Centre for Ophthalmic Sciences</td>
<td>Mitochondrial genome mutation analysis in congenital glaucoma</td>
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<td>No.</td>
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<td>28.</td>
<td>Dr K.H. Reeta</td>
<td>Assistant Professor</td>
<td>Dept. of Pharmacology</td>
<td>Comparative study of platelet aggregation, micro-inflammatory state and oxidative stress in renal transplant patients receiving different immunosuppressants</td>
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<td>29.</td>
<td>Dr Renu Dhingra</td>
<td>Associate Professor</td>
<td>Dept. of Anatomy</td>
<td>Role of circulating angiogenetic factors in the pathogenesis of preeclampsia</td>
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<td>30.</td>
<td>Dr Surender Singh</td>
<td>Assistant Professor</td>
<td>Dept. of Pharmacology</td>
<td>A randomized open-label prospective study of effect of atorvastatin on insulin sensitivity and pancreatic beta-cell function in type-2 diabetes mellitus patients</td>
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<td>31.</td>
<td>Dr N.C. Chandra</td>
<td>Assistant Professor</td>
<td>Dept. of Biochemistry</td>
<td>A comparative study on expression and/or transcription between LDL receptor (LDLR) and tumor suppressor proteins (p53, pRB) in presence of Insulin, thyroxin and Benzo(a)-pyrene</td>
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<td>32.</td>
<td>Dr T.K. Das</td>
<td>Associate Professor</td>
<td>Dept. of Anatomy</td>
<td>To study the regional differences in amyloid beta induced microglia activation in vivo</td>
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<tr>
<td>33.</td>
<td>Dr Suman Jain</td>
<td>Assistant Professor</td>
<td>Dept. of Physiology</td>
<td>Effect of exposure to magnetic field following implantation of ferromagnetic plates on the recovery from spinal cord injury in rats</td>
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<td>34.</td>
<td>Dr Jagriti Bhatia</td>
<td>Assistant Professor</td>
<td>Dept. of Pharmacology</td>
<td>Evaluation of antihypertensive potential of emblica officinalis in DOCA-salt model of rat hypertension</td>
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<tr>
<td>35.</td>
<td>Dr T.C. Nag</td>
<td>Associate Professor</td>
<td>Dept. of Anatomy</td>
<td>Mechanisms of muller glial activation in aging human retina: An immunohistochemical investigation</td>
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<td>36.</td>
<td>Dr Ritu Sehgal</td>
<td>Assistant Professor</td>
<td>Dept. of Anatomy</td>
<td>Cardiovascular effects of selective estrogen receptor modulators administered alone and in combination with parnaparin: A comparative histological study in ovariectomized rats</td>
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<tr>
<td>S.No</td>
<td>Name of the investigator</td>
<td>Title of the project</td>
<td>Amount sanctioned</td>
<td>Duration</td>
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<tr>
<td>37.</td>
<td>Dr Y.S. Kusuma Assistant Professor Dept. of CCM</td>
<td>Antenatal care: Utilization, perceptions and expectations of migrant women in Delhi: A mixed methods study</td>
<td>1,00,000</td>
<td>2</td>
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<td>38.</td>
<td>Dr K. Anand Associate Professor Dept. of CCM</td>
<td>Validation of an adult verbal autopsy tool at CRHSP Ballabgarh.</td>
<td>1,00,000</td>
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<td>39.</td>
<td>Dr Puneet Misra Assistant Professor Dept. of CCM</td>
<td>Prevalence of metabolic syndrome and its selected socio-behavioural determinants among females aged more than 20 years residing in a rural area of Haryana.</td>
<td>1,00,000</td>
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<td>40.</td>
<td>Dr Govind K. Makharia Associate Professor Dept. of Gastroenterology and Human Nutrition</td>
<td>Familial prevalence amongst first and second degree relatives of patients with celiac disease</td>
<td>49,500</td>
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**ONGOING PROJECTS**

<table>
<thead>
<tr>
<th>S.No</th>
<th>Name of the investigator</th>
<th>Title of the project</th>
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<th>Duration</th>
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<tbody>
<tr>
<td>1.</td>
<td>Dr Anant Mohan Assistant Professor Medicine</td>
<td>Prognostic utility of various acute phase reactants in acute exacerbation of chronic obstructive pulmonary disease</td>
<td>1,00,000</td>
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<td>2.</td>
<td>Dr D.N. Sharma Assistant Professor Radiation Oncology</td>
<td>A prospective randomized trial of amifostine (radioprotector) given subcutaneously during radiation therapy in head and neck cancer patients</td>
<td>1,00,000</td>
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<td>3.</td>
<td>Dr Minati Choudhury Associate Professor Cardiac Anaesthesia</td>
<td>Imbalance between endothelin-1 and plasma nitric oxide products influences the outcome in children suffering from severe pulmonary hypertension due to congenital heart disease</td>
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<td>4.</td>
<td>Dr Neeti Makhija Associate Professor Cardiac Anaesthesia</td>
<td>Role of coenzyme Q10 and alpha lipoic acid in attenuating the oxidative stress and systemic inflammatory response in patients undergoing coronary artery bypass graft surgery</td>
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<td>5.</td>
<td>Dr Deepak Agrawal</td>
<td>Acute thalamic involvement in severe head injury: An autopsy study</td>
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<td>Assistant Professor (JPNATC)</td>
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<td>Neurosurgery and Gammaknife</td>
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<td>6.</td>
<td>Dr S.B. Ray</td>
<td>Role of cyclic AMP response elementbinding protein expression in the</td>
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<td></td>
<td>Additional Professor Anatomy</td>
<td>spinal cord of rat in nimodipine induced potentiation of morphine</td>
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<td></td>
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<td>analgesia: An immunohistochemical study</td>
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<tr>
<td>7.</td>
<td>Dr B.R. Mirdha</td>
<td>Prevalence of intestinal coccidiosis and other parasitosis in at risk</td>
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<tr>
<td></td>
<td>Additional Professor Microbiology</td>
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<td>8.</td>
<td>Dr V.K. Iyer</td>
<td>Evaluation of chromosome 1p and 11p deletions in hepatoblastoma and</td>
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<tr>
<td></td>
<td>Associate Professor Pathology</td>
<td>hepatocellular carcinoma</td>
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<td>9.</td>
<td>Dr Kunzang Chosdol</td>
<td>Distribution of cancer susceptibility modifying polymorphisms (MDM2</td>
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<tr>
<td></td>
<td>Assistant Professor Biochemistry</td>
<td>SNP309 and p53 codon 72) in Indian population groups</td>
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<td>10.</td>
<td>Dr Ratna Sharma</td>
<td>A study on stress reactivity of students as a function of their general</td>
<td>50,000</td>
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<tr>
<td></td>
<td>Associate Professor Physiology</td>
<td>and emotional intelligence and effect of meditation on the stress</td>
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<tr>
<td></td>
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<td>response</td>
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<td>11.</td>
<td>Dr T. Velpandian</td>
<td>Development and validation of N-in-One dosing technique to evaluate</td>
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<td></td>
<td>Assistant Professor Ocular Pharmacology and Pharmacy</td>
<td>ocular kinetics of drugs using LC/MS/MS</td>
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<td></td>
<td>Dr R.P. Centre</td>
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<td>12.</td>
<td>Dr Nibhriti Das</td>
<td>Paraoxonase (PON 1) activity and its genetic determinants (PON 1 gene</td>
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<td></td>
<td>Professor Biochemistry</td>
<td>polymorphisms, in coding region at codon 55, 192 and in promoter</td>
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<td></td>
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<td>region at position -108) in relation to coronary artery disease (CAD)</td>
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<tr>
<td>No.</td>
<td>Name</td>
<td>Department</td>
<td>Project Description</td>
<td>Funds Available</td>
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<td>13</td>
<td>Dr Arundhati Sharma</td>
<td>Associate Professor</td>
<td>To evaluate the possible presence of mutations in VSX1 gene in Keratoconus</td>
<td>1,00,000</td>
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<td>14</td>
<td>Dr Rajiva Gupta</td>
<td>Associate Professor</td>
<td>To study the effect of statins in rheumatoid arthritis special reference to disease activity and lipid profile</td>
<td>95,100</td>
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<tr>
<td>15</td>
<td>Dr Garima Shukla</td>
<td>Associate Professor</td>
<td>Prevalence of the restless legs syndrome in women and its relationship with iron deficiency – a prospective case – controlled study from North India</td>
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</table>

Total funds available : 50,64,000  
Total allocated : 50,63,050  
Balance : 950
During the period under review (2008–2009), the Examination Section conducted the following Professional and Entrance Examinations.

**POSTGRADUATE AND UNDERGRADUATE PROFESSIONAL EXAMINATIONS**
Details of various undergraduate and postgraduate professional examinations conducted by AIIMS from 1.4.2008 to 31.3.2009.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Examination</th>
<th>Number of students</th>
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<tr>
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<td>1.</td>
<td>Final Postgraduate/Post-doctorial</td>
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<td>2.</td>
<td>MSc (Nursing), Phase I</td>
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<td>3.</td>
<td>MSc (Nursing), Phase II</td>
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<td>4.</td>
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<td>5.</td>
<td>Second MB,BS (Supplementary)</td>
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<td>6.</td>
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<td>BSc Nursing (Post-certificate), Phase II</td>
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<td>BSc (Hons) Nursing, Phase I</td>
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<td>BSc (Hons) Nursing, Phase II</td>
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<td>S.No.</td>
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<td>B.F.</td>
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<tr>
<td>S No</td>
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<td>MB,BS (AIIMS) August Session 2008</td>
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<td>BSc (Hons) Nursing 2008</td>
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<td>MSc Courses 2008</td>
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<td>MSc Nursing 2008</td>
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<td>11.</td>
<td>Senior Residents Entrance Examination, July 2008</td>
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<td>12.</td>
<td>MD/MS/MCh (6 years)/MDS (AIIMS) January Session 2009</td>
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<td>DM/MCh/MHA January Session 2009</td>
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<td>14.</td>
<td>All-India PG Entrance Exam: MD/MS/Diploma/MDS</td>
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</table>
Number of entrance examinations conducted : 15
Number of applicants : 1,57,489
Number of candidates appeared : 1,26,971
Candidates passed in PhD viva-voce examination : 42
(1 April 2008 to 31 March 2009)

Examination for recruitment

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<tr>
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<th>Written exam</th>
<th>Interview</th>
<th>Applied</th>
<th>Appeared</th>
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<tr>
<td>2.</td>
<td>Scientist –I (TII)</td>
<td>12 June 2008</td>
<td>5 August 2008</td>
<td>81</td>
<td>41</td>
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<td>4.</td>
<td>Lab Technician</td>
<td>8 March 2009</td>
<td>15 and 16 April 2009</td>
<td>272</td>
<td>85</td>
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<td><strong>Total</strong></td>
<td><strong>13,755</strong></td>
<td><strong>10,389</strong></td>
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</table>

Number of examinations conducted : 7
Number of applicants : 13,755
Number of candidates appeared : 10,389

Important entrance examinations conducted

1. All-India PG entrance examination for admission to the MD/MS/Diploma/MDS courses against 50% open merit seats quota was held in 107 centres (Local 22, outstation 85) in 15 cities of India on 11 January 2009. The results were declared on 15 February 2009.

2. AIIMS PG entrance examination for admission to the MD/MS/MCh (6 years)/MDS courses for the session starting from July 2008 was conducted at 29 centres in Delhi on 11 May 2008 and for January 2009 session at 41 centres on 9 November 2008. The results were declared on 26 May 2008 and 24 November 2008, respectively.
3. Selections for various Post-doctoral (superspecialty) courses, viz. DM/MCh and Masters in Hospital Administration for July 2008 and January 2009 sessions were made on a two-stage performance evaluation carried out from 18 May 2008 to 26 May 2008 and 14 December 2008 to 20 December 2008, respectively.

4. The Institute had also conducted the entrance examination for the post of Senior Residents/ Senior Demonstrators on 20 July 2008 at two centres in Delhi. All the candidates who had scored 50% or above in the written examination were called merit wise for the departmental assessment which was held on 24, 25 July 2008 and 26 July 2008, respectively.

5. Selections of candidates for registration to the PhD programme for the sessions starting from July 2008 and January 2009 were held from 29 June to 5 July 2008 and 18 to 27 January 2009. The results were declared on 5 July 2008 and 27 January 2009, respectively.

6. The entrance examination for admission to the MB,BS course of AIIMS for the August 2008 session was held in 111 centres (local 57, outstation 54) in 10 cities of India on 1 June 2008.

7. The entrance examination for admission to the BSc (Hons) Nursing course was held in Delhi and Thiruvananthapuram on 22 June 2008.

8. The entrance examination for admission to MSc and MBiotechnology courses for the August 2008 session was held in Delhi on 6 July 2008 and 12 July 2008, respectively.

9. The entrance examination for admission to MSc Nursing course, introduced from the year 2005. This examination was held on 14 June 2008 in Delhi. Admission was made by allotment of seats on merit through counselling held on 10 July 2008.

10. The entrance examination for admission to the BSc Nursing (Post-certificate) course was held in Delhi on 26 June 2008, followed by the personal assessment of candidates on 28 June 2008.

11. The entrance examination for admission to Paramedical courses—BSc (Hons) Ophthalmic Techniques and BSc (Hons) Medical Technology in Radiography for the August 2008 session was held in Delhi on 8 June 2008. Admissions to these two courses were made by allotment of seats on merit through counselling held on 15 July 2008.

12. The Examination Section also conducted Written/Skill Test for recruitment to the following posts at the Institute:

   i) Technician Radiology Grade II …… held on 26 May 2008.
      Interview……… held on 9 May 2008.

   ii) Scientist – I ……… held on 12 June 2009.
       skill test/interviews……………5 August 2008.

   iii) Sister Grade II …… held on 21 September 2008.
       Interview ………… held on 18, 19 and 20 October 2008.
iii) Laboratory Technician ….. held on 8 March 2009.

Interview……….15 and 16 April 2009.

v) Scientist (Pharmacology) and) ….. held on 14 March 2009

Scientist I (NMR)…………16 March 2009

Interview……….15 May 2009…………

Participation in other events

13. The Examination Section actively participates in the counselling for admission to the AIIMS-Postgraduate/Undergraduate courses and personal assessment/interview for BSc (Nursing) Post-certificate course.

SIGNIFICANT EVENTS

The Examination Section has started providing Ball Point Pen for writing/marking of Answer/option to candidates and Invigilators for all the Entrance Examinations.
# 5. General Administration

**Deputy Director (Administration)**  
Shailesh Kumar Yadav, IPS

**Chief Administrative Officer**  
Attar Singh

**Senior Administrative Officers**  
K.C. Chhoker

- **Research Section**  
  - Research Hospital  
    - E.L. Lakra  
  - NDDTC  
    - Ajay Kumar

- **General and Estate Section**  
  - General Hospital  
    - Kundan Kumar
  - JPNA Trauma Centre  
    - S. Rangabashiam

- **Administrative Officers**  
  - Public Relations and Telemedicine  
    - S. Rangabashiam

- **Recruitment and Hostel**  
  - Faculty, Establishment and Transport  
    - V.V. Mishra

- **SECURITY**  
  - Deputy Chief Security Officer  
    - Rajiv Lochan

- **STORES**  
  - Stores Officers  
    - R.L. Prasad  
    - Pradeep Kumar Gupta

  - S.S. Bhaduria

  - K.D. Sharma

**ENGINEERING SERVICES DEPARTMENT**

**Superintending Engineer**  
B.S. Anand (officiating)
GENERAL ADMINISTRATION

The General Administration, including personnel and establishment, security, estate, matters related to Engineering Services Department, stores, vigilance and public relations activities of AIIMS 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 activities of these branches is given below.

All matters relating to the Establishment Section and General Administration including appointment of staff, arranging meetings of statutory committees, management of estate and property, purchase of equipments, materials and consumables, security arrangements, and employees’ welfare are looked after by the administration.

The total sanctioned staff of AIIMS is 9937, including the main hospital, all the centres and administration. These include the following:

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Category/group</th>
<th>Sanctioned strength</th>
<th>In position staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Faculty</td>
<td>625</td>
<td>446</td>
</tr>
<tr>
<td>2.</td>
<td>Group ‘A’</td>
<td>321</td>
<td>190</td>
</tr>
<tr>
<td>3.</td>
<td>Group ‘B’</td>
<td>789</td>
<td>614</td>
</tr>
<tr>
<td>4.</td>
<td>Group ‘C’</td>
<td>6,296</td>
<td>4,705</td>
</tr>
<tr>
<td>5.</td>
<td>Group ‘D’</td>
<td>1,906</td>
<td>1,847</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>9,937</td>
<td>7,802</td>
</tr>
</tbody>
</table>
6. Main Hospital

**Medical Superintendent**
D.K. Sharma

**Additional Professor**
Siddhartha Satpathy
(Department of Hospital Administration)

**Associate Professor**
I.B. Singh
Sanjay Arya
(Department of Hospital Administration)

### GENERAL INFORMATION

**Total number of beds** 1486
- Main Hospital and private wards 1038
- Bassinets 25
- CNC 423

### HOSPITAL PERFORMANCE INDICES

<table>
<thead>
<tr>
<th>Item</th>
<th>Current Year</th>
<th>Past Year</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average length of stay (days)</td>
<td>5.9</td>
<td>4.7</td>
<td>Indicates effective utilization of beds</td>
</tr>
<tr>
<td>Average bed occupancy rate (%)</td>
<td>79.9</td>
<td>78.5</td>
<td>Indicates fair occupancy</td>
</tr>
<tr>
<td>Net death rate (%)</td>
<td>2.7</td>
<td>2.7</td>
<td>Indicates low mortality rate despite the fact that quite large number of critically ill patients are admitted to the hospital</td>
</tr>
<tr>
<td>Combined crude infection rate (%)</td>
<td>7.60</td>
<td>8.26</td>
<td></td>
</tr>
</tbody>
</table>

Please see Appendices I and II for details
6.1 Medical Record Services (Hospital)

Chief Medical Record Officer and Sub-Registrar, Births and Deaths
N.K. Sharma

Education and Training

A group of Medical Record Technician from St. Stephens Hospital, New Delhi visited Medical Record Section (Main Hospital) and outpatient department of AIIMS.

A group of 23 BSc (PC) Nursing students visited Medical Record Section (Main Hospital) and a brief lecture was delivered on Medical Record Management at AIIMS by Shri N.K. Sharma, Chief Medical Record Officer.

Meetings

Shri N.K. Sharma, Chief Medical Record Officer, Shri Yogesh Kumar Sharma, DEO and Shri Ashok Kumar, MRT attended the on-line registration of Birth and Deaths meeting on 18 September 2008 and 23 December 2008 in office of MOH, Health Department, NDMC, Palika Kendra, New Delhi.

Court attendance

A total of 1269 summons (average 4 summons per day) were attended to by the Medical Record Personnel in Delhi and outside Delhi.

Computerization of Medical Records

Computerization of Medical Records is in full swing. During the first phase, the Central Admission Office and Hospital Enquiry will be computerized and in the second phase, Medical Record Section (Hospital) will be computerized.

Inpatient services

The hospital has maintained its tradition of services and quality of patient care, in spite of the ever increasing number of patients that come to this hospital from all over the country as well as from abroad. A total of 82,877 patients were admitted during the year in the various clinical units of the Main Hospital and CNC. The department-wise, region-wise and gender-wise admissions are given in Appendices III and IV. The number of surgical procedures performed during the year in different surgical disciplines is given in Appendix V.

Records are systematically classified and categorized for easy retrievals in compactors. All the inpatient records of the CN Centre are maintained by the Medical Record Section of the Main Hospital.

Central Admission Office and Hospital Enquiry

Medical Records of patients admitted to the hospital are initiated from the Central Admission Office which also functions as an Enquiry counter. All types of information regarding patients, departments, doctors and centres are provided from this office.
This office functions round the clock, i.e. 365 days x 24 hours. Therefore, the staff works in shifts. This office is manned by Receptionists, Medical Record Technicians and other ministerial and hospital staff.

**Outpatient department and specialty clinics**

A total of 15,07,786 patients attended the general outpatient department and specialty clinics of the main hospital. The details of the outpatient load profile are given in Appendix VI.

**APPENDIX I**

*Yearly Statistical Health Bulletin (2008–2009)*

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Description</th>
<th>Main hospital</th>
<th>CNC</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Total patient admitted</td>
<td>65,867</td>
<td>17,010</td>
<td>82,877</td>
</tr>
<tr>
<td></td>
<td>a. Adults and children</td>
<td>63,621</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>b. Newborn infants</td>
<td>2,246</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>2.</td>
<td>Total number of patients discharged</td>
<td>59,280</td>
<td>14,221</td>
<td>73,501</td>
</tr>
<tr>
<td></td>
<td>a. Adults and children</td>
<td>57,259</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>b. Newborn infants</td>
<td>2,021</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>3.</td>
<td>Total days of care</td>
<td>3,47,514</td>
<td>1,02,327</td>
<td>4,49,841</td>
</tr>
<tr>
<td></td>
<td>a. Adults and children</td>
<td>3,33,926</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>b. Newborn infants</td>
<td>13,588</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>4.</td>
<td>Average length of stay (ALS)</td>
<td>5.9</td>
<td>7.2</td>
<td>6.1</td>
</tr>
<tr>
<td></td>
<td>a. Adults and children</td>
<td>5.8</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>b. Newborn infants</td>
<td>6.7</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>5.</td>
<td>Total number of patient care days in hospital</td>
<td>3,10,228</td>
<td>1,11,327</td>
<td>4,21,555</td>
</tr>
<tr>
<td></td>
<td>(as per daily census)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. Adults and children</td>
<td>3,03,893</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>b. Newborn infants</td>
<td>6,335</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>6.</td>
<td>Daily Average number of patients</td>
<td>850</td>
<td>305</td>
<td>1,155</td>
</tr>
<tr>
<td></td>
<td>a. Adults and children</td>
<td>833</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>b. Newborn infants</td>
<td>17</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>7.</td>
<td>Average bed occupancy (%)</td>
<td>79.9</td>
<td>72.1</td>
<td>77.6</td>
</tr>
<tr>
<td></td>
<td>a. Adults and children</td>
<td>80.2</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>b. Newborn infants</td>
<td>68.0</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>
8. Births in hospital 2,246 — 2,246
   a. Male babies 1,142 — —
   b. Female babies 1,102 — —
   c. Intersex 2 — —

9. Total death (including newborns) 2,380 923 3,303
   a. Death under 48 hours 787 229 1,016
   b. Death over 48 hours 1,593 694 2,287
   c. Gross death rate (%) 4.0 6.5 4.5
   d. Net death rate (%) 2.7 5.0 3.2

10. Attendance in casualty 1,08,486 — 1,08,486
    a. Deaths in casualty 797 — 797
    b. Brought dead in casualty 157 — 157

**APPENDIX II**

**Department-wise distribution (Main Hospital + CNC)**

<table>
<thead>
<tr>
<th>Department</th>
<th>Admission</th>
<th>Discharges</th>
<th>Days of care</th>
<th>Average length of stay</th>
<th>Total deaths</th>
<th>Deaths under 48 hours</th>
<th>Deaths over 48 hours</th>
<th>Gross death rate (%)</th>
<th>Net death rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicine I</td>
<td>1,670</td>
<td>1,503</td>
<td>13,875</td>
<td>9.2</td>
<td>325</td>
<td>124</td>
<td>201</td>
<td>21.6</td>
<td>14.6</td>
</tr>
<tr>
<td>Medicine II</td>
<td>1,106</td>
<td>995</td>
<td>9,706</td>
<td>9.7</td>
<td>303</td>
<td>117</td>
<td>186</td>
<td>30.4</td>
<td>21.2</td>
</tr>
<tr>
<td>Medicine III</td>
<td>1,357</td>
<td>1,221</td>
<td>13,667</td>
<td>11.2</td>
<td>353</td>
<td>128</td>
<td>225</td>
<td>28.9</td>
<td>20.6</td>
</tr>
<tr>
<td>Surgery I</td>
<td>1,503</td>
<td>1,353</td>
<td>11,766</td>
<td>8.7</td>
<td>38</td>
<td>10</td>
<td>28</td>
<td>2.8</td>
<td>2.1</td>
</tr>
<tr>
<td>Surgery II</td>
<td>2,146</td>
<td>741,931</td>
<td>13,994</td>
<td>7.2</td>
<td>55</td>
<td>9</td>
<td>46</td>
<td>2.8</td>
<td>2.4</td>
</tr>
<tr>
<td>Surgery III</td>
<td>1,082</td>
<td>974</td>
<td>10,266</td>
<td>10.5</td>
<td>37</td>
<td>6</td>
<td>31</td>
<td>3.8</td>
<td>3.2</td>
</tr>
<tr>
<td>Surgery IV</td>
<td>1,657</td>
<td>1,491</td>
<td>10,896</td>
<td>7.3</td>
<td>32</td>
<td>4</td>
<td>28</td>
<td>2.1</td>
<td>1.9</td>
</tr>
<tr>
<td>Orthopaedics I</td>
<td>1,680</td>
<td>1,512</td>
<td>13,261</td>
<td>8.8</td>
<td>5</td>
<td>1</td>
<td>4</td>
<td>0.3</td>
<td>0.3</td>
</tr>
<tr>
<td>Orthopaedics II</td>
<td>2,121</td>
<td>1,909</td>
<td>14,766</td>
<td>7.7</td>
<td>9</td>
<td>—</td>
<td>9</td>
<td>0.5</td>
<td>0.5</td>
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<tr>
<td>Obstetrics and Gynaecology I</td>
<td>3,834</td>
<td>3,451</td>
<td>18,257</td>
<td>5.3</td>
<td>7</td>
<td>2</td>
<td>5</td>
<td>0.2</td>
<td>0.1</td>
</tr>
<tr>
<td>Obstetrics and Gynaecology II</td>
<td>3,129</td>
<td>2,816</td>
<td>14,913</td>
<td>5.3</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Obstetrics and Gynaecology III</td>
<td>3,099</td>
<td>2,789</td>
<td>14,473</td>
<td>5.2</td>
<td>7</td>
<td>1</td>
<td>6</td>
<td>0.3</td>
<td>0.2</td>
</tr>
<tr>
<td>Nephrology</td>
<td>4,291</td>
<td>3,862</td>
<td>14,654</td>
<td>3.8</td>
<td>160</td>
<td>47</td>
<td>113</td>
<td>4.1</td>
<td>3.0</td>
</tr>
<tr>
<td>Specialty</td>
<td>First Year</td>
<td>Second Year</td>
<td>Total (MAIN)</td>
<td>First Year</td>
<td>Second Year</td>
<td>Total (CNC)</td>
<td>First Year</td>
<td>Second Year</td>
<td>Total (MAIN)</td>
</tr>
<tr>
<td>------------------------------</td>
<td>------------</td>
<td>-------------</td>
<td>--------------</td>
<td>------------</td>
<td>-------------</td>
<td>-------------</td>
<td>------------</td>
<td>-------------</td>
<td>--------------</td>
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<tr>
<td>Endocrine</td>
<td>468</td>
<td>421</td>
<td>9,506</td>
<td>22.6</td>
<td>21</td>
<td>7</td>
<td>14</td>
<td>5.0</td>
<td>3.4</td>
</tr>
<tr>
<td>Gastroenterology</td>
<td>2,258</td>
<td>2,032</td>
<td>17,248</td>
<td>8.5</td>
<td>347</td>
<td>119</td>
<td>228</td>
<td>17.1</td>
<td>11.9</td>
</tr>
<tr>
<td>Haematology</td>
<td>7,102</td>
<td>6,392</td>
<td>15,208</td>
<td>2.4</td>
<td>157</td>
<td>58</td>
<td>99</td>
<td>2.4</td>
<td>1.6</td>
</tr>
<tr>
<td>Psychiatry</td>
<td>345</td>
<td>311</td>
<td>8,343</td>
<td>26.8</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Urology</td>
<td>4,894</td>
<td>4,405</td>
<td>16,617</td>
<td>3.8</td>
<td>22</td>
<td>4</td>
<td>18</td>
<td>0.5</td>
<td>0.4</td>
</tr>
<tr>
<td>Otolaryngology I</td>
<td>1,177</td>
<td>1,059</td>
<td>4,989</td>
<td>4.7</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>0.3</td>
<td>0.2</td>
</tr>
<tr>
<td>Otolaryngology II</td>
<td>1,549</td>
<td>1,394</td>
<td>5,623</td>
<td>4.0</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>0.3</td>
<td>0.2</td>
</tr>
<tr>
<td>Otolaryngology III</td>
<td>1,446</td>
<td>1,301</td>
<td>6,734</td>
<td>5.2</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>0.2</td>
<td>1.5</td>
</tr>
<tr>
<td>Dermatology</td>
<td>3,739</td>
<td>3,365</td>
<td>13,024</td>
<td>3.9</td>
<td>10</td>
<td>—</td>
<td>10</td>
<td>0.3</td>
<td>0.3</td>
</tr>
<tr>
<td>New Born</td>
<td>2,246</td>
<td>2,021</td>
<td>13,588</td>
<td>6.7</td>
<td>42</td>
<td>18</td>
<td>24</td>
<td>2.1</td>
<td>1.2</td>
</tr>
<tr>
<td>Paediatrics I</td>
<td>2,661</td>
<td>2,395</td>
<td>9,705</td>
<td>4.1</td>
<td>91</td>
<td>22</td>
<td>69</td>
<td>3.8</td>
<td>2.9</td>
</tr>
<tr>
<td>Paediatrics II</td>
<td>1,505</td>
<td>1,355</td>
<td>8,056</td>
<td>5.9</td>
<td>71</td>
<td>20</td>
<td>51</td>
<td>5.2</td>
<td>3.8</td>
</tr>
<tr>
<td>Paediatrics III</td>
<td>2,819</td>
<td>2,537</td>
<td>9,263</td>
<td>3.6</td>
<td>72</td>
<td>18</td>
<td>54</td>
<td>2.8</td>
<td>2.1</td>
</tr>
<tr>
<td>Paediatric Surgery</td>
<td>2,550</td>
<td>2,295</td>
<td>17,445</td>
<td>7.6</td>
<td>72</td>
<td>7</td>
<td>65</td>
<td>3.1</td>
<td>2.8</td>
</tr>
<tr>
<td>Radio Therapy</td>
<td>59</td>
<td>53</td>
<td>290</td>
<td>5.5</td>
<td>27</td>
<td>19</td>
<td>8</td>
<td>50.9</td>
<td>23.5</td>
</tr>
<tr>
<td>Dental Surgery</td>
<td>191</td>
<td>172</td>
<td>1,548</td>
<td>9.0</td>
<td>—</td>
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### APPENDIX III

**Department-wise distribution of inpatients (2008–2009)**

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**GRAND TOTAL 82,877**

(Main Hospital and CN Centre)

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**APPENDIX V**

Surgical procedures (2008–2009)

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## APPENDIX VI
### Attendance in OPDs and Specialty Clinics (2008–2009)

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<td>10,189</td>
</tr>
<tr>
<td><strong>ORTHOPAEDICS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. <em>General OPD</em></td>
<td>61,013</td>
<td>1,16,960</td>
<td>1,77,973</td>
</tr>
<tr>
<td>2. <em>Specialty Clinics</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Follow-up</td>
<td>—</td>
<td>7,845</td>
<td>7,845</td>
</tr>
<tr>
<td>b) Tuberculosis</td>
<td>259</td>
<td>629</td>
<td>888</td>
</tr>
<tr>
<td>c) Polio</td>
<td>6</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>d) Scioliosis</td>
<td>363</td>
<td>1,058</td>
<td>1,421</td>
</tr>
<tr>
<td>e) Hand</td>
<td>649</td>
<td>897</td>
<td>1,546</td>
</tr>
<tr>
<td>f) CTEV</td>
<td>214</td>
<td>1,365</td>
<td>1,579</td>
</tr>
<tr>
<td>g) Arthritis</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>OTORHINO-LARYNGOLOGY AND RUAS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. <em>General OPD</em></td>
<td>34,560</td>
<td>40,771</td>
<td>75,331</td>
</tr>
<tr>
<td>2. <em>Specialty Clinics</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Audiology</td>
<td>126</td>
<td>97</td>
<td>223</td>
</tr>
<tr>
<td>b) Speech</td>
<td>1,084</td>
<td>2,335</td>
<td>3,419</td>
</tr>
<tr>
<td>c) Hearing</td>
<td>859</td>
<td>2,229</td>
<td>3,088</td>
</tr>
<tr>
<td>d) Voice</td>
<td>616</td>
<td>1,489</td>
<td>2,105</td>
</tr>
<tr>
<td>e) Vertigo</td>
<td>101</td>
<td>93</td>
<td>194</td>
</tr>
<tr>
<td>f) Rhinology</td>
<td>100</td>
<td>80</td>
<td>180</td>
</tr>
<tr>
<td>Surgical disciplines</td>
<td>New cases</td>
<td>Old cases</td>
<td>Total</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>-----------</td>
<td>-----------</td>
<td>---------</td>
</tr>
<tr>
<td><strong>OBSTETRICS AND GYNAECOLOGY</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. General OPD</td>
<td>29,897</td>
<td>48,190</td>
<td>78,087</td>
</tr>
<tr>
<td>2. Specialty Clinics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Postnatal</td>
<td>92</td>
<td>11</td>
<td>103</td>
</tr>
<tr>
<td>b) Infertility</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>c) IVF</td>
<td>520</td>
<td>1,622</td>
<td>2,142</td>
</tr>
<tr>
<td>d) Family welfare</td>
<td>6,541</td>
<td>3,217</td>
<td>9,758</td>
</tr>
<tr>
<td>e) Antenatal</td>
<td>449</td>
<td>2,542</td>
<td>2,991</td>
</tr>
<tr>
<td>f) Endocrine gynaecology</td>
<td>34</td>
<td>102</td>
<td>136</td>
</tr>
<tr>
<td>g) High-risk pregnancy</td>
<td>2,256</td>
<td>12,925</td>
<td>15,181</td>
</tr>
<tr>
<td><strong>RADIOThERAPY</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General OPD</td>
<td>344</td>
<td>56,805</td>
<td>57,149</td>
</tr>
<tr>
<td><strong>DENTAL SURGERY</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. General OPD</td>
<td>26,878</td>
<td>12,917</td>
<td>39,795</td>
</tr>
<tr>
<td>2. Specialty Clinics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Orthodontics</td>
<td>1,163</td>
<td>7,737</td>
<td>8,900</td>
</tr>
<tr>
<td>b) Combined cleft palate</td>
<td>89</td>
<td>902</td>
<td>991</td>
</tr>
<tr>
<td>c) Trigeminal neuralgia</td>
<td>242</td>
<td>263</td>
<td>505</td>
</tr>
<tr>
<td>d) Restorative-cum-endodontic</td>
<td>11,898</td>
<td>10,184</td>
<td>22,082</td>
</tr>
<tr>
<td>e) Oral prophylaxis</td>
<td>6,172</td>
<td>9,172</td>
<td>15,344</td>
</tr>
<tr>
<td>f) Prosthodontics-cum-maxillofacial prosthesis</td>
<td>11,703</td>
<td>11,975</td>
<td>23,678</td>
</tr>
<tr>
<td><strong>OTHERS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Casualty</td>
<td>1,08,486</td>
<td>—</td>
<td>1,08,486</td>
</tr>
<tr>
<td>2. Employees Health Scheme</td>
<td>1,06,292</td>
<td>70,862</td>
<td>1,77,154</td>
</tr>
<tr>
<td>3. Nutrition</td>
<td>2,019</td>
<td>847</td>
<td>2,866</td>
</tr>
<tr>
<td>4. PMR</td>
<td>12,805</td>
<td>9,224</td>
<td>22,029</td>
</tr>
<tr>
<td>5. SMCC</td>
<td>2,148</td>
<td>2,408</td>
<td>4,556</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6,84,183</strong></td>
<td><strong>8,23,603</strong></td>
<td><strong>15,07,786</strong></td>
</tr>
</tbody>
</table>
### 6.2 Hospital Dietetics Services

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chief Dietician</td>
<td>Parmeet Kaur (Acting)</td>
</tr>
<tr>
<td>Dietician</td>
<td>Swapna Chaturvedi</td>
</tr>
<tr>
<td>Assistant Dietician</td>
<td>Gurdeep Kaur Richa Jaiswal Vasundhara Singh Anjali Bhol Monita Gahlot</td>
</tr>
</tbody>
</table>

**Number of indoor patients served different diets**

<table>
<thead>
<tr>
<th>Diet Type</th>
<th>Number (Servings)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of diets</td>
<td>6,49,618</td>
</tr>
<tr>
<td>Normal diets</td>
<td>3,27,759</td>
</tr>
<tr>
<td>Semisolid</td>
<td>60,058</td>
</tr>
<tr>
<td>Therapeutic diets</td>
<td>1,39,321</td>
</tr>
<tr>
<td>Kitchen based enteral feeds</td>
<td>34,180</td>
</tr>
<tr>
<td>Commercial enteral feeds</td>
<td>975</td>
</tr>
<tr>
<td>Private ward diets</td>
<td>87,325</td>
</tr>
</tbody>
</table>

**Nutrition clinic—outpatients**

<table>
<thead>
<tr>
<th>Group</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Old patients</td>
<td>847</td>
</tr>
<tr>
<td>Males</td>
<td>541</td>
</tr>
<tr>
<td>Females</td>
<td>306</td>
</tr>
<tr>
<td>New patients</td>
<td>2,019</td>
</tr>
<tr>
<td>Males</td>
<td>1,167</td>
</tr>
<tr>
<td>Females</td>
<td>852</td>
</tr>
</tbody>
</table>
PATIENTS WELFARE

Patient care: Rs 46,60,000 (approximately) raised as donation.

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Donation</th>
<th>Donor</th>
</tr>
</thead>
<tbody>
<tr>
<td>For treatment and surgery of poor and needy patients who are undergoing treatment in the Main Hospital and Centres</td>
<td>Rs 4,40,500</td>
<td>Shri Sai Bhakta Samaj (Regd.)</td>
</tr>
<tr>
<td></td>
<td>Rs 7,26,049</td>
<td>Handicapped Children’s Rehabilitation Association</td>
</tr>
<tr>
<td></td>
<td>Rs 4,07,500</td>
<td>Jawahar Bhawan Trust</td>
</tr>
<tr>
<td></td>
<td>Rs 1,30,000</td>
<td>Rajendra Bhawan Trust</td>
</tr>
<tr>
<td></td>
<td>Rs 87,500</td>
<td>Sahu Jain Trust</td>
</tr>
<tr>
<td></td>
<td>Rs 85,800</td>
<td>Other Charitable Trust</td>
</tr>
<tr>
<td></td>
<td>Rs 25,800</td>
<td>Lal Devi Charitable Trust</td>
</tr>
<tr>
<td></td>
<td>Rs 27,172</td>
<td>Sewa Prakalp Trust</td>
</tr>
<tr>
<td></td>
<td>Rs 24,000</td>
<td>Vijay Gujral Foundation</td>
</tr>
<tr>
<td></td>
<td>Rs 17,035</td>
<td>Other individual donors</td>
</tr>
<tr>
<td>AIIMS Poor Fund Account</td>
<td>Rs 50,000</td>
<td>Mrs Dwarka Prasad Trust</td>
</tr>
<tr>
<td></td>
<td>Rs 10,000</td>
<td>Smt Anita Swani</td>
</tr>
<tr>
<td></td>
<td>Rs 7,000</td>
<td>Shri Naresh Swani</td>
</tr>
<tr>
<td>Anti-cancer drugs provided free to cancer patients</td>
<td>Rs 26,24,105</td>
<td>Gopal Foundation</td>
</tr>
</tbody>
</table>

Patients living below poverty line are being assisted to avail of financial assistance for their treatment from *Rashtriya Arogya Nidhi*, PM National Relief Fund, Health Ministers Discretionary Grant and other governmental and non-governmental agencies.

Medicines were arranged for poor and needy patients from Hospital Poor Patient Fund. Patients were also assisted for admission, exemption of levy charges and investigation charges, etc.

*Dharamshalas*

As a welfare activity through the aegis of the AIIMS Hospital Social Welfare Society, the Rajgarhia Vishram Sadan, Sureka Vishram Sadan and Shri Sai Vishram Sadan provided shelter to over 16,300 patients and their attendants. The renovation of Rajgarhia Vishram Sadan was also undertaken so as
to improve the existing facility. In special cases, food is arranged through donors for the poor and needy inmates of the Vishram Sadans. Shakti Sewa Samiti Charitable Trust (regd) donated bed sheets, pillows, pillow covers and other items worth Rs 72,000 (approx) for the benefit of the inmates.

**Employees’ Welfare**

**Appointment on compassionate grounds**

Cases for appointments 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 has suffered and thereby enable them to shoulder the responsibilities that had fallen on them. Assistance for funeral expenses was also provided, if required, to the relatives of the deceased employees.

**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 are being provided for redressal of grievances to staff members and patients

**Sponsorship of school fees**

Handicapped Children’s Rehabilitation Association sponsored school fees for the wards of our ‘Group D’ employees. School fees of 32 children was sponsored for a period of 6 months (total amount of sponsorship Rs 58950). In addition, school fees of two more children was sponsored through an individual donor.

**Free hearse van facility**

Free hearse van facility is being organized through Shri Sai Bhakta Samaj (Regd) to enable easy transportation of the dead body by the distressed relatives to their homes/crematorium in Delhi.

**Sports activities**

Facilitating participation of institute employees in the inter-ministry tournaments. The AIIMS Shooting Ball Team won the Inter Ministry Shooting Ball Championship and also secured 3rd prize in the 27th National Championship of Shooting Ball. The AIIMS Football Team secured the runner-up position in the Inter Ministry Football Tournament.

**Diwali celebration**

On the occasion of Diwali, Cardigans and gifts were distributed to the children of employees studying in the nursery and primary school being run by Medical Institute Residents Welfare Association (MIRWA) in Ansari Nagar campus.

It may kindly be ensured that the Annual Report of the Welfare Unit is not merged with that of the Medical Social Services Unit as both the Units are working independently of each other.
6.4 Hospital Billing Section

Following is the amount of donation received and the payments made to the patients during the financial year 2008–2009.

Donations received from donors: Rs 6,01,653.00
(Bank Interest + donations + Poor fund boxes)

Payment made to [66+194] patients: Rs 90,851.00

(The amount disbursed is from the donations received from donors during the year as well as from the previous balance lying in the ‘AIIMS POOR FUND ACCOUNT’).

6.5 Hospital Laundry

The mechanized laundry is providing its services to all departments of AIIMS Hospital, Dr R.P. Centre, Dr B.R. Ambedkar Institute Rotary Cancer Hospital, Cardiothoracic and Neurosciences Centre.

The laundry was visited by several batches of hospital administrators attending the courses at the National Institute of Health and Family Welfare and by several teams of doctors from other hospitals in the country. These visits have helped the participants to gain first hand knowledge of the mechanized laundry with a view to start similar system in their own hospitals.

Workload during the year 2008-2009
1. Total pieces processed 51,17,527
2. Total weight (in kgs) 15,74,623
3. Total cost of washing material (Rs) 16,23,165
4. Cost of washing material per piece (Rs) 0.3171
5. Cost of washing material per kg of linen (Rs) 1.030

6.6 Blood Bank (Hospital)

April 2008 to March 2009
Blood collection in donor room
1. Total relative donors 19,853
2. Total voluntary donors 12,651
   From donation camps 8,052
   From AIIMS Blood Bank 4,599
   From Mobile Donation Nil
3. Collected from CNC  
   IRCH  
   Others  
   **Total collection**  
   
34,775

Camps organized  
82

**Routine Laboratory**

1. Total patients  
   
42,237

2. Total ABO grouping  
   
1,08,020

3. Total Rh  
   
77,012

4. Total OPD grouping and Rh  
   
3,767

5. Total cross-match (Emergency and Routine)  
   
58,799

6. Total donor grouping  
   
69,550

7. Total ICT  
   ICT positive  
   
1,025  
   190

8. Total titre  
   
120

9. Total A/B  
   
38,649

10. Total DCT  
    DCT positive  
    
466  
    96

11. Total blood issued (units)  
    
33,583

12. Total received back (units)  
    
632

13. Total small units  
    
841

14. Total blood discarded (units)  
    
1,956

15. Blood issued but not transfused  
    Nil

16. Total blood issued to private ward (units)  
    
2,591

17. Total component issued to private wards  
    
2,140

18. Total blood issued to outside hospital (units)  
    
926

19. Total component issued to outside hospital  
    
158

20. Total cross-match but not transfused  
    
9,054

21. Blood issued to IRCH  
    IRCS  
    CNC  
    
3,314  
    5  
    139

   **Total**  
   
4,55,270

**Special Procedure Laboratory**

1. Minor grouping  
   
239

2. Platelet antibody  
   
68

3. Reagent cell thawing  
   
742

4. Cell freezing  
   Nil

5. DAT  
   
43

6. Cross-matching discrepancy  
   
99

7. Group discrepancy  
   
22
8. AB screening  
9. Blood thawing  
10. Antibody identification  
   **Total**  
   1,312  
11. Component QC  
12. Antisera QC  
13. EQAS  

Component Laboratory  
1. Platelet-rich concentrate  
2. Fresh-frozen plasma  
3. Liquid plasma  
4. Cryoprecipitate  
5. Red blood cells  
6. Single donor platelet pheresis (SDP)  
   **Total component prepared**  
   88,274  

Infection Laboratory  
1. HIV test  
2. HBV test  
3. Anti-HBc test  
4. HCV test  
5. VDRL  
   **Total**  
   2,10,311
EDUCATION

Undergraduate
Fortynine students graduated from the four-year BSc (Hons) Nursing course, while 18 students graduated from the two-year BSc Nursing (Post-certificate) course.

Postgraduate
MSc Nursing - 14 students graduated from MSc Nursing two year course.
Eighteen students have joined the program this year in the following specialties:

1. Paediatric Nursing
2. Psychiatric Nursing
3. Cardiology/CTVS Nursing
4. Neurosciences Nursing
5. Oncology Nursing
6. Critical care Nursing
7. Nephrology Nursing

Continuing Nursing Education (CNE)

1. The College of Nursing has organized the following Short-term courses/symposium/workshops:

   “Cardiology Nursing Update” was held in October, 2008. A total of 32 nurses from AIIMS Hospital attended the update. Coordinator: Ms R.Andrews.

   “Oncology Nursing Update” was held in October, 2008. In all 37 nurses from AIIMS hospital attended the update. Coordinator: Ms K.Sharma.
“Nephrology Nursing Update” was held in March, 2009. Total 27 nurses from AIIMS hospital attended the update. Coordinator: Ms D.C. Khakha

Workshop on “Feeding of normal & sick newborns with special emphasis on breast feeding” was held in November, 2007. In all 17 nurses from AIIMS attended the update. Coordinator: Ms P.Joshi.

Workshop on “Mental Health Nursing- child and adolescent psychiatry” was held in October, 2008. In all 34 nurses from AIIMS hospital attended the update. Coordinator: Dr S.Gupta.

“Neurological Nursing Update” was held in September, 2008. In all 24 nurses from AIIMS Hospital attended the update. Coordinator: Ms M.Agarwal.

Workshop on “Substance use disorder nursing” was held on March 2009. In all 17 nurses from AIIMS hospital attended the workshop. Coordinator: Dr S. Gupta.

Symposium on “Disaster Management” was held on Annual day of the college. More than 350 nurse participants, students & others from AIIMS hospital attended the programme. Coordinator: Dr S.Gupta.

A five days “HIV/AIDS training for nurses” funded by NACO/DSACS. 28 nurses from ART centres/ Community care centres from Delhi, Haryana, Punjab, Rajasthan, Chandigarh and Madhya Pradesh attended the training. Coordinator: Ms R.Andrews.

Three “Master Trainers training program in HIV/AIDS” funded by INC-GFATM project were held. A total of 90 Faculty members from different colleges of nursing in Delhi, Chandigarh, Kolkata, SNDT Mumbai, Punjab, Chattisgarh, Gujrat, Rajasthan and Haryana attended the programmes. Coordinator: Dr Manju Vatsa.

2. The College of Nursing conducted orientation/briefing sessions for:

Two groups of visitors from abroad and 5 groups of visitors from various educational institutions of India.

Faculty members of the College attended 21 workshops/conferences and delivered 67 lectures for 35 continuing nursing/medical education programmes and workshops held during the year.

CONSULTANCY AND PARTICIPATION AS EXPERT

M.Vatsa participated as a core group member for ‘PhD consortium in India’ coordinated by the Indian Nursing Council: took teaching sessions through Video conferencing for PhD scholars; continuing as Guide for 6 PhD scholars for consortium for PhD in Nursing, INC and RGUHS.

Member of the Indian Nursing Council and its executive and education committees.

Pilot testing of Essential Newborn Care package for nurses training tool. WHO collaborating centre for newborn care, AIIMS.

Member National Advisor Board, Prism’s Nursing Practice- Journal of clinical nursing – education, training and career development, (earlier called The Journal of Nursing) . Quarterly publication of Prism books, Bangalore, since its inception in 2005.
Member of organizing committee for XVI National Conference of Indian association of Social Psychiatry, Dept of Psychiatry

Convenor for the workshop on Lactation Management conference of ISOPARB, AIIMS, New Delhi

She was Expert member for Technical resource group on HRD for Technical support for capacity building and HR planning and Development. NACO-Phase III.

Development of National maternal health policy, Govt.of India, Ministry of Health and Family Welfare, Maternal Health Division.

Revision of MTP act, Ministry of Health and Family Welfare, Govt.of India

Strengthening of Pre-service education of ANM, GNM as Skilled Birth Attendant, INC.

Technical meeting on strengthening nursing and midwifery programmes to support NRHM, INC

Teaching modules for ANM school teachers for midwifery INC

Skilled birth attendant modules and teaching –INC and CEDPA

Indian Association of Neonatal Nurses (IANN) president and executive Committee member

Regional advocacy workshop on Tobacco control law and measures” PGI Chandigarh of Health and Family Welfare, Govt.of India Tobacco Cessation centre, PGI Chandigarh

Review meeting on Pre service IMNCI for NPI states LHMC/WHO

Commonwealth steering committee for nursing and midwifery in SE asia region Workshop on HR issues for nursing and Midwifery including HIV/AIDS implications and presentation proposal writing and influencing skills

Expert group meeting on community and home based newborn care – finalization of and strategy modules NIHFW and UNOPS

Invited as Chief Guest for ENBC training for teachers in Haryana state at MM College of nursing, Mullana Ambala

Dr Manju Vatsa, Principal and Dr Sandhya Gupta, Lecturer continue to be on review panel of Indian Journal of Nursing and midwifery

Dr Manju Vatsa, Principal and Ms Sandhya Gupta, Ms R. Andrews and Ms Deepika C.Khakha, Lecturers participated as expert for

Development of “training manual for nurses for trainers and nursing personnel in HIV/AIDS” organized by the Indian Nursing Council, and NACO

Two days orientation training program for trainers for HIV modules organized by the Indian Nursing Council under GFATM project.

Dr S Gupta is nominated as:
Chief editor of Indian Society of Psychiatric Nurses

Joint-organizing secretary for International conference of Indian society of Psychiatric Nursing to be held in 2009 at Bangalore.

Member of Editorial Board: International Journal of Nursing Education

Member Expert group of NACO on HIV/AIDS for IDUs, Govt of India

Member Education committee, Indian nursing Council

Member of technical committee, Indian Standard’s Institute


Expert group member of committee on geriatric care homes in India by Helpage India

Participated as expert for revision of syllabus of ‘Nursing management of Substance Use Disorders for Paramedical staff, NDDTC,AIIMS’.


Facilitator for workshops on ‘standards for old age homes’ and ‘standards for long term care’ for the Conference Proceedings of international conference of Gerontology, organized by Indian geriatric society, held in Delhi in February, 2009

Ms Rachel Andrews

Was trainer for HIV/AIDS TOT under the GMFT project at con AIIMS and Kolkata

Coordinator for HIV/AIDS course for the NACO in training of nursing personnel working in ART centers

Was expert committee member for developing evaluation tools for the critical care specialty training for nurses organized by booc.

Worked as counsellor for IGNOU Post basic BSc nursing 2nd year students in Medical Surgical Nursing course (24 hours)

Ms Rachel Andrews, Ms Deepika Khakha, and Ms Kamlesh Sharma attended workshop for “Medical Teachers on Research Methodology Improving Quality of PG theses held at Department of Paediatrics, AIIMS.

Ms Deepika Khakha was

Co-ordinator for Asian Congress of Urology, Nursing Workshop, 3-4 October, 08.

Resource Person for Sessions for NACO Training in HIV Counselling for Paramedical Staff of Central Paramilitary Forces Medical Services organized by Jamia Milia Islamia University, October 2008
Ms Kamlesh Sharma, Lecturer, was resource person for
Training of trainers workshop on “Breast self examination” for CGHS doctors from Delhi, AIIMS, May 2008.

One day workshops on Kangaroo Mother Care (KMC) at Sir Ganga Ram Hospital and Chacha Nehru Hospital in Delhi, November 2008.


For development of training module on Midwifery, organized by INC
Subcommittee member (DNC) to develop ANM practical records and question bank, December, 2008.

Ms K. Sharma, S. Mawar, A. Qureshi, G. Razdan, P. Thomas attended Master trainer training programme on HIV/AIDS for nurses organized by CON AIIMS, under INC- GFATM project

Ms Kiran Singh is continuing as programme officer of NSS Unit, AIIMS.

Dr M. Vatsa, Principal and other faculty members participated as resource persons/committee Members for the following organizations:

- Various committees at AIIMS
- Indian Nursing Council: General Body, Executive Committee and Education committee
- Baba Farid University of Health Sciences Faculty of Nursing:
- Ministry of Health and Family Welfare, Government of India
- R.A.K College of Nursing, external lecturers selection committee
- CMET- AIIMS adjunct faculty
- Punjab University, Chandigarh: Board of Studies in Nursing
- NEIGRIHMS Shillong – NIMHANS – Selection Committee
- Indira Gandhi National Open University: Core/expert group member
- Trained Nurses’ Association of India
- Indian Journal of Nursing and Midwifery: Review Committee
- G.G.S. Indraprastha University – Institutional Assessment committee
- Indian Academy of Hospital Administration
- I.P. University: Inspections, College of Nursing of Batra Hospital and St. Stephen Hospital, Safdarjang and RML Hospitals
- NIPI
- Jamia Milia Islamia University

Faculty members of the College participated in conduct of inspections and examinations in various colleges of nursing and universities in India.
CLINICAL AND COMMUNITY SERVICES

The faculty and students participated in outdoor and indoor patient-care activities of all the departments of the institute. They organized and conducted 6 rounds of Pulse Polio programme at 2 centers of South Delhi, organized by Government of NCT of Delhi.

Ms Kiran Singh coordinated and supervised the programme.

- Hundred health education sessions in rural areas and 100 in urban slums and OPDs on various health issues such as B.P. Immunization, New born care, PNC Care etc.
- ‘Prevention of Substance abuse’, a community awareness camp was held in Kalyanpuri.
- One month Training programme on “Life skills” for Street children and school drop-outs in Trilok puri
- An educational programme for patients recovering from Substance Use disorder, taking treatment from Trilok puri treatment centre.
- Street plays (10) and exhibitions on various health related topics for urban slums.
- Newborn week was celebrated in November 2009. 100 women participated in Breastfeeding promotion programmes in urban and rural community at Ballabhgarh.

PUBLICATIONS


Razdan G. Project Litracy initiative for Empowerment (LIFE) by UNESCO and NIOS (National Open School). The module litracy for safe motherhood.

Mawar S. A comparative study to assess the qualify of life of patients with ESRD on two different dialysis modalities and to identify factors associated with the quality of life. Indian Journal of Nursing, May, 2008, P107.


AWARDS AND HONOURS

Principal, Dr Manju Vatsa is Nominated member, faculty of nursing, Baba Farid University of Health Sciences, Faridkot, Punjab.

Mrs M Aggarwal, lecturer is selected for ‘Dr Sehgal oration award’ by the Society of Indian Neuro Science Nursing.

Dr S Gupta is Awarded PhD in August 2008 in old age care by Panjab University.

Dr S Gupta has been nominated as a Member of Board of studies, Punjab University, Chandigarh.
The mandate of the All India Institute of Medical Sciences makes research an important and integral part of the activities of the faculty. AIIMS has been at the forefront of conducting high quality research, both in the fields of basic and applied health sciences. During the year under review, the faculty of AIIMS had 381 ongoing projects and initiated 110 new projects from national and international agencies amounting to nearly Rs 58.7 crore.

This section deals with the administration of all the extramural research conducted at AIIMS. The Research Committee constituted by the Director is as follows:

From 1 April 2008 to 7 July 2008

1. Professor R.C. Deka, Dean (Academic) Chairperson
2. Dr P.P. Kotwal, Professor of Orthopaedics and Professor-in-Charge (Research Section) Vice-Chairperson
3. Dr Sunil Chumber, Sub-Dean (Academic) Member
4. Dr A.K. Dinda, Sub-Dean (Exam) Member
5. Deputy Director (Administration) Member
6. Dr G.K. Rath, Professor and Head of Radiotherapy Chief, IRCH Member
7. Dr N.K. Mehra, Professor and Head of T.I.I. Member
8. Dr S.K. Panda, Professor and Head of Pathalogy Member
9. Dr N.R. Jagannathan, Professor and Head of NMR Member
10. Dr A. Malhotra, Professor and Head of Nuclear Medicine Member
11. Dr Subrata Sinha, Professor and Head of Biochemistry Member
12. Dr V.K. Bahl, Professor and Head of Cardiology Member
13. Dr R.M. Pandey, Professor and Head of Biostatistics Member
14. Dr Kameshwar Prasad, Professor of Neurology Member
15. Dr S.P. Garg, Professor of Ophthalmology Member
16. Dr Shobha Broor, Professor of Microbiology Member
17. Dr R. Guleria, Professor of Medicine Member
18. Dr J.S. Tyagi, Professor of Biotechnology Member
19. Dr Nikhil Tandon, Professor of Endocrinology and Metabolism Member
20. A Representative of the Indian Council of Medical Research (ICMR) nominated by Director General, ICMR Member
21. Financial Adviser Member
22. Sh. S.P. Mahla, Member
23. Sh. K.C. Chhoker, Finance and Chief Accounts Officer (Research Section) Senior Administrative Officer (Research) Member-Secretary
24. A Representative of Society of Young Scientists Member
**From 8 July 2008 to 31 March 2009**

1. Professor R.C. Deka, Dean (Academic)  
   Chairperson
2. Dr N.R. Jagannathan,  
   Professor and Head of Nuclear Magnetic Resonance  
   Member
3. Dr S.S. Chauhan, Professor of Biochemistry  
   Member
4. Dr Rama Chaudhary, Professor of Microbiology  
   Member
5. Dr Y.D. Sharma, Professor and Head of Biotechnology  
   Member
6. Dr Y.K. Gupta, Professor and Head of Pharmacology  
   Member
7. Dr R. Handa, Professor of Medicine  
   Member
8. Dr C.S. Bal, Professor of Nuclear Medicine  
   Member
9. Dr S.K. Aggarwal, Additional Professor of Nephrology  
   Member
10. Dr G.V.S. Murthy, Additional Professor of Community Medicine  
    Member
11. Dr Sunil Chumber, Sub-Dean (Academic)  
    Member
12. Dr D.K. Mitra, Associate Professor of T.I.I.  
    Member
13. Dr A.K. Dinda, Additional Professor of Pathology  
    Member
14. Dr S. Bhatnagar, Scientist-III, Department of Paediatrics  
    Member
15. Dr A.B. Dey, Professor of Medicine and  
    Professor-in-Charge (Research Section)  
    Member-Secretary

**Ongoing projects funded by Indian agencies**

<table>
<thead>
<tr>
<th>Investigator</th>
<th>Project</th>
<th>Funding agency</th>
<th>Funds (Rs)</th>
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<td><strong>Anatomy</strong></td>
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<tr>
<td>Rima Dada</td>
<td>Analysis of mitochondrial DNA mutations in pathogenesis of spermatogenic arrest.</td>
<td>ICMR</td>
<td>6,45,087</td>
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<td>Shashi Wadhwa</td>
<td>Regional electron microscope facility</td>
<td>DST</td>
<td>16,29,020</td>
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<td>Shashi Wadhwa</td>
<td>Influence of prenatal auditory stimulation on the development of synaptic proteins brain derived neurotrophic growth factor and spatial memory in chick hippocampus</td>
<td>DBT</td>
<td>7,35,003</td>
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<td>T.S. Roy</td>
<td>Prenatal development and maturation of human inferior colliculus</td>
<td>DST</td>
<td>4,64,062</td>
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<tr>
<th><strong>Biochemistry</strong></th>
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<tr>
<td><strong>D.N. Rao</strong></td>
<td>To evaluate the correlation between levels of cytokines (IL-6, IL-8, IL-10) in seminal plasma in different groups of infertile men and correlation with sperm morphology functions and bacteria infection in semen</td>
<td>ICMR 2,28,238</td>
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<td><strong>D.N. Rao</strong></td>
<td>Immunocapture based diagnostic assay for the detection of <em>Plasmodium falciparum</em> HRP-2 and LDH antigen</td>
<td>ICMR 4,58,400</td>
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<td><strong>D.N. Rao</strong></td>
<td>Development defensin(s) as a mucosal adjuvant/imicrobicife with peptide antigens of HIV</td>
<td>ICMR 2,02,523</td>
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<tr>
<td><strong>D.N. Rao</strong></td>
<td>Immunocapature based diagnostic assay for the detection of <em>plasmodium falciparum</em> HRP-2 and LDH antigen</td>
<td>ICMR 2,17,707</td>
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<td><strong>D.N. Rao</strong></td>
<td>T Reg cells and other negative regulatory elements of IL-2 in leprosy patients</td>
<td>ICMR 7,55,356</td>
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<td><strong>D.N. Rao</strong></td>
<td>Development Defensin(s) as a mucosal adjuvant/imicrobicife with peptide antigens of HIV</td>
<td>DBT 5,32,497</td>
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<td><strong>D.N. Rao</strong></td>
<td>Programme for productization of diagnostics and development of prophylactics for neglected infectious diseases with filariasis as a model</td>
<td>DBT 5,52,301</td>
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<td><strong>Kalpana Luthra</strong></td>
<td>Differential cell response of goat granulose cell to LH or hCG stress in cell culture system. To analyze the signal transduction pathway in the two</td>
<td>ICMR 1,50,025</td>
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<td><strong>Kalpana Luthra</strong></td>
<td>Genetic polymorphism of cholesterol ester transfer protein in hyperlipidemic patients. A case control study</td>
<td>ICMR 4,76,528</td>
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<tr>
<td><strong>Kalpana Luthra</strong></td>
<td>SDF-1 and DC-SIGNR polymorphisms and expression in HIV-1 infection</td>
<td>ICMR 5,70,945</td>
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<tr>
<td><strong>M.R. Rajeswari</strong></td>
<td>Neurological disorders Friedreich’s ataxia (FRDA) and spinocerebellar ataxia (SCA) associated with DNA trinucleotide repeats; Identification and Development of protein biomarkers and circulating DNA for clinical diagnosis</td>
<td>ICMR 6,16,601</td>
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<td><strong>N.C. Chandra</strong></td>
<td>Studies on SREBP-mediated regulation of low-density lipoprotein receptor (LDLR), low-density lipoprotein receptor-related protein (LRP) and receptor-associated protein (RAP)</td>
<td>DST 6,90,780</td>
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<tr>
<td>Researcher</td>
<td>Project Description</td>
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<td>N.C. Chandra</td>
<td>An <em>in vitro</em> model study of hyperlipoproteinemia on the degree of LDL receptor expression in placental trophoblast cells: Correlation with oral steroid contraceptive induced hyperlipoproteinemia</td>
<td>ICMR</td>
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<tr>
<td>Neeta Singh</td>
<td>Mitochondria in apoptosis and human cancer</td>
<td>ICMR</td>
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<tr>
<td>Neeta Singh</td>
<td>A study of molecular and biological factors in pathogenesis of ovarian cancer</td>
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<tr>
<td>Neeta Singh</td>
<td>Development of HPV vaccine prototype</td>
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<tr>
<td>Nibhriti Das</td>
<td>Expression and modulation of complement receptors: Significance in the pathophysiology and prognosis of autoimmune disorders</td>
<td>CSIR</td>
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<tr>
<td>Nibhriti Das</td>
<td>Evaluation of the role of free radical homeostasis cell adhesion molecules, nitric oxide, HDL and associated gene polymorphisms in relation to the risk and severity of coronary artery disease</td>
<td>ICMR</td>
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<td>Parthaprasad Chattopadhyay</td>
<td>Hypoxia and CPG island methylation of selected loci in tumor cell genome: Modulation of methylation and subsequent effects on cell proliferation and chemotherapeutic response</td>
<td>ICMR</td>
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<td>S.S. Chauhan</td>
<td>Characterization of the positive regulatory region of the first exon of human cathepsin L gene</td>
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<td>S.S. Chauhan</td>
<td>Mechanism(s) of regulation of human dipeptide peptidase-III expression in tumor cell lines</td>
<td>DRDO</td>
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<td>Subrata Sinha</td>
<td>Interaction of DNA repair genes and p53 in determining the cellular response to genotoxic agents in glial tumor cell-lines.</td>
<td>DST</td>
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<tr>
<td>Subrata Sinha</td>
<td>Funds for improvement of S&amp;T infrastructure (FIST)</td>
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<td>Subrata Sinha</td>
<td>Deregulated initiation of translation in oral carcinogenesis</td>
<td>DST</td>
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<tr>
<td>Subrata Sinha</td>
<td>Generation and characterization of phage displayed recombinant antibodies to biochemically and immunologically relevant epitopes of the oncodevelopmental antigen heat stable alkaline phosphatase</td>
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<tr>
<td>Name</td>
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<td>Subrata Sinha</td>
<td>Ligand based selection from combinatorial libraries for generating recombinant antibodies to the placental (oncofetal) isozyme of alkaline phosphatase: Characterization and validation in clinical cancers</td>
<td>DBT</td>
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<td>Subrata Sinha</td>
<td>Therapy of infectious and chronic diseases. Targeted gene delivery and long-term specific modulation of gene expression</td>
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<td><strong>Biomedical Engineering Unit</strong></td>
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<tr>
<td>J.C. Bhardwaj</td>
<td>Reversibility of injectable intravasal contraceptive for the male technology development and multicentric non human primates study</td>
<td>MOHFW</td>
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<td>J.C. Bhardwaj</td>
<td>Study of fallopian tube function with luminal implant</td>
<td>Markansas Research Division</td>
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<tr>
<td>J.C. Bhardwaj</td>
<td>Evaluation of vaginal microbial flora and sperms after styene maieic anhydride (SMA) application</td>
<td>IIT</td>
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<td>Sneh Anand</td>
<td>Analysis of autonomic nervous system correlates and health of rhythmic breathing techniques</td>
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<td><strong>Biophysics</strong></td>
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<td>A. Srinivasan</td>
<td>Infrastructural support for clinical proteomics</td>
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<td>A. Srinivasan</td>
<td>Proteomics of human body fluids: Structural characterization of proteins and target identifications for diagnosis and drug discovery</td>
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<td>Krishna Dalal</td>
<td>A randomized clinical trial on the effect of reflexology in the management of patients suffering from diabetic neuropathy: Case studies</td>
<td>ICMR</td>
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<tr>
<td>Krishna Dalal</td>
<td>Randomized clinical trial (RCT)of reflexology therapy and usual drug treatment in the management of intractable epilepsy</td>
<td>CCRYN</td>
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<td>Punit Kaur</td>
<td>Three-dimensional structure determination of the novel mammalian signaling proteins SPX-40 secreted during involution and their complexes with various oligosaccharides and designed oligopeptides</td>
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<td>Punit Kaur</td>
<td>Setting up bioinformatics centres at AIIMS, New Delhi</td>
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<tr>
<td>Sharmistha Dey</td>
<td>Structure based rational drug design: Development of specific anti-inflammatory agents using phospholipase A2 and cyclooxygenase-2 as target enzymes</td>
<td>CSIR</td>
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<tr>
<td>Name</td>
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<tr>
<td>Sharmistha Dey</td>
<td>Design synthesis and evaluation of inhibitors of lipooxygenase as anti-inflammatory agents</td>
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<td>Sujata Sharma</td>
<td>Structural studies of signaling proteins expressed during involution/breast cancer and ligand design</td>
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<td>Sujata Sharma</td>
<td>Determination of amino acid sequence and three-dimensional structure of phospholipase A2 from Indian red scorpion</td>
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<tr>
<td>Sujata Sharma</td>
<td>Isolation and three dimensional structure determination of the novel signaling protein SPX-40 from memory gland secretion during involution</td>
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<td>Sujata Sharma</td>
<td>Clinical proteomics: Structural and functional studies of proteins present in pleural fluid</td>
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<td>T. P. Singh</td>
<td>Distinguished Biotechnologist award</td>
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<td><strong>Biostatistics</strong></td>
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<td>R. M. Pandey</td>
<td>Development of appropriate prevention and intervention strategies for non-communicable nutrition related disorders among women in post-reproductive period</td>
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<td>R. M. Pandey</td>
<td>New born screening for congenital hypothyroidism and congenital adrenal hyperplasia: A multicentric study</td>
<td>ICMR</td>
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<td>V. Sreenivas</td>
<td>A multicentric randomized controlled clinical trial of lamivudine, lamivudine and adefovir, glycyrrhizin and adefovir in HBV related decompensated cirrhosis</td>
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<td><strong>Biotechnology</strong></td>
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<td>Anushree Gupta</td>
<td>Polymorphisms in genes of the endothelin system in patients undergoing coronary artery bypass grafting surgery and having a concomitant diagnosis for diabetes</td>
<td>ICMR</td>
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<td>H. K. Prasad</td>
<td>Functional characterization of RV2986c, a DNA binding protein of <em>Mycobacterium tuberculosis</em></td>
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<td>H. K. Prasad</td>
<td>Study of transmission of livestock derived pathogenic mycobacteria and its prevalence among humans (zoonotic tuberculosis)</td>
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<td>H. K. Prasad</td>
<td>Development of vaccine for control of bovine tuberculosis</td>
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<td>H. K. Prasad</td>
<td>Molecular switch in Th1-Th2 response by SMAR1: Its implications in <em>Mycobacterium</em> infection</td>
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<tr>
<td>Name</td>
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<tr>
<td>J.S. Tyagi</td>
<td>Fast Track Proposal: Pharmacophore-based screening of compounds targeting DevR response regulator and assessment of their anti-<em>Mycobacterium tuberculosis</em> activity</td>
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<td>J.S. Tyagi</td>
<td>Evaluation of devRmutant of <em>Mycobacterium tuberculosis</em> in animal model of tuberculosis and in cultured bacilli: Virulence and gene expression analysis</td>
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<td>J.S. Tyagi</td>
<td>High throughput PCR assays for diagnosing tuberculosis caused by <em>Mycobacterium tuberculosis</em> and <em>Mycobacterium bovis</em> using molecular beacons</td>
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<tr>
<td>J.S. Tyagi</td>
<td>Reconstructing cellular network: Two-component regulatory systems</td>
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<tr>
<td>Satya N. Das</td>
<td>Studies of FAC (CD95) and FAS ligand (CD95L) gene polymorphisms and their association with tobacco related oral carcinomas</td>
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<td>Satya N. Das</td>
<td>Development and characterization of autologous NKT cell vaccine for active specific immunotherapy of oral squamous cell carcinoma</td>
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**Cardiac Anaesthesiology**

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<td>Poonam Malhotra Kapoor</td>
<td>Myocardial preconditioning against infarction in patients undergoing coronary artery bypass surgery: A comparison of isoflurane and sevoflurane</td>
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**Cardiac Biochemistry**

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<td>R. Lakshmy</td>
<td>Evaluation of HDL2, HDL3 and apolipoprotein A1 levels in a large Indian industrial population: Association with genetic variants in CETP, LCAT, hepatic lipase and LPL gene</td>
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<td>R. Lakshmy</td>
<td>Relation of candidate gene variants regulating triglyceride metabolism to serial changes in childhood body mass index and coronary artery disease risk factors in young adulthood</td>
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<td>R. Lakshmy</td>
<td>Low dose magnesium sulphate regimen for management of eclampsia: A randomized controlled trial</td>
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<td>R. Lakshmy</td>
<td>Circulating endothelial progenitor cells in CAD patients: Role of telomere length and telomerase activity in EPC senescence</td>
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**Cardiac Radiology**

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<td>Gurpreet Gulati</td>
<td>MRI for <em>in vivo</em> tracking iron oxide labeled mesenchymal stem cells in a rat model of heart failure</td>
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<td>Balram Bhargava</td>
<td>Stanford India Biodesign Programme</td>
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<td>Balram Bhargava</td>
<td>Cardiovascular product evaluation support service for industry</td>
<td>DBT 51,54,580</td>
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<td>Balram Bhargava</td>
<td>Biodesign in medicine</td>
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<td>G. Karthikeyan</td>
<td>Non-invasive detection of sub-clinical disease activity inpatients with established rheumatic valvular heart disease</td>
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<td>R. Juneja</td>
<td>Intravascular ultrasound for severe pulmonary artery hypertension in congential heart diseases</td>
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<td>V. K. Bahl</td>
<td>Clinical validation of a low cost telemedicine equipment at a tertiary care hospital</td>
<td>N. C. Pvt Ltd 2,00,000</td>
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<td>Balram Airan</td>
<td>Establishment of Centre for Stem Cell Research: Basic and Translational</td>
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<td>Balram Airan</td>
<td>Surgical treatment for ischemic heart (STICH) failure trial</td>
<td>CLINIRx Research Pvt Ltd, Gurgaon 12,49,008</td>
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<td>Balram Airan</td>
<td>Use of autologous bone marrow stem cells for myocardium regeneration</td>
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<td>Veena Jain</td>
<td>To develop indigenous bite force measuring appliance and to test in patients with different clinical conditions</td>
<td>DBT 246,683</td>
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<td>O. P. Kharbanda</td>
<td>Development of visual analog scale for smile characteristics following orthodontic treatment and its correlation with the treatment outcome</td>
<td>ICMR 287,734</td>
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<td>Manju Mehta</td>
<td>National mental health programme</td>
<td>MOHFW 103,155</td>
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<td>Rajesh Sagar</td>
<td>Efficacy and safety of a Gomeiatine (25Mg/day with potential adjustment at 50 mg/day with potential adjustment at 50 mg/day given orally compared to placebo in addition to a mood stablizer in bipolarri patients with a current major depressive episode</td>
<td>Quintiles Spectral India 800,146</td>
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<td>Centre for Community Medicine</td>
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<td>K. Anand</td>
<td>Development of a model for integrated management of non-communicable diseases through existing health system in India</td>
<td>ICMR 932,415</td>
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<td>K. Anand</td>
<td>NCD Risk Factor Surveillance under Integrated Diseases Surveillance project</td>
<td>ICMR 193,124</td>
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<tr>
<td>Puneet Mishra</td>
<td>Development of appropriate prevention and intervention strategies for non-communicable nutrition related disorders among women in post-reproductive period</td>
<td>DST 54,477</td>
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<th>Centre for Dental Education and Research</th>
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<tr>
<td>Ajoy Roychoudhry</td>
<td>A randomized double blind placebo controlled study of efficacy of lactobacillus CD2 lozenge in patients with chronic periodontitis</td>
<td>CD Pharma India Pvt Ltd 358,752</td>
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<td>Ritu Duggal</td>
<td>Detection of apoptosis in human periodontal ligament during orthodontic tooth movement</td>
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<th>Dermatology and Venereology</th>
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<td>K. K. Verma</td>
<td>Randomized clinical trial of azathioprine weekly pluse versus daily azathioprine for the treatment of parthenium dermatitis</td>
<td>ICMR 480,959</td>
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<td>Neena Khanna</td>
<td>A phase II, double blinded, randomized placebo controlled non-inferiority trial of Epi Cept TM NP-1 topical cream (Amitriptyline 4% Ketamine 2%) vs. oral Gabapentin in post-herpetic neuralgia (PHN)</td>
<td>Apothecaries Ltd 291,058</td>
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<td>V. K. Sharma</td>
<td>Evaluation of cyclophosphamide pulse therapy as adjuvant in the management of pemphigus</td>
<td>ICMR 415,368</td>
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<td>V. K. Sharma</td>
<td>Programme support for skin pigmentation and melanocyte-keratinocyte biology</td>
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<th>Dr B. R. Ambedkar Institute–Rotary Cancer Hospital</th>
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<td>Ritu Gupta</td>
<td>SERC FAST TRACK Scheme: Immunophenotypic characterization of plasma cells by flowcytometry in health and disease with particular reference to plasma cell myeloma</td>
<td>DST 21,621</td>
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<td>Ritu Gupta</td>
<td>Regulatory T cells repertoire in plasma cell myeloma</td>
<td>DBT 483,889</td>
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<td>Atul Sharma</td>
<td>A randomized double blind study of efficacy of lactobacillus CD2 lozenges in preventing radiation and chemotherapy induced oral mucositis in head and neck</td>
<td>CD Pharma India Pvt Ltd 453,477</td>
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<td>B. K. Mohanti</td>
<td>Patterns of care and survival studies in Cancer Registry Programme</td>
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<td>G. K. Rath</td>
<td>A randomized controlled comparative trial to evaluate the efficacy and safety of 2-Deoxy-D-Glucose(2DG) as a radiomodifier in the treatment of Glioblastoma multiforme</td>
<td>Dr Reddy’s Lab Pvt Ltd</td>
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<td>Lalit Kumar</td>
<td>Expansion of adult human bone marrow and cord blood stem cells for reprogramming into hepatocytes</td>
<td>ICMR</td>
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<td>Lalit Kumar</td>
<td>Neoadjuvant chemotherapy followed by interval debulking surgery versus upfront surgery followed by chemotherapy in stage III and stage IV epithelial ovarian carcinoma</td>
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<td>Lalit Kumar</td>
<td>In vitro expansion and establishment of human fetal liver hematopoietic stem cell line</td>
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<td>Lalit Kumar</td>
<td>Grastim (G-CSF) mobilized peripheral blood progenitor cell (PBPC) transplantation (allogenic or autologous): A multicentric study</td>
<td>Dr Reddy’s Lab Pvt Ltd</td>
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<td>Lalit Kumar</td>
<td>Combination of P53, EGFR status and tumor grading in determining the outcome of early epithelial ovarian cancers</td>
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<td>Lalit Kumar</td>
<td>To study the molecular biology of multiple myeloma.</td>
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<td>Lalit Kumar</td>
<td>Endothelial progenitor cells as biomarker of disease activity in multiple myeloma</td>
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<td>Lalit Kumar</td>
<td>A study of the prevalence and type of anaemia in lymphoid malignancies</td>
<td>Global Cancer Concern India</td>
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<td>N. K. Shukla</td>
<td>Characterization and functional analysis of differentially expressed genes in esophageal cancer</td>
<td>DST</td>
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<tr>
<td>P. K. Julka</td>
<td>A phase III trial of ALIMTA vs. docetaxel in patients with locally advanced or metastatic non-small cell lung cancer</td>
<td>Ranbaxy/ EliLilly Pvt Ltd</td>
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<tr>
<td>P. K. Julka</td>
<td>A randomised, double-blind, parallel-group, multi-centre, phase III study comparing the efficacy and tolerability of fulvestrant (FASLODEX) 500 mg with fulvestrant (FASLODEX) 250 mg in postmenopausal women with oestrogen receptor positive advanced breast cancer progressing or relapsing after previous endocrine therapy</td>
<td>Quintiles Spectral India</td>
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<tr>
<td>Authors</td>
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<td>Sponsor</td>
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<td>P. K. Julka</td>
<td>A randomized double blind placebo controlled multi-centre phase 3 study of denosumab on prolonging bone metastasis free survival in men with hormone refractory prostate cancer</td>
<td>Quintiles Spectral India</td>
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<tr>
<td>V. Raina</td>
<td>Antioxidants as adjunct to chemotherapy of lung cancer: <em>In vitro</em> study</td>
<td>Dr Reddy’s Lab Pvt Ltd</td>
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<tr>
<td>V. Raina</td>
<td>A treatment protocol for patients with gastrointestinal stromal tumor who are ineligible for participation in other SU011248 protocols and are refractory to or intolerant of imatinib mesylate</td>
<td>Pfizer Ltd</td>
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<tr>
<td>V. Raina</td>
<td>An ascending dose, sequential group, placebo-controlled, multicenter, phase I study of RWJ 800088 in subject with cancer receiving plantinum-based chemotherapy regimens protocol 800088-NAP-1002: Phase I</td>
<td>Johnson &amp; Johnson</td>
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<td>V. Raina</td>
<td>A SU011248 expanded access protocol for systemic therapy of patients with metastatic renal cell carcinoma who are ineligible for participation in other SU011248 protocol but may derive benefit from the treatment with Su011248</td>
<td>Pfizer Ltd</td>
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<td>V. Raina</td>
<td>A randomized double blind multicentre placebo controlled study of adjuvant lapatinib in women with early stage Erb B2 overexpressing breast cancer EGF 105485</td>
<td>GlaxoSmith Kline Asia Pvt Ltd</td>
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<td>V. Raina</td>
<td>Randomized phase 3 trial of ALIMTA (Pemetrexed and Carboplatin) versus Etoposide and Carboplatin in extensive stage small cell lung cancer</td>
<td>Ranbaxy/ EliLilly Pvt Ltd</td>
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<tr>
<td>Sameer Bakhshi</td>
<td>An open label multicentric study to assess the efficacy and safety of pegylated recombinant human granulocyte colony stimulating factor (pegfilgastrin) injections in patients undergoing myelosuppressive chemotherapy</td>
<td>Cadila Healthcare</td>
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<tr>
<td>Sameer Bakhshi</td>
<td>An open label multicentric study to assess the efficacy and safety of recombinant human granuocyle colony stimulating factor (filgastrim) injections in patients undergoing myelosuppressive chemotherapy</td>
<td>Cadila Healthcare</td>
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<td>Dr R. P. Centre for Ophthalmic Sciences</td>
<td>Evaluation of polymerase chain reaction assay for detection of HSV genome in tear specimens as a rapid diagnostic tool for laboratory diagnosis of HSV keratitis particlary stromal keratitis and atypical epithelial keratitis vis antigen detection and genomic DNA detection by PCR assay in corneal scrapings</td>
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<td>Radhika Tandon</td>
<td>Ocular surface reconstruction with alternative autografts of non-ocular origin</td>
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<td>Radhika Tandon</td>
<td>Development of a potential bio-polymer to serve as an alternative substrate of human</td>
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<td>amniotic membrane for <em>ex vivo</em> expansion of corneal epithelial stem cells</td>
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<td>Rohit Saxena</td>
<td>Study on the prevalence, therapeutic option and outcome measures of amblyopia</td>
<td>DST</td>
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<td>T. Velpandian</td>
<td>Evaluation of the biodisposition of Xanthophylls in Indian donor eyes and detection</td>
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<td>of their content in commonly available fruits and vegetables</td>
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<td>T. Velpandian</td>
<td>Evaluation of characterization of colours and documentation of their ocular toxicity</td>
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<td>in the northern States of India during the festival of colours (Holi)</td>
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<td>T. Velpandian</td>
<td>Development of topical ocular formulation of calcium dobesilate and evaluation of</td>
<td>Ozone Pharma Ltd</td>
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<td>T. Velpandian</td>
<td>Development of novel water-soluble isoflavone derivatives using in-silico approach</td>
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<td>and determination of its ocular pharmacological activity in experimental model of</td>
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<td>post-menopausal dry eye</td>
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<td>Tanuj Dada</td>
<td>Mutation analysis in congenital and developmental glaucoma in North Indian population</td>
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<td><strong>Endocrinology and Metabolism</strong></td>
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<td>A. C. Ammini</td>
<td>Comparison of efficacy of metformin and spironolactone in the management of polycystic ovarian syndrome</td>
<td>ICMR</td>
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<td>A. C. Ammini</td>
<td>Demographic and clinical profile of young diabetics in a tertiary care hospital in</td>
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<td>north India</td>
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<td>A. C. Ammini</td>
<td>Postmenopausal evaluation and risk-reduction with lasofoxifene (Pearl)</td>
<td>Pfizer Ltd.</td>
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<td>A. C. Ammini</td>
<td>Effects of arzoxifene on vertebral fracture incidence and on invasive breast cancer</td>
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<td>incidence in postmenopausal woman with osteoporosis or with low bone density</td>
<td>Spectral India</td>
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<td>A. C. Ammini</td>
<td>A phase 2B long-term randomized, open-label safety and tolerability trial comparing</td>
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<td>(S.S.) reboxetine (PNU-165442G) with routine care in patients with chronic painful</td>
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<td>diabetic peripheral neuropathy (DPN)</td>
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<tr>
<td>Nikhil Tandon</td>
<td>Registry of people with diabetes in India with young age at onset</td>
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<table>
<thead>
<tr>
<th>Name</th>
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<tr>
<td>Nikhil Tandon</td>
<td>A randomized, double-blind, placebo-controlled, parallel group study to determine whether, in patients with type 2 diabetes at high risk for cardiovascular and renal events, aliskiren, on top of conventional treatment, reduces cardiovascular and renal morbidity and mortality</td>
<td>Novartis India Ltd</td>
<td>1,446,043</td>
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<td>Nikhil Tandon</td>
<td>A phase 3 open label parallel group study to evaluate the efficacy and safety of human insulin inhalation powder (HILP) compared to preprandial injectable insulin in insulin-naive patients with type 2 diabetes mellitus</td>
<td>Ranbaxy/ EliLilly Pvt Ltd</td>
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<td>Nikhil Tandon</td>
<td>A phase 3 open label, parallel group study, to evaluate the efficacy of preprandial human insulin inhalation powder (HIP) compared to preprandial injectable insulin in patients with type 1 diabetes mellitus</td>
<td>Ranbaxy/ EliLilly Pvt Ltd</td>
<td>345,491</td>
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<td>Nikhil Tandon</td>
<td>A phase III randomized placebo controlled clinical trial to study the safety and efficacy of Mko 364 in everweight and obese patients with type 2 Diabetes mellitus (T2DM)</td>
<td>Neeman Medical International Asia Ltd</td>
<td>261,355</td>
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<td>Nikhil Tandon</td>
<td>Novel antigen diabetic agent evaluation study</td>
<td>Reliance Clinical Research Services</td>
<td>325,940</td>
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<td>Nikhil Tandon</td>
<td>Effect of glycemic control of once daily administration lieaglutide in combination with metformin versus glimepiride in combination with metformin in subjects with type 2 diabetes: A 16 week randomized double blind double dummy, active control 4 armed parallel group multicentre multinational trial</td>
<td>Nova Nordisk India</td>
<td>225,651</td>
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<td>Rajesh Khadgawat</td>
<td>Correlation between first trimester glucose screening and serum insulin levels with development of gestational diabetes mellitus in pregnancy</td>
<td>ICMR</td>
<td>390,516</td>
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<td>Ravinder Goswami</td>
<td>Prevalence and significance of celiac disease in patients with type 1 diabetes</td>
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<td>961,272</td>
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<td>Ravinder Goswami</td>
<td>Pattern and significance of single nucleotide polymorphism at select sites in two important candidates genes, i.e. vitamin D receptor and parathormone genes in subjects with osteoporosis</td>
<td>DRDO</td>
<td>427,494</td>
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<td>Ravinder Goswami</td>
<td>Role of oral vitamin D as an adjunct therapy in category I pulmonary tuberculosis along with assessment of immunological parameters (double-blind, randomized, placebo-controlled, clinical Trial)</td>
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## ENT (Otorhinolaryngology)

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<tr>
<td>Alok Thakar</td>
<td>Phase II/III randomized placebo controlled clinical trial of curcumin in squamous head and neck cancers</td>
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<td>Alok Thakar</td>
<td>Prevalence of hypothyroidism following treatment of head and neck cancer and its impact on quality of life</td>
<td>DST</td>
<td>563,610</td>
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<td>R. C. Deka</td>
<td>Assessment of changes in the T, C levels, dynamic range and changes in the neural response telemetry in cochlear implant users: To evaluate possible electrical stimulation induced damage to the neural elements</td>
<td>ICMR</td>
<td>337,315</td>
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<td>R. C. Deka</td>
<td>Efficacy of intratympanic dexamethasone in the management of tinnitus and its effect on improving quality of life: A clinical study</td>
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## Gastroenterology and Human Nutrition

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<td>S. K. Acharya</td>
<td>FIST infrastructure in universities and higher educational institute</td>
<td>DST</td>
<td>–1,130,415</td>
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<td>S. K. Acharya</td>
<td>Advanced center for liver diseases</td>
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<td>S. K. Acharya</td>
<td>A multicentric randomized controlled clinical trial of lamivudine and adefovir, glycyrrhizin and adefovir in HBV-related decompensated cirrhosis</td>
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<td>S. K. Acharya</td>
<td>An Open label response adaptive study of telbivudine in adults with HBeAg positive compensated chronic hepatitis B</td>
<td>Novartis India Ltd.</td>
<td>388,286</td>
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<td>Govind Makharia</td>
<td>Detection of Mycobacterial pathogens in patients with Crohn’s disease</td>
<td>DBT</td>
<td>960,983</td>
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<td>Vineet Ahuja</td>
<td>A phase III, randomized, multicentre, double blind, parallel group,active comparator study to compare the efficacy and safety of SPD476 (measalazine) 2.4 g/day once daily (QD) with Asacol 1.6 g/day twice daily (BID) in the maintenance of remission in patient with ulcerative colitis</td>
<td>PPD Pharma Development India Pvt. Ltd</td>
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<td>Vineet Ahuja</td>
<td>A randomized,double-blind controlled trial of the probiotic preparation VSL*3 for assessing clinical and histological response in patients with microscopic colitis</td>
<td>CD Pharma India Pvt Ltd</td>
<td>164,103</td>
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<td>Vineet Ahuja</td>
<td>Evaluation of efficacy and tolerability of curcumin (NCB-2) enema in ulcerative colitis</td>
<td>Himalaya Drug Co.</td>
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<td>Anoop Saraya</td>
<td>Role of enteral nutrition in preventing complications in severe acute pancreatitis in randomized control trial</td>
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<td>Anoop Saraya</td>
<td>Genetic basis of alcohol induced pancreatic disorders</td>
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<td>Pramod Garg</td>
<td>Is chronic pancreatitis a premalignant disease</td>
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<td>554,074</td>
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<td>Umesh Kapil</td>
<td>Epidemiology of gallbladder cancer with special reference to nutritional risk factor</td>
<td>ICMR</td>
<td>362,061</td>
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<td>Y. K. Joshi</td>
<td>Assessment of intestinal permeability in chronic liver disease and its consequences</td>
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### Gastrointestinal Surgery

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<tr>
<td>T. K. Chattopadhyay</td>
<td>Identification of novel esophageal squamous cell carcinoma genes by using a combination of array-based CGH and gene expression microarrays</td>
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### Haematology

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<tr>
<td>Tulika Seth</td>
<td>Assessment of the effect of planned intervention on awareness, perception and attitude regarding common cancers in Delhi: A community based longitudinal study</td>
<td>The Cancer Foundation</td>
<td>381,705</td>
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<td>Renu Saxena</td>
<td>Fund for improvement of S&amp;T Infrastructure in University and Higher Educational Institutions (FIST)</td>
<td>DST</td>
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<td>Renu Saxena</td>
<td>Elucidation of molecular genetics of acute leukemia in India</td>
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<td>Renu Saxena</td>
<td>Evaluation of platelet receptor polymorphism in patients with coronary artery disease</td>
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<td>Renu Saxena</td>
<td>Thalassemia awareness and screening programme for detection of thalassemia trial</td>
<td>National Thalassemia Welfare Society</td>
<td>81,045</td>
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<td>Renu Saxena</td>
<td>Organisation of ISHTM AIIMS external quality assurance programme</td>
<td>ISHTM</td>
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### Laboratory Medicine

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<tr>
<td>A. K. Mukhopadhyay</td>
<td>Assessment of risk factor associated with Alzheimer’s disease and vascular dementia</td>
<td>ICMR</td>
<td>835,995</td>
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<tr>
<td>M. Irshad</td>
<td>Cloning sequencing and expression of different genomic regions of transfusion transmitted virus (TTV) prevalent in Indian population</td>
<td>ICMR</td>
<td>1,151,506</td>
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<td>Sarman Singh</td>
<td>Transmission of drug resistant hepatitis B virus in close family contracts of HBV-related chronic liver disease patients</td>
<td>DST</td>
<td>305,616</td>
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<td>Sarman Singh</td>
<td>Identification of <em>Leishmania donovani</em> reservoir (S) in various animal species of endemic areas using species-specific antibodies and PCR technique</td>
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<td>Sarman Singh</td>
<td>Genotyping of <em>Mycobacterium tuberculosis</em> isolates from an endemic area of Delhi and determining their transmission dynamics in the house hold contacts and the community using molecular methods.</td>
<td>ICMR</td>
<td>1383,535</td>
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<td>Sarman Singh</td>
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<td>Sarman Singh</td>
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<td>Development of a web-portal directed at welfare of older people.</td>
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<td>Pankaj Hari</td>
<td>Antibiotic prophylaxis in the management of vesicoureteric reflux: A multicentric randomized double blind placebo controlled trial</td>
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<tr>
<td>Pratima Ray</td>
<td>Evaluation of chikungungunya infection in children and adults</td>
</tr>
<tr>
<td>Pratima Ray</td>
<td>Characterization of rotavirus strains from a multicentric rotavirus surveillance study at AIIMS, Delhi</td>
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<tr>
<td>Rachna Seth</td>
<td>To understand the deviation in cell signaling pathway autism through neurotrophic factors (insulin like growth factor-1) and undertake a randomized blinded trial with olanzapine to evaluate its effects on insulin like growth factor-1 (IGF-1), clinical symptoms of autism and autism rating scales</td>
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<table>
<thead>
<tr>
<th>Name</th>
<th>Project Description</th>
<th>Funding Agency</th>
<th>Amount</th>
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</thead>
<tbody>
<tr>
<td>Shinjini Bhatnagar</td>
<td>Zinc as an immunomodulators in the treatment of possible serious bacterial infections in infants more than 7 days and upto 2 months of age</td>
<td>DBT</td>
<td>2,535,059</td>
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<tr>
<td>Shinjini Bhatnagar</td>
<td>Efficacy of stem cells in the improvement of left ventricular function in patients with acute myocardial infarction</td>
<td>DBT</td>
<td>686,430</td>
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<tr>
<td>Shinjini Bhatnagar</td>
<td>Effects of administering 10 mg zinc orally to young infants aged 7 days and upto 4 months with possible serious bacterial infection on survival and function of peripheral blood mononuclear cells ... age</td>
<td>DBT</td>
<td>2,991,282</td>
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<tr>
<td>Vandana Jain</td>
<td>Kigs advanced patient outcome survey number SN87-052-38</td>
<td>Pfizer Ltd</td>
<td>-40</td>
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<tr>
<td>Veena Kalra</td>
<td>FIST in Subject Area life Sciences for Level II support</td>
<td>DST</td>
<td>2,185,298</td>
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<td><strong>Pathology</strong></td>
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<tr>
<td>A. K. Dinda</td>
<td>Development of nanoparticular system for selective receptor specific macrophage targeting</td>
<td>DBT</td>
<td>735,608</td>
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<tr>
<td>Chitra Sarkar</td>
<td>Glial tumours: a correlative clinicopathological study of chromosome 1p/19q status, epidermal growth factor receptor (EGFR) amplification and p53 expression</td>
<td>ICMR</td>
<td>672,468</td>
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<tr>
<td>S. K. Panda</td>
<td>Operation of the J. C. Bose Fellowship</td>
<td>DST</td>
<td>851,212</td>
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<td>S. K. Panda</td>
<td>FIST Program</td>
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<td>6,626,544</td>
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<td>S. K. Panda</td>
<td>Study of viral proteins and other molecular markers in hepatitis E virus (HEV) infected cells using high throughput molecular techniques</td>
<td>DBT</td>
<td>4,144,459</td>
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<td>S. K. Panda</td>
<td>Investigation related to mechanism of entry of HEV into the host cells</td>
<td>DBT</td>
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<tr>
<td>Seema Sen</td>
<td>Detection of human papilloma virus genome in malignant ocular lesions</td>
<td>ICMR</td>
<td>739,882</td>
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<td>Vaishali Suri</td>
<td>Study of the role of bone marrow derived pluripotent cells in peripheral nerve repair in adult rats</td>
<td>ICMR</td>
<td>1,138,612</td>
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<td><strong>Pharmacology</strong></td>
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<tr>
<td>D. S. Arya</td>
<td>Pharmacological and molecular studies on cardio-protective potential of some unani drugs in experimentally induced myocardial infection</td>
<td>CCRUM</td>
<td>339,452</td>
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<td>K. H. Reeta</td>
<td>Estimation of oxidative stress during oral iron supplementation (daily vs. weekly) with or without vitamin C among anemic pregnant mothers</td>
<td>ICMR</td>
<td>688,459</td>
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</table>

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<table>
<thead>
<tr>
<th>Name</th>
<th>Project Title</th>
<th>Funding Agency</th>
<th>Grant No.</th>
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<tbody>
<tr>
<td>S. K. Maulik</td>
<td>Modulatory effect of phytoadaptogens on cardiovascular and neurological changes induced by experimental stress in rats</td>
<td>DST</td>
<td>740,048</td>
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<tr>
<td>S. K. Maulik</td>
<td>Clinical trial of a standardized preparation of Terminalia arjuna in patients with left ventricular dysfunction</td>
<td>DBT</td>
<td>372,116</td>
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<tr>
<td>Surender Singh</td>
<td>Standardization and pharmacological studies of widely practiced anti-arthritic Unani preparation ‘Majoon Suranjam’ based on clinical Unani literature</td>
<td>ICMR</td>
<td>578,142</td>
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<tr>
<td>Y. K. Gupta</td>
<td>Efficacy and safety evaluation on antiepileptic activity of selected Indian herbs</td>
<td>DST</td>
<td>259,960</td>
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<tr>
<td>Y. K. Gupta</td>
<td>Antiemetic study of ginger against cancer chemotherapy induced emesis</td>
<td>Dabur Research Foundation</td>
<td>527,749</td>
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<tr>
<td>Y. K. Gupta</td>
<td>National Pharmacovigilance Program</td>
<td>MOHFW</td>
<td>169,017</td>
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<td>Y. K. Gupta</td>
<td>Pharmacological evaluation of medicinal plants and their products</td>
<td>Ranbaxy/EliLilly Pvt Ltd</td>
<td>1,729,246</td>
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<td>Y. K. Gupta</td>
<td>Training module in clinical research</td>
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<td>1,348,300</td>
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<td>Y. K. Gupta</td>
<td>Assessment of awareness of environmental mercury pollution in healthcare system: Solutions and strategies for prevention</td>
<td>Min. of Environment &amp; Forest</td>
<td>528,699</td>
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<td><strong>Physiology</strong></td>
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<td>Debabrata Ghosh</td>
<td>An mRNA expression array cluster analysis of human first trimester placental trophoblast cell functions</td>
<td>DST</td>
<td>313,696</td>
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<td>Debabrata Ghosh</td>
<td>Defining endometrial receptivity for blastocyst implantation using cDNA based array technology</td>
<td>DST</td>
<td>1,404,871</td>
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<tr>
<td>H. N. Mallick</td>
<td>The role of lateral preoptic area in regulation of body temperature, thermal preference, sleep-wakefulness and homeostatic restoration of sleep during chronic exposure in rats</td>
<td>ICMR</td>
<td>252,465</td>
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<td>Jayasree Sengupta</td>
<td>Elucidating endometriosis using genomic strategy</td>
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<td>2,042,291</td>
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<td>Raj Kumar Yadav</td>
<td>Psychoneuromune effects of meditation An evaluation by PET and biochemical markers</td>
<td>DBT</td>
<td>547,080</td>
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<tr>
<td>Rashmi Mathur</td>
<td>Motor responses to noxious/non-noxious stimuli in spinalised humans and rats: Role of electromagnetic stimulation in recovery</td>
<td>DST</td>
<td>525,731</td>
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<td>Rashmi Mathur</td>
<td>Effect of bone marrow cells transplantation and magnetic stimulation in the sensory motor functional recovery of spinalised rat</td>
<td>ICMR</td>
<td>606,092</td>
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<tr>
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<td>Ratna Sharma</td>
<td>A study to assess acute mental stress induced changes in EEG, cognitive behaviour and nucuroteroids across the menstrual cycle and effect of meditation on stress induced changes</td>
<td>CCRYN</td>
<td>547,088</td>
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<tr>
<td>S. C. Mahapatra</td>
<td>Immunomodulatory effects of Tulsi (Ocimum sanctum Linn) on healthy human subjects</td>
<td>AYUSH, MOHFW</td>
<td>680,601</td>
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**Reproductive Biology**

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<tr>
<td>Anand Kumar</td>
<td>Testing of pregnancy kits produced by Hindustan Latex Ltd for supply to NRHM programme of Govt of India</td>
<td>Hindustan Latex</td>
<td>356,871</td>
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<tr>
<td>Ashutosh Halder</td>
<td>Prevalence of 22q 11 deletion syndrome in children with structural cardiac malformation : A tertiary care referral hospital-based study in Delhi</td>
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**Stem Cell Facility**

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<th>Amount</th>
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<tbody>
<tr>
<td>Sujata Mohanty</td>
<td>Isolation and expansion of mesenchymal stem cells (MSC) from human bone marrow (BM)/umbilical cord blood (UCB) and evaluation of its cardiomyogenic and neurogenic differentiation potential</td>
<td>ICMR</td>
<td>942,341</td>
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<tr>
<td>Sujata Mohanty</td>
<td>Transplantation of mesenchymal stem cells in animal models of myocardial infarction and Parkinson’s disorder</td>
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<td>1,577,000</td>
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**Surgery**

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<tr>
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<tbody>
<tr>
<td>Anurag Srivastava</td>
<td>Safety and efficacy of autologus stem cells in prevention of amputation of patients with chronic critical limb ischemia</td>
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<td>171,700</td>
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<tr>
<td>Anurag Srivastava</td>
<td>Adjuvant taxoxifen: Longer against shorter (ATLAS) for breast cancer patients</td>
<td>Oxford Univ., UK</td>
<td>91,366</td>
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<td>Maneesh Singhal</td>
<td>Ultrasonic debridement of post traumatic wounds</td>
<td>Overseas Associates</td>
<td>65,000</td>
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<tr>
<td>Sandeep Guleria</td>
<td>Evaluation of efficacy and tolerability of Tacrolimus in patients undergoing renal transplantation</td>
<td>Panacea biotech Ltd.</td>
<td>467,622</td>
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<td>Sandeep Guleria</td>
<td>Save the Kidney</td>
<td>Rajiv Gandhi Foundation</td>
<td>172,516</td>
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<tr>
<td>Anita Dhar</td>
<td>Safety and efficacy of autologous stem cells in prevention of amputation of patients with chronic critical limb ischemia</td>
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<td>4,868,000</td>
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**Transplant Immunology and Immunogenetics**

<table>
<thead>
<tr>
<th>Name</th>
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<th>Amount</th>
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<tbody>
<tr>
<td>D. K. Mitra</td>
<td>Early detection of polarized producing allo-reactive T cells and the role of chemokines in their selective homing among patients undergoing renal transplantation</td>
<td>DST</td>
<td>1,236,451</td>
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<tr>
<td>Researcher</td>
<td>Project Title</td>
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<tr>
<td>D. K. Mitra</td>
<td>Impact of HIV infection on latent TB among patients with HIV-TB co-infection</td>
<td>ICMR</td>
<td>167,636</td>
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<tr>
<td>D. K. Mitra</td>
<td>Study of NKT cells in polarized immunity among leprosy patients</td>
<td>ICMR</td>
<td>1,189,978</td>
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<tr>
<td>D. K. Mitra</td>
<td>Efficacy of oral zinc administration as an adjunct therapy in category I pulmonary tuberculosis along with assessment of immunological parameters</td>
<td>DBT</td>
<td>878,456</td>
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<tr>
<td>D. K. Mitra</td>
<td>Role of oral vitamin D as an adjunct therapy in category I pulmonary tuberculosis along with assessment of immunological parameter (double-blind, randomized, placebo-controlled, clinical trial)</td>
<td>DBT</td>
<td>679,419</td>
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<tr>
<td>D. K. Mitra</td>
<td>Studies on T cell mediated suppression of immunity in visceral leishmaniasis patients</td>
<td>DBT</td>
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<td>D. K. Mitra</td>
<td>Impact of HIV infection on latent TB among patients with HIV-TB co-infection</td>
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<td>827,118</td>
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<tr>
<td>N. K. Mehra</td>
<td>Monitoring T cell activation markers and cytokine production following allogenic renal transplantation</td>
<td>ICMR</td>
<td>351,360</td>
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<tr>
<td>N. K. Mehra</td>
<td>HLA profile of Raica community of Rajasthan</td>
<td>ICMR</td>
<td>1,062,931</td>
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<td>N. K. Mehra</td>
<td>Genomic analysis of MHC genes (HLA and non-HLA) in type 1 diabetes in the Indian population</td>
<td>ICMR</td>
<td>3,062,824</td>
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<td>N. K. Mehra</td>
<td>Program support for advanced program in histocompatibility and transplant immunology (PS-APHTI)</td>
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<td>243,759</td>
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<td>N. K. Mehra</td>
<td>Genetic basis for HIV-I transmission resistance and disease progression polymorphism in MHC chemokine/ cytokin and their receptor genes</td>
<td>DBT</td>
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<tr>
<td>N. K. Mehra</td>
<td>Immunotherapy of drugs in refractory leukemias and lymphomas expressing HCG or subunits by a highly specific recombinant chimeric antibody against beta HCG linked to curcumin or other drugs</td>
<td>DBT</td>
<td>339,500</td>
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<td>N. K. Mehra</td>
<td>Haematopoietic stem cell transplantation in India: Challenges and opportunities and immunogenetic aspects of HIV infection</td>
<td>DBT</td>
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<tr>
<td><strong>Urology</strong></td>
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<tr>
<td>Amlesh Seth</td>
<td>Molecular analysis of gene markers in urine cytology and tissue histology specimens of Indian patients with superficial and muscle invasive transitional cell carcinoma of urinary bladder</td>
<td>ICMR</td>
<td>464,617</td>
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## Ongoing research projects funded by World Health Organization

<table>
<thead>
<tr>
<th>Centre for Behavioural Sciences (Psychiatry)</th>
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<tbody>
<tr>
<td>Pratap Sharan</td>
<td>Development of an identification instrument for depression for South East Asia Region of the World Health Organization</td>
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<table>
<thead>
<tr>
<th>Obstetrics and Gynaecology</th>
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<tbody>
<tr>
<td>Suneeta Mittal</td>
<td>Comparison of three misoprostol regimes after pretreatment with mifepristone for early pregnancy termination: A multinational RCT</td>
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<thead>
<tr>
<th>Paediatrics</th>
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<tr>
<td>V. K. Paul</td>
<td>South East Asia Regional Neonatal-Perinatal Database network</td>
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<tr>
<td>V. K. Paul</td>
<td>WHO guidelines for feeding of LBW infants: Feasibility, requirements and effects of their implementation in health facilities in India</td>
</tr>
<tr>
<td>Shinjini Bhatnagar</td>
<td>Efficacy of zinc (given as an adjunct) in the treatment of severe and very severe pneumonia in hospitalized children 2-24 months of age</td>
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</table>

## Ongoing research projects funded by international agencies

<table>
<thead>
<tr>
<th>Investigator</th>
<th>Project</th>
<th>Funding agency</th>
<th>Funds (Rs)</th>
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<tbody>
<tr>
<td>Biochemistry</td>
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<tr>
<td>Kalpana Luthra</td>
<td>Characterization of HIV-1 subtypes from Indian subjects</td>
<td>NIH, USA</td>
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<table>
<thead>
<tr>
<th>Cardiology</th>
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<tr>
<td>Balram Bhargava</td>
<td>Untreated heart failure: Activation of the immunological and inflammatory systems and changes after short term treatment</td>
<td>British Council, UK</td>
<td>1,242,216</td>
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<tr>
<td>Balram Bhargava</td>
<td>Future revascularization evaluation in patients with diabetes mellitus: Optimal management of multivessel disease (The FREEDOM Trial)</td>
<td>NIH, USA</td>
<td>999,182</td>
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<tr>
<td>G. Karthikeyan</td>
<td>Diagnostic performance of gated SPECT myocardial perfusion imaging at rest in patients presenting to the emergency room with chest pain and a normal or non-diagnostic ECG</td>
<td>IAEA</td>
<td>557,527</td>
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<tr>
<td>V. K. Bahl</td>
<td>A clinical evaluation of the Xience TM V everolimus eluting coronary stent system in the treatment of patients with de novo coronary artery lesions</td>
<td>Abbott Vascular, USA</td>
<td>1,091,896</td>
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<td><strong>Computer Facility</strong></td>
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<tr>
<td><strong>R. S. Tyagi</strong></td>
<td><strong>Mainstreaming HIV/AIDS concerns in going drugs demand programmes in South Asia</strong></td>
<td><strong>UN International Drug and Crime Control Programme</strong></td>
<td><strong>866,764</strong></td>
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<tr>
<th><strong>Dermatology and Venereology</strong></th>
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<tbody>
<tr>
<td><strong>V. K. Sharma</strong></td>
<td>A prospective, randomized, double-blind, placebo-controlled, parallel group, multicenter, 52 week trial to assess the efficacy and safety of adjunct mycophenolate mofetil (mmf) to achieve remission with reduced corticosteroids in subjects with active pemphigus vulgaris</td>
<td><strong>Aspreva Pharmaceutical Corporation, Canada</strong></td>
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<tr>
<td><strong>V. K. Sharma</strong></td>
<td>A randomized, double blinded study to evaluate the safety and efficacy of intraleisional administration of PCNA synthetic chimeric ribozyme (VIT 100) (Chelase) in the treatment of keloids and hypertrophic scars when administered concurrently with 5 FU and Kenalog</td>
<td><strong>Clinicte, USA</strong></td>
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<tr>
<th><strong>Dr B. R. Ambedkar Institute–Rotary Cancer Hospital</strong></th>
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<tbody>
<tr>
<td><strong>V. Raina</strong></td>
<td>Randomized trial of adjuvant endocrine therapy and chemotherapy in women with early breast cancer: The adjuvant breast cancer trial (ABC trial)</td>
<td><strong>Coordination Committee, Institute of Cancer Research, UK</strong></td>
</tr>
<tr>
<td><strong>V. Raina</strong></td>
<td>Adjuvant tamoxifen long against short (ATLAS) trial</td>
<td><strong>Oxford Univ., UK</strong></td>
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<tr>
<td><strong>V. Raina</strong></td>
<td>An open label study to evaluate the efficacy and safety of human recombinant granulocyte colony stimulating factor (G-CSF) in patients with chemotherapy induced neutropenia</td>
<td><strong>Clinigene International Pvt Ltd</strong></td>
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<tr>
<th><strong>Endocrinology and Metabolism</strong></th>
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<tr>
<td><strong>A. C. Ammini</strong></td>
<td>A one year multicentre, international randomized double blind study with comparison of benfluorex (150 mg b.d or 150 mg TID) versus pioglitazone (30 mg OD or 45 mg OD) in combination with sulphonylurea administered orally for treatment of type 2 diabetes</td>
<td><strong>Institute De Recherches Internationales Servier (IRIS), France</strong></td>
</tr>
<tr>
<td><strong>Rajesh Khadgawat</strong></td>
<td>A phase III, multicentre, randomized, parallel group study of safety and efficacy of the LB03002, a new sustained release formulation of human recombinant growth hormone as compared to standard daily therapy with genotropin in the treatment of naïve children with growth failure due to insufficient secretion of endogenous growth hormone</td>
<td><strong>Parexel International Ltd, UK</strong></td>
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<tr>
<td><strong>Gastroenterology and Human Nutrition</strong></td>
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<tr>
<td>Govind Makharia</td>
<td>Protocol C0524T17-18 A phase 2/3 multicenter, randomized, placebo-controlled, double-blind study to evaluate the safety and efficacy of golimumab induction therapy, administered subcutaneously in subjects with moderately to severely active ulcerative colitis</td>
<td>Centocor Research &amp; Development, USA</td>
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<table>
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<th><strong>Haematology</strong></th>
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<tbody>
<tr>
<td>Renu Saxena</td>
<td>Molecular characterization and treatment of acute lymphoplastic leukemia on protocol MCP-943</td>
<td>INCTR USA</td>
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<table>
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<th><strong>Medicine</strong></th>
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<tr>
<td>Naval K.Vikram</td>
<td>Body fat and its relationship with metabolic syndrome indicators in overweight pre-adolescents and adolescents</td>
<td>IAEA</td>
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</tbody>
</table>

| Naveet Wig | Phase I planning grant to the international clinical, operational and health services research training for AIDS/TB programmes | NIH, USA | 2,447,005 |

| S. K. Sharma | Evaluation of management strategy for pulmonary embolism | IAEA | 86,871 |

<table>
<thead>
<tr>
<th><strong>Microbiology</strong></th>
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<tbody>
<tr>
<td>Rama Chaudhary</td>
<td>Prevention of infection in neonates in India</td>
<td>Univ. of Maryland</td>
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<th><strong>National Drug Dependence Treatment Centre</strong></th>
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<tr>
<td>Anju Dawan</td>
<td>To test the effectiveness of oral substitution with buprenorphine and to establish a protocol for oral substitution with buprenorphine</td>
<td>UN International Drug and Crime Control Program</td>
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<tr>
<th><strong>Nephrology</strong></th>
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<tr>
<td>S. K. Agarwal</td>
<td>A randomized double blind, placebo, controlled, four arm, parallel group, multicentric, multinational, safety and efficacy trial of 100 mg, 300 mg and 900 mg of abetimus sodium in systemic lupus erythematoses (SLE) patients with a history of renal disease</td>
<td>Lajolla Pharma Company, California</td>
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<tr>
<th><strong>Neurology</strong></th>
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<tr>
<td>Madhuri Behari</td>
<td>Protocol OV-1003 safety and Efficacy of Melperone in the treatment of patients with psychosis associated with Parkinson’s disease</td>
<td>Ovation Pharmaceuticals, USA</td>
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| Madhuri Behari | A randomized, double-blind, placebo-controlled, dose-escalation study of single and multiple oral dose administration of BIIBo14 in subjects with moderate to late-stage Parkinson’s disease who are also receiving treatment with levodopa | Biogen Idec Limited, UK | 921,694 |

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<tr>
<th><strong>Neurosurgery</strong></th>
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<tr>
<td>Ashish Suri</td>
<td>The International infant hydrocephalus study (IIHS): A multicentre prospective randomized study</td>
<td>The International Society for Paediatric Neuro-surgery (ISPNE)</td>
<td>70,569</td>
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<tr>
<td>Ashish Suri</td>
<td>A multi-national, multi-centre, open-label, active-controlled, randomized parallel-group dose-finding study to evaluate the efficacy and safety and two doses of AP 12009-G004 in adult patients with recurrent high-grade glioma, administered intratumorally as continuous high-flow microperfusion over a 7-day period every other week</td>
<td>Antisense Pharma GmbH, Germany</td>
<td>165,399</td>
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<td>B. S. Sharma</td>
<td>A phase-II randomized, double-blind, placebo-controlled, dose finding, safety and tolerability trial of XY2405 as a treatment for traumatic brain injury</td>
<td>LSHTM, UK</td>
<td>302,385</td>
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<td>Deepak Agarwal</td>
<td>A registry for comparing catheter related infection rates among various shunt systems in the treatment of hydrocephalus</td>
<td>Codman &amp; Shurtleff Inc., USA</td>
<td>279,500</td>
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<td>Deepak Kumar Gupta</td>
<td>PPHM 0503: Open label, dose confirmation study of intestinal 1131-ch TNT-A/B MAb (COTARAR) for the treatment of recurrent glioblastoma multiforme (GBM) at first relapse</td>
<td>Peregrine Pharmaceuticals, USA</td>
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<td>P. Sarat Chandra</td>
<td>Surgical trial in lobar infracerebral haemorrhage (STICH II trial)</td>
<td>The Medical Res. Council, UK</td>
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<td>Chetan D. Patel</td>
<td>Role of cerebral perfusion SPECT in the differential diagnosis of dementia</td>
<td>IAEA</td>
<td>189,496</td>
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<td>Rakesh Kumar</td>
<td>Role of nuclear cardiology techniques in ischaemia assessment with exercise imaging in asymptomatic diabetes</td>
<td>IAEA</td>
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<td>J. B. Sharma</td>
<td>CORONIS: International study of caesarean section surgical technique: A randomized factorial trial</td>
<td>National Perinatal Epidemiology Unit, Univ. of Oxford, UK</td>
<td>2,245,513</td>
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<td>Neerja Bhatla</td>
<td>A phase HIb, double-blind, randomized, controlled study to evaluate the immunogenicity and safety of glaxosmithkine biological HPV-16/18...18-35 years</td>
<td>GlaxoSmith Kline Asia Private Ltd</td>
<td>173,177</td>
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<td>Neerja Bhatla</td>
<td>Parallel performance trial of fast HPV versus HC2 for cervical cancer screening</td>
<td>Digene Corporn, USA</td>
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<td><strong>Paediatrics</strong></td>
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<td>Madhulika Kabra</td>
<td>Economic modelling study non-invasive(RhD) testing in Europe and Asia under SAFE Network</td>
<td>University of Warwick, UK</td>
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<td>S. K. Kabra</td>
<td>Development of continuing medical education (CME) programs to strengthen AIDS treatment in India</td>
<td>NIH, USA</td>
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<td>S. K. Kabra</td>
<td>Strengthening of Cystic Fibrosis services at AIIMS</td>
<td>Cystic fibrosis/WorldWide, USA</td>
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<td>S. K. Kabra</td>
<td>Zinc supplementation in childhood tuberculosis patients in Delhi, India</td>
<td>Univ. of Bergan, Norway</td>
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<td>S. K. Kabra</td>
<td>Surveillance of serotype distribution and antimicrobial resistance pattern in invasive bacterial infection (IBIS) caused by <em>Streptococcus pneumoniae</em> and <em>Haemophilus influenzae</em> in India (IBIS Extension Phase III)</td>
<td>South Asian Pneumococcal Alliance (SAPNA)</td>
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<td>Sheffali Gulati</td>
<td>Model infection centres (MICs): A program to improve infection practices in the country</td>
<td>INCLEN &amp; USAID</td>
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<td>Shinjini Bhatnagar</td>
<td>Specific targeted research or innovation project</td>
<td>Univ. of Bergan, Norway</td>
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<td>Shinjini Bhatnagar</td>
<td>Efficacy of zinc (given as an adjunct) in the treatment of severe and very severe pneumonia in hospitalized children 2-24 months of age</td>
<td>John Hopkins Bloomberg School of Public Health (JHBSPH)</td>
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<td>N. K. Mehra</td>
<td>Type 1 diabetes genetics consortium (TIDGC): An international effort</td>
<td>NIH, USA</td>
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<td>N. K. Mehra</td>
<td>Comprehensive approach to understand streptococcal diseases and their sequelae to develop innovative strategies for diagnosis therapy, prevention and control</td>
<td>European Commission</td>
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<td><strong>Anatomy</strong></td>
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<td>Rima Dada</td>
<td>Genetic and DNA fragmentation study in infertile couples opting for ART</td>
<td>ICMR</td>
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<td>and couples experiencing recurrent IVF/ICSI failure</td>
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<td>S. B. Ray</td>
<td>A study on the novel analgesic effect of intraspinal loperamide in a</td>
<td>ICMR</td>
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<td>murine model of postsurgical pain</td>
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<td>Shashi Wadhwa</td>
<td>Influence of prenatal chronic noise exposure on brain stem auditory</td>
<td>DBT</td>
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<td>nuclei hippocampus and spatial memory in chicks</td>
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<td>T. C. Nag</td>
<td>Photoreceptor changes in the ageing human retina and their possible link</td>
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<td>Alpana Sharma</td>
<td>Determination of telomerase activity and telomere length in the T-cells</td>
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<td>of peripheral blood in patients of Parthenium induced contact dermatitis</td>
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<td>and its correlation with severity of the disease</td>
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<td>D. N. Rao</td>
<td>A study to assess the effects of long-term obstruction of epididymis in</td>
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<td>the morphology, functional and chromatin status of epididymal spermatozoa</td>
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<td>in men: Comparison with ejaculated sperm from men of proven fertility</td>
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<td>D. N. Rao</td>
<td>III Clinical trial with an intravasal injectable male contraceptive-RSIUG</td>
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<td>D. N. Rao</td>
<td>Multiple antigen peptide approach (MAP) incorporating BT constructs of</td>
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<td>FI and V antigen of Y pestis in nanoparticles for plague vaccine</td>
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<td>Kunzang Chosdol/</td>
<td>An <em>in vitro</em> study of the role of FAT, a Drosophilla tumour suppressor</td>
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<td>Subrata Sinha</td>
<td>gene homologue in human glial tumorigenesis</td>
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<td>Neeta Singh</td>
<td>To study the immune response of T cell dominant synthetic peptides</td>
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<td>derived from HPV-16 using different adjuvants in a mouse model of cervical</td>
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<td>Punit Kaur</td>
<td>Structural and functional studies of peptidoglycan recognition proteins</td>
<td>DST</td>
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<tr>
<td>Savita Yadav</td>
<td>Isolation, purification and structural and functional characterization</td>
<td>DST</td>
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<td>of new proteins from amniotic fluids and seminal plasma</td>
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<td>Name</td>
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<tr>
<td>Savita Yadav</td>
<td>Purification, biochemical and functional characterization of heparin binding proteins in human seminal plasma</td>
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<td>Sharmistha Dey</td>
<td>Development of synthetic alternatives to currently available microbicidal agents</td>
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<td>Sujata Sharma</td>
<td>Structural and functional studies of lactoperoxidase</td>
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**Biotechnology**

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<td>H. K. Prasad</td>
<td>Comprehensive proteomics profiling of CSF proteins from patients of different meningitis infections for biomarker discovery</td>
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<td>J. S. Tyagi</td>
<td>Comprehensive proteomics profiling of CSF proteins from patients of different meningitis infections for biomarker discovery</td>
<td>DBT</td>
<td>1,825,000</td>
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<td>J. S. Tyagi</td>
<td>Computational design and development of inhibitors for the treatment of tuberculosis</td>
<td>DBT</td>
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**Cardiology**

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<th>Funding Body</th>
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<tr>
<td>Balram Bhargava</td>
<td>A clinical trial comparing treatment with cangrelor (in combination with usual care) to usual care in subjects who require percutaneous coronary intervention</td>
<td>Quintiles Research India Pvt Ltd</td>
<td>44,850</td>
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<tr>
<td>Balram Bhargava</td>
<td>A clinical trial comparing cangrelor to clopidogrel in subjects who require percutaneous intervention</td>
<td>Quintiles Research India Pvt Ltd</td>
<td>44,850</td>
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<td>Balram Bhargava</td>
<td>Efficacy of stem cells in improvement of left ventricular function in patients with acute myocardial infarction</td>
<td>DBT</td>
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<td>Rakesh Yadav</td>
<td>Zyban as an effective smoking cessation aid for patients following an acute coronary syndrome: The ZESCA trial</td>
<td>Centre for Chronic Disease Control</td>
<td>55,969</td>
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<tr>
<td>V.K. Bahl</td>
<td>A double-blind, randomized, placebo-controlled, multicenter study to assess the efficacy and safety of Darbeopetin alpha treatment on mortality and morbidity in heart failure (HF) subjects with symptomatic left ventricular systolic dysfunction and anaemia</td>
<td>Amgen Technology Pvt Ltd</td>
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**Centre for Behavioural Sciences (Psychiatry)**

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<tr>
<td>R. K. Chadda</td>
<td>Development of pharmacogenomics SNP database for critical candidate genes involved in drug response for schizophrenia</td>
<td>DBT</td>
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<td>Rajesh Sagar</td>
<td>A multi-center, double blind, randomized, placebo-controlled, parallel group, flexible dose titration, add-on study of mecamylamine 2.5 to 7.5 mg in the treatment of major depressive disorder with subject who are partial responders or non-responders to citalopram therapy</td>
<td>QED Pharmaceutical Services Pvt Ltd</td>
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<td>Centre for Community Medicine</td>
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<td>Puneet Mishra</td>
<td>Pilot study on menstrual hygiene and practices of rural women and their willingness to pay for low-cost sanitary pad</td>
<td>DST</td>
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<td>Arti Kapil</td>
<td>Mechanisms of resistance to ciprofloxacin in <em>Salmonella typhi</em></td>
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<td>Arti Kapil</td>
<td>Comprehensive proteomics profiling of CSF proteins from patients of different meningitis infections for biomarker discovery</td>
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<td>Arti Kapil</td>
<td>Expert group on antibiotic susceptibility testing (EGAST) 2008: Observational plan</td>
<td>Pfizer Ltd</td>
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<td>Arti Kapil</td>
<td>Development of nenosilver Nanohydrogets for biomedical applications</td>
<td>DBT</td>
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<td><strong>B. R. Mirdha</strong></td>
<td>Study of genetic diversity and phylogenetic analysis of <em>Pneumocystis</em> proved isolate obtained from patients with clinical diagnosis of <em>Pneumocystis carinii</em> pneumonia (PCP)</td>
<td>CSIR</td>
<td>792,000</td>
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<td>Shobha Broor</td>
<td>Respiratory virus infections: Rapid low molecular detection</td>
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<td>1,106,984</td>
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<td>Shobha Broor</td>
<td>Cloning and expression of G protein gene of group B respiratory syncytial viruses in bacterial and mammalian systems and their antigenic as well as biophysical characterization</td>
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<td>Urvashi B. Singh</td>
<td>Comprehensive proteomics profiling of CSF proteins from patients of different meningitis patients for biomarker discovery</td>
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<td>Anju Dawan</td>
<td>Effectiveness of yoga in patients of opiate dependence</td>
<td>AYUSH, MOHFW</td>
<td>442,000</td>
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<td><strong>Neurology</strong></td>
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<td>M. V. Padma</td>
<td>Efficacy of minocycline in acute ischemic stroke: A single blinded placebo-controlled, trial</td>
<td>ICMR</td>
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<td>Manjri Tripathi</td>
<td>Cognitive activation studies of languages and memory as a preoperative evaluation in patients with intractable epilepsy: A novel noninvasive method of investigation</td>
<td>DST</td>
<td>892,134</td>
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<td>Manjri Tripathi</td>
<td>A randomized double blind parallel group multicenter study to evaluate the retention rate, efficacy, safety, and tolerability of carisbamate, topiramate and levetiracetam as adjunctive therapy in subjects with partial onset seizures</td>
<td>Quintiles Research India Pvt Ltd</td>
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<tr>
<td>N. R. Jagannathan</td>
<td>Magnetic resonance spectroscopic imaging (MRSI) and diffusion-weighted MRI (DW-MRI) in the non-invasive detection, assessment of treatment response and tumor metabolism in breast cancer</td>
<td>DST</td>
<td>700,000</td>
</tr>
<tr>
<td><strong>Obstetrics and Gynaecology</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>J. B. Sharma</td>
<td>Study of efficacy and safety of directly observed treatment strategy (DOTS) in female genital tuberculosis</td>
<td>MOHFW</td>
<td>2,449,041</td>
</tr>
<tr>
<td>Alka Kriplani</td>
<td>Comparative study of oral single dose of metronidazole, tinidazole, secnidazole and ornidazole in the case of bacterial vaginosis</td>
<td>DST</td>
<td>574,800</td>
</tr>
<tr>
<td>Alka Kriplani</td>
<td>An open label single-arm, non-comparative study to evaluate the efficacy and safety of iron sucrose (OROFER-S) injection in the treatment of iron deficiency anaemia during pregnancy</td>
<td>Emcure Pharmaceutical Ltd</td>
<td>100,001</td>
</tr>
<tr>
<td>Suneeta Mittal</td>
<td>Phase IV multicentric study with Centchroman</td>
<td>ICMR</td>
<td>258,950</td>
</tr>
<tr>
<td>Orthopaedics</td>
<td></td>
<td>EliLilly</td>
<td>186,577</td>
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</tr>
<tr>
<td>Rajesh Malhotra</td>
<td>An observational study to assess back pain in patients with severe osteoporosis treated</td>
<td></td>
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</tr>
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<td></td>
<td>with Teripartide versus antiresorptives</td>
<td></td>
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<tr>
<td>Rajesh Malhotra</td>
<td>A phase III randomised, parallel group, double-blind, active controlled study to</td>
<td>Siro Clin Pharma</td>
<td>284,349</td>
</tr>
<tr>
<td></td>
<td>investigate the efficacy and safety of oral 220 mg dabigatran etexilate (110 mg on the</td>
<td>Pvt Ltd</td>
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<td></td>
<td>day of surgery followed by 220 mg once daily) compared to subcutaneous 40 mg enoxaparin</td>
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<td></td>
<td>once daily for 28-35 days in prevention of venous thromboembolism in patients following</td>
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<td></td>
<td>primary elective total hip arthroplasty (RE-NOVATE II)</td>
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<tr>
<td>Paediatric Surgery</td>
<td></td>
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</tr>
<tr>
<td>D.K. Gupta</td>
<td>Role of stem cells in a surgically created rat model of biliary atresia</td>
<td>ICMR</td>
<td>131,228</td>
</tr>
<tr>
<td>M. Bajpai</td>
<td>A study on clinical and molecular markers of chronic interstitial nephropathy in</td>
<td>DBT</td>
<td>853,000</td>
</tr>
<tr>
<td></td>
<td>congenital unilateral ureteropelvic junction obstruction</td>
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<tr>
<td>Paediatrics</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Madhulika Kabra</td>
<td>To compare integrated screening with contingent sequent screening for prenatal detection</td>
<td>DBT</td>
<td>334,000</td>
</tr>
<tr>
<td></td>
<td>of Downs syndrome in the Indian context</td>
<td></td>
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<tr>
<td>Ramesh Agarwal</td>
<td>Micronutrient status of low birth weight babies during early infancy</td>
<td>ICMR</td>
<td>665,123</td>
</tr>
<tr>
<td>Shinjini Bhatnagar</td>
<td>Intravenous autologous bone marrow derived stem cell therapy for patients with acute</td>
<td>DBT</td>
<td>478,300</td>
</tr>
<tr>
<td></td>
<td>ischaemic stroke: A multiinstitutional project</td>
<td></td>
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<tr>
<td>Pathology</td>
<td></td>
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<tr>
<td>Manoj K. Singh</td>
<td>Primary cutaneous lymphomas: Use of an antibody panel to improve diagnostic accuracy</td>
<td>ICMR</td>
<td>298,494</td>
</tr>
<tr>
<td></td>
<td>in skin biopsy, classify cases using the WHO-EORTC classification of primary cutaneous</td>
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<td></td>
<td>lymphomas, flowcytometric analysis of peripheral blood to detect and quantify the</td>
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<td></td>
<td>circulating neoplastic lymphocytes in these patients, attempt to delineate therapeutic</td>
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<td></td>
<td>subgroups for future planning of therapeutic options</td>
<td></td>
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<tr>
<td>Pharmacology</td>
<td></td>
<td></td>
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<tr>
<td>D. S. Arya</td>
<td>Studies on pharmacological and molecular mechanism to investigate an angiotensin type 1</td>
<td>ICMR</td>
<td>667,774</td>
</tr>
<tr>
<td></td>
<td>receptor blocker, Irbesartan in experimental model of myocardial ischemia-reperfusion</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>injury</td>
<td></td>
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<tr>
<td>Name</td>
<td>Title</td>
<td>Institution</td>
<td>Amount</td>
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</tr>
<tr>
<td>D. S. Arya</td>
<td>Screening and scientific evaluation of hypoglycemic effects of some unaniugs in streptozotocin-induced diabetic rats</td>
<td>CCRUM</td>
<td>700,000</td>
</tr>
<tr>
<td>D. S. Arya</td>
<td>To study the cardioprotective effects of Seabuckthorn pulp oil in experimental models of myocardial infarction (MI)</td>
<td>NAIP</td>
<td>377,000</td>
</tr>
<tr>
<td>Y. K. Gupta</td>
<td>Safety study of UNIM-401 and UNIM-403 in the treatment of chronic plaque psoriasis</td>
<td>CCRUM</td>
<td>802,864</td>
</tr>
</tbody>
</table>

**Physiology**

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Institution</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ashok Kumar Jaryal</td>
<td>Development of blood flow variability software using impedance plethysmography technique and derivation of BFV-BPV relationship</td>
<td>Min. of Communication and IT</td>
<td>2,176,000</td>
</tr>
<tr>
<td>Jayasree Sengupta</td>
<td>Role of human chronic gondatropin in endometrial receptivity for pregnancy establishment</td>
<td>DST</td>
<td>1,700,000</td>
</tr>
<tr>
<td>Jayasree Sengupta</td>
<td>Effect of inorganic arsenic compounds on the activity of intestinal smooth muscle in mammals: A molecular physiological study</td>
<td>DST</td>
<td>520,000</td>
</tr>
<tr>
<td>Rashmi Mathur</td>
<td>To study the effect of repeated magnetic stimulation on sensori-motor recovery in spinal cord injured patients</td>
<td>DST</td>
<td>974,820</td>
</tr>
<tr>
<td>Sanjay Kumar Sood</td>
<td>To study pre-attentive and attentive processing of phonemes and tones in dyslexic children using pre-pulse inhibition paradigm, mismatch negativity and long latency event related evoked potentials</td>
<td>DST</td>
<td>2,223,200</td>
</tr>
</tbody>
</table>

**Surgery**

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Institution</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maneesh Singhal</td>
<td>Comparison of conventional paraffin gauze dressing and femtotechnology based sustained silver ion in calcium alginate foam dressing for acute wounds</td>
<td>Lupin Ltd</td>
<td>88,000</td>
</tr>
<tr>
<td>Sushma</td>
<td>Comparative study of sustained silver ion releasing semipermeable 3D foam dressing and conventional paraffin gauze dressing for skin graft donor site</td>
<td>Coloplast</td>
<td>125,093</td>
</tr>
</tbody>
</table>

**Transplant Immunology and Immunogenetics**

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Institution</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>N. K. Mehra</td>
<td>Genetic basis for HIV-1 transmission, resistance and disease progression: Polymorphism in MHC, chemokin/cytokine and their receptor genes</td>
<td>ICMR</td>
<td>111,240</td>
</tr>
</tbody>
</table>
New research projects funded by WHO

<table>
<thead>
<tr>
<th>Centre for Behavioural Sciences (Psychiatry)</th>
<th></th>
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<tbody>
<tr>
<td>Pratap Sharan</td>
<td>Validation of the depression identification instrument in an outpatient population</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Centre for Community Medicine</th>
<th></th>
</tr>
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<tbody>
<tr>
<td>K. Anand</td>
<td>Implementation of community-based intervention for non-communicable disease at Ballabgarh, India</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Centre for Dental Education and Research</th>
<th></th>
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<tbody>
<tr>
<td>Naseem Shah</td>
<td>To frame policy guidelines for oral health promotion and interventions for handicapped population</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Haematology</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Renu Saxena</td>
<td>Validation of haemoglobin colour scale for hemoglobin estimation: A multicentric study</td>
</tr>
</tbody>
</table>

New research projects funded by international agencies

<table>
<thead>
<tr>
<th>Cardiology</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Balram Bhargava</td>
<td>Untreated heart failure: Activation of the immunological and inflammatory systems and changes after short term treatment</td>
</tr>
</tbody>
</table>

| Sandeep Seth | Multi-Sensor Monitoring in Congestive Heart Failure (MUSIC) | Corventis, USA 527,879 |

<table>
<thead>
<tr>
<th>Centre for Behavioural Sciences (Psychiatry)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sonali Jhanjee</td>
<td>Rolling out of Opioid Substitution Treatment (OST) in Tihar Prisons, India - A collaborative Project of UNODC-ROSA, AIIMS &amp; Tihar Prisons</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dermatology and Venereology</th>
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<tbody>
<tr>
<td>Somesh Gupta</td>
<td>Determination of melanin and haemoglobin distribution in the skin of idiopathic cutaneous hyperchromia of the orbital region (ICHOR)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dr B. R. Ambedkar Institute–Rotary Cancer Hospital</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Atul Sharma</td>
<td>A phase-II, multicenter, open label, randomized study of Mapatumumab (TRM-1, HGS 1012), a fully human monoclonal antibody to TRAIL-R1 in combination with Bortezombib (VELCADE) and Bortezombib alone in subjects with relapsed or refractory multiple myeloma</td>
</tr>
<tr>
<td>Name</td>
<td>Title</td>
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<td>----------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Sushma Bhatnagar</td>
<td>CP045/06/FCNS: An open label study investigating long term safety and tolerability of Nasalfent (fentanyl citrate nasal spray) in the treatment of breakthrough cancer pain (BTCP) in subjects taking regular opioid therapy</td>
</tr>
<tr>
<td><strong>Laboratory Medicine</strong></td>
<td></td>
</tr>
<tr>
<td>Sarman Singh</td>
<td>The role of TNFa, IFNy and the success of anti-tuberculosis therapy in immune restoration disease in HIV/TB co-infected patients responding to ART</td>
</tr>
<tr>
<td><strong>Medicine</strong></td>
<td></td>
</tr>
<tr>
<td>Sanjeev Sinha</td>
<td>ASHA HIV Health Promotion Intervention in India</td>
</tr>
<tr>
<td><strong>Neurology</strong></td>
<td></td>
</tr>
<tr>
<td>Kameshwar Prasad</td>
<td>Efficacy of nitric oxide in stroke (ENOS): A prospective, international, multicentre, randomised, parallel-group, blinded, controlled, collaborative, factorial trial to investigate the safety and efficacy of treatment with transdermal glyceryl trinitrate, a nitric oxide donor, and of stopping or continuing prior antihypertensive therapy, in patients with acute stroke</td>
</tr>
<tr>
<td>M. V. Padma</td>
<td>Predicting hematoma growth and outcome in intracerebral hemorrhage using contrast bolus CT (PREDICT): A part of Multicentric study</td>
</tr>
<tr>
<td>Madhuri Behari</td>
<td>A randomized, multicenter, double-blind, placebo-controlled, dose-comparison study to determine the efficacy, and safety of BG00012 in subjects with relapsing-remitting multiple sclerosis (IN109MS301)</td>
</tr>
<tr>
<td>Vinay Goyal</td>
<td>Safety and effectiveness of open label melperone in the treatment of patients with psychosis in Parkinson's disease (OV: 1005)</td>
</tr>
<tr>
<td><strong>Neurosurgery</strong></td>
<td></td>
</tr>
<tr>
<td>B. S. Sharma</td>
<td>A prospective, multicentre, double blind, randomized, placebo-controlled, parallel-group study to assess the efficacy and safety of clazosentain in reducing vasospasm-related morbidity and all-cause mortality in adult patients with aneurysmal subarachnoid hemorrhage treated by surgical clipping</td>
</tr>
<tr>
<td>P. Sarat Chandra</td>
<td>Safety, tolerability and effectiveness evaluation of the ISS in the treatment of vascular dementia: A pilot study</td>
</tr>
<tr>
<td>Nuclear Medicine</td>
<td></td>
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<tr>
<td>C. S. Bal</td>
<td>A multicentric, open-label, randomized phase II/III study to evaluate the safety and efficacy of Combretastatin A-4 phosphate in combination with paclitaxel and carboplatin in comparison with paclitaxel and carboplatin against anaplastic thyroid carcinoma</td>
</tr>
<tr>
<td>C. S. Bal</td>
<td>Lu-177 EDTMP in hormone refractory prostate cancer patients with bone metastases: A phase I activity escalation study</td>
</tr>
<tr>
<td>Rakesh Kumar</td>
<td>Cost effective differential diagnosis in lung cancer using PET generator based radiopharmaceuticals</td>
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<thead>
<tr>
<th>Paediatrics</th>
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<tbody>
<tr>
<td>Arvind Bagga</td>
<td>Levamisole treat for children with steroid sensitive nephrotic syndrome: A multicentre, double-blind, placebo-controlled randomized trial</td>
</tr>
<tr>
<td>Madhulika Kabra</td>
<td>A multicenter, randomized, double-blind parallel, group study of gene-activated human glucocerebrosidase (GA-GCB) enzyme replacement therapy compared with Imiglucerase in patients with type 1 Gaucher disease</td>
</tr>
<tr>
<td>Shinjini Bhatnagar</td>
<td>Hib meningitis sentinel surveillance in north India</td>
</tr>
<tr>
<td>Shinjini Bhatnagar</td>
<td>Etiology and characteristics of influenza and other acute lower respiratory infection in New Delhi</td>
</tr>
</tbody>
</table>
9.1 Anaesthesiology

Professor and Head
Chandralekha

Professors
M.K. Arora    D.K. Pawar    Ravinder Kumar Batra
S. Rajeswari  Anjan Trikha  Maya Dehran
L. Kashyap    Dilip Shende

Additional Professors
Ganga Prasad

Associate Professors
Virender K. Mohan    Vimi Rewari    Vanlal M. Darlong
Rani Sunder

Assistant Professors
A.P. Bhalla    R. Pandey    Anjolie Chabbra
Jyotsna Punj    Rashmi Ramachandran

EDUCATION

Undergraduate and Postgraduate

Academic activities of undergraduates, postgraduates and paramedical staff (BSc Nursing, MSc Nursing) are continuing as before.

Short- and long-term training

Training of doctors and technicians from India and abroad in various aspects of anaesthesia, intensive care management, pain medicine and emergency care is continuing.

Number of doctors and para-medical staffs from various medical colleagues:
– Pain-clinic 1
– ICU 3
– Anaesthesia 2

Continuing Medical Education

Professor Ravinder Kumar Batra


• ‘CME-Hands-on-workshop for trainers’ sponsored by National Board of Examinations Sir Ganga Ram Hospital, New Delhi; 4–6 August 2008.
• ‘CME-Hands-on-workshop for trainers’ sponsored by National Board of Examinations, Care Hospital, Hyderabad; 20–21 September 2008.

• ‘How to plan a research project and write a Protocol’ for post-graduate students, AIIMS, New Delhi; 1 October 2008.

• ‘CME-Hands-on-workshop for trainers’ sponsored by National Board of Examinations, Dina Nath Mangeshkar Hospital, Pune; 4–5 October 2008.

• ‘CME-Hands-on-workshop for trainers’ sponsored by National Board of Examinations, Southern Railway Hospital, Chennai; 11–12 October 2008.

• ‘CME-Hands-on-workshop for trainers’ sponsored by National Board of Examinations, Sr John Hospital, Bangalore; 18–19 October 2008.


• ‘How to plan a research project and write a Protocol’ for post-graduate students, AIIMS, New Delhi; 27 March 2009.


• CME-Hands-on-workshop for faculty for DNB, organized by National Board of Examinations, Jaipur Golden Hospital, New Delhi; 25–27 July, 2008. He delivered lectures on:
  – Bedside teaching of long case and short case
  – Bedside teaching of cases in ward round
  – Teaching of spots
  – Writing of protocol, thesis and doing research
  – Constructing of MCQs, Short questions, their advantages and disadvantages

• CME-Hands-on-workshop for Faculty for DNB, organized by National Board of Examinations, Sir Ganga Ram Hospital, New Delhi; 4–6 August 2008. He delivered lectures on:
  – Bedside teaching of long- and short-case
  – Bedside teaching of cases in ward round
  – Teaching of spots
  – Writing of protocol, thesis and doing research
  – Constructing of MCQs, short questions, their advantages and disadvantages

• CME-Hands-on-workshop for faculty for DNB, organized by National Board of Examinations, Care Hospital, Hyderabad; 20–21 August 2008. He delivered lectures on:
  – Bedside teaching of long- and short-case
  – Bedside teaching of cases in ward round
  – Teaching of spots
– Writing of protocol, thesis and doing research
– Constructing of MCQs, Short questions, their advantages and disadvantages.

• ‘How to plan a research project and write a Protocol’, ‘Purpose and process of thesis in workshop’ for post-graduate students, AIIMS, New Delhi; 1 October 2008.

• ‘How to plan a research project and write a Protocol’, ‘Submission of documents for IEC in workshop’ for post-graduate students, AIIMS, New Delhi; 1 October 2008.

• CME-Hands-on-workshop for Faculty for DNB, National Board of Examinations, Dina Nath Mangeshkar Hospital, Pune; 4–5 October 2008. He delivered lectures on:

– Bedside teaching of long- and short-case
– Bedside teaching of cases in ward round
– Teaching of spots
– Writing of protocol, thesis and doing research
– Constructing of MCQs, Short questions, their advantages and disadvantages

• CME-Hands-on-workshop for Faculty for DNB, organized by National Board of Examinations, Southern Railway Hospital, Chennai; 11–12 October 2008; He delivered lectures on:

– Bedside teaching of long- and short-case
– Bedside teaching of cases in ward round
– Teaching of spots
– Writing of protocol, thesis and doing research
– Constructing of MCQs, Short questions, their advantages and disadvantages


• CME-Hands-on-workshop for Faculty for DNB, organized by National Board of Examinations, Sr John Hospital, Bangalore; 18–19 October, 2008. He delivered lectures on:

– Bedside teaching of long- and short-case
– Bedside teaching of cases in ward round
– Teaching of spots
– Writing of protocol, thesis and doing research
– Constructing of MCQs, Short questions, their advantages and disadvantages


• CME-Hands-on-workshop for Faculty for DNB, organized by National Board of Examinations, Lady Harding Medical College and S.K. Hospital, New Delhi; 25–26 October 2008; He delivered lectures on:

– Bedside teaching of long- and short-case
– Bedside teaching of cases in ward round
– Teaching of spots
- Writing of protocol, thesis and doing research
- Constructing of MCQs, Short questions, their advantages and disadvantages

  - Planning and organization of short structured questions
  - Grading of short-structured questions and listing of key skills for attempting theory questions
  - Attempting short structured questions

- ‘Early goal directed therapy in sepsis’, CME and FCCS Course at JNMC, Aligarh, Uttar Pradesh; 12 December 2008.

- ‘Purpose and process of thesis in workshop’, CME on ‘How to plan a research project and write a Protocol’ for post-graduate students; AIIMS, New Delhi; 27 March 2009.

- ‘Submission of documents for IEC in workshop’, CME on ‘How to plan a research project and write a Protocol’ for post-graduate students, AIIMS, New Delhi; 27 March 2009.

**Teleconferencing Session**

- ‘Quiz in anaesthesia’, Moderated the teleconferencing session for DNB candidates; IGNOU, New Delhi; 24 April 2008.

- Quiz on ‘Case scenario in anaesthesia’; 24 April 2008.

- ‘Interpretation of biochemical, haematological investigations and Cerebrospinal Fluid’, Moderated the teleconferencing session for DNB candidates, IGNOU, New Delhi; 22 May 2008.

- Moderator and co-ordinator for teleconferencing session for DNB Anaesthesia candidates, IGNOU, New Delhi; 30 March 2009.

**Radio-talk (FM Band 105 Hz)**

- ‘How to prepare for clinical/practical DNB examinations in anaesthesia’; 24 April 2008.

- ‘Anaesthesia’ in Hindi; 1 August 2008.


- ‘How to prepare for clinical/practical DNB examinations in Anaesthesia’; 26 February 2009.

- Moderator and co-ordinator for radiotalk session for DNB Anaesthesia candidates, IGNOU; 30 March 2009.


- ‘How to plan a research project and write a Protocol’, AIIMS, New Delhi; 27 March 2009.
Professor Anjan Trikha

- ‘How I would do it’, CME on ‘Management of difficult airway’, Department of Anaesthesiology and Intensive Care, Maulana Azad Medical College and Associated Hospitals; February 2009.
- ‘Non invasive ventilation’, CME on ‘Basics of mechanical ventilation’, JLN Bhillai Hospital, Bhillai, Chhattisgarh; March 2009.
- ‘Mechanical ventilation strategies for some common conditions’, CME on ‘Basics of mechanical ventilation’, JLN Bhillai Hospital, Bhillai, Chhattisgarh; March 2009.

Dr Vimi Rewari


Professor S. Rajeshwari


National and International Conferences

- Organized 1st International Congress on ‘Recent advances in anaesthesia (INCRAA); 30 January – 1 February 2009.

Lectures delivered

Dr Chandralekha

‘Anaesthesia problems in CRF patients’, EORCAPS-2008, UCMS & GTB Hospital, Delhi; September 2008.

**Professor Ravinder Kumar Batra**

- Chaired and Moderated the Panel Discussion on ‘Mechanical ventilation in critical care’, 47th Annual Conference and CME of Indian Society of Anaesthesiologists (Delhi Branch) and Indian College of Anaesthesiologists, New Delhi; 6 April 2008.
- Moderated workshop on ‘Mechanical ventilation’; APICON 2009, Greater Noida, Uttar Pradesh; 31 January 2009.
- Chaired session in Annual Conference of India Association of Palliative Care, AIIMS, New Delhi; 14 February 2009.
- Panelist in Panel Discussion on ‘Cardiac patient coming for non-cardiac surgery’, Society of Cardiac Anaesthesiologist of Delhi & NCR, AIIMS, New Delhi; 22 March 2009.

**Professor Anjan Trikha**

- ‘What is new in Sepsis?’, Annual Conference of Indian Society of Anaesthesia, Delhi Branch, New Delhi; April 2008.
- ‘Preservative free clonidine: How can it change the anaesthesia practice?’; Teleconference between anesthesiologists from Delhi, Meerut, Raipur, Amritsar, and Jaipur; April 2008.
- ‘Recent advances in management of ARDS’, Annual North zone conference of Indian Society of Anaesthesiologists, Srinagar, Kashmir; July 2008.
- ‘Anaesthesia and tracheostomy’, EUROCAPS 2008, UCMS and GTB Hospital, Delhi; September, 2008.
- ‘One lung ventilation’, EUROCAPS 2008, UCMS and GTB Hospital, Delhi; September 2008.
• ‘Antibiotics in the ICU—a continuing enigma’, Medicine Update (Delhi Chapter), November 2007.

• ’Free bees from medical industry are justified’, Debate session during the monthly meet of the Indian Society of Anaesthesiologists, ICMS and GTB Hospital, Delhi; February, 2009.

**Professor S. Rajeshwari:**

• ‘Anaesthetic Considerations’, **Workshop** on ‘Bariatric surgery’; March 2008:
• ‘Bariatric surgery–anaesthetic considerations’, Doordarshan Live Telecast; 3rd March 2008:
• ‘Cushing’s syndrome, emergency drugs acid-base disorders’; April, 2008.
• ‘ECGs, PFTs, acid-base disorders’, DNB Live Telecast; April 2008.
• Paper Presentation on ‘Comparison of 2% lignocaine gel with fentanyl for pediatric cataract surgery’, XXVII Annual ESRA Congress, Genoa, Italy; 23 & 27 September.
• Paediatric anaesthesia: General considerations; management of neonatal surgical emergencies; management of MMC, cleft lip and cleft palate’; Post Graduate Assembly India North, 23 October 2008.

**Dr Virender K Mohan**

• ‘Regional anaesthesia equipments, spinal/epidural anaesthesia, neuromuscular junction monitoring, TENS and Ultrasound’, All India Institute of Medical Sciences, New Delhi; 12–14 April 2008.
• ‘Non-interventional management of neck pain’, 14th Annual Conference of Indian Society for Study of Pain (ISSPCON 2009), Hyderabad; February 2009.

**Dr Rashmi Ramchandran**

• ‘Fiber-optic Intubation in Airway’, MAMC; 13–14 February 2009.

**Dr Vimi Rewari**


• ‘Modes of ventilation’, Workshop on ‘Mechanical ventilation’, JLN Hospital and Research Centre, Bhilai, Chattisgarh; 28–29 March 2009.


RESEARCH

Funded Projects

Nil

Departmental Projects

Completed

1. A comparative study to assess the effect of oral decontamination with 0.12% Chlorhexidine solution vs. H2O2 solution in normal saline in a ratio of 1:8 on the incidence of ventilator associated pneumonia (VAP) and oral microbial flora in Mechanically ventilated patients

2. Percutaneous dilatational tracheostomy: Griggs guide wire dilating forceps technique Versus controlled rotating dilation technique – A prospective randomized study

3. Comparison of cardiac output and stroke volume using esophageal Doppler, Arterial pulse wave contour and thoracic impedance in critically ill patients

4. Effect of glutamine supplementation in critically ill patients

5. Peri-operative entropy in paediatric day care surgery

6. To evaluate the effect of epidural volume extension in combined spinal epidural anaesthesia

7. Efficacy of paravertebral block as analgesic technique for laparoscopic cholecystectomy

8. Paediatric internal jugular vein cannulation: Comparison of Real-Time Ultrasound Guided and Conventional Landmark Technique-chief investigator

9. Role of radiofrequency ablation in the treatment of symptomatic lower limb varicosities 2008-co-investigator

10. Effect of Pregabalin on pre-operative anxiety and postoperative pain after total Abdominal hysterectomy—a dose ranging study
11. Evaluation of stroke volume variation as predictor of fluid responsiveness using pulse contour analysis device (Flotrac/Vigileo) in mechanically ventilated patients

12. Comparison of nitroglycerine and diltiazem as adjuvant in intravenous regional anaesthesia

**Ongoing**

1. Paediatric internal jugular vein cannulation: Comparison of real-time ultrasound guided and conventional landmark technique

2. Effect of Pregabalin on pre-operative anxiety and postoperative pain after total abdominal hysterectomy – A dose ranging study

3. Evaluation of stroke volume variation as predictor of fluid responsiveness Using pulse contour analysis device (Flotrac/Vigileo) in mechanically ventilated patients

4. Percutaneous microballoon comparison of Gasserian ganglion in classical Trigeminal neuralgia: Outcome and complications

5. Low dose hyperbaric bupivacaine in combination with intrathecal clonidine for unilateral knee arthroplasties

6. Ketamine as an adjunct with bupivacaine in paravertebral analgesia for breast surgery

7. Intrathecal morphine for postoperative pain relief in children: A comparison of two doses

8. Effect of Fentanyl pretreatment for alleviation of perineal symptoms after administration of Intravenous Dexamethasone sodium phosphate in the preoperative period

9. Incidence of accidental venous cannulation during epidural catheter placement after prior epidural injection of normal saline and head down position

10. Feasibility and comparison of technique of ultrasound guided central venous catheter placement via internal jugular vein in three different patient position – conventional (15° Trendelenburg), semi sitting (30 head up) and left lateral position

11. Safety and efficacy of low dose spinal anesthesia in patients undergoing laparoscopic hernia repair

12. Internal jugular vein cannulation: A comparison of three techniques

**Collaborative Research**

1. Phenotypic and genotypic characterization of clinical isolates of candida species

2. Comparative clinical proteomics and identification and characterization of new proteins

3. A study to assess quality of sleep and factors affecting quality of sleep in hospitalized patients

4. A descriptive comparative study to assess the prevalence of Burnout syndrome and probable causative factors among nurses working in selected intensive care units versus general wards of AIIMS
5. To evaluate the postoperative pain and other postoperative variables/complications with different surgical techniques of tonsillectomy (with ENT Department)

6. Outcome of laparoscopic sleeve gastrectomy in morbidly obese patients (with Surgery Department)

7. Assessment of factors affecting safety in patients undergoing operations in general surgery (with Surgery)

8. A study of phenotypic and phenotypic characterization of Asian Indian children with Craniosynostosis (with Paediatric Surgery)

9. Quantitative estimation of indices for components of balanced anesthesia using electroencephalographic signals from sub-human primates (with Centre for Biomedical Engineering, IIT, Delhi)

10. Development of an anesthesia delivery work station (with Central Scientific Instruments Organization, Chandigarh)

**PUBLICATIONS**

**Journals**


13. Punj J, Darlong V, Pandey R, Chandrakekha. Thirty five franklin size double lumen tube may not be suitable for tall patients.


**Chapter in Books**


**Book**

PATIENT CARE

The following facilities are available in the department:

1. Pre-anaesthesia clinic (PAC), 3 days in a week (Monday, Wednesday, Friday), 2–5 pm.
2. Pain clinic, 3 days in a week (Monday, Wednesday, Friday), 2–5 pm.
3. Interventional pain management procedures in operation theatre on Thursday.

Number of operations/procedures done

1. Main Operation Theatre
   - General surgery 2,779
   - Gastrointestinal surgery 451
   - Urology 1,155
   - Otorhinolaryngology 1,097
   - Gynaecology 1,091
   - IVF 92
   - Paediatric surgery 1,556
   - Dental surgery 134

2. Peripheral Operation Theatre
   - Maternity OT 1,946
   - Orthopaedics 2,219
   - Dr R.P. Centre for Ophthalmic Surgery 5,083

3. Interventional Pain Management Procedure 465

4. Procedures done under GA in Peripheral areas
   - Modified ECTs (Psychiatry OPD) 466
   - CECT/MRI 1,467
   - Paediatric USG (RPC) 448
   - DSA 31
   - ESWL 4

AB8/ICU
   - Total number of patients admitted 243
   - Number of patients discharged 169
   - Number of Deaths 36

AB8 EMERGENCY DUTY
   - Emergency operations done 3167
   - Emergency calls attended 2530
     (from wards, peripheral ICUs and Casualty)

OPD CLINICS
   - Total number of patients attended the clinic:
Voluntary community services

Dr Maya Dehran provided voluntary medical community services at the Bhatti Centre in Radha Soami Satsang, New Delhi for 17 days. She also provided first-aid services, resuscitation and critical care till the patients were shifted to a major hospital; Governing Body Member and advisor to council in the Centre of Social Research (NGO) and Women Power Connect.

AWARDS AND HONOURS

Dr Chandralekha was nominated as Executive Member to Bureau of Indian Standards (BIS) and Chairperson of Anaesthetic, resuscitation and allied equipment sectional committee MHD-11; Chairperson to Academic Committee of Indian College of Anaesthesiologists; Trust member and Governing Council Member of Indian College of Anaesthesiologists.

Dr Ravinder Kumar Batra is Chairman Ethic Subcommittee, AIIMS, New Delhi. He was selected as Expert for National Baord of Examinations for Inspection of DNB Anaesthesiology for DNB Accredited Institute; Expert for National Board of Examinations for Inspection of FNB Critical Care for National Board of Examinations Accredited Institute; Expert for finalization and standardization of the day to day teaching schedule for training of MBBS doctors in Life Saving Anaesthetic Skills for Emergency Obstetric Care; Expert-Group Member of ‘Committee for decision for using unethical means during National Board of Examinations’; Expert-Group Member of ‘Thesis Review Committee’ for National Board of Examinations; Expert-Group member for preparing Course and Curriculum for the training of MBBS Doctors in Obstetrics and Anaesthesia Skills for UTs of Lakshadweep and A & N Island; Member of the Screening Committee to screen the applications of Joint Director (Nob-Medical), NBE, on 12th Feb, 2009 at New Delhi.

Dr Anjan Trikha was nominated for the post of Vice President and editor of the Association of Obstetric Anaesthesiologist. He was also invited to be the founder member of the ‘Establishment Committee’ of the Indian College of Anaesthesiologists.

Dr Rashmi Ramachandran was elected Member of Hospital Infection Control Core Committee.

Dr Anjolie Chhabra was appointed Chairperson for judging poster/free paper section at the International Anesthesia and Critical care review at DMC Ludhiana, 15–16 November 2008.
9.2 Anatomy

Professor and Head
Rani Kumar
(Dean AIIMS from March 2009)

Professors
Shashi Wadhwa
Raj D. Mehra
T.S. Roy

Additional Professors
A. Shariff
Pushpa Dhar
S.B. Ray

Associate Professors
T.K. Das
(Electron Microscopy)
Rima Dada
Arundhati Sharma
(Genetics)
Renu Dhingra
T.C. Nag
(Robotics)
Ritu Sehgal

EDUCATION

Undergraduate
The department conducts MB, BS, BSc (Honours.) Nursing, B.Sc. Nursing (Post Certificate), B.Sc. Ophthalmic, Radiographic technique and speech and hearing therapy training courses. A booklet on Learning Objectives for Gross Anatomy was compiled and printed for distribution to the undergraduate students on admission. Formative multiple choice questions have been prepared on various topics in Gross Anatomy, microanatomy, developmental anatomy and the undergraduate students have regularly undertaken the self-assessment.

Postgraduate
Besides giving training to the department MD, MSc and PhD anatomy students, the department conducted course on Human Genetics for the PG students of the Department of Biotechnology, AIIMS. The faculty taught human genetics (both practical and theory) to these students. The faculty delivered series of lectures to MSc students in neurosciences, medical genetics and embryology at Jiwaji University Gwalior. The faculty also delivered lectures on ‘Anatomy for postgraduates during teleconference’, IGNOU on Gyan Darshan National Board of Examination.

Short and long-term training
Four MB, BS students from AIIMS completed Summer Research training in Genetics and neuroscience and submitted short-term projects under Kishore Vagyanik Puruskar Yojna (KVPY) and of these two students were selected/awarded this fellowship. B.Tech students from Chennai University and M.Sc (Biotechnology) students from Amity University worked for summer training in basic cytogenetic and Molecular techniques in ophthalmic disorders. Two MSc students from Jiwaji University, Gwalior were trained in neuroanatomical techniques. The department provided training to six WHO fellows in genetics for a period of three months in molecular genetic, basic cytogenetics and prenatal diagnostic techniques for detection of chromosomal disorders using CVS, amniotic fluid and cord blood samples.
One scientist from Myanmar was trained in plastination, genetics, and electron microscopic techniques. The department has upgraded the eLearning facility, which provides facilities to manage the UG and PG courses and coordinate the departmental activities like the Journal Club presentations and seminars. The PGs and PhD Students are also using the eLearning facility for scientific literature search and activities related to their thesis and research.

**Continuing Medical Education**

The department organized a meeting of the Delhi Association of Morphological Sciences (DASOMS) on 7th March 2009, which was attended by faculty and students of all five medical colleges of Delhi. The postgraduate students of the department presented three scientific papers.

**Lectures delivered**

**Professor Rani Kumar**

- “Knowledge of Anatomy—A must for intervention’, ‘ in 16th International Conference of Indian Association of Palliative Care, New Delhi; on 12th February, 2009.

**Professor S. Wadhwa**

- Delivered a guest lecture on “Electron Microscopy in Medical Science” in the CME, held at BHU, Varanasi; on 26 December, 2008.

**Dr. T. S. Roy, Dr. S. B. Ray and Dr. R. Dhingra**

- Delivered lectures on various topics in gross and developmental anatomy during teleconference, organized by National Board of Examination, IGNOU on Gyan Darshan; 23 January 2009.

**Dr. P. Dhar**

- ‘Sodium arsenite exposure during rapid brain growth period alters calcium binding protein (CaBP) expression in rat cerebellum’’, at 28th Annual Conference of STOX and International Symposium on ‘Monitoring & Modulating Global Resources of Environmental & Food contaminants: Nature versus chemicals’,” at Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana; (October., 2008.)

**Dr Rima Dada**

- ‘Genetics of male infertility’, organizing faculty at National workshop on ‘Molecular cytogenetics and rapid prenatal diagnosis by FISH’, Department of Reproductive Biology, AIIMS 3–8 November 2008 Genetics of Male Infertility.

**Professor Raj Mehra**

- Delivered invited lecture on ‘Electrogen regulates synaptic plasticity in sathippocampus through activation of ERK/MAPK signaling path way,’ International symposium on ‘Molecular aspects of brain aging and neurological disorders’, Guranank Dev University, Amritsar, November, 2009.

• Delivered lecture on ‘Vitrification and alterations in germ cell morphology and impact on ART’, at live workshop on ‘Vitrification at Army Research and Referral Hospital’, on 8th March 2008. This was organized by Indian Fertility Society; 8 March 2008.

• Delivered invited lecture on ‘Genetic alterations in women with Premature Ovarian failure’ at National Symposium on ‘Recent advances in female reproductive health’, organized by Department of Endocrinology, at CDRI, Lucknow; on 7th December 2008.

**Dr Renu Dhingra and Dr Ritu Sehgal** were appointed as Resource faculty in ““National workshop on Assessment Methods for learning Evaluation in Basic medical Sciences”, AIIMS, New Delhi; September 22—24 September, 2008.

**Dr Renu Dhingra**

• Delivered a guest lecture on “‘Anatomy of tTemporal bone for ENT surgeons’”, in Surgical workshop and Otology update, organized by Department of Otolaryngology, AIIMS, New Delhi; from 17– to 19th August 2008.

• Delivered a guest lecture on “‘Plastination : A new hope for academic institutions’”, in Reorientation training programme for teachers of Sharir Rachna, organized by National Institute of Ayurveda, Jaipur.

**Dr. A. Sharma**

• Attended Bioinformatics workshop on “‘Introduction to Bioinformatics’”, organized by Bio-Medical Informatics Centre, Department of Biophysics, AIIMS; 2nd – to 5th February; 2009;.

• Faculty Resource Person and Delivered a talk on “‘Importance of Prenatal diagnosis of Genetic disorders and awareness in the Indian Scenario’”, at the “CME on ‘Clinical Genetics’,” organized by Departments of Anatomy, Obstetrics and Paediatrics., LLRM Medical College, Meerut; on 28th February, 2009.

• Delivered a talk on ‘Prenatal diagnosis of chromosomal aberrations by conventional cytogenetics’, Workshop on ‘Molecular Cytogenetics and prenatal diagnosis by FISH’, organized by Department of Reproductive Biology, AIIMS; from 3rd — 8th November 2008.

**Dr. Ritu Sehgal**

• Worked as Resource Faculty for National Workshop on ‘Assessment Methods for Learning Evaluation in Basic Medical Sciences’, organized by Department of Physiology, AIIMS; (Check above)


National and International Conferences

Lectures delivered

Professor Rani Kumar

- Attended 56th NATCON of Anatomical Society of India, Banaras Hindu University, Varanasi; from 26–29th December 2008 at BHU Varanasi.

Professor Shashi Wadhwa

- Professor Shashi Wadhwa participated in the 74th Annual Meeting of the Indian Academy of Sciences at IIT, New Delhi; from 31 October – 2nd November 2008.
- Participated and chaired a session and judged the best paper presented at an award session of the 56th National Conference of the Anatomical Society of India, held at Varanasi; on 26 – 27th December, 2008.

Professor Raj D. Mehra

- Dr. Mehra participated in the International conference of Translational Pharmacology and 41st conference of the Indian Pharmacology Society. She chaired the Poster Awards, AIIMS, December, 2008.
- Participated in the International Symposium on ‘Tribal health’ and chaired the session on “Non-communicable diseases”, Regional Medical Research Center for Tribal’s (RMRCT), Jabalpur, February 2009.
- Participated in the Ranbaxy Science Foundation symposium on ‘Hormonal receptors and women’s health’. She chaired the session on ‘Hormonal receptors in other medical conditions’, AIIMS, March 2009.

Professor T. S. Roy

- Prof. T.S.Roy participated and chaired a session on Acute pancreatitis in the Asia Pacific Digestive week (APDW), New Delhi; 13—16th September, 2008.
- He also presented a research paper in the 56th Annual Meeting of the “Anatomical Society of India, Varanasi; December. 27—29th 2008.
Dr. P. Dhar

- Attended International Conference of South Asian Congress of Forensic Medicine, Forensic Science and Toxicology and 9th Annual Meeting of ICFMT at Amity University; (Oct. October 2008)
- Attended the 28th Annual Conference of STOX and International Symposium on “Monitoring and modulating global resources of environmental and Food contaminants: Nature versus chemicals.”, at Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana; October 2008. and Also chaired the Scientific Session for Award Papers.
- Participated in the 7th Annual Congress of the Asia Pacific of Medical Toxicology (APAMT), at Chandigarh; December 2008.
- Participated in the 41st Annual Conference of Indian Pharmacological Society and International Conference on Translational Pharmacology at AIIMS; October 2008.
- Participated in the 56th National Conference of Anatomical Society of India, BHU, Varanasi; (December 2008).

Dr. S. K. Basu Ray

- Presented papers at the National Conference of the Anatomical Society of India and the Annual Conference of the Indian Pharmacological Society.
- Chaired a scientific session on “Medical Education”, at the 56th National Conference of the Anatomical Society of India, Varanasi, Uttar Pradesh.
- Invited as guest Faculty at the 16th International Conference of the Indian Association of Palliative Care, at AIIMS, New Delhi.
- Invited to the National Convention on ‘Testing and Evaluation for Hindi’ organized by the Central Institute of Indian Languages, Mysore.

Dr. Rima Dada

- Delivered Invited Lecture on ‘Mitochondrial genetics in male infertility’, Asian Congress of Urology, organized by Urology Department of Urology, AIIMS;, 2 October 2008.
- Delivered invited lecture on ‘Insight into genetic and biochemical aspects of male infertility at Androcon’, at Biotechnology Department, Mumbai University; on 5th December 2008. Also chaired session during this meeting.
- Delivered invited lecture on ‘Molecular studies in infertility—Their role in work-up of infertile couples’, at International Congress on ‘Bio-immunoregulatory mechanism associated with reproductive organs: Relevance in fertility and sexually transmitted infections’, organized by NII;, 11 February 2009.
- Attended Human Genome meeting HGM2008 (satellite Symposium) on ‘Clinical genomics’, India Habitat Centre, New Delhi; on 25th September 2008 at India Habitat Centre.
• Presented 4 posters at HUGO meeting, Hyderabad; from 27—29th September 2008 at Hyderabad
• Presented 3 posters at ASIA ARVO meeting, at Hyderabad; in January 2009.

**Dr. Arundhati Sharma**


• The Thirteenth International Conference of HUGO – The Human Genome Organization (HUGO) and HGM2008, meeting held in the Hyderabad International Convention Centre, Hyderabad; India, organized by HUGO – the Human Genome Organization from 27–30 September, 2008.

• North India Conference on ‘Fetal medicine—prenatal diagnosis and therapy’, organized by Delhi Society for Prenatal Diagnosis and Therapy (DESPAT), at Sir Ganga Ram Hospital and AIIMS, New Delhi; 15–16 November 2008.


• International Symposium on ‘Ethics, culture and population genomics’ and 34th Annual Conference of the Indian Society of Human Genetics, held at Indira Gandhi National Centre for Arts, New Delhi; 17–20 March 2009.

**Dr. T.C. Nag**

Participated in the XVIII International Congress of Eye Research, Beijing, China; September 24–29 September, 2008.

**Dr. Renu Dhingra**

• Attended a workshop on “Introduction to biomedical—informatics”’, organized by ICMR and Department of Biophysics, AIIMS, New Delhi; 2–5 February 2009.

• Attended the 56th NATCON of Anatomical society of India; BHU, Varanasi; from 26th Dec to 29th December 2009 at BHU Varanasi.

**Dr. Ritu Sehgal**

Delivered invited lectures ion ‘Anatomy and Eembryology’ for the RCOG North Zone Postgraduate Course, at Amity University; August, 2008.

**RESEARCH**

**Funded Projects**

**Completed**

Ongoing


4. Studies on ovariectomy induced anatomico-chemical changes in rat cerebellum and their response to estradiol and tamoxifen therapies. PI: Dr.R.D. Mehra., Funded by ICMR funded (2008—2011), Funds: Rs. 5.64 lakh.


16. Role of circulating angiogenetic factors in the pathogenesis of preeclampsia. Renu Dhingra. Funded by AIIMS. Funds: Amount Rs 75000., PI: Dr Renu Dhingra Co PI : Dr Rani Kumar and Dr Neerja Bhatla.


Collaborative

1. European Commission funded “ASSIST” Project, EU-FP6. (Dr.R.D. Mehra with Professor N.K. Mehra as the Principal investigator, 2007—2010).


5. ICMR Phase III clinical trial with intravasal injectable Male contraceptive RISUG.- Co PI Rima Dada. Funded by AIIMS.


Departmental Projects

Ongoing :

1. Hippocampal regulation of immune mechanism.
2. Development of the human auditory system
3. Age changes in the human oculomotor nerve
4. Age changes in the human cochlear nerve
5. Morphology of the fetal and adult human pancreatic duct system
6. Effect of lipoic acid as an antioxidant supplement on arsenic induced toxicity in developing rat hippocampus
7. Effect of sodium arsenite exposure during early postnatal period on rat testis
8. Effect of arsenic exposure on rat liver during early postnatal period.
9. Glial changes in aging human optic nerve

**Completed**

1. Effect of prenatal sound on the morphology of auditory and visual thalamic relay nuclei of domestic chick; Departmental project completed in July 2008. Dr. S. Wadhwa.
3. Effects of arsenic exposure during early postnatal period on the rat hippocampus; (2007.)

**Collaborative Projects**

**Ongoing**

1. Chromosomal aberrations in Oculoplastic syndromes. Dr Rima Dada. (with Dr Neelam Pushker-RPC)
2. ROS and DNA damage assessment pre and post varicocelectomy. Dr Rima Dada. (with Dr Rajiv Kumar-Urology)
3. Chromosomal aberrations and molecular study in BPES. Dr Rima Dada. (with Dr Bhavna Chawla-RPC)
4. Cytogenetic study in Myelodysplastic Syndromes. Dr Rima Dada. (with Dr Renu Saxena-Haematology-IRCH)
5. Mitochondrial mutation analysis and cytogenetic study in Keratoconus. Dr Rima Dada. (with Dr Tityal and Dr N Sharma in RPC)

**PUBLICATIONS**

**Journals**


**Abstracts**


41. Sharma A, Dadhwal V, Paliwal P, and Deka D. ‘Rare case of double aneuploidy seen in fetus on amniocentesis with USG abnormalities’. Meeting of the Delhi Society for Prenatal Diagnosis and Therapy (DESPAT). Moolchand Hospital, New Delhi; 17th January 2008.


44. Tanwar M, Sihota R, Dada T, Kumar M, Dada R. Identification of Ter@223 as a Predominant CYP1B1 Allele Causing Primary Congenital Glaucoma in North-Indian Patients. Asia-ARVO; 15–18 January, 2009; page 28.


46. Varugheese Betsy , Kumar R , Bhatla N, and Dhingra R. Comparative study of circulating antiangiogenic factors in normotensive and pre eclamptic pregnant women in Indian population. 56th NATCON ASI; December 2008: Page 82.


**Books/Chapters in Books**


**PATIENT CARE**

**Genetic Diagnostic and Counselling Services**

Offering genetic diagnostic and counselling services to patients from several clinical departments and also helped Delhi Police in sex identification of unidentified bodies.

**Cytogenetic analysis**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male infertility</td>
<td>123</td>
</tr>
<tr>
<td>POF</td>
<td>52</td>
</tr>
<tr>
<td>ART failure</td>
<td>96</td>
</tr>
<tr>
<td>Endocrinological disorders and genital ambiguity</td>
<td>24</td>
</tr>
<tr>
<td>Oculoplastic syndromes</td>
<td>41</td>
</tr>
<tr>
<td>MDS-myelodysplastic syndrome</td>
<td>16</td>
</tr>
<tr>
<td>Chromosome analysis</td>
<td>346</td>
</tr>
<tr>
<td>Amniotic fluid/cvs/cord blood</td>
<td>80</td>
</tr>
</tbody>
</table>

AIIMS 2008-2009 / 132
Embalming of dead bodies

For transportation 627
For teaching/research 13

Fluorosis Diagnostic Laboratory: Fluoride estimation

Urine 58
Blood/serum 46
Drinking water 95

AWARDS AND HONOURS


Dr. S.B. Ray awarded the “International Fellowship for Bbiomedical Scientists” by the Indian Council of Medical Research for doing research work at the Department of Anaesthesiology in University of California at San Diego, USA for 3 months.

Dr. Sonali Kataria, was awarded ‘ICGP Junior Investigator Award’ by the International Society of Geriatrics and Psychoneuroendocrinology for her paper entitled “Estrogen therapy reduces senile neurodegenerative changes in female rat subiculum”, Sydney, July 2008.

Mr. Mukesh, Ph.D. student was awarded IBRO-Italian Neuroscience Society Fellowship for participation in the conference on ‘Steroids and Nervous System’, for his paper entitled “An overview into the role of estrogen in cerebellar synaptic plasticity and neuroprotection”, Torino, Italy, February. 2009.

Sraboni Chaudhury, Ph.D. student was awarded ISN-CAEN Travel Award to visit the Functional Neuroscience Laboratory, Department of Life Science, The Open University, and Milton Keynes to work with Professor. M. Stewart w.e.f 06.07.2008 — 05.09.2008. She was also recipient of the travel award from Swiss Society for Neuroscience to attend FENS Forum 2008, held at Geneva, Switzerland, from 12—17 July, 2008 as well as the CIMO, Finland grant to visit Prof. Eero Castern, University of Helsinki, Finland for 3 months from 16.10.2008-15.01.2009. Through the IBRO-SfN travel award she attended the 38 Annual meeting of SfN, Washington DC, held from15—19 November 2008 at Washington DC.

Dr Rima Dada received ICMR international fellowship for young biomedical scientists. She visited Cleveland Clinic as Visiting Scientist.
SIGNIFICANT EVENTS

Professor R. Kumar

Was appointed as Chairperson, Hospital Management Board, AIIMS w.e.f 8th July, 2008. She was also appointed as Dean, AIIMS w.e.f. 25th March, 2009. Professor Rani Kumar continues to be Chairperson of Curriculum Committee Phase-I MBBS teaching, professional examinations for UGs and PGs of Anatomy, Member of the editorial Board of Journal of Anatomical Society of India, Member of Publication Advisory Committee of National Academy of Medical Sciences, was President of DASMOS, Delhi, was appointed as external expert for selection of faculty positions in Anatomy at various Colleges in India.

Professor Shashi Wadhwa continued to function as member of Planning and Monitoring Board, Selection Committee, Assessment Committee, and SAC of National Brain Research Centre at Manesar, Haryana and attended the various Committee meetings. as expert member She went to JNU for selections on DST project on 23rd May 2008. She reviewed research papers submitted to J. Biosciences and J. Anatomical Society of India. She also reviewed neuroscience research projects and annual project reports for ICMR, DST and DBT. She also continued to be a member of the editorial board of J. Biosciences, J. Anatomical Society of India and Annals of Neurosciences. Professor. Shashi Wadhwa was appointed on various committees of AIIMS: as Chairperson of research subcommittee and teaching schedule committee; as member of Institutional committee for stem cell research and therapy, patent committee, implementation committee for AIIMS extension at Jhajhar, Haryana and subcommittee for institute travel grant.

Professor Raj D. Mehra was invited to participate in a ‘“Health Shibir’’ organized by IAM Chanderpur (Maharashtra), where she delivered a lecture and participated in educating the community on the importance of Blood and blood components and of some blood associated hereditary congenital diseases prevalent in the area, April 2008. Dr. Mehra visited Helmholtz Center for Infection Research in Braunschweig, Germany for discussions on European Union funded “ASSIST” project, June 2008. She also visited Semmelweis University Budapest under the Indo-Hungarian Collaborative Research Project for undertaking project related behavioural studies and discussions , July 2008. Dr.Mehra was nominated as a member of the Adhoc Progress Review Expert Group of DBT, December. 2008. She was also nominated to evaluate the progress of the DBT research project at the Department of Neurosciences , Jiwaji University Gwalior, January., 2009. She reviewed neuroscience research projects for ICMR, DBT and DST and research papers for publication in Brain Research, Neurosciences Letters and Annals of Neurosciences. She also nominated as the Chairperson of Window AC Committee and member of Research Committee and Animal Ethics Committee of AIIMS.

Professor T.S. Roy continued to be a member of the editorial board of Pancreas. He reviewed manuscripts for the journal, Clinical Anatomy, Pancreas, National Medical Journal of India and Neuroscience Letter. Professor. T.S. Roy was member of the expert committee for establishment of AIIMS like Medical Institutions in India, under the Pradhan Mantri Swastha Suraksha Yojna.
Dr. A. Shariff

On foreign assignment

Dr. S.K. Basu Ray was an expert in a Teleconferencing session organized by the National Board of Examination, New Delhi. He also appeared as an expert in a television programme on “Body Donation” organized by Live Media, Delhi.

Dr. P. Dhar delivered the Presidential address at the 56th Annual Conference of Anatomical Society of India BHU, Varanasi, (December, 2008); was awarded ‘Valuable Contribution as Faculty’ at 16th International Conference of Indian Association of Palliative care (13-15 February, 2009) at AIIMS, New Delhi; as joint secretary of DASMOS, organized DASMOS-09 in the Department of Anatomy (March, 2009); was invited for participation in Third National Convention on Testing and Evaluation (18—20th February, 09) at Indian Institute of Mass Communication, New Delhi, conducted by National Testing Service- India; and Joint UNESCO-CPR-ZHCES(JNU) Ethics Education Workshop on 21.3.09 at Centre for Policy Research (CPR) New Delhi; Chaired the session for Memorial Orations and appointed judge for Dr. P.C. Bansal Memorial Gold Medal award at 56th Annual Conference of Anatomical Society of India, (December, 2008); Continued to be Member – Curriculum Committee Phase –I, MBBS (AIIMS); became Life Member of STOX and APAMT.

Dr. Rima Dada became member of Editorial Board of Journal of Paediatric, Neurology and Online Journal of Health and Allied Sciences, The open Andrology Journal, Indian Journal of Practicing Doctor. Dr Rima Dada reviewed articles for Fertility and Sterility, Expert Reviews in Gynaecology and Obstetrics, Asian Journal of Andrology, Indian Journal of Medical Research, Andrologia, Indian Journal of Urology, Food and Chemical Toxicology, British Medical Journal Case reports, Microscopy research and Techniques, Indian Journal of Biochemistry and Biophysics. She is a Member of ICMR task force on male Infertility. She worked as reviewer for projects submitted to ICMR. She appeared on TV on Star Plus in a programme to highlight effect of lifestyle on male reproductive health.

The article on role of oxidative stress on outcome of ART appeared in Amar Ujjala. Dr Rima Dada was nominated as member of ARVO and ASIA ARVO. Dr Dada was also nominated as member of Society of Reproductive Biology and Comparative Endocrinology

Dr. Arundhati Sharma was selected as National Faculty and panelist in the Panel discussion on ‘Prenatal Cytogenetics and Mmolecular Genetics Advances’: at North India Conference on ‘Fetal Medicine – Prenatal Diagnosis and Therapy’, organized by Delhi Society for Prenatal Diagnosis and Therapy (DESPAT), 15th and 16th November 2008. She was Appointed as one of the three judges for the young scientists awards session at the International Symposium on ‘Ethics, Culture and Population Genetics’ and 34th Annual Conference of the Indian Society of Human Genetics held at Indira Gandhi National Centre for Arts, New Delhi, 17th to 20th March 2009. She was a External expert on the Post Graduate Board of Studies in Biochemistry and Genetics (P.G. BOS), of M. D. University, Rohtak.
**Dr. R. Dhingra** was appointed as member of Teaching Schedule Committee for the MBBS first year students and was also appointed as member secretary for Delhi association for morphological sciences.

**Dr T. C. Nag** continued to be a member of International Society for Eye Research.

**VISITING SCIENTIST**

1. Dr Michael Stewart, Open University, Milton Keynes, UK delivered a lecture on “Morphological basis of hippocampal plasticity following stress and learning: Electronmicroscopic studies.” on October 2008.

2. Professor. Csaba Nyakas, and Dr. Klara Felszeghy and Dr. Edina Wappler visited the Department under Indo-Hungarian collaborative research project, in November 2008 and March, 2009, respectively.


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<tr>
<th>9.3 Biochemistry</th>
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<tr>
<td><strong>Professor and Head</strong></td>
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<tr>
<td>Subrata Sinha</td>
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<tr>
<td><strong>Professors</strong></td>
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<tr>
<td>Neeta Singh</td>
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<tr>
<td>Ranju Ralhan</td>
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<tr>
<td>D.N. Rao</td>
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<tr>
<td>Nibhriti Das</td>
</tr>
<tr>
<td>S.S. Chauhan</td>
</tr>
<tr>
<td>(Voluntary retirement on 27 December 2008)</td>
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<tr>
<td><strong>Additional Professor</strong></td>
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<tr>
<td>M.R. Rajeswari</td>
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<td><strong>Associate Professors</strong></td>
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<td>P.P. Chattopadhyay</td>
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<td>Kalpana Luthra</td>
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<td><strong>Assistant Professors</strong></td>
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<td>Alpana Sharma</td>
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<tr>
<td>Kunzang Chosdol</td>
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<tr>
<td>N.C. Chandra*</td>
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</table>

**EDUCATION**

**Undergraduate**

The department continues with its undergraduate UG teaching programmes which include MB,BS (two semesters), Nursing (one semester) and B.Sc. (Hons) Nursing (one semester). Student’s feedback on the teaching-learning of Biochemistry and feedback on examinations to the students had been regularly incorporated in the Biochemistry teaching schedule for the medical undergraduates. New problem-based modules had been introduced for the second semester to strengthen the concepts in immunology and water electrolyte balance along with. Bench level exercises in basic immunological techniques.

**Postgraduate**

These include Seven M. Sc. (1st year and IIIrd year) students and seven M. D. students. The department also has 43 Ph. D. students.

**Short-term training**

Summer training in research was provided to MB,BS students from AIIMS. Fifteen MB,BS (1st year) students have conducted projects work for the KVPY Scheme of the DST in different laboratories of the department and four students have been awarded the fellowships. Fifteen students from India received short-term training. The Department also imparted short-term training (one month) to two M.Sc. students from BPKIHS, Dharan, Nepal in molecular biology and advanced immunological techniques.

**Continuing Medical Education**

Dr. Neeta Singh delivered the following lectures on: “Cell signaling and therapeutics”, at Venkateshwar College, New Delhi; on 11th November 2008; HPV and cervical cancer”, at Venkateshwar College, organized by Women Development Ccell, New Delhi; on 2nd December 2008. Dr Singh chaired a session at the 77th Annual Meeting of SBC on and ‘Impact of basic and translation research in medicine agriculture and industry, SBC, Chennai, held from 18th – 20th December.
2008; at Chennai., Chaired a session at the International Symposium on ‘Novel strategies for targeted prevention and treatment of cancer’, held at JNU, New Delhi, from 19th – 20th December 2008; ‘.,”HPV and cervical cancer”’, at SRM Medical College, Chennai, held on 10th January 2009; at Chennai., Chaired a session at 28th Annual Convention of Indian Association for Cancer Research and on “Emerging challenges and approaches in cancer biology”, Bangalore, held from 21st – 24th February 2009; at Bangalore., Chairperson for a session at the “Ovarian Cancer”, AIIMS, New Delhi, Symposium held from 27th – 28th March 2009 at AIIMS, New Delhi.

Dr Nibhriti Das delivered lectures at .

National Workshop on Assessment Methods for Learning Evaluation in Basic Medical Sciences, 22—24 September, 2008 organized by the Departments of Basic Sciences at the AIIMS workshop on ‘assessment strategies in medical education’ organized by KL Wig CMET, AIIMS on 18 October, 2008.

National and International Conferences

Dr Subrata Sinha

Dr Neeta Singh
- delivered the following invited talks on “HPV and cervical cancer pathogenesis (Poster)”, at the Annual AACR meeting- 2008, held at San Diego, USA; from 12th – 16th April 2008.
- “(Poster),”Induction of apoptosis by curcumin and its therapeutic efficacy in human squamous cell lung carcinoma H520 cells”, at the Cancer Congress of UICC (Poster), held from 27th – 31st August 2008 at Geneva, Switzerland.; 27–31 August 2008 (Poster),
- ‘at AIIMS, New Delhi.,”Analysis of HPV-16 E6/E7 and L1 mutations in cervical cancer isolates from different regions of India”,’ at the International Symposium on ‘HPV associated cancer; translating research into cancer prevention and medicine’, held at Trivandrum; from 1st – 3rd November 2008
- “Effect of curcumin on cisplatin and radiotherapy in human cervical cancer cells”, at the 77th Annual Meeting of SBC and impact of basic and translation research in medicine agriculture and industry’, Chennai; held from 18th – 20th December 2008.

Dr D.N. Rao
- delivered following Invited talks during IIS Annual conference, held at Bhubaneshwar 2008., XIX National Congress of Veterinary Parsitology; 2008.,
• Biotechnology meet at Andhra University, Vishakapatnam, Srivenketeshwara University, Tirupati and Utranchal University, Dehradun and Indo-Brazil DST meeting, held at Rio-Brazil. November,

Dr Nibhriti Das
• Invited talks on ‘Expression and significance of complement receptor 1 in SLE’, delivered the following invited talks at the University of Maryland. USA; June 11, 2008.
• Expression and significance of complement receptor 1 in SLE and papers presented in Federation of Clinical Immunology Society 2009, San Francisco; June 11—14 June, 2009.
• XV International Symposium on Atherosclerosis 2009, Boston, MA USA; June 14-18, 2009.
• XXI International Complement Workshop; Basel, Switzerland; 28 September – 2 October 2008.
• Keystone Symposia on ‘Molecular and Cellular Biology’, Alpbach, Austria; 8–13 June 2008.

Dr M R Rajeswari delivered invited lectures
• Invited lectures on: on ‘Cell-free circulating DNA in plasma in health and neurological disorders SCA-12 and FRDA’, at International Conference Neurocon-2009, 8th Feb, 2009 at Kolkata.

Dr Kalpana Luthra
• delivered Invited lectures speaker at workshop on ‘How to plan a research project and write a proposal’ for PG students, AIIMS, New Delhi; October 2008.
• ‘MCQs— as assessment tool’ for residents and PGs in department of Physiology, AIIMS, New Delhi, Aug 20, 2008.

Dr Alpana Sharma
delivered invited talk on ‘Problem Based Learning’, at National Workshop on ‘Teaching, learning Methods in Health Professions’ Education’, at AIIMS, New Delhi and in IACR 2009 conference at Bangalore.

Dr N. C. Chandra
RESEARCH

A. Funded Projects

Completed


5. To evaluate the correlation between levels of cytokines (IL-6, IL-8, IL-10) in seminal plasma in different groups of infertile men and correlation with sperm morphology, functions and bacterial infection in semen. D.N. Rao. Funded by ICMR for 3 years (2005–2008). Funds: Rs. 15 lakh.s


Ongoing

Principal Investigators


14. Mechanism (S) of Regulation of Human Dipeptidyl Peptidase III Expression in Tumor Cell Lines S.S Chauhan Funded by Defence Research and Development Organization, Governmentt. of India for 3 years (2008—- 2011). Funds: Rs. 50.86 lakh.


20. Assessment of beta --2 microglobulin, IL-6 and IL-2R as prognostic factors in Indian patients of multiple myeloma. Alpana Sharma. Funded by AIIMS for 3 years (2006—2009). Funds: Rs. 2.75 lakh.


31. Phase II/III randomized placebo controlled clinical trial of curcumin in resectable Stage III and IV squamous head and neck cancers (oral cancers). Dr. Alok Thakar (PI), Dr. Ranju Ralhan (Co-PI), Funded by under DBT (2006–2010). Funds: Rs. 62.85 lakh.


Departmental Research

Completed

1. Evaluation of efficacy of curcumin as an adjuvant along with radiotherapy & chemotherapy in advanced cases of cervical carcinoma.


3. Molecular insights into the pathogenesis of human cervical cancer—-Aan in-vitro study

4. Expression of leukocyte Complement Receptor 1, its modulation and significance in the pathophysiology of systemic lupus erythematosus (SLE).

5. Role of eNOS gene polymorphisms in coronary artery disease in the Indian Subjects

6. Signal transduction and modulation of LDL receptor expression in cultured cells.

7. Role of LDL receptor, LDL uptake and thyroxin on HepG2 cell proliferation under serum starvation

Ongoing

1. Effect of Curcumin on advanced human cervical cancer

2. Molecular detection and genotyping of HPV in uterine cervix – A population based study

3. Development of HPV-16 candidate vaccine prototype

4. A study of molecular and biological factors in pathogenesis of ovarian cancer

5. Targeting apoptotic pathways for the treatment of primary epithelial ovarian cancer

6. Paraoxonase and its gene polymorphism in relation to CAD.

7. Elucidation of the expression of complement regulatory proteins in relation to the pathophysiology and severity of SLE.

8. Role of complement receptors in cell signaling and microbicidal properties of macrophages in relation to mycobacterium tuberculosis.

9. Complement Receptor 1 and its gene polymorphism in relation to the pathophysiology and susceptibility to severe malaria

10. Expression and modulation of leukocyte complement receptor 1 and CD59 (protectin) in relation to rheumatoid arthritis
11 Expression of Ang1 and 2 in multiple myeloma
12 A pilot study to evaluate the inter-relationship of insulin, insulin receptor and LDL receptor in patients of Type 1 diabetes mellitus.
13 Leptin and associated plasma risk factors in human Obesity.
14 Role of Leptin in the regulation of LDL- and oxidized LDL- receptors in cultured cells.
15 Modulation of oxidized-LDL-receptor and its effect on pro- and anti-inflammatory cytokines

**Collaborative Research**

**Completed**
1. Culture of limbal stem cells for ocular surface reconstruction in stem cell deficiency disorders , (with R.P Centre , AIIMS).
2. Computational Studies and Structure Based Rational Drug Design for Flaviiral Envelope Proteins” ( with School of Bioinformatics, JNU).
3. MRI studies on murine skin tumors (NMR Departmentt., AIIMS)
4. Histopathological investigations on murine skin tumors (Histopathology Dept., AIIMS).

**Ongoing**
1. Elucidation of the role of the hypermethylation in cancer (HIC-1) gene in glial tumorigenesis (with Dept. of Pathology and Neurosurgery ,AIIMS).
2. Role of p and 19q loss of heterozygosity in human gliomas (with Dept. of Pathology and Neurosurgery, AIIMS).
3. DNA fingerprinting methods for study of genetic alterations in gliomas (with Dept. of Pathology and Neurosurgery, AIIMS).
4. MRI studies on murine liver tumours (with NMR Departmentt., AIIMS)
5. Proteomic analysis of host parasite interactive proteins of Cryptosporidium” , (with Dept of Microbiology, AIIMS).
6. Characterization of Salmonella Enterica Serotype Typhi strains from north India, (with Dept of Microbiology, AIIMS).
7. Biophysical studies on interactions of membrane proteins of Acinetobacter baumannii and its resistant strains with various antibiotics Microbiology.
8. Role of cobalt chloride induced hypoxia on MA10 cells (Dept of Reproductive Biology, AIIMS).
9. Isolation and analysis of the outer membrane proteins , beta lactamases of Acinatobacter Baumanii (Dept of with Microbiology, AIIMS).
10. Levels of interleukin-1-â in GCF during retention after successful orthodontic treatment (Dept of with Dental Surgery, AIIMS).
12. A prospective study of oxidative stress markers and antioxidant levels in patients with pre-eclampsia (with Dept. of Obstetrics & Gynecology,AIIMS)
13. A pilot study to evaluate the inter-relationship of insulin, insulin receptor and LDL receptor in patients of Type 1 diabetes mellitus (with Endocrinology and Metabolism and Cardiology, AIIMS).


15. T-cell response in Parthenium induced contact dermatitis (with Dermatology and Venereology, AIIMS).

16. Role of T helper cytokines in skin autoimmune disorder Pemphigus vulgaris. (with Dermatology and Venereology, AIIMS).

17. Study of Inflammatory markers as prognostic factors in COPD cases (Medicine).

18. Genetic diversity of Entamoeba histolytica isolates and identification of genotype-clinical phenotype correlations. (with Collaborative department: Gastroenterology).

19. Immunohistochemical and Molecular Studies on Wnt/β-catenin Signaling Pathway in Sebaceous Cell Carcinoma of the Eye Lid. Collaborative department: (with Dr. R.P. Centre).


22. To evaluate the endometrial and sub endometrial blood flows in the prediction of pregnancy during In-Vitro Fertilization Treatment. Collaborative department: (Obstetric and Gynecology)

23. The role of insulin and insulin receptor on LDL receptor functioning. (with Endocrinology & Metabolism and Cardiology).

Publications

Journals


10. Dutta R, Mondal AM, Arora V, Nag TC, & Das N. Immunomodulatory effect of DDT (bis[4-chlorophenyl]-1,1,1-trichloroethane) on complement system and macrophages.. *Toxicology.* 2008; **252** (1-3): 78–85.


**Abstracts**


PATIENT CARE

Marker tests for pregnancy and prostate cancer:

- PSA : 282 samples
- Ïeta- hCG : 264 samples

Indian patents have been applied for the following:

1. A novel small interfering RNA (siRNA) targeting the Human Papilloma Virus – 16 enhancer region leading to down regulation of the expression of viral oncogenic mRNA’s E6 and E7 in a human Papilloma Virus – 16 (HPV-16) positive cervical carcinoma cell line, and its novel genomic target.

2. A novel small interfering RNA (siRNA) directed against ME 1a1 binding region in the P2 promoter of proto-oncogene c-myc results in its transcriptional gene silencing.

AWARDS & HONORS

Dr. Subrata Sinha was Awarded ICMR International Fellowship for Senior Biomedical Scientists. He was a Membership of the Guha Research Conference.

Dr. Neeta Singh was appointed as a Executive Ccommittee Mmember of Indian Association for Cancer Research and Editorial Board member of IACR Newsletter; Secretary (Delhi Chapter) of Indian Association for Cancer Research.

Dr. D.N. Rao was appointed Secretary, Indian Immunology Society; Editor Indian Journal of Biochemistry & Biophysics.

SIGNIFICANT EVENTS:

Dr. Subrata Sinha was selected as a Member of following Committees: Scientific Advisory Committee (SAC) of Rajiv Gandhi Centre of Biotechnology, Thiruvananthapuram; SAC of Institute of Pathology, New Delhi; SAC of School of Medical Sciences, University of Hyderabad; Review Committee for Biology Projects, Indian Statistical Institute (2009); Project Review Committee (PRC), Chronic Diseases, Dept of Biotechnology (DBT) (2005–2007); PRC, Biotechnology Products and Process Development, DBT, (2005 –till date); PRC, Cell and Molecular Biology, ICMR, (2005); Special Committee, Centre for Molecular Medicine., JNU, 2001 till date.; Special Committee, Centre for Biotechnology, 2000 till date, JNU; Member of the Institutional Biosafety Committee and Ethical Committee of the National Institute of Immunology (2000– till date); Institutional Ethics Committee of the Jawaharlal Nehru University (2001- till date); Academic Committee, JNU-Center for Cellular and Molecular Biology (2006-08); Sectional Committee, Medical Sciences, INSA; Chairman, Committee for Biochemistry Curriculum (UG & PG) , MCI.

Dr. Neeta Singh was selected as a Member of experts committee on evaluating the effect of RFR on human health of ICMR;, Member of subject expert – Life Sciences Committee of Women Scientists Scheme of DST;, Member of B. B. Dixit Library Committee, AIIMS.. He Continues to be member of International Union Against Cancer (UICC), American Association for Cancer Research (AACR), Indian Society of Cell Biologists, Indian Women Scientists Association, Indian Society of Lung Cancer and Indian Society for Free Radicals Research in India. He was also a Member of the Research Advisory Committee and Program Advisory Committee of ICMR;, Member of Scientific

**Dr. D.N. Rao** was selected as Member of Technical Advisory Committee of ICMR; Member of Core Committee for Selection ICMR; ICMR Selection Committee for SRF; Member board of Studies of Biochemistry of Jamia Hamdard University &and Aligarh Muslim University; Member of JNU-CCMB Academic Committee; UGC member for Biotechnology Programme in India; DST-Industry project Committee Member; Member of Ethical Committee; Project review Committee of DBT, DST, CSIR and ICMR.

**Dr. Nibhriti Das** was appointed as a Member of the International Complement Society; Professional Member American Heart Association; Member of the Executive Committee of NESA and ISAR.

**Dr. M. R. Rajeswari** was elected as a Member of Project Review Committee (Neurochemistry ) ICMR and CSIR –NET evaluation committee (Life sciences); Member Selection committee at National Accreditation Board for Testing and calibration Laboratories, DST; UGC faculty selection committee meeting , University of Hyderabad (Andhra Pradesh); Nominated member of a number of UGC expert committee meetings held regarding : sanction of Deemed status to of Indian universities and XI plan review of 5 National universities


Ph. D. student (Mr Vishnu Swarup ) received Best Poster award for ““Protein Biomarkers for FRDA”, ““Neurocon—2009”, in Feb, 2009 at Kolkata.

**Dr. Kalpana Luthra** was selected as Member of cultural program committee of Institute Day Sept 2008; Member of stores Negotiation Committee; Member of Project Advisory Committee of ICMR for Nephrology.

**Dr. Alpana Sharma** was selected as a Member American Association of Cancer Research (AACR); Member Specification committee of Instruments at VMMC and Safdarjung Hospital; Reviewer for *Int J Gynecological Cancer, Int J Cancer, Am. J Reprod. Immunol., Ind J Clin. Biochem., Evidence Based Complementary and Alternative Medicine.*
9.4 Biomedical Engineering

Professor and Head
Sneh Anand

Professors
Dinesh Mohan
Alok Ranjan Ray
Harpal Singh

Associate Professor
Veena Koul

Principal Scientific Officer-I
Nivendita Karmakar Gohil

Senior Design Engineer
S.M.K. Rahman

Scientist
J. C. Bhardwaj

EDUCATION
The department participates in the PhD programme

National and International

Professor A.R. Ray

• Invited talk and participate in National Seminar on ‘Advances in materials’, MS University, Tamilnadu; 16–17 March 2009.
• Attended World Congress on ‘Biomaterials’, WBC2008, Amsterdam Rai, the Netherlands and as guest researcher at School of Engineering and Physical Science, Heriot Watt University Edinburgh, UK; 26 May – 1 June 2008.
• Attended conference on ‘Medical Device’, Ahmdabad; 25 February 2008

Professor D. Mohan

• Presentation at FORUM for Exchange and Excellence in Design, Pune; 13 February 2009.
• Attended International Conference on ‘Re-Imaging Cities, urban design after the age of oil’, at Philadelphia, USA; 6–7 November 2008.
• Attended Symposium on “Transportation planning and safety”, Vienna; 20–28 November 2008.
• Attended the Annual International Conference of International Research Council on the Biomechanics of Injury (IRCOBI), Bern, Switzerland; 16–19 September 2009.

To give a seminar at Singapore, as visiting speaker University of British Columbia (UBC) in Vancouver, Canada, attend the VREF CoE Network Conference, USA, as visiting Scientist at University of Michigan transportation Research Institute, USA, attend the annual Southern African Transport Conference, CSIR, Pretoria, South Asia; 13 May 5 – 1 June 2008.

R. Rastogi, V. Koul, S. Anand


Raja Mohamed, Dirk Kuckling, Hans Juergen P. Adler, Veena Koul, Veena Choudhary


Raja Mohamed, Veena Choudhary, Veena Koul


Deepak Joshi, Sonal Atreya, A.S.Arora and Sneh Anand


Deepak Joshi and Sneh Anand


Vijay Khare, Jayashree Santhosh and Sneh Anand


Know—how developed/transferred

A bone cement technology has been patented and commercialized by XL ORTHOMED, Faridabad, Haryana.

RESEARCH

Funded Project


13. To Develop an External Counter Pulsation Device (ECP). Professor Sneh Anand. Funded by DIT, Delhi (to be extended). Funds: Rs 57.60 lakh.


15. Development of instant-ECG (I-ECG), a low cost 12-lead ECG with telemetric capability (TeleECG), Mobile ECG (m-ECG) and a software for ECG analysis (ECG-soft). Professor Sneh Anand. Funded by DBT (2010). Funds: Rs 33.21.


**Departmental Project**

1. A novel contact killing antimicrobial quaternary amine acrylate copolymer and their applications thereof. Professor Harpal Singh, Supriya Singh.


6. A Prosthetic Shoe for an artificial intelligent AK prosthesis. Professor Sneh Anand.
**PUBLICATIONS**

**Journals**


9.5 Biophysics

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<tr>
<th><strong>Head</strong></th>
<th>Krishna Dalal</th>
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<tr>
<td><strong>Associate Professors</strong></td>
<td><strong>Assistant Professors</strong></td>
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<tr>
<td>Krishna Dalal</td>
<td>A. Srinivasan</td>
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<tr>
<td><strong>Senior Scientific Officer</strong></td>
<td><strong>Senior Technical Officers</strong></td>
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<tr>
<td>S. Baskar Singh</td>
<td>Sharmistha Dey</td>
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**EDUCATION**

The faculty and scientists are actively involved in teaching and guiding students for PhD degree, MSc (Biophysics) and MD (Biophysics) and imparting long- and short-term training to students from different institutes and universities.

**RESEARCH**

**Funded Projects**

**Completed**


**Ongoing**


PUBLICATIONS


Conference


**Protein Data Bank entries**

1. 3FAQ Crystal Struture Of Lactoperoxidase Complex With Cyanide
2. 3GCJ Mode Of Ligand Binding And Assignment Of Subsites In Mammalian Peroxidases: Crystal Structure of Lactoperoxidase Complexes With Acetyl Salicylic Acid, Salicylhydroxamic Acid And Benzylhydroxamic Acid
3. 3GC1 Crystal Structure of Bovine Lactoperoxidase

**PATIENT CARE**

The following services are provided by the department for patient care:

- The patients suffering from the following ailments got treated through the research projects on the clinical trials
  - (i) intractable epilepsy
  - (ii) diabetic neuropathy
  - (iii) osteo-arthritis
- Characterization and analysis of kidney gallstones using X-ray diffraction techniques: More than 61 stones have been analyzed by this technique in the current year.
- Protein N-terminal sequencing
- Characterization of biomolecules using MALDI-TOF
- Receptor-ligand binding studies-Biacore
- Peptide synthesis
- X-ray intensity data collection for small molecules
- X-ray intensity data collection for macromolecules

**AWARDS, HONOURS AND SIGNIFICANT EVENTS**

**Dr Krishna Dalal** has been awarded membership of American Epilepsy Society, USA; honorary membership (life time) of China Reflexology Association, Beijing, China; governing body members of Indian Institute of Research in Integrated Medicine, Kolkata.

**Dr Punit Kaur** organized workshop on ‘Introduction to Bio-Medical informatics sponsored by ICMR; 2–5 February 2009.

**Dr Savita Yadav** participated in 3weeks course on multidisciplinary applications of synchrotron radiation from ICTP, Trieste, Italy; 7–25 April 2008.

**Dr Sharmistha Dey** was a member of National Academy of Medical Sciences; life member of Indian Biophysical Society, European Peptide Society and Indian Peptide Society.

**Ms Asha Bhushan** has presented a paper and poster on ‘Phospholipase A₂ as a potential target for structure based rational drug design’ in the ‘National conference on drug discovery and development’, University of Delhi, South Campus, New Delhi; 21–23 January 2009.

**CENTRAL FACILITIES**

Infrastructure Facility for Clinical Proteomics at AIIMS (DBT supported).
Bioinformatics Centre for Drug Designing (ICMR supported)
9.6 Biostatistics

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<tr>
<th>Professor and Head</th>
<th>R.M. Pandey</th>
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<tr>
<td>Additional Professor</td>
<td>S.N. Dwivedi</td>
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<tr>
<td>Associate Professor</td>
<td>V. Sreenivas</td>
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<td>Scientists</td>
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<tr>
<td>R.K. Ahuja</td>
<td>Rajvir Singh (VRS was 4/12/2008)</td>
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<td></td>
<td>M. Kalaivani</td>
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<td>Statisticians</td>
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<tr>
<td>Ombir Singh</td>
<td>Kulwant Singh Kapoor</td>
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<td>Statistical Assistants</td>
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<tr>
<td>Ashish Datt Upadhyay</td>
<td>Bhupender Kumar</td>
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EDUCATION

The department was actively involved in teaching ‘Biostatistics and essentials of Research Methods’ in the undergraduate, paramedical and postgraduate courses, viz. MB, BS, BSc (Hons) in Medical Technology in Radiology, MBiotech, BSc, MSc (Nursing) and MD Community Medicine.

The department organized a series of evening classes on ‘Biostatistical aspects of Research Methodology’ for new Residents and Research Scholars. Faculty members delivered lectures on application of bio-statistical tools in specific areas of medical research; participated in departmental scientific presentations; contributed to the educational activities in other departments by being Co-Guides, DC Members for MD/MS, DM, MCH and PhD students.

The department provided 1 week hands-on-training on data analysis using statistical software to the residents, Ph.D. students and junior faculty members; short-term training (2–3 months) in practical applications of Biostatistics was given to fresh postgraduate students in Statistics/Biostatistics from outside the Institute.

Continuing Medical Education

Lectures delivered

Dr S.N. Dwivedi delivered more than 30 invited lectures in workshops/symposium/training programmes/continuing education programmes within and outside the Institute.

Dr V. Sreenivas delivered more than twenty invited lectures in workshops/symposium/training programmes/continuing education programmes within and outside the Institute.

Ms M. Kalaivani delivered three 3 invited lectures in workshops/symposium/training programmes/continuing education programs within the Institute.
National and International Conferences

- Dr R.M. Pandey organised one day pre-conference workshop on ‘Cluster Randomised trials’, Annual Conference of the Indian Society for Medical Statistics, Nainital; 7–9 November 2009.

- Dr S.N. Dwivedi presented two papers in the 14th International Conference of Forum for Interdisciplinary Mathematics, Memphis University, USA; 15–18 May 2008. He also presented a paper in the XXXth Annual Conference of the Indian Association for the Study of Population, Bangalore, Karnataka; 17–19 October 2008.

- Dr V. Seenivas attended the 5th National Conference on Science and Technology, National Academy of Science and Technology (NAST), Nepal, and presented a paper on ‘Prognostic factors of acute liver failure using Cox regression model’; 10–12 November 2008.


- M. Kalaivani presented a paper in the 26th ISMS conference during, Nainital; 7–9 November 2008, India.


RESEARCH

Funded projects

**Ongoing**

1. Newborn screening for congenital hypothyroidism and congenital adrenal hyperplasia: A multicentric study Data Coordinating Centre. R.M. Pandey. (Funded by ICMR. for three years (with Dept of Pediatrics) Funds: Rs 9 lakh).

2. Comparison of multivariate statistical methods of classification: Logistic Regression, classification and Regression Tree, and artificial neural network R.M. Pandey (SRF). Funded by ICMR for one year. Funds: one SRF.

3. A study on primary, secondary and tertiary delays for prevention and treatment to breast, oral and esophagus cancer patients (S.N. Dwivedi. Funded by ICMR for 3 years (2007–2010). Funds: One SRF.


**Completed**

Departmental Projects

Ongoing

1. Comparison of multivariate statistical methods of classification: Logistic regression, classification and regression tree, and artificial neural network (with Medicine)
2. A Biostatistical Study on Pattern of Referral and Timing of Treatment of Cancer Patients with Special Reference to Breast Cancer (with IRCH)
3. A comparison of Cox proportional Hazards model, parametric proportional hazards model and accelerated failure time models in the survival of acute liver failure (with Gastroenterology).

Collaborative Projects

Faculty Members and the Scientists are involved as a co-investigator in large number of research projects in most of the departments in the Institute. (with ??Au: Name of the Department)

PUBLICATIONS


**Chapters in Book**


**AWARDS, HONOURS AND SIGNIFICANT EVENTS**

**Dr R.M. Pandey** resumed his duties in the department in February 2009, after completing one year and ten months assignment with the International Clinical Epidemiology Network (INCLLEN) at their Global Head Quarter in New Delhi. Dr Pandey is the INCLLEN liaison person to develop joint academic and research activities with the International Epidemiological Association (IEA) under the INCLLEN-IEA MOU. Dr Pandey continues to be member of the several Data Safety Monitoring Board, Task Force, and Proposal/Project Review committees of the DBT, DST, INCLLEN and the ICMR; Member, Research committee, All India Institute of Medical Sciences; Member, Research Committee, National Institute of Health and Family Welfare; Member, National Nutritional Monitoring Bureau, National Institute of Nutrition, Hyderabad; Member, Scientific Advisory Committee, Centre of Entomological Research, Madurai; Member, Institutional Ethics Committee, Public Health Foundation of India; Member, Group to develop course curriculum for various course at all the five Institutes of Public Health; Member, Data Safety Monitoring Board of the multi country trial on neglected diseases in India, being conducted by the London School of Hygiene and Tropical Medicine; Examiner. Ph.D. thesis from Universities within and outside the country; Reviewer of the manuscripts submitted to all major medical journals in the country; Chairman, Scientific Committee, Annual Conference of the Indian Clinical Epidemiology Network, held in Nagpur;

**Dr S.N. Dwivedi** was included as Member of the Expert Group to discuss methods regarding evaluation of Programme effectiveness of Janani Suraksha Yojana (JSY) at National Institute of Medical Statistics, ICMR; Elected to serve the ad hoc Search Committee for the Editor of Biometric Bulletin of International Biometric Society; Member, Research Committee, B.P. Koirala Institute of Health
Sciences, Dharan, Nepal; involved as Reviewer for Research Projects of Mathematical Sciences Office, Department of Science and Technology; Member, Technical Advisory Committee, National Institute of Health and Family Welfare, Expert for Selection Committee at Lucknow University. Dr Dwivedi continued as Member, Scientific Advisory Committee, National Institute of Medical Statistics; External Expert Member, Board of Studies on Health Statistics, BHU, Varanasi; Member, ISMS Award Committee; Executive Council Member, International Biometric Society (Indian Region) for the period 2006–2008; Correspondent, Indian Region for the Biometric Bulletin of the International Biometric Society; Member, Screening/Selection Committee, National Institute of Medical Statistics, Indian Council of Medical Research, All India Institute of Medical Sciences; Member, Editorial Board, Indian Journal of Chest Diseases & Allied Sciences; Editor, Demography India; Reviewer, Indian Journal of Medical Research; Reviewer, International Society for Clinical Biostatistics; Reviewer, Demography India; Member, Editorial Advisory Committee, Biometrics; Statistical Consultant, Indian Journal of Psychiatry; Reviewer, Journal of Royal Statistical Society, UK (Series A); External Examiner, Evaluation of Ph.D. thesis submitted at International Institute for Population Sciences, Mumbai; Member, Editorial Board regarding Technical Report on Long Term Clinical Studies on Health effects of Toxic Gas Leak from the Union Carbide Methyl Isocyanate Plant, Bhopal; Member, Task Force Group constituted by the ICMR to look into the current status of activities and provide directions to future research needs regarding toxic gas exposed people at Bhopal.

Dr V. Sreenivas was Examiner for a PhD thesis submitted to the Dibrugarh University, Dibrugarh; continued to be, Member, ICMR Expert Group on the seroprevalence study to determine the impact of Hepatitis B vaccination; Member Secretary, Data and Safety Monitoring Board (DSMB) for 3 research projects sponsored by the Department of Biotechnology, Government of India; Reviewer for the journals—Indian Journal of Medical Research and Indian Journal of Paediatrics; Chairman/Member of the Screening/Selection Committee, Indian Council of Medical Research, New Delhi; Advisor to the Journal of Neonatology, India; Statistical Consultant to the Journal of Indian Association for Child and Adolescent Mental Health (JIACAM).
EDUCATION

Postgraduate

The department continues with its 2 years postgraduate programme in Medical Biotechnology leading to MBiotech degree. The teaching programme includes theory and practical classes, seminar presentations and research project (dissertation) on frontier area of medical research. Students are given individual attention and hands on experience in practical classes. The infrastructural facilities were expanded with the acquisition of new computer softwares and hard-wares to make available computer to each student during bioinformatics practical exercise. Experts were invited from institutes such as JNU, IGIB, ICGEB, NII and NIIT besides AIIMS faculty to provide insight to the students in their respective areas of research and developments related to biotechnology, bioinformatics, molecular medicine, genomics, proteomics, etc.

The department continues conducting PhD programme in the area of Medical Biotechnology.

Short-term training

The faculty of the department provided summer training to students from the University of Delhi, Maharshi Dayanand University, Rohtak, Kurukshetra University, Kurukshetra and institutions such as Career Institute of Technology and Management, Faridabad, Amity Institute of Technology, Noida, Manipal Institute of Technology, Manipal, Institute of Applied Medicine & Research, Ghaziabad. Students and faculty from Department of Biotechnology, Nehru Arts and Science College, Coimbatore visited the department during, July 2008.

Long-term Training

Faculty of the department provided long-term training to five scientists from various institutions. Four of them under WHO in-country training programme (from Safdarjung Hospital, Ram Manohar Lohia Hospital, Lady Hardinge Medical College, New Delhi and ICMR, Kolkata) and one as DBT Post Doctoral Fellow.
National and International Conferences

Lectures delivered

Dr Y.D. Sharma


- Chaired a session on anti-malarial drug resistance in International Symposium on Tribal Health, RMRC, Jabalpur (MP); February 2009.

- Chaired a session on malaria vaccine in International Symposium on Tribal Health, RMRC, Jabalpur (MP); February 2009.

Dr J.S. Tyagi


- Invited talk at Open Source Drug Discovery meeting, CSIR Science Centre, New Delhi. Organized by CSIR, presided by DG CSIR.


Dr. H.K. Prasad


- ‘Trends in TB Research’, Conference on ‘Biogenesis-II (Future Challenges and Opportunities)’, IILM College of Engineering and Technology, Greater Noida, Gautam Budh Nagar (UP); 27-28 February 2009.

- ‘Variation in dendritic cell subsets and IL-12 independent production of IFN-g in pulmonary tuberculosis’, Annual meeting of the Molecular Immunology Forum-2009, ACTREC, Tata
Memorial Centre, Kharghar, Navi Mumbai held at Kashid Beach Resort, Alibaug, Maharashtra; 7–9 March 2009.

Dr S. N. Das


- TNF, TNFR2 and NF-kappa B Signaling in Oral Squamous Cell Carcinoma, 35th IISM Conference, Institute of Life Sciences, Bhubaneswar; 12 – 14 December, 2008.


- Chaired a session in symposium on Ovarian Cancer, All India Institute of Medical Sciences, New Delhi; 27–28 March 2009.

**National and International Conferences**


- Kaur K, Taneja NK, Dhingra S, Tyagi JS. DevS binding peptides inhibit signaling and hypoxic survival of *M. tuberculosis* at International TB Symposium 2008 at Second Indian Peptide Symposium; February 2009.
• Dhingra S, Kaur K, Taneja NK, Tyagi JS. Peptide based inhibition of DevR function inhibits viability of *Mycobacterium tuberculosis* under hypoxic conditions, Second Indian Peptide Symposium; February 2009.

**RESEARCH**

**Funded Projects**

**Ongoing**


8. Studies on FAS (CD95) and FAS L (CD95L) gene polymorphism and their association with tobacco related oral carcinomas. Satya N. Das. Funded by ICMR for 3 years. Funds: Rs 6.0 lakh.


**Completed**


**Departmental Projects**

**Ongoing**

1. Innate immunity to *Mycobacterium tuberculosis*.
2. Humans immune response to *Mycobacterium tuberculosis*
3. PCR Based diagnosis of tuberculosis in humans and cattle
4. Studies on mTOR Signaling in Oral Cancer
5. Studies on PI 3 Kinase in Oral Cancer
6. TH-2 Cytokine (IL-4, IL-10) gene polymorphism in Oral Cancer
7. Genetic polymorphism in *P. falciparum* for drug resistance markers

**Completed**

1. Studies on Beclin 1 in Oral Cancer
2. Genetic polymorphism in COX-2 genes in Oral Cancer patients
3. Genetic polymorphisms in COX-2 genes in Breast Cancer patients
4. Studies to evaluate neo-adjuvant chemotherapy followed by post operative chemotherapy and assess the expression of multi-drug resistance gene and cell cycle specificity in locally advanced gastric and gastro-oesophageal function adenocarcinoma

**Collaborative Projects**

Project No. : Collaboration with
1. (LRS Institute, New Delhi and M/s Arbros. Pharmaceuticals Pvt. Ltd.)
2. (Departments of Microbiology and Physical Medicine and Rehabilitation, AIIMS)
3. (National TB Institute Bangalore and Tuberculosis Research Center, Chennai)
4. (NCCS, Pune)
5. (Department of Pediatrics, AIIMS)
6. (Gastroenterology and Human Nutrition, AIIMS)

**Ongoing**


5. Effects of administering 10 mg of zinc orally to young infants aged 7 days and up to 4 months with possible serious bacterial infection on survival and function of peripheral blood mononuclear cells. H. K. Prasad. Funded by DBT (2007–2010). Funds: Rs 40.34 lakh.


7. Imbalance between Endothelin-1 and plasma nitric oxide products influence the outcome in children suffering from severe pulmonary hypertension due to congenital heart disease (with Cardiac Anaesthesia, CTC), AIIMS.

**Completed**

1. High throughput PCR assays for diagnosing tuberculosis caused by *Mycobacterium tuberculosis* and *Mycobacterium bovis* using molecular beacons (with Public Health Research Institute, Newark) New Jersey, USA.

**PUBLICATIONS**


PATIENT CARE

Patents

International Application # PCT/N03/00302 dated 9.9.2003 on ‘The Characterization of HupB Gene Encoding Histone like Protein of Mycobacterium Tuberculosis’” filed in the name of DBT and AIIMS.

1. European 03813287.4-2402-IN0300302
2. US 10/540,086-IN0300302
3. Chinese 03825875.7-IN0300302

Patents Awarded

1. South African 2005/05007-IN0300302
2. Indian 1274/DEL/2002

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor Y.D. Sharma has been elected as a Fellow of all the three National Science Academies; continued to be Member, Sectional Committee of Indian National Science Academy (INSA); Member, Project Advisory Committee of CSIR for Biotechnology; Member, DBT Task Force Sub-committee on Human Resources Development; Member of Course Curriculum Committee for PG programme in Biotechnology of DBT; Research Advisory Committee, Parasite Biology, NIMR, Delhi; Member, Board of Research Studies of NICD-IP University; Academic Committee, Guru Nanak Dev University, Amritsar; Member, Board of Studies in Biotechnology, Jawaharlal Nehru University, New Delhi; Interdisciplinary Biotechnology Unit, Aligarh Muslim University, Aligarh; Expert Member, Board of PG Studies in Biotechnology, Vanasthali Vidyapeeth; Expert Member, Teaching Advisory Committee of Devi Ahilya University, Indore; Expert Member, Teaching Advisory Committee of Banaras Hindu University, Varanasi; Member, Editorial Board of ‘J Vect Borne Dis’; Member, International Reviewer Panel of ‘Medical Science Monitor’; Member, Editorial Board of ‘Biotechnology’; Member, NML Book Selection Committee; Member, Research Committees of AIIMS; Chairman, Patent Cell of AIIMS; Chairman, Central Recruitment Committee of Research staff in projects in AIIMS; Member, Selection Committee for Scientists for ICMR; Faculty positions of GNDU, Amritsar; Expert, Review Committee of NII.

Dr J.S. Tyagi was awarded the Tata Innovation Fellowship by Department of Biotechnology, Government of India; Member, Scientific Advisory Committee, Tuberculosis Research Centre, Chennai; RAP/SAC, National Institute of Immunology, New Delhi; NBRC MSc. Neuroscience Coordination Committee; Masters in Biotechnology Curriculum Development Committee of BCIL; AIIMS Patent Committee and Chairperson of AIIMS Institutional Biosafety Committee for Recombinant DNA Research.
**Dr H.K. Prasad** is a Member, Guha Research Conference (GRC); Member, IAEC Nominee of Committee for the Purpose of Control and Supervision of Experiments of Animals (CPCSEA); Member, Expert Group of the Technical Committee of Central JALMA Institute for Leprosy and Other Mycobacterial Diseases, Agra; Institute of Life Sciences, Bhubaneswar; Expert Member, Selection Committee of the National Institute of Immunology, ICMR, DBT, ICGEB, SGPGIMS, Biotech Consortium India Limited, Central Drug Research Institute (CDRI), National Centre for Cell Science (NCCS); Member, Medical Biotechnology Sectional Committee, MHD-20, Bureau of Indian Standards; Member, Sub-Committee for the construction of Molecular Biology Centre at AIIMS; Member, Specification Committee for the purchase of LSR II Flowcytometer, Department of Microbiology, AIIMS; Member, National Advisory Committee and Invited Speaker, 2\textsuperscript{nd} Annual Conference of Cytometry Society – India, Institute of Life Sciences, Bhubaneswar, Orissa.

**Dr S.N. Das** continued as Fellow, International Academy of Biological Therapy; Member, National Academy of Medical Sciences, India; Life Member, Indian Immunology Society; Member, American Association for Cancer Research, USA; Member, DKFZ Alumni Association, Heidelberg, Germany; Life Member, The Cytometry Society, India; Member, Task Force Group on Cancer Cervix, DBT, Government of India; Member, Terry Fox Run Grant Committee on Cancer Research; Member, Technical Committee, Institute of Pathology (ICMR) New Delhi; Member, Institutional Committee for recombinant DNA research, AIIMS; Member, Negotiation Committee, AIIMS, Member, Selection Committee for posts’- under sponsored projects, AIIMS; Member, Selection Committee for PGT in Biotechnology, Kendriya Vidyalaya Sangathan, New Delhi; Member, Editorial Board, Open Journal of Toxicology; Member, Editorial Board, International Journal of Osteoporosis and Metabolic Disorders; Referee, International Journal of Immunogenetics; Referee, Cancer Immunology and Immunotherapy; Referee, Oral Oncology; Referee, Cancer Letters; Referee, International Journal of Medicine and Medical Sciences; Referee, Journal of Cellular and Molecular Medicine.

**OTHER ACTIVITIES**

**Bioinformatics Centre**

The department has a Bioinformatics resource centre which provides database services, bibliographical search facility, DNA and protein sequence search and retrieval, e-mail, Internet services, training and assistance to students in graphics, statistics and data presentation. This facility is being widely used by students and faculty of this as well as neighbouring institutes. A 512 kbps leased line for internet taken from VSNL is also functional in the department.

**Liquid Nitrogen Plant**

The department’s liquid nitrogen plant supplied a total of 2947 litres of liquid nitrogen to users at AIIMS on request.
The education programmes for undergraduates, postgraduates, BSc ursing and Post-certificate Nursing students remained unchanged.

Undergraduate

**Rural posting:** A major revamp of undergraduate teaching was carried out. The duration of the programme remained the same Undergraduates undergo a residential posting for five weeks in Semester VII. A new activity called Orienting Undergraduates to Community Health (OUCH) was started. The other activities were regrouped into Health System, Epidemiology and Clinical sessions. The schedule was made more rational. Regular assessment has been introduced. Newer techniques such as qualitative research method, case studies, etc. have also been introduced.

**Urban posting:** Fourth and fifth semester students are posted in urban area for five weeks as part of their teaching programme,

- A role play on High Risk Pregnancy, rabies, alcoholism and First-aid was performed by 5th semester students under Family Health Advisory Service at Dr Ambedkar Nagar. Participant: 300.
- 64 Health Talks on different topics were organized and supervised at the community level.
- 50 families with chronic problems were identified and allotted to undergraduates for Clinical Psycho Social Case Review (CPSCR) and supervised for various intervention and follow-up.
- Four research projects were undertaken by undergraduates during their field posting.

**Internship**

The programme remained unchanged. Interns are posted for six weeks in either Dayalpur or Chhainsa primary health centre and for 6 weeks at Ballabgarh. It is a residential posting. Activities in both areas were the same.
Postgraduate

Postgraduates in Community Medicine were posted in rural areas for 15 months. This gives them adequate time to gain the necessary experience both at referral hospital and at primary health centres. They are encouraged to take active part in decision making. Their teaching in Ballabgarh has also been revised with a higher focus on learning practical aspects of running, PHCs, addressing public health issues, working with district level officials, etc. A system of regular assessment has also been introduced.

Fellows

Ms Purva Dwivedi and Mr Ravinder Bisla joined as INDEPTH fellows at Ballabgarh to support our demographic and data management activities.

Continuing Medical Education

Conferences

- Dr Osmon Sankoh delivered 19th Guest Lecture on ‘Cluster detection method—an application to data from health and demographic surveillance sites (HDSS)’, INDEPTH, Nursing LT; 24 July 2008.
- Professor R.M. Mutatkar delivered 20th Guest Lecture on ‘Ethical issues in health research’ Maharashtra Association of Anthropological Sciences (MAAS), LT of College of Nursing, Pune; 11 September 2008.
- Two CMEs for Qualified Medical Private Practitioners was held on ‘Influenza and on safe injection practices’.
- A Public Lecture on ‘HIV/AIDS’, was organized for the BSF Jawans & Officers, BSF Signal Training Centre, Delhi; 27 March 2009.
- Training Sessions on ‘Safe injection practices’ were held for Nursing students (three), Waste handlers (three), Registered Medical Practitioners (fourteen).
- Two trainings of ASHAs were carried out. The first one was on 22 September 2008 and focused on ‘Neonatal and child health issues’. The second one held on 19 December 2008 was on ‘Non-communicable diseases and refresher course on neonatal health’.
- All the health workers were trained in management of non-communicable diseases through a protocol developed by the faculty.
- Training of Health workers and Anganwadi workers were carried out on nutrition related disorders and balanced diet.
- Female volunteers groups were trained on diet and nutrition.
Lectures delivered

Dr Bir Singh


Dr Shashi Kant

- 1st Annual Clinical and Epidemiological Research Methods and Leadership Training workshop for UG and PG medical students, AIIMS, New Delhi.
- Orientation workshop organized by Academic Section of AIIMS for new postgraduate students.

Dr Anil Goswami


RESEARCH

Funded Projects

Ongoing


5. Determinants of under-nutrition in children and assessment of management at different levels of health care by IPEN, INCLEN
6. Evaluation of Janani Suraksha Yojana (JSY) in Jharkhand
7. Quality assurance visits to supervise field work in two of the six states, i.e. Uttar Pradesh and Delhi under ‘HIV Sentinel Surveillance’ (Central Region), NACO
8. A pilot study on menstrual hygiene and practices of rural women and their willingness to pay for low cost sanitary pads
11. Mukhya Mantri Janani Swasthya Abhiyan (MMJSSA)–Janani Surakhsha Yojana (JSY) in Jharkhand. Funded by INCLEN.
12. Haemoglobin color scale in field and Laboratory by WHO

Collaborative Projects

Ongoing
4. To study the prevalence of rheumatic heart disease among children of 5–15 years age group in Ballabgarh block of Haryana using echocardiography with Doppler (a Pilot study). Anita Saxena. Funded by ICMR.
5. ‘Acute respiratory viral infections in rural India’. Shobha Broor, C.S. Pandav et al. Funded by ICMR.

Departmental Projects

Completed
1. Development of a Rapid Assessment approach to estimate prevalence of non-communicable diseases and their risk factors.

Ongoing
1. A study of hygiene behavior and water treatment practices of the residents of the slums in North India in the context of an ongoing behavior change intervention
2. Evaluation of ASHA Scheme under NRHM in Faridabad District of Haryana
3. Implementing and monitoring healthy settings approach for prevention of Non-Communicable Diseases in Middle schools of rural Ballabhgarh (block), District Faridabad, Haryana, India


7. Prevalence of metabolic syndrome and its selected socio-behavioral determinants among females aged more than 20 years residing in a rural area of Haryana

8. Association of blindness and hearing impairment with mortality among the elderly in a rural area

9. Development of an integrated predictive model for evidence-based eye care. Department of Community Ophthalmology, Dr R.P. Centre for Ophthalmic Sciences, AIIMS.

PUBLICATIONS


9. Patro BK, Kumar R, Goswami A, Baridalyne N, Pandav CS. Community Perception and Client Satisfaction about the Primary Health Care Services provided through a Mobile Health Clinic in


**Abstracts**


**Books**


**Chapter in Books**

1. Rai S. *Health policies and programmes in India*. In: Taneja DK (ed). 7th ed New Delhi: Doctor Publication; 2008..

**PATIENT CARE**

This has been divided into five broad categories.

1. Comprehensive Rural Health Services (CRHS) Project, Ballabgarh

2. Urban Health Programme

3. National Service Scheme Unit, AIIMS

4. Sex and Marriage Counselling Clinic

5. AIDS Education and Training Cell

Other activities are described under:

1. Health Promotion and Health Communication unit, and
2. Social Services

CRHS Project, Ballabgarh

This has two components: (i) Referral Hospital, Ballabgarh; and (ii) Community Health Services.

Referral Hospital, Ballabgarh

Outpatients

The following outpatient departments are run:

- General OPD for adults
- Child Welfare Centre for children
- Ophthalmology (daily)
- ENT (twice a week)
- Dental (daily)
- Obstetrics & Gynaecology (daily)
- Rehabilitation (two days a week)
- Psychiatric (once a week)
- ANC Clinic (thrice a week)
- Paediatric Surgery OPD-cum-surgery (once a week)
- NCD clinic (once a week)

**OPD load**

<table>
<thead>
<tr>
<th>Description</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Patients</td>
<td>98,700</td>
</tr>
<tr>
<td>Old &amp; New Patients</td>
<td>1,66,886</td>
</tr>
<tr>
<td>ANC Registration</td>
<td>5541</td>
</tr>
<tr>
<td>Immunizations</td>
<td>6415</td>
</tr>
</tbody>
</table>

NCD Clinic*

*A total of 5380 patients attending the OPD were screened for risk factors related to NCDs. Counselling for behavior change was done for 1113 individuals.

Inpatients

The number of beds has remained unchanged at 50.

- Total number of admissions including hospital births: 7009
- Number of hospital births: 1595
- Bed occupancy rate: 49.19%
- Average duration of stay: 1.7 days
**Distribution of inpatients by specialty**

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicine</td>
<td>1555</td>
</tr>
<tr>
<td>Surgery</td>
<td>217</td>
</tr>
<tr>
<td>Obstetrics Gynaecology</td>
<td>2313</td>
</tr>
<tr>
<td>Paediatrics</td>
<td>1036</td>
</tr>
<tr>
<td>Ophthalmology</td>
<td>293</td>
</tr>
<tr>
<td>Newborn</td>
<td>1595</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>7009</td>
</tr>
</tbody>
</table>

**Casualty**

- Number of patients registered: 18,899
- Number of medico-legal cases: 3,125

**Diagnostic tests performed**

- Lab investigations (Including malaria slides): 95,149
- X-ray (total): 5,335
- Malaria slides: 4,512
  - Malaria cases: 25
    - *P. Vivax*: 25
    - *P. Falciparum*: Nil

**Total number of surgical procedures performed sex wise**

- Male: 651
- Female: 1,340
- Total: 1,991

**Revised National Tuberculosis Control Programme (RNTCP)**

Ballabgarh hospital is a treatment unit under the Revised National Tuberculosis Control Programme (RNTCP) and has 4 microscopy centres under it. The total number of cases treated at Ballabgarh Treatment Unit was 529 in 2008.

**Break-up of cases treated at the Ballabgarh Microscopy Centre**

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>306</td>
</tr>
<tr>
<td>II</td>
<td>109</td>
</tr>
<tr>
<td>II</td>
<td>114</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>529</td>
</tr>
</tbody>
</table>
**Community Health Services**

Intensive Field Practice Area (IFPA)

This comprises of the two primary health centres—Dayalpur and Chhainsa. Outpatient, domiciliary and referral services are being provided.

1. **Community level Indices**

- Population 85,552
- Birth Rate per 1000 population 23.8
- Death Rate per 1000 population 7.2
- Neonatal mortality rate per 1000 live- births 23.1
- Infant mortality rate per 1000 live- births 46
- Maternal mortality rate per 100,000 live- births 212

2. **Load of OPD patients at various centres in IFPA**

<table>
<thead>
<tr>
<th>PHC</th>
<th>New cases</th>
<th>Repeat visits</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dayalpur</td>
<td>12,710</td>
<td>10,737</td>
<td>23,447</td>
</tr>
<tr>
<td>Chhainsa</td>
<td>10,506</td>
<td>9,137</td>
<td>19,643</td>
</tr>
</tbody>
</table>

**Laboratory activities**

<table>
<thead>
<tr>
<th>Laboratory test</th>
<th>PHC Chhainsa</th>
<th>PHC Dayalpur</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slides for malaria parasite</td>
<td>–</td>
<td>7,433</td>
</tr>
<tr>
<td>Sputum slides</td>
<td>–</td>
<td>479</td>
</tr>
<tr>
<td>Haemoglobin estimation</td>
<td>581</td>
<td></td>
</tr>
<tr>
<td>Blood sugar</td>
<td>239</td>
<td>296</td>
</tr>
<tr>
<td>Urine for albumin, sugar and pregnancy</td>
<td>434</td>
<td>160</td>
</tr>
<tr>
<td>Blood grouping and Rh typing</td>
<td>432</td>
<td>300</td>
</tr>
<tr>
<td>Urine Pregnancy Test</td>
<td>343</td>
<td>–</td>
</tr>
<tr>
<td>ECG</td>
<td>152</td>
<td>–</td>
</tr>
</tbody>
</table>

**National Health Programmes**

Family Welfare & Maternal Child Health

The Project area is dependent on the District Family Welfare and Immunization Offices for the supply of vaccines and other items.
• Total antenatal cases (new registration)  2239
• Pregnant women receiving AN care  100%
• Complete TT coverage of registered cases  90.10%
• Deliveries conducted by staff or hospital  1033
• Eligible couple protection rate  52.05%
• Total number of persons who accepted family planning methods in the year 2008  1169
  – Tubectomy  197
  – Vasectomy  30
  – CC users  532
  – IUD  201
  – Oral pills  207

**Expanded Programme on Immunization**

Coverage of 12 - 23 month of age

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCG</td>
<td>98.0%</td>
</tr>
<tr>
<td>OPV (3 doses)</td>
<td>96.4%</td>
</tr>
<tr>
<td>DPT (3 doses)</td>
<td>97.9%</td>
</tr>
<tr>
<td>Measles</td>
<td>94.4%</td>
</tr>
</tbody>
</table>

**Malaria**

Collection of blood slides is done by active and passive surveillance in the IFPA.

<table>
<thead>
<tr>
<th>Slides collected</th>
<th>8058</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive cases</td>
<td>10</td>
</tr>
</tbody>
</table>

**Indices**

- Annual blood examination rate  9.4%
- Annual parasite incidence rate  0.12/1000 population
- Slide positivity rate  0.12%

**Tuberculosis**

The Revised National Tuberculosis Control Programme (RNTCP) is carried out in the IFPA on the national pattern. Dayalpur PHC has been designated as a microscopy centre and caters to all villages under the IFPA. The break-up of patients treated in the total field practice area is as follows:
Category 1 66
Category 2 35
Category 3 14
Total 115

3. Integrated Disease Surveillance Project (IDSP)

Integrated Disease Surveillance Project is going on in Primary Health Centre and weekly report is being sent to District Hospital. No outbreaks were reported in year 2008–2009.

SPECIAL ACTIVITIES

Demographic and Behavioural Surveillance: The Census of the villages under PHC, Chhainsa was carried out between 1 and 31 December 2008 by male Multipurpose Health Worker. Data was collected for various demographic indicators including literacy and occupation. Data entry was started as soon as census was over. Data entry was completed by 5 January. Final census report was ready by 19 January which was discussed with different stakeholders.

Surveillance for Demographic Environmental and Health Information-2 (SUDEHI-2): Information on Maternal and Child Health related knowledge, attitude and health seeking behaviour was collected from the mothers of a child cohort born from 1 January to 31 December 2008. Health worker female collected the information using the appropriate forms under the supervision of Health Assistant female. The number of Sudehi forms filled were 884 by Chhainsa and 902 by Dayalpur.

Birth and Death Registration: All the birth and death events that took place under the villages of PHC Dayalpur were registered at PHC Dayalpur. The registrar for registering the vital events was MO I/C PHC Dayalpur.

Number of Births registered at the PHCs: Dayalpur – 435; Chhainsa – 634
Number of Deaths registered at the PHCs: Dayalpur – 255; Chhainsa – 232

Maternal and Child health (MCH) camps at Chhainsa: Since 7 November 2008 MCH camps are being organized in different villages of PHC on Friday forenoon. Since February 2009, this activity was intensified in two sub-centres Chhainsa and Atali, where camps are being held at Anganwadi centres on Wednesdays and Thursdays respectively. A comprehensive reproductive and child health services including ANC check-ups, laboratory investigations like haemoglobin estimation blood grouping and typing and urine albumin, immunization and health check-up of children as well as health education is being provided at these clinics.

Number of camps held 24
Number of patients seen 467
Investigations
Haemoglobin Estimation 454
Blood grouping and typing 391
Urine albumin and sugar 249
Urine Pregnancy Test 27
Intensive Pulse Polio Immunization (IPPI): The Intensified Pulse Polio Programme was conducted 11 times during the year 2008 viz, 06.01.08, 10.02.08, 30.03.08, 27.04.08, 01.06.08, 06.07.08, 17.08.08, 07.09.08, 28.10.08, 16.11.08 and 21.12.08. The coverage was 99%. lasted for three days. (First day – booth activity, Second and Third day for house to house immunization)

Control and prevention of NCDs: Under a research project initiated in collaboration with ICMR, since March 2008, health workers were trained to do risk assessment for NCDs, suspect NCDs, provide advice on risk behavior change. The Sub centres and PHCs were also provided digital BP instruments and glucometer. 2195 adults were screened by health workers for risk of Diabetes, CVD and Stroke. 1800 patients screened at PHC through opportunistic screening.

Delivery Hut: One of the notable achievements has been in getting the delivery hut at Dayalpur functional. Though the scheme was innovated by Haryana government, it was implemented by the CRHSP, Ballabgarh. CRHSP provided manpower, infrastructure, non consumable and consumables of the delivery hut at Ballabgarh. In addition to doctors an ANM () was also available. A total of 88 deliveries were conducted in PHC Dayalpur in 2008–2009. A similar activity was being launched in PHC Chhainsa.

Health Promotion/Health education activities:

Following health education activities were carried out in CRHSP.

- Health Talks: 107
- Films: 69
- Exhibitions: 03
- Community Meetings: 02
- Yoga Demonstrations: 10
- Cooking Demonstrations: 10

The topics covered were related to NCDs, Breast feeding, weaning, female feticide, Newborn care, Diarrhea, Dengue and malaria, Institutional deliveries.

Village health days at Dayalpur: All the female health workers along with selected Anganwadi worker and ASHA worker conducted village health days as per the planned schedule. These days were utilized for providing health education regarding ANC, Adolescent Health, identification of high risk beneficiaries, and notification of vital events. A total of 381 Village Health Days were held in 2008–2009.

The nursing students delivered health talk on selected topics in various villages as a part of their assessment supported by the health workers during the talks. A total of 108 Health Talks were delivered in 2008–2009.

Sarpanch Meeting: Meeting with all Sarpanches of villages under the project was held on 2 January 2009. Eighteen Sarpanches attended the meeting. The discussion was on increasing the role of Panchayat in health especially in tobacco control, promoting institutional deliveries and in decreasing female feticide.
Urban Health Programme

- **Total number of patients seen at** Dakshin Puri Extension
  Dr Ambedkar Nagar: 20,359

- **Total number of Referrals**: 1031

- **Total number of Health talks given on different health topics at**
  Dr Ambedkar Nagar: 120

- **Immunizations**
<table>
<thead>
<tr>
<th>Doses given</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 dose OPV</td>
</tr>
<tr>
<td>BCG</td>
</tr>
<tr>
<td>DPT I</td>
</tr>
<tr>
<td>DPT II</td>
</tr>
<tr>
<td>DPT III</td>
</tr>
<tr>
<td>DPT B</td>
</tr>
<tr>
<td>OPV I</td>
</tr>
<tr>
<td>OPV II</td>
</tr>
<tr>
<td>OPV III</td>
</tr>
<tr>
<td>OPV B</td>
</tr>
<tr>
<td>DT I + OPV</td>
</tr>
<tr>
<td>DT II + OPV</td>
</tr>
<tr>
<td>DT (Booster) + OPV</td>
</tr>
<tr>
<td>Measles</td>
</tr>
<tr>
<td>MMR</td>
</tr>
<tr>
<td>TT I (Antenatal)</td>
</tr>
<tr>
<td>TT II (Antenatal)</td>
</tr>
<tr>
<td>TT (Booster)</td>
</tr>
<tr>
<td>TT (Others) - above 6 years</td>
</tr>
<tr>
<td>Hepatitis B</td>
</tr>
<tr>
<td>0 dose</td>
</tr>
<tr>
<td>I dose</td>
</tr>
<tr>
<td>II dose</td>
</tr>
<tr>
<td>III dose</td>
</tr>
<tr>
<td>Typhoid</td>
</tr>
<tr>
<td>Supplements</td>
</tr>
<tr>
<td>Vitamin A (I dose)</td>
</tr>
<tr>
<td>Iron and folic acid (Adult)</td>
</tr>
<tr>
<td>Iron and folic acid (Paediatric)</td>
</tr>
</tbody>
</table>
Family planning acceptors

Nirodh 4360
Oral contraceptive pills 102 Cycles

Laboratory Services

Blood smear for malarial parasite 136
Haemoglobin 740
Urine routine/ microscopic examination 95
Urine pregnancy test 61

National Services Scheme Unit, AIIMS

The NSS Unit of AIIMS is located at Centre for Community Medicine. Dr Bir Singh continued to be its Programme Coordinator and Dr Anil Goswami, Mrs Kiran Singh continued to be the Programme Officers of this unit. Despite receiving no grants from the government, the unit continued to be active in the year under review. Dr Anil Goswami, Ms Neena Chawla and the Field Staff organized these events as part of the Urban Health Programme and NSS activities:

**Organization of events / exhibitions**

- T.B. posters displayed on notice boards of CCM, AIIMS 01.04.2008
- Organized an exhibition on ‘World Health Day’ and ‘World Water Day’ Exhibition at Dr. Ambedkar Nagar (120 participants) 07.04.2008
- Organized an exhibition on ‘World No Tobacco Day’ was held at Dr. Ambedkar Nagar (105 Participants) 31.05.2008
- Dengue Posters Displayed at Centre for Community Medicine and 20 other prominent places at AIIMS 05.06.2008
- ‘World Population Day’ was observed in the form of exhibition and a talk at Dr Ambedkar Nagar (95 Participants) 10.07.2008
- New Batch of MBBS Students briefed about Centre’s activities 04.08.2008
- Participated in ‘Walkathon’ on the eve of ‘International Day for the Older Persons’ organized by HelpAge India at Raj Path India Gate (With 3 PGs) 01.10.2008
• Organised a film Show for CCM staff on ‘Institute of Naturopathy and Yogic Sciences Bangalore’ 30.10.2008

• Organised a ‘Health Camp/Health Exhibition’ at Mobile Crech (NGO) at Dakshin Puri Extension Dr.Ambedkar Nagar 25.11.2008

• Organised a mini Exhibition on HIV/AIDS at AIIMS 01.12.2008

• Two ‘Blood Donation Camp’ were organized for HDFC at Kasturba Gandhi Road and Gurgaon in Collaboration of CNC Blood Bank and CNC Blood Bank on 12 December 2008 12.12.2008

• Organized and Co-ordinated MIS training programme for the Urban Health Centre staff with Dr Kapil and Dr Kiran Singh 06.03.2009- 09.03.2009

• Organised an exhibition on ‘World Water Day’, Dakshin Puri Extension, Dr Ambedkar Nagar (125 Participants) 23.03.2009

• Organised an exhibition on ‘World TB day’ at Dakshin Puri Extension, Dr Ambedkar Nagar (120 Participants) 26.03.2009

**Sex and Marriage Counselling Clinic**

(This clinic operates 3 days a week. Faculty Incharge Dr Bir Singh.)

Report of SMCC *wef* 01.04.2008 to 31.03.2009:

<table>
<thead>
<tr>
<th>Category</th>
<th>Quantity</th>
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<tbody>
<tr>
<td>New Patients</td>
<td>2,148</td>
</tr>
<tr>
<td>Old Patients</td>
<td>2,408</td>
</tr>
<tr>
<td>Total</td>
<td>4,556</td>
</tr>
</tbody>
</table>

**Investigations**

<table>
<thead>
<tr>
<th>Test</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hormone Analysis</td>
<td>681</td>
</tr>
<tr>
<td>Blood Sugar</td>
<td>429</td>
</tr>
<tr>
<td>Semen Analysis</td>
<td>645</td>
</tr>
<tr>
<td>Urine and semen C/S, VDRL, HIV</td>
<td>74</td>
</tr>
<tr>
<td>Urine (R/M)</td>
<td>99</td>
</tr>
<tr>
<td>Haemoglobin15</td>
<td></td>
</tr>
<tr>
<td>FNAC</td>
<td>164</td>
</tr>
<tr>
<td>USG Doppler/ X-Ray</td>
<td>473</td>
</tr>
</tbody>
</table>

**AIDS Education and Training Cell**

Professor Bir Singh is the coordinator of this Cell and Professor C.S. Pandav is the Chairperson. Ms Sosamma Shyam and Ms Manju Siddhu are other functionaries. The following activities were organized
• The telephone helpline on HIV/AIDS and contraception ‘Shubhchintak’ continued to be operated with usual popularity, attracting good number of calls.

• The Internet-based helpline ‘e-shubhchintak’ on HIV/AIDS and contraception continued to be operated with usual popularity. It received 3–5 requisitions/day for IEC materials apart from queries on HIV/AIDS, sexual problems, STDs, contraception etc.

• The Cell produced and disseminated educational material on HIV/AIDS to general public in 2008–2009 also.

• About seventy new patients were given personal counselling personally apart from repeat patients.


• Organized a Public Lecture on HIV/AIDS for BSF Jawans and Officers, BSF Signal Training Centre, Delhi; 27 March 2009.

Health Promotion and Health Communication (HPHC) unit

The ‘Health Promotion and Health Communication (HPHC) unit’ carried out the following activities in the field as well as the AIIMS in the year under review.

IEC material development

by Dr Bir Singh/Dr Anil Goswami/Mr R.B. Pokale:

1. Poster on ‘Father’s day’ Developed and displayed at 20 places in the campus.

2. Posters were on ‘Dengue’ were displayed at three places, i.e. Dengue screening OPD, AIIMS and at CCM & CRHSP Ballabgarh, Faridabad, Haryana.

S. No. Posters Developed / Modified on No.
1. Father’s day 01
2. Tobacco/smoking 12
3. Field data poster 02
4. Team-work works 01
5. HIV/AIDS 01
6. Design IDD-MGD card with logos of ICCIDD, AIIMS and IQ plus 01
7. Tobacco free area 01
8. Designed banners on HIV/cards 04
9. Designed Poster on Bihar flood relief 01
10. Designed poster on HELP
11. Designed Banners
Presentations

12. Presentation on Dengue cases in Delhi 01
13. Presentation on smoking in Hindi 01
14. Presentation on Medicine 01

Eleven film shows were conducted under various teaching and training programmes.

Four role-plays were performed in the community on Alcoholism, Drug-addiction, Family Planning, Polio, Personal Hygiene, Obesity, Mother and Child Health and Gender Bias.

Radio and TV programmes

Radio Programmes

1. Singh B. Live-Phone-in-Programme on ‘Mental health’, National Channel, All India Radio; 03 April 2008.


**T.V. Programmes**

1. Singh B. Viral fever. MH-1 TV News Channel; 02 April 2008.

2. Singh B. Sex counselling. Delhi Aaj Tak T.V. Channel; 08 June 2008.


**Social Services**

Dr Anil Goswami and Mrs Neena Chawla carried out the following activities

Patients identified for social services 4,597

Financial help arranged for

- Medicine 04
- Education 03
- Occupation 06
- Charges exempted 08

Counselling provided

- Individual 4,027
- Family 360
- Group 330

Referral services to various social welfare organizations 137

Rehabilitation Services
AWARDS AND HONOURS

Dr C.S. Pandav was selected as a Member of the Advisory Committee of Food and Nutrition Board, Ministry of Women and Child Development, Government of India in 2008. He has been conferred Dhanvantari Oration during the 35th Annual National Conference of Indian Association of Preventive and Social Medicine held at Puducherry from 21st to 23rd January, 2009; has been selected for the ‘Best Citizens of India Award – 2008’, International Publishing House.

Dr Puneet Misra and Dr Sanjay Rai was awarded for Best Poster as First Author for poster entitled ‘Annual HIV sentinel surveillance in India and its quality assurance’. (XIth International Health Conference in California, USA in March 2009, Conference jointly organized by UC Berkeley, UC Devis, UC San Francisco, Stanford University and Touro University.)

SIGNIFICANT EVENTS

Bangalore, Karnataka, 9–11 January, 2009; participated as Team Leader in the Second Annual ‘Health Mela’, Gidhour (Jamui), Bihar organized by the Civil Surgeon cum CMO, Jamui, Bihar to provide quality health care to rural community as envisaged under ‘National Rural Health Mission’, 17–19 January, 2008; attended the 36th Annual National Conference of IAPSM and Joint State Conference of Maharashtra Chapters of IPHA and IAPSM, at Aurangabad, Maharashtra, 21–23 January 2009; Attended the Review Meeting of Project Proposals under National AIDS Research Institute, (NARI), Pune, 9–10 February 2009. Attended IndiaCLEN Governing and General Body Meetings scheduled, Nagpur, 20–22 February 2009; participated as an External Expert for the Senior Staff Selection Committee meeting, Sree Chitra Tirunal Institute for Medical Sciences and Technology, Thiruvananthapuram; Conducted MD Examination (Community Medicine) as an External Examiner in the University of Colombo, Sri Lanka from 11–17 August 2008; attended the Annual Board Meeting of the International Council for Control of Iodine Deficiency Disorders, Moscow, Russia, 27–30 April 2008; attended the Annual Board Meeting of the International Council for Control of Iodine Deficiency Disorders at Cairo, Egypt, 13–16 March 2009.

Dr Bir Singh started a unique, innovative programme ‘Pre-marriage counselling course for happy married life’, AIIMS for the unmarried men and women. Three courses held during 2008–2009; Nominated as the National Resource Faculty for STI/RTI Program by National AIDS Control Organization, Government of India (19 May 2008); was a Consultant to UNICEF Assam for Evaluation of PPTCT/ ICTC Services in the State. [August-September 2008]; was a Consultant to UNICEF Jharkhand for evaluation of PPTCT/ICTC services in the state [December 2008]; Participated as a Resource Faculty in the symposium ‘National Symposium on Belief & Faiths’ at Maulana Azad Medical College, New Delhi (13 September 2008); Adviser to UPSC for Combined Medical Services Examination – 2008 Interviews [3–7 November, 2008]; Organized and coordinated Relief work for Bihar Flood Victims under the auspices of National Service Scheme Unit, AIIMS (September 2008); participated as an Observer in the WHO–SEARO Meeting at New Delhi on ‘Core-Competencies for Health Promotion Specialists’ (18–20 June 2008); Participated in ‘National Advocacy Workshop on ‘Health promotion in hospitals in Delhi’ (11–13 August 2008); was an Examiner for Jammu University and Kashmir University (May 2008); was a Judge for a Hindi Debate in Indian Council of Medical Research (ICMR). [26 September 2008]; was an Examiner for M.D. Exam in Community Medicine for University of Delhi (October 2008); Was an Examiner for MBBS Examination for MD. Medical University, Rohtak (November 2008); nominated as an Expert on the Health Portal of the Public Health Foundation of India and Ministry of Health and Family Welfare, Government of India; continued to be a member of the Editorial Board of Indian Journal of Pediatrics; Chaired a Scientific session during the 53rd National Conference of Indian Public Health Association at Bangalore (09–11 January 2009); participated and Chaired two Scientific session during the 36th Annual National Conference of Indian Association of Preventive and Social Medicine (IAPSM) Aurangabad, Maharashtra (21–23 January 2009); Continued to be the Secretary General of IAPSM during 2008–2009; Continued to be a Member of the Scientific Advisory Committee of Dessert Medicine and Research Centre (ICMR) during 2008–2009; Continued to be a member of the National Technical Advisory Group of Department of Science and Technology, Government of India; and Indian Council of Medical Research (ICMR), Government of India; Member of the Research Sub-Committee of AIIMS to select Community-based Research Studies; Organized a Public Lecture on HIV/AIDS for BSF Jawans and Officers at BSF Signal Training Centre, Delhi (27 March 2009).
Institutional Responsibilities at AIIMS

- Co-Chairman, Gymkhana Committee
- Member, Raj Bhasha Committee
- Member, Selection Committees
- Member of the Research Sub-Committee of AIIMS to select Community Based Research Studies.

Research-related:

- Member, Doctoral Committee of Dr Manish Jain, Reproductive Biology Department of AIIMS.
- Co-guide for a PhD student in Department of Biostatistics, AIIMS.
- Member of the Research Sub-Committee of AIIMS to select Community Based Research Studies

Dr Shashi Kant is the Nodal Person for Regional Institute for HIV Sentinel Surveillance in Central Zone recognized by National AIDS Control Organization. Temporary Technical Advisor to review HIV surveillance in India, organized by WHO (SEARO); Chaired the training programme on School Health organized by Directorate of Health Services, Government of NCT of Delhi; Co-chaired a session on HIV/AIDS at Annual Conference of Indian Association for the study of population (IASP) held at Bangalore; Organized a Training Workshop for Laboratory Technicians and Microbiologists on behalf of World Health Organization, Country Office, New Delhi; Presented a scientific paper at Australasian Society for HIV Medicine-2008 conference at Perth, Australia; Facilitated the meeting on use of DBS in the TI project Organized by National Institute of Health and family Welfare, New Delhi; Resource person for Annual Sentinel Surveillance for HIV infection 2008 Organized by National Institute of Health and family Welfare, New Delhi; Organized Review meeting of HIV Sentinel Surveillance, Central Zone at New Delhi; Participated in ‘Protocol finalization workshop’ organized by the INCLEN Trust International at Faridabad, Haryana; Attended the National Conference of the Indian Association of Preventive and Social Medicine held at Aurangabad, Maharashtra; Attended Annual General Body Meeting of IndiaCLEN held at Nagpur; Attended the 14th World Conference on Tobacco or Health held at Mumbai; Member of National Resource Pool for orientation on STI/RTI services in India; Member of Personality Test Board for Combined Services Examination held by the Union Public Service Commission (UPSC), Government of India; Member of Indian Delegation for the 5th Steering Committee meeting of Pan African e-Network Project to be held at Addis Ababa, Ethiopia; Member of Expert Committee for selection of PhD student at National Institute of Medical Statistics; Member of Institutional Review Board of IndiaCLEN; Member of Ethics Committee of National Institute of Medical Statistics; Member of Ethics Sub-committee of All India Institute of Medical Sciences. Wrote the background document on ‘Sexually transmitted diseases in India’ for Department of Communicable Diseases, WHO (SEARO)

Additional responsibilities at AIIMS

1. Faculty in-charge of Central workshop
2. Faculty in-charge of Telemedicine facility
3. Member of Dean’s Committee
4. Member of House Allotment Committee
5. Member of Staff Council

**Dr Sanjeev Kumar Gupta** was a part of the Course Revision team (2nd revision) of the Preventive MCH Course of PGDMCH Programme of IGNOU, New Delhi; Member the sub-committee for reconsideration and restructuring of the document, i.e. nomenclature, qualification, pay, etc for the research staff at the AIIMS; Member of the revised committee for the MBBS teaching curriculum Phase-II/III for the session July- December 2008; Member , Stores Purchase Committee of the Centre for Dental Education and Research; Reviewer for the Indian Journal of Community Medicine; Member,Doctoral Committee in respect of a Ph.D. Thesis in the Department of Community Ophthalmology, Dr R.P. Centre, AIIMS.

**Dr Kiran Goswami** attended Project Management Workshop by INCLEN; Attended DBS Training for Trainers under HIV Sentinel Surveillance; Participated as resource person under ‘MICs: A programme to improve injection practices in country’ at AIIMS, Delhi; Attended Training for Web Based Data Entry (3– 4 December 2008) for HIV Sentinel Surveillance NIHFW; Attended the South Asian Conference on ‘Alternatives to Mercury in the health care sector’ on 5–6 December 2008; Chief guide and co-guide for two MD students; Examiner for MBBS Undergraduate Examination at Lady Hardinge Medical College, Delhi from 20th to 25th Nov.2008; Examiner for MD Community Medicine at BP Koirala Institute of Health Sciences, Dharan, Nepal from 20–23 August 08.

**Dr K. Anand**

Member of Steering Committee of National Program for Prevention and Control of Diabetes, CVD and Stroke. (NPDCS); Member of Technical Advisory Group for NCD Surveillance under IDSP; Member Board of Trustees of INDEPTH Network; Undertook an Assignment As Temporary International Professional in NCD Risk Factor Surveillance with WHO/SEARO in January 2009; Delivered lecture on ‘Economic evaluation in healthcare’ at Platinum Jubilee Celebration of MCI during a CME organized by Medical College Indore; Conducted training program for national level trainers under the National Program for prevention of Diabetes, CVD and stroke in Gandhinagar Gujarat; Member of the Committee on PG medical education set up by Indian Academy of Public Health under Indian Public Health Association; Facilitated a workshop on STEPs approach to NCD Surveillance at a meeting organized by Madras Diabetes Research Foundation in Chennai, 28 March 2009; Attended different meetings of the Steering Committee of National Program for Prevention and Control of Diabetes, CVD and Stroke. (NPDCS) and Technical Advisory Group for NCD Surveillance under IDSP; Attended ‘Teaching the teacher to teach’ (T5) in Boston University for three weeks from 23 May – 13 June 2008; Attended Project Review Group Meeting of Media Lab Asia at Trivandrum on 5 January 2009; Non-specific Effects of Vaccination by London School of Hygiene and Tropical Medicine in London from 17–18 April 2008; National Course on NCD Prevention and Control in Chandigarh, 22–23 April 2008; Attended INDEPTH NCD Meeting at Bangkok, Thailand from 04– August 2008; Attended Influenza Vaccine group Meeting, CDC Atlanta, 28 August 2008 To 29.08.08; Attended Eighth Annual General and Scientific Meeting INDEPTH, Tanzania from 22–26 September 2008; Attended Employee Health as a Strategic Priority 2008—Joint Meeting of the
World Economic Forum and World Health Organization at New Delhi, India from 14–15 November 2008; Attended National Level Workshop for Medical Officers under National Programme for Prevention and Control of Diabetes, Cardiovascular Diseases and Stroke (NPDCS) at New Delhi from 25–26 November 2008; Attended INDEPTH Board of Trustees Meeting at Accra, Ghana from 16–18 February 2009; Attended National Capacity Strengthening Workshop for Programme Managers on Integrated Prevention and Control of NCDPC at DPR Korea from 23 February – 05 March 09.

Dr Puneet Misra

Member of Program Advisory Committee, Department of science and Technology, Government of India; Member of Regional Institute Central Zone for HIV Sentinel Surveillance, NACO, Government Of India, responsible for HSS activity in five states of India for technical support and quality control; Member of Telemedicine Committee of AIIMS and In charge Telemedicine Facility at CRHSP-AIIMS, Ballabgarh; Team member of Consensus Development for Cut-offs of Measures of Obesity and Metabolic Syndrome for Asian Indians; Attended Meeting on HIV surveillance, SIHFW, Jaipur, September 2008; Attended Pre round Meeting on HIV surveillance, Hotel Rajhans, Surajkund October 2008; Attended IDSP meeting for training of surveillance officers – on 11 November 2008 at NICD; Attended Obesity summit – Delhi on 15 and 16 November 2008; Attended IMNCI training, MAMC, Delhi, 22–30 September 2008; Attended INDEPTH meeting on COPD, KEM Hospital and CRF Pune Jan 2009; Attended National conference of IAPSM, Aurangabad, Jan 2009; Attended 2nd International Conference on Integrating Spirituality and Organizational Leadership, Pondicherry, February 2009; Attended International meeting on ‘Non-specific effects of vaccination’, London School of Tropical Medicine and Hygiene, UK, April 2008; Attended Health Communication Skills workshop in Ghana, October 2008; Attended XI International Health Conference, Touro University, California, USA in March 2009.

Dr Sanjay Rai


Dr Baridalyne Nongkynrih

Attended a meeting organized by Norway India Partnership Initiative (NIPI)-NIHFW collaboration on planning for training curriculum for Yashoda on 20 April 2008; Attended a workshop in NDDTC

Dr Anil Goswami

Attended a Symposium on ‘One Million Campaign: Support Women to Breastfeed’ at Constitutional Club on 09 February 2009; Attended a Symposium on ‘One Million Campaign: Support Women to Breastfeed’ at Constitutional Club, 09 February 2009; Attended a training course on ‘Health & Human Right’ at National Institute of Health & Family Welfare (NIHFW) w.e.f. 04–06 August 2008; Attended a two days ‘Workshop on Health Promotion in a setting based approach viz School, Hospitals, and Workplace’, Lady Harding Medical College (LHMC), New Delhi, 5–6 September 2008; Attended 2nd National Symposium on ‘Belief and faiths: A challenge to public health’, Maulana Azad Medical College (MAMC), New Delhi, 13 September 2008; Attended a Symposium on “The setting-based approach to Health Promotion: Concepts and application in common setting” at Maulana Azad Medical College (MAMC), New Delhi, 08 November 2008; Attended a Seminar on ‘Female foeticide: Social evil or medical vice’ at Maulana Azad Medical College (MAMC) on 13 November 2008; Attended ‘53 National Conference of Indian Public Health Association’ 9–11 January 2009 at Kempegowda Institute of Medical Sciences, Bangalore, Karnataka; attended ‘36th Annual National Conference of “Indian Association of Preventive & Social Medicine’ 21–23 January, 2009 at Government Medical College & Hospital Aurangabad, Maharashtra; Continued to be the Treasurer of Indian Association of Preventive Medicine (IAPSM) during 2008–2009; Organized and coordinated relief work for the ‘Bihar flood victims’ under the National Service Scheme during September 2008.

Dr Rakesh Kumar Senior Resident and Mr Mangi Lal Chaudhury PHN at Ballabgarh were sent to National Institute of Mental Health and Allied Neuro-sciences for training in Tobacco Cessation by the Ministry of Health and Family Welfare as a preparatory work for setting up an Tobacco Cessation Clinic at Ballabgarh.

Vivek Gupta attended the TARGETS Program Dissemination Workshop of the Maharashtra Association of Anthropological Sciences (MAAS) and London School of Hygiene and Tropical Medicine on 15 December 2008 in Pune; Attended the Review meeting for the Text Book on Public Health and Community Medicine, Armed Forces Medical College, Pune, 13–14 November 2008.
Kapil Yadav participated in meeting on ‘Non specific effects of vaccine’ organized by London School of Hygiene and Tropical Medicine, London, United Kingdom, 17–19 April 2008; Participated in 14th World Conference on Tobacco or Health, Mumbai; 8–12 March 2009

Conferences


VISITING SCIENTISTS

Scientists from different parts of the country and abroad visited the Centre during this period.

International

1. Centre for Diseases Control (CDC) Atlanta
2. University of Alabama, United States
3. Stanford Biodesign Team (AIIMS – IIT Delhi Stanford University collaboration)
4. Regional Adviser—NCDs WHO/SEARO and Public Health Administrator from WHO India for evaluating Center for Community Medicine and CRHSP Ballabgarh as a WHO Collaborating Center.
5. An International network of HDSS sites involved in demographic and health research in developing countries (INDEPTH)
6. Health Sector Management programme of Boston University

National

1. National Health Systems Resource Center (NHSRC), New Delhi
2. National Institute of Health and Family Welfare (NIHFW)
3. Community Health Department, Jawahar Lal Nehru University (JNU)
4. Sree Chitra Thirunal Institute of Medical Sciences, Trivandrum
9.9 Dermatology and Venereology

**Professor and Head**
Vinod K. Sharma

**Professors**
Neena Khanna  
Kaushal K. Verma

**Additional Professor**
M. Ramam

**Associate Professors**
Binod K Khaitan  
Sujay Khandpur  
G Sethuraman

**Assistant Professor**
Somesh Gupta

**EDUCATION**

**Lectures/Presentations in Conferences, CMES**

**Dr V.K. Sharma**

- ‘Recent advances in the management of Urticria/Psoriasis’, Department of Dermatology of Osmania Medical College, Hyderabad; 11 April 2008.
• Attended 37th National Conference of Indian Association of Dermatologists Venereologists and Leprologists at Bangalore as President and Panel discussion on ‘Off label uses of common drugs’; 6–10 January 2009.


Dr M. Ramam


• ‘Histopathology of cutaneous tuberculosis, 37th National Conference of IADVL, Bangalore; 6–10 January 2009.


Dr Binod Khaitan


• Invited talk on ‘Oral mini-pulse therapy in Dermatology’, Annual Conference of North-East Chapter of IADVL, Dimapur; 7th November 2008.

Sushruta Dash, Binod K. Khaitan presented ‘A randomized study to evaluate efficacy and safety of 0.1% tacrolimus ointment Vs 0.05% fluticasone propionate cream in patients with segmental vitiligo’, European Academy of Dermatology and Venereology Congress, Paris, France; September 2008

Dr Sujay Khandpur


• Panelist in Videoconference of 2nd World Congress of TeleDermatology, Chennai; 16–18 October 2008.
• ‘Diagnosis of Bullous Disorders’, Regional Conference of Indian Association of Dermatologists, Venereologists and leprologists (Delhi State Branch); December 2008.

• ‘Induction of Th2 cells in the pathogenesis of autoimmune skin disease—pemphigus vulgaris, Immunology Conference, AIIMS; September 2008.

Dr G. Sethuraman


Dr Somesh Gupta

• Chaired a session in 18th International Society for Sexually Transmitted Diseases Research (ISSTDR) Congress in association with British Association of Sexual Health Conference, London, UK; 28 June – 1 July 2009

PUBLICATIONS


26. Same guidelines were reproduced in a book on Vitiligo published from Springer, Europe (Edited by Dr Mauro Picardo, Roma, Italy)

BOOKS


2. Guidelines for Vitiligo, Stevens-Johnsons Syndrome & Toxic Epidermal Necrolysis and Psoriasis (IADV&L); 2009.


**RESEARCH**

**Funded Project**

[Ongoing]


2. To study genetic and immunological immunological associations and examine


5. Vasculitis: A clinicopathological and Etiological correlation. Funded by AIIMS for 3 years. Funds: Rs 1 lakh.


**Departmental Projects**

[Ongoing]

1. Desmoglein 1 and 3 antibodies in pemphigus

2. Comparative efficacy of 40 mg betamethasong monthly and equivalent doses of biweekly pulse in treatment of alopecia areata
3. Clinical and histopathological profile of PMLE
4. Clinical profile photo dermatoses in India
5. Study of Occupational dermatitis in India
6. To study of effectiveness of 15 mg weekly methotrexate in inducing remission in chronic idiopathic urticaria resistant to antihistamines
9. A descriptive study to define the specific clinical features of segmental vitiligo as compared to non-segmental vitiligo and to study the prevalence of co-existent organ specific (TPO) and non-organ specific (ANA) autoimmunity in these patients. Binod Khaitan.
10. A study of knowledge and attitude towards leprosy in people with and without leprosy and measurement of dehabilitation in leprosy patients. Binod Khaitan.
12. A study on isolation, characterization and evaluation of differentiation potential of hair follicle stem cells. Binod Khaitan
17. Comparison of efficacy of PUVA versus PUVA sol in vitiligo. Dr Sujay Khandpur.
22. Utility of ELISA testing in establishing the activity of pemphigus vulgaris. Dr Sujay Khandpur.
23. Role of sclerotherapy in vascular malformations. Dr Sujay Khandpur.
25. Role of cyclophosphamide pulse as adjuvant therapy in pemphigus vulgaris. Dr Sujay Khandpur.
27. Involvement of Th1/Th2 cytokines in the pathogenesis of pemphigus vulgaris. Dr Sujay Khandpur.
28. Quality of Life and Questionnaire development in vitiligo. Dr Sujay Khandpur.

Completed


AWARDS, HONOURS AND SIGNIFICANT EVENTS

Dr Vinod K Sharma was selected as a National President, Indian Association of Dermatologists, Venereologists and Leprologists; Member, Editorial Board, Journal of European Society of Contact Dermatitis named ‘Contact Dermatitis’; Member, Editorial Board, American Society of Contact Dermatitis named “Dermatitis”.

Dr M Ramam was awarded Bishnupriya Devi award for best original article in IJDVL, 2007

Dr Binod Khaitan was elected President, Faculty Association, AIIMS; Elected Fellow of International Medical Science Academy; Reviewer, Indian Journal of Dermatology, Venereology and Leprology, Indian Journal of Community Medicine, Indian Journal of Pediatrics; Member, Thesis Evaluation Committee, IADVL; Member, Editorial Board, Indian Journal of Cutaneous and Aesthetic surgery

Dr Sujay Khandpur was selected as Assistant Editor, Indian Journal of Dermatology, Venereology and Leprology; Deputy Editor, Indian Journal of Cutaneous and Aesthetic surgery; Treasurer, Dermatopathology Society of India; Member Dermato-Therapeutic and Dermatosurgery Guidelines Committee of IADVL; International Fellow American Academy of Dermatology; Reviewer of Dermatology, Indian Pediatrics, Indian Journl of Dermatology.

Dr G Sethuraman was selected as a Reviewer for British J Dermatol, Clin Exp Dermatol, JEADV and IJDVL, Indian J Pediatrics.

Dr Somesh Gupta was elected as President, Association of Cutaneous Surgeons of India; Membership Secretary of International Union against Sexually transmitted Infections (IUSTI)-World; Co-chair of 12th International Union against Sexually transmitted Infections (IUSTI) World Congress to be held in New Delhi from 2–5 November 2011; Associate Editor of Sexual Health, an official journal of IUSTI-Asia-Pacific (Published from Australia, indexed in Medline/PubMed); Associate Editor of Journal of Cutaneous and Aesthetic Surgery.
## 9.10 Endocrinology and Metabolism

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professor and Head</td>
<td>A.C. Ammini</td>
</tr>
<tr>
<td>Professor</td>
<td>Nikhil Tandon</td>
</tr>
<tr>
<td>Additional Professor</td>
<td>N. Gupta</td>
</tr>
<tr>
<td>Associate Professor</td>
<td>R. Goswami</td>
</tr>
<tr>
<td>Assistant Professors</td>
<td>V.P. Jyotsna, R. Khadgawat</td>
</tr>
</tbody>
</table>

### EDUCATION

**Undergraduate, postgraduate, paramedical training**

The department was actively involved in regular training of undergraduate and nursing students while postgraduate students from MD Internal Medicine came for one month posting in the Department of Endocrinology and Metabolism.

**Long-and short-term training**

- Three candidates completed their DM and two new candidates joined the department for DM course.
- Two student joined PhD (Endocrinology).
- Six students joined the department for short-term training of six months.

**National and International Conferences**

**Lecture delivered**

**Dr R. Goswami**

- ‘Approach to metabolic bone disorder and vitamin D deficiency in the Medicine Update’, Department of Medicine, Maulana Azad Medical College and Associated Hospitals, New Delhi.
- ‘Vitamin D deficiency in India and its potential significance’, International Symposium on ‘Frontiers in molecular medicine’, jointly organized by Centre for Molecular Medicine, Jawaharlal Nehru University, New Delhi and Uppsala University, Sweden, at School of Social Sciences-I, Jawaharlal Nehru University, New Delhi; 13–14 February 2009.

**Dr R Khadgawat**

• ‘How close are diabetes and depression’, 23rd Annual Conference of Rajasthan Psychiatric Association, Behror, Rajasthan.


Dr N. Tandon


10. ‘Results from the ADVANCE Trial: Indian experience’, Australia-India Diabetes Workshop held as part of the Annual Conference of the Research Society for the Study of Diabetes in India, Hyderabad; 21 November 2008.


**Conferences**


RESEARCH

Funded projects

**Ongoing**


2. Registry of people with diabetes in India with young age at onset. Nikhil Tandon. Funded by Indian Council of Medical Research (ICMR) for 5 years (2006–2011).


9. Pattern and significance of single nucleotide polymorphism at select sites in two important candidate genes, i.e. Vitamin D receptor and parathormone genes in subjects with osteoporosis. Funded by DRDO New Delhi, Ministry of Defence for 3 years. Funds: Rs 9.75 lakh.

10. Role of oral vitamin D as an adjunct therapy in category I pulmonary tuberculosis long with assessment of immunological parameters: Randomized double blind trial. Funded by Department of Biotechnology, Government of India for 3 years. Fund: Rs 90.7 lakhs.


**Completed**

- A phase 3 open label, parallel group study to evaluate efficacy and safety of Human Insulin Inhalation Powder (HIIP) compared to preprandial Injectable Insulin in Insulin Naïve patients with type 2 diabetes mellitus. Nikhil Tandon. Funded by Eli-Lilly.

AIIMS 2008-2009 / 216
• A Phase IIb/III randomized, placebo-controlled clinical trial to study the safety and efficacy of MK0364 in overweight and obese patients with type 2 diabetes mellitus (T2DM). Nikhil Tandon. Funded by MSD Pharmaceuticals.

• A multicenter, double blind randomized, placebo controlled study of MK-0431 in patients with type 2 diabetes who have inadequate glycemic control. Nikhil Tandon. Funded by MSD Pharmaceuticals.


PUBLICATIONS


20. Fall CHD, Sachdev HPS, Osmond C, Lakshmy R, Dey Biswas S, Prabhakaran D, *et al.* Adult metabolic syndrome and impaired glucose tolerance are associated with different patterns of body mass index gain during infancy; Data from the New Delhi birth cohort. *Diabetes Care* 2008;31:2349–56.


**Chapter in book**


**AWARDS, HONOURS AND SIGNIFICANT EVENTS**

**Dr Nikhil Tandon** Downtown Public Oration, Guwahati; President of the Biological Sciences Section of the National Academy of Science, India (Allahabad) and Presidential lecture in the Annual Conference of the NASI; Dr PN Shah Oration awarded by the Endocrine Society of India; Jerome Markowitz Memorial Oration awarded by the South Asian Society for Atherosclerosis and Thrombosis (SASAT).

**Dr R Goswami** won Shanti Swarup Bhatnagar prize for Medical Sciences, 2008, Member , Selection Committee for the Senior Research Fellow and Research Associates by the ICMR from 2007 to date; Member , selection committee for awarding MD, DM and MCh thesis financial grant by The Indian Council of Medical Research (ICMR) 2009 ;.

**PATIENTS CARE**

**Endocrine OPD**

<table>
<thead>
<tr>
<th>Month</th>
<th>New Cases</th>
<th>Old cases</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 2008</td>
<td>746</td>
<td>1729</td>
<td>2475</td>
</tr>
<tr>
<td>May 2008</td>
<td>794</td>
<td>2062</td>
<td>2856</td>
</tr>
<tr>
<td>June 2008</td>
<td>800</td>
<td>1899</td>
<td>2699</td>
</tr>
<tr>
<td>July 2008</td>
<td>844</td>
<td>2138</td>
<td>2982</td>
</tr>
<tr>
<td>August 2008</td>
<td>773</td>
<td>1860</td>
<td>2633</td>
</tr>
<tr>
<td>September 2008</td>
<td>860</td>
<td>1969</td>
<td>2829</td>
</tr>
<tr>
<td>October 2008</td>
<td>699</td>
<td>1578</td>
<td>2277</td>
</tr>
<tr>
<td>November 2008</td>
<td>717</td>
<td>1731</td>
<td>2448</td>
</tr>
<tr>
<td>December 2008</td>
<td>749</td>
<td>1894</td>
<td>2643</td>
</tr>
<tr>
<td>January 2009</td>
<td>749</td>
<td>1859</td>
<td>2608</td>
</tr>
<tr>
<td>February 2009</td>
<td>847</td>
<td>1848</td>
<td>2695</td>
</tr>
<tr>
<td>March 2009</td>
<td>866</td>
<td>1905</td>
<td>2771</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9444</strong></td>
<td><strong>22472</strong></td>
<td><strong>31916</strong></td>
</tr>
</tbody>
</table>

**Pediatric and Adolescent Endocrinology Clinic (PAEC)**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>New Cases</td>
<td>310</td>
<td></td>
</tr>
<tr>
<td>Old cases</td>
<td>1402</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1712</strong></td>
<td></td>
</tr>
</tbody>
</table>
OPD activity
The department has OPD on all six working days with two specialty clinics, Pediatric and Adolescent Endocrinology clinic, PAEC (every Monday, 2–5 p.m.) and Diabetes of Young clinic, DOY (Every Saturday 9–1 pm).

Laboratory Investigations
The total number of hormone assays done during this period was 44,703, while metabolic laboratory of the department carried out 19,855 investigations. The break-up of these investigations is given below.

<table>
<thead>
<tr>
<th>Hormone</th>
<th>Number of samples assayed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) T4</td>
<td>7,543</td>
</tr>
<tr>
<td>2) TSH</td>
<td>11,161</td>
</tr>
<tr>
<td>3) TPO</td>
<td>1,435</td>
</tr>
<tr>
<td>4) LH</td>
<td>1,291</td>
</tr>
<tr>
<td>5) FSH</td>
<td>1,463</td>
</tr>
<tr>
<td>6) PRL</td>
<td>1,390</td>
</tr>
<tr>
<td>7) Testosterone</td>
<td>1,435</td>
</tr>
<tr>
<td>8) Cortisol</td>
<td>2,764</td>
</tr>
<tr>
<td>9) 17-OH Progesterone</td>
<td>281</td>
</tr>
<tr>
<td>10) DHEAS</td>
<td>644</td>
</tr>
<tr>
<td>11) ACTH</td>
<td>1,436</td>
</tr>
<tr>
<td>12) 25-OH Vitamin. D</td>
<td>1,432</td>
</tr>
<tr>
<td>13) PTH</td>
<td>2,404</td>
</tr>
<tr>
<td>14) Insulin</td>
<td>4,617</td>
</tr>
<tr>
<td>15) C-Peptide</td>
<td>2,935</td>
</tr>
<tr>
<td>16) GAD Antibody</td>
<td>212</td>
</tr>
<tr>
<td>17) Growth hormone</td>
<td>394</td>
</tr>
<tr>
<td>18) Free T4</td>
<td>991</td>
</tr>
<tr>
<td>19) Free T3</td>
<td>474</td>
</tr>
<tr>
<td>20) T3</td>
<td>473</td>
</tr>
<tr>
<td>Total</td>
<td>44,703</td>
</tr>
</tbody>
</table>

Investigations done in the Metabolic Laboratory

<table>
<thead>
<tr>
<th>Investigation</th>
<th>Number of samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood glucose</td>
<td>9,998</td>
</tr>
<tr>
<td>Glycosylated haemoglobin</td>
<td>6,155</td>
</tr>
<tr>
<td>Urinary creatinine</td>
<td>1,508</td>
</tr>
<tr>
<td>Urinary albumin</td>
<td>1,508</td>
</tr>
<tr>
<td>Urine pH</td>
<td>218</td>
</tr>
<tr>
<td>Osmolality</td>
<td>318</td>
</tr>
<tr>
<td>Calcium</td>
<td>50</td>
</tr>
<tr>
<td>Phosphorus</td>
<td>50</td>
</tr>
<tr>
<td>Alkaline Phosphatase</td>
<td>50</td>
</tr>
</tbody>
</table>
# 9.11 Forensic Medicine

<table>
<thead>
<tr>
<th>Professor and Head</th>
<th>T.D. Dogra</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional Professor</td>
<td>O.P. Murty</td>
</tr>
<tr>
<td></td>
<td>D.N. Bhardwaj (relieved on 31/3/09 on VRS)</td>
</tr>
<tr>
<td>Associate Professor</td>
<td>S.K. Gupta</td>
</tr>
<tr>
<td>Assistant Professors</td>
<td>Millo Tabin, Sanjeev Lalwani (JPNATC), Adarsh Kumar (JPNATC)</td>
</tr>
<tr>
<td></td>
<td>Anupama Raina</td>
</tr>
<tr>
<td></td>
<td>A.K. Jaiswal</td>
</tr>
</tbody>
</table>

## EDUCATION

The department is actively engaged in undergraduate and postgraduate teaching with five postgraduate (MD) students and one Ph D student. The department is also imparting training in DNA Fingerprinting and Toxicology to BSc/MSc students from other Indian universities.

### CONTINUING MEDICAL EDUCATION

#### Conferences

- The department co-organized 9th Conference of ICFMT and SAFCON 2008 at Amity Institute, Noida.
- The department organized Wet workshop in collaboration with NICFS, Rohini for Forensic Scientists.

#### Lectures delivered

The departmental faculty/staff participated in training programmes organized by Academy of CBI, NICFS, Amity Institute, Delhi Judicial Academy, Delhi Police (HRD Cell), Delhi Police Training School. Lectures and demonstrations were held for CBI officials, police officers, judicial officers, medical officers and forensic science experts from all over the country. Professor T.D. Dogra delivered lecture on ‘Medical Ethics’ at JLN Medical College, Aligarh. Dr. Adarsh Kumar delivered lecture on ‘Medico-legal aspects of record keeping’ hosted by IMA, Lucknow.
RESEARCH

Departmental Projects

Completed

1. A comprehensive autopsy study of sudden natural deaths in South Delhi

Ongoing

1. A comprehensive autopsy study of unnatural deaths in children and women
2. Auditing of asphyxial death
3. A comprehensive autopsy study of fatal poisoning in South Delhi
4. A comprehensive autopsy study of injury pattern in fatal road traffic accidents in South Delhi
5. Inferring genetic diversity and molecular relatedness among the Indian Saraswat community at various STR loci.

PUBLICATIONS

Journals


**PATIENT CARE**

**Casualty services**

The department continued to provide round–the-clock coverage to the casualty in medicolegal cases, e.g. injury, sexual offences, poisoning and other complicated medicolegal cases. The department is also attending all the calls pertaining to medical examination in police and judicial custody.

**Medicolegal postmortem performed: 1254+893(JPNATC) =2147**

The department provided consultation services to the CBI, crime branch and other central and state investigating agencies in complicated medicolegal postmortem conducted at other centers of the country and also participated in board postmortem cases. At trauma centre 893 autopsies were conducted.
Court attendance by the members of the department: 800

Doctors of the department also attended court in CBI cases as experts.

Clinical forensic medicine

The department examined cases of age estimation, medical examination, marriage disputes, potency, DNA fingerprinting, etc referred by the court, CBI and other investigating agencies. Thirty-five such cases were dealt in 2008–09.

DNA Fingerprinting

The department is providing training to the candidates of various universities. It is performing DNA fingerprinting test in selected medicolegal cases. 42 samples were processed for DNA fingerprinting during 2008–09. Department also provided training to 28 students in DNA fingerprinting and toxicology.

Medical toxicology

Tests for various poisons, e.g. heavy metals, opiates, benzodiazepines and alcohol were done in toxicology laboratory. 115 such tests were performed during this period.

Community services

The department participated in training programme organized by CBI officials, police officers, medical officers, judges public prosecutors and forensic science experts from all over country.

AWARDS AND HONOURS

Professor T.D. Dogra was given felicitation for ‘Outstanding contribution in field of Forensic Medicine’, by Indian Congress of Forensic Medicine (ICFMT).

Dr Sanjeev Lalwani was awarded a Scroll of honour from Pakistan Society of Forensic Medicine and Toxicology. He was also awarded fellowship of Indian Congress of Forensic Medicine and Toxicology (ICFMT).

Dr Anupuma Raina, Scientist II was given ‘Meritorious performance award’ by Pakistan Society of Forensic Medicine and Toxicology. Dr Raina, Scientist II was given best performance award of ICFMT :2008.

Dr Ashish Jain (MD Student) was awarded best poster award in conference, SAFCON-2008.
EDUCATION

Undergraduate, postgraduate, PhD and paramedical training programme remained the same.

Short- and long-term training

Eight candidates underwent training during 2008–09 for a period of 3 months to 6 months. Thirteen DM candidates and seven PhD candidates underwent long-term training.

Continuing Medical Education

The department organized Asia Pacific Digestive Week (APDW-2008) in conjunction with Annual Conference of Indian Society of Gastroenterology, Ashoka Hotel, New Delhi, 13–16 September 2008.

National and International Conferences

The department faculty delivered 39 lectures at international and national conferences/meetings.

RESEARCH

Funded projects

Completed

1. Randomised trial of pegylated interferon (Peg-) vs. lamividine followed by PEG-1 for 1 year among patients with chronic hepatitis-B. S.K. Acharya. Funded by Fulford, India for 4 years. Funds: Rs 24 lakh.


Ongoing

2. Advanced Centre for liver diseases (institute and different projects in liver diseases). Projects include (i) randomized controlled trial of somatostatin monotherapy vs. somatostatin and nitroglycerine infusion in acute variceal bleeding, (ii) aetiology, clinical presentation and therapy among Indian patients with primary liver cancer, (iii) hepatic venous outflow tract obstruction: etiology and results of angioplasty, (iv) probiotics for spontaneous bacterial peritonitis, and (v) neutrophilic function studies in acute liver failure, (vi) randomized double blind placebo control trial of L–ornithine, L–Aspartate in acute liver failure. S. K. Acharya. Funded by ICMR. Funds: Rs 2 crore.


5. An open label responses adaptative study of telbivudine in adults with HBeAg compensated chronic hepatitis B. S.K. Acharya. Funded by Novartis for 3 years. Funds: Rs 11.11 lakh.

6. An open label responses adaptative study of telbivudine in adults with HBeAg negative chronic hepatitis B. S.K. Acharya. Funded by Novartis for 3 years. Funds: Nil (company supplies drug and placebo).


16. A multi-centric study on treatment of abdominal tuberculosis (intestinal or peritoneal): A randomized controlled trial to compare the 6 months of Cat I treatment with 9 months of Cat I Treatment (extension for 3 months) in abdominal tuberculosis under the Revised National Tuberculosis Control program. Govind Makharia. Funded by Central TB Division, Ministry of Health and Family Welfare, Government of India for 4 years (2008–11). Funds: Rs 57 lakh


**Departmental projects**

**Completed**

1. Acute viral hepatitis in diabetics: Evaluation of natural course
2. Three month treatment of chronic hepatitis C with interferon a2b and ribavirine
3. Characterization, natural course, and outcome of patients with organized pancreatic necrosis.
4. A study of the risk factors for cancer of the pancreas
5. A study of the risk factors for cancer of the gallbladder
6. Relationship between intestinal permeability in anti-\textit{Saccharomyces cerevisiae} antibody in patients with Crohn’s disease
7. Nutritional and biochemical assessment of patients with inflammatory bowel disease
8. A study of assessment of dietary fiber intake in patients with irritable bowel syndrome and healthy individuals
9. Differentiation of Crohn’s disease and intestinal tuberculosis: Therapeutic trial of anti-tuberculocidal therapy

**Ongoing**

1. Hepatitis Be antigen negative chronic hepatitis B. Magnitude, viral and host characteristics
2. Immunotolerant chronic HBV infection: Natural course
3. Endoscopic biliary drainage versus conservative treatment for patients with inoperable cancer of the gallbladder with obstructive jaundice: A randomized controlled trial
4. To develop mouse model of acute pancreatitis and to correlate the severity of pancreatitis with the levels of TNF-α and IL-6 cytokines

5. Dose ranging study of steroid (oral and intravenous) in patients with moderate to severe ulcerative colitis

6. Retinoic acid is the microenvironmental cue determining disease activity in patients with ulcerative colitis

7. Genomic diversity of *E. histolytica* isolates and identification of genotype–clinical phenotype correlations

8. Dynamics of differential T regulatory cell expression in inflammatory bowel disease and intestinal tuberculosis

9. Role of leukocytapheresis in steroid dependent/refractory patients with ulcerative colitis

10. Natural history of steroid resistant and steroid responsive patients with ulcerative colitis

11. Fox p3 mRNA expression in patients with Crohn’s disease and intestinal tuberculosis

12. A study of assessment of dietary fibre intake in patients with irritable bowel syndrome and healthy individuals

13. Prevalence of celiac disease in irritable bowel syndrome and dyspepsia

14. Effect of steroid in celiac disease: A randomized controlled trial

**Collaborative Projects**

**Completed**

1. Role of diffusion MRI, MDCT and EUS in the evaluation of patients with pancreatic head mass (with Radiology).

2. Quality of life assessment following palliative esophageal stenting (with Gastrointestinal Surgery)

3. A prospective study to evaluate the role of *Helicobacter pylori* in benign and malignant hepatobiliary disease (with Surgery)

4. Molecular typing of *Campylobacter jejuni* by PCR and its subtyping using PCR-RFLP and PFGE) (with Microbiology)

5. A double blind randomized trial to evaluate efficacy and tolerability of probiotics in mild to moderate ulcerative colitis. (with Multicentre, DMC Ludhiana, and PSRI, New Delhi)

6. Genetics of inflammatory bowel disease in Indians and Asians migrated to Canada (with Mount Sinai Hospital, Toronto, Canada)

7. A study of emerging parasitic agents (intestinal coccidia and microsporidia) in the aetiology of malabsorption syndrome (with Microbiology).


11. Functional magnetic resonance imaging and magnetic resonance imaging in patients with achalasia cardia (with Nuclear Magnetic Resonance).

**Ongoing**

1. Role of surface promoter mutations in hepatitis B surface antigen production and secretion in occult hepatitis B virus infection (with Pathology).

2. HBV mutants among patients with acute and chronic liver disease (with Pathology).

3. Cellular and humoral immunity studies among patients with acute hepatitis E virus infection (with Pathology).

4. HCV quantitation assay and HEV quantitation assay development and their relevance (with Pathology).


6. Comparative evaluation of PET CT scan and EUS in patients with suspected pancreatic malignancy (with Nuclear Medicine).


8. Role of TNF-á in the pathogenesis of experimental acute pancreatitis and the effect of anti-TNF-á therapy in attenuating the severity of pancreatitis and in the subsequent regeneration of the pancreas (with Anatomy).

9. Application of specific amplification of *Entamoeba histolytica* DNA for the diagnosis of amoebic liver abscess directly from ultrasound guided aspirated pus (with Microbiology).

10. Identification and molecular characterization of bacterial flora in inflammatory bowel disease (with Jawaharlal Nehru University).

11. Studies on metronidazole resistance in laboratory grown and patient derived *Entamoeba histolytica* (with Jawaharlal Nehru University).

12. Derivation of a risk score to predict risk of advanced colorectal cancer (Collaborative study, with Asia Pacific Colorectal Cancer Study Group).

13. Attitude towards colorectal cancer (Collaborative study, with Asia Pacific Colorectal Cancer Study Group).
14. Prevalence of celiac disease in high risk group such as seizure, short stature, metabolic bone disease (with Endocrinology and Neurology).


17. PET-CT enteroclysis: A new technique for evaluation of small intestinal inflammatory diseases (with Nuclear Medicine).

18. PET-CT colonography: A new technique for evaluation of activity and extent of ulcerative colitis (with Nuclear Medicine).

19. PET-CT colonography: Evaluation of terminal ileal disease (Nuclear Medicine).

20. Detection, identification and molecular characterization of intestinal coccidia and microsporidia in patients with chronic diarrhoea and malabsorption syndrome (with Microbiology).

21. Reintroduction of anti-tubercular drugs in ATT induced hepatitis: Randomized controlled trial (with Medicine)

22. Effect of treatment (laparoscopic cardiomyotomy and pneumatic dilatation) on structural and functional abnormalities of the lungs in achalasia (with General Surgery)

23. Genetic study of *Giardia lamblia* (with Microbiology).

**PUBLICATIONS**

**Journals**


**Chapters in Books**


**PATIENT CARE**

**Special clinics**

<table>
<thead>
<tr>
<th>Name of the clinic</th>
<th>New cases</th>
<th>Old cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liver</td>
<td>919</td>
<td>7205</td>
</tr>
<tr>
<td>Gallstone and pancreas</td>
<td>377</td>
<td>1236</td>
</tr>
<tr>
<td>IBD and ulcer</td>
<td>179</td>
<td>1603</td>
</tr>
<tr>
<td>Interventional</td>
<td>333</td>
<td>221</td>
</tr>
</tbody>
</table>

**Routine clinic**

- New cases: 14,996
- Old cases: 32,348
 Procedures
Endoscopy 12,000
Colonoscopy 1,890
Endoscopic sclerotherapy and variceal ligation 3,000
Sigmoidoscopy 370
Side viewing endoscopy 140
Endoscopic cholangiopancreatography 1,020
Endoscopic ultrasound 250
Ultrasound 4,000

Tests undertaken in the department
1. Serum ceruloplasmin 530
2. Serum copper 544
3. 24-hour urinary copper 562
4. TNF-á 404
5. Il-6 524
6. IL-1â 86
7. Adeponectin 86
8. Insulin 86
9. Lipid peroxidation 577
10. Free radical antioxidant potential 356
11. Vitamin C 592
12. Leptin 86
13. Superoxide dismutase 281
14. TtG-1GA 1200
15. Nitric oxide 338
16. Neutrophil function test 90
17. Melatonin 260
18. IL-1á 238
19. Il-8 238
20. IFN-y 238
21. MCP-1 200
22. HBV-DNA (PCR) 863
23. HBV-DNA (Real Time PCR) 150
24. HCV-RNA (PCR)  
25. HEV-RNA (PCR)  
26. Plasma glutamina (HPLC)  
27. Bile acid (HPLC)  
28. IL-6 (PCR)  
29. K-ras mutation (PCR)  
30. Ca19.9  
31. Pancreatic tissue DNA  
32. Matrix metalloproteinase-1  
33. Matrix metalloproteinase-2  
34. Matrix metalloproteinase-8  
35. Matrix metalloproteinase-9  
36. IgG4  
37. LOH (PCR)  
38. FFPE tissue section DNA  
39. TNF-á (PCR)  
40. Plasma renin activity  
41. Myeloperoxidase activity  
42. L-Cathepsin  
43. Antiendotoxin antibody (IgG)  
44. Antiendotoxin antibody (IgM)  
45. C reactive protein  
46. D-xylose  
47. Faecal chymotrypsin  
48. Faecal fat  
49. Hydrogen breath test  
50. Blood ammonia  
51. Prothrombin time

**AWARDS, HONOURS AND SIGNIFICANT EVENTS**

**Dr Pramod Garg** was awarded an Overseas Associateship by the Department of Biotechnology for 6 months in 2008.

**Dr Vineet Ahuja** was awarded ICMR Young Biomedical Fellowship, June–December 2008 at Inflammatory Bowel Disease Centre, Massachusetts General Hospital, Harvard Medical School,
Boston, USA; Coordinator, Postgraduate Training Clinics organized by Indian Society of Gastroenterology, February 2009; Member, Investigative committee for recommendations on tackling hepatitis B epidemic in Modasa, Gujarat, February 2009.

**Dr Govind Makharia** nominated Member, Asia Pacific Working Party on Inflammatory Bowel Disease; nominated Secretary, Sub-Committee for Asia Pacific Guidelines on Management of Irritable Bowel Syndrome (Asian Neurogastroenterology and Motility Associations); elected Governing Council Member, Indian Society of Gastroenterology; invited Member, Task Force on celiac disease by Indian Council of Medical Research; nominated as Coordinator, Young Clinician’s Programme, Indian Society of Gastroenterology.

**VISITING SCIENTISTS**

1. Professor A. McCullough, USA visited the department on 10 April 2008.

2. Professor Paul Koltman, Mount Sinai School of Medicine, New York, USA visited the department on 16 March 2009.
EDUCATION

The department faculty is involved in the didactic teaching programme for undergraduates, surgical postgraduates and postdoctoral trainees. The department offers 3 year superspecialty training in gastrointestinal surgery leading to an award of MCh in Gastrointestinal Surgery.

Continuing Medical Education

Lectures

The faculty delivered 14 CME lectures at various regional medical fora of the country.

RESEARCH

Funded projects

Ongoing


Departmental projects

Completed

1. A prospective study of the quality of life following endoscopic oesophageal stenting for inoperable patients with oesophageal carcinoma

2. A prospective pilot study to evaluate the efficacy of neoadjuvant chemoradiotherapy in patients with locally advanced but resectable gall bladder cancer
3. A prospective and retrospective evaluation of the long term outcomes of patients with incidental gall bladder cancer

4. A prospective study of evaluation of neoadjuvant chemoradiotherapy in adenocarcinoma of the gastro-oesophageal junction

**Ongoing**

1. A prospective evaluation of three field resection for carcinoma of mid-oesophagus

2. A randomized controlled trial of resection versus bypass procedure for the treatment of corrosive stricture of oesophagus

3. Quality of life following restorative proctocolectomy in patients with refractory ulcerative colitis

4. Quality of life following transhiatal oesophagectomy in patients with carcinoma oesophagus.

5. Long term follow up of lienorenal shunt procedure in patients with extrahepatic portal vein obstruction

6. Study of gastric emptying following classical Whipple’s pancreatoduodenectomy and pylorus-preserving pancreaticoduodenectomy using scintigraphic techniques after randomizing them to antecolic or retrocolic gastrojejunostomy or pylorojejunostomy

7. A prospective randomized trial comparing preoperative radiotherapy and transhiatal oesophagectomy vs. transhiatal oesophagectomy alone for squamous cell cancer of the lower third of oesophagus

8. Prospective evaluation of the outcome following management of oesophageal perforations

9. Prospective evaluation of choledochoscopy for various biliary tract disorders

10. Prospective evaluation of the role of intraoperative enteroscopy in the management of obscure gastrointestinal bleeding

11. A prospective randomized study to compare hand-sewn and stapled oesophagogastric anastomoses following transhiatal oesophagectomy


13. Quality of life following operations for corrosive strictures of oesophagus

14. Assessment of the problem of mucocele following bypass procedure for corrosive strictures of oesophagus

**Collaborative Projects**

**Ongoing**

1. A randomized controlled trial of proximal lienorenal shunt versus sequential endoscopic variceal ligation and endoscopic sclerotherapy for patients with extrahepatic portal venous obstruction (with Gastroenterology)
2. Role of neoadjuvant chemoradiotherapy in adenocarcinoma of gastro-oesophageal junction (with Radiotherapy).

3. Prospective study on the effect of lienorenal shunt on pericholedochal collaterals causing portal hypertensive biliopathy (with Gastroenterology).

4. A randomized controlled clinical trial of preoperative cholecystojejunostomy versus endoscopic stenting in surgical obstructive jaundice due to periampullary carcinoma (with Gastroenterology).

5. The role of endoscopic ultrasound in the evaluation of periampullary tumours (with Gastroenterology).

PUBLICATIONS

Journals


Books


Chapters in Books


PATIENT CARE

OPD and specialty clinics
Please see Chapter 6 (Hospital), Appendix VI
Total number of new patients seen 1791
Total number of old patients seen 5261

Special laboratory facilities
Anal manometry
Oesophageal manometry
24-hour ambulatory oesophageal pH monitoring

Inpatients
Please see Chapter 6 (Hospital), Appendix III
Total number of inpatient admissions (January 2007–December 2007) 584

Surgical procedures
Please see Chapter 6 (Hospital), Appendix V
Total number of operations performed 537
Elective operations 410
Emergency operations 127

Number of operations performed (Special interest areas)
Surgical jaundice 83
Portal hypertension 45
Oesophageal cancer 81
Carcinoma gall bladder 29
Ulcerative colitis 21
Upper GI haemorrhage 14
Lower GI haemorrhage 11
Acute pancreatitis 21
Chronic pancreatitis 16
Biliary strictures 17
Pancreato-duodenectomy 30
Liver resections 24
Cadaveric liver retrievals 1

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Dr Peush Sahni is the current representative of the World Association of Medical Editors (WAME) at the International Committee of Medical Journal Editors and is also the Editor of National Medical Journal of India.

VISITING SCIENTISTS
1. Dr Sumit Mittal, Department of Surgery, Creighton University Medical Center, Omaha, Nebraska, USA.
9.14 Hematology

Professor and Head
R Saxena

Professors
HP Pati

Associate Professors
S Tyagi

S. Sazawal

Assistant Professors
Tulika Seth

Dr Rajat Kumar
resigned from the
post of professor.

M Mahapatra

Pravas Mishra

EDUCATION

The faculty is training undergraduates in Haematology and Medicine, and Clinical case studies for Paediatric students and postgraduates from MD Pathology in Haematology.

The department is running DM courses in Clinical Haematology and Haematopathology. Two candidates passed DM Clinical Hematology and one passed the DM Haematopathology examination. Presently eight residents are undergoing training in DM Clinical Haematology and six in DM Haematopathology. Currently, five students were registered for PhD in Haematology.

Short- and long-term training

The department has provided 1–6 months training in the field of clinical and laboratory Haematology to eleven doctors from other institutions. Seventeen MSc students also undertook short-term training in molecular haematology for periods of 1 to 6 months during the year.

Continuing Medical Education

Conferences, seminars, workshops:

- Thalassaemia Symposium III in association with National Thalassaemia Welfare Society, Department of Paediatrics, LHMC and KSCH; 31 August 2008.
**Lectures delivered**

**Dr R. Saxena**

- ‘Myelodysplastic syndromes in the WHO classification of tumours of haematopoietic and lymphoid tissues 2008 (4/e)’, Department of Haematology, B.L. Kapur Memorial Hospital, New Delhi; 20 December 2008.
- ‘Peripheral blood examination in paediatric and neonatal age groups’, Nizam’s Institute of Medical Sciences, Hyderabad; 10 January 2009.
- Cytochemistry for leukemias. Nizam’s Institute of Medical Sciences, Hyderabad; January 2009.
- ‘Molecular genetics in Inherited bleeding disorders’, Indian Society of Human Genetics, Delhi; March 2009
- ‘All you need to know about HbA2’, XV National CME in Haematology, Bombay Hospital, Mumbai; 24–26 January 2009.
- ‘Serum transferrin receptors (sTfR) and sTfR-Ferritin index’. XV National CME in Haematology, Bombay Hospital, Mumbai 24–26 January 2009.

**Dr H.P. Pati**

- ‘How safe is blood after viral screening tests?’; 3rd Annual Conference of Orissa chapter meeting of Indian Society of Haematology and Transfusion Medicine, Cuttack; 13 April 2008
- ‘Bone marrow aspirate and biopsy in MDS’, 49th annual conference of ISHTM, pre-conference Workshop; Pondicherry; September 2008.
- ‘Laboratory diagnosis of acute leukemia’, Update on ALL, Calcutta Society of Haematology and Blood Transfusion. Kolkatta; 8–9 November 08
- ‘PRCA Aetiology and Pathology’, XV National CME in Haematology; Bombay Hospital, Mumbai; 3–6 January 2008.

Dr Seema Tyagi


Dr M. Mahapatra


• ‘Clinical approach to splenomegaly’, 47th Annual conference of Tata Main Hospital Clinical Society, Jamshedpur, 28–29 March 2009.

• ‘Diagnosis and management of hypoplastic anaemia: Indian Perspective’, 47th Annual conference of Tata Main Hospital Clinical Society, Jamshedpur; 28–29 March 2009.

Dr Tulika Seth


• ‘Bone marrow failure syndromes’, XV National CME in Haematology and Haemato-oncology, Bombay Hospital Institute of Medical sciences, Mumbai; 23–25 January 2009.

Dr Pravas Mishra


• ‘Will there be newer effective treatment in AML?’ XV National CME in Haematology; 25 January 2009.


• ‘Complications of AML management’, Calcutta society of Haematology, Calcutta Medical College; Kolkatta 8 February 2009.

• Presented AIIMS data on BMT, Indian bone marrow transplant registry meeting, Vellore; 4 April 2009.

• ‘Transplantation in Aplastic anaemia’, DSH meeting, Delhi; September 2009

National and International Conferences

Lectures delivered

Dr R. Saxena

• ‘Laboratory diagnosis of sickle cell disease’, IAPM Chennai December 2008.
• ‘Coagulation disorders—newer strategies in diagnosis’, Annual Meet of PHO, India Habitat Centre; New Delhi November 2008
• ‘Prenatal diagnosis of β-Thal by cord blood HPLC’, Thalassaemia Symposium III; National Thalassemia Welfare Society in association with Department of Paediatrics, LHMC and KSCH and Department of Haematology AIIMS, LHMC, New Delhi; August 2008.
• ‘Coagulation profile in polytrauma patients’, Trauma Conference, AIIMS; November 2008.

Dr H.P. Pati

• ‘PRCA: aetio-pathogenesis and diagnosis’, 49th annual conference of ISHTM, conference, at Pondicherry; September 2008

Dr M. Mahapatra

• Haemophilia: Issues in management. 64th Annual conference of Association of Physicians of India, Noida 29; January –1 February 2009.
• Leucocyte filters. Thalassaemia Symposium III National Thalassaemia Welfare Society in association with Department of Paediatrics, LHMC and KSCH and Department of Haematology, AIIMS; LHMC, New Delhi; August 2008.

Dr Tulika Seth

• ‘Bone marrow failure syndromes—case-based approach’, PHOCON 2008, 3rd National meet, India Habitat Centre, New Delhi; 8–9 November 2009.
• Panel discussion on bleeding and coagulation disorders in children. PHOCON 2008, 3rd National meet, India Habitat Centre, New Delhi; 8–9 November 2009.


– HO/19(O) Evaluation of Feasibility, Outcome and Complications of The First 20 Allogeneic Paediatric Haematopoietic Stem Cell Transplants From A Large Government Hospital.


– HO/22(O) Fanconi anemia: A clinical and genetic study of patients presenting with haematological manifestations.

RESEARCH

FundedProjects

Ongoing


Funded Research

Completed

1. Elucidation of molecular genetics of acute leukaemia. R. Saxena. Funded by ICMR (2005 onwards). Funds: Rs 5.5 lakh.


Departmental Projects

Completed

1. A study of the prevalence and type of anaemia in lymphoid malignancies

Ongoing

1. Effect of glucocorticoids on vWF levels and its correlation with vWF gene promoter polymorphism
2. Role of alpha thaslassaemia in pts with iron refractory microcytosis and normal HbA2
3. Role of FCM immunophenotyping in CLPD
5. Effect of modulating factors on Indian HbE patients (2006–2009)
10. Fanconi anemia molecular characterization
11. Iron deficiency anaemia: Prevalence of refractory IDA and response to iron in IDA.

14. Flow cytometric study of granulocyte and red cells in PNH

**Collaborative Projects**

**Completed**

1. Role of ART in HIV positive patients (with Medicine; )

2. Determination the prevalence of Clopidogrel Resistance in CAD and evaluation of the role of P2Y12 Gene Polymorphism in its pathogenesis (with Cardiology).

3. Development of new fluorescent biosensor for evaluation of Iron profiles in haematological disorders (with Department of Biomedical Engineering, IIT, Delhi; )

4. Evaluation of anaemia in patients with solid tumors (with Oncology; ).

**Ongoing**

1. Zinc as an immunomodulator in the treatment of possible serious bacterial infections in infants more than 7 days and up to 4 months of age (with Paediatrics)

2. Evaluation of platelet receptor polymorphism and thrombogenic mutation in patients with coronary artery disease (with Cardiology).

3. Prevalence of DVT/ Pulmonary embolism in critically ill medical patients (with Medicine).

**PUBLICATIONS**

**Publication in Journals including abstracts published in journals**


**Chapters in Books**


**Book**


**AWARDS AND HONOURS**

Dr R Saxena was awarded Life time achievement award in Haematology by Mumbai Hematology Group 2009; Distinguished career award at SASAT Conference 2008.

Dr H.P. PATI received Dr J.G. Parekh Oration, 49th annual Conference of India Society of Hematology and Transfusion Medicine, Pondicherry, September 2008.

Dr M. Mahapatra received JN Berry Award from Associations of Physicians of India (API), 63rd APICON-2008, Kochi, India;. Fellow , Indian College of Physicians (FICP).

Dr Pravas Mishra endeavour Executive Award. Department of Science and Technology, Australia, September.
Laboratory Investigations

The department has a well equipped haematology laboratory and conducted the following tests

Tests for anaemia

<table>
<thead>
<tr>
<th>Test</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPLC</td>
<td>1,714</td>
</tr>
<tr>
<td>Sickling</td>
<td>55</td>
</tr>
<tr>
<td>Hb electrophoresis</td>
<td>16</td>
</tr>
<tr>
<td>G6PD</td>
<td>1,015</td>
</tr>
<tr>
<td>S Iron</td>
<td>1,944</td>
</tr>
<tr>
<td>Coombs</td>
<td>518</td>
</tr>
<tr>
<td>CD55/CD59</td>
<td>252</td>
</tr>
<tr>
<td>PNH (Ham’s test)</td>
<td>48</td>
</tr>
<tr>
<td>Sucrose lysis</td>
<td>48</td>
</tr>
<tr>
<td>Plasma haemoglobin</td>
<td>156</td>
</tr>
<tr>
<td>Urine hemosiderin</td>
<td>179</td>
</tr>
<tr>
<td>Osmotic fragility/incubated osmotic fragility</td>
<td>274</td>
</tr>
<tr>
<td>Heinz bodies</td>
<td>11</td>
</tr>
<tr>
<td>Methemoglobin</td>
<td>01</td>
</tr>
<tr>
<td>Cold agglutinins</td>
<td>05</td>
</tr>
<tr>
<td>Cryoglobulins</td>
<td>01</td>
</tr>
<tr>
<td>Iron stain</td>
<td>257</td>
</tr>
<tr>
<td>Molecular tests for a thalasemia</td>
<td>35</td>
</tr>
</tbody>
</table>

Haemogram and biopsy

<table>
<thead>
<tr>
<th>Test</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Haemogram</td>
<td>34,347</td>
</tr>
<tr>
<td>Reticulocyte count</td>
<td>3,697</td>
</tr>
<tr>
<td>Bone marrow aspirate</td>
<td>2,257</td>
</tr>
<tr>
<td>Biopsy</td>
<td>1,728</td>
</tr>
<tr>
<td>Reticulin special stain</td>
<td>129</td>
</tr>
</tbody>
</table>
### Tests for Haemostasis

| Test                                | Price  
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Short screening coagulogram</td>
<td>5,800</td>
</tr>
<tr>
<td>Factor assay</td>
<td>695</td>
</tr>
<tr>
<td>Inhibitors screening</td>
<td>378</td>
</tr>
<tr>
<td>Factor inhibitors assay</td>
<td>13</td>
</tr>
<tr>
<td>INR</td>
<td>5,318</td>
</tr>
<tr>
<td>Lupus anticoagulant</td>
<td>2,540</td>
</tr>
<tr>
<td>Platelet Function Test</td>
<td>1,790</td>
</tr>
<tr>
<td>D. Dimer</td>
<td>1,460</td>
</tr>
<tr>
<td>Fibrinogen</td>
<td>780</td>
</tr>
<tr>
<td>Proglob C</td>
<td>750</td>
</tr>
<tr>
<td>Protein C</td>
<td>250</td>
</tr>
<tr>
<td>Protein S</td>
<td>250</td>
</tr>
<tr>
<td>APCR</td>
<td>300</td>
</tr>
<tr>
<td>AT-III</td>
<td>200</td>
</tr>
<tr>
<td>P2GP</td>
<td>450</td>
</tr>
<tr>
<td>S. Homocysteine</td>
<td>150</td>
</tr>
<tr>
<td>VWD</td>
<td>140</td>
</tr>
<tr>
<td>DNA Parental detection</td>
<td>14</td>
</tr>
<tr>
<td>DNA : Carrier detection</td>
<td>43</td>
</tr>
<tr>
<td>FV Leiden</td>
<td>60</td>
</tr>
<tr>
<td>MTHFR</td>
<td>35</td>
</tr>
<tr>
<td>P2010</td>
<td>26</td>
</tr>
<tr>
<td>Thalassaemia molecular test</td>
<td>35</td>
</tr>
</tbody>
</table>

### Tests for leukemia

| Test                                      | Price  
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Molecular studies for leukemias</td>
<td>506</td>
</tr>
<tr>
<td>(BCRABL, 315 mut, t15; 17,t8;21,Inv16,FIT3)</td>
<td></td>
</tr>
<tr>
<td>Cytochemistry</td>
<td>409</td>
</tr>
<tr>
<td>LAP</td>
<td>225</td>
</tr>
</tbody>
</table>
Flow cytometry

<table>
<thead>
<tr>
<th></th>
<th>Acute leuk</th>
<th>CML</th>
<th>CD34</th>
<th>PNH</th>
<th>CLL</th>
<th>GTT</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>75</td>
<td>3</td>
<td>19</td>
<td>22</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>2009</td>
<td>136</td>
<td>4</td>
<td>4</td>
<td>21</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>211</td>
<td>7</td>
<td>23</td>
<td>43</td>
<td>13</td>
<td>13</td>
</tr>
</tbody>
</table>

PATIENT CARE

Inpatient treatment

Increasing number of patients of leukemias, aplastic anemia, idiopathic thrombocytopenic purpura, lymphomas, myelodysplastic syndrome, haemophilia, multiple myeloma and various other haematological disorders have been treated by the haematology department as indoor patients. Twenty allogeneic transplants were performed successfully. The department also has a Daycare Centre for chemotherapy, procedures and blood product transfusions for haematological patients.

Inpatients census

General ward patients 547 (C2, Haematology ward and others)

Private ward patients 378

TOTAL 925

Haematology Daycare Centre

Census of April 2008 to March 2009 of Hematology Daycare Centre

<table>
<thead>
<tr>
<th>Month</th>
<th>Blood Transfusions</th>
<th>Bone Biopsy &amp; Bone Marrow Aspirates</th>
<th>Chemo therapy</th>
<th>IT</th>
<th>Others</th>
<th>Total Admission</th>
</tr>
</thead>
<tbody>
<tr>
<td>April</td>
<td>362</td>
<td>82</td>
<td>76</td>
<td>16</td>
<td>5</td>
<td>541</td>
</tr>
<tr>
<td>May</td>
<td>251</td>
<td>92</td>
<td>130</td>
<td>16</td>
<td>9</td>
<td>498</td>
</tr>
<tr>
<td>June</td>
<td>362</td>
<td>103</td>
<td>78</td>
<td>12</td>
<td>9</td>
<td>564</td>
</tr>
<tr>
<td>July</td>
<td>217</td>
<td>120</td>
<td>118</td>
<td>12</td>
<td>6</td>
<td>473</td>
</tr>
<tr>
<td>August</td>
<td>133</td>
<td>91</td>
<td>92</td>
<td>21</td>
<td>7</td>
<td>344</td>
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<tr>
<td>September</td>
<td>350</td>
<td>93</td>
<td>112</td>
<td>21</td>
<td>13</td>
<td>589</td>
</tr>
<tr>
<td>October</td>
<td>104</td>
<td>112</td>
<td>104</td>
<td>15</td>
<td>24</td>
<td>359</td>
</tr>
<tr>
<td>November</td>
<td>221</td>
<td>106</td>
<td>125</td>
<td>22</td>
<td>24</td>
<td>498</td>
</tr>
<tr>
<td>December</td>
<td>292</td>
<td>68</td>
<td>101</td>
<td>19</td>
<td>7</td>
<td>487</td>
</tr>
<tr>
<td>January</td>
<td>256</td>
<td>87</td>
<td>147</td>
<td>8</td>
<td>9</td>
<td>507</td>
</tr>
<tr>
<td>February</td>
<td>255</td>
<td>94</td>
<td>145</td>
<td>19</td>
<td>11</td>
<td>524</td>
</tr>
<tr>
<td>March</td>
<td>256</td>
<td>126</td>
<td>151</td>
<td>10</td>
<td>12</td>
<td>555</td>
</tr>
<tr>
<td>TOTAL</td>
<td>3059</td>
<td>1174</td>
<td>1379</td>
<td>191</td>
<td>136</td>
<td>5939</td>
</tr>
</tbody>
</table>
Clinical Apheresis Procedures

Single donor platelets (SDP) 870  
Peripheral blood stem cell (PBSC) collection 19  
Plasma pheresis 2

OPD

Out patient department runs on the third floor of the Amrit Kaur OPD block as per schedule below

Monday, Wednesday, Friday  
Regular Haematology 9.30 am to 6.00 pm

Monday  
Oncology Patients in Hematooncology clinic (HO)

Specialty Care Clinics

Hematopoietic Stem Cell Transplant clinic  
Tuesday morning

Haemostasis Clinic (HC)  
Thursday morning

Long Term Leukemia survivor Clinic  
Saturday morning.

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
<th>Total (H)</th>
<th>Special clinics</th>
<th>Grand total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>HO</td>
<td>HC</td>
</tr>
<tr>
<td>Old cases</td>
<td>9249</td>
<td>6166</td>
<td>15,415</td>
<td>6000</td>
<td>5000</td>
</tr>
<tr>
<td>New Cases</td>
<td>1829</td>
<td>929</td>
<td>2858</td>
<td>1320</td>
<td>660</td>
</tr>
</tbody>
</table>

External Haematology Proficiency Testing Programme

Dr R Saxena coordinated External Quality Assurance Programme in complete blood counts, red cell indices and peripheral blood smear in the Department of haematology along with Indian Society of Haematology and Transfusion Medicine. There were about 550 participating laboratories availing services of the programme. The EQAP programme was conducted on the basis of ISO-IEC guide-43 and WHO guidelines. All the specimens were prepared in the department and sent for analysis to the participating laboratories. The results were evaluated and communicated to the participating laboratories to take corrective steps in case the performance was out of acceptable range.

COMMUNITY SERVICES

The department of haematology provided consultative services to patients of thalassaemia, in coordination with National Thalassemia Welfare Society. Care to haemophilia was provided in coordination with Haemophilia Federation of India.

SIGNIFICANT EVENTS

Dr R. Saxena Member, Reach the World Forum of International society of Thrombosis and Haemostasis,. President Elect, Indian Society of Haematology and Transfusion Medicine 2008–2009; Member Secretary - Institution Ethics Committee, AIIMS since August 2008; Executive
Dr H. Pati was elected Honorary secretary of India Society of Haematology and Transfusion Medicine for 3 years (2008–2011).

Dr M. Mahapatra continued as an Executive member of Indian Society of Haematology and Transfusion Medicine (ISHTM); Organizing Secretary, golden jubilee conference of Indian Society of Haematology and Transfusion medicine (ISHTM); Fellow, University of British Columbia after completing one year Fellowship in Leukemia and Bone Marrow Transplant, Vancouver, Canada.
9.15 Hospital Administration

**Head**
Shakti Kumar Gupta
&
(Medical Superintendent, Dr R.P. Centre for Ophthalmic Sciences, AIIMS)
D.K. Sharma
(Medical Superintendent, AIIMS, Main Hospital)

**Additional Professor**
Sidhartha Satpathy
(BRA-IRCH and Main Hospital)

**Associate Professors**
I.B. Singh
(Main Hospital)
Sanjay Arya
(Main Hospital)
Aarti Vij
(ORBO, CT & NS Centre)

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**EDUCATION**

The Department of Hospital Administration is running a 2-year postgraduate programme for students in Hospital Administration. The present, MHA (Masters in Hospital Administration) course entered its 43rd year of inception; it was officially started in February 1966 for the first time in India and has since been recognized as a distinct post-graduate discipline by Medical Council of India. The Residency Programme in Hospital Administration focuses on ‘hands on’ training, where Resident Administrators man the ‘Control Room’ of the hospital, round the clock as ‘Duty Officers’, and coordinate all the hospital activities.

The Department introduced a paradigm shift in the Academic programme by launching Integrated Learning Modules for the residents of Department of Hospital Administration from 1st January, 2008. This includes lectures, discussions, problem-based learning, case studies, journal club, etc. from 8.00 am – 9 a.m., 12 noon – 1 p.m. and 4 pm – 5 pm everyday. Each faculty member is assigned ‘Moderator’ for a specific period. Various guest lectures were also organized in the Department.

The Department of Hospital Administration became 1st department in AIIMS hospital to be ISO certified, receiving the prestigious ISO 9001:2000 certification in the month of October, 2008.

Faculty members conducted several training programmes for the doctors working in various organizations including Central and State Governments, Paramilitary Forces and in various PSUs such as IICM, Ranchi and also private sector management institutes.

- Training was also imparted to two WHO fellows from Myanmar for a period of one month in March 2009.
- Fifteen Students of Health Sector Management Programme (HSMP) from Boston University School of Management, USA, a one day sensitization programme in January 2009.
- Twenty Medical Superintendents of Coal India Ltd., Ranchi in January 2009.
• One student from Deccan School of Management, Hyderabad for three months’ observership from September to November 2008.

• Four officers from Armed Forces Medical College, Pune, two weeks’ training in October 2008.

• Eleven students of MD (Community Health Administration/Diploma in Health Administration) from National Institute of Health and Family Welfare, New Delhi, two weeks’ training in October 2008.

• Two students of Symbiosis Institute of Health Sciences, Pune, two and half months’ training from May 2008 – July 2008.

CONTINUING MEDICAL EDUCATION

Conferences, seminars, workshops

• ‘Planning and designing of healthcare facilities with focus on safe hospitals and patient safety’. South Asian Conference and CME on ‘Synergy in Healthcare’. In collaboration with WHO and in association with The Indian Institute of Architects (NC) and The School of Planning and Architecture, New Delhi; November 2008.

• CME on ‘Laws applicable to hospitals’, AIIMS, New Delhi. In collaboration with Christian Medical Association of India, New Delhi; March 2009.

• Training Programme on ‘Hospital Administration’ for Medical Superintendents and GDMOs, of Coal India Ltd, Indian Institute of Coal Management, Ranchi.. January–February, 2009;


• Workshop on ‘Standardization of syllabus for PG course in hospital administration’, AIIMS; In collaboration with Medical Council of India and World Health Organization.


Lectures delivered

• ‘Value-based project management’, AIIMS; April 2008.

• ‘Mass casualty incident and triage’, AIIMS; August 2008.


• ‘Drivers of childhood obesity – Indian context’, AIIMS; January 2009.

• ‘Medical tourism – scope in India’, AIIMS; February 2009.

• ‘Role of Mumbai Railway Vikas Corporation’, in improving the sub-urban Railway System in Mumbai and improvement in the health of the travelling public—a case study; AIIMS; March 2009.

• ‘Earthquake risk mitigation for hospitals’, AIIMS; February 2008.

• Poster making, Collage making and Caricature drawing competition in the Annual festival of AIIMS, PULSE as a prelude to SASHCON-2008 on the theme ‘Planning and Designing of Healthcare Facilities with focus on Safe Hospitals and Patient Safety’; September 2008.

National and International Conferences

Dr Shakti Kumar Gupta


• ‘Challenges before Hospital Administrators vis-à-vis Changing Role of Hospitals’, 2nd Healthcare Executive Management Development Programme, Department of Hospital Administration in collaboration with WHO; 16 September 2008.

• ‘Leadership—a perspective’, 2nd Healthcare Executive Management Development Programme, Department of Hospital Administration in collaboration with WHO India office, Goa; 14 April 2008.

• ‘Public private partnership and outsourcing on 14th April, 2008 during Healthcare Executive Management Development Programme, Department of Hospital Administration in collaboration with WHO India office, Goa; 14 April 2008.

• ‘Public relations and media management’, 2nd Healthcare Executive Management Development Programme, Department of Hospital Administration in collaboration with WHO India office, Goa; 14 April 2008.


• ‘Inventory management’, 2nd Healthcare Executive Management Development Programme, Department of Hospital Administration in collaboration with WHO India office, Goa; 15 April 2008.

• ‘Principles and logistics of disaster management’, 2nd Healthcare Executive Management Development Programme, Department of Hospital Administration in collaboration with WHO India office, Goa; 15th April 2008.

Dr D.K. Sharma

• Actively involved in teaching and training hospital administration residents.
Delivered lectures in various training programmes/workshops organized by the department sponsored by Ministry of Health, HRD, personnel etc.

Invited by various govt. and public sector organizations and professional associations to deliver lectures on various topics in the specialty of Hospital Administration.

Dr Sidhartha Satpathy

‘Approaches to accreditation of hospitals’; 17 April 2008. Conduct half-day Organizational Behavior Workshop, 2nd HxMDP organized by Department in collaboration with WHO India Office, Goa; 18th April 2008.


‘Accreditation of railway hospitals’, Facility Management, Infection Control and Information Management System during sensitization programme for Chief Divisional Medical Officers of Indian Railways, Railway Staff College, Vadodara; 8–9 September 2008.


Various hospital administration topics and conducted organizational Behavior Lab during Special Training Programme on Hospital Management and Administration for Medical Superintendents, GDMO’s and non-specialists of Coal India, IICM; 6–8 January 2009 and 2–5 February 2009.


‘Medical records–a legal perspective’, ‘Laws applicable to hospitals’ and panelist for RTI Act during Panel Discussion, Board Room, AIIMS, organized by Department of Hospital Administration and Christian Medical Association of India; 21 March 2009.
- ‘Quality of sanitation hospital waste management and control of hospital infection’ and ‘Quality needs in store management, equipment audit’, contact-cum training programme for 7th Batch of Post Graduate Certificate Course in Quality Management & Accreditation of Health Care Organization at Academy of Hospital Administration; 27 March 2009.


- Panelist during National Workshop on ‘Standardization of syllabus for PG Course in Hospital Administration’, in collaboration with MCI and WHO-India, AIIMS; 18–19 October 2008.


**Dr Sanjay Arya**

- Various Hospital Administration topics during special training programme on ‘Hospital management and administration’, for Medical Superintendents, GDMOs and non-specialists of Coal India Ltd., IICM, Ranchi, January 2009.

- ‘Hospital Administration for MSc’ Nursing Students, RAK College.

- ‘Hospital evacuation plan’, National Institute of Disaster Management (Ministry of Home Affairs); 9 July 2008.

- Invited as Faculty to deliver lecture on ‘Patient safety’, Interns Orientation Programme, CMET, AIIMS.

- ‘Hospital disaster preparedness’, Heart Care Foundation; March 2008.

**Dr Aarti Vij**


- Chaired the Symposium on ‘Promotion of deceased organ donation’, Department of Renal Transplant Surgery, PGIMER, Chandigarh; 7 February 2009.


- ‘Organ donation’, 23rd National Eye Donation Fortnight, Dr R.P. Centre for Ophthalmic Sciences, AIIMS; 8 September 2008.

- ‘Organ retrieval banking organization’, MSc Nursing Students, AIIMS; 23 June 2008.

Conferences, Seminars, Workshops

Dr Shakti Kumar Gupta

- Chairman, South Asian Conference, ‘Synergy in healthcare (SASHCON), in collaboration with WHO and in association with The Indian Institute of Architects and The School of Planning and Architecture, New Delhi; 3–6 November 2008.


- Programme Director, Training Programme on ‘Hospital administration’ for Medical Superintendents, GDMOs, and non-specialists of Coal India Ltd., Indian Institute of Coal Management, Ranchi, Department of Hospital Administration, AIIMS; January–February 2009.

- Chairman, ‘Legal and ethical issues in medical practices’, Department of Hospital Administration, AIIMS; 30 April 2008.

- Chairman, ‘Laws applicable to hospitals’, Department of Hospital Administration, AIIMS in collaboration with Christian Medical Association, New Delhi; AIIMS, New Delhi; March 2009.

- Chairman, National workshop on ‘Standardization of Syllabus for PG Course in Hospital Administration’, Department of Hospital Administration, AIIMS in collaboration with Medical Council of India and World Health Organization, AIIMS, New Delhi; 18–19 October 2008.

Dr D.K. Sharma


Dr Sidhartha Satpathy

- Programme co-coordinator, training programme on Hospital Management and Administration for Medical Superintendents, GDMOs and non-specialists of Coal India at IICM and CME on Clinical issues during field visit to AIIMS; January 2009.

Dr Sanjay Kumar Arya


- Chief Organising Secretary, SASHCON 2008, AIIMS; 3–6 November 2008.


- Facilitated District Communication Strategy Workshop under the programme MIC, Shri Chatrapati Sahuji Medical University, Lucknow; 27 February 2009.

- Facilitated District Communication Strategy Workshop, Darbhanga Medical College; 22 March 2009.

**Dr Aarti Vij**


- Attended SASHCON organized, Department of Hospital Administration, AIIMS; 3–6 November 2008.


- ‘Organ donation’, 23rd National Eye Donation Fortnight, Dr R.P. Centre for Ophthalmic Sciences, AIIMS; 8 September 2008.


- ‘Organ retrieval banking organization’, MSc Nursing Students of AIIMS; 23 June 2008.

**RESEARCH**

**Departmental Projects**

**Completed**

1. Study the awareness among doctors and nurses regarding pharmacovigilance, extent of adverse drug reaction reporting and evaluate the impact of various interventions to determine the most suitable method

2. Cost analysis of robotic urologic procedures in AIIMS

3. Cost analysis of minimal invasive surgical procedures in the department of surgery, at AIIMS

4. Determining the cost of training undergraduate medical (MBBS) students at AIIMS

5. A Cost analysis study of in-patient care services at AIIMS
6. Study the level of satisfaction amongst the employees of AIIMS
7. To study economics of Health Care Associated Infection (HAI) in operated surgical cases in AIIMS

**Ongoing**

1. To study System of Empanelment of private hospitals on CGHS panel
2. Costing of Neuro-Surgery ICU
3. Cost Analysis of Bone Marrow Transplant (allogenic)
4. Costing of Bio-medical Waste Management system
5. Costing of Renal Transplant
6. A comparative study of Operation Theatre disinfection and sterilization practices in selected hospitals in Delhi
7. A study to evaluate the Trauma Care System for Delhi Metropolis
8. A study to evaluate competencies of Indian Healthcare Leaders
9. A study of Process of outsourcing of services in selected hospitals of Delhi
10. Study of Inpatient Medical Records of AIIMS as a prerequisite for Accreditation

**PUBLICATIONS**

**Journals**

2. Pathni RK, Satpathy S, Kailash S. Need for tele follow-up: A study at a public sector Quaternary referral hospital in India (Manuscript ID: JTT-08-12-006.R1) accepted for publication in *Journal of Tele medicine and Tele care* (in press).

**PATIENT CARE**

The Department of Hospital Administrationis closely associated with the provision of administrative support to various departments for delivery of patient care and control of costs in the hospital services. The department has been responsible for bringing quality care standards in patient care services.
As per the need for efficient functioning of the patient care areas various renovations and upgradation have been planned and commissioned in the main hospital. An advanced, new laundry is also being added.

**C.N. Centre**

- OPD Computerization
- Renovation of NS-3 & NS-6 Wards with state-of-the-art facilities
- Renovation of NS ICUB (in process)
- Patient Safety Initiative: Initiated patient safety programme at C.T. Centre. Following have been implemented in phase-I; (a) Conformity to Patient’s identification Bands for all admissions (b) Incident Reporting (c) Implementation of Surgical Safety Check List (d) Patient falls report and (e) Bed sores.
- Bio Medical Waste Management: An initiative to streamline bio medical waste management process and monitoring has started in C.N. Centre. Co-ordination for VVIP care at C.N. Centre
- Part Time Social Guides: 34 number of social guides have been recruited and deployed in the C.N. Centre for the patient care including Medical Record Section, N.S. Centre, Medical Record Section, C.T. Centre, May I Help you counter, C.N. Centre OPD, Blood Bank, C.N. Centre, MSSO Room, CTC & N.S. Centre, patient transfer, assistance to physically challenged and senior citizens at C.N. Centre.

**Organ Retrieval Banking Organization (ORBO)**

- Organ Retrieval Banking Organization (ORBO) coordinated Organ and Tissue donations and transplantation. Twelve whole bodies were also donated through ORBO. 1546 persons pledged for organ donation on motivation of ORBO. Awareness programmes with various NGOs, Schools, and Colleges etc were conducted. Collaboration with Dadhichi Deh Dan Samiti with ORBO to promote the noble cause of organ and tissue donation. Training was imparted to Grief counsellors. Orientation Programme on Organ Donation and Transplant Coordination was imparted to MSc Nursing students.
- Second Pancreas and kidney combined transplantation in the country was successfully coordinated; on 24th November 2008.

**AWARDS AND HONOURS**

**Dr Shakti Kumar Gupta** was appointed as Inspector to carry out the physical and other teaching facilities available at Narayana Medical College, Nellore for starting MD (Hospital Administration) course under NTR University of Health Sciences, Vijaywada, February 2009; Member; Institutional Advisory Authority (IAA); B.P. Koirala Institute of Health Sciences (BPKIHS), January 2009; Member; expert team for setting up Medical College in Thimpu, Bhutan by Ministry of External Affairs, Government of India, December 2008; Expert in Academic Programmes and Course Curriculum on Health Care Engineering, DCR University of Science and Technology, Haryana, December 2008; Consultant, WHO, Development of Training Module on Hospital Management.
Training, Kathmandu, Nepal, 16–24 November 2008; Appointed Honorary Consultant, Hospital Projects/Equipment Planning and Procurement for Government Medical College and Associated Hospitals, Jammu, Health and Medical Education Department, Chief Secretariat, Srinagar, Government of J&K, October 2008; Member; Expert Committee Meeting for preparation of the modules on Patient Safety and Infection Control (PSIC); Indira Gandhi National Open University, New Delhi October, 2008; Member; Expert Group for developing a model Hospital Disaster Management Plan Template for Delhi region by National Institute of Disaster Management, IP Estate, New Delhi September, 2008; External Examiner, MD (Medical Administration) Part-II Examination, Post Graduate Institute of Medicine, University of Colombo, Srilanka, May 2008; Resource Person for the Multi-Hazard HOPE Course Development–Course Finalisation workshop, April, 2008, National Society for Earthquake Technology- Kathmandu, Nepal; Nominated as a Member of the Academic Council of Jammu University for the triennial period (2006 – 2009) vide Notification no. 08/January/Gen/03 by University of Jammu; Appointed as an Honorary Resource Guest faculty for the training on Professional Development Course for the district level senior medical officer of Punjab by State Institute of Health and Family Welfare, Government of Punjab.

Dr D.K. Sharma served as Chairman/Member of various intra- as well as extra mural policy making and decision making committees of AIIMS as well as other organizations including Ministry of Health and Family Welfare, Central Pollution Control Board, Government of NCT of Delhi, etc; was invited as Chief Guest/ Guest of Honour/ Guest faculty etc. in various National and International symposia, workshops and conferences; nominated as Chairman/Principal Member of various Committees of Bureau of Indian Standards (BIS), India on hospital planning, medical equipments, surgical instruments, disposables and dressings

Dr Sidhartha Satpathy was appointed Editor of Journal of Academy of Hospital Administration (JAHA); Member of Technical Committee, National Accreditation Board for Hospitals & Healthcare providers (NABH), under aegis of Quality Council of India (QCI). Conducted pre and final assessment of various applicant hospitals for NABH accreditation; and finalized the NABH guide book (2nd ed); Member of Bureau of Indian Standards (MHR-14) involved in preparation/review of Indian Standards on Health Care Facilities. Completed review and re-drafting of Standards on ‘Matrix of Services for Hospitals’; Expert member of National Accreditation Board for Certification Bodies (NABCB) under aegis of QCI; Expert member of National Accreditation Board for Personnel & Training (NRBPT) under aegis of QCI. Conducted office assessment of several organizations to determine compliance with prescribed standards; External examiner for M.D. (Medical Administration) at Postgraduate Institute of Medicine (PGIM), University of Colombo, 12–17 May 2008 and 15–20 February 2009; Member of Technical Committee for evaluation of Master Plan/Block Plans of six AIIMS like Institutions under PMSSY, Ministry of Health & Family Welfare, Government of India; External Examiner for Postgraduate Certificate Course in Hospital Management for 13th Batch at National Institute of Health and Family Welfare, 31 July – 4 August 2008; Member of Technical Committee to examine Detailed Project Report (DPR) for construction of medical college and hospital complex at 6 AIIMS like institutions under PMSSY, Ministry of Health and Family Welfare, Government of India; Member of ‘Task force on public private partnership in health care’, by Federation of Indian Chambers of Commerce and Industry (FICCI); Member of Sectional Committee on Bio-medical Waste Management (MHD-22) at Bureau of Indian Standards (BIS).
Dr I.B. Singh was selected as Appraiser by the National Board of Examination, New Delhi for the subject Health Administration including Hospital Administration at the Indian Spinal Injuries Centre, New Delhi vide letter no. NBE/Appraisal-Jan to June 2008/2008/3518-4818, dt. June, 2008; elected as a Member of the National Academy of Medical Sciences (India) vide letter no. 30(4)/208/NAMS/8919 dt. 19 August 2008; elected Fellow of the International Medical Sciences Academy in recognition of his outstanding contribution for the advancement of medical sciences on 11 September 2008;

Dr Sanjay Kumar Arya visit to Gorakhpur as a part of Central Team of Senior Specialists constituted by O/o D.G.H.S., Ministry of Health and Family Welfare; 13–16 May 2008; Participated as an expert in the technical evaluation of Medical Equipments for cardiology, internal medicine, general medicine, trauma and emergency department. under PMSSY scheme of Ministry of Health and Family Welfare, Noida Hindustan Latex Limited, Procurement & Consultancy Division, 17 July 2008; invited as an external expert in the Technical Evaluation for purchase of equipment PGIMER, Chandigarh; 10 September 2008 visited Tata Memorial Hospital, Mumbai as a part of delegation nominated by Director, AIIMS to study the working at Tata Memorial Hospital, October 2008; invited for evaluation of theory answer sheets in the specialty of Health Administration and Hospital Administration at National Board of Examinations, Dwarka Office, New Delhi, 29 January, 2009; nominated as Inspector of National Board of Examination for Accreditation of Government. Medical College, Chandigarh for DNB in Health & Hospital Administration, 12–14 February 2009.

Dr Aarti Vij conferred with Young Women Achievers Award by FICCI Federation House, Tansen Marg, New Delhi for the contribution in medical profession by Mrs. Renuka Chowdhury, Hon’ble Minister for Women and Child Development, 23 April 2008; Letter of Appreciation from Shri Man Mohan Singh, Hon’ble Prime Minister of India for effective co-ordination and efficient management of the Medical Care Services at C.N. Centre; Letter of appreciation from Prof. A. Sampath Kumar, Chief Cardio Thoracic Centre for providing the best medical care (administrative and Management) to VVIP Care at C.N. Centre; selected as Member of National Human Rights Commission to inspect the hospitals of Delhi; Chief Guest in the 19th Organ Donation Festival organized by Dadhichi Deh Dan Samiti, 8 June 2008.

VISITING SCIENTIST

1. Dr Gado Tshering, Health Secretary, Ministry of Health, Royal Government of Bhutan; March 2009.
2. Mr P.C. Sehgal, M.D., Mumbai Railway Vikas Corporation, Mumbai; March 2009.
3. Dr Reinhard Huss, Nuffield Centre for International Health and Development, University of Leeds; March 2009.
4. Professor J.K. Das, Head, Medical Care and Hospital Administration, NIHFW, New Delhi, AIIMS; February 2009.
5. Mr Lyonpo Zangley Dulyak, Minister of Health, Royal Government of Bhutan; February 2009
7. Dr. Paul Chang, Managing Director, Asia Pacific Joint Commission International, Singapore; September 2008

8. Professor Suresh S. David, CMC, Vellore; August 2008


14. Professor Raymond J. Fabius, Board of Directors Member, American College of Physician Executives.
9.16 Laboratory Medicine

<table>
<thead>
<tr>
<th>Professor &amp; Head</th>
<th>A.K. Mukhopadhyay</th>
</tr>
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<tbody>
<tr>
<td>Professor</td>
<td>M. Irshad</td>
</tr>
<tr>
<td>Additional Professor</td>
<td>Sarman Singh</td>
</tr>
<tr>
<td>Associate Professor</td>
<td>Subhadra Sharma</td>
</tr>
<tr>
<td>Assistant Professors</td>
<td>(Trauma Centre)</td>
</tr>
<tr>
<td>Purva Mathur</td>
<td>S. Arulselvi</td>
</tr>
<tr>
<td>A.K. Srivastava S-IV</td>
<td>Vandita Vasudev S-III</td>
</tr>
</tbody>
</table>

**EDUCATION**

**Short-term training**

Fifteen trainees — 3 from CCS University, Meerut; 1 from I.P. College, Bulandshar, U.P.; 1 from L.N. Mithila University, Darbhanga; 1 from Bundelkhand University, Jhansi; 1 from Allahabad Agricultural Institute (Deemed University); 1 from Lovely Professional University, Jalandhar; 1 from B. R. Ambedkar University, Agra; 1 from Jamia Hamdard, New Delhi; 1 from Punjab Technical University, Jalandhar and 4 foreign students from DPR Korea (Ministry of Health and Family, Government of India) underwent short term training in Laboratory Medicine. From this year, 50 students of BSc (Hons) Nursing from the College of Nursing, AIIMS were trained in phlebotomy and laboratory services.

**National and International conference**

**Lectures delivered**

**Dr A.K. Mukhopadhyay**

• ‘Integral model of science’, Academic Staff College, JNU Special Winter School on Frontier of Humanities; 09 January 2009.

• ‘Local and non-local Science’, Academic Staff College, JNU, Special Winter School on Frontier of Humanities; 12 January 2009.

• ‘Individuation’, Academic Staff College, JNU Special Winter School on Frontier of Humanities; 13 January 2009.

Dr M. Irshad

• ‘Laboratory exposure to Interns’, AIIMS; 7 February 2009.

Dr Sarman Singh

• ‘Research ethics in animal studies’, Central Council for Research in Unani Medicine, Delhi; 3 June 2008.

• ‘Immunology’, Boston College, Gwalior; 13 June 2008.


• Key note lecture on ‘Microscope to microarray’, XIX National Congress of Veterinary Parasitology, Ludhiana; 3 February 2009.

• ‘CNS HIV infections’, Central India Institute of Medical Sciences, Nagpur; 8 February 2009.

• ‘immunodiagnostics for infectious diseases’, Mahatma Gandhi Institute of Medical Sciences, Wardha; 13–14 February 2009.


Conference attended

Dr M. Irshad

- as a delegate in the CME on Legal and Ethical Issues in Medical Practice, AIIMS; 30 April 2008.

RESEARCH

Funded projects

Completed

3. Prevalence and significance of transfusion transmitted virus (TTV) and association of lipoprotein (a) with apoprotein A and B in various forms of liver diseases. M. Irshad. Funded by ICMR (2005–08).

Ongoing


11. The role of TNF-TNFα, TNFα and the success of anti-tuberculat therapy in Immune Restoration Disease in HIV/MTB co-infected patients responding to ART. Sarman Singh Funded by Australia-India Council for 3 years (2006–2009).


Departmental Projects


2. Role of Interleukin-1, 6 and 10 and TNF-a in Acute Pancreatitis

3. Preparation and characterization of VI-Polysaccharide-Protein conjugate for immunization against Salmonellae

4. HCV genotypes and its relation with liver diseases

5. Epidemiology of viral hepatitis in Indian communities

6. To assess the impact of viral hepatitis on steatosis of liver

7. Role of TTV infection in liver and renal diseases

8. Epidemiological studies on CRF in Indian Communities

9. Cloning, sequencing and expression of TTV related polypeptides

10. Genotyping of TTV in Indian population

11. Effect of HCV core expression on oxidative status

12. Comparative evaluation of various PCR primers for the rapid and sensitive diagnosis of tuberculosis
13. Standardization and evaluation of Multiplex PCR for the species specific diagnosis of various Mycobacterial infections
14. To study the prevalence of ESBL of urinary pathogens using disk diffusion method and e-Test.
15. To study the immune response in acute Toxoplasmosis using Western Blot Method.
16. Comparative evaluation of Smear, LJ Culture, MGIT-960 Bactec Culture and Bacteriophage tests for the diagnosis of Tuberculosis
17. Comparative evaluation of various TORCH test kits
18. Blood borne infections after needle prick injury in Health Care workers of AIIMS
19. *Toxoplasma gondii* IgG avidity assays in pregnant women attending AIIMS
20. Sequence based diagnosis of Mycobacterial isolates from HIV positive and HIV negative patients
21. Nested polymerase chain reaction for the diagnosis of congenital CMV infection
22. Opportunistic infections in AIDS patients attending AIIMS

**Collaborative Projects**

1. Transmission rate of HBV and HCV in family members of dually infected patient (with Gastroenterology)
2. Hepatitis B viral load monitoring in patients undergoing Anti-HBV therapy using Quantitative Real-Time PCR (with Gastroenterology)
3. Prevalence and treatment response of coccidian parasitic infections in HIV positive patients at AIIMS (with Medicine)
4. To study reintroduction of anti-tuberculosis drugs and risk factors for anti-tuberculosis treatment induced hepatotoxicity (with Medicine)
5. Study of Mycobacteremia in Patients with milliary and extrapulmonary tuberculosis (with Medicine)

**PUBLICATIONS**


Chapter in Books


PATIENT CARE

Total tests performed: 69,76,788

Centralized collection centres

*Blood Collection*

<table>
<thead>
<tr>
<th>For department</th>
<th>No. of Specimen</th>
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<tr>
<td>Laboratory Medicine</td>
<td>1,54,365</td>
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<tr>
<td>Blood Bank</td>
<td>3,298</td>
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<tr>
<td>Microbiology</td>
<td>18,433</td>
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<tr>
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(Samples collected from other clinics)

Total 2,00,463

*Emergency Laboratory Service (Round-the-clock)*

*Critical Care Laboratory*

*Clinical Biochemistry*

*Haemogram and Body Fluids*

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<td>Hb</td>
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<tr>
<td>Bilirubin (T)</td>
<td>41,965</td>
<td>TLC</td>
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<tr>
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<td>5,764</td>
<td>Platelets</td>
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<tr>
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<tr>
<td>Glucose</td>
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<td>MP</td>
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<td>Urea</td>
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<td>CSF</td>
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<tr>
<td>Sodium</td>
<td>91,128</td>
<td>Urine</td>
<td>1,228</td>
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<tr>
<td>Potassium</td>
<td>91,128</td>
<td>Microbiology blood culture</td>
<td>6,319</td>
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<tr>
<td>Cl.</td>
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<td>Microbiology CSF</td>
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Calcium 18,773  
T. Ca 18,773  
PpH 18,773  
CSF (Protein) 5,475  
ABG 6,482  

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<tr>
<td>Stool Hanging Drop</td>
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<tr>
<td>MCV</td>
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<td>MCH</td>
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<td>PCV</td>
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<tr>
<td>RBC</td>
<td>93,794</td>
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<tr>
<td>Others*</td>
<td>14,358</td>
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</tbody>
</table>

**Total** 4,64,639  
**GRAND TOTAL** 12,77,893

* Repeat test, trial test, quality control sample, internal Q.C. etc.

**Note:**  Arterial blood gas (ABG) includes, pH, pCO₂, pO₂, BE, BEecf, BB, HCO₃, st. HCO₃, TCO₂, st. pH, CH⁺, O₂ saturation, A-aDO₂, RQ, dBE/dTHb, all measured as a single test within the same time frame.

Hb, TLC, MCV, MCHC, PCV, RBC are measured by single reagent, within the same time frame

**Clinical Biochemistry**

**Routine investigations**

<table>
<thead>
<tr>
<th>Test</th>
<th>Blood</th>
<th>Urine</th>
<th>Fluid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sugar</td>
<td>1,04,629</td>
<td>7,345</td>
<td>3,058</td>
</tr>
<tr>
<td>Urea</td>
<td>2,10,494</td>
<td>350</td>
<td>3,057</td>
</tr>
<tr>
<td>T. Protein</td>
<td>1,95,285</td>
<td>–</td>
<td>3,058</td>
</tr>
<tr>
<td>Albumin</td>
<td>1,95,285</td>
<td>–</td>
<td>3,058</td>
</tr>
<tr>
<td>24h Albumin</td>
<td>–</td>
<td>7,707</td>
<td>–</td>
</tr>
<tr>
<td>Bilirubin</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Total</td>
<td>1,99,142</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>-Conjugated</td>
<td>1,99,142</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Alk. Phosphatase</td>
<td>2,06,755</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Cholesterol</td>
<td>54,306</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Na</td>
<td>1,73,911</td>
<td>4,875</td>
<td>–</td>
</tr>
<tr>
<td>K</td>
<td>1,73,911</td>
<td>4,875</td>
<td>–</td>
</tr>
<tr>
<td>Calcium</td>
<td>1,39,148</td>
<td>6,596</td>
<td>–</td>
</tr>
<tr>
<td>Phosphate</td>
<td>1,28,763</td>
<td>5,280</td>
<td>–</td>
</tr>
<tr>
<td>Uric Acid</td>
<td>1,33,314</td>
<td>4,360</td>
<td>–</td>
</tr>
</tbody>
</table>
Amylase       –    – –
Creatinine       2,08,198        10,297    –
SGOT                    2,11,934 –    –
SGPT                    2,11,934 –    –
ABG                        5,895
pCO$_2$                   5,895 –    –
pH                        5,895 –    –
pO$_2$                    5,895 –    –
HCO$_3$                   5,895 –    –
CO$_2$                    5,895 –    –
A-aDO$_2$                 5,895 –    –
O$_2$saturation           5,895 –    –
BE                        5,895 –    –
Total               27,99,206 51,685 12,231

Other Investigations
(done by Dr M. Irshad, on request, not as routine service)

<table>
<thead>
<tr>
<th>Test</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCV- RNA</td>
<td>300</td>
</tr>
<tr>
<td>TTV-DNA</td>
<td>500</td>
</tr>
<tr>
<td>Superoxide dismutase</td>
<td>150</td>
</tr>
<tr>
<td>Total Antioxidant</td>
<td>150</td>
</tr>
<tr>
<td>Apoprotein A</td>
<td>200</td>
</tr>
<tr>
<td>Apoprotein B</td>
<td>200</td>
</tr>
<tr>
<td>Lp(a)</td>
<td>200</td>
</tr>
<tr>
<td>CK</td>
<td>50</td>
</tr>
<tr>
<td>LDH</td>
<td>50</td>
</tr>
<tr>
<td>GGT</td>
<td>–</td>
</tr>
<tr>
<td>TG</td>
<td>100</td>
</tr>
<tr>
<td>LDLC</td>
<td>100</td>
</tr>
<tr>
<td>HDLC</td>
<td>100</td>
</tr>
<tr>
<td>Light chains (k/lambda)</td>
<td>600</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>2,700</strong></td>
</tr>
<tr>
<td><strong>GRAND TOTAL</strong></td>
<td><strong>28,65,822</strong></td>
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</tbody>
</table>
Service from room no. 18 (under HoD).

Adenosine Deaminase Assay (ADA)  

TOTAL  

**Haematology Section**

<table>
<thead>
<tr>
<th>Test</th>
<th>OPD</th>
<th>Ward</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hb</td>
<td>82,288</td>
<td>68,574</td>
</tr>
<tr>
<td>TLC</td>
<td>82,288</td>
<td>68,574</td>
</tr>
<tr>
<td>PCV</td>
<td>82,288</td>
<td>68,574</td>
</tr>
<tr>
<td>DLC</td>
<td>78,145</td>
<td>68,574</td>
</tr>
<tr>
<td>ESR</td>
<td>78,252</td>
<td>40,800</td>
</tr>
<tr>
<td>D/M</td>
<td>78,310</td>
<td>68,574</td>
</tr>
<tr>
<td>PLT</td>
<td>82,288</td>
<td>68,574</td>
</tr>
<tr>
<td>Retic Count</td>
<td>12,312</td>
<td>9,155</td>
</tr>
<tr>
<td>ABS Count</td>
<td>34,141</td>
<td>11,229</td>
</tr>
<tr>
<td>Malarial Parasite</td>
<td>51,588</td>
<td>5,637</td>
</tr>
<tr>
<td>Thick Smear</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MCV</td>
<td>82,288</td>
<td>68,574</td>
</tr>
<tr>
<td>MCH</td>
<td>82,288</td>
<td>68,574</td>
</tr>
<tr>
<td>MCHC</td>
<td>82,288</td>
<td>68,574</td>
</tr>
<tr>
<td>RBC</td>
<td>82,288</td>
<td>68,574</td>
</tr>
<tr>
<td>BT</td>
<td>1,229</td>
<td></td>
</tr>
<tr>
<td>CT</td>
<td>1,229</td>
<td></td>
</tr>
<tr>
<td>PT</td>
<td>7,504</td>
<td>9,800</td>
</tr>
<tr>
<td>B/C</td>
<td>1,348</td>
<td>1,121</td>
</tr>
<tr>
<td>Others*</td>
<td>14,521</td>
<td>11,550</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>10,16,883</td>
<td>7,75,032</td>
</tr>
<tr>
<td><strong>GRAND TOTAL</strong></td>
<td>17,91,915</td>
<td></td>
</tr>
</tbody>
</table>

* Repeat test, trial test, Quality Control Sample, Internal QC etc.
**Note:** Hb, TLC, PCV, DLC, Platelet, MCV, MCHC, RBC are measured by single reagent, within the same time frame

**Microbiology Section**

**Routine Investigations**

**A. Urine**

<table>
<thead>
<tr>
<th>Name of the Test</th>
<th>OPD</th>
<th>Ward</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical board</td>
<td>14,210</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Routine</td>
<td>1,16,306</td>
<td>49,172</td>
<td></td>
</tr>
<tr>
<td>Microscopic</td>
<td>1,74,459</td>
<td>73,758</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>58,153</td>
<td>24,586</td>
<td></td>
</tr>
<tr>
<td>Specific gravity</td>
<td>58,153</td>
<td>24,586</td>
<td></td>
</tr>
<tr>
<td>Acetone</td>
<td>58,153</td>
<td>24,586</td>
<td></td>
</tr>
<tr>
<td>Bile pigment/salt</td>
<td>58,153</td>
<td>24,586</td>
<td></td>
</tr>
<tr>
<td>Urobilinogen</td>
<td>58,153</td>
<td>24,586</td>
<td></td>
</tr>
<tr>
<td>Blood</td>
<td>58,153</td>
<td>24,586</td>
<td></td>
</tr>
<tr>
<td>Bence Jones protein</td>
<td>484</td>
<td>280</td>
<td></td>
</tr>
<tr>
<td>Chyluria</td>
<td>313</td>
<td>195</td>
<td></td>
</tr>
<tr>
<td>Porphobilinogen</td>
<td>84</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>Myoglobinuria</td>
<td>6</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Microalbumin</td>
<td>20</td>
<td>–</td>
<td>20</td>
</tr>
<tr>
<td>Urine cultures</td>
<td>13,905</td>
<td>–</td>
<td>13,905</td>
</tr>
<tr>
<td>Strain identifications tests</td>
<td>10,610</td>
<td>–</td>
<td>10,610</td>
</tr>
<tr>
<td>Antibiotic sensitivity</td>
<td>2,246</td>
<td>–</td>
<td>2,246</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>3,96,386</td>
<td>2,70,965</td>
<td>6,81,561</td>
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</table>

**B. Faecal investigations**

<table>
<thead>
<tr>
<th>Name of the Test</th>
<th>OPD</th>
<th>Ward</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wet mount- saline</td>
<td>9,878</td>
<td>2,554</td>
<td></td>
</tr>
<tr>
<td>Wet iodine stain</td>
<td>9,878</td>
<td>2,554</td>
<td></td>
</tr>
<tr>
<td>Occult blood in stool</td>
<td>4,290</td>
<td>1,030</td>
<td></td>
</tr>
<tr>
<td>Fat globules</td>
<td>316</td>
<td>246</td>
<td></td>
</tr>
<tr>
<td>Special stains for stool Z-N stain, Modified Z-N stain, Trichrome and chrmotrope</td>
<td>2,916</td>
<td>1,696</td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>19,198</td>
<td>8,080</td>
<td>27,278</td>
</tr>
</tbody>
</table>
### C. Semen investigations

<table>
<thead>
<tr>
<th>Test</th>
<th>Material</th>
<th>Result</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Routine</td>
<td></td>
<td>11,880</td>
<td></td>
</tr>
<tr>
<td>Morphology</td>
<td></td>
<td>3,329</td>
<td></td>
</tr>
<tr>
<td>Fructose</td>
<td></td>
<td>631</td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td><strong>15,840</strong></td>
<td><strong>15,840</strong></td>
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</tbody>
</table>

### D. Sputum investigations

<table>
<thead>
<tr>
<th>Test</th>
<th>Material</th>
<th>Result</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z-N Staining for AFB</td>
<td>12873</td>
<td>4068</td>
<td>16941</td>
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</table>

### E. Sputum investigations

<table>
<thead>
<tr>
<th>Test</th>
<th>Material</th>
<th>Result</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z-N Staining for AFB</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concentration/decontami-nation</td>
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<td></td>
</tr>
<tr>
<td>AR Staining</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LJ Culture and subculture</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BACTEC culture</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drug Sensitivity by MGIT 960</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>DST by Agar proportional</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DST by Tetrazolium Microplate assay</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Mycobacterial strains maintained</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Non tubercular mycobacterium isolate maintained</td>
<td></td>
<td></td>
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<tr>
<td>Biochemical tests for culture identification</td>
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</tr>
<tr>
<td>MB BACT Blood Culture for TB</td>
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<tr>
<td>Culture cryo preserved</td>
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<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td><strong>22,804</strong></td>
<td><strong>22,804</strong></td>
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</table>

**Total A**  

<table>
<thead>
<tr>
<th>Material</th>
<th>Result</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><strong>7,64,424</strong></td>
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### Specialized investigations
## Serology and Molecular Biology

<table>
<thead>
<tr>
<th>Name of the tests</th>
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</thead>
<tbody>
<tr>
<td><strong>TORCH</strong></td>
<td>14,601</td>
</tr>
<tr>
<td>Toxoplasma gondii IgG</td>
<td>1,054</td>
</tr>
<tr>
<td>Toxoplasma gondii IgM</td>
<td>1,280</td>
</tr>
<tr>
<td>Rubella IgG</td>
<td>1,220</td>
</tr>
<tr>
<td>Rubella IgM</td>
<td>1,384</td>
</tr>
<tr>
<td>Cytomegalovirus IgG</td>
<td>1,970</td>
</tr>
<tr>
<td>Cytomegalovirus IgM</td>
<td>2,240</td>
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<tr>
<td>Herpes Simplex virus IgG</td>
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</tr>
<tr>
<td>Herpes Simplex virus 2 IgG</td>
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<tr>
<td>Herpes Simplex virus (1+2) IgM</td>
<td>1,385</td>
</tr>
<tr>
<td>Toxoplasma gondii IgG avidity</td>
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</tr>
<tr>
<td>Rubella IgG avidity</td>
<td>535</td>
</tr>
<tr>
<td>Cytomegalovirus IgG avidity</td>
<td>292</td>
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<tr>
<td>Parvo virus B19 IgG</td>
<td>263</td>
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<tr>
<td>Parvo virus B19 IgM</td>
<td>263</td>
</tr>
<tr>
<td><strong>Viral Markers and HIV</strong></td>
<td>50,190</td>
</tr>
<tr>
<td>Anti HAV IgM</td>
<td>1,622</td>
</tr>
<tr>
<td>HBs Ag</td>
<td>16,526</td>
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<tr>
<td>Anti HBcIgM</td>
<td>894</td>
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<tr>
<td>HBe Ag</td>
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<tr>
<td>Anti HBe</td>
<td>890</td>
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<tr>
<td>Anti HBs</td>
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<tr>
<td>Anti HCV antibody</td>
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<td>HEV IgM</td>
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<td>Toxo DAT</td>
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<tr>
<td>HIV (1+2) ELISA</td>
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<tr>
<td>Test</td>
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<td>----------------------------------</td>
<td>------</td>
</tr>
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<td>HIV Spot Test</td>
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<tr>
<td>HIV Westernblot</td>
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</tr>
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<td>HBs Ag (spot)</td>
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</tr>
<tr>
<td><strong>Others Serology</strong></td>
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<tr>
<td>Measles IgG</td>
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<td>Measles IgG</td>
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<tr>
<td>Mumps IgM</td>
<td>180</td>
</tr>
<tr>
<td>Mumps IgG</td>
<td>180</td>
</tr>
<tr>
<td>Varicella IgG</td>
<td>271</td>
</tr>
<tr>
<td>Varicella IgM</td>
<td>271</td>
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<tr>
<td>EBV IgG</td>
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<tr>
<td>EBV IgM</td>
<td>192</td>
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<tr>
<td><strong>PCR Tests</strong></td>
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<tr>
<td>Toxoplasma gondii PCR</td>
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<tr>
<td>Cytomegalovirus PCR</td>
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<td>Leishmania PCR</td>
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</tr>
<tr>
<td>TB PCR</td>
<td>6089</td>
</tr>
<tr>
<td>Miscellaneous</td>
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<td>HHV-6 PCR</td>
<td>15</td>
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<tr>
<td>EBV PCR</td>
<td>20</td>
</tr>
<tr>
<td>HSV (192) PCR</td>
<td>25</td>
</tr>
<tr>
<td>CMV (RT PCR)</td>
<td>25</td>
</tr>
<tr>
<td>PCR(Giardia lamblia)</td>
<td>100</td>
</tr>
<tr>
<td>PCR (E. histolytica)</td>
<td>100</td>
</tr>
<tr>
<td>PCR (Salmonella spp.)</td>
<td>100</td>
</tr>
<tr>
<td>PCR (Hepatitis E)</td>
<td>25</td>
</tr>
<tr>
<td>DNA isolation</td>
<td>325</td>
</tr>
<tr>
<td>HBV DNA Quantitative</td>
<td>260</td>
</tr>
</tbody>
</table>
HBV DNA Qualitative  40
HCV RNA Quantitative  108
Miscellaneous  182
**Others**  947
Culturing of Salmonella  252
Gel electrophoresis  645
Sequencing  50
**NASBA**  192
HIV viral load  144
HSV NASBA  48
**Leishmania**  2,708
Maintenance of *Leishmania* Clinical isolates  1,248
Serology (anti rKE-16 antibody test)  410
Giemsa staining  410
Culture  80
DNA isolation  280
PCR  280
**Laboratory animals**  393
Subtotal B  7,4932
Grand Total A+B  8,39,356

**AWARDS, HONOURS AND SIGNIFICANT EVENTS**

**Dr A.K. Mukhopadhyay**; nominated as Member of Nominating Council of Infosys Science Foundation Award; nominated as Chairperson for setting up the Course Curriculum of the Degree/ Diploma of the Medical Laboratory Technology in NIPM & RIPM as member of the National Task Force Committee under DGHS, Government of India; nominated as Expert in Selection Committee of Delhi State Cancer Institute; nominated as Expert in Selection Committee of Nuclear Power Corporation of India Ltd; nominated as Hon’ble Board Member of Editorial Board in *IJBST, IJMST, IJLST*; continued to remain as Reviewer for *Indian Journal of Clinical Biochemistry* and *International Journal of Medicine and Medical Sciences*; Cambridge Nobel Laureate, Brian D. Josephson personally acclaimed the paper of Dr A.K. Mukhopadhyay on ‘Radical view of information: On its nature and science’, and distributed its electronic version to his colleagues
Dr M. Irshad was nominated as the Reviewer for articles of Blackwell Publishers and Elsevier Publishers; Hon’ble Member of Editorial Board in *IJBST*, *IJMST*, *IJLST*, since August, 2008; Hon’ble Member of Editorial Board in *IJBLS*, *IJBSP*, *IJBSAHM*, January, 2009; selected as a member in National Tobacco Control Programme, since 2008.

Dr Sarman Singh was awarded with prestigious Hari Om Ashram Alembic Research Award (Subcategory: ‘Dr B.C. Roy Award’) of Medical Council of India, for the year 2006; was Nominated, Chairman, Institutional Ethics Committee, of CARE Foundation, Namakkal, Tamilnadu; nominated, Member-Advisory Board, Dr B Lal Institute of Biotechnology, Jaipur; nominated, Member of the IAEC of ICGEB; is Government of India Nominee for the IAECs of Jawaharlal Nehru University, New Delhi and Delhi Armed Forces Medical College, Delhi; nominated, Member of DST-SERC Task Force for the Fast Track Research Projects for Young Scientists; nominated, Member of Expert Committee of ICMR to evaluate and inspect the procurement of Equipments at ICMR Institutes; invited by International AIDS Society as guest speaker on HIV-TB co-infection during the World AIDS Conference held at Mexico, August 2008; was invited as Chief Guest to inaugurate the “Biotechnology Update” of IP Degree College of CCS University, Meerut.

Dr Singh had been the Chairman, Organising Committee, Second National Conference of Tropical Parasitology (Tropacon-2) New Delhi, October 30- November 2, 2008

Dr. S. Sharma received Dr S. Radha Krishnan memorial award 2008, awarded on 6th September, 2008 Scroll of Honors by Delhi Siksha Evam Khel Vikas Sangh. Healthy Universe Foundation;

**VISITING SCIENTIST**

Professor Leonid Margolis, NIH, USA; Professor Brian Wigdahl and Professor Zafar Khan of Drexel University, Philadelphia, USA; Dr Suresh Kumar, Department of Parasitology, University of Malaya, Malaysia visited Clinical Microbiology section of the Department and exchanged their research activities.
9.17 Medicine

**Professor & Head**
S.K. Sharma

**Professors**
Rita Sood  
A. B. Dey

**Professors**
Ashok Kumar  
Rohini Handa

**Randeep Guleria**  
G. C. Khilnani

**Associate Professors**
Naveet Wig  
Rajiva Gupta

**Associate Professors**
Ashutosh Biswas  
Uma Kumar

**Assistant Professors**
Sanjeev Sinha  
Naval K. Vikram

**Assistant Professors**
Anant Mohan

**EDUCATION**

**Short- and long-term training**
Seventeen postgraduate and undergraduate students from South Asia, UK, Singapore, Hong Kong and Germany underwent training in the Department of Medicine

**Continuing Medical Education**

**Professor S.K. Sharma** organized the following:

- Expert group Meeting for Forming Consensus Recommendations on Adult Immunization at AIIMS; 6–7 December 2008.
- Jointly with Ranbaxy Science Foundation XXII Round Table Conference on ‘Challenges of MDR/XDR Tuberculosis in India’, India Habitat Centre, New Delhi; 13 December 2008.
- Symposium, ‘Venous Thromboembolism (VTE)’, 64th Annual Conference of Association of Physician of India (APICON 2009), Greater Noida; 31 January 2009.

**Dr Rita Sood** was

- Organizing chairperson for the National workshop on ‘Teaching learning methods in Health Professions Education’, The workshop was attended by more than 40 faculty members from various medical, nursing and dental colleges;

- Co-organizing secretary for the collaborative workshop (CEU-CMET)–1st Annual clinical epidemiology research methods and leadership workshop.

**Dr Ashutosh Biswas** organized National Workshop on ‘Management of dengue fever’, About 50–60 doctors attended this workshop from different parts of India funded by Ministry Of Health and Family Welfare and WHO, AIIMS; 25–26 June 2008.

**Dr Rajiva Gupta** organized (i) workshop on Rheumatology clinical for postgraduates; 21 February 2009. (ii) Rheumatology Update 2009; 22 February 2009.

**Dr Anant Mohan**

- Co-Organizing Secretary of ‘Medicine Update’, AIIMS; August 2008.
- Clinical Tutor/ Faculty in the ‘Basic Bronchoscopy Course’, Royal Preston Hospital, UK; 4 March 2009.

**Dr Sanjeev Sinha**


**National and International Conferences**

**Lectures delivered**

**Professor S.K. Sharma**

- Key note address on ‘Challenges of HIV-TB co-infection’, Workshop on Training Programme for Prevention, Control and Management of HIV/AIDS. Jointly organized by the All India Institute of Medical Sciences and Delhi State AIDS Control Society, AIIMS; 18 October 2008.
- ‘Clinical management of TB-HIV Co-infection- Newer developments’, National CME Programme on ‘Challenges on the road ahead for TB Control’ of National Task Force for the involvement of Medical Colleges in RNTCP of India Jointly organized by the All India Institute of Medical Sciences and Central TB Division (Ministry of Health and Family Welfare, Government of India), AIIMS; 22 October 2008.
- ‘Therapeutic challenges in the management of MDR and XDR Tuberculosis’, 21st Round Table Conference ‘Challenges on XDR tuberculosis in India’, Ranbaxy Science Foundation, India Habitat Centre, New Delhi; 13 December 2008.
- ‘Evidence-based indications for deep venous thrombosis prophylaxis in medical diseases’, 64th Annual Conference of Association of Physician of India (APICON 2009), Greater Noida; 31 January 2009.
Dr Rita Sood


- Student assessment, Validity and reliability in assessment, Project management and developing educational scholarship

- Course faculty in 2nd PSG-FAIMER Regional Institute Faculty Development Programme in Medical Education at Coimbatore, Tamil Nadu; 15–23 April 2008. sessions conducted:

- Conducted a panel and an interactive session on ‘Giving effective educational feedback’, Course faculty in Workshop on ‘Assessment and student feedback’, Sikkim Manipal Institute of Medical Sciences, Gangtok, Sikkim; 12–14 May 2008.

- ‘Project management, qualitative research and Educational scholarship’, Course faculty in Fourth GSMC-FAIMER regional Institute Course in Medical Education; KEM Hospital and GSMC, Mumbai; 15–18 June 2008.


- Panelist for a panel discussion on ‘Healing head and heart’ (Teaching values in health care), 15th National conference on ‘Mind, body and medicine’, Mount Abu, Rajasthan; 27–29 July 2008.


- Guest faculty for the MUHS Deans’ consultation meeting on ‘Capacity Building in Medical Education and Leadership’; 12–13 January 2009.

- Conducted session on ‘Written communication’, Interns orientation programme, AIIMS; February 2009.


• ‘Teaching learning methods’, Session on postgraduate training, Annual conference of Indian Association of Medical Microbiologists, India Habitat Centre, New Delhi; 28 March 2009.

Professor Randeep Guleria

• ‘Management of Asthma–Chronic persistent as well as acute exacerbations and Pulmonary Rehabilitation’, Refresher course in Obstructive Airway Diseases.

• Speaker, scientific programme on ‘Management of Pulmonary Diseases’, Bangkok, Pattaya.


• Participated in the workshop of key Indian and US Investigator and Collaborators on Environment Risks and Respiratory Diseases, INDO-US programme ICMR.


• Visited Flood devastated areas of Surat, Gujarat on the request of the Ministry of Health, Gujarat Government to offer AIIMS expertise for patients of Leptospirosis and Viral haemorrhagic fever; 28–29 August 2008.


• Member and Attended the Scientific Advisory Committee (SAC), National Institute of Virology, Pune; 16–17 December 2008.


• Attended three days training programme as resource person for the clinicians on ‘Influenza’, NIHFW, Ministry of Health & Family Welfare, Government of India, New Delhi.

• ‘Difficult asthma’, 34th Workshop on ‘Respiratory allergy: Diagnosis and management’, VP Chest Institute, Delhi; 18 February 2009.

• ‘Snoring can kill’, Refresher Course Programme, IMA College of General Practitioners Kanpur; 22 January 2009.

• chaired symposium ‘Tobacco-related lung disease in Asia– actions to avert the epidemic’, 14th World Conference on Tobacco or Health, Mumbai, 8–12 March 2009.

• Attended three days training programme as resource person for the clinicians on ‘Influenza’, NIHFW, Ministry of Health & Family Welfare, Government of India, New Delhi; 11–13 February 2009.

• Attended the South East Asia Network on ‘Respiratory diseases’, PGIMER, Chandigarh; 20 March 2009.

Professor G.C. Khilnani


• ‘Steroids must be used in ICU’, Workshop on ‘Mechanical ventilation’, Criticare 2009 (Annual Conference of Indian Society of Critical Care Medicine), 18–22 February 2009.


Dr Ashutosh Biswas

- ‘Occupational exposure and PEP for HIV among HCW’, HIV/AIDS training workshop, AIIMS.

Dr Uma Kumar


Dr Rajiva Gupta

- ‘Anti TNF therapy at RHCH – an Audit’, RHCH, Winchester, UK; August 2008.
- ‘Interesting cases of Indian SLE and challenges in their management’, SGH, Southampton UK, August 2008.
- ‘Osteoporosis awareness in community’, Andover War Memorial Hospital, Andover, Hampshire; August 2008.
- Chairperson, Rheumatology session, MAMC CME 2008.
- Invited to participate in Observational study, workshop organized by NIH, US, Lucknow; 9–11 December 2008.
- Intern orientation programme–Good prescription writing; 9 February 2009.
• Moderator CPC – Rheumatology Update 2009, AIIMS.

• ‘Optimizing the early use of anti THF therapy: Can we target the right patient?’, Fulford advisory board meeting, Delhi; 29 February 2009.

• Poster Quiz, APICON 2009

• Sclerderma revisit – IRACON 2008, Pune

• Study the treatment outcome in Indian systemic sclerosis patients with ILD–Preliminary Result from single centre. BSR, Liverpool (UK)

• ‘Dyslipidemia in Indian SSc patients with reference to lipoprotein a (Lpa)’, BSR, Liverpool (UK).

• ‘Pregnancy outcome in Indian systemic sclerosis patients’, BSR, Liverpool (UK).

• ‘Autonomic nervous system dysfunction in rheumatoid arthritis’, BSR, Liverpool (UK).

Dr Sanjeev Sinha


• Workshop on ‘ASHA’, UCLA, Los Angeles, USA; May 2008.

• A paper presentation on ‘The role of Vitamin D in susceptibility to HIV and tuberculosis’, American College of Chest Physician, Philadelphia, USA; October 2008.


• Chair the session on ‘Neurological diseases’, APICON, Greater Noida; January 2009.

• ‘Evidence-based clinical practice guidelines on adult Immunization’, API; 2009 (Member of expert group).

Dr Anant Mohan


• ‘Clinical features and management of influenza’, National Symposium on Influenza, V. P. Chest Institute, Delhi; 22 September 2008.

Dr Naval Kishore Vikram

RESEARCH

Funded projects

Completed


3. A population based study of prevalence and risk factors in sleep disordered breathing in south Delhi [Designated as South Delhi Sleep Study Cohort (SDSSC)]. S.K. Sharma. Funded by Pfizer India Ltd for 2 years (2006–2008). Funds: Rs 5 lakh.


Ongoing


11. Efficacy of oral zinc administration as an adjunct therapy in Category I Pulmonary Tuberculosis along with assessment of immunological parameters (Double-blind, Randomized, Placebo-Controlled, Multicentre Clinical Trial. S.K. Sharma. Funded by Department of Biotechnology, Ministry of Science and Technology, Government of India for 3 years (2006–2009). Funds: Rs 63.38 lakh


15. Impact of HIV infection on latent TB among patients with HIV-TB co-infection (Facility has been designated as National Facility). S.K. Sharma. Funded by Department of Biotechnology, Ministry of Science and Technology, Government of India for 3 Years (2007–2010). Funds: Rs 220lakh.


22. Genetic Metabolic and Hormonal Profile in Obstructive Sleep Apnea Syndrome. Randeep Guleria. Funded by Department of Science and Technology (till April 2011). Funds: Rs 24 lakh.

23. A randomized double-blind placebo controlled exploratory study to assess the safety and efficacy of multiple doses of ACZ885 in COPD. Randeep Guleria. Funded by Novartis (till March 2010). Funds:.

24. 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. Randeep Guleria. Funded by Ranbaxy India (till April 2009).

25. Pharmaco-genetics of Methotrexate in Rheumatoid arthritis. R. Gupta. Funded by DST.


33. Oxidized low-density lipoprotein antibodies: pathogenic implications for vascular involvement in patients with autoimmune diseases and type 2 diabetes mellitus. Funded by AIIMS. Funds: Rs 2 lakh.

34. Effect of outdoor and indoor air pollution on children’s health in Delhi. A controlled study. Professor G.C. Khilnani. Funded by Ministry of Environment and Forest for 3 years Funds: Rs 5.6 lakh, per year for three and half years)

35. A Phase IIIB Multicentre, Randomized, Double-Blind, Double-Dummy Study to Compare the Efficacy and Safety of Abatacept Administered Subcutaneously and Intravenously in Subjects with Rheumatoid Arthritis, Receiving Background Methotrexate, and Experiencing an Inadequate Response to Methotrexate. Uma Kumar. Funded by British Meyer Squibb (till 2010).


37. Study of early versus delayed initiation of antiretroviral therapy for HIV infected patients with tuberculosis on Antituberculosis chemotherapy in Indian subjects. S. Sinha. Funded by NACO (A collaborative UCLA, USA and AIIMS project). Funds: Rs 45 lakh.

38. Study of prevalence and types of baseline HIV drug resistance in the antiretroviral treatment-naive and previously treated HIV infected Northern India population. S. Sinha. Funded by NACO (A collaborative UCLA, USA and AIIMS project). Funds: Rs 45 lakh.

39. Nevirapine versus Efavirenz-based highly active antiretroviral therapy regimens in antiretroviral-naive patients with HIV and Tuberculosis infection in India. S. Sinha. Funded by NACO. Funds: Rs 35 lakh.

40. Role of Vitamin D in susceptibility of tuberculosis in HIV (A collaborative Harvard Medical School, USA and AIIMS project). S. Sinha.

41. ASHA HIV health promotion intervention. S. Sinha. Funded by NIH, USA. Funds: Rs 12.5 lakh.
Departmental Projects

Completed

1. Study the therapeutic window in rheumatoid arthritis
2. Screening for catastrophic antiphospholipid syndrome
3. Study of neuropathy associated with rheumatoid arthritis
4. Serum nitrite as a discriminatory marker for inflammatory back pain
5. Treatment outcome and drug resistance among category II pulmonary tuberculosis patients under RNTCP
6. Critical Appraisal of Assessment in Key Clinical Disciplines in Undergraduate Course, AIIMS (CMET)
7. Hospitalisation for rheumatic diseases—a prospective study
8. Efficacy of oral Sildenafil in pulmonary artery hypertension in Scleroderma- A hospital based study
9. To study the therapeutic window in Rheumatoid arthritis
10. Screening for catastrophic antiphospholipid antibody syndrome
11. Assessment of nutritional profile and CRP levels in patients with respiratory failure who are on mechanical ventilation
12. Evaluation of 18-FDG PET-CT and comparison with CT findings in patients with mediastinal lymphadenopathy due to tuberculosis and sarcoidosis
13. Dynamics of commensal flora and development of nosocomial infections in the critically ill. Clinical profile of frail elderly patients in hospital setting
14. Evaluation of side effects of Anti retroviral therapy in patients with HIV/AIDS.
15. To study the pregnancy outcome in systemic lupus erythematosis with special reference to cyclophosphamide therapy
16. Role of 18 FDG CT PET in diagnosis and assessment of Systemic Necrotising Vasculitis
17. Study the effect of DMARD on lipid profile in rheumatoid arthritis with special reference to lipoprotein A and oxidized LDL
18. Pregnancy outcome in Indian systemic sclerosis
19. Prevalence and clinical significance of antiphospholipid antibodies in systemic sclerosis
20. Neurocognitive functions in AIDS patients and response to antiretroviral therapy
21. Evaluation of efficacy and adverse effects of antiretroviral drugs in treatment naïve HIV patients at AIIMS
**Ongoing**

1. Study the clinical and laboratory correlations of hand abnormalities in scleroderma
2. Study the etiology of reactive arthritis in Indian patients
3. Atherosclerosis in Ankylosing Spondylitis
4. Dyslipidemia among HIV infected patients with Antiretroviral Therapy
5. Evaluation of side effects of Antiretroviral therapy in patients with HIV/AIDS
6. Evaluation of 18-FDG PET-CT and comparison with CT findings in patients with mediastinal lymphadenopathy due to tuberculosis and Sarcoidosis
7. Dynamics of commensal flora and development of nosocomial infections in the critically ill
8. Study the prevalence of Clostridium difficile in nosocomial diarrhea in patients admitted in Medicine ICU
9. Prognostic utility of various acute phase reactants in acute exacerbation of COPD
10. Clinical profile of frail elderly patients in hospital setting
11. Endothelial dysfunction in systemic sclerosis
12. Utility of PET scan in assessing extent of disease and response to treatment in Sarcoidosis
13. Study of the prognostic utility of various inflammatory markers in patients with acute exacerbation of chronic obstructive pulmonary disease
14. Study of Non Alcoholic Fatty Liver Disease and Atherosclerosis in Asian Indians.
15. Endothelial dysfunction in systemic sclerosis
16. Cognitive dysfunction in systemic lupus erythematosus
17. Gastrointestinal manifestations in systemic sclerosis
18. Viral Hepatitis Co-infection among HIV/AIDS
19. Evaluation of risk factors associated with hospital mortality: A case control study
20. Dyslipidemia among HIV infected patients receiving antiretroviral therapy, a prospective observational study
21. Study of bone mineral density in young adult with JIA
22. Evaluation of Disease activity by Imaging modalities in TA
23. Serum IL-6 Level as marker of Disease activity in Ankylosing Spondylitis without peripheral arthritis
Collaborative Projects

Completed

1. Study of etiological risk factor profile in paediatric strokes (with Paediatrics)
2. Role of 18-FDG PET-CT scan in diagnosis and assessment of disease activity in primary systemic necrotizing vasculitis (with Nuclear Medicine and Cardiac Radiology)
3. To study the pregnancy outcomes in patients with SLE with special reference to cyclophosphamide therapy (with Obstetrics and Gynaecology)
4. Holmium radiosynovectomy in refractory arthritis (with Nuclear Medicine)
5. Evaluation of patients with mediastinal lymphadenopathy using 18 FDG PET Scan and its correlation with histopathology (with Department of Surgery)
6. Role of 18 FDG PET Scan in the diagnosis and evaluation of pulmonary nodules (with Surgery)
7. Modulation of neutrophil CR1 expression by IFN-¥ and immune complexes, its relationship with CR1 density polymorphism and significance in SLE. (with Biochemistry)
8. Role of complement regulatory protein DAF, MCP and CD59 in pathophysiology of SLE (with Biochemistry)
9. Phenotyping and genotyping characterization of clinical isolates of Candida Species (with Microbiology).
10. Cytokine gene polymorphism and their possible association with immune restoration disease in HIV-TB co-infected patients (with Microbiology).
11. Immunological characterization of HIV-1 Clade-C virus (with Microbiology).
12. Genetic characterization of HIV-1 subtype-C envelope including V3 antibodies (with Biochemistry).
13. Cutaneous vasculitis–aetiological and clinico-pathological correlation (with Dermatology)
14. Endothelial Dysfunction in Rheumatoid Arthritis (with Radiology)
15. Hospitalisation for Systemic Rheumatic Diseases (with Dermatology, Gastroenterology and Hospital Administration)
16. Diagnosis of visceral Leishmaniasis by use of PCR on patient blood (with Microbiology).
18. Effect of IFN-ô and immune complex on neutrophil-CR1 transcript and its relationship with CR1 density polymorphism (with Biochemistry)
19. HIV/AIDS:
20. Prevalence and treatment response of Coccidian parasitic infections in HIV positive patients at AIIMS (with Laboratory Medicine)

21. Diagnosis of Symptomatic Visceral Leishmaniasis by Use of the Polymerase Chain Reaction on Peripheral Blood Samples (with Microbiology)

22. Existing status of Faculty Development in Medical Education in India (with CMET)

23. Prevalence and Treatment Response of Coccidian Parasite Infection in HIV Positive Patients at AIIMS (with Laboratory Medicine)

_Ongoing_

1. Complement regulatory proteins and their significance in the pathophysiology of systemic lupus erythematosus (with Biochemistry)

2. Prevalence of Metabolic Syndrome and its selected socio–behavioral determinants among females aged more than 20 years residing in an urban resettlement colony, South Delhi (with Community Medicine)

3. Comparison of serum and dietary erythrocyte magnesium in obese and non-obese children and its relation to insulin resistance (with Paediatrics)

4. Impaired glucose tolerance in children and adolescents with cystic fibrosis (with Paediatrics)

5. Endothelial nitric oxide synthase gene polymorphism and rheumatoid arthritis (with Biochemistry)

6. Expression and modulation of complement receptors: significance in the pathophysiology and prognosis of autoimmune disorders (with Biochemistry)

7. Determination of relative fraction of integrated and unintegrated viral DNA and plasma viral RNA in HIV-1 infected individuals (with Biochemistry).

8. To study the immunogenic effect of Kinesin motor domain gene against visceral Leishmaniasis (with Laboratory Medicine)

9. Study of Mycobacteremia in Patients with Extrapulmonary and Disseminated Tuberculosis (with Laboratory Medicine)

10. Study of acute febrile illnesses with Cytopenias (with Haematology)

11. A comparative study of Pain status in Fibromyalgia patients and healthy controls (with Physiology).

12. Psychosocial aspect of chronic pain syndrome (with Psychiatry)

13. Arthroscopic elbow synovectomy in Rheumatoid arthritis: its effectiveness and MRI correlation (with Orthopaedics)

14. A study of chronic exposure to magnetic field on pain status of fibromyalgia patient (with Physiology)
15. Expression and modulation of leukocyte Complement Receptor 1 and CD59 (Protectin) in relation to rheumatoid arthritis (with Biochemistry)

16. Endothelial Nitric Oxide Synthase Gene Polymorphism and Rheumatoid arthritis (with Biochemistry)

17. DNA amplification study by polymerase chain Reaction (PCR) to detect sub-clinical *Pneumocystis carinii* Pneumonia (PCP infection and colonization in ‘at risk’ patients with or without respiratory symptoms. Funded by Department of Science and Technology (DST). (with Microbiology)

18. Primary drug resistance studies by Genotypic and Phenotypic analysis in HIV – Indian subtype C infected individual (with Microbiology).

19. Brachial plexus neurotization with phrenic and or intercostals nerves and its effect on pulmonary function (with Neurosurgery).


23. Double masked Placebo controlled parallel group multicentre dose ranging study within an optional extension to assist efficacy and safety of LX 211 as therapy in subjects with active fight threatening non-infectious intermediate interior and intermediate posterior pan uveitis. Funded by Global sponsored Lux biosciences (with Dr R.P. Centre for Ophthalmic Sciences).

24. Double masked Placebo controlled parallel group multicentre dose ranging study within an optional extension to assist efficacy and safety of LX 211 as therapy in subjects with active fight threatening non-infectious anterior uveitis. Funded by Global sponsored Lux biosciences (with Dr R. P. Centre for Ophthalmic Sciences).

25. Double masked Placebo controlled parallel group multicentre dose ranging study within an optional extension to assist efficacy and safety of LX 211 as therapy in subjects with clinically quiescent fight threatening non-infectious intermediate anterior and intermediate posterior and pan uveitis. Funded by Global sponsored Lux biosciences (with Dr R.P. Centre for Ophthalmic Sciences).

26. Existing status of Faculty Development in Medical Education in India (with CMET).

27. Study of Mycobacteremia in Disseminated Tuberculosis (with Laboratory Medicine)

28. Reference diagnostic range for serum free light chains in Indian Subjects. Comparison with multiple myeloma (with Haematology)
29. Modulation of neutrophil CR1 expression by IFN-γ and immune complexes, its relationship with CR1 density polymorphism and significance in SLE (with Biochemistry)

30. Role of complement regulatory protein DAF, MCP and CD59 in pathophysiology of SLE (with Biochemistry)

PUBLICATIONS

Journals


45. Mohan A. Viruses are an important cause of community acquired pneumonia. *BMJ* 2008;336:1429–33. [Letter]


93. Williams H, Stewart A, von Mutius E, Cookson W, Anderson HR, and the International Study of Asthma and Allergies in Childhood (ISAAC) Phase one and Three Study Groups. Is eczema really on the increase worldwide? *J Allergy Clin Immunol* 2008;**121**:947–54. [Professor S.K. Sharma was the Principal Investigator for the study from India (name listed in the Appendix in online supplement)].

Books

Chapters in Books


PATIENT CARE

Chest Clinic
New cases 2077
Old cases 4031
Total 6108

Rheumatology Clinic
New cases registered 352
Number of follow up visits 7919
Total 8271

Rheumatology Procedures
Intravenous pulses of steroids and cyclophosphamide 492
Joint and soft tissue injections 1905
Synovial fluid aspirations 80

Adult Haematology Clinic
New cases 78
Old cases 305

Infectious Diseases Clinic
New cases 414
Old cases 475
Sleep Related Breathing Disorders (SRBD) Clinic

New cases 307
Old cases 166

Antiretroviral centre
Total registered 4550
ART started 1733
On ART and regular follow-up 1002
Total 1061
ART started 2008–2009 261

AIIMS DOTS Centre
Total cases on DOTS 175
CAT I 120
CAT II 35
CAT III 20

Laboratories

Respiratory laboratory
Spirometry procedures 3321
Diffusion capacity estimation 328
Body Box (Plethysmography) measurements 160
Oxymetries 1125

Bronchoscopy Laboratory
Fiberoptic bronchoscopy performed 564

Sleep laboratory
Sleep studies 306
CPAP titrations 131
Anthropometries 306
Body composition 306

ADA/ACE Laboratory
Adenosine deaminase tests 244
ACE tests 210

Clinical Immunology Laboratory
Number of blood samples received 9874
Number of tests done 24,346
Test | Number
--- | ---
RF | 5223
ANA | 6867
Anti-dsDNA | 1772
C3 | 1544
Serum IgG, IgA and IgM | 1833
Cryoglobulins | 100
ANCA | 1997
aCL | 3302
Anti-LKM-1 | 877
ASMA | 831
Synovial fluid examination | 80
(Including polarizing light microscopy)

**AWARDS, HONOURS AND SIGNIFICANT EVENTS**


He is a Member, Scientific Advisory Committee of Infectious Diseases, Indian Council of Medical Research since 2004; World Lung Health [initiative of International Union Against Tuberculosis and Lung Diseases (IUATLD)] since 2004; Joint Steering Committee for collaboration between the two institutions All India Institute of Medical Sciences, Ansari Nagar, New Delhi and University of Minnesota, Minneapolis (USA).

He has been appointed as a Co-ordinator of IMPACT (Indian Medical Professional Association’s Coalition Against Tuberculosis) on behalf of the Association of Physicians of India (API) to fight jointly against tuberculosis by forming a coalition for a period of 5 years since 2008.

He continues to be the Chairperson of National Task Force on The Involvement of Medical Colleges in TB Control Programme of India, Ministry of Health and Family Welfare, Govt. of India; DOTS-Plus Committee of Ministry of Health and Family Welfare, Govt. of India for MDR-TB; Central Standing Committee for Operational Research on RNTCP related project, Ministry of Health & Family Welfare, Govt. of India; Drugs Purchase Selection Committee, All India Institute of Medical Sciences hospital, New Delhi.

He was an Expert Member for Selection Committee for the post of Professor in Respiratory Medicine at VP Chest Institute under Delhi University, for the post of lecturer in Respiratory Diseases at University College of Medicine, Delhi. He was member Selection Committee for admission for DNB course in Respiratory Medicine, LRS Institute of TB and Respiratory Diseases (Ministry of Health & Family Welfare, Govt. of India), New Delhi, 2009. He was a member of Tuberculosis and HPV Vaccine Development Group meeting at National Institute of Immunology 2008. He was a member of committee for Drugs Controller General (India) [DCG(I)} in matters related to regulatory approval of clinical trials for Investigational New Drugs (IND) since 2008. He was a member of Scientific Committee of APICON 2009 and has been appointed as a member, Expert Group for Pulmonology, The Association of Physicians of India, 2009. He was Expert Member, Selection Committee for the post of Additional DG to Deputy DG and Deputy DG to Senior Deputy DG; Research Officer to Senior Research Officer and Senior Research Officer to Additional Director General at ICMR, New Delhi, 2009. He was member, Annual meeting of the Research Area Panels/Scientific Advisory Committee (RAP/SAC), National Institute of Immunology (NII), 2009 and is an Expert Member for, Joint Monitoring Mission of the World Bank and World Health Organization and Ministry of Health and Family Welfare, GOI, New Delhi, April 2009 to evaluate performance of RNTCP. Professor SK Sharma was Chairperson of the Curriculum Committee of the Medical Council of India for making postgraduate curriculum on Tropical Medicine, Infectious Diseases and Chest and TB in March 2009.

Professor SK Sharma continues to be the reviewer for the following journals: The Lancet, The Lancet Infectious Disease, American Journal of Respiratory and Critical Care Medicine (Blue Journal), Chest (American College of Chest Physicians), Indian Journal of Tuberculosis, Indian Journal of Chest Diseases and Allied Sciences, Indian Journal of Medical Research, Infection Genetics and Evolution, Clinica Chimica Acta, Pharmacological Research, Respiration, Journal of Laboratory and Clinical Medicine, Biomedcentral Infectious Disease, Journal of Molecular and Cellular Proteomics, Cytokine, Respiratory Medicine, Respirology, Sleep Medicine, Expert Review of Respiratory Medicine, Allergologia et immunopathological
Professor Rita Sood was on the International Advisory Board of 7th edition of Textbook of Clinical Medicine by Kumar & Clark, Executive Committee member of South East Asian Regional Association of Medical Education (SEARAME), Member, Association for the Study of Medical Education in Europe (ASME), Member Faculty Council, Indian College of Physicians; on Editorial Board ‘South East Asian Journal of Medical Education’ (SEAJME), published from Chulalongkorn University, Bangkok, Thailand. Member, Advisory Board, Journal of Association of Physicians of India, Journal of Indian Academy of Clinical Medicine. Reviewer — International Journal of Medical Education, Medical Teacher, Yonsei Medical Journal, Postgraduate Medical Journal, NMJI, JAPI, J Indian Academy of Clinical Medicine.

She was invited as Temporary Advisor to WHO for the Expert group meeting to review and finalize the module on ‘Teaching of ethics in undergraduate medical curriculum’ at WHO, SEARO, New Delhi, 25–26 September’ 2008; attended 3rd Executive Committee Meeting of SEARAME at Chulalongkorn University, Bangkok, 10–11 January 2009. She was a chancellor’s nominee for 2 years on the selection committee of Pd B D Sharma University of Health Sciences, Rohtak, for the selection of teaching faculty. She was invited as technical expert by the Ministry of HRD for selection of fellows for commonwealth fellowships. She was an expert for Medical Council of India for undergraduate and postgraduate (competence based) curriculum revision in Medicine, October 2008 and for the development of undergraduate and postgraduate curriculum in Family Medicine. She was also invited faculty for the 3rd National convention on ‘Testing and Evaluation’ held at New Delhi on 18–20 February 2009, organized by the National testing service, Mysore. She was nominated expert by the Medical Council of India to develop the curriculum for the Basic and Advanced courses on Medical education for the teaching faculty.

Professor Randeep Guleria was an Adviser, Board for the interview of candidates, qualified in the Combined Medical Services, Examination 2007, UPSC. He was member of the interview board to interview the candidates for the post of Civilian Medical Officer, UPSC, 22nd August 2007. He was also Adviser, Board for the interview candidates for Assistant Professor (TB and Chest Disease), UPSC. He was member of the Project Review Committee on “Leprosy, Tuberculosis and Other Chest Diseases” of the ICMR, Project advisory Committee on Nutritional profile of Assam, Manipur and Meghalaya, ICMR, and member of the Expert Committee constituted by the Ministry of Health and Family Welfare to visit Leptospirosis affected areas in Surat, Gujrat, Scientific Advisory Committee of National Institute of Virology, Pune and Joint Monitoring Committee on Avian Influenza Constituted by the Government of India, Ministry of Health and Family Welfare. He was nominated resource person for the Refresher Training for the Rapid Response Teams on Avian Influenza held at Panjim, Goa, 11–15 November 2007. He was invited by the International Atomic Energy (IAEA) as consultant at a meeting on Justification of patient exposure in medical imaging at the IAEA’s Headquarters, Vienna; 10–14 December 2007.

He was External Examiner for DM (Pulmonary Medicine) PGIMER, Chandigarh and External Examiner for M.D. (Medicine) University of Kashmir, B.P. Koirala Institute of Health Sciences, Dharan, and Delhi University. He was member of the expert Committee/ Interview Board to select the Associate Professor (Chest & TB) in the department of Medical Education, H.P, DNB course in Respiratory Medicine at LRS Institute of Tuberculosis and Respiratory Diseases, New Delhi, Commonwealth
Professor G.C. Khilnani was elected (unopposed) as Vice president of National College of Chest Physicians for a period of two years. He was awarded ‘ICS oration’ award by the Indian Chest Society. He served as course Director of the Workshop on Non-invasive ventilation during the 10th Joint National Conference of National College of Chest Physicians and Indian Chest Society (NAPCON 2008), Lucknow, 6–9 November 2008. He served as Chairman for the Committee on ‘Health effects of air pollution’ by Central Pollution Control Board, Ministry of Environment and Forests. He served as examiner for Diplomat for National Board (DNB Medicine), and External examiner for Practical examination for MD Medicine Examination at Jodhpur, University of Rajasthan on 18–19 May 2008. He served as External Expert for selection of faculty posts (Professor of Pulmonary Medicine) at PGIMS Rohtak, faculty posts in Pulmonary Medicine at SGPGI Lucknow, faculty posts of Senior Professor of Medicine at PGIMS Rohtak, faculty posts for Autonomous Medical Colleges of Madhya Pradesh at Bhopal and faculty posts for Department of Medicine at BPKIHS, Dharan, Nepal.

He participated in the workshop for development of SEA Network for Chronic Respiratory Diseases held at PGIMER Chandigarh and in Indo-US workshop on ‘Research and Intervention Strategies for Indoor Air Pollution and Health’ held under aegis of Indo–US program on Environmental and Occupational Health Neemrana Fort Palace, Rajasthan, 2–4 March 2009. He was Chairman for Technical Advisory Committee for examining and approving Technical specifications for equipments for Dept of Critical care and Anaesthesia for Institute of Liver and Biliary Sciences, Vasant Kunj, New-Delhi. He was a member of Data and Safety Monitoring Board (DSMB) titled ‘Zinc as an immunomodulator in the treatment of possible serious bacterial infections in infants more than 7 days and up to 2 months of age’.

Dr Naveet Wig received Masters Degree in ‘Health Services’ from University of California Los Angeles, USA. He continued to be Member of Technical Resource Group, National AIDS Control organization.

Dr Ashutosh Biswas was conferred membership of New York Academy of Sciences, (NYAS) and membership of International AIDS Society, (IAS). He was a member of Government National Committee for Quality Assurance of anti TB drugs. He was also a member of Review Committee of International Journal ‘CHEST’. He was a member of Technical Advisory committee in planning the strategies of clinical management of Dengue Fever, National Vector Borne Diseases Control Programme. Ministry of Health and Family Welfare. He is also a member of Government of India, National leprosy eradication programme for workshop on facilitation skills for strategies planning through logical framework approach, Central leprosy division, Ministry of Health & Family Welfare, Government of India.

Dr Uma Kumar was awarded International Scholarship, Japanese College of Rheumatology, 2008. She has been the External Examiner for MBBS (Medicine), S N Medical College, Agra and MBBS (Medicine) PMCH, Patna. She was expert for interview of specialists in ESI Corporation. She was nominated, planning and monitoring board, JSS University, Mysore, Karnataka and advisory

Dr Rajiva Gupta was Member, International Advisory Board of Davidson’s - Principles and Practice of Medicine – 21st edition, member of International Advisory Board of Kumar and Clark – Clinical Medicine – 7th edition and member of International Advisory Board of Bates’ Guide to Physical Examination and history taking – 10th ed. He was awarded Zydus Oration 2008 for scientific contribution in Rheumatology; Executive Member – Indian Rheumatology Association.

Dr Anant Mohan was awarded the UK Commonwealth Fellowship for 2008–2009 in Chest Medicine at the Royal Preston Hospital, Lancashire Teaching Hospitals NHS Trust, UK, reviewer Journal of Supportive Care in Cancer, Indian Journal of Medical and Paediatric Oncology.

Academic, Administration, Finance, Engineering, Library, Central Facilities, etc

Professor S.K. Sharma was the Chairperson, AIIMS Drug Purchase Selection Committee, the Institute Medical Board, Operational Research in TB (Ministry of Health and Family Welfare, Government of India), and the National Task Force on Involving Medical Schools in DOTS programme. He was also Member of the Drug Selection Committee of National AIDS Control Organization, Governing Body, L.R.S. Hospital, New Delhi. Dr. Rajiva Gupta was member of Horticulture & Sanitation Advisory Committee of AIIMS and member of Environmental (Horticulture, Sanitation, DPORC) Advisory Committee, AIIMS. Dr. Anant Mohan was a member of the Institute Medical Board. Dr Sanjeev Sinha was faculty member of core committee of AIIMS for DOTS under Revised National Tuberculosis Control Programme and Faculty member of core committee of AIIMS for Antiretroviral therapy unit for HIV/AIDS patients. He was Member, Medical Board Antarctica Expedition, Government of India.
### 9.18 Microbiology

**Professor and Head**  
J.C. Samantaray

**Professor**  
S. Broor  
R. Chaudhry  
A. Kapil

**Additional Professors**  
B.R. Mirdha  
B.K. Das  
L. Dar

**Associate Professors**  
B. Dhawan  
M. Vajpayee  
I. Xess

**Assistant Professors**  
S. Sood  
U.B. Singh

### EDUCATION

**Short- and long-term summer training**

Short-term summer training was provided to 2 students (MSc) and long-term training was provided to 10 students (MSc) from various institutes/universities. Short-term summer training was provided to 1 MD student.

**Continuing Medical Education (CME)**

**Dr Madhu Vajpayee** organized workshop ‘ICTC Sensitization Programme’ for Doctors, Counsellors and Nurses with support from DSACS; 13–14 February 2009.

**Dr Urvashi B. Singh** organized one day symposium (CME) on the occasion of World TB Day on ‘I am stopping tuberculosis’; 24 March 2009.

### National and International Conferences

The Department organized ‘AIIMS Microbiology symposium’ an academic meeting of the alumni; 7 March 2009.

**Dr B.R. Mirdha,** Executive Member of Indian Association of Medical Microbiology (Delhi Chapter) was the Co-organizer of 1st Annual Conference of Indian Association of Medical Microbiologists; 23–24 March 2009.

Fourteen papers were presented in various national and international conferences.

**Lectures delivered**

**Dr Shobha Broor**

- 8th Asia Pacific Congress of Medical virology, Hong Kong; 26–28 February 2009.


**Dr Rama Chaudhary**


• ‘Recent Advancement in Probiotics/Prebiotics for Health Promotion’, panel discussion on ‘Gaps in knowledge and the way forward’, ILSI-India/ICMSF Conference in session I; 20 February 2009.


**Dr Lalit Dar**

• Update on Infectious Diseases. ‘Antiretroviral drug resistance’, Department of Microbiology, Safdarjung Hospital and BLK Memorial Hospital in association with Department of Gastrointestinal Infections, HPA, UK India Habitat Centre, New Delhi; 20 November 2008.

**Dr Benu Dhawan**

• Indo-German Combined Workshop/brainstorm meeting on ‘Zoonoses and animal models of infectious diseases’. Animal models of *Staphylococcus aureus* including MRSA, ICMR, New Delhi; 15 September 2008.

• Update on Infectious Diseases. ‘Therapeutic options for MRSA and VRE’. Departments of Microbiology, Safdarjung Hospital & BLK Memorial Hospital in association with Department of Gastrointestinal Infections, HPA, UK, India Habitat Centre, New Delhi; 20 November 2008.

• ‘Molecular Diagnosis of *Ureaplasma urealyticum* and *Mycoplasma hominis*’, CME on ‘Emerging trends of Mycoplasmas’, Department of Microbiology, Indira Gandhi Medical College, Shimla; 26 March 2009.

**Dr Urvashi B. Singh**


• 1st International Conference of South East Asia Region (The Union) and 63rd National Conference on ‘Tuberculosis and chest diseases’, (SEAR, NATCON 2008), Tuberculosis Association of India ‘Interplay of multiple genetic markers for genotyping of *Mycobacterium tuberculosis* isolates from India’, Mumbai, India Habitat Centre, New Delhi; 8–10 September 2008.

RESEARCH

Funded Projects

Completed


4. DNA amplification study by Polymerase Chain Reaction (PCR) to detect sub-clinical *Pneumocystis carinii* infections and colonization in ‘at risk’ patients with or without respiratory symptom. B.R. Mirdha. Funded by DST (2004–2007). Funds: Rs 18 lakhs.


Ongoing


3. Detection and Identification of Thermophilic Campylobacter Spp. (*C. jejuni*, *C. coli*, *C. upsaliensis* and *C. lari*) and Molecular Sub-Typing of Campylobacter jejuni in Faecal Samples of Diarrheic Patients and in Food samples Using PCR, PCR-RFLP and PFGE. R. Chaudhry. Funded by ICMR for 3 years (March 2007–March 2010). Funds: Rs 17 lakh.


6. HIV National Reference Laboratory (NRL) and External Quality Assurance Scheme (EQAS). M Vajpayee (November 2009 onwards)/ Lalit Dar (April–October 2008). Funded by NACO.


11. Pneumococcal surface protein A (Psa A) tPA DNA construct as vaccine Candidate against *Str. Pneumoniae*. Bimal Das. Funded by Department of Biotechnology (DBT). Funds: Rs 23 lakh.


**Collaborative Projects**

**Completed**

1. Diagnosis of visceral leishmaniasis by use of the Polymerase chain reaction (PCR) on patient blood (with Medicine and Institute of Pathology).

2. Study of emerging parasitic agents (Intestinal Coccidia and Microsporidia) in aetiologies of Malabsorption Syndrome (with Microbiology, Gastroenterology and HNU and Paediatrics).
**Ongoing**

1. 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. Urvashi B. Singh. Funded by Ministry of Health (with Department of Obstetrics and Gynaecology)

2. Administration of *Lactobacillus rhamnosus* GG for the prevention and treatment of *Clostridium difficile* infection and subsequent diarrhea in Indian population. R. Chaudhry. Funded by DBT for 18 months (December 2007–May 2009). Funds Rs 37.30 lakh. (with The Energy Research Institute)

3. Assessment of Intestinal permeability in Chronic Liver Disease and its Complications. Seema Sood. (with Gastroenterology)


5. Detection of mycobacterial pathogens in Crohn’s disease patients. Urvashi B. Singh. Funded by Department of Biotechnology, Ministry of Science and Technology, Government of India. (with Gastroenterology and Human Nutrition)


8. Diagnosis of genital tuberculosis in infertile women and the effect of antitubercular therapy. Urvashi B. Singh. Funded by ICMR, New Delhi. (with Obstetrics and Gynaecology)

9. Efficacy and safety of immuno-modulator (*Mycobacterium w*) Mw as an adjuvant therapy in Category II and multi-drug resistant pulmonary tuberculosis along with reduction in the duration of therapy and to study immunological parameters. Urvashi B. Singh. Funded by Department of Biotechnology, Ministry of Science and Technology, Government of India and Cadila Pharmaceuticals Ltd. Funds: Rs 526.54 lakh.


11. Efficacy and safety of immuno-modulator *Mw* as an adjunct therapy in Category I (new sputum smear positive) pulmonary tuberculosis, along with assessment of immunological parameters (Double-blind, Randomized, Placebo-Controlled, Multicentre Clinical Trial). Urvashi B. Singh. Funded by Department of Biotechnology, Ministry of Science and Technology, Government of India. Funds: Rs 7.6 lakh.
12. Efficacy of oral zinc administration as an adjunct therapy in Category I Pulmonary Tuberculosis along with assessment of immunological parameters (Double-blind, Randomized, Placebo-Controlled, Multicentre Clinical Trial). Urvashi B. Singh. Funded by Department of Biotechnology, Ministry of Science and Technology, Government of India.

13. Evaluation of the efficacy of thrice weekly DOTS regimen in TB pleural effusion at six months (Multicentre project) with Department of Medicine. Urvashi B. Singh. Funded by National AIDS Control Organization (NACO); Ministry of Health and Family Welfare; Government of India.


15. Molecular characterization of *Giardia intestinalis* isolates and study of genotype-clinical phenotype correlation (with Microbiology, Gastroenterology, Paediatrics)

16. To study the diagnostic value of Quantiferon gold test in detecting latent TB infection in end stage renal disease patients on renal replacement therapy. Urvashi B. Singh. Funded by ICMR, New Delhi.

17. Role of oral vitamin D as an adjunct therapy in Category I Pulmonary Tuberculosis along with assessment of immunological parameters. Urvashi B. Singh. Funded by DBT, Department of Science, Government of India. Funds: Rs 50 lakh.


22. Direct and indirect protection by influenza vaccine given to children in India. Broor S, Sullender WM, (UAB,USA) Fowler K (UAB, USA), Krishnan A. Funded by Centres of Disease Control and Prevention USA (2008–20011). Funds: Rs 10,36.lakh


PUBLICATIONS

Journals


13. Chauhan NK, Mendiratta S, Mojumdar K, Vajpayee M. Effect of Mother to Child Transmission Intervention Strategies and Clinical, Haematological, Immunological Characteristics in Children Born To HIV-1 Infected Mothers in India. Accepted for publication in *Journal of Pediatric Infectious Diseases*.


33. Sood S, Rachna, Singh R, Sumana G, Bala M, Samantaray JC, et al. The sequences for the primers and probe to be used on the Biosensor and for PCR for the detection of *Neisseria gonorrhoeae* in clinical samples have been validated by the GenBank. The accession numbers for the primer set and the probe are 2706 and 2705 respectively. The sequences have been derived from the Opa gene of *N. gonorrhoeae*.


**Chapters in Books**


**PATIENT CARE**

**Bacteriology**

*Bacteriology Laboratory*

Clinical samples

<table>
<thead>
<tr>
<th>Sample</th>
<th>Count</th>
</tr>
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<tbody>
<tr>
<td>Pus</td>
<td>22,305</td>
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<tr>
<td>Urine</td>
<td>24,906</td>
</tr>
<tr>
<td>Blood</td>
<td>34,730</td>
</tr>
</tbody>
</table>
Sputum/ Throat/Tracheal swabs 18,896
CSF 9801
Stool 2510
Total 1,13,202

Sexually Transmitted Diseases

Clinical samples
High vaginal swabs (HVS) 350
Semen 509
Expressed prostatic secretions (EPS) 100
Urethral discharge 01
Vaginal/Cervical discharge 08
Total 968

Antimicrobial susceptibility testing
HVS 74
Semen 52
EPS 32
Urethral discharge –
Cervical discharge –
Total 158

Hospital Infection control and water testing laboratory
Water sample 1158
Swabs (Thioglycolate Broth) 9,056
Air sampled (MSA) 4305
CSSD samples received (Central sterile supply department) 1,620
Total 16,129

Seroology laboratory
Widal 4192
VDRL 6171
ASLO 60
Total 10,423

Anaerobic bacteriology
Anaerobic culture 317
<table>
<thead>
<tr>
<th>Test Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antimicrobial sensitivity</td>
<td>20</td>
</tr>
<tr>
<td>Faecal culture for <em>C. difficile</em></td>
<td>261</td>
</tr>
<tr>
<td>ELISA for <em>C. difficile</em> toxin</td>
<td>261</td>
</tr>
<tr>
<td><em>Leptospira</em> culture</td>
<td>160</td>
</tr>
<tr>
<td><em>Leptospira</em> serology for IgM antibodies</td>
<td></td>
</tr>
<tr>
<td>– By ELISA</td>
<td>160</td>
</tr>
<tr>
<td>– By Lepto dri-dot</td>
<td>40</td>
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<tr>
<td><em>Campylobacter jejuni</em></td>
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<tr>
<td>– Culture</td>
<td>28</td>
</tr>
<tr>
<td>– Serology</td>
<td>28</td>
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<tr>
<td><em>Legionella pneumophilla</em></td>
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<tr>
<td>By ELISA</td>
<td>58</td>
</tr>
<tr>
<td><em>Polymerase Chain Reaction (PCR)</em></td>
<td></td>
</tr>
<tr>
<td><em>Salmonella typhi</em></td>
<td>36</td>
</tr>
<tr>
<td><em>Leptospira</em></td>
<td>33</td>
</tr>
<tr>
<td><em>Legionella pneumophilla</em></td>
<td>34</td>
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<tr>
<td><em>Campylobacter jejuni</em></td>
<td>28</td>
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<tr>
<td><em>C. difficile</em></td>
<td>98</td>
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<tr>
<td>Mycoplasma</td>
<td></td>
</tr>
<tr>
<td>Mycoplasma pneumoniae <em>IgM, IgG, IgA antibodies by ELISA</em></td>
<td>58</td>
</tr>
<tr>
<td>Mycoplasma pneumoniae culture</td>
<td>58</td>
</tr>
<tr>
<td>Mycoplasma hominis culture</td>
<td>208</td>
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<tr>
<td>Ureaplasma urealyticum culture</td>
<td>208</td>
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<tr>
<td>Antibiotic Susceptibility</td>
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<tr>
<td>Mycoplasma hominis</td>
<td>26</td>
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<tr>
<td>Ureaplasma urealyticum</td>
<td>43</td>
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<tr>
<td><em>Chlamydia pneumoniae</em></td>
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<tr>
<td>By ELISA</td>
<td>58</td>
</tr>
<tr>
<td><em>Polymerase Chain Reaction (PCR)</em></td>
<td></td>
</tr>
<tr>
<td>Mycoplasma pneumoniae</td>
<td>34</td>
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<tr>
<td>Mycoplasma hominis</td>
<td>208</td>
</tr>
<tr>
<td>Ureaplasma urealyticum</td>
<td>208</td>
</tr>
</tbody>
</table>
C. trachomatis  

Total 2879

Parasitology laboratory

Serological Investigations

Toxoplasma gondii serology for IgG antibodies by ELISA 28
Hydatid diseases serology by Indirect haemagglutination test 155
Amoebic serology of IgG antibodies by ELISA 176

Investigation for Malaria

Fluorescent staining (Acridine Orange) 2734
Giemsa staining 2734
Quantitative Buffy Coat (QBC) Assay 987
HRP-II antigen detection 322

Investigation for Kala-Azar

Fluorescent staining (Acridine Orange) 128
Giemsa staining 128
Quantitative Buffy Coat (QBC) Assay 230
Kala-azar serology (rk-39) 418
Aldehyde test 418

Examination of faecal samples for intestinal parasitosis

Direct and concentration 338
Culture 30
Modified acid-fast and special staining for intestinal coccidia 3380
Tissue specimens (homogenates) 68

Examinations of aspirates

Sputum, pus and others 168

Investigation for filariasis

Direct and concentration 74
Acridine orange 74
Thin and thick smear 74
Hetrazan provocative test 15
Other Investigations

Broncho-alveolar lavage (BAL), induced sputum 210
Tracheal aspirate, Nasopharyngeal aspirates for Pneumocystis jiroveci infection
Cerebrospinal fluid examination for free living amoebae (FLA) 105

Total 16,036

Tuberculosis laboratory
ZN smear and culture on LJ medium 9,900
rapid culture on Bactec 3,185
Anti-tubercular drug sensitivity done on bactec 880
PCR for Mycobacterium tuberculosis 3,470

Total 17,435

Virology laboratory including HIV laboratory

Viral Serology
Dengue 665
HSV 50
HIV 5260
CMV 20
Chikungunya 25
Measles 125
CMV antigen (pp65) 70

PCR
Dengue 25
HIV DNA 50
HSV 85
CMV 165
HSV Culture 10
Tzanck slide 35

Total 6585

Immunology
CD4 Test 5000
Mycology and ICP Laboratory

BAL 1290
Urine 1799
CSF 745
Sputum 125
Swab 191
Pus 210
Miscellaneous 934
Tissue/Biopsy 217
Nail/Hair/skin 109
Bone Marrow 131
Blood 1963

Fungal serology
Cryptococcus 291
Aspergillus 19
Histoplasma 11

Total 8035

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Dr J.C. Samantaray was elected as the treasurer of the Biotechnology Society of India.

Best Poster Award: Lal P, Kapil A, Das BK and Sood S. Diversity of Acquired Amp Câ-lactamases in Enterobacteriaceae in a Tertiary care Hospital in North India. IAMM- Delhi Chapter, SJH; 26 April 2008.

Dr Madhu Vajpayee was awarded International Scholarship to attend Conference on Retroviruses and Opportunistic Infections CROI, Boston, USA, 3–6 February 2008. He nominated Member, International Advisory Board of International AIDS Research and Training Programme, University of Washington, Seattle, National Institute of Health, USA.

Professor Rama Chaudhry was the President of Indian Association of Mycoplasmologists (IAM).

Dr Arti Kapil was awarded the DBT overseas fellowship as a guest researcher at CDC Atlanta, GA, USA for a period of 3 months, 15 October 2007 -15 January 2008. She was awarded Certificate of Course Mastery by CDC, Atlanta in Laboratory Safety, Occupational Emergency Programme and General Responsibilities

Dr B.R. Mirdha received Fellowship from Indian Society for Malaria and Other Communicable Diseases and selected as Governing Body Member of Shaheed Bhagat Singh College, Delhi University.
**Dr Seema Sood** has been elected as member of the National Academy of Medical Sciences – NAMS (India). The admission to Membership and Award of Scroll was made at the Annual Convocation of the Academy, 27 October 2007, Guru Nanak Dev University, Amritsar. She also received the Best Poster Award for ‘Synthesis of size controlled ZnO nanoparticles’ at the International Conference on Nanomaterial Toxicology (ICONTOX-2008), Lucknow, 5–7 February 2008.

**Dr Shobha Broor** was awarded Fellowship of Indian Academy of Medical Sciences (FNAMS).

**VISITING SCIENTISTS**

1. Dr Dick van Soolingen, Head of the National Mycobacteria Reference Laboratory National Institute of Public Health and the Environment, Bilthoven, The Netherlands visited the laboratory between; 21 July – 7 August 2008. and delivered a lecture

2. Dr Uma Malhotra, Assistant Professor, University of Washington; 9–15 February 2009.

3. Dr Wayne Sullender, Professor of paediatric infectious diseases, University of Alabama, USA visited the Virology laboratory thrice in relation with various ongoing collaborative projects.

4. Dr Joshua Mott and other members of CDC Influenza division visited the Virology laboratory in relation with ongoing collaborative projects titled ‘Academics, administration, finance, engineering, library, central facilities, etc’.
9.19 Nephrology

Professor and Head
S.C. Tiwari

Professor
S.K. Agarwal

Associate Professors
S. Gupta
D. Bhowmik
S. Mahajan

(on leave)

Education

Long-term training

Department mainly runs a 3-year DM Nephrology course for post-MD (Medicine) candidates, who get selected by AIIMS on the basis of merit. Five candidates were admitted to the DM course. Postgraduates in Internal Medicine are posted on a rotational basis for a short-period of 1–2 months. At present the department has twelve DM students.

Short-term training

Department has allowed doctors from Army hospital (R&R) for attending teaching schedule. Nurses from JP Narayan Apex Trauma Centre were trained for dialysis to take care of patients in trauma centre for dialysis. Dr Bindu Amitabh, physician from Safdarjung hospital was trained for renal transplant for three months.

Continuing Medical Education

Lectures delivered

Professor S.C. Tiwari


2. ‘Conflict management and attitude in board room’, Department of Hospital Administration, AIIMS; 9 August 2008.


Dr S.K. Agarwal


2. ‘Management of HCV during dialysis’, DIALYSISCON 2008, Lucknow

Dr D. Bhowmik

- ‘Fluid and electrolyte therapy’, Medicine Update, Department of Medicine, Maulana Azad Medical College, New Delhi.

Dr S. Mahajan


RESEARCH

Funded projects

Ongoing


**Completed**

Spectrum of bone disease in chronic kidney disease patients on haemodialysis

Efficacy and tolerability of extraneal in CAPD patients (randomized open label study)

**Departmental Projects**

**Completed**

1. Spectrum of patients presenting as unilateral small kidney
2. Impact of new onset diabetes mellitus after renal transplantation on patients and graft survival
3. Spectrum of kidney disease in pregnancy
4. Oxidative Stress in progressive Renal failure and dialysis therapy

**Ongoing**

1. Costing of haemodialysis procedure at AIIMS, New Delhi (with Hospital administration)
2. A study of Psychiatric Morbidity and Quality of Life in Patients before and after Renal Transplantation (with Psychiatry)
3. To study the pregnancy outcomes in systemic lupus erythematoses with special reference to cyclophosphamide therapy
4. Estimation of anti-Oxidant in blood in renal and liver diseases (with Laboratory Medicine)
5. Targeted screening for CKD and its risk factors in first degree relatives of patients of non-diabetic CKD (with Laboratory medicine)
6. Tuberculosis prophylaxis in patients on maintenance haemodialysis
7. Clinicopathological correlation of HBV and HCV infection in patients on renal replacement therapy
8. Efficacy and tolerability of extraneal in CAPD patients (randomized open label study)
9. Renal Osteodystrophy and its post transplant course
10. Sleep and cognitive function in ESRD
11. Oxidative Stress in post renal transplant patients and effect of N acetyl Cysteine on it
12. Study of physiological parameters in living kidney donors – pre- and post-donation
13. Quality of sleep in haemodialysis and renal transplant patients

**Collaborative Projects**

1. Detection and genotyping of human cytomegalovirus from neonates and renal transplant recipients (with Microbiology)
2. Plasma level monitoring of mycophenolic acid in renal transplant recipients (with Pharmacology and Surgery)
3. Molecular detection and characterization of *Pneumocystic jiroveci* in respiratory samples from the patients both immunocompromised as well immunocompetent with suspected interstitial pneumonia and other chronic lung diseases (with Microbiology)
4. Role of urinary cytology and immunocytochemistry in diagnosis and management of acute renal allograft dysfunction (with Pathology)
5. Quality of life of live related renal donors with (with Surgery)
6. Determination of efficacy of reflexology in treating patients suffering from diabetic nephropathy with hypertension and evaluating possible biomarker (with Biophysics)
7. Study of autologous stem cell therapy in reversing the progression of chronic kidney disease

**PUBLICATIONS**

**Journals**

3. Tiwari SC, Bhowmik. The heart is a muscle, the kidney is a vessel. *Inter Med* 2008;47: 1291.


**Chapters in Books**


**PATIENT CARE**

<table>
<thead>
<tr>
<th>1. Haemodialysis-related</th>
<th>1. Haemodialysis</th>
<th>5,562</th>
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<tr>
<td></td>
<td>2. Plasmapheresis/plasma exchange</td>
<td>54</td>
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<td></td>
<td>3. Femoral vein catheterization</td>
<td>780</td>
</tr>
<tr>
<td></td>
<td>4. Jugular and subclavian catheter insertion</td>
<td>144</td>
</tr>
<tr>
<td></td>
<td>5. AV fistula</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>6. AV shunt</td>
<td>14</td>
</tr>
</tbody>
</table>

| 2. ICU-related | 1. Continuous-renal replacement therapy including SLED | 24   |

<table>
<thead>
<tr>
<th>3. Peritoneal dialysis-related</th>
<th>1. Intermittent acute peritoneal dialysis</th>
<th>344</th>
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<tr>
<td></td>
<td>2. Continuous ambulatory peritoneal dialysis</td>
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<th>4. Indoor-related</th>
<th>1. Kidney biopsy</th>
<th>376</th>
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<td>2. Indoor regular admissions</td>
<td>673</td>
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<td>3. Indoor short admission</td>
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<td>4. Nephrology consultations</td>
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<th>5. Day care treatment</th>
<th>1. IV Methylprednisolone therapy</th>
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<td>2. IV Iron therapy</td>
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<td>3. IV cyclophosphamide therapy</td>
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<th>6. Renal transplant-related</th>
<th>1. Evaluation for Living RT recipients and donors</th>
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<tr>
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<td>2. Evaluation of cadaver RT recipients</td>
<td>103</td>
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<td>3. Living renal transplant done</td>
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<td>4. Cadaver renal transplant done</td>
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<th>7. Renal Laboratory-related</th>
<th>1. Number of patient blood sampling done</th>
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<tr>
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<td>2. Biochemistry (Urea, Creatinine, Na and K)</td>
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<td>3. Urine osmolality</td>
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<td>4. 24-hour urine testing</td>
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<td>5. Haemogram for transplant patients</td>
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<th>8. OPD-related</th>
<th>1. Renal clinic new patients</th>
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<td>2. Renal clinic old patients</td>
<td>20,819</td>
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<tr>
<td></td>
<td>3. RT counselling clinic (3 days per week)</td>
<td>2005</td>
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<td>4. Renal transplant clinic old cases</td>
<td>5,596</td>
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<td>5. Renal transplant clinic new cases</td>
<td>128</td>
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</table>
AWARDS AND HONOURS

Dr S.C. Tiwari was selected Member of selection committee of Medical Officer for the 28th Indian Scientific Expedition to Antarctic, Goa, 31 July 2008; Conducted DM Nephrology examination, SMS Medical College, Jaipur, 2 August 2008; Invited for Workshop on ‘Antarctic Medical Research and Medicine 2008’ Auditorium, National Institute of Polar Research (NIPR), Tokyo, 23 August 2008; Chairman, Medical Board, XXVII Indian Antarctica Expedition—Medical/Psychological examination of the Expedition members, AIIMS, 28 August 2008; elected President of Indian Society of Hemodialysis; Invited as member for National level Expert group Meeting for finalization and approval of curriculum for training of physicians on managing stand-alone hemodialysis centers all over the country; awarded Fellowship International Medical Sciences, Academy, 30 March 2009; invited to be Executive Member, Health Society Bihar; Invited to be member expert for Selection Committee – Faculty selection PGI, Chandigarh, August 2008.

Dr S.K. Agarwal was awarded ‘Fellowship of National Academy of Medical Sciences (FAMS)’, Contribution made on ‘Infections in Renal Replacement Therapy’; awarded ‘JM Patel Oration’, Indian Society of Organ Transplantation on the work on ‘Changing immunosuppression and renal transplant outcome’: AIIMS 25 years experience, 19th Annual Conference of Indian Society of Organ Transplant”; Member of Committee of ‘Faculty expert for evaluation of architectural designs for AIIMS likes institutions’ Bhuvaneshwar, Raipur and Patna, 2008; Member of committee for ‘monitoring and preparation of curriculum to train doctors for standalone dialysis units’ under the healthcare delivery system of government of India; Member of curriculum committee ‘to frame and monitor the development of instructional courses material and implementation of training of physician for dialysis”; Member of expert committee to make ‘guidelines for inspection of hospitals for their registration for renal transplantation’ under THOA 2008; Appointed as member of institute Research Committee for three years since 2008; appointed as member of Institute Store Purchase committee 2008; Appointed as Associate Editor Indian Journal of Organ Transplantation; elected Member of Executive Council of Indian Society of Organ Transplantation; elected Member Governing body Indian Society of Nephrology; Conferred Professional Membership of International Renal care Group 2008.
EDUCATION

The faculty participated in and delivered 22 lectures in CME programme, workshop, symposia and annual conference during the year.

CME

Conference, Seminars, workshops


- ‘Role of FDG-PET-CT scan in staging and treatment response evaluation’, 4th International Meeting of Hellenic Society of Nuclear Medicine, Thassaloniki, Greece; 7–9 November 2008.

- ‘Role of FDG-PET-CT scan in detecting recurrent brain tumour and comparison with MRI’ 4th International Meeting of Hellenic Society of Nuclear Medicine, Thassaloniki, Greece; 7–9 November 2008.

Lectures delivered

- ‘Emerging role of PET-CT in intestinal disease’, Asia Pacific Diagestive Week, Delhi; 16 September 2008.
• ‘PET scan in the management of ovarian cancer’, Symposium Ovarian Cancer, AIIMS, Delhi; 27 March 2009.

• ‘Recent advances in Geneto-urinary Imaging’, AIIMS-PGI-MAMC course, PGI Chandigarh; 2 April 2009.

RESEARCH

Funded Projects


Departmental Projects

Completed

1. Evaluation of patients with neuroendocrine tumours by $^{68}$Gallium-DOTATOC Positron Emission Tomography (PET/CT).

2. Comparison of $^{18}$F-FDG positron emission tomography (PET-CT) with $^{99m}$Tc-GHA single photon emission computed tomography (SPECT) and magnetic resonance imaging of brain in detection of recurrence in patients with glioma.

3. Evaluation of role of FDG-PET/CT in staging and management of ovarial malignancies.

4. Filter Optimization in Bone SPECT.

5. Radiolabeling of oligosaccharides.

6. To evaluate the role of $^{99m}$Tc-DMSA (V) and $^{18}$F-Fluoro 2-Deoxy-Glucose ($^{[18F]}$FDG-PET-CT) in the management of patients with Osteosarcoma.

7. Lu177-EDTMP in Hormone Refractory Prostate cancer patients with Bone Metastases: A pre-phase 1 Dosimetry Study.

8. Preparation of $^{68}$Ga labelled Somatostatin analog ($^{68}$Ga-DOTATOC) from $^{68}$Ga/$^{68}$Ga Generator and the Radiation Exposure to Nuclear Medicine Staff during handling the $^{68}$Ga/$^{68}$Ga Generator.

Ongoing

1. Role of PET-CT in early response evaluation to chemotherapy in neuroblastoma & abdomyosarcoma.

2. Role of Diffusion MRI and FDG PET-CT in initial staging and chemotherapy response evaluation in patients with non-Hodgkins lymphoma.


19. Lata S, Bal CS, Naswa N, Dwivedi DK, Dhanapathi H, Malhotra A. A radionuclide generator (68Ga-DOTATOC) for PET imaging of neuroendocrine tumors (NETs): One year experience. JNM 2008; 49 (Suppl 1); 308.


21. Naswa N, Bal CS, Lata S. Comparison of 68 Ga-DOTATOC(G-PET) with 18F- FDG (F-PET) and conventional imaging modalities (C1) in the localization of carcinoid tumors. JNM 2008; 49 (Supple 1): 116.


Chapters in Books


PATIENT CARE

Radionuclide investigations Number

1. Radioactive iodine uptake (RAIU) 1350
2. Perchlorate discharge test 25

AIIMS 2008-2009 / 344
|   | Description                                      | Price  

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<td>1.</td>
<td>I-131 whole body scan</td>
<td>7035</td>
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<tr>
<td>2.</td>
<td>Dimercaptosuccinic acid scans</td>
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<td>3.</td>
<td>Ca-thyroid I-131 whole body scan</td>
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<td>Thyrotoxicosis</td>
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<td>DTPA/LLECT 99mTc renal dynamic scan</td>
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<td>Direct radionuclide cystourethorography</td>
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<td>7.</td>
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<td>8.</td>
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<td>9.</td>
<td>Bone scan</td>
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<td>99mTc HIDA</td>
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<td>11.</td>
<td>Thyroid scan</td>
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<td>Liver scan</td>
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<td>13.</td>
<td>Meckel’s study</td>
<td>86</td>
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<td>14.</td>
<td>GI Bleed</td>
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<td>15.</td>
<td>Lymphoscintigraphy</td>
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<td>16.</td>
<td>MIBG (diagnostic and therapeutic)</td>
<td>530</td>
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<td>17.</td>
<td>153Samarium bone palliation</td>
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<td>18.</td>
<td>99mTc DMSA-V</td>
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<td>Radionuclide ventriculography</td>
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<td>20.</td>
<td>Thallium scan</td>
<td>1200</td>
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<td>21.</td>
<td>Tetrofosmin</td>
<td>280</td>
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<tr>
<td>22.</td>
<td>Parathyroid</td>
<td>36</td>
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<td>23.</td>
<td>Brain SPECT</td>
<td>760</td>
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<td>24.</td>
<td>PET whole body</td>
<td>3142</td>
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<tr>
<td>25.</td>
<td>Brain gluocophentonate (GHA)</td>
<td>680</td>
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<tr>
<td>26.</td>
<td>F18 DOPA</td>
<td>20</td>
</tr>
<tr>
<td>27.</td>
<td>68Ga peptide imaging</td>
<td>115</td>
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</table>

**VISITING SCIENTISTS**

Professor D. Richard P. Baum (Germany), Dr Teofilo O.L. San Luis (Philippines), Professor Annare Ellmann (South Africa), Dr S.K. Ozker (Dubai, UAE), Professor Mohmad Eftakari (Iran), Dr Gopinath Gnansegaran (United Kingdom), Dr Thomas N.B. Pascual (Philippines).
EDUCATION

Postgraduate

The faculty participated in and delivered lectures for the course entitled ‘Structural Biology and NMR Technology’ and ‘Molecular medicine and biotechnology’ in the MBiotech programme of the Department of Biotechnology.

Short- and long-term training

Three persons from medical and science disciplines from various institutes and universities underwent training in MRI and MRS techniques.

Continuing Medical Education (CME)

The faculty participated in and delivered several lectures in CME programmes, symposia and conferences.

Lectures delivered

Professor N.R. Jagannathan

• ‘Role of MRI and MR spectroscopy in Biology: Application of analytical techniques for the characterization of biomolecules’, University of Lucknow; 2–3 August 2008.

• ‘Monitoring the therapeutic response of breast cancer patients by MRI and diffusion weighted MR imaging’, XXIII International Conference on ‘Magnetic resonance in biological systems (ICMRBS)’, San Diego, USA; 24–19 August 2008.

• ‘Role of MRSI and DWI in the evaluation of prostate cancer: An Indian experience’, Department of Radiology, University of California, San Francisco, USA; 22 August 2008.

• ‘Integration of various branches of science in understanding Biology’, Workshop on Biology for college teachers, Miranda House; 24 September 2008.


• Chairperson of a scientific session, 6th Asian Biophysics Association (ABA) Symposium and the 27th Hong Kong Society of Neurosciences Annual Meeting, HKUST, Hong Kong; 11–15 January 2009.

• Chairperson of a scientific session, National Symposium on ‘Cellular and molecular biophysics (NCMB-2009)’, Centre for Cellular and Molecular Biology (CCMB), Hyderabad; 22–24 January 2009.

• ‘Role of NMR in Medicine: Magnetic resonance imaging (MRI) and in-vivo MR Spectroscopy’, National Seminar on ‘NMR: Advances and applications’, Department of Chemistry, MS University, Vadodara; 21–22 February 2009.

• ‘Magnetic resonance imaging (MRI) and in-vivo MR Spectroscopy (MRS) in Biomedical Research’, National Symposium on ‘Emerging trends in biomedical sciences, Dehradun; 28 February 2009.

• Chairperson of a scientific session, NMRS-2009, Symposium on ‘MR and bimolecular Mimetics and 15th NMR Society Meeting, Indian Institute of Chemical Technology (IICT), Hyderabad; 2–5 February 2009.

Dr Rama Jayasundar

• ‘Magnetic resonance in medicine’, KG Super Specialty Hospital, Coimbatore; 26 April 2008.

• ‘Management of eye diseases in Ayurveda’, KG Eye Hospital, Coimbatore; 26 April 2008.


• ‘Relevance of ayurveda in the current health scenario’, Engineering College, Amrita Vishwa Vidyapeetham, Coimbatore; 27 April 2008.

• ‘Nuclear magnetic resonance and RF Coil Making’, Engineering College, Amrita Vishwa Vidyapeetham, Coimbatore; 27 April 2008.


• ‘Contemporary significance of Ayurveda’, Centre for the Study of Social Systems, School of Social Sciences, Jawaharlal Nehru University; 20 November 2008.

• ‘Quantum physics, ayurveda and spirituality (Plenary lecture)’. Science and Spirituality Quest, National Institute of Technology (NIT), Trichy; 27 December 2008.

• ‘Which road to take in one’s health highway–biomedicine or ayurveda?’, DST Unit of Nanosciences, Indian Institute of Technology (IIT), Chennai; 3 January 2009.


• ‘Quantum physics and spirituality’, Department of Tibetan Medicine, Central Institute of Higher Tibetan Studies, Sarnath, Varanasi; 18 February 2009.

• ‘Quantum physics and ayurveda’, Department of Tibetan Medicine, Central Institute of Higher Tibetan Studies, Sarnath, Varanasi; 19 February, 2009.

• ‘Women’s health in ayurveda’. Department of Tibetan Medicine, Central Institute of Higher Tibetan Studies, Sarnath, Varanasi; 20 February 2009.

• ‘Research in ayurveda’, Department of Tibetan Medicine, Central Institute of Higher Tibetan Studies, Sarnath, Varanasi; 21 February 2009.

• ‘Can human biology be studied in two different ways–biomedicine and ayurveda?’’, Department of Tibetan Medicine, Central Institute of Higher Tibetan Studies, Sarnath, Varanasi; 21 Feb.2009.


Dr S. Senthil Kumaran


• ‘Functional MRI in Neurological disorders’, National Science Day Celebrations, Solid State Physics Laboratory, DRDO, Delhi; 27 February 2009.

RESEARCH

Funded Projects

Ongoing


2. 700 MHz NMR Spectrometre for Biomedical Research. N. R. Jagannathan. Funded by Department of Science and Technology, Government of India (December 2007 – December 2012). Funds: Rs 842.6 lakh.


**Departmental Projects**

**Ongoing**

1. MRI and MRS study of animal model of demyelination

2. Development of pulse sequence for *in vivo* simultaneous suppression of water and fat in breast cancer patients

**Collaborative projects**

**Ongoing**

1. MRI/MRS studies to evaluate brain metabolism in sleep apnea patients (with Medicine)

2. *In-vivo* and *in-vitro* MR spectroscopy studies of tissue extracts of prostate cancers (with Urology and Pathology)

3. *In-vitro* MR spectroscopy of colon tissue in patients of IBD (with GI Surgery)

4. *In vivo* MR spectroscopy study of human breast carcinoma (with Surgery, Radiotherapy and Pathology)

5. MRI studies of skin cancers (with Biochemistry)

6. *In-vivo* MRS of brain in NIDDM patients (with Medicine).

7. Functional MRI study in IBD and Achalasia Cardia patients (with Gastroenterology)

8. Neural mapping during stoop task of familiar faces (with Physiology)

9. *In vitro* MR spectroscopy of immune cells from mice (with National Institute of Immunology)

10. $^{31}$P MRS study of skeletal muscle in normal subjects with vitamin D supplementation (with Endocrinology)

11. MRI/MRS studies to evaluate brain metabolism in patients with diabetes mellitus (with Medicine)

12. Analytical evaluation of ayurvedic bhasmas (with DST Unit of Nanoscience, Indian Institute of Science, Chennai)
PUBLICATIONS

Reviews


Chapters in Books


Journals


**Abstracts**


PATIENT CARE

The department has two 1.5 Tesla whole body MR scanners for patient care and research. The department provides 12 hours per day of MRI scanning for patient. The details of the number of patients scanned during the year are:

Clinical Diagnostic MRI Scan : 4758 patients
Research MRS/fMRI : 392 patients
High-resolution NMR : 147 samples

AWARDS AND HONOURS

Professor N.R. Jagannathan is a member of the editorial board of “MAGMA” (Magnetic Resonance Materials in Physics, Biology and Medicine), (Springer); member of the editorial board of ‘Magnetic Resonance Insights’ (Libertas Academica, USA); Deputy Editor of ‘Neuroscience Imaging’; Member, editorial board ‘NMR Biomedicine (John Wiley and Sons); Member, editorial board, “Magnetic Resonance Imaging” (Elsevier); Member, editorial board ‘Spectroscopy–Biomedical Applications’ (IOC Press, Netherlands); Member, editorial board,’Biophysical Reviews’ (Springer); Editor (special issue) on ‘Breast MR’ in ‘NMR Biomed’ (John Wiley and Sons), volume 22(1), 2009; President of the Indian Biophysical Society (IBS); elected member of the executive council, International Union of Pure and Applied Biophysics (IUPAB) (2008-2011); Member, Annual Meeting Programme Committee (AMPC), International Society for Magnetic Resonance in Medicine (ISMRM); Member, Education Committee, International Society for Magnetic Resonance in Medicine (ISMRM); Member, steering committee, Asian Biophysics Association (ABA); Moderator, Joint Meeting of the International Society for Magnetic Resonance in Medicine (ISMRM), Toronto, Canada May 2008; Chairperson, scientific session, 6th Asian Biophysics Association (ABA) meeting, Hong Kong, January 2009; Member of the Programme Advisory Committee (PAC), Section for Biochemistry, Biophysics and Molecular Biology, Department of Science and Technology (DST), Government of India; Member of the Steering Committee of the Sophisticated Instruments facilities (SAIFs), Department of Science and Technology (DST), Government of India; council member of the International Conference on Magnetic Resonance in Biological Systems (ICMRBS); coordinator of the expert panel on ‘Biomedical Devices and Bioengineering’, Life Sciences Research Board (LSRB), DRDO; Member, INSA committee for International Union of Pure and Applied Biophysics (IUPAB); Member, Programme Advisory Committee (PAC), National Facility for High Field NMR, Tata Institute of Fundamental Research (TIFR), Bombay; Member, Management Advisory Committee (MAC), Regional Sophisticated Instruments Facility (RSIC), Indian Institute of Technology (IIT), Chennai.

Dr Rama Jayasundar completed 5½ years Bachelor of Ayurvedic Medicine and Surgery (BAMS) degree; awarded the Best Outstanding Outgoing Student by the SJS Ayurveda College, Chennai; one of the two scientists (the other being an Australian Neuroscientist) to be interviewed and featured for the ‘Biotechcellence 2008’, Centre for Biotechnology, Anna University.
9.22 Obstetrics And Gynaecology

Professor & Head
Suneeta Mittal

Professor
Alka Kriplani
Suneesh Kumar
Deepika Deka

Additional Professor
Neerja Bhatla
K.K. Roy

Associate Professor
Neena Malhotra
Vatsla Dadhwal
Nutan Agarwal

Assistant Professor
J.B. Sharma
Neeta Singh (on transfer from Reproductive Biology)
Pradeep Garg (adhoc)

Scientist Gr.I
Rohini Sehgal
Avnish Chandra Tiwari

EDUCATION

Undergraduate, Postgraduate, paramedical

The Delhi Postgraduate Medical Education Forum is organized by the department as monthly meetings for postgraduate training since 2001. These are held to supplement training of postgraduates in clinical and surgical skills, a problem-oriented approach to Obstetrics and Gynaecology, protocols and guidelines, case presentations and discussions. Invited faculty from various academic and teaching institutions of Delhi as well as international faculty contribute towards the training of postgraduates.

Short-term and long-term training

The department offers short- and long-term training in various subspecialty subjects such as Gynaecological Endoscopic Surgery, High-risk Pregnancy, Gynaecological Oncology, and Gynaecological and Obstetrics Ultrasonography and Infertility. 10 long-term fellows and 20 short-term trainees underwent training in different subspecialty subjects.

Continuing Medical Education

The department organizes a national CME in Obstetrics and Gynaecology in collaboration with the National Board of Examinations, National Academy of Medical Sciences and World Health Organization every six months. It is a unique, innovative modular teaching programme in which the MD syllabus is covered in six modules over 3 years. Series 2, Module V and Series 2, Module VI were held on 26–27 April 2008 and 2–3 November 2008, respectively. The CME modules are attended by more than 200 students as well as senior gynecologists and are accredited by Delhi Medical Council.
CME, workshops and seminars

- National CME in Obstetrics and Gynaecology (Series 2, Module V), AIIMS; 26–27 April 2008.
- CME on Managing Congenital Intrauterine Infections, AIIMS; 31 August 2008.
- Women’s Health Initiative Training Course in Minimally Invasive Gynaecology, AIIMS; 1–11 September 2008.
- National CME in Obstetrics and Gynaecology (Series 2, Module VI), AIIMS; 1–2 November 2008.
- Practical Workshop on Research Methodology, COHORT study design, AIIMS; 12–14 January 2009.

Lectures delivered

Dr Suneeta Mittal


• ‘Laparoscopic surgeries complications and Management’, Women’s Health Initiative Training Training Course in Minimally Invasive Gynaecology, AIIMS; 2–12 February 2009.

Dr Alka Kriplani


• ‘Managing abnormal uterine bleeding’, 11th practical course and CME, Department of Obstetrics and Gynaecology, MAMC, Delhi; 10 August 2008.


• ‘Rubella’, CME on Managing Congenital Intrauterine infections, Department of Obstetrics and Gynaecology, AIIMS and Genetic and Fetal Medicine Committees, FOGSI, Delhi; 31 August 2008.
• ‘Endoscopy in infertility’, 9th WHI Training course in MAS, Department of Obstetrics and Gynaecology, AIIMS, UNU and Karl Storz Germany, Delhi; 3 September 2008.

• ‘Endoscopy and Hysterectomy’, 9th WHI Training course in MAS, Department of Obstetrics and Gynaecology, AIIMS, UNU and Karl Storz Germany, Delhi; 10 September 2008.


• ‘Laparoscopy in Gynaecological Malignancy’, CME on practical applications and current concepts in Gynaecological Oncology, Department of Obstetrics and Gynaecology, AIIMS, Oncology Committee, AOGD and AOGIN, New Delhi; 27 September 2008.

• ‘Endoscopy in infertility’, 10th WHI Training course in MAS, Department of Obstetrics and Gynaecology, AIIMS, UNU and Karl Storz Germany, Delhi; 15 October 2008.

• ‘Endoscopy and Hysterectomy’, 10th WHI Training course in MAS, Department of Obstetrics and Gynaecology, AIIMS, UNU and Karl Storz Germany, Delhi; 22 October 2008.


• ‘Endoscopy in infertility’, 11th WHI Training course in MAS, Department of Obstetrics and Gynaecology, AIIMS, UNU and Karl Storz Germany, Delhi; 4 February 2009.

• ‘Endoscopy and Hysterectomy’, 11th WHI Training course in MAS, Department Obstetrics and Gynaecology, AIIMS, UNU and Karl Storz Germany, Delhi; 11 February 2009.


Dr D. Deka


Dr Neerja Bhatla

• Procedure of Myomectomy, National CME, Obstetrics and Gynaecology, (Series 2, Module 5), New Delhi; 26 April 2008.

• HPV vaccine in cancer cervix, CME, HPV, cervical cancer and its vaccines, Dharamshila Hospital and Research Centre, Delhi; 26 April 2008.

• HPV vaccination and its future, CME, Gynaecological Oncology, Sir Ganga Ram Hospital, New Delhi; 12 July 2008.

• ‘Laparoscopy in Gynaecological Oncology’, Women’s Health Initiative Training Course in Minimally Invasive Gynaecology, AIIMS; 7 February 2009.

Dr Neena Malhotra

• ‘Antepartum haemorrhage’, National CME, Obstetrics and Gynaecology (Series 2, Module 5), AIIMS; 27 April 2008.

• ‘Endoscopic tubal sterilization’, training course in Minimally Methods in Reproductive Health, AIIMS, New Delhi.

• ‘Chicken pox, Measles, mumps in Pregnancy’, CME, Managing Intrauterine infections, AIIMS; 31 August 2008.


Dr Vatsla Dadhwal

• ‘Rh negataive pregnancy, Rh isoimmunisation’, National CME in Obstetrics and Gynaecology (Series 2, Module 5), AIIMS; 27 April 2008.

• ‘Herpes Simplex’, CME, Managing congenital intrauterine infections, Department of Obstetrics and Gynaecology, AIIMS; 31 August 2008.


• ‘HIV in pregnancy’, National CME, Obstetrics and Gynaecology (Series 2, Module 5), AIIMS; 1 November 2008.

• ‘Newer concepts in prenatal diagnosis and preconception counselling’, CME, Challenges in Obstetrics and Gynaecology, Mata Chanan Devi Hospital, Delhi; 21 December 2008.

• ‘Diagnostic/hysteroscopy, training course in Minimally Invasive Gynaecology, AIIMS; 2–12 February 2009.

Dr Nutan Agarwal

• ‘Multiple pregnancy’, National CME in Obstetrics and Gynaecology (Module 5) AIIMS, New Delhi; 27 April 2008.


• ‘Valvectomy – tailoring to individual’, CME, practical applications and current concepts in gynaecology oncology, AIIMS, in collaboration with AOGD and AOGIN, India; 27 September 2008.


• ‘Thyroid disorders during pregnancy’, National CME on Obstetrics and Gynaecology (Module 6, series 2), AIIMS; 1 November 2008.

• ‘Complications of hysteroscopy and their management’, Women’s Health Initiative Training Course in Minimally Invasive Gynaecology, AIIMS; 2–12 February 2009.


Dr J.B. Sharma


• ‘Tuberculosis in pregnancy’, CME, 52nd All India Congress in Obstetrics and Gynaecology, AICOG 2009, Jaipur, Rajasthan; 5 January 2009.

• ‘Role of endoscopy and laparoscopy in urogynaecology’, Women’s Health Initiative Training Course in Minimally Invasive Gynaecology, AIIMS; 1–11 September 2008.


• ‘Role of endoscopy and laparoscopy in urogynaecology’, Women’s Health Initiative Training Course in Minimally Invasive Gynaecology, AIIMS; 2–12 February 2009.
National and International Conferences

Lectures delivered

Dr Suneeta Mittal

• ‘Updates in MMA research and practice in India’, Conference on ‘Medical abortion in Sourth Asia: What is new? What is next?’, Gynuity Health Projects, Kathmandu, Nepal; 23–24 October 2008.

• ‘Medical eligibility criteria’, NARCHI Symposium on reproductive health, AIIMS, New Delhi; 2 November 2008.


• AOGD Oration on ‘Role of IVF in infertility management in developing countries’, 30th Annual Conference of Association of Obstetricians and Gynaecologists of Delhi (AOGD), New Delhi; 8–9 November 2008.

• ‘Recent trends in endometriosis‘, National Symposium on recent advances in female reproductive health services, Central Drug Research Institute, Lucknow; 12 December 2008.

• ‘Stem cell therapy–Current perspective’, 52nd All India Congress of Obstetrics and Gynaecology (AICOG 2009), Jaipur; 4–8 January 2009.


• ‘Emergency contraception’, Rockland Hospital, New Delhi; 29 January 2009.

• ‘Introduction and need for clinical research’, Pre-congress workshop data management and research, AIIMS, New Delhi; 28 February 2009.

• ‘Ovarian tissue and oocyte cryopreservation’, Symposium on ovarian cancer, AIIMS, New Delhi; 28 March 2009.

Dr Alka Kriplani


• ‘Management of abnormal uterine bleeding – current concepts’, 41st Annual Scientific sessions in association with Asia-Oceania Federation of Obstetrics and Gynaecology (AOFOG) and supported by Indian College of Obstetricians and Gynaecologists (ICOG), Sri Lanka College of Obstetricians and Gynaecologists, Colombo, Sri Lanka; 30 July 2008.


• ‘Diabetes in pregnancy’, Workshop on Maternal Foetal Medicine, Department of Obstetrics and Gynaecology, AIIMS, and Genetic and Foetal Medicine, Committee of FOGSI, New Delhi; 26 August 2008.


• ‘Diabetes in pregnancy’, DNB teaching programme, Steel Authority of India, Bhilai; 14 November 2008.

• ‘Current concepts – Management of AUB’, DNB teaching programme, Steel Authority of India, Bhilai; 14 November 2008.

• ‘Contraception today’, DNB teaching programme, Steel Authority of India, Bhilai; 14 November 2008.


• ‘Primary amenorrhoea’, 13th Annual revision course for exam-going postgraduates, Sri Ramachandra Medical College and Research Institute, Sri Ramachandra University, Porur, Chennai; 2 February 2009.

• ‘Abnormal uterine bleeding’, 13th Annual revision course for exam-going postgraduates, Sri Ramachandra Medical College and Research Institute, Sri Ramachandra University, Porur, Chennai; 2 February 2009.


Dr Sunesh Kumar

• ‘Laparoscopy – positioning, pneumoperitoneum, port placement, indications, contradictions’, Women’s Health Initiative Training course in Minimally Invasive Gynaecology, AIIMS; 1–11 September 2008

• ‘Laparoscopy – positioning, pneumoperitoneum, port placement, indications, contradictions’, Women’s Health Initiative Training course in Minimally Invasive Gynaecology, AIIMS; 13–23 October 2008

• ‘Laparoscopy – positioning, pneumoperitoneum, port placement, indications, contradictions’, Women’s Health Initiative Training course in Minimally Invasive Gynaecology, AIIMS; 2–12 February 2009
Dr Deepika Deka

- Rh Isoimmunization meeting, Delhi Gynaecologist Forum (Westown), Delhi; 1 August 2008.

Dr Neerja Bhatla

• ‘Formulation of research question’, 1st Annual clinical epidemiology research methods and leadership training workshop for UG and PG medical students, K.L. Wig CMET, AIIMS; 11–13 Jul 2008.


• ‘Laparoscopy in gynaecological oncology’, Women’s health initiative training course in minimally invasive gynaecology, AIIMS; 10 September 2008.

• ‘Mahilaon mein stan cancer, jaanch or uska upchar’, All India Radio, 15 September 2008.


• ‘HPV vaccine’, AOGD, New Delhi; 8–9 November 2008.


• ‘Possible role of HPV vaccines in the control of cervical cancer in developing countries and India – Current status and future’, Annual Day on Institute of Cytology and Preventive Oncology, Noida; 15 January 2009.


• ‘Screening after vaccination’, 24th AICC RCOG Conference, New Delhi; 28 February–2 March 2009.
• ‘Cervical cancer’, CNN-IBN TV Channel; 8 March 2009.

Dr Neena Malhotra

• ‘Hormone therapy for endometriosis’, XV Annual symposium on hormonal receptors and women’s health ranbaxy science foundation, New Delhi; 19 March 2009.

Dr Vatsla Dadhwal

• ‘Prenatal diagnostic procedures’, Workshop on foetal medicine, Madurai Obstetrics and Gynaecology Society; 21 February 2009.
• ‘Identifying foetal anaemia before hydrops develops’, Workshop on management of Rh negative mothers and Rh-isoimmunization–current concepts, SAFE, DESPAT, Genetics and foetal medicine committee, FOGSI, AIIMS; 28 February 2009.

Dr Nutan Agarwal

• ‘Ultrasound guided and amniocentesis as a foetal medicine procedure’, workshop on maternal and foetal medicine, AIIMS, 25–30 August 2008.


• ‘Prevention and management of hysteroscopic complications’, 9th World Congress and 17th National Conference of reproductive and child health; 12–14 September 2008.


Dr J.B. Sharma


• ‘Management of pregnant patients under DOTS plus in national DOTS plus committee for MDR/XDR management’, LRS Institute of TB and Respiratory Diseases, New Delhi; 20 December 2009.
• ‘Urogynae disorders in day to day gynaecology practice’, Challenges in obstetrics and gynaecology, Mata Chanan Devi Hospital, New Delhi; 21 December 2008.


Dr Pradeep Kumar Garg


RESEARCH

Funded Projects

Completed


Ongoing


2. Prevention of parents to child transmission of HIV. Suneeta Mittal. Funded by Delhi State AIDS Control Society (ongoing long project). Funds: Rs 0.5 lakh.

3. Phase I clinical trial of once weekly administration of 50 mg mifepristone as oral contraceptive. Suneeta Mittal. Funded by ICMR (ongoing long project). Funds: HRRC.
4. Phase III multicentre clinical trial with subdermal single Rod contraceptive implant–implanon. Suneeta Mittal. Funded by ICMR for two years. Funds: HRRC.


**Departmental Projects**

*Completed*

1. Persistence of HPV DNA and its correlation with residual disease in treated cases of CIN.

2. Comparison of Glibenclamide (GYBURIDDE) and insulin for glycemic control obstetrical and perinatal outcome in diabetes mellitus during pregnancy.

3. Role of Pulse Doppler in detecting Uterine and Radial artery flow changes in predicting Pregnancy outcome in Unexplained Infertility.
4. Correlation of HPV DNA testing with residual decrease in treated cases of CIN.


*Ongoing*

6. Detection and quantification of foetomaternal hemorrhage (FMH) following deliveries in Rh-ve non-immunized pregnancy by KBT, flow cytometry.

7. Comparison of harmonic scalpel with bipolar cautery in laparoscopic assisted vaginal hysterectomy.

8. A comparative study of VIA, cyto diagnosis, HPV testing and colposcopy as tools for cervical cancer screening.


10. Doppler assessment in various foetal vessels and foetal weight estimation using antenatal soft tissue thickness in intra uterine growth restriction with normal pregnancies.


14. Endometrial changes and ovarian function in women with early breast cancer.

15. A randomized study to compare two surgical technique of laparoscoic stripping of ovarian endometrioma.

16. Role of middle cerebral artery – peak systolic velocity in predicting foetal anaemia in Rh Isoimmunisation after previous intrauterine transfusions.

17. Use of letrozole versus clomphene citrate combined with gonadotrophin in superovulation and IUI cycles.

18. Hyperhomocystenemia in unexplained recurrent pregnancy loss and therapeutic response to vitamin $\text{B}_6$, $\text{B}_{12}$ and folic acid.

19. Prophylactic administration of micronized progesterone in prevension of preterm labour in women at increased risk.

20. Prospective randomized comparative study of total laparoscopic hysterectomy, laparoscopically assisted vaginal hysterectomy and non descent vaginal hysterectomy for treatment of benign diseases of the uterus.

21. Correlation of stage and imaging of endometriosis with fertility outcome.
22. Role of messenger RNA PCR in the diagnosis of genital tuberculosis in infertile women.
23. Comparison of uterine and radial artery flow changes detected by pulse doppler in women undergoing stimulated intrauterine insemination for unexplained infertility.
24. To compare three different time regimen of vaginal misoprostol after oral mifepristone for medical abortion.
25. Transvaginal ultrasound markers for ovarian reserve and periovarian adhesions after laparoscopic ovarian drilling in patients with clomiphene citrate resistant polycystic ovarian syndrome.
27. Role of PET in staging of ovarian malignancies.
28. To compare BPP with Doppler in pregnant patients with IUGR in normal pregnancies.
29. Role of anastrozole for treatment of symptomatic leiomyoma in premenopausal women.
30. Ovarian function and endometrial changes in case of carcinoma breast.
31. Comparative study between MRI and ultrasound in prenatal diagnosis using autopsy or postpartum imaging as a standard of reference.
32. Application of PET scan in preoperative evaluation of carcinoma endometrium.
33. Effect of oral contraceptive containing ethinyl estradiol combined with drospirenon vs desogestrel on clinical and biochemical parameters in patients of PCOS.
34. Sentinel lymph node biopsy in cancer cervix.
35. The comparison between laparoscopic assisted vaginal hysterectomy with non-descent vaginal hysterectomy for large uteri – a randomized clinical trial.
36. Role of MRI in evaluation of pelvic organ prolapse and its relationship with POPQ classification.
37. Comparing thermal balloon ablation and levonorgestrel intrauterine system in patients with dysfunctional uterine bleeding.
38. Role of direct foetal intravascular immunoglobulin therapy rhesus isoimmunized pregnancies.
40. Normogram of foetal nasal bone length at 11–14 weeks of gestation.
41. Sonographic placental investigation in early pregnancy: correlation with foetal and maternal outcome in singleton pregnancy.
42. Clinical, imaging, endoscopic and laboratory evaluation of female genital tuberculosis.
43. Evaluation of the screen-and vaccinate strategy as a model for comprehensive cervical cancer prevention.
44. To evaluate endometrial & sub endometrial blood flows in the prediction of pregnancy during in-vitro fertilization treatment.

**Collaborative Projects**

**Ongoing**

2. Apoptosis in placental membranes in pre-eclampsia: An immunohistochemical study (with Anatomy).
3. PEARL study (postmenopausal evaluation and risk reduction with lasofoxifene). Global research and development (with Endocrinology).
4. The Generations trial. Effects of Arzoxifene on vertebral fracture incidence and on invasive breast cancer incidence in postmenopausal women with osteoporosis or with low bone density (with Endocrinology).
5. Chromosome aneuploidy and mosaicism in preimplantation embryo (with Anatomy).
6. Sequence based identification of Mycobacterium species isolated from extra-pulmonary tuberculosis cases (with Laboratory Medicine).
7. Establishment and characterization of human foetal liver hematopoietic stem cell line (with Medical Oncology, IRCH).
8. To study the subset of antiphospholipid syndrome defined by anti beta2 glycoprotein 1 antibody (with Laboratory Medicine).
9. Role of centchroman in benign breast disease (with Surgery).
10. Epidural analgesia in labour (with Anaesthesiology).
11. Chromosome aneuploidy and mosaicism in preimplantation embryo (with Reproductive Biology).
12. Prenatal development and maturation of the human inferior colliculus (with Anatomy).
14. Biostatistical aspects in case control studies on unintended pregnancies (with Biostatistics).
15. A study of molecular basis of endometrial receptivity for blastocyst implantation in primates (with Physiology).
16. Prevention of parent to child transmission of HIV (with Paediatrics and Microbiology).
18. Prevalence of bacterial vaginosis and other reproductive tract infections among symptomatic women (study in tertiary centre) (with Microbiology).

19. To study the effect of human chorionic gonadotrophin (hCG) on vascular endothelial growth factor (VEGF) expression by human mid-secretory endometrial cells grown on rat-tail collagen matrix (with Physiology).

20. Effect of progesterone on hsp 27 expression in human, mid-secretory stage endometrial cells grown on collagen matrix in vitro (with Physiology).

21. Elucidation of endometriosis based on transcript profiling (with Physiology).

22. To study the prevalence of vitamin D deficiency in pregnant women at first and third trimester during the routine care (with Endocrinology).

23. Correlation between first trimester glucose screening and serum insulin levels with development of gestational diabetes mellitus in pregnancy (with Endocrinology).

24. An in vitro model study of hyperlipoproteinemia on the degree of LDL receptor expression in placental trophoblast cells: Correlation with oral steroid contraceptive induced hyperlipoproteinemia (with ICMR).

25. Comparative evaluation of neo adjuvant chemotherapy vs primary debulking surgery in the management of advanced epithelial ovarian cancer (with IRCH).

26. pl61NK 4a and E-cadherin expression profile in pre-cancerous lesions of cervix and cervical carcinomas (with Pathology).

27. Role of circulating angiogenetic factors in the pathogenesis of pre-eclampsia (with Anatomy).

28. Validation of strategies for rapid prenatal detection of aneuploides (with Genetics).


31. Establishment and characterization of human foetal liver hematopoietic stem cell line (with Medical Oncology, IRCH).

32. Endothelial progenital cells as biomarker of disease activity in multiple myeloma (with Oncology).

33. Use of Hb A estimation by HPLC for prenatal diagnosis of b-thalassemia in foetal blood samples during second trimester pregnancies (with Haematology).

34. Delineation of molecular basis of trophoblast invasion (with National Institute of Immunology).

35. Implantation of human retinal pigment epithelial (RPE) cells in the 6-OH DA lesioned rat model of Parkinson’s disease (with Neurology).

36. Diagnosis of genital tuberculosis in infertile women and the effect of antitubercular therapy (with ICMR).
37. Role of mifepristone (RU 486) in the management of Uterine Leiomyoma (ICMR).

38. An open label, single-arm, non-comparative study to evaluate the efficacy and safety of ion surose (OROFER-S) injection in the treatment of iron deficiency anaemia during pregnancy (with Emcure Pharmaceuticals).

39. Comparative study of oral single dose of metronidazole, tinidazole, secnidazole and ornidazole in the case of bacterial vaginosis (with DST).

PUBLICATIONS


Fertility among women with classical congenital adrenal hyperplasia: Report of 7 cases where treatment was started after 9 years of age. *Gynecol Endocrin* 2008;**24**:267–72.


Chapters in Books


**PATIENT CARE**

Hospital care: Facilities available with the department include special clinic and special laboratory facilities besides the regular Gynaecology OPD which is held everyday. The following special clinics are held.

<table>
<thead>
<tr>
<th>Clinics</th>
<th>Number of patients attended</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. General OPD</td>
<td>6/ week</td>
</tr>
<tr>
<td>New: 30,650</td>
<td>Old: 53,460</td>
</tr>
<tr>
<td>2. High- risk pregnancy clinic</td>
<td>3/week</td>
</tr>
<tr>
<td>New: 2,651</td>
<td>Old: 1,26,518</td>
</tr>
<tr>
<td>3. Gynaecological endocrine clinic</td>
<td>3/week</td>
</tr>
<tr>
<td>New: 217</td>
<td>Old: 503</td>
</tr>
<tr>
<td>4. Gynaecological cancer clinic</td>
<td>2/week</td>
</tr>
<tr>
<td>New: 311</td>
<td>Old: 677</td>
</tr>
<tr>
<td>5. Postnatal clinic</td>
<td>3/week</td>
</tr>
<tr>
<td>New: ---</td>
<td>Old: 413</td>
</tr>
<tr>
<td>6. Medical termination of pregnancy clinic</td>
<td>6/week</td>
</tr>
<tr>
<td>New: 785</td>
<td>Old: 385</td>
</tr>
<tr>
<td>7. Family Welfare clinic</td>
<td>6/week</td>
</tr>
<tr>
<td>New: 6,535</td>
<td>Old: 3,217</td>
</tr>
</tbody>
</table>

**Operations Performed**

*Gynaecological*

Major:

- Surgery for benign diseases - 1,432
- Oncology surgery - 243
- Infertility - 765
<table>
<thead>
<tr>
<th>Procedure</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endoscopic surgeries: Laparoscopy</td>
<td>2,337</td>
</tr>
<tr>
<td>Hysteroscopy</td>
<td>153</td>
</tr>
<tr>
<td>Plastic surgery</td>
<td>62</td>
</tr>
<tr>
<td>Minor:</td>
<td></td>
</tr>
<tr>
<td>D&amp;C/EA</td>
<td>2338</td>
</tr>
<tr>
<td>Colposcopy/cryo/LEEP</td>
<td>297</td>
</tr>
<tr>
<td>Diagnostic hysteroscopy</td>
<td>785</td>
</tr>
<tr>
<td>MTP</td>
<td>785</td>
</tr>
<tr>
<td>Pap smear</td>
<td>3409</td>
</tr>
<tr>
<td>Cervical biopsies</td>
<td>211</td>
</tr>
<tr>
<td>Obstetrics</td>
<td></td>
</tr>
<tr>
<td>Major:</td>
<td></td>
</tr>
<tr>
<td>LSCS</td>
<td>785</td>
</tr>
<tr>
<td>Em. laparotomies</td>
<td>52</td>
</tr>
<tr>
<td>Minor:</td>
<td></td>
</tr>
<tr>
<td>Operative vaginal deliveries: Forceps</td>
<td>151</td>
</tr>
<tr>
<td>Vaginal deliveries: Normal</td>
<td>1141</td>
</tr>
<tr>
<td>Foetal Medicine</td>
<td></td>
</tr>
<tr>
<td>Cordocentesis</td>
<td>98</td>
</tr>
<tr>
<td>Chorionic villus sampling</td>
<td>187</td>
</tr>
<tr>
<td>Amniocentesis</td>
<td>163</td>
</tr>
<tr>
<td>In-vitro utro infusion</td>
<td>101</td>
</tr>
<tr>
<td>High-risk obstetrics</td>
<td></td>
</tr>
<tr>
<td>—Obstetric ultrasound</td>
<td>3800</td>
</tr>
<tr>
<td>—NST</td>
<td>4228</td>
</tr>
<tr>
<td>—BPP</td>
<td>3085</td>
</tr>
<tr>
<td>Gynaecological ultrasound</td>
<td>2935</td>
</tr>
<tr>
<td>Ovarian cyst aspirations</td>
<td>235</td>
</tr>
<tr>
<td>Laboratory Investigations</td>
<td></td>
</tr>
<tr>
<td>Urine pregnancy</td>
<td>2925</td>
</tr>
<tr>
<td>Haemoglobin</td>
<td>3849</td>
</tr>
<tr>
<td>Blood groups</td>
<td>3207</td>
</tr>
<tr>
<td>Urine Albumin/sugar</td>
<td>48,823</td>
</tr>
</tbody>
</table>
### IVF Facility

<table>
<thead>
<tr>
<th>1.</th>
<th>IVF</th>
<th>71</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ICSI</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>Antagonist</td>
<td>68</td>
</tr>
<tr>
<td></td>
<td>Agonist</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>IUI</td>
<td>75</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2.</th>
<th>Cycles cancelled</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reasons for cancellation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Failure to respond</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Fertilization failure</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Severe OHSS</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Converted to IUI</td>
<td>2</td>
</tr>
</tbody>
</table>

|    | EHS | 29 |

| 3. | Frozen Embryo cycles | 18 |
| 4. | PESA | 6 |

| 5. | Total number of Pregnancies | 17 |
|    | Ongoing | 7 |
|    | Delivered | 5 |
|    | Abortions | 4 |
|    | Ectopic | 1 |

| 6. | Andrology |
|    | semen Analysis | 201 |
|    | semen wash for IUI | 75 |
|    | semen preparation for IVF | 109 |

| 7. | Ultrasounds |
|    | IVF cycles | 550 |
|    | Follicle monitoring | 150 |
|    | Day 2 AFC and Day 21 ET | 1100 |
|    | Total | **1800** |

| 8. | OPD registrations (Old and New) | 2400 |

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The Postpartum Programme (PPP) is a maternity-centred 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 Paediatrics, Community Medicine, Surgery and Anaesthesiolotgy.

**Achievement of different family planning methods, Postpartum Programme (2008-2009)**

<table>
<thead>
<tr>
<th>Method</th>
<th>Achievement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper T</td>
<td>541</td>
</tr>
<tr>
<td>Oral pills (13 cycles=1 user)</td>
<td>169/patient + 480 pkts</td>
</tr>
<tr>
<td>Conventional contraceptives (72 pieces=1 user)</td>
<td>73,000 pieces</td>
</tr>
</tbody>
</table>

**Sterilisation**

(a) Tubectomy                           1090
(b) Vasectomy                            59

Note: Family planning methods are free of target.

**Maternal and Child Health (MCH) Performances (2008-2009), Postpartum Programme**

<table>
<thead>
<tr>
<th>Service target</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pregnant women</td>
<td></td>
</tr>
<tr>
<td>TT (Mothers) (2nd or booster)</td>
<td></td>
</tr>
</tbody>
</table>

**Children (0-1) year**

<table>
<thead>
<tr>
<th>Service</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPT (3rd dose)</td>
<td>M + F = 648/508</td>
</tr>
<tr>
<td>Polio (3rd dose)</td>
<td>M + F = 1078/879</td>
</tr>
<tr>
<td>BCG</td>
<td>1137 + 1245</td>
</tr>
<tr>
<td>Measles</td>
<td>745 + 556</td>
</tr>
</tbody>
</table>

**Children under five years**

<table>
<thead>
<tr>
<th>Service</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>DT</td>
<td>369 + 316</td>
</tr>
</tbody>
</table>
COMMUNITY SERVICES/CAMPS

The faculty participated in community awareness programmes through public education talks on radio, phone-in programmes and panel discussions on AIR and allied TV channels.

- Camp at BICODEP, Janakpuri in collaboration with Rotary Club, December 2008.
- Cancer prevention camp for EHS beneficiaries at AIIMS, 26 March 2009.
- Reproductive child health camps organized by the Directorate of Family Welfare at different hospitals of Delhi Government.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

**Dr Suneeta Mittal** is the Editor, Reproductive Health Library, WHO; Vice-President, North Zone, ISOPARB; Fellow of Royal College of Obstetricians and Gynaecology, London; Vice-President, Indian Society for Study of Reproduction and Fertility; Short-term consultant for technical assistance to WHO on Safe abortion in DPRK; Member, WHO Fertility Regulation Group; Memebbr, WHO Task Force on Post-Ovulatory Methods of Contraception; Member, International Clinical Epidemiology Network (INCLEN); Member, Indian Clinical Epidemiology Network (IndiaCLEN); Member, Global Network for Perinatal and Reproductive Health (GNPRH); Member, Asia Pacific Network for Promotion of Emergency contraception (APNEC); Member, International Consortium for Medical Abortion (ICMA); Member, Core Assessment committee, ICMR, Delhi; Member, Regional Technical Advisory Group (RTAG) on Adolescent Health Development (AHD) of the WHO; Memer, Editorial Board, *Asian Journal of Obstetrics and Gynaecology; Obstetrics and Gynaecology today; Samachar, MOHFW, Government of India; Scientific Communications in Obstetrics and Gynaecology*; Appointed as a Consultant in the panel of consultants/experts to extend medical advice to the Vice President of India; Reviewer (National Journals), *Indian Journal of Medical Research, ICMR, 1997-onwards; Indian Journal of Pediatrics, 1998 onwards; National Medical Journal of India, 1999 onwards; Journal of Obstetrics and Gynaecology of India; Annals of National Academy of Medical Sciences, since 2005; Indian Journal of Community Medicine; Reviewer (International Journals), *International Journal of Obstetrics and Gynaecology of India, 2000 onwards; Archives in Obstetrics and Gynaecology, since 2006; Reproductive Health, since 2001; Reproductive Health Matters, 2005 onwards; British Biomedical Central Journal of Pregnancy and Childbirth, 2007 onwards.*

**Dr Alka Kriplani** is the Vice-President, Federation of Obstetricians and Gynaecological Societies of India (FOGSI) 2009; Editor, *Asian Journal Obstetrics and Gynaecological Practice; continuing as Vice-President, North Zone, Indian Society of Minimal Access and Gynaecological Endoscopic Surgery (IMAGES) 2003; Member, Governing Council, ICOG (2009–2011); Member, Executive Committee, NARCHI, Delhi Branch (2006–2008); Member, Managing Committee, Indian Association of Gynaecological Endocopists (2007–2009); Member, PG Board of Studies in Surgery and Allied subjects, JSS University, Mysore, Karnataka (2008–2009); Editorial board member of 4 journals.

**Dr Sunesh Kumar** is the Member of the Project Advisory Committee on Screening for common cancers being conducted by ICMR in three districts of Himachal Pradesh.
Dr. Deepika Deka is the Chairman, Genetics and Foetal Medicine Committee (FOGSI) (2007–2010); Chairman, Perinatal Medicine Committee, Association Obstetrics and Gynaecology of Delhi (AOGD); Executive Member, Imaging Sciences Committee, FOGSI; Executive Member, International Exchange Committee, FOGSI; Member for Maternal Morbidity, Technical Advisory Committee, UNFPA; Peer Reviewer, Journal of Obstetrics and Gynaecology of India; Member, Editorial Board, Obstetrics and Gynaecology Today; Member, Staff Council, AIIMS (2006–2007); Consultant in-charge, Foetal Medicine OT, Department of Obstetrics and Gynaecology, AIIMS; Consultant in charge, Department of Obstetrics and Gynaecology, AIIMS; UG and PG Examiner for Delhi University, Gau. University, MAHE, Calcutta University, PhD, Bharti Vidhyapeeth, Pune, National Board of Examinations, AMU, Faridkot, Utkal University, etc.

Dr Neerja Bhatla was awarded Dr S.K. Ghai Bhandari award for the best conference presentation on ‘Preventive care in Obstetrics and Gynaecology’ at the 24th AICC RCOG Conference at New Delhi, 28 February–2 March 2009; 40th Dr Subodh Mitra Memorial Oration on ‘The HPV DNA test - A new paradigm in cervical cancer screening’, Kolkata, April 12, 2008 organized by the Bengal Obstetric and Gynaecological Society.

Dr Neena Malhotra was awarded Dr C.S. Dawn prize for the best paper on ‘Modern Technology in Women Health’ 52nd All India Congress of Obstetrics and Gynaecology, Jaipur, January 2009.

Dr Vatsla Dadhwal received the Fellowship of Indian College of Obstetricians and Gynaecologists.

Dr J.B. Sharma is the UG and PG Examiner, Delhi University and Dehradun; MRCOG Examination Coordinator for Delhi for last 6 years; In-charge of postpartum programme of AIIMS for last 4 years actively participating in Family Welfare Programmes of Government of India; Editor, Obstetrics and Gynaecology Today; Associate Editor, International Journal of Gynaecology and Obstetrics India, Asian Journal of Obstetrics and Gynaecology, India Today; Developed Sharma’s Modified Leopold maneuvers and Sharma’s Right and Left Laternal Maneuvers for abdominal for abdominal palpation during late pregnancy; Reviewer, International Journal of Gynaecology and Obstetrics, International Journal of Gynaecology and Obstetrics India, Archives in Obstetrics and Gynaecology, BMC, Journal of Obstet Gynecol Research, Indian Journal of Medical Research; Awarded Ranjana Sharma’s best Urogynaecology Award for best video presentation on urogynaecology at 24th AICC-RCOG Conference, New Delhi, 28 February–2 March 2009.

**SIGNIFICANT EVENTS**

1. Established Endoscopy Centre for Training Course on Minimally Invasive Gynaecology under Women’s Health Initiative
2. construction of ART Centre at the Department of Obstetrics and Gynaecology

**VISITING SCIENTISTS**

1. Surg. Cdr S. Srinivas, Kochi
2. Lt. Col. Davendra Arora, Pune
3. Dr Pak Sun Hu, DPR Korea
4. Dr Jon Kwang Chol, DPR Korea
5. Dr Ashok Agarwal, USA
6. Dr Bradford Lucas, Washington DC, USA
7. Dr Baskar Pandey, Washington DC, USA
8. Dr Barbara Farrell, UK
9. Shan Rich, UK
10. Dr Nisha Lal, Germany
11. Dr Joharna Houres, Germany
12. Dr P.C. Ho, Bangkok
13. Dr Helena von Hertzen, WHO, Switzerland
14. Dr Allan Templeton, UK
15. Dr Kristina Emzell-Daniesson, Sweden

**TRAIENEES & FELLOWS**

**Long-term fellowship**

**WHO Fellows**

1. Dr Anjali Dabral, New Delhi
2. Dr Rita Dhawan, Uttrakhan
3. Dr Manikya Mala Yedla, New Delhi
4. Dr Sangeeta Devi Prasad, New Delhi
5. Dr Poonam Agarwal, New Delhi
6. Dr Dolly Chawla, New Delhi
7. Dr Sangita Nangia, New Delhi
8. Dr Alka Goel, New Delhi
9. Dr Bajrang Lal Soni, Rajasthan
10. Dr Hemali Heidi Sinha, Bihar

**Short-term training**

1. Dr Nicholas Holford
2. Dr Pranab Sinha
3. Mr Andrew Rogers, UK
4. Mr Gorav Wali, UK
5. Mr Julian Allfrey, UK
6. Lt Col. Davendra Arora
7. Dr Alexa Matuschek, Germany
8. Dr Rishabh Singh, UK
9. Mr Dhrushil Patel, UK
10. Ms Zhongbo Chen, UK
11. Ms Helen Jenks, UK
12. Dr Sameena Gul, Srinagar
13. Dr Mansor Bin Md Noor, Malaysia
14. Dr R.M. Udayar Pandian, Malaysia
15. Dr Rajesh Mahendra, Malaysia
16. Dr Deepali Sinhal (Verma)
17. Dr Tania Basu, US
18. Ms Johanna Hauer, UK
19. Ms Leena Herzer, UK
20. Ms Catherine Liu, USA
EDUCATION

Undergraduate and Postgraduate

The department had several doctors from various parts of the country and Afro-Asian region for short-term training in various aspects of Orthopaedics.

Teaching to undergraduate and postgraduate in the form of lectures, bedside teaching, assessment, clinicopathology seminars was imparted.

Continuing Medical Education

Lectures Delivered

Dr P.P. Kotwal

1. ‘RSD: Presentation and Management’, Annual Meeting of the North Zone Chapter of Indian Orthopaedic Association, New Delhi; April 2008.


5. ‘Carpal Tunnel Syndrome’, Hand CME, Patna Medical College, Patna; June 2008.


12. Delivered the ‘Dr OP Sharma Oration’ at the Annual Conference of the MP Chapter of Indian Orthopaedic Association, Indore; October 2008.


17. ‘Non–union fracture Scaphoid’, PG Instructional Course at Manipal University, Manipal; October 2008.

18. ‘Management of Flexor Tendon Injuries’, PG Instructional Course at Manipal University, Manipal; October 2008.


23. Phonein programme, answering to questions related to Orthopaedic problems, from time to time on All India Radio 2008.


27. ‘Role of surgery in Rheumatoid Hand’, AIIMS Rheumatology Update; February 2009.


Dr S. Rastogi

1. ‘Examination of Hip Joint’, DNB-CME teaching programme in Orthopaedics, Central Institute of Orthopaedics, Safdarjang Hospital; 22 February 2008.


Dr A. Jayaswal


6. Delivered the Presidential address, XXII Annual Conference of Association of Spine Surgeons of India (ASSICON 2009), Chennai; 23 January 2009.

Dr. R. Malhotra


2. ‘Bearing Option Selection: A surgeon’s perspective’, THA Instructional Course Chula Lab, Bangkok, Thailand; 7–8 February 2009.

3. ‘Dislocation and Leg Length Discrepancy: Pre-op and Intra-op management’, THA Instructional Course Chula Lab, Bangkok, Thailand; 7–8 February 2009.


Dr H.L. Nag


Dr C.S. Yadav

1. Surface arthroplasty or Headless chicken, NZIOACON; 4–6 April 2008

2. Instability after, TKR – NZIOACON; 4–6 April 2008

3. Instability after THR – NZIOACON; 4–6 April 2008
4. Post-op management and rehabilitation after THR – NZIOACON; 4–6 April 2008
5. Extramedullary fixation (external fixation and bridge plate), AO workshop, NZIOACON; 4–6 April 2008
6. Patient and implant selection in TKR, Knee symposium, Fortis Hospital, Mohali, Punjab; 4 May 2008
8. Surface arthroplasty or headless chicken, Millennium arthroplasty conference, Mumbai, 2008
10. Conventional stem is better than short stem, Cross Fire, IOACON 2008, Banglore; 6 December 2008
11. Primary THR for complexed proximal femoral fractures, UPCON 2009, Lucknow; 6–8 February 2009

National and International Conferences

Dr S. Rastogi

5. Paper presentation on ‘Tuberculosis of sternum – what we know and what we don’t?’ Trienwial World Congress of SICOT Hongkong 24-28 August, 2008
Dr A. Jayaswal

1. ‘Why fix the Spine?’, Workshop on Spinal Fixation, Annual Conference of North Zone Orthopaedics Association (NZOA 2008), India Habitat Centre, New Delhi; April 2008.

2. ‘Spinal Pseudarthrosis in Rounded Kyphosis’, Meeting of the Spine and Paediatric Orthopaedics Section of Asia Pacific Orthopaedics (APOA–SP 2008), Jeju, Korea; 5–7 June 2008.


4. ‘Minimally invasive disc surgery’, Instruction course in spine surgery (ICS 2008), Combined instructional course of European Spine society and Associate of Spine Surgeons of India, Shimla (HP); 7–10 August 2008.


22. ‘Lumbar disc herniations’, Mid-term Symposium of the Central Zone of Indian Orthopaedics Association on ‘Spinal disorders–evaluation and decision making’, Raipur (MP); 22 March 2009.


Dr R. Malhotra


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20. ‘Challenges in treatment of musculoskeletal pain’, Pain Symposium in the XIX Annual CME, Association of Physician of India, Delhi State Chapter (API-DSC), India Habitat Centre, Lodhi Road, New Delhi; 18–19 October 2008.
21. ‘Revision TKR: When to select wedges, stems and sleeves?’, Indian Arthroplasty Association Conference (IAACON), Essex Farms, New Delhi; 8–9 November 2008.


25. ‘Pre-operative planning’, Delhi Orthopaedic Association Conference (DOACON), Lady Hardinge Medical College, New Delhi; 10 January 2009.


35. Malhotra R, Kumar V. ‘Short metaphyseal cementless stem in young patient’, Annual Joint Meeting with Arthroplasty Care Practitioners Association and British Hip Society (BHS), Manchester, UK; 12–13 March 2009.

Dr H.L. Nag


Dr Ravi Mittal


2. ‘OT set up and instrumentation for knee arthroscopy’, UPORTHOCON, Lucknow; 6 February 2009.


Dr Vijay Kumar

5. ‘Two stage revision THR for infected hips using an antibiotic impregnated cement spacer’, Indian Arthroplasty Association Conference (IAACON 2008), New Delhi; 8–9 November 2008.

RESEARCH

Funded Projects

1. Role of free radical scavengers and the effect of antioxidants on their levels in patients with ankylosing spondylitis—to investigate the possible role of antioxidants as therapeutic agents in ankylosing spondylitis. Arvind Jayaswal, Taposh Kumar Das. Funded by ICMR for 4 years (2004–2008).


7. A phase III randomised, parallel-group, double-blind, active controlled study to investigate the efficacy and safety of oral 220 mg dabigatran etexilate (110 mg on the day of surgery followed by 220 mg once daily) compared to subcutaneous 40 mg enoxaparin once daily for 28–35 days in prevention of venous thromboembolism in patients following primary elective total hip arthroplasty (re-novate II). Rajesh Malhotra, Vijay Kumar. Funded by SIRO Clinpharm for one year (2008–2009). Funds: Rs 25.50 Lakh.


**Departmental Projects**

*Completed*

1. PET-SPECT evaluation of femoral head vascularity following Surface hip Replacement.


4. Comparison of nitroglycerin and diltiazem as adjuncts to lignocaine in intravenous regional anaesthesia.

5. Short and midterm result following total knee arthroplasty with posterior stabilized mobile bearing prosthesis: A retrospective and prospective study.


7. Effects of intra-articular pressure, posterior communication and garden’s alignment index on the management of intracapsular femoral neck fractures.

8. Assessment of functional outcome after arthroscopically assisted mini open rotator cuff repair.

9. Comparative study between interlock nailing and MIPPO using locking compression plate in fracture shaft of tibia.
**Ongoing**

1. Assessment of profile of patients with osteoporotic vertebral compression fracture and comparison of conservative invasive and minimally surgery
2. Evaluation of arthroscopic bankart repair of recent traumatic anterior shoulder dislocation
3. Clinico-radiological evaluation of total knee arthroplasty: A short-term retrospective and prospective study
4. Study of clinical, radiological and functional outcome of management of congenital scoliosis
5. Role of F18 fluoride PET-CT and F18 FDG PET-CT in painful hip prosthesis to rule out septic versus aseptic loosening
6. Assessment of profile of patients with osteoporotic vetebral compression fractures and comparision of outcomes following various treatment modalities
7. Prognostic factors in the management of osteosarcoma: A clinical study
8. Expression of Vegf and Matrix Metalloproteinase-T in Bone Sarcomas
9. Evaluation of the results of proximal humerus locking plate in fracture of the proximal humerus
10. Arthroscopic elbow synovectomy in rheumatoid arthritis its effectivnesss and MRI correlation
11. Comparison of post-op pain relief by combined local periarticular wound infiltration and post-operative single short intra-articular injection of bupi vaccine with continuous epidusal analgesia after total hip arthroplasty
12. Intralesional autologous bone marrow stem cell injection in avascular necrosis of femoral head and evaluation of outcome using MRI, PET Scan and bone scan
13. Outcome of surgical correction in rigid scoliosis – a prospective and retrospective study
14. Evaluation of arthroscopic bankart repair of recurrent traumatic anterior shoulder dislocation
15. Epidemiology of traumatic spine injuries and a randomized study to compare different surgical methods of treatment of thoracolumbar burst fractures
16. Functional outcome in patients with intra-articular fractures of calcaneus undergoing treatment with open reduction and internal fixation vs minimally invasive techinique – a randomised controlled trial
17. A clinical study to determine the functional outcome of operatively treated cases of displaced tibial plateau fractures.

**PUBLICATIONS**

**Dr P.P. Kotwal**


Dr A. Jayaswal


Dr R. Malhotra


5. Khatri D, Malhotra R, Bhan S. Results of total knee replacements in stiff and ankylosed knees and comparison with knees with good preoperative range of motion. Accepted in *J Knee Surg*.


7. Malhotra R, Kumar V. Acetabular revision using total acetabular allograft. Accepted in *Indian J Orthopaedics*.


Dr H.L. Nag


Dr C.S. Yadav


**Abstracts**


**Dr Ravi Mittal**


**Dr Vijay Kumar**


2. Khatri D, Malhotra R, Kumar V, Bhan S. Results of total knee replacements in stiff and ankylosed knees and comparison with knees with good preoperative range of motion. Online in ‘*Journal of Knee Surgery*’.

**AWARDS, HONOURS AND SIGNIFICANT EVENTS**

**Dr P.P. Kotwal** chaired Scientific Session, Annual Conference of the North Zone Chapter of Indian Orthopaedic Association, New Delhi, April 2008; Annual Conference of the Trauma Association of India (TRAUMACON 2008), Mumbai, August 2008; Chaired a Panel discussion session, first Annual Conference of the Trauma Association of India (TRAUMACON 2008), Mumbai, August 2008; Scientific session on Hand, Annual Conference of Delhi Orthopaedic Association, January 2009; Chairman, Selection Committee, set up by the National Centre for Antarctic and Ocean Research,
Goa, to select medical officers for the Indian Expedition team to Antarctica, 2008; Chairman, Selection Committee, for Technical Staff (Research), AIIMS, 2002 to 2008; Chairman, Project Review and Monitoring Committee of Ortho, CAD Project under the office of the Principal Scientific Advisor to the Prime Minister of India, New Delhi (2007–2010); Chairman, Vidyalaya Management Committee of Kendriya Vidyalaya, INA Colony, New Delhi (2005–2010); Chairman, Store Purchase Committee (2008–2009); Chairman, Screening Committee for the Selection of Junior Physiotherapists / Occupational Therapy, AIIMS, May 2008; Vice Chairman, Research Committee, AIIMS (2002–2008); Member, committee constituted by the DGHS, Ministry of Health and Family Welfare to consider the case of reimbursement after total shoulder arthroplasty, February 2009.

Dr Kotwal appointed as an Expert Member, Central Selection Board of the NTPC, to select Medical Specialists on Orthopaedics, August 2008; Expert Member, Union Public Service Commission, to assist in the Selection of Professor of Orthopaedics for the Government Medical College, Chandigarh, October 2008; Expert member, Selection Committee of Jamia Hamdard (Deemed University), New Delhi, to select Lecture in Physiotherapy, March 2009; Expert Member, Indian Council of Medical Research, New Delhi in the Assessment Promotion Scheme of the ICMR Scientists, February 2009; Expert Member, Academic Council of the Pt. BD Sharma University of Health Sciences, Rohtak (2008–2010); Expert Member, Ministry of Health and Family Welfare to facilitate the Ministry in finalizing the Users Requirement Specifications (URS) in order to setup 6 AIIMS like Institutions in different parts of the Country, November 2008; Nominated as an Expert by the President, National Board of Examination, for a meeting of the Expert group to discuss important issues related to examinations and curriculum development, December 2008; Member, committee constituted by the DGHS, Ministry of Health and Family Welfare to consider the case of reimbursement after total shoulder arthroplasty, February 2009; Member, Dean’s Committee, AIIMS (2002–2008); Member, Staff Council, AIIMS, 1998 till date; Member, Institutional Ethics Committee, AIIMS (2003–2008); Member, Institutional Ethics Committee for Experimental Research, AIIMS (1998–2008); Member, Committee for Computerization, AIIMS, February 2009; Chairman, Kendriya Vidyalaya, INA Colony, New Delhi, 2003 till date; Inspector, Medical Council of India to inspect the M.V.J. Medical College and Hospital at Bangalore, January 2008. President, Orthopaedic Research Society of AIIMS, 2007 till date; Co-guide for PhD, ‘Non-specific musculoskeletal pain’ in Clinical Psychology at AIIMS, 2008.

Examinership of various Universities

For M.S. (Ortho) Examination:

- PGIMER, Chandigarh, 2008
- Manipal University, Manipal; October 2008.
- Baba Faridkot University of Health Sciences, Faridkot (Punjab), April 2009.

For D. Orth. Examination:

- Manipal University, Manipal, October 2008

Dr S. Rastogi chairsession II: debates in THR: Bearing surfaces, Acetabulum – cemented vs/cementless – femur; Chairsession: Oncology; Chairsession: Rehabilitation Medicine; XXVII Annual Nzioacon –
2008, India Habitat Centre, New Delhi 4–6 April 2008; Attended PMRC Ortho-Cad meeting held at Bombay on 13 August 2009; Attended the 7th monitoring review committee meeting at Hyderabad, 18 December 2008. Member, Academic Council of Banaras Hindu University and National Institute of Handicapped, Kolkata.

**SIGNIFICANT EVENTS**

**Dr A. Jayaswal** was current President of Association of Spine Surgeons of India (ASSI); President, Spine Society Delhi Chapter; Vice President of the Spinal Cord Society of India; Elected Honorary Secretary, Spine Section of Asia Pacific Orthopaedics Association at the Council meeting, Jeju, Korea, 4 June 2008; President, Organising Committee of Instructional Course in Spine Surgery (ICS 2008), combined course of European Spine Society and Association of Spine Surgeons of India, Shimla, 7–10 August 2008; Chairman, Organising committee, Scoliosis Research Society (SRS), Worldwide Programme on ‘Spinal Deformities – Current Concepts’, New Delhi, 2–4 October 2008; Chief Guest, Inaugural Function of Annual Conference of Central Zone Orthopaedics Association CEZCON 2008, Ranchi, 24–26 October 2008; Visiting Professor, Armed Force Medical College (AFMC), Pune, 16–17 November 2008; Editorial Article Reviewer, *Indian Journal of Orthopaedics* (IJO); Invited Panelist at 4 Conferences; Chairperson/Moderator of 5 national and 2 international conferences; Invited Faculty to two International Spine Conferences, held in Jeju, Korea and Memphis, US; Invited Guest Speaker, International Orthopaedics Forum, Chongqing, China, 27–29 March 2009.

**Dr R. Malhotra**

Faculty, MIDCON 2008, India Habitat Centre, New Delhi, 7 September 2008; Chairman, ‘Skeletal Relay 2008’, Group workshop introduced by AO India, New Delhi, 18–19 October 2008; Faculty, Pain Symposium, XIX Annual CME of Association of Physician of India, Delhi State Chapter (API-DSC), India Habitat Centre, New Delhi, 18–19 October 2008; Faculty, Hip Resurfacing Arthroplasty 2008, Annual CME, Dr Hedgewar Arogya Sansthan, New Delhi, 2 November 2008; Faculty, Trauma 2008, International Conference, CME cum Live Workshop and Inaugural Conference of the Indian Society for Trauma and Acute Care (ISTAC), Siri Fort Auditorium Complex, New Delhi, 29 November 2008; Faculty, Indian Orthopaedic Association Conference (IOACON) 2008, Bangalore, 3–5 December 2008.


Radio programme

- ‘Vradhavastha mei kamar ka jhukna, bachav aur uska upchar’ in ‘Uttarkatha’ broadcast on Indraprastha Delhi A 366.3, Tuesday, 16 September 2008 8:00 AM.

- ‘Uthiye Acche Swasthya Ke Saath- Osteoporosis – Bachaav aur Upchaar’ broadcast on Indraprastha Delhi A 366.3, Wednesday, 10th December, 2008 from 7.05 to 7.55am.

Contributions to Orthohyperguide (a web based orthopaedics education portal tutorials)

- Member, Regional Advisory Board, Orthohyperguide, A web based global Orthopaedics learning portal


Case of the week


TV programmes


Assignments for ICMR

- Member, working group, ICMR-WHO Workshop on ‘Development of a feasibility Modules on Road Traffic Injury Surveillance’, New Delhi.

- Member, Advisory Group for Research in Accidents and Injuries (AGRAI) of ICMR, New Delhi.

- Expert for the Golden Triangle Partnership (GTP), a scheme between the department of AYUSH-CCRAS, ICMR and CSIR. Advisor for the Project on Osteoporosis under the scheme.

- Member, advisory group, Determination of Musculoskeletal Burden in Indian Population.

- Member, advisory group, Determination of Normative Laboratory Parameters in Indian Population.

- Member, expert group, ICMR Task Force on Cancer Management Guidelines

- Member, expert group, ICMR Task Force on Osteoporosis

- Expert/Chairman, Project Review Committee, ICMR for funding of projects in the field of NCD, BMS and Biomedical Engineering since 1994.
Assignments for University Grants Commission

- Expert for the committee constituted by UGC towards the evaluation assessment of the research papers submitted by College teachers concerning travel grant assistance to attend International Conferences abroad in UGC, 17 March 2009.

- Expert for the committee constituted by UGC towards the evaluation assessment of the research papers submitted by College Teachers concerning travel grant assistance to attend International Conferences abroad in UGC, 16 April 2008.


- Expert for UGC team for evaluation of Devi Ahilya University for approval of utilization of funds granted in 5 year plan and further sanction of funds, Indore, 24–26 September 2008.

Additional Assignments

- Committee Member, Tele Medicine, AIIMS, for 3 years (2006—2009).

- Member, Hospital Infection Control Committee, for 4 years (2005—2009).

- Member, Staff Council, for 2008–2009.

- Member, Advisory Committee, Central Workshop (orthopedic implants and devices), AIIMS, for 2 years (2007–2009).

- Member, Department Store Purchase Committee.

- Nominated Member, OT Users Committee 2008, AIIMS, New Delhi

- Vice President, Delhi Orthopaedics Association (DOA) for 2009–2010.

- Nominated as International Body Member, Committee on Prevention of osteoporosis and osteoporotic fractures in Asia, Strong Bone Asia.

- Invited as an Expert for the Expert Group meeting for development of skill lab for clinical and surgical skills for DNB candidates, AIIMS, 30 August 2008.

- Expert for selection of Professor (Orthopaedics) at Union Public Services Commission (UPSC), New Delhi, 8 October 2008.

Papers read at conferences


Dr H.L. Nag was Honorary Consultant, Sports Authority of India (SAI), Jawahar Lal Nehru Stadium, New Delhi; Member, Orthopaedic Sports Medicine Committee (2005–2009), International Society of Arthroscopy, Knee Surgery and Orthopaedic Sports Medicine (ISAKOS); Member, Therapeutic Use Exemption (TUE) Committee (2009–2010), under National Anti Doping Agency (NADA), in compliant with World Anti Doping Agency (WADA) and attended its first meeting on 2 February 2009, presided by Shri MS Gill, Honorary minister for Sports and Youth Affairs; Secretary General, India Federation of Sports Medicine (IFSM) for 2007–2010; Member, Expert Committee of UGC, for inspection of UGC–XI five year plan of Rashtrasant Tukadoji Maharaj, Nagpur University, Maharashtra, 7–9 July 2008; Appraiser by National Board of Examination for DNB Candidates and Sant Parmanand Hospital, Delhi (18 June 2008) and Rockland Hospital, Delhi (29 July 2008); Member, Panel of Reviewer, Journal Injury, for Arthroscopy and Sports Medicine section (6 August 2008); Honorary Member, International Journal of Medical Sciences and Technology (IJMST) and International Journal of Life Sciences and Technology (IJLST); Editorial Board Member, IJMST and Advisory board member, IJLST; Editorial Referee, Indian Journal of Orthopaedics; Board Member, Elsevier Clinical Advisory Boards for Orthopaedics for clinical update series for South Asian practioners – by Reed Elsevier India; As Expert on DD News TV live National telecast, ‘Total Health TV Programme’, on ‘Sports Injuries’ (27 April 2008) and Health Show Programme on ‘arthritis’ (29 March 2009); As Expert on All India Radio (AIR) talk in Hindi on ‘Bridhawastha me haddi ka khokhlapan aur iski dekhbhal’, New Delhi, 21 January 2009;

Dr Nag was elected as Committee Member, Medical Care arrangement of the Common Wealth Games 2010 (attended its meeting on 16 May 2008); Member for English and Professional Coaching class for SC/ST students, AIIMS, 15 May 2008; Faculty–Incharge, AIIMS MB,BS Entrance Examination at Ahmedabad centre (1 June 2008) and AIIMS’ PG Examination (MD/MS) at Kolkata (11 January 2009); Penalist in arthroscopy section at MEDCON 2008, midterm symposium of DOA, New Delhi, 7 September 2008; Faculty and penalist, 3rd International Symposium on new horizons in arthroscopic surgery, New Delhi, 29–30 March 2009; Faculty at TRAUMA 2008, International Conference, CME cum live Workshop and Inaugural Conference of the Indian Society for Trauma and Acute Care (ISTAC), New Delhi, 28–30 November 2008; Faculty, National Symposium on ‘Knee Injuries and its managements– recent trends in Sports Health’, Jamia Millia Islamia University, New Delhi, 7 March 2009; Executive Member, Indian Orthopaedics Association (IOA), elected unopposed representative of Delhi (2009–2011); External Examiner for MS (Orthopaedics) Examination, RNT Medical College, Udaipur, Rajasthan (18 December 2008) and Internal Examiner for MS (Orthopaedics) Examination at AIIMS (11 December 2008); Faculty, IAS Cadaver workshop, New Delhi, 16 November 2008 and Advanced Knee Arthroscopy Workshop, 53rd IOA Annual Conference Bangalore, 3 December 2008; Member, EHS Advisory Committee, AIIMS, 8 July 2008; Member, Anti Ragging squad, AIIMS, 7 and 15 August 2008; Secretary, Orthopaedics Research Society, AIIMS, 2008; Member, Senior Resident Selection Interview Board, AIIMS, 2 June 2008; Faculty–Incharge, AB1 Ward, Member, Store purchase committee.

Dr C.S. Yadav appointed as examiner and paper setter for MS Orthopaedics Baba Faridkot University, Punjab; Member-observer, for senior resident selection committee of AIIMS; Examiner and paper setter for MS Orthopaedics, L.N. Mithila University, Dharbhanga, Bihar; Panelist invited by the institute of chartered accountant of India, hotel Ashok, with Baba Ramdev, 29 June 2008; Faculty,
DNB CME, LHMC, 27 July 2008; Appraiser for DNB centres, Maharaja Agarsen hospital; Chaired a session, challenges in THR, in Millennium arthroplasty conference; Organized lecture of Dr Nagamine from Japan, 4 September 2008; Faculty, THR workshop, IAACON 2008, Delhi, 8–9 November 2008; Chaired session, IOACON 2008, Banglore, 5 December 2008; Chaired session, TRAUMACON 2008, Delhi, 28–30 December 2008; Chaired session, NZIOACON 2009, 13–15 February 2009; Panelist, THR workshop, NZIOACON 2009, 13–15 February 2009; Appointed member of inspection committee for GGSI University, Delhi; Acted as expert in selection of lectures in UP Medical colleges, Public Service Commission, Allahabad, 3–4 November 2008; Appearing on health programmers as orthopaedic expert, on various TV channels routinely.

**Dr Ravi Mittal** was awarded the membership to the Royal College of Surgeons, Glasgow, November 2008; Listed in Marquis, Who’s Who in the World 2009; Reviewer, *Indian Journal of Orthopaedics*, 2008; Member, Executive Committee, Indian Federation of Spots Medicine (2007–2008); Member, MB,BS curriculum, 2008; Adjunct faculty at CMET, AIIMS, 2008; Chairing of session, Trauma 2008 International Conference, CME cum Live Workshop and Inaugural Conference, Indian Society for Trauma and Acute Care (ISTAC), Delhi, 29 November 2008; Examiner, D. Orth examination, Patiala Medical College, May 2008; Examiner, D. Orth examination, PGIMS, Rohtak, June 2008.

**Dr Vijay Kumar** was awarded Membership of Royal College of Surgeons, Glasgow; Co-Organizing Secretary, Current Concepts in Arthroplasty 2008, New Delhi, 23–24 August 2008; Member, Expert group meeting, for development of skill lab for clinical and surgical skills, for DNB candidates, AIIMS, New Delhi, 30 August 2008; Member, Organizing Committee of Scoliosis Research Society Worldwide Programme on ‘Deformity Correction’, New Delhi, 2–5 October 2008; Participated in Television programme on Arthritis ‘Sangini’ on Sahara Samay Channel.


9.24 Otorhinolaryngology (ENT)

Professor and Head
Ramesh C. Deka

Professor
Suresh C. Sharma
(On deputation leave*)

Associate Professors
Alok Thakar
Kumud K. Handa

Assistant Professors
Rakesh Kumar
Venkata Karthikeyan C

*On assignment as clinical specialist (ENT) at the Medical Services Department, Ministry of health, Darussalam, Brunei. w.e.f 15 October 2007

EDUCATION

The department has actively participated in the academic activities of undergraduate, postgraduate and paramedical teaching.

Continuing Medical Education

Organized by the department

- Live Surgical and Temporal bone dissection workshop and CME in Otology, AIIMS, New Delhi, 17–19 August 2008.
- Head-Neck Study day, associated with the visit of Professor P J Bradley, Hunterian Professor, Royal College of Surgeons of England; 19 Jan 2009.

Lectures delivered

Professor R.C. Deka

5. ‘CME on Laws Applicable to Hospitals’, Department of Hospital Administration, AIIMS, New Delhi; 21 March 2009.

6. ‘Symposium on Ovarian Cancer’, Department of Medical Oncology, AIIMS, New Delhi; 27–28 March 2009.

Dr Alok Thakar


4. ‘Approach to the Diagnosis and Treatment of Vertigo’, Course on Neuro-Otology and Audiology, Kolkata; February 2009.

5. ‘Perilymphatic Fistula’, Course on Neuro-Otology and Audiology, Kolkata; February 2009.


Dr K.K. Handa

1. ‘Type 2 Thyroplasty for Spasmodic Dysphonia’, CCR, AIIMS, New Delhi; August 2008.


Dr Rakesh Kumar


Dr Venkata Karthikeyan C


National and International Conferences

Lectures delivered

Professor R.C. Deka

‘People centred health Care’, WHO sponsored bi-regional forum of medical training institutions on people centred health care meeting, Manila, Philippines; 1–2 July 2008.

Dr Alok Thakar


2. ‘Speech rehabilitation and conservation in advanced laryngeal cancers’, ISHNO (Indian Society of Head-Neck Oncology) meeting, Patna; 5–6 April 2008.


Dr K.K. Handa


Dr Rakesh Kumar


Dr Venkata Karthikeyan C


Residents and Research associates


RESEARCH

Funded Projects

Completed


Ongoing

1. Role of bacterial and fungal colonization in patients with chronic rhinosinusitis and nasal polyposis with special emphasis on their superantigenicity and biofilm property. Anurag Ramavat, R.C. Deka. Funded by CSIR for 3 years.

2. Effect on hearing function in individuals with diabetes mellitus. Gaurav Chaturvedy, R.C. Deka. Funded by CSIR for 3 years.

3. Assessment of T, C levels and the resultant change in the dynamic range in cochlear implant users: To evaluate possible electrical stimulation induced damage to the neural elements. R.C. Deka. Funded by ICMR for 3 years. Funds: Rs 11.67 lakh.
4. Phase II/III Randomized placebo-controlled clinical trial of curcumin in respectable stage III and IV squamous head and neck cancers. A. Thakar. Funded by DBT for 3 years. Funds: Rs 43 lakh.


**Collaborative Projects**

**Ongoing**


2. Stereological study of the age related morphological and neurochemical changes in the human cochlear nucleus (with Anatomy).

3. Prenatal development and maturation of human inferior colliculus (with Anatomy).

**Departmental Projects**

**Ongoing**

1. Clinical profile of patients with laryngotracheal stenosis.

2. Bilateral submandibular duct transposition and bilateral sublingual gland excision for drooling in children.

3. Comparison of various techniques of tonsillectomy in terms of post operative pain and other post operative variables.


5. The effect of dexamethasone injection in the inner ear on hearing and NRT and its outcome results in cochlear implant patients.

6. Role of PET scan in diagnosing unknown primary in head and neck carcinoma with cervical neck node metastasis.

7. To study the effect of cricoid split with costal cartilage rib grafting and lumen augmentation in cases of subglottic stenosis.

8. Study of patient profile with external nasal deformity requiring septorhinoplasty and its outcome.

9. Immunohistochemical characterization of JNA and radiological and histological evaluation of vidian canal involvement in JNA.

**Completed**

1. Otolaryngologic and head and neck manifestations in HIV/AIDS patients

2. To determine the efficacy of flutamide as a tumour volume reducing agent in nasopharyngeal angiofibroma (NPA).

3. Role of proton pump inhibitors in laryngopharyngeal reflux.
PUBLICATIONS


**PATIENT CARE**

**Facilities available in the department**

The department provides state-of-art ENT services and is equipped with the entire range of diagnostic and therapeutic equipment including a cochlear implant laboratory, audiological facilities, electronystagmographic facilities, electrodiagnostic audiometry, hearing aid analyzer, ear mould laboratory, speech therapy, stroboscopy and computer aided speech analysis. It has a well staffed rehabilitation unit of Audiology and Speech Therapy function. This function with the clinical department to provide supportive, diagnostic and rehabilitative services for hearing impairment, speech problems and post-laryngectomy speech disabled.

The cochlear implantation (CI) programme was started in 1996 under the chairmanship of Professor R.C. Deka and the first adult patient was successfully operated upon in February 1997. Soon, the department started the Children Programme in 1998. Since then, 257 patients have been subjected to Cochlear implantation at AIIMS till March 2009. Professor R.C. Deka has also done the country’s first bilateral Cochlear implant successfully in an adult patient. The department has provided support in starting cochlear implant surgery programme in R.R. Hospital, Central Railway Hospital and also PGIMER, Chandigarh. The department is an established centre for cochlear implantation and in the year under review, a total of 56 cases have had successful cochlear implantation. All such cases further continue to be on follow-up and are receiving post implantation speech therapy and training to maximize the benefit of cochlear implantation.

The Head and Neck cancer clinic of our department in the B.R. Ambedkar Institute Rotary Cancer Hospital, with the collaborative support of radiotherapists and medical oncologists, caters to large number of patients suffering from head and neck malignancies. The department provides surgical
expertise for the effective management of head and neck cancers. The department also runs specialty clinics (Vertigo, Audiology, Skull Base, Rhinology, Voice Clinics) and provides services to a large number of patients. The department has developed an undergraduate (MB, BS) teaching manual and a postgraduate log book. It provided short- and long-term training to national and international doctors and audiologists.

**OPD and Specialty clinics**

**ENT OPD**
- New cases: 33,605
- Old cases: 36,450

**Specialty clinics**
- RUAS–speech: 3,498
- RUAS–hearing: 3,146

**Head and Neck**
- NEW: 999
- OLD: 3,881
- Voice: 2,156
- Vertigo: 178
- Audiology and Skull Base: 204
- Rhinology: 175

**Inpatients**
- Long admission: 1,048
- Short admission: 196

**Surgical Procedures**
- Major: 2,044
- Minor: 1,643
- Minor OT: 22,820

**Community Services/Camps**

The department provides comprehensive ENT services at Primary Health Centre at Ballabgharh, Haryana. In addition, Dr C.V. Karthikeyan runs once-a-week OPD services at the Deaf Centre, Gurgaon, under the Government of Haryana.
AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor Ramesh Chandra Deka is the Director of AIIMS with effect from 10th March 2009.

Professor R.C. Deka is the founder chairman of Indian Academy of Otolaryngology–Head Neck Surgery; Inspector, Medical council of India (MCI) and National board of examinations (NBE); Chairman, Technical advisory group for the speech and hearing handicapped, Ministry of Social Welfare; Chairman, Sectional committee of ENT surgical instruments (MHR04) of Bureau of Indian standards; International Editorial Board Member of Acta–Otolaryngologica (Stockholm), Otolaryngology–Head and Neck Surgery (USA), Otology–Neurotology (USA), Pakistan Journal of Otology; Editorial Chief of Indian Journal of Otology, Vertigo Viewpoint; Distinguished Guest of honour in the Second Healthcare Executive Management Development Programme, Goa (13–18 April); Invited distinguished international guest faculty in the WHO sponsored Bi-regional Forum of Medical training Institutions on people centred health Care meeting, Manila, Philippines (1–2 July 2008); Invited distinguished guest faculty, Rhinocon 2008, 21st Annual conference of All India Rhinology Society, PGIMER, Chandigarh (20–21 September 2008); Organizing Chairman, Otology Update – Live surgical and temporal bone dissection workshop, AIIMS, New Delhi (17–19 August 2008) and in the Live surgical session, he demonstrated cochlear implant surgery for the benefit of the national delegates.

Dr Alok Thakar was awarded the Professor C Das Oration by the North East Brach of the Association of Otolaryngologists of India; Invited faculty, Meeting of the International Federation of Head and Neck Societies (IFHNOS), Mumbai (October 2008), Conference of the India Society of Head-Neck Oncology, Patna (April 2008), LARYNXCON, Regional Cancer Centre, Trivandrum (August 2008), Biennial conference of the North West Branch of the Association of Otolaryngologists of India (October 2008), Annual Conference of the North East Branch of the Association of Otolaryngologists of India and the Annual Conference of the Association of Otolaryngologists of India (January 2009); Editorial Board Member, Otology India (Journal of the Indian Society of Otology), Indian Journal of Otology; Moderator, discussion on Hearing Aids in Otology practice, Otology Course, AIIMS (August 2008); Panelist in discussion, Treatment options in Cancer Larynx, LARYNXCON, Regional Cancer Centre, Trivandrum (August 2008); Panelist in discussion, Salivary Gland and Parapharyngeal tumors, International Federation of Head and Neck Oncological Societies, Global CME, Mumbai (October 2008); Panelist in discussion, Para Nasal Sinus Tumors, 8th National Conference of the Foundation of Head-Neck Oncology (FHNO), Bhubneshwar (December 2008); Moderator for Panel discussion, Laryngo-Tracheal Stenosis, 61st Annual Conference of the Association of Otolaryngologists of India, Jaipur (January 2009); Panelist in discussion, Troubleshooting with the TE Prosthesis in LARYNXCON, Regional Cancer Centre, Trivandrum (August 2008).

Dr K.K. Handa was the Convener, surgical workshop on Phonosurgery and Sialology, AIIMS (18–20 April 2008) and conducted live surgeries; Moderator for discussion on Laryngotracheal Stenosis, Surgical workshop on Phonosurgery and Sialology, AIIMS (18–20 April 2008); Quiz Master for the participants, Annual conference of Phonosurgeons of India (13–15 March 2009); Panelist in the
panel discussion on hearing aids in Otology Workshop, AIIMS (17–19 August 2008); Chairperson for operative session ‘Stapedectomy’, Otology Workshop in AIIMS (17–19 August 2008); Moderator for panel discussion on Phonosurgery, Le Meridian, New Delhi; Appraiser for DNB Course in St Stephan’s Hospital, New Delhi; Conducted surgical workshop on Tympanoplasty, Bihar branch of AOI, PMCH, Patna (29 April 2008); Moderator, Panel discussion on benign salivary gland tumours, surgical workshops on Phonosurgery and Sialology, AIIMS (18–20 April 2008); Moderator, Panel discussion on Management of paralyzed cord, surgical workshop on Phonosurgery and Sialology, AIIMS (18–20 April 2008); Vice President, Association of Phonosurgeons of India; Treasurer, NES India; Reviewer, Indian Journal of pediatrics and Indian Journal of Otorhinolaryngology.

**Dr RKumar** is a co–member of Sectional committee of ENT surgical instruments (MHR04) of Bureau of Indian standards; Organizing Secretary, Live surgical workshop and temporal bone dissection (17–19 August 2008).

**Dr Venkata Karthikeyan C.** is Assistant editor, Indian Journal of Otology; Reviewer, Indian Journal of Pediatrics; Panelist, Panel discussion on Laryngeal cancers, AOI Delhi Branch New Delhi (May 2008); Panelist, Panel Discussion on Cochlear implant in the Live surgical workshop and temporal bone dissection, AIIMS (17–19 August 2008); Organizing Secretary, Otology update, Live surgical workshop and temporal bone dissection (17–19 August 2008).
9.25 Paediatrics

Professor and Head
Dr Vinod K. Paul

Professors
Dr Maharaj K. Bhan
Dr Ashok K. Deorari
Dr Arvind Bagga
(On deputation)
Dr Sushil K. Kabra
Dr Arvind Bagga

Additional Professor
Dr Madhulika Kabra

Associate Professors
Dr Pankaj Hari
Dr Sheffali Gulati

Assistant Professors
Dr Rakesh Lodha
Dr Rachna Seth
Dr Vandana Jain
Dr Ramesh Agarwal

Scientists
Dr Shinjini Bhatnagar
Dr Pratima Ray
Dr Suman Vashisht
Dr Manju Ghosh
Dr Madhumita
Roy Choudhary
Dr Manju Saksena

Other Staff
Ms Savita Sapra
Ms Anuja Agarwala
Ms Sumita Gupta
(Clinical Psychologist)
(Dietician)
(Physiotherapist)
Mr D Yadav
(Medical Social Service Officer)

EDUCATION

The department organized programmes in MB, BS, BSc (Nursing), MD Paediatrics, MSc (Paediatric Nursing), MSc (Biotechnology), DM (Neonatology and Paediatric Neurology) and PhD.

MD Paediatrics ongoing programme

- Implementation of log book for postgraduates in the department of Paediatrics
- Formulation of guidelines for thesis protocol and thesis submission postgraduate residents in the department of Paediatrics
- Introduced child development guide and kit for the residents
- A structured internal assessment scheme formulated within the department for periodic assessment of PG students in the domains of clinical skills, theory and thesis writing.

PhD Programme: Total PhD students: 15 (Paediatric Gastroenterology 5, Genetics 9 Paediatric Pulmonology 1).
The department conducted Paediatric Quiz for undergraduate and MD students organized under the aegis of the Indian Academy of Paediatrics, and Neonatology Quiz for MD students under the aegis of the National Neonatology Forum.

**Short-term training**

A total of 46 short-term trainees were trained in different superspecialities from India and other countries. Neonatology: 16; Genetics: 14; Nephrology: 6; Neurology: 1; Nutrition and Dietetics: 7; Pulmonology and Intensive care: 2.

**Continuing Medical Education**

**Conferences, Seminars, Workshops**

A total of 19 seminars/workshops or training courses were organised.

- Workshop on management of Rh Isoimmunization – Current concepts (February 2009)
- Paediatric Endocrinology Course for residents; September 2009
- Update on childhood tuberculosis and thalassaemia with Platinum Jubilee Celebration of Indian Journal of Pediatrics; October 2009
- Two Thesis Writing and Research Methodology Workshop for young faculty members from Medical Colleges; August and November 2008
- Three onsite workshops on essential Newborn Care for Nurses in Maulana, Vadodara and Delhi.
- Eight workshops on Kangaroo Mother Care at AIIMS and seven other hospitals during the Newborn Week in collaboration with the Nursing College.

In addition, the division of Neonatology also initiated national movement for education of science, evidence and art of non-invasive ventilation in the country by launching CPAP workshops in 2009. The Division also conducted two pilot testing workshops on Essential Newborn Care Package with support of WHO/SEARO (www.newbornwhocc.org).

Faculty members delivered a total of 110 lectures in various national and international CME programmes and workshops.

**RESEARCH**

**Funded projects**

**Completed**

**Gastroenterology, Hepatology and Nutrition**


Genetics

• Survey of prenatal diagnostic practices in India as a part of multi country survey – developing methods to facilitate informed choice taking into account concordance between the principles that govern the undergoing of prenatal tests and practice across Europe and beyond economic modelling study, non-invasive (NI) RhD testing in Europe and Asia.

Nephrology


Pulmonology and Intensive Care

• Development of CME on use of antiretroviral in HIV/AIDS. Collaborative project with UCLA. Funded by NIH (NI 776). Funds US$ 37000.

Ongoing

Oncology


Endocrinology


Gastroenterology, Hepatology and Nutrition

• Zinc as an immunomodulator in the treatment of possible serious bacterial infections in infants more than 7 days and up to 2 months of age. Shinjini Bhatnagar, S.K. Kabra. Funded by DBT (2005–2008). Funds: Rs 87.64lakh

• Specific targeted research or innovation project. Shinjini Bhatnagar, S.K. Kabra. Funded by University of Bergan, Norway, European Union (2005–2008). Funds: Rs 72.15 lakh


- Effects of administering 10 mg of zinc orally to young infants aged 7 days and up to 4 months with possible serious bacterial infection on survival and function of peripheral blood mononuclear cells. Shinjini Bhatnagar, H.K. Prasad. Funded by DBT (2007–2009). Funds: Rs40.34 lakh


- Effects of administering 10 mg of zinc orally to young infants aged 7 days and up to 4 months with possible serious bacterial infection on survival and function of peripheral blood mononuclear cells. Shinjini Bhatnagar. Funded by DBT (2008–2010). Funds: Rs 42,37,105.

**Genetics**


• To understand the deviation in cell signalling pathway of autism through neurotrophic factors (Insulin like Growth Factor) and undertake a randomized blinded trial with olanzepine to evaluate its effect on insulin like growth factor-1 (GF-1), clinical symptoms of autism rating scales. Rachna Seth, Savita Sapra, Suman Vashisht. Funded by DST (2006–2009). Funds: Rs 4.08 lakh.


**Neonatology**


• Developing and testing low cost diaper for low birth weight babies. V.K. Paul, A.K. Deorari, R. Agarwal. Funded by DBT. Funds: Rs 2.87 lakh

**Neprology**


• A multicentre double-blind, randomized, parallel-group evaluation of 12 weeks of valsartan compared to enalapril in children 6–17 years of age with hypertension. Arvind Bagga. Funded by


**Neurology**

- A programme to improve injection practices in the country: An India CLEN study. Sheffali Gulati. Funded by USAID.


**Oncology**

- To understand the deviation in cell signaling pathway of autism through neurotrophic factors (Insulin like growth factor-1) and undertake a randomized blinded trial with olanzapine to evaluate its effect on Insulin like Growth factor-1 (IGF-1), clinical symptoms of autism and autism rating scales. Rachna Seth. Funded by DST for three years. Funds: Rs 4,08,000.

**Pulmonology and Intensive Care**


- Zinc supplementation in childhood tuberculosis patients in Delhi, India. Funded by Norwegian Programme for Development, Research and Education (NUFU), Pb 7800, N-5020 Bergen, Norway (2007–2009). Funds: Rs 15,60,00,000.

**Departmental Projects**

**Completed**

**Endocrinology**


2. Sensitivity and specificity of the Biocard Celiac Disease kit in identifying patients of celiac disease.

**Genetics**


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**Nephrology**

6. Glomerular filtration rate estimation in children using prediction equation from plasma creatinine and height.

**Neurology**

7. Evaluation of ketogenic diet as add-on therapy in infants and young children with refractory epilepsy

8. Blood ammonia levels in epileptic children on two dose ranges of valproic acid monotherapy

9. Immunodiagnosis of childhood tubercular meningitis by detection of antigens in cerebrospinal fluid using ELISA

10. Non-invasive screening for early preclinical atherosclerosis in children on phenytoin or carbamazepine monotherapy for more than 18 months.

**Pulmonology and Intensive Care**

11. Effect of addition of oral montelukast to standard treatment in acute moderate to severe asthma in children between 5–15 years of age: A randomized, double-blind, placebo-controlled trial

12. Oral mucosal decontamination with chlorhexidine for prevention of ventilator associated pneumonia in children: A randomized-controlled trial

13. Changes in CD4 count with antitubercular therapy in HIV infected children with tuberculosis

14. Optimal maintenance intravenous fluids in hospitalized children

15. Quality of life in HIV infected children.

**Ongoing**

**Endocrinology**

1. Impaired glucose tolerance in children and adolescents with cystic fibrosis.

2. Basal and stimulated cortisol levels in preterm and very low birth weight infants with and without shock: A case-control study.

**Genetics**


**Neurology**

6. Intranasal versus intravenous lorazepam for control of acute seizure in children: prospective open-labeled randomized equivalence trial.

7. Effect of low dose folic acid supplementation on phenytoin induced gingival overgrowth: A randomized double-blind controlled trial.

8. Efficacy of modified constraint induced movement therapy on upper extremity function in cerebral palsy children with asymmetrical motor impairment.


12. To study the clinical and neurodevelopmental profile in children with tuberous sclerosis.

13. Comparison of daily versus intermittent (10 days a month) prednisolone therapy in ambulatory children with duchenne muscular dystrophy: An open label randomized controlled trial.

14. Comparison of the full outline of unresponsiveness (FOUR) score coma scale and the glasgow coma scale (GCS) in children aged 5–18 years with non traumatic coma in predicting outcome (in-hospital mortality and functional outcome at discharge).


16. The evaluation of thyroid functions and thyroid antibodies in children with epilepsy on valproate monotherapy

17. Randomized open label comparative study of efficacy and tolerability of classical 4:1 versus 2.5:1 ketogenic diet in intractable epilepsy in children between 6 Months and 5 years.

18. Comparative cross sectional study of heart rate variability in well controlled vs refractory childhood epilepsy.

**Oncology**


20. Evaluation of paediatric cancer survivors for long/late effects of cancer therapy
21. Arsenic versus ATRA in acute promyelocytic leukaemia

**Pulmonology and Intensive Care**

22. Formoterol and salbutamol in acute asthma.
23. Glucose homeostasis in critically ill children

**Neonatology**

25. Predictors of CPAP failure in respiratory distress in newborn.
27. Hypoxemia in young infants a predictor of severity of illness.

**Collaborative Projects**

**Endocrinology**

1. Body fat and its relationship with metabolic syndrome indicators in overweight pre-adolescents and adolescents (ongoing) (with Clinical Pharmacology, Medicine).
2. Efficacy of flutamide in reducing tumour size and vascularity in nasopharyngeal carcinoma (with ENT).
3. ICMR young diabetics registry (with Endocrinology and Metabolism).

**Genetics**

4. An integrated approach for mutation analysis and identification of new gene(s) for X-linked mental retardation (with B.K. Thelma, Delhi University, South Campus). Funded by DBT for 3 years. Funds: Rs 14 lakh. Completed in February 2009 after extension.

5. CFTR mutations in congenital absence of vas deference (with Urology).

**Neurology**

6. Effect of ACTH treatment on serum levels of TNF-a, IL-6, and IL-2 in patients of infantile spasms Y.K. Gupta; (with DM Clinical pharmacology).
8. Evaluation of adaptive changes in masseter muscle dimensions and EMG activity following twin block and a phase of fixed appliance therapy - Ritu Duggal, (with Dentistry).
Oncology

10. Detection of minimal residual disease (MRD) in B cell lineage acute lymphoblastic leukemia (ALL) at the end of induction by flowcytometry. (Laboratory Oncology, IRCH) (MD thesis received the ICMR grant)

11. Evaluation of expression of P-glycoprotein (P-gp) in retinoblastoma (RPC) (with MD thesis)

12. Evaluation of myocardial function in paediatric cancers and paediatric cancer survivors (Cardiology) : an ongoing evaluation for evaluation of long/late effects of cancer therapy

13. Evaluation of anthracycline toxicity in childhood cancers ; A comparative study with echocardiography and MUGA (with Cardiology & Nuclear medicine)

14. Assessment of cardiac function by MUGA and conventional echocardiography and tissue doppler echocardiography in children with ALL receiving anthracycline chemotherapy has been undertaken and submitted as DM dissertation

Pulmonology and Intensive Care

15. Antigenic and molecular characterization of influenza virus strains from acute respiratory infection (with Microbiology).

16. A prospective study on nosocomial infections in a paediatric high risk unit with special reference to device associated infections.

17. Development of taqman based real timer quantitative polymerase chain reaction assay for detection of pneumocystis carinii/jerovacci pneumonia

18. Nosocomial infections in paediatric ICU

19. To detect sensitization to various allergens in moderate to severe persistent asthmatics and its relation with the outcome of their treatment, funded by CSIR, New Delhi (with VP Chest Institute, Dr Jasmeet Kaur, Senior Research Associate).

Neonatology

20. Screening for CMV infection by PCR (with Microbiology)

PUBLICATIONS

Journals


3. Awasthi S, Agarwal G, Singh JV, Kabra SK, Pillai RM, Singhi S, et al. ICMR-IndiaCLEN pneumonia project group. Effectiveness of 3-day amoxycillin vs 5-day co-trimoxazole in the treatment of


Books


3. Agrawala A. Recipe Book for Celiac Children. AIIMS.


Chapters in Books


PATIENT CARE

Outpatient Services

Department of Paediatrics provides general OPD services daily from 9 a.m. in Paediatrics OPD. There are 15 superspeciality services provided by department, which are as follows:

<table>
<thead>
<tr>
<th>Name of Service</th>
<th>New cases</th>
<th>Old cases</th>
<th>Total attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>General OPD</td>
<td>30,202</td>
<td>37,106</td>
<td>67,308</td>
</tr>
<tr>
<td>Paediatric Neurology</td>
<td>1,526</td>
<td>3,089</td>
<td>4615</td>
</tr>
<tr>
<td>Myopathy clinic</td>
<td>318</td>
<td>499</td>
<td>817</td>
</tr>
<tr>
<td>Paediatric Gastroenterology Hepatology and Nutrition</td>
<td>4,224</td>
<td>1,285</td>
<td>5,509</td>
</tr>
<tr>
<td>Well Baby Clinic</td>
<td>380</td>
<td>1,006</td>
<td>1,386</td>
</tr>
<tr>
<td>High Risk Neonatology Clinic</td>
<td>325</td>
<td>1,225</td>
<td>1,540</td>
</tr>
<tr>
<td>Paediatric Nephrology</td>
<td>445</td>
<td>698</td>
<td>1,143</td>
</tr>
<tr>
<td>Paediatric Chest</td>
<td>487</td>
<td>3,513</td>
<td>4,000</td>
</tr>
<tr>
<td>Paediatric Tuberculosis</td>
<td>264</td>
<td>1,954</td>
<td>2,218</td>
</tr>
<tr>
<td>Paediatric Rheumatology</td>
<td>148</td>
<td>1,404</td>
<td>1,552</td>
</tr>
<tr>
<td>Service</td>
<td>Patients admitted in ORU</td>
<td>Regular admissions (Long admission)</td>
<td>Admissions in day care facility (Short admission)</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>--------------------------</td>
<td>-------------------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>Genetics and birth defects</td>
<td>1,680</td>
<td>929</td>
<td>1,435</td>
</tr>
<tr>
<td>Paediatric Oncology</td>
<td>123</td>
<td>2,101</td>
<td>3,224</td>
</tr>
<tr>
<td>Paediatric Cancer Survivor clinic</td>
<td>94</td>
<td>481</td>
<td>575</td>
</tr>
<tr>
<td>Paediatric Endocrine and Metabolism</td>
<td>1,000</td>
<td>1,400</td>
<td>2,400</td>
</tr>
<tr>
<td>Development defect clinic</td>
<td>742</td>
<td>740</td>
<td>1,482</td>
</tr>
<tr>
<td><strong>Grand total</strong></td>
<td><strong>46,500</strong></td>
<td><strong>57,430</strong></td>
<td><strong>99,204</strong></td>
</tr>
</tbody>
</table>

In addition Cystic fibrosis and Paediatric HIV services were provided in Paediatric Chest clinic.

Physiotherapy Services were provided to the patients in Neurology clinic, Myopathy clinic, Genetics clinic, Development clinic, Paediatric Chest Clinic, Rheumatology clinic and OPD services.

Dietetics services were provided to patients attending Paediatric Gastroenterology, Hepatology and Nutrition clinic, Paediatric Endocrinology clinic, Paediatric Renal clinic, Genetics, Paediatric Chest clinic and General OPD services.

**Indoor Services**

Indoor services include admission facilities in general wards, day care facility, oral rehydration unit and paediatric intensive care facility.

Children requiring short procedures or interventions are admitted for a day in day care facility situated in C5 ward.

Children suffering from acute diarrhoeal diseases are admitted and provided with oral rehydration therapy in Oral rehydration unit (ORU) situated in C5 ward.

Children requiring intensive care are admitted in Paediatric Intensive care unit which is well equipped to provide care to critically ill children.

Revised nutrition monitoring charts, Nutritive value, 24 hour recall charts.

Patients admitted in ORU 1000

Regular admissions (Long admission) 1710

Admissions in day care facility (Short admission) 3023

Patients admitted in Paediatric Intensive Care Unit (PICU) 230

Procedures and laboratory investigations

**Endocrinology**

Water deprivation test 10

Vasopressin challenge test 10

ACTH stimulation test 20
<table>
<thead>
<tr>
<th>Test</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCG stimulation test</td>
<td>40</td>
</tr>
<tr>
<td>GnRH stimulation test</td>
<td>20</td>
</tr>
<tr>
<td>Dexamethasone suppression test</td>
<td>10</td>
</tr>
<tr>
<td>GH stimulation test</td>
<td>10</td>
</tr>
</tbody>
</table>

**Gastroenterology Hepatology and Nutrition**

<table>
<thead>
<tr>
<th>Service</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dietetics counselling services</td>
<td>2735</td>
</tr>
<tr>
<td>EST</td>
<td>400</td>
</tr>
<tr>
<td>Diagnostic</td>
<td>462</td>
</tr>
<tr>
<td>Duodenal biopsy</td>
<td>115</td>
</tr>
<tr>
<td>Stricture dilation</td>
<td>30</td>
</tr>
<tr>
<td>Colonoscopy</td>
<td>35</td>
</tr>
<tr>
<td>Foreign Body</td>
<td>5</td>
</tr>
<tr>
<td>Liver Biopsy</td>
<td>80</td>
</tr>
<tr>
<td>D-xylose</td>
<td>20</td>
</tr>
<tr>
<td>24 hours faecal fat estimation</td>
<td>35</td>
</tr>
<tr>
<td>Immunofluorescence assay (IFA) to detect anti-endomysial antibodies (AEA) and tissue transglutaminase ELISA for diagnosis of celiac</td>
<td>615</td>
</tr>
<tr>
<td>Nitro-blue tetrazolium test for CGD</td>
<td>75</td>
</tr>
<tr>
<td>Serum Zn estimation</td>
<td>2500</td>
</tr>
<tr>
<td>Serum Cu estimation</td>
<td>2500</td>
</tr>
<tr>
<td>Serum ‘Mg’ estimation (Research)</td>
<td>400</td>
</tr>
</tbody>
</table>

**Genetics**

<table>
<thead>
<tr>
<th>Service</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developmental/Behavioural evaluation and intervention</td>
<td>1435</td>
</tr>
</tbody>
</table>

**Cytogenetics laboratory**

<table>
<thead>
<tr>
<th>Service</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peripheral blood cultures</td>
<td>344</td>
</tr>
<tr>
<td>Cord cultures for karyotyping</td>
<td>62</td>
</tr>
<tr>
<td>Chromosomal breakage studies</td>
<td>78</td>
</tr>
</tbody>
</table>
Biochemical laboratory

Prenatal diagnosis for high risk pregnancies by triple test 1627

MSAFP 1627
Âeta-hCg 1627
Free estriol 1627
AFP 58
Âeta-hCg 51

TLC for disorders of amino acid metabolism

Urine 255
Plasma 1

Disorders of mucopolysaccharidosis (Urine spot test) 87

Homocystenuria test

Urine 46
Plasma 1
Reducing substances in urine 263
DNPH 257
FeCl 3 255
Urine Porphyria 6
Oligosaccharides 6
Blood ammonia 22

Enzyme assays for inborn error of metabolism

Total no. patients for Enzyme Assays 281

• No. of patients with single enzyme assay 249
• No. of patients with multiple enzyme assays 32

S. No. Enzyme assay Disorder No. of Pts
1. Arylsulfatase A Metachromatic- Leukodystrophy 65
2. â-Glucosidase Gaucher disease 30
3. á-Iduronidase Hurler syndrome (MPS I) 23
4. Iduronate Sulfatase Hunter syndrome (MPS II) 19
5. Galactosose-6-sulphate sulphatase Morquio (MPS IV A) 10
6. á-Galactosidase GM1 Gangliosidosis and Morquio B (MPS IV B) 27
7. Arylsulfatase B Maroteaux-lamy syndrome (MPS VI) 6
8. á-Glucuronidase MPS VII 8
9. Hexosaminidase A Tay-sachs (GM 2) 18
10. Galactose-1-phosphate-uridyl transferase Galactosaemia 34
11. Biotinidase (screening test) 40

**Molecular laboratory**

1. Thalassaemia mutation studies 340
2. Thalassaemia prenatal diagnosis 120
3. Duchenne muscular dystrophy family studies 213
4. Duchenne muscular dystrophy prenatal diagnosis 19
5. Cystic fibrosis family studies 35
6. Cystic fibrosis prenatal diagnosis 3
7. Spinal muscular atrophy family studies 58
8. Spinal muscular atrophy prenatal diagnosis 16
9. Hemophilia A family studies 7
10. Hemophilia A prenatal diagnosis 4
11. Hemophilia B family studies 1
12. Hemophilia B prenatal diagnosis 1
13. Fragile X screening 107
14. Fragile X Prenatal diagnosis 1
15. Xmn polymorphism studies 6
16. Amniotic fluid Rh genotyping 2
17. Intersex cases for genotyping 78
18. Skeletal dysplasia mutations 10
19. Skeletal dysplasia prenatal 1
20. MTHFR 30
21. Sequencing for diagnosis and prenatal test 69

**Nephrology**

- Hemodialysis 710
- Acute peritoneal dialysis (including automated peritoneal dialysis) 133
- Continuous ambulatory peritoneal dialysis 12
- Plasmapheresis sessions 90
- Temporary hemodialysis catheter placement: 128
  (internal jugular, subclavian, femoral)
- Renal biopsy 115
- Renal transplantation 3

**Neurology**

- Electroencephalography 1768
- Electrophysiological studies (EMG, NCV, BERA, VER) 293
- Arterial Lactate 280
- CSF Lactate 95
- Muscle biopsies 207
- Nerve biopsies 7
- Skin biopsies 10

**Oncology**

**Bone marrow examination**

**Pulmonology and Intensive Care**

- Sweat chloride estimation 560
- Fibre-optic bronchoscopy 225
- Spirometry 655
- Skin prick testing 65
- Mechanical ventilation 200
- Arterial blood gas analysis 10000
Electrolyte estimation 7000

**Rheumatology**

Intra articular steroid injection 30

**Tuberculosis**

Induce sputum 50
Ambulatory gastric aspirate 50
Quantiferon gold assay 25

Community Service and camps

In Paediatric Oncology division the ‘parent support group – doctor meet’ was held in which an interactive meeting between parents of children with various forms of childhood malignancies was held every three to four months in which various issues pertaining to childhood cancers were dealt with. A NGO ‘CANKIDS’ helps with the organization of the event.

Financial support was provided to these patients through the Rashtriya Arogya Nidhi, Prime Ministers relief fund, by providing medications and financial assistance for education to Paediatric Cancer survivors with the help of NGOs like CANKIDS and CPAA.

Accommodation facilities were provided for patients coming from distant places at dharamshalas.

A small film had been created by the treating physicians highlighting the importance of the health, hygiene and nutrition programme, children were shown and explained the importance of these issues on International Childhood Cancer Day, 15 Feb 2009.

Paediatric Endocrine division organized 2 interactive educational meets for children with type 1 diabetes and their parents and one for children with congenital adrenal hyperplasia.


Agarwala A. ‘Healthy, wealthy ‘n’ wise’. Mail today: Education (special Initiative); 2008:34.

3rd Childhood diabetes-celiac meet, Endo-gastro Units, Department of Paediatrics and Endocrinology, AIIMS, CMET; 11 March 2008.
AWARDS HONOURS

Dr Vinod Paul was elected as a member of the American Paediatric Society (the first Indian neonatologist and second Indian paediatrician to be bestowed this prestigious membership); Delivered the first Annual Oration of the Rajasthan Chapter of National Neonatology Forum.

Dr A.K. Deorari was conferred Fellowship of National Academy of Medical Sciences in Jammu during Annual Convention, 1–2 November 2008.

Dr Arvind Bagga was elected Member, Paediatrics Board, Medical Council of India (2007–09); Member, Expert Group on Classification of Childhood Vasculitides, European League Against Rheumatism (2005–2008); Member, Expert Group, Acute Kidney Injury Network (2005–2008).

Dr Pankaj Hari was elected Secretary, Indian Society of Paediatric Nephrology.

Dr Arvind Bagga was elected Member, Paediatrics Board, Medical Council of India (2007–09); Member, Expert Group on Classification of Childhood Vasculitides, European League Against Rheumatism (2005–2008); Member, Expert Group, Acute Kidney Injury Network (2005–2008).

Dr Rachna Seth was elected life member, Child abuse, neglect and child labour, IAP chapter.

Dr Vandana Jain was awarded the Lawson Wilkins Paediatric Endocrine Society International Scholar Award for the year 2008 which enabled a visit to the division of Endocrinology at the Department of Paediatrics, University of Michigan, Ann Arbor, USA for a period of 3 months from May to July 2008.

Dr Pratima Ray was Awarded ICMR International fellowship for senior biomedical scientist 2007; Elected life member of American Society of Virology.

Dr S.K. Kabra was Chaired taskforce meeting of ICMR on Childhood HIV infection on at head quarters; Delivered “H Paramesh oration” on community acquired pneumonia in RESPICON, Davangere ,21 November 2008.

SIGNIFICANT EVENTS

1. Rated as the best Paediatrics Department in India by the magazine The Week for the second consecutive year.

2. WHO Collaborating Centre for Training and Research in Newborn Care for the South East Asia Region.

3. WHO Collaborating Centre for Clinical Genetics for the South East Asia Region.

4. The Genetics division continued to be Centre of Excellence recognized by the Department of Biotechnology, Government of India.

5. The Division of Neonatology, in collaboration with the Nursing College, launched the most comprehensive capacity development initiative ever on Kangaroo Mother Care in the Delhi State by conducting eight workshops in different hospitals during the Newborn Week.

6. The Division of Neonatology was nodal centre for National Neonatal Perinatal Database for six countries in SE Asia Region namely Nepal, Bangladesh, Sri Lanka, Thailand and Indonesia.

7. A team of doctors and nurses of the department developed a high quality training tool on Essential Newborn Nursing based on participatory learning methods for nurses working in district hospital
with the assistance of SEARO-WHO office. State of Gujarat has undertaken systematic scaling of this programme with introduction of ENBC in pre-service education.

8. Division of Neonatology has created a website www.newbornwho.cc.org. The website highlights the activities and provides free access to learning resource materials, software for data collection etc developed by Neonatology Division. It clocked 100000 cumulative hits this year.

9. Two postgraduate students (Dr Meenakshi Bothra and Dr Suman Sarkar) received the prestigious ICMR fellowships for the thesis work.

Dr V.K. Paul is leading a technical group constituted by the Ministry of Health and Family Welfare to develop the Newborn and Child Health Policy 2009; Member, Indo-US Joint Working Group on Maternal and Child Health Research; Member, Committee on Codex of the Ministry of Women and Child Development; Member, Committee on Food Fortification of the Ministry of Women and Child Development; Member, Advisory Group, National Child Health Resource Centre; Member, Technical Advisory Group, Research NGO SNEHA (Mumbai); Member, Technical Advisory Group, Sure Start project (Gates Foundation / PATH India); Member, International Advisory Panel for the NRHM; Conducted the first evaluation of the multi-skilling course in newborn care for general duty medical officers in Gujarat and conducted a planning workshop to develop newborn care units in J&K; Provided technical oversight for the training module for the ASHA workers under the Norway India Partnership Initiative; Member, Governing Body, National Neonatology Forum; Member, the advisory panel of the credentials committee of the National Academy of Medical Sciences; Member of the scientific/technical advisory committees of the following international organizations: The Global Alliance for the Prevention of Prematurity and Stillbirths (GAPPS), the Saving Newborn Lives initiative of the Save the Children (US), the Advisory Group of the American Academy of Pediatrics on Neonatal Resuscitation and the newly-launched Maternal Health Task Force; Continued to be the Board Member of the Global Partnership for Maternal, Newborn and Child Health (PMNCH); Was a temporary advisor to WHO Geneva for developing WHO guidelines for neonatal resuscitation and to advise on the Healthy Babies Breathe programme of the AAP; Member, Child Health Technical Advisory Committee, WHO South East Asia Region and addressed the WHO South East Asia Regional Meeting on Primary Health Care in Jakarta on the ‘Role of Health Sector in Promoting Health Equity’; Core team member, ICMR task Force study on home based Management of young Infants: five site study (Funded by ICMR and Government of India.

Dr Arvind Bagga was the Associate Editor, Indian Pediatrics; Member, International Advisory Board, Current Pediatrics; Core Group Member, Chronic Kidney Disease Registry, Indian Society of Nephrology; Editor, Bulletin Indian Society of Pediatric Nephrology.

Dr S.K. Kabra was the Editor, Indian Journal of Pediatrics.

Dr Pankaj Hari was elected Member, Disease Outbreak Prevention and Response Cell (DOPRC), and Reviewer for Paediatrics, official Journal of American Academy of Paediatrics and Paediatric Nephrology, Journal of International Pediatric nephrology Association.

Dr Sheffali Gulati was served as Expert, Neurology projects for Indian Council of Medical Research and National Trust; Editorial Consultant of Indian Journal of Pediatrics.

Dr Rachna Seth was an Invited participant to the National consultative on G-CSF and Peg G –CSF, annual conference, PHOCON of IAP; Participant, panel discussion on Myelodysplastic syndrome, Annual Conference, Paediatric Hematology chapter, IAP.

Dr Ramesh Agarwal served as an expert in WHO Task Force Committee on Management of neonatal seizures.

Dr Shinjini Bhatnagar was elected Member, Technical Advisory Board for Diarrhoea, World Health Organization; Member, Working Group of Celiac Disease, Commonwealth Association of Paediatric Gastroenterology, Hepatology and Nutrition.

Dr Pratima Ray was a Reviewer for Infection Genetics and Evolution (Elsevier), Indian Journal of Pediatrics and Pediatric Infectious Diseases journal; Assessed PhD thesis for the Swinburn University of Technology, Victoria, Australia.

Ms Anuja Agarwala was elected Executive member, Indian Society of Enteral and Parenteral Nutrition (ISPEN) 2008; Expert Committee member, Central Board of Secondary Education.

Dr Sushma Nangia

Her paper ‘Topical coconut oil application reduces Tran epidermal water loss in reterm very low birth weight neonates: A randomized clinical trial’ was judged as the best research Paper, SPR meeting at Boston 2008.

Dr Satish Mishra

NNF Gold Medal for the paper ‘Transcutaneous bilirubinometry reduces need for sampling in late preterm and term neonates’ NNF meeting at Calcutta, December 2008.

Dr Shamsher Dalal


VISITING SCIENTISTS

- Dr Leeza O. Warwick University U.K. (February 2009).
- Dr Charles Cantor - Chief Scientific Officer SEQUANOM, USA (January 2009).
- Dr Priya Kishnani University of Duke USA (July 2008).
• Professor PSN Menon, Chairman, Department of Paediatrics, Armed Forces Hospital, Kuwait (September 2008)

• Dr Venkat Shankar, Chief, Section of Critical Care, Department of Paediatrics, Medical Director, Intensive Care Unit, Associate Professor of Paediatrics, Drexel University College of Medicine, Pennsylvania, USA (December 2008).

• Dr Victor Chernick, Editor, Pediatric Pulmonology (February 2009).

• Dr Susan Niermeyer and Dr William Keenan, American Academy of Paediatrics Steering Committee on Neonatal Resuscitation (January 2009).

• Dr Nalini Singhal, University of Calgary, Canada (January 2009).

• Dr Jose Marines (April 2008), Dr Olivier Fontaine (November 2008) and Rajiv Bahl (November 2008), WHO Child and Adolescent Health department, WHO Geneva.

• Dr Ole Soder, Head of Paediatrics, Karolinska University, Stockholm, Sweden (March 2009).
9.26 Paediatrics Surgery

Professor and Head
D.K. Gupta

Professors
V. Bhatnagar
M. Bajpai

Associate Professors
S. Agarwala
M. Srinivas

EDUCATION

Undergraduate, Postgraduate and Paramedical

• Teaching of undergraduate medical and nursing students

• Postgraduate teaching and training of MCh Paediatric Surgery trainees, this included seminars, journal clubs, case discussions, thesis presentations

• Trainees on rotation—MCh trainee in Neurosurgery, DM trainees in Neonatology, MS trainees in General Surgery

• Training of BSc and MSc Nursing students

Short- and long-term training

Several students from various countries underwent short-term and long-term training.

Continuing Medical Education

Professor D.K. Gupta organized the

• International symposium on ‘Stem cells—Promises and potentials’, Felicitation of Professor P Upadhyaya, the founder of the Department of Paediatric Surgery, on his 80th Birthday celebrations, AIIMS, New Delhi; 15–16 August 2008.

Lectures delivered

Professor D.K. Gupta

• Delivered the guest lectures during the workshop on ‘Anorectal malformations’, Kolkata, 14 June 2008, on;

—Recent concepts including MRI for anorectal anomalies
—Management of ARM with krikenbeck
—Role of laparoscopy in anorectal malformation
—Re-do Surgery for anorectal anomalies
—Long-term follow-up on anorctal anomalies
— As panelist during the panel discussion on ARM
— Chaired the scientific session on ‘Congenital Pouch Colon’

• Guest lecture on Paediatric Oncology in India, Symposium on Paediatric Oncology, University of Kyushu, Kukuoka, Japan; 19 May 2008

• Delivered the guest lectures during the Live Operative Workshop on Hypospadias, JIPMER, Pondichery, 22–24 August 2008, on;
  — Difficult Hypospadias
  — Intersex Disorders – diagnosis without tears

• Delivered the guest lectures during the International Symposium on ‘Stem Cell Applications – Promises and Potentials’, AIIMS, New Delhi, 16–17 August 2008, on
  — Stem cell application in regenerative medicine – introductory lecture
  — Role of stem cell in hepatic fibrosis – a pilot study in biliary atresia

Professor V. Bhatnagar


• ‘Biochemical and bone densitometry changes after sigmoid colocoloplasty in children’, CME session I, 34th Annual Conference, Indian Association of Paediatric Surgeons, Guwahati, Assam; 4 December 2009.

• Live operative demonstrations at the CME and Live operative workshop, VII Annual Paediatric Surgical Conference, Tamil Nadu and Pondicherry Chapter, Indian Association of Paediatric Surgeons, CMC Vellore, 10–12 July 2008, on,
  — Minilap and operative cholangiogram for neonatal cholestasis
  — Esophageal replacement by reverse gastric tube
  — Posterior sagittal ano-recto-plasty for high anorectal anomalies in a male
  — Abdomino-perineal posterior sagittal ano-recto-vagino-plasty with tubularisation of pouch colon for cloacal malformation in a female.
Professor M Bajpai

- Clinical presentation, pathology, genetics and decision-making in the management of True hermaphrodites, CME on Intersex disorders, B.J. Wadia hospital, Mumbai; 13 April 2008.

Dr Sandeep Agarwala

- RCN guidelines for treatment of hepatoblastoma, Annual meeting of SIOPEL, Munich; 1–3 March 2009.

National and International Conferences

Lectures delivered

Professor D.K. Gupta

- Felicitation function held to honour Professor C.S. Gopal, the first MCh Student from the department to have taken over as the Vice Chancellor of the KGM University and Professor Narpat Singh, Medical Superintendent on receiving the BC Roy Award, AIIMS, New Delhi; 8 May 2008.
- Felicitation function to honour Professor P. Upadhyaya, the founder of the Department of Paediatric Surgery, on his 80th birthday celebrations, AIIMS, New Delhi; 15–16 August 2008.

Professor D.K. Gupta

- Delivered the Guest Lectures during the workshop on ‘Anorectal malformations’, Kolkata, 14 June 2008, on;
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  —Management of ARM with Krikenbeck
  —Role of laparoscopy in anorectal malformation
  —Re-do surgery for anorectal anomalies
  —Long-term follow-up
  —As the panelist during the panel discussion
  —Chair the scientific session on congenital pouch colon
- Guest lecture on Paediatric Oncology in India, University of Kyushu, Kukuoka, Japan; 19 May 2008.
- Live Operative Workshop on Hypospadias, JIPMER, Pondicherry; 22–24 August 2008, on;
  —Difficult Hypsopadias
  —Intersex Disorders – diagnosis without tears
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—Esophageal replacement by reverse gastric tube
—Posterior sagittal ano-recto-plasty for high anorectal anomalies in a male
—Abdomino-perineal posterior sagittal ano-recto-vagino-plasty with tubularisation of pouch colon for cloacal malformation in a female.

Dr Sandeep Agarwala


RESEARCH

Funded projects


Melanocyte cell culture and transplantation in albinos. National Institute of Immunology, joint research Project with AIIMS. D.K. Gupta. Funded by DST.

• ACE I/D gene polymorphism in ‘Posterior urethral valves’ and its correlation with transforming growth factor-b1, Tumour Necrosis Factor (TNF)-a, soluble TNF receptor-1, interleukin–6 (IL-6), microalbuminurea, angiotensin II, and plasma renin activity in the early diagnosis of renal damage. M. Bajpai. Funded by DST.

• ACE I/D gene polymorphism in ‘Vesico ureteric reflux’ and its correlation with transforming growth factor-b1, Tumour Necrosis Factor (TNF)-a, soluble TNF receptor-1, interleukin–6 (IL-6), microalbuminurea, angiotensin II and plasma renin activity in the early diagnosis of renal damage. M. Bajpai. Funded by DST.


**Departmental projects**

**Completed**

• Conservation of circulating blood volume in portal hypertension (Haematology, Nuclear Medicine).

• Comparison of imaging modalities in the evaluation of portal hypertension (Radiodiagnosis).

• Outcome of patients with antenatally diagnosed unilateral pelviureteric junction obstruction managed conservatively and surgically.

**Ongoing**

• Antibiotic prophylaxis in the management of vesicoureteric reflux: A multicentric randomized double-blind placebo-controlled trial (with Paediatrics).

• Volumetric analysis of the spleen in portal hypertension (with Radiodiagnosis).

• The role of nitric oxide in portal hypertension (with Biochemistry).

• Long-term results of oesophageal replacement by reverse gastric tube (with Radiodiagnosis, Nuclear Medicine).

• Long-term results following Kasai’s procedure for biliary atresia.

• Long-term results following tubularisation of pouch colon for pull through(with Radiodiagnosis)

• To study the role of renin angiotensin system blockade on renal recovery in experimentally induced unilateral ureteric obstruction: A morphometric analysis.

• To study the effect of ipsilateral ureteric obstruction on contra lateral kidney and the role of renin angiotensin system blockade on renal recovery in experimentally induced unilateral ureteric obstruction: A morphometric analysis.

• A clinical and urodynamic study on the effects of oral tolterodine on serial alterations in neurogenic detrusor overactivity vis-à-vis oral oxybutynin in children (with existing oxybutynin users).

• Results of the outcome of treatment of neuroblastoma in children by using moderately intense chemotherapy consisting of cyclophosphamide, doxorubicin, etoposide and cisplatin in combination with surgery and radiotherapy. No funding.
• Results with the use of platinum based regimes in the treatment of pediatric malignant germ cell
tumours. No funding.

• Prospective study of treatment of children with Wilms’ tumour on treatment with NWTS-5
regimen. No funding.

• Prospective study of treatment of children with rhabdomyosarcoma on treatment with IRS-5
regimen. No funding.

• Prospective study of treatment of children with hepatoblastoma on treatment with PLADO
regime. No funding.

• Monotherapy for standard risk hepatoblastoma. No funding

• Prospective study on five drug regimen for the management of clear cell sarcoma of the kidney.

• Musculoskeletal and pulmonary functional abnormalities after thoracic surgeries.

Collaborative Projects

Completed

• Renal function reserve in hydronephrotic children (with Nuclear Medicine).

• Assessment of latent manganese toxicity in follow-up cases of biliary atresia (with Radiology).

• Development of intrapulmonary arteriovenous shunting in follow-up cases of biliary atresia (with
Paediatric Cardiology).

• Hepatoblastoma: Role of DNA ploidy, cell proliferation and cytokeratin 19 expression in subtyping
and prognosis (with Pathology).

• Wilms’ tumour: Relation of apoptotic gene expression with subtype, chemoresponse and prognosis
(with Pathology).

Ongoing

• Antibiotic prophylaxis in the management of vesicoureteric reflux: A multicentric randomized
double-blind placebo-controlled trial (with Paediatrics).

• Long-term follow-up of patients after augmentation cystoplasty (with Endocrinology and
Metabolism).

• Comparison of imaging modalities in the evaluation of neonatal cholestasis (with Radiodiagnosis).

• Comparison of imaging modalities in the evaluation of portal hypertension (with Radiodiagnosis).

• Volumetric analysis of the spleen in portal hypertension (with Radiodiagnosis).

• Conservation of circulating blood volume in portal hypertension (with Haematology, Nuclear
Medicine).

• The role of nitric oxide in portal hypertension (with Biochemistry).
• Long-term results of esophageal replacement by reverse gastric tube (with Radiodiagnosis, Nuclear Medicine).

• Long-term results following Kasai’s procedure for biliary atresia.

• Evaluation of cardiotoxicity related to adriamycin in children with solid tumours (with Nuclear Medicine).

• Evaluation of hearing deficiencies in children who have received cis-platinum for treatment of solid tumours (with ENT).

• Evaluation of restrictive lung disease in long-term survivors of malignant germ cell tumours who have received Bleomycin as a part of treatment (with Paediatrics).

• Gain of chromosome 17q and its effect on outcome in patients with neuroblastoma (with Anatomy).

• Whole body MR imaging for detection of skeletal metastases in paediatric patients of small cell neoplasms: Comparison with skeletal scintigraphy and FDG-PET CT scan (with Medical Oncology, Radiodiagnosis and Nuclear Medicine).

• Comparison of efficacy and safety of oral antibiotics (amoxycillin-clavulonic acid and ofloxacin) with intravenous combination (ceftriaxone and amikacin) in outpatient setting in paediatric patients of low risk febrile neutropenia (with Medical Oncology).

• Telomerase estimation in patients with Wilms’ tumour and hepatoblastoma as a marker for prognosis (with Pathology).

• Evaluation of lymphocytic infiltration in Wilms’ tumour and adjoining normal renal parenchyma and its relation to recurrence and outcome (with Pathology).

• Evaluation of role of adjunctive therapy with 131 I MIBG therapy for advanced non-responsive, relapsed and metastatic neuroblastoma (with Nuclear Medicine).

• Posterior urethral valves: Persistent renin angiotensin system activation and role of angiotensin converting enzyme inhibition on renal recovery (with Radiodiagnosis).

**PUBLICATIONS**

**Journals**


Chapters in Books


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**PATIENT CARE**

**Attendance in OPD and specialty clinics**

<table>
<thead>
<tr>
<th>Specialty clinics</th>
<th>New cases</th>
<th>Old cases</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>General OPD</td>
<td>5,870</td>
<td>12,741</td>
<td>18,611</td>
</tr>
<tr>
<td>Specialty clinics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydrocephalus</td>
<td>43</td>
<td>276</td>
<td>319</td>
</tr>
<tr>
<td>Intersex</td>
<td>37</td>
<td>291</td>
<td>328</td>
</tr>
<tr>
<td>Craniosynostosis</td>
<td>7</td>
<td>25</td>
<td>32</td>
</tr>
<tr>
<td>Paediatric urology</td>
<td>293</td>
<td>2,093</td>
<td>2,376</td>
</tr>
<tr>
<td>Paediatric solid tumour</td>
<td>168</td>
<td>2,022</td>
<td>2,190</td>
</tr>
<tr>
<td>CRHSP Ballabgarh</td>
<td>580</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Minor procedures</td>
<td>3,200</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>
Admissions

AB-5 ward 2,550
AB5-ICU 153

Surgical procedures

Major 1,300
Minor 352
At CRHS, Ballabgarh 315
Total 1,967

Special investigations:

Urodynamic evaluation 417
Uroflometry 734
Ano-rectal manometry 53
Esophageal manometry 37
24-hour pH monitoring 25

AWARDS AND HONORS

Professor DK Gupta was nominated as Chairman of the curriculum committee of the Medical Council of India for preparing the curriculum in the specialty, during the meeting held on 28 April 2008; Chairman, to select the candidates from SAARC countries for the Lister and Greenwood fellowships of the British Association of Paediatric surgeons, UK; Expert, to conduct the inspection at the Postgraduate Institute of Medical Sciences, Rohtak, to start the MCh course in Paediatric surgery, 9 May 2008; Chair the scientific session, 15th congress of Federation of the Asia-Oceana Perinatal Societies, Nagoya, Japan, 18–20 May 2008; Visiting Professor, Department of Paediatric Surgery, Kyushu University, Fukuoka, Japan, and deliver the guest lecture on Paediatric oncology in India, May 2008; Chair the scientific session during the International Congress on Advances in Neuroblastoma Research, Chiba, Japan, 21–24 May 2008. Honoured with the University Medal and the Certificate of Honour by the Kyushu University, Fukuoka, Japan, 19 May 2008.

Dr DK Gupta was invited to chair the scientific session, during the Annual Congress of South African Association of Paediatric Surgeons, Sun City, 29 May—4 June 2008; Visiting Professor, Red Cross Memorial Hospital, Cape Town, South Africa, University of Cape Town and received the certificate of honour and the Hospital memento, June 2008; Chair the scientific session, 10th International Congress of the European Association of Paediatric surgeons, Istanbul, 18–21 June 2008; Chair the scientific session during the Annual congress of South African Association of Pediatric Surgeons, Sun City, South Africa, 28 May—1 June 2008; Was conferred the Honorary Membership of the South African Association of Paediatric Surgeons during the Annual Congress held in Sun City, South Africa, 31 May 2008; Chair the scientific Session on Congenital Pouch Colon during the
Workshop on Anorectal malformations, Kolkata, 14 June 2008; Council Member representing Asia, World Federation of Associations of Pediatric Surgeons (WOFAPS), Istanbul, 18–21 June 2008; Council Member representing Asia, European Association of Paediatric Surgeons (EUPSA), Istanbul, 18–21 June 2008; Editorial consultant, *Gold Journal of Urology* and *Journal of the Emergency Medicine, Trauma and Surgery*, July 2008; Invited by the National News Media for expert comments on the baby born with major facial anomaly and, also on providing training in paediatric surgery to overseas doctors at AIIMS, July 2008; Chair the scientific Session on hypospadias and moderating the panel discussion on the management of hypospadias, Live Operative Workshop on Hypospadias, JIPMER, Pondichery, 22–24 August 2008; Invited as the President, SAARC Nations and the Guest of Honour to deliver the Presidential Address (from SAARC nations) during the Annual conference of the Pakistan Association of Paediatric Surgeons with the EC meeting of the FAPSS, Bhawalpur, Pakistan, 17–19 October 2008.

**Dr DK Gupta** was nominated as the Chairman of the Publication committee, AAPS to Journal Paediatric surgery International, 21st Congress of the Asian Association of Paediatric Surgeons (AAPS), Bangkok, 16–19 November 2008; Chair the Suruga Lecture, Board of Directors meeting and the general Assembly of the Asian Association of Paediatric Surgeons, Bangkok, 16–19 November 2008; Invited to chair session, North India Conference on Foetal Medicine – Prenatal diagnosis and Therapy, New Delhi, 15 November 2008; Invited to chair the scientific session, 34th Annual Conference of the Indian Association of Paediatric Surgeons, Guwahati, 4–7 December 2008; Invited as the guest faculty to deliver the lecture on antenatal management of HN during the Live Operative workshop on Paediatric Urology, Gwalior, 13–14 December 2008; Invited as an expert, National Commision for protection of child rights, during the expert group meeting, New Delhi, 6 January 2009; Invited to chair the scientific session and serve as Panelist during the 3rd Workshop on Paediatric Andrology, Liestal, Switzerland, 14–16 January 2009; Invited to assist the selection committee for the faculty in Paediatric Surgery at CSMMU, Lucknow, 2 February 2009; Member, scientific abstract selection committee, Pacific Association of Pediatric Surgeons, Hongkong, 2008–09; Invited to chair the scientific session, Vesico-ureteric reflux and urinary tract infection, Annual Conference of the Indian Academy of Paediatrics, Surat, 28–29 March 2009; Chairman, MCh Examination in Paediatric Surgery, AIIMS, December 2008.

**Professor M. Bajpai** was member abstract reviewer committee of the American Urology Association for the meeting, Orlando, Florida, USA, 2008; Chairperson, session on endourology, Annual meeting of the *Paediatric Endoscopic Society of India*, Mumbai, 2008; Member, Board of studies in Paediatric Surgery, Banaras Hindu University, Varanasi; Member, Project Advisory Committee, Department of Science and Technology, Government of India; External Examiner for MCh, University of Gujarat, West Bengal University of Health Sciences, PGI Chandigarh, Jammu and Kashmir; Internal Examiner for MCh, All India Institute of Medical Sciences, New Delhi, Expert, Medical Council of India for recognition of MCh training programme in the country.

**Dr Sandeep Agarwala** was awarded the SIOP 2008 scholarship, CCLG (UK) travel grant for 2008; Awarded the International travel grant sponsored and funded by Asian Children’s Care League, Japan; Selected as course instructor for Surgical Oncology course conducted by European Union of Paediatric Surgical Associations (EUPSA) for 2008; Invited as visiting Professor to Royal Hospital for Sick Children, Yorkhill, Glasgow, UK.
SIGNIFICANT EVENTS

Dr DK Gupta published following books:

1. Paediatric surgery – Diagnosis and Management (2 vol set, 1600 pages, 1250 colour photos)
2. Hutchison Paediatrics (Edited by K Goel and DK Gupta)
5. Memoir Book on Professor P. Upadhyaya, to felicitate him on his 80th Birthday.
6. Felicitation function held to honour Prof CS Gopal, the first MCh Student from the department to have taken over as the Vice Chancellor of the KGM University and Professor Narpat singh, Medical Superintendent on receiving the BC Roy Award at AIIMS on 8 May 2008.
7. Felicitation function to Honour Professor P Upadhyaya, the Founder of the Department of Pediatric Surgery at AIIMS, on his 80th Birthday.

VISITING SCIENTISTS

Prem Puri, Dublin (Ireland); Bikul Das (Canada); Talal Al-Malki (Saudi Arab); Paul Tam (Hong Kong); Bikramjit Sangha, (Los Angeles, USA); Gabriel Ionescu (Abu Dhabi); Andrew Pinter (Hungary); Iftikar Jan (Pakistan).
### 9.27 Pathology

<table>
<thead>
<tr>
<th>Professor and Head</th>
<th>Subrat K. Panda</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professors</td>
<td></td>
</tr>
<tr>
<td>Chitra Sarkar</td>
<td>Manoj K. Singh</td>
</tr>
<tr>
<td>Rajni Safaya</td>
<td>Ruma Ray</td>
</tr>
<tr>
<td>S. Datta Gupta</td>
<td>A.K. Karak</td>
</tr>
<tr>
<td>(On deputation)</td>
<td></td>
</tr>
<tr>
<td>Additional Professors</td>
<td></td>
</tr>
<tr>
<td>A.K. Dinda</td>
<td></td>
</tr>
<tr>
<td>Associate Professors</td>
<td></td>
</tr>
<tr>
<td>M.C. Sharma</td>
<td>Venkateswaran K. Iyer</td>
</tr>
<tr>
<td>Assistant Professors</td>
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</tr>
<tr>
<td>Sandeep R Mathur</td>
<td>Vaishali Suri</td>
</tr>
<tr>
<td></td>
<td>Kabita Chatterjee</td>
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<td>(Blood Bank)</td>
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### EDUCATION

#### Undergraduate

No change from previous years.

#### Postgraduate

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<table>
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<tbody>
<tr>
<td>MD students</td>
<td>18</td>
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<tr>
<td>Senior Residents</td>
<td>10</td>
</tr>
<tr>
<td>PhD students</td>
<td>12</td>
</tr>
<tr>
<td>Pool Officer</td>
<td>2</td>
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#### Short-term and long-term training

- Dr Kachnar Verma, Allahabad Medical College – short-term training in Neuropathology for three months.
- Dr Isha Muteeja from Amity University underwent summer training for two months (1 June – 31 July, 2008).
- Mr Dhiraj Kumar from Amity University underwent summer training for two months (1 June – 31 July 2008).
- Dr Shivani from Jamia Milia Islamia underwent short term training for 2 months (23/6/2008 – 22/8/2008).
- Dr Punam Paudyal, Dr. Meenu Agarwal and Dr. Mrinalini Singh from BPKIHS underwent training for one month (2 February – 28 February 2009).
CONTINUING MEDICAL EDUCATION

Lectures delivered

Professor S.K. Panda

- ‘HEV Biology’, Indian Association of Pathologists and Microbiologists, HQ CME - 2009 as guest speaker in Cuttack; on 14 February 2009.

Professor Chitra Sarkar


Dr Vaishali Suri

- ‘Classification and histopathology of CNS tumours’, Paediatric Haematology oncology conference, Sir Ganga Ram Hospital, New Delhi; 6 November 2008.

Professor R. Safaya

- ‘Bone lesions with emphasis on histopathology of bone tumors’, 1st CME in Pathology, M.V.J. Medical College and Research Hospital, Bangalore; 29 August – 30 August 2008.

Dr A.K. Dinda

- ‘Recent advances in diagnosis of glomerular diseases’, Quarterly meet of IAPM Delhi chapter, Lady Hardinge Medical College, New Delhi; January 2009.
• ‘Role of animal models in renal research’, II International CME in Renal and transplantation Pathology  PGIMER Chandigarh; 20–22 February 2009.

Dr V.K. Iyer

Dr Sandeep Mathur
• Participated as faculty in workshop on endoscopic ultrasound guided FNAC in Asia-Pacific Digestive week, AIIMS, New Delhi; 13 September 2008.
• Participated as Pathology discussant in Clinicopathology conference at the XIX annual CME of API-DSC, IHC, New Delhi; 19 October 2008.

National and International Conferences

Lectures delivered

Professor S.K. Panda
• Chaired a session and presented two papers in an “International Symposium on Viral Hepatitis and Liver Disease”, Washington DC, USA; 20–24 March 2009.

Professor Chitra Sarkar
• ‘1p&19q deletions in astrocytic and oligodendroglial tumors’, First congress of the Asian Society of Neuropathology, Tokyo, Japan; 22 May 2008.

Dr AK Dinda
• ‘Pathology and pathogenesis of lupus nephritis’, Annual Conference of Indian Society of Nephrology, East Zone, Behrampur Medical College, Orissa; 21 November 2008.
• ‘Nanotechnology’, 13th refresher course on Environmental Sciences, Jawaharlal Nehru University, Delhi; 20 April 2008.

Dr VK Iyer
• Participated as a faculty in Workshop on low grade squamous intraepithelial lesions at the 38th Annual Conference, Indian Academy of Cytologists, Ahmedabad; 2008.

Dr Sandeep Mathur

• ‘Cytology of common epithelial tumors of the lung’, 38th annual conference of Indian Academy of Cytology, Ahmedabad, Gujarat; 16 November 2008.

RESEARCH

Funded Projects

Completed


Ongoing


8. Efficacy and safety of AP 12009 in adult patients with recurrence or refractory anaplastic astrocytoma (WHO grade III) as compared to standard treatment with temozolomide or BCNU: A randomized actively controlled, open label clinical phase III study. Chitra Sarkar (Co-PI). Funded by Antisense Pharma, Germany (2007–10). Funds: Rs 25 lakh.


Departmental Projects

Completed

1. p53, EGFR & HER2 receptor in osteogenic sarcomas
2. GBMs with long term survival – Role of cell cycle regulatory genes
3. Transplant glomerulopathy: An ultra structural, immunohistochemical and morphometric study
4. An ultrastructural study of glomerular changes in renal biopsy of HIV positive patients with proteinuria
5. Study of C4d deposition in peritubular capillaries of renal transplant biopsy and its correlation with morphological features of severity of rejection
6. Ultrastructural evidence of injury to endothelial mitochondria in calcineurin inhibitor toxicity and its correlation with immunohistochemical detection of peroxynitrite and VEGF.
7. Idiopathic collapsing glomerulopathy: a clinicopathologic analysis of 20 cases
8. Atypical hemolytic uraemic syndrome: Histopathological features and significance of anti factor-H antibodies and CFHR1/CFHR 3 gene deletions
9. Hepatitis B-virus associated nephropathy: experience of a tertiary care centre in north-India
10. Focal segmental glomerulosclerosis in renal allograft biopsies: a clinico-pathologic study
11. Focal segmental glomerulosclerosis in idiopathic membranous glomerulonephritis: A morphological and stereological analysis of 15 cases
12. Histopathological spectrum and role of vascular endothelial growth factor (VEGF) and peroxynitrite radicals in development of calcineurine inhibitor (CNI) toxicity in renal allografts: lessons from protocol allograft biopsies
13. Rule-based decision support system in glomerular diseases: role in diagnosis and teaching
14. The spectrum of 11p13 and 11p15 deletions in Wilms tumor with histological correlation
15. Immunohistochemical and image analytic characterization of primary and recurrent giant cell tumor of bone
16. To analyse Immunohistochemical and Image Analytic Characterization of stromal Components in Primary and recurrent Giant cell tumor of Bone
17. Role of Urinary Cytology and Immunocytochemistry in the Diagnosis and Management of Acute Renal Allograft Dysfunction
Ongoing

1. Primary and secondary glioblastomas: A study of EGFR amplification, EGFR VIII mutants and p53 expression.
2. Study of gliomagenesis: Possible involvement of CNS developmental pathway
3. Study Of Limb Girdle Muscular Dystrophy (LGMD) Patients In Indian Population Using Calpain-3, Dysferlin And Sarcoglycan Protein Analysis
4. Clinicopathological study of angiogenesis in glioblastoma multiforme
5. Childhood GBMs : A clinicopathological and molecular genetic study
6. Study of iron metabolism associated proteins in renal cell lines in hyperglycemic and hypernatraemic condition
7. Role of macrophage in modulation of renal fibrosis
8. Ultrastructural study of podocyte changes in immune and non-immune mediated glomerular diseases
9. Study of endocytosis and fate of calcium phosphate based and gold nanoparticle
10. Modulation of macrophage function with nanoparticle
11. Airway remodeling in Bronchial Asthma; A study in experimental mice model.
12. Nanoparticle mediated antigen presentation and modulation of antigen processing by macrophage
13. Immuno-localization of podocalyxin and synaptopodin in patients with steroid resistant nephrotic syndrome
15. A study of histomorphological, immunohistochemical and ultrastructural study of renal toxicity induced by calcineurin inhibitors in childhood steroid resistant nephrotic syndrome (SRNS)
16. 1p and 11p Loss of heterozygosity in hepatoblastoma
18. Expression of p16 INK4a, E-cadherin, and Ki 67 in cervical cancer and its precursors compared with hyperplastic and metaplastic squamous epithelium of chronic cervicitis

Collaborative Projects

Completed

1. Pharmacological and molecular studies on cardioprotective potential of cox-2 inhibitor and indigenous antioxidant drugs in experimentally induced myocardial infarction (with Pharmacology)
2. Effect of blocking of HIF1á gene expression on macrophage endocytosis and generation of ROS (with JNU, Delhi)

3. Detection and molecular characterization of Pneumocystis jiroveci from patients with clinical diagnosis of interstitial pneumonia (with microbiology)

4. To study the prevalence and predictors (clinical and laboratory) of celiac disease in patients with down syndrome. (with Paediatric, Pathology)

5. Characterization of thymoma using f18 fluorodeoxyglucose positron emission tomography (FDG PET-CT) and its correlation with histopathology. (with Pathology, Surgery and Nuclear Medicine)

6. Role of centchroman in regression of mastalgia and regression of fibroadenoma and its correlation to histopathology and estrogen and progesterone receptor (with Pathology, Surgery)

7. Studies of the role of intracellular and extracellular factors on the expression of LDL receptor and SREBP2: Correlation with cellular uptake of LDL and cell apoptosis (with Pathology, Biochemistry)

8. A pilot study comparing p53, p16, k-ras and c-erbB-2 expression in non neoplastic Gall Bladder epithelium and gallbladder cancer cases (with Pathology, Medical Oncology, Surgical Oncology)

**Ongoing**


2. Analysis of immunomodulation property of IFN-g on classical, nonclassical MHC 1 and TGF-b expression in astrocytic tumors and their relevance in immunotherapy (with Neurobiochemistry, AIIMS).

3. Study of HIC-1 in tumorigenesis and cell response (with Biochemistry, AIIMS)

4. Effects of administration of human umbilical cord blood cells (HUCBG) in combination with melatonin versus HUCBG in rat with stroke (with Neurology)

5. Altered DNA sequences in gliomas: characterization of changes and context sequences with reference to tumor type (with Biochemistry)

6. Characterization of the properties of an amplified region of DNA in primary meningeal tumours (with Biochemistry)

7. Analysis of FAT gene in glial tumors (with Biochemistry)

8. Pilocytic astrocytomas : correlation of clinical features and outcome with proliferation index and angiogenesis (with Neurosurgery)

9. Histomorphometric analysis of intrapulmonary vessels in patients undergoing Bi-Directional Glenn and total cavopulmonary connection (with CTVS).

10. Left ventricular muscle biopsy in patients with Transposition of great arteries with prepared and regressed left ventricle (with CTVS).

AIIMS 2008-2009 / 468
11. To study the ‘Role of ¹⁸F-FDG-PET-CT and MRI in Osteosarcoma for Chemotherapy Response Evaluation and Initial Staging (with Dr BRA IRCH)

12. Development of hydrogel patch with nanoparticle impragnation for wound healing (with Centre for Biomedical Engineering, IIT, Delhi).

13. Study on temperature responsive polymeric nanoparticle for anticancer drug delivery (with Centre for Biomedical Engineering, IIT, Delhi).

14. Development of amphotericine B loaded gelatin nanoparticles for specific macrophage targeting in Leishmaniasis (with Centre for Biomedical Engineering, IIT, Delhi).

15. Development of tumor targeting with nanogel system (with Centre for Biomedical Engineering, IIT, Delhi).

16. Role of macrophage and oxidative stress in airway remodeling (with IGIB, Delhi).

17. Fabrication of Tissue Engineering Scaffolds using Bubbles and their Biocompatibility Studies for Tissue Engineering Applications (Department of Textile Engineering, IIT, Roorkee)

18. Molecular detection and genotyping of HPV in cervical cancer–a population based study (with Biochemistry).

19. Study of genetic polymorphisms of dihydropteroate synthase (DHPS) gene in Pneumocystis jiroveci isolates: correlation with clinical outcome in patients with PCP (with Microbiology)

20. Development of HPV candidate vaccine: Preparation of a clinical trial site/cohort for vaccine testing (with Gynaecology).

21. Randomized study of preoperative short course radiotherapy (25 Gy) vs preoperative concurrent radiotherapy (45Gy) and chemotherapy followed by surgery in rectal cancer (Funded by ICMR). (With Radiotherapy).

22. A randomised phase II biomarker neoadjuvant study of sequential AC followed by Ixabepilone compared to sequental AC followed by Paclitaxel in women with early stage breast cancer not over expressing HER-2 and estrogen receptors (with Medical Oncology)

23. Correlation of HPV DNA testing with residual disease in treated cases of CIN (with Obstetrics and Gynaecology).

24. Age related fibrotic changes in islets of Langerhans and ductular system of human pancreas. (with Pathology, Anatomy)

25. Gene deletions and mutations in Wilm’s tumour: correlation with histopathology and outcome (with Pathology, Paediatric Surgery, Genetics)

26. A Randomized controlled trial to determine gluten threshold for paediatric patients with celiac disease (with Pathology, Physiology, Paediatrics)

27. Evaluation of focal renal mass lesions using MDCT & MR with diffusion-weighted imaging (with Pathology, Radiodiagnosis, Urology)
28. Effect of Anti-TFN- Ú therapy on severity of experimental acute pancreatitis and subsequent pancreatic regeneration (with Pathology, Anatomy)

29. The correlation of VEGF and TGF BETA1 expression of clinico-pathological response, ER, PR and HEP2/neu STATUS in locally advanced breast cancer: A pilot study (with Pathology, Radiation Oncology)

30. Analysis of Her-2/neu, proliferation markers, estrogen and progesterone receptors and apoptosis in Breast cancer patients; An immunocytochemistry and fluorescent in situ Hybridization (FISH) study (with Pathology, Surgery).

31. Study to evaluate neoadjuvant chemotherapy followed by postoperative chemoradiotherapy and Nasseress the expression of multidrug resistance gene and cell cycle specificity in locally advanced gastric and gastroesophageal junction adenocarcinoma (with Pathology, Radiation Oncology)

32. Cysts, tumours and tumour like lesions of the jaw: evaluation by panoramic radiographs and multi detector computed tomography with limited MRI correlation (with Pathology, Radio-Diagnosis)

33. Correlation of Hepatitis B virus DNA in serum with viral core and surface antigen detection in liver tissue by immunohistochemistry in occult hepatitis B virus infection (with Pathology, Gastroenterology).

34. Relationship between polymorphisms in drug metabolizing enzymes, CYP1A1 and GSTM1 and the risk of developing oral precancer and cancer among consumers of tobacco and chewing product. Funded by ICMR task force project cancer.

35. Histological diagnosis of Celiac disease and its correlation with other markers (with Pathology, Paediatrics)

36. Histopathology of Acute and Subacute Liver Failure ( with Pathology, Gastroenterology)

37. A study of molecular markers in cervical cancers (with Pathology, Biochemistry, Obstetrics and Gynecology)

38. Emerging parasitic etiologies in malabsorption syndromes (with Pathology, Microbiology, Paediatrics, Gastroenterology)

39. Effect of Glutamine Supplementation on structure and function of the intestines in patients with Crohn’s Disease (with Pathology, Gastroenterology)

40. Evaluation of Curcumin in advanced Cervical Cancer (with Pathology, Biochemistry, Obstetrics and Gynecology, Radiation Oncology)

41. Role of bone marrow derived mononuclear stem cells in obstructive cholangiopathy.

**PUBLICATIONS**


**PAPERS AND POSTERS:**


PATIENT CARE

Laboratory services

Surgical Pathology Laboratory

Specimens processed 37324
Special stains 29564
Frozen sections 594

Cytopathology Laboratory

Total specimens 19,065
FNAC (out patient) 6962
Exfoliates routine 11,191
Millipore preparations 221
Immunocytology Specimens 194

Autopsies performed 19

Electron microscopy
Specimens processed 888

Immunohistochemistry Laboratory
Specimens processed 14,702

Neuropathology

Neuropathology surgical specimens 2,744
Immunohistochemistry 4,219

Muscle biopsies:
Total number received 340
Muscle enzyme histochemistry 537
Myelin stain 155
Frozen sections 522

Tissue culture lab

Section cutting of blocks for research: 5418
H&E Staining: 1376
Special Stains [Warthin Starry, AB-Pas, Sirius Red]: 785
Immunohistochemistry: 1148
Frozen Sections: 695
Renal pathology Urine sediment analysis 910
Immunofluorescence of kidney biopsies 605
Electron microscopy of kidney biopsies 120
Cardiac pathology
Routine Cases 1236
Research Cases 156
Poly. L Lysine (slides) 20,026
Special stains 312
Unstained 126
Hepatic pathology
Markers for hepatitis viruses
HBs Ag 1,490
HBe Ag 1,320
HBc-IgM 176
HAV IgM 320
Anti-HCV IgG 624
Anti-HEV IgM 86

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Dr Chitra Sarkar was elected as Fellow Royal College of Pathologists (FRCPath), London, April 2008; She is one of the 100 distinguished ‘Women in science’, India whose autobiography/biography has been published in an Indian Academy of Sciences’ book entitled ‘Lilavati’s Daughters’.

P Das, T Puri, P Jha, V Suri, M C Sharma, BS Sharma, A Gupta, C Sarkar won the First Prize in Neurosurgery for the poster entitled ‘Glioblastoma multiforme’ with long-term survival in the XI annual conference of DNA (DNACON- 2009)); AIIMS, 6–7 February 2009.


Dr Seema Kaushal, Dr VK Iyer, Dr S Mathur won Second prize for best oral presentation for paper titled: Fine needle aspiration cytology of medullary carcinoma thyroid, 38th Annual Conference, Indian Academy of Cytologists, Ahmedabad, 2008.


Dr AK Dinda was appointed as an expert and chairperson in ‘Application of Nanotechnology in Health and Textile Sectors’, Emerging Technologies In Developing Countries: Capabilities And Governance Issues as a part of the DSDS (Delhi Sustainable Development Summit), Tata Energy Research Institute (TERI) at India International Centre, 4 February 2009; He was nominated as one of the Indian resource person for organizing Indo-US workshop on ‘Cancer Nanotechnology’, Delhi, 4–6 February 2009; was elected for the post of the Honorary Editor of Journal of Indian Society of Renal and Transplantation Pathology for the year 2008–2010.

VISITING SCIENTISTS

Dr Atul Bhan, Professor, Harvard University, Boston, USA visited the Department of Pathology and delivered a lecture, AIIMS, New Delhi; 10 November 2008.
EDUCATION

The department is engaged in the teaching programme of MB,BS (3rd, 4th and 5th semester), BSc Nursing (Hons), MSc, MD, PhD and DM (Clinical Pharmacology) courses.

Continuing Medical Education

Organized by the department

• International Conference on Translational Pharmacology and 41st Annual Conference of Indian Pharmacological Society, AIIMS, New Delhi; 18–20 December 2008.

• Parallel pre-conference workshops on ‘Getting started in research and scientific communications’ and ‘Research methodologies in basic and clinical pharmacology’, AIIMS, New Delhi; 16–17 December 2008.

National and International Conferences

Lectures delivered

Y. K. Gupta


• Seminar on ‘Emerging food safety risks—What can we expect and what can we do’, Shri Ram Institute for Industrial Research, New Delhi; 11 November 2008.

• Workshop on ‘Clinical Trial’, Pune; 26 November 2008.

• Seminar on ‘Development for the medicinal chemistry based on biologically active natural products in the sub-tropical zone’, Tokyo, Japan; 13–15 January 2009.

• Seminar on ‘Human toxicology and environmental health: New frontiers and future challenges’, Indian Society of Toxicology, Aligarh Muslim University; 2 February 2009.

• 4th RBF International symposium on ‘Recent advances in pharmaceutical sciences’, 3–5 February 2009.

• Plenary session on ‘Medicinal preparedness and mass casualty management’, National Disaster Management Authority, New Delhi; 12 February 2009.


• Symposium on ‘Clinical research and training’, NIPER, Chandigarh; 20–22 February 2009.


• ‘Pharmacovigilance—an overview’, Seth GS Medical College and KEM Hospital; 7 March 2009.

• ‘Prerequisites including regulatory requirements for clinical trials and safety evaluation of Unani Drugs’, Workshop on project/report writing, CCRUM; 18 March 2009.

• CME on ‘Pharmacovigilance of ayurvedic drugs’, Banaras Hindu University; 19 March 2009.

• Oration on ‘How to be a good doctor’, National Medicos Organization Conference, New Delhi; 29 March 2009.

Dr K.H. Reeta

• ‘Rational use of drugs and rational prescribing’, Interns Orientation Programme, CMET, AIIMS, New Delhi; 7 February 2009.

• ‘How to write a research proposal and article’, Reorientation training programme, Department of Ilmul Advia, National Institute of Unani Medicine, Bangalore; 13 November 2008.


**RESEARCH**

**Funded Projects**

**Ongoing**


**Completed**


Departmental Projects

Ongoing

1. Pharmacokinetic and toxicity profile of high dose methotrexate and its relationship with serum creatinine in Indian children
2. Role of central neurotransmitters on cardiac hypertrophy in rats
3. Effect of *Terminalia arjuna* on cardiac hypertrophy in rats
4. Effect of curcumin, genestein and rutin on experimental cardiac hypertrophy
5. Effects of atorvastatin and pioglitazone on endothelial dysfunction in non-diabetic patients with hypertension or stable angina
6. Study of antihypertensive potential of *Emblica officinalis* in rat model of hypertension

Completed

1. Plasma level monitoring of mycophenolic acid and clinical outcome in renal transplant patients.
2. Neurobehavioral evaluation of hydroalcoholic extract of *Emblica officinalis* with special reference to its antiepileptic activity.

Collaborative Projects

Ongoing


PUBLICATIONS

Journals


Abstracts


**Books/Chapters in Books/Monographs**


**PATIENT CARE**

**Clinical Pharmacology Wing**

To facilitate the patient care facilities and in-patient wards for various clinical pharmacological activities, a new private ward, ‘Clinical Pharmacology Wing’ had been taken up in the newly constructed wing in collaboration with Forensic Medicine.

*Inductively Coupled Plasma–Atomic Emission Spectrophotometer (ICP-AES) model:* Jobin Yvon Horiba JY-2000-2 has been installed on 12 January 2009 in the Clinical Pharmacology wing of Department of Pharmacology. ICP is a valuable multi-element tool for rapid analysis of trace metals in a variety of samples such as herbal and traditional ayurvedic formulation, biological samples (blood, urine and tissues).

**Therapeutic Drug Monitoring Facility**

Therapeutic drug monitoring has become important for dose titration of many drugs of narrow therapeutic margin. Monitoring of antiepileptic drugs, immunosuppressants such as cyclosporine and methotrexate has been done for patients free of cost.

**The National Poison Information Centre**

This centre is operational round the clock and caters to calls from all over the country in providing information about poisoning, management, symptomatology and specific antidotes. Some qualitative as well as quantitative tests are done in the centre for detection of various poisons.

**National Pharmacovigilance Programme – Zonal Centre**

AIIMS (Department of Pharmacology) was designated as the zonal pharmacovigilance centre for the North-East region of the country by the Central Drugs Standard Control Organization (CDSCO), Ministry of Health, Government of India. The centre received adverse drug reaction data from the peripheral and regional centres. The data is then collated and analysed for causality assessment of the adverse drug reactions and submitted to CDSCO.
Urinary Catecholamin test

Urinary catecholamines estimation for screening of pheochromocytoma was done for 208 patients.

AWARDS AND HONOURS

Dr Y.K. Gupta was elected Chairman, National Technical Committee on Good Laboratory Practices (GLP); Member, Review Committee, Central Council for Research in Ayurveda and Siddha (CCRAS); Member, Review Committee, Central Council for Research in Unani Medicine (CCRUM); Member, Expert Group to review toxicity data for indigenous manufacture of pesticide formulation, Directorate of Plant Protection, Quarantine and Storage; Ministry of Agriculture; Member, Task Force to increase the undergraduate and postgraduate seats at AIIMS; Chairman, Project Advisory Committee on Biomedical Science and Technology, Department of Science and Technology; Member, Screening Committee for HIV/AIDS under Golden Triangle Partnership Programme; Member, Working Group on Development of Antifertility Agent ISM Drug Pippalyadi Yoga; Member, Task Force, ‘Quality standards of Indian medicinal plants’ by ICMR; Member, Task Force, Science and Society, Division of Department of Science and Technology; Member, Review Group, Programme ‘Charak’ by DRDO, Delhi; Chairman, Ethics Committee, Fortis Flt Lt Rajan Dhall Hospital, Vasant Kunj, New Delhi; Expert Member, Biomedical Ethics Committee, Sitaram Bhartiya Institute for Science and Research; Chairman, Committee for Amendment of Insecticides Rules, 1971 of Plant Protection and Quarantine and Storage, Faridabad; Member, Task Force, Biotechnology for Medicinal and Aromatic Plants, Department of Biotechnology; Member, Ethics Committee, Research on Human Subjects, AIIMS; Member, National Disaster Management Authority, Government of India; Member, Navodaya Vidyalaya Samiti; Member, High Powered Committee, ‘Global Environment Change and Health’, ICMR; Member, Drug Selection Committee, AIIMS; Member, Project Review Group, INDO-US Project proposals of National Institute of Occupational Health, Ahmedabad; Member, Scientific Advisory Committee, Food and Water Safety, International Life Sciences Institute, India; Editor, *IJPP (Pharmacology)*, a national peer-reviewed journal of pharmacology and physiology in India; Coordinator, Zonal Centre of National Pharmacovigilance Programme under the aegis of the CDSCO; Member, Research Council, Central Drugs Research Institute, Lucknow and Central for Cellular and Molecular Biology, Hyderabad; Member, Institutional Review Board for National Institute of Health and Family Welfare, Delhi; Member, IUNS–IUPS–IUPHAR National Committee; Member, IUPHAR-IOSP International Committee; Member, Consumer Awareness Task Force, Ministry of Health and Family Welfare; Member, National Environmental, Engineering Research Institute, Nagpur; Member, Editorial Board, *Indian Journal of Experimental Biology, Indian Journal of Pharmacology, Journal of Ecophysiology and Occupational Health, Annals of Neurosciences, Indian Journal of Medical and Pediatric Oncology*.

Dr Surender Singh, Member, Pharmacopeia’s Committee (Unani), Department of AYUSH, Ministry of Health and Family Welfare, Government of India; Member, Project Evaluation Committee, CCRUM, Department of AYUSH, Ministry of Health and Family Welfare, Government of India; Member, Appraisal Committee, AICTE, Ministry of HRD, Government of India; Member, Inspection Committee, AICTE, Ministry of HRD, Government of India; Member, Inspection Committee, Pharmacy Council of India, Government of India; Member, Board of Research Studies, GGS
Indraprastha University, New Delhi; Member, Board of Research Studies, Jamia Hamdard, New Delhi; Member, Board of Research Studies, Uttar Pradesh Technical University, Lucknow; Member, Programme Expert Committee, IGNOU, New Delhi.
EDUCATION

The department is involved in teaching undergraduate MB,BS students through lectures, integrated seminars and practical demonstration/visit to department including prosthetic–orthotic workshop.

The department is providing MD (PMR) training to postgraduate students, besides orientation training of MHA, MD (Community Medicine, Pharmacology, Medicine, Rheumatology, Paediatrics), MS (Orthopaedics), DM (Neurology and Pediatric Neurology) students, WHO Fellows and postgraduate nursing students. The faculty has been involved in guiding postgraduate students of Orthopaedics, Pharmacology, Community Medicine and Paediatrics in their thesis, and Computer Facility Project trainees are also provided guidance.

Continuing Medical Education

The faculty and resident doctors of the department participated in a number of national and international CME programmes, conferences, seminars, symposia and panel discussions.

Lectures delivered

Dr U. Singh

- ‘Recent advances in the management of osteoporosis’, Second Annual Conference, Indraprastha Association of Rehabilitation Medicine, VMMC and SJ Hospital, New Delhi; 12–13 April 2008.


- ‘No need for aggressive management of high cervical injuries with quadriplegia’, Conference on Trauma 2008, JPN Apex Trauma Centre, AIIMS, New Delhi; 29 November 2008.

Dr Sanjay Wadhwa


Attended the Third Meeting of the Committee formed under Baba Farid University of Health Sciences, Faridkot, for framing MPT Syllabus and Ordinances, PGI, Chandigarh; 12 March 2009.


**Dr Gita Handa**


**National and International Conferences**

**Dr U. Singh**

**First Author**


‘Trauma rehabilitation in India, where are we?’, Conference on Trauma 2008, JPN Apex Trauma Centre, AIIMS, New Delhi; 29 November 2008.


‘Recommendations for promoting physical activity among people of various age groups’, WHO workshop on ‘Developing guidelines for appropriate and adequate physical activity for different sections of population’, Department of Rehabilitation, Safdarjang Hospital, New Delhi; 5 December 2008.

**One of the Authors**


Mass Media


Dr Sanjay Wadhwa

Participated as an Expert, Weekly programme on ‘Heart Attack and Cardiac Rehabilitation’ in Total Health, Telecast live from Doordarshan; 15 March 2009.

Lectures delivered

Dr Gita Handa


Camps

Faculty and residents participated in different camps at Srikrishna Janambhumi Mandir at Mathura.

RESEARCH

Collaborative Projects

1. Development of ICF core set for hand conditions, in collaboration with ICF Research Branch of WHO CC FIC (DIMDI) Institute for Health and Rehabilitation Sciences, Ludwig-Maximilian University, Germany.

2. 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. (with Dr R Goswami, Endocrinology and Metabolism,). Applied for funding to ICMR.

PUBLICATIONS

Dr U Singh


Dr Gita Handa

Chapter in the book


PATIENT CARE

The department provided outpatient, inpatient and outreach services to people with disabilities. The department had many diagnostic as well as therapeutic facilities which include comprehensive rehabilitation facilities, balance laboratory, computerized dynamometry, electrophysiology laboratory, minor OT, etc.

OPD and special clinics

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<tr>
<td><strong>New Cases</strong></td>
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<tr>
<td>OPD</td>
<td>12,805</td>
</tr>
<tr>
<td>Ballabgarh</td>
<td>4,352</td>
</tr>
<tr>
<td>Camps</td>
<td>250</td>
</tr>
<tr>
<td>Prosthetic and Orthotic</td>
<td>2,709</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>20,116</strong></td>
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|                |     |
| **Old Cases**  |     |
| OPD            | 9,224  |
| OPD visits: PT section | 15,040 |
| OPD visits: OT section  | 20,713 |
| OPD visits: MSW | 3,117   |
| OPD visits: Vocational counsellor | 1,013  |
| Disability evaluation clinic | 198    |
| Railway concession certificates | 601    |
| Prosthetic and orthotic | 10,785 |
| Minor OT procedures | 2,097  |
| **Total**      | **62,788** |

AWARDS AND HONOURS

Dr U. Singh won the Second Prize in the Essay Competition (Non-Hindi Bhasha Bhashi Group) in Hindi during the ‘Hindi Pakhwa’ organized by AIIMS, 16 September 2008; Awarded the Second Prize for Hindi Dictation (Non-Hindi Bhasha Bhashi Group) for non-Hindi speaking persons given by Hindi Section, AIIMS, during 2007–08; continued to be Member, Sub-Committee on Locomotor, Leprosy Cured, etc., of Rehabilitation Council of India, Ministry of Social Justice and Empowerment; Chairman, Specialty Advisory Board in PMR, National Board of Examinations; Chairman, Technical Advisory Group, Mission Mode Project, Ministry of Social Justice and Empowerment.
Empowerment, Government of India; Member, Executive Council, National Institute for the Orthopaedically Handicapped, Kolkata; Inspector, GGS IP University, Government of NCT, Delhi; Inspector, Rehabilitation Council of India; Member BIS, Rehabilitation Appliances and Equipment for Disabled Sectional Committee (MHD 10); Consulting Editor and Reviewer, *Journal of Rehabilitation Council of India Locomotor and Associated Disabilities*; Editor, *Indian Journal of Physical Medicine and Rehabilitation*; Editorial Board Member, *Indian Journal of Physiotherapy and Occupations Therapy*; Member, Advisory Committee to monitor upgradation of facilities in the departments of PMR in medical colleges, DGHS, Ministry of Health and Family Welfare, Government of India; Chairman, Expert Committee for upgradation of facilities in the Departments of Physical Medicine and Rehabilitation in Medical Colleges, DGHS, Ministry of Health and Family Welfare, Government of India; Member, Academic Committee, National Institute for the Orthopaedically Handicapped, Kolkata; Chairman, Scientific Session I, during the Second Annual Conference, Indraprastha Association of Rehabilitation Medicine, VMMC and SJ Hospital, New Delhi, 12–13 April 2008; Member, Research Committee, Guru Nanak Dev University, Amritsar.

**Dr Gita Handa** was elected External Expert (thesis co-guide) for dissertation of a student from National Institute of Social Defence on ‘An epidemiological study of obesity among elderly in Delhi’; Assistant Editor, *Indian Journal of Physical Medicine and Rehabilitation.*
9.30 Physiology

**Professor and Head**
J. Sengupta

**Professors**
- R. Mathur (on leave from 16.9.2008)
- K. K. Deepak (on leave from 25 April 2008)
- H. N. Mallick
- S. C. Mahapatra
- D. Ghosh

**Additional Professors**
- K. P. Kochhar

**Associate Professors**
- Ratna Sharma
- Nalin Mehta

**Assistant Professors**
- Suman Jain
- Ashok Kumar Jaryal
- Sanjay Kumar Sood
- Anjana Talwar
- Raj Kumar Yadav

**EDUCATION**

**Undergraduate, Postgraduate, Paramedical**

The department provided about 400 hours of teaching to the first year MB.BS students, and about 60 hours of teaching to students of BSc Nursing and allied courses, besides conducting MSc (Physiology) and MD (Physiology) courses and guiding PhD students.

**Short-term and long-term training**

The department provided short-term training for one month (20 August–19 September 2008) to a Professor and Head and a Professor, Department of Physiology, Gauhati Medical College, Assam; to a MSc student (Advance Zoology), Department of Zoology, H.N.B. Garhwal University, Srinagar, Garhwal for four months (5 March–4 July 2008) to a MSc student, Biomedical Sciences, Bundelkhand University, Jhansi for six months (25 February–24 August 2008) to a MSc student, Neuroscience, Gwalior for six months (25 February–24 August 2008) to a PhD Scholar, Institute of Genomics and Integrative Biology (CSIR) for two months (19 May–18 July 2008) to a PhD student, IGIPSS, Department of Physical Education and Sports Science, University of Delhi for one month (4 June–2 July 2008) to a PhD student, IGIPSS (Department of Physical Education and Sports Science, University of Delhi for one month (4 June–2 July 2008) to a BTech student from Jaypee Institute of Information Technology, Noida for one month (5 June–16 July 2008).

**Continuing Medical Education**

**Organised by the department**

The Department conducted the national workshop on ‘Assessment Methods for Learning Evaluation in Basic Medical Sciences’ from 22–24 September 2008. The workshop was attended by 37 faculty members from the Anatomy, Physiology, Biochemistry and pre-medical disciplines from various
medical colleges across the country. The workshop was an extensive ‘hands-on’ training in groups for making, analysing and improving questions for each tool of assessment. The organizing committee was: J. Sengupta (Chairperson), A. Talwar (Organizing Secretary), R. Sharma (Finance Secretary), N. Mehta, S. Jain and A. K. Jaryal (Members).

Session resourced by

Dr N. Mehta


Dr S. Jain

- MCQ’s, SAQ’s and OSPE’s Session in the national workshop on ‘Assessment methods for learning evaluation in basic medical sciences’, AIIMS; 22–24 September 2008.

Dr A.K. Jaryal


Dr S. K. Sood


National Conference

Organized by the department

Dr K.K Deepak


Dr N. Mehta


- Member, Organizing Committee, National workshop on ‘Teaching learning methods in health professions’, Education held at K.L. Wig Centre for Medical Education and Technology, AIIMS; 10–12 November 2008.
- Panel discussion for ‘Can exercise be a modern day panacea for new age diseases?’, CME programme on ‘Exercise: The wisdom of mind and body in stress and lifestyle diseases’, Government Medical College, Chandigarh; 1 November 2008.

- Panel discussion for ‘Laws applicable to hospitals’, CME programme on ‘Laws applicable to hospitals’, Department of Hospital administration, AIIMS, i; 21 March 2009.

**International Conference**

**Lectures delivered**

**Dr R. Mathur**


**Dr K.K. Deepak**


**Dr D. Ghosh**


**National Conference**

**Dr R. Mathur**


**Dr R. Sharma**


**Dr N. Mehta delivered lectures on**


• ‘Priority setting in healthcare and research’, ICMR-NIH training programme on Bioethics, Indian Council of Medical Research (ICMR), Saint John’s Academy of Health Sciences, Bangalore; 4 December 2008.

• ‘Problem based learning principles and process’ ‘Problem Based Teaching/Learning and Formulation of a Need Based Contemporary Curriculum in UG Pharmacology Education’, University College of Medical Sciences, Delhi; 27–28 February 2009.

**Dr A. K. Jaryal**


RESEARCH

Funded Project

Completed


Ongoing


**Departmental Projects**

**Completed**

1. Effect of magnetic field on aggressive behaviour
2. Effect of varying stimulus onset asynchronies on multisensory prepulse modulation of startle response (Postgraduate thesis)

3. Effect of speech and non-speech stimuli variation on preattentive processing in dyslexic children (Postgraduate thesis)

4. Effect of acute deep brain stimulation of the subthalamic nucleus on selective attention in Parkinson’s disease (Postgraduate thesis)

**Ongoing**

1. Effect of chronic magnetic field exposure on pain modulation status of rat (Postgraduate thesis work)

**Collaborative Project**

**Completed**

Nil

**Ongoing**

1. Purglautation of human adult retinal pigment epithelial (GRPE) cells in the 6-OHD and lesioned rat model of Parkinsons’ disease (PD) (with Neurology.)

2. Calibration and interpretation of the physiological measurement in research development of new curriculum in the area of sound and vibration (with Mechanical and industrial engineering, IIT, Roorkee)

3. Non-invasive assessment of vascular function in patients with chronic endogenous hypercortisolism (with Endocrinology)

4. Heart rate variability in chronic obstructive pulmonary disease, association with systemic inflammation and clinical implications (with Vallabhbhai Patel Chest Institute, Delhi University)

5. A comparison of autonomic function before and after surgical intervention in patients with temporal lobe epilepsy (with Neurology, Neurosurgery)

6. Correlation between cardiovascular autonomic function and myocardial ischemia. (with Cardiology)

7. Cardiovascular autonomic functions after myocardial infarction: effect of short-term exercise training (with Cardiology)

8. Autonomic dysfunction in newly detected Type-II diabetes mellitus patients (with Endocrinology)

9. Electroencephalographic and sympathetic responses to visual and cues with emotional and rational contents (with Atal Bihari Vajpayee Indian Institute of Information Technology and Management, Gwalior)

10. Influence of prenatal chronic noise exposure on brain stem auditory nuclei, hippocampus and spatial memory in chicks (with Anatomy)
11. Influence of prenatal auditory stimulation on the development of synaptic proteins, brain derived growth factor and spatial memory in chick hippocampus (with Anatomy)

**PUBLICATIONS**

**Journals**


**Abstracts**


**Chapters in books**


**PATIENT CARE**

Endocrine assays of 15 patients for IVF-ET from Department Obstetrics and Gynaecology, AIIMS was provided by Departmental Central Biochemistry laboratory.

Neurophysiology Research Laboratory offered objective assessment of pain and pain modulation status by a battery of electro physiological and biochemical tests for select, referred patients of chronic pain. 60 patients (headache, fibromyalgia) were assessed during the year. Relief in pain was provided by transcranial magneto therapy to 6 patients of fibromyalgia.

Autonomic function laboratory and vascular function laboratory provide diagnostic facility for referred patients. The laboratory provide routine test of autonomic reactivity along with autonomic tone...
quantification and non-invasive recording of gastric motility (electrogastrography, EGG). A total number of 888 persons were tested for autonomic function test this year, which included 715 patients.

Intra-operative monitoring of spinal cord: The department of physiology provided support to the orthopaedic department for monitoring of integrity of spinal cord during corrective surgeries for kypho-scoliosis, patient: (1–2 patients per month)

Integral Health Clinic (IHC)- is a centre of mind body medicine. IHC is an outpatient facility which is used not only for therapeutic gains but also as part of a developing health consciousness. A total of 55 participants (including patients and nursing students) were enrolled at IHC for the year 2008–2009. Additionally, for the benefit of depression patients, IHC facility was being used by the department of laboratory. Medicine, AIIMS.

**The Department provided central facilities for**

Autonomic function and vascular function;
Confocal imaging;
Molecular biology;
Pain modulation status;
Transcranial magneto therapy for chronic pain patients.

**AWARDS AND HONOURS AND SIGNIFICANT EVENTS**

The department faculty had chaired several sessions in national and international conferences/symposium. The faculty also had been assisting various universities in India and abroad in various capacities as experts and examiners.

**Dr J. Sengupta**, member Programme Advisory Committee in Health Sciences, Department of Science and Technology, Government of India; member, National Committee of IUNS-IUPS-IUPHAR, Indian National Science Academy.

**Dr R. Mathur** was appointed subject expert for appointment/promotion of faculty, Chhatrapati Shahuji Maharaj Medical University, Lucknow; was appointed Expert Member for promotion of faculty in the Department of Physiology, Institute of Medical Sciences, Banaras Hindu University, Varanasi; was appointed Member selection board, faculty, Institute of Postgraduate Medical Education and Research, Medical College, Rohtak; was appointed subject expert for selection of faculty in Physiology, Autonomous Medical Colleges, Madhya Pradesh, Bhopal; was appointed External expert in the discipline of Physiology, for recruitment of scientist (B, C) in Defense Research Developmental Organization, Government of India; was nominated expert member for appointment of faculty in the Department of Physiology, Delhi University, Delhi; member, Board of Studies of Department of Anatomy and Physiology, Jamia Hamdard University, Delhi; Expert, Postgraduate Board of Studies in Physiology, Pt. B.D. Sharma University of Health Sciences, Rohtak; member, Expert Committee for selection of Senior Research Associates in Medical Sciences, Council of Scientific and Industrial Research, New Delhi; Continued as a treasurer of Indian Society of Pain Research and Therapy, Delhi; Member, B.B. Dixit Library Committee, AIIMS, New Delhi; member, Sub-Committee, Research proposal, AIIMS, New Delhi; serving Inspector, Medical Council of India, Delhi.
Dr K.K. Deepak  Rita Khadka Received the ‘Young Investigator Travel Award of International Union of Physiological Sciences, 2009 for the abstract: Khadka R, Patel CD. Jaryal A, Narang R, Deepak KK Cardiovascular autonomic modulation increases with severity of myocardial ischemia; serving as Member, Education Committee of International Union of Physiological Sciences; appointed Member, Board of Specialty of Physiology of Medical Council of India; served as Professor-Incharge, Examination Section, AIIMS; 14 September 2008; served as Appellate Authority under RTI act 2005 for entire AIIMS till 10 September 2008; served as member, Advisory Committee, Central Board of Secondary Education; Expert selection committee to assess a reader for promotion as professor under career advancement scheme in the Department of Tashseeh-wa-Munaful Aza, Faculty of Medicine, Jamia Hamdard, New Delhi; served as Member, Institutional Animal Ethics Committee, AIIMS; member expert committee for Evaluation/Ballistic trial of Bullet Proof Patka, Bureau of Police R and D, Ministry of Home Affairs, Government of India; served as member Project Advisory Committee (DST) for Biomedical ‘International Collaborative Projects’, Department of Science and Technology (DST), Government of India; 14 September 2009; Member, Project Review and Steering Group for MCIT funded project on ‘pulse examination and diagnostics’ under Medical Electronics and Telemedicine division, Ministry of Communication and Information Technology, Government of India; served as Director’s nominee for ‘Project Management Committee’ under Pradhan Mantri Swasthya Suraksha Yojana, Government of India; July 2008; serving as member, Academic council, Netajee Subhash National Institute of Sports Patiala, Punjab; member, selection board for recruitment of scientist (G) in Defense Research Developmental Organization, Government of India; Member, Selection Board, Jamia Hamdard, New Delhi; served as sub-editor for Indian Medical Journal; served as reviewer for Internal Journal of Yoga, Journal of Post Graduate Medium and Indian Journal of Physiology and Pharmacology; project reviewer, National Research Development Corporation, Government of India; member, editorial board, International Journal of Yoga; Member, editorial board, Biomedicine an International Journal for Biomedical Sciences; invitation as Guest Faculty to participate in group/panel discussion on Working Memory and Executive functions in the 16th Annual Meeting of the Cognitive Neuroscience Society, at the Hyatt Regency San Francisco, USA; 21–24 March 2009.

Dr D. Ghosh  continued Executive Editor, Indian Journal of Physiology and Pharmacology.

Dr S.C. Mahapatra  was appointed Convener, International Society for Horticulture Sciences, for the forthcoming ‘International Symposium on Medicinal and Nutraceutical Plants’, AIIMS, New Delhi; 25–27 November 2009; Chairman, Institutional Ethics Committee of Central Insecticide Laboratory, Ministry of Agriculture, Government of India.


VISITING SCIENTISTS

1. Dr Natalija Alexandrovna Shcherbakova, and Dr Valeriy Dmitrievich Avelev, Pavlov Institute of Physiology, Sankt-Petersburg, Russia visited Department of Physiology, for 14 days from 10
December 2008 for joint work under the Integrated Long Term Programme (ILTP) of cooperation in Department of Science and Technology, Ministry of Science and Technology, Government of India.

2. Dr Indu Taneja, Assistant Professor, New York Medical College, USA had delivered a talk and demonstrated use of Transcranial Doppler for assessment of Brain Blood flow; August 2008.

3. Dr Alan David Phillips, Professor Paediatric Gastroenterology, Consultant Clinical Scientist and Centre Director, Centre for Paediatric Gastroenterology, Department of Paediatrics and Child Health, London; 11 December 2008.

4. Professor Mark Bernstein, Neurosurgeon, Toronto Western Hospital, University Health Network and Professor of Surgery, University of Toronto, delivered guest lecture entitled ‘Ethics in clinical research: myth, mystery, or missing in action?’ 23 October 2008.
# 9.31 Psychiatry

**Professor and Head**  
Rajat Ray

**Professors**  
Manju Mehta  
Pratap Sharan  
S.K. Khandelwal  
R.K. Chadda

**Associate Professor**  
Rajesh Sagar

**Assistant Professors**  
Nand Kumar  
Mamta Sood

## EDUCATION

### Undergraduate

#### Teaching

<table>
<thead>
<tr>
<th>Hours</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 hours</td>
<td>3rd Semester</td>
</tr>
<tr>
<td>14 hours</td>
<td>6th Semester</td>
</tr>
<tr>
<td>6 hours</td>
<td>8th Semester</td>
</tr>
</tbody>
</table>

#### Clinical posting

<table>
<thead>
<tr>
<th>Days</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 days</td>
<td>4–5 Semester</td>
</tr>
<tr>
<td>40 days</td>
<td>6–8 Semester</td>
</tr>
</tbody>
</table>

Undergraduate Teaching in CRHSP Ballabgarh.

### BSC Nursing

38 hours in 2 semesters

### PhD and Postgraduate teaching

- Journal discussion once every week
- Seminar once every week
- Case Conference once every week
- Psychotherapy supervision for postgraduate psychiatry and doctoral level clinical psychology students
- Supervision of Consultation-Liaison training for junior residents in psychiatry.
- Faculty/Staff presentation once every week besides CCR and CGR in every semester
Continuing Medical Education:

Lectures delivered

Dr R.K. Chadda


Dr Pratap Sharan


Dr Rajesh Sagar

- Panel discussion, National consultation meet of National Alliance on Access to Justice for People with Mental Illness (NAAJMI), New Delhi; October 2008.

Dr Mamta Sood


National and International Conferences

Conferences/Workshop

Dr R.K. Chadda

• ‘GHPUs in India’, 61st Annual Conference of the Indian Psychiatric Society, Agra; 8–11 January 2009.

Dr Pratap Sharan

• ‘Impact of climate change on mental health’, Workshop on Impact of Climate Change on Health,’ National Institute of Malaria Research (ICMR), Delhi, August 2008.


Dr Rajesh Sagar

• ‘Communication skills’, National Conference of Medical Education, Teaching and Learning Methods, New Delhi; November 2008

• ‘Psychiatric aspects of trauma’ Trauma-2008: Annual National Conference of Indian Society of Trauma Care, New Delhi; November 2008.


• ‘Rural mental health care in India: A developing country’s perspective.’ World Psychiatry Association Conference, Saskatchewan, Canada; May 2008

• ‘Trans-cultural aspects and issues related to survey instrument in developing countries’, World Psychiatry Association Conference, Saskatchewan, Canada; May 2008.

• ‘Post-tsunami: psychiatric and psychosocial care in Andaman and Nicobar Islands.’ Robert Gordon University, Aberdeen, United Kingdom; September 2008.


Dr Nand Kumar

• ‘Measurement of disability in person suffering from major mental illness’, 61st Annual Conference of Indian Psychiatry Society, Agra; 8–9 January 2009.

• ‘Treatment outcome in subjects with disability related to major psychiatric disorders attending tertiary health care centre in India: a longitudinal study.’ International Leadership Exchange Programme (IIHML), Brisbane, Australia; 2–6 March 2009.

Dr Manju Mehta


RESEARCH

Funded Projects

Ongoing


Completed


**Collaborative Research**

**Ongoing**

**Funded**

1. Effect of Yoga and naturopathy on serum interleukin levels in adolescents with depression. Funded by AYUSH. AK Mukhopadhyay, Manju Mehta, Rajesh Sagar. (with Department of Laboratory Medicine)

2. Assessment of patients suffering from paroxysmal nonepileptic seizures. Achal Srivastava, Nand Kumar. Funded by AIIMS. (with Department of Neurology)


**PUBLICATIONS**

**Journals**


**Books/Chapter in Books/Monographs**


**PATIENT CARE**

**Outpatients**

<table>
<thead>
<tr>
<th></th>
<th>NEW</th>
<th>OLD</th>
<th>TOTAL</th>
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</thead>
<tbody>
<tr>
<td>Walk in clinic</td>
<td>11,965</td>
<td>23,450</td>
<td>35,415</td>
</tr>
<tr>
<td>Detailed assessment</td>
<td>1,829</td>
<td>–</td>
<td>1,829</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>13,794</strong></td>
<td><strong>23,450</strong></td>
<td><strong>37,244</strong></td>
</tr>
</tbody>
</table>

**Specialty clinic**

- **Child guidance**: 486, 456, 942
- **De-addiction clinic**: 178, 1367, 1545

**Inpatients**

- **Total admission**: 325
- **Total discharges**: 288

Laboratory investigations for patient care

Total Number of Serum Lithium levels: 1130

**Patient care initiative**

The department has taken a new initiative, ‘Structuring and expansion of consultation-liaison (C-L) psychiatry services’:

- Introduction of supervised C-L training for junior residents and establishment of referral structure.
- Introduction of psychoeducation groups for patients and relatives of medical oncology inpatients.
- Development of outpatient liaison interaction with endocrinology department.

**AWARDS AND HONOURS AND SIGNIFICANT EVENTS**

**Dr Manju Mehta** was invited to deliver a keynote address at Indore University and at the U.G.C. Seminar in the Department of Psychology, Punjab University, Chandigarh, to conduct a workshop on ‘Stress Management’ for residents of Postgraduate Institute of Medical Education and Research, Chandigarh.

**Dr S.K. Khandelwal** had been nominated as a member of the Delhi High Court Legal Services Committee to assist it with psychosocial issues. While at Antarctica, he had initiated and maintained a live web-blog, www.himalayanadventurer.blogspot.com. This had been recognized as the first ever live Indian blog from Antarctica. The Limca Book of Records has awarded an entry to this fact in its

**Dr R.K. Chadda** was appointed the Secretary General of the Indian Association for Social Psychiatry and the Organizing Secretary of the XVI National Conference of Indian Association for Social Psychiatry, New Delhi, 28–30 November 2008; Member, Ethics Committee, Institute of Human Behaviour and Allied Sciences, Delhi; Chairperson, Awards Committee, Indian Psychiatric Society, North Zone; Chaired a free paper session, 61st Annual Conference of the Indian Psychiatric Society (8–11 January 2009); 33rd Annual Conference of the Indian Psychiatric Society, North Zone (18–19 October 2008); chaired the theme symposium ‘Social psychiatry and clinical practice’ XVI National Conference of the Indian Association for Social Psychiatry, New Delhi (28–30 November, 2008); participated in the Workshop on ‘Psychotherapy in Routine Clinical Practice’, Agra, 15–16 September 2008.


**Dr Rajesh Sagar** was selected by the Royal Society of Edinburgh for International Exchange Programme and visited the Robert Gordon University, Aberdeen, United Kingdom, September 2008; Coordinator, Awards Committee of the Delhi Psychiatry Society (December 2008); He was elected as a Member, Executive Council of the Indian Association for Social Psychiatry (IASP), November 2008; Project Review, Central Council for Homeopathy Research (CCRH), August 2008; Resource person, WHO sponsored National Workshop to develop Essential Medicine List for Common Mental Disorders, New Delhi (February 2009); invited for a special meeting by Government of Uttarakhand for development of mental health services for state health institutions and the state in Dehradun (February 2009). participated in the Annual Scientific Advisory Committee meeting of the National Brain Research Centres, Gurgaon, March 2009; Member, peer review committee of Guidelines for Management of Epilepsy in India (GEMIND). He is serving as a Technical Advisory Group (TAG) member of the multi-centric research project on Neuro-developmental Disability in Children by INCLEN; Chief Guest, National consultation meet, National Alliance, Access to Justice for People with Mental Illness (NAAJMI), New Delhi (October 2008); India coordinator, World Mental Health Survey Consortium Annual Meeting, Annapolis, USA (July 2008).
Dr Nand Kumar was nominated as an Executive Council member of National Institute of Mental Health, Secunderabad by the Ministry of Social Justice and Empowerment, Government of India for 2 years (2008–2020); Chaired a scientific session in the XVI National Conference of the Indian Association of Social Psychiatry, Delhi (28–30 November 2008).

Dr Mamta Sood was appointed as the Assistant Secretary of the General of the Indian Association for Social Psychiatry and served as the Assistant Organizing Secretary of the XVI National Conference of Indian Association for Social Psychiatry, New Delhi (28–30 November 2008); Chaired a free paper sessions in the same conference; Trainee Editor, *Journal of Indian Association for Child and Adolescent Mental Health.*
### 9.32 Radio-Diagnosis

#### Professor and Head
Arun Kumar Gupta

#### Professor
Deep Narayan Srivastava

#### Additional Professor
Raju Sharma

#### Associate Professors
- Sanjay Thulkar (IRCH)
- Sanjay Sharma (RPC)
- Ashu Seith Bhalla
  (on leave w.e.f. 19 May 2008 – 7 March 2009)

#### Assistant Professors
- Smriti Hari
- Shivanand Gamanagatti
  (Trauma Centre)
- Atin Kumar
  (Trauma Centre)

#### Scientist-IV
Shashi B. Paul

### EDUCATION

#### Undergraduate and Postgraduate

A batch of 8 students was admitted to BSc (Hons) Medical Technology in Radiography course in 2008-2009. The duration of the course is three years. A total of 21 students are enrolled.

MD: There were a total of 28 Junior Residents out of whom 5 were sponsored candidates.

#### Short-term training

- *Short-term training in CT was imparted to one Radiologist from Ministry of Health and Family Welfare UP Government for 6 months and*.
- *one Radiologist from Kasturba Gandhi Hospital, New Delhi for 2 months.*

#### Continuing Medical Education

*Organized by the department*


#### Lectures delivered

**Dr Deep N Srivastava**


Dr Raju Sharma

• ‘Medical imaging applications of ultrasound’, Ultrasound Society of India Meeting, National Physical Laboratory, Delhi; 19 May 2008.
• ‘MR evaluation of focal lesions of the liver’, IRIA and Mallinckrodt Institute of Radiology, USA, Joint CME, Agra; 2 August 2008.
• ‘Fetal MRI’, IRIA Assam Branch Annual Conference, Shillong; 14 December 2008.
• ‘MRI of focal liver lesions’, IRIA Assam Branch Annual Conference, Shillong; 14 December 2008.
• ‘Film reading session’, Imaging Update 2009. GB Pant Hospital, New Delhi; 28 February-1 March 2008.
• ‘Malignant focal liver lesions’, AIIMS-MAMC-PGI Imaging Course on GI Radiology, AIIMS, New Delhi; 23–24 October 2008.
• ‘MR evaluation of focal liver lesions’, Symposium on Advances in MRI. NMR Foundation Day Celebration, AIIMS, New Delhi; 22 March 2009.

Dr Shivanand Gamanagatti


Dr Atin Kumar


Dr Sanjay Thulkar

• ‘Recent advances in image guided breast biopsy’, CME on Advancements in Breast Biopsy, Sir Ganga Ram Hospital, New Delhi; 5 March 2009.


**Dr Sanjay Sharma**


**Dr Ashu Seith Bhalla**


**Dr Smriti Hari**


**National and International Conferences**

**Lectures delivered**

**Dr Deep N Srivastava**


**Dr Shivanand Gamanagatti**

Dr Ashu Seith Bhalla


Dr Smriti Hari

- ‘Thoracic applications of Multi-Detector CT’, APICON 64th Annual Conference of Association of physicians of India, New Delhi; 31 January 2009.

*International Conferences*

Dr Raju Sharma


Dr Shivanand


Dr Atin Kumar


*RESEARCH*

**Funded Projects**

**Completed**

**Ongoing**

1. Diagnostic accuracy of whole body diffusion weighted MRI in oncologic imaging: Comparison with whole body STIR MRI and FDG-PET-CT. R. Sharma. Funded by AIIMS. Funds: Rs 1 lakh.


**Departmental Projects**

**Completed**

1. Comparison of US, CT and MR Portography in children with EHPVO

2. MRI and PET-CT evaluation of soft tissue sarcomas

3. Role of PET-CT Enteroclysis and double balloon enteroscopy in the evaluation of Crohn’s disease

4. Role of PET-CT colonography and colonoscopy in the evaluation of ulcerative colitis

5. To evaluate the role of CT-guided radiofrequency ablation in the management of inoperable primary lung cancer.

**Ongoing**

1. Comparison of MDCT, Endoscopic Ultrasound, MRI and PET-CT in evaluation of pancreatic malignancy

2. MRI in evaluation of chronic wrist pain

3. Percutaneous management of patients with malignant biliary obstruction

4. Diffusion weighted MRI: A new tool for evaluation of focal liver lesions Comparison of CT and MRI including diffusion weighted MRI in renal mass lesions

5. Cysts, tumors and tumour like lesions of the jaw: Evaluation by panoramic radiographs and multidetector CT with limited MRI correlation


7. Magnetic resonance evaluation of chronic internal derangements of knee

8. Utility of cardiac MRI in RV function evaluation in health and disease

9. Differentiating recurrent gliomas from post radiotherapy changes: Utility of advanced MRI techniques and their correlation with 99m tc-glucoheptonic acid (GHA) brain SPECT
10. Imaging and intervention in vascular malformations of the extremities

11. Role of computed tomography and splenic artery embolisation in patients with blunt splenic injury

12. Role of MDCT in staging of laryngeal carcinoma with limited MRI correlation

13. Role of ultrasound in mamographically detected breast carcinomas

14. Differentiating recurrent gliomas from post radiotherapy changes: Utility of advanced MRI techniques and their correlation with 99m tc-glucoheptonic acid (GHA) brain SPECT

15. Role of MDCT in staging of laryngeal carcinoma with limited MRI correlation.

16. A prospective study on radiological approach in patients with vascular malformations of extremities

17. Comparison of accuracy of image guided and palpation guided core needle biopsy in palpable breast masses

18. Ultrasound and CT evaluation of the neck for the assessment of metastases in clinically N0 patients with squamous cell carcinoma of upper aero-digestive tract

19. Role of multi detector row CT in epiphora

**Collaborative Projects**

**Completed**

1. Role of Alfa 1 reductase inhibitors in treatment of nasopharyngeal angiofibroma (with ENT)

2. Study of quality assurance programme, identify gaps and recommend steps for improvement in department of Radiodiagnosis (with Hospital administration)

3. Renal functions and their maturation and renal volume in normal and growth restricted neonates (with Paediatrics)

4. Study of radio-diagnostic services of AIIMS hospital and their utilization pattern so as to identify equipment, physical facilities and manpower for the diagnostic imaging services of hospitals of Coal India Ltd. Commensurating with their needs (with Department of Hospital Administration)

5. Assessment of endothelial dysfunction and oxidative stress in chronic kidney disease of varying severity and after renal transplantation (with Nephrology)

6. To determine the efficacy of Flutamide as a tumour volume reducing agent in nasopharyngeal angiofibroma (with ENT)

7. A Phase 3, Open-Label, Parallel-Group Study to evaluate the efficacy of preprandial Human Insulin Inhalation Powder (HIIP) Compared to preprandial Injectable Insulin I patients with Type 1 Diabetes Mellitus (with Endocrinology)

8. Noninvasive screening for early preclinical atherosclerosis in children on phenytoin on Carbamazepine monotherapy for more than 18 months.( with Paediatrics)
9. Role of FDG PET CT in evaluation of patients with recurrent ovarian cancer: A pilot study (with Medical Oncology)

10. Role of FDG-PET and MRI in assessment of Osteosarcoma: Prechemotherapy and Post-chemotherapy. (with Medical Oncology)

11. Comparison of FDG-PET and Dynamic MRI in correlation of VEGF expression on tumour cells in patients with Osteosarcoma. (with Medical Oncology)

12. A comparative evaluation of changes in ultrasonographic dimensions of masseter muscle with EMG activity prior and subsequent to twin block therapy (with Dental)

**Ongoing**

1. Role of PET-CT in differentiating benign and malignant pancreatic mass lesions in patients with or without chronic pancreatitis (with Nuclear Medicine)

2. Use of CT as an adjunct to pre-operative planning and monitoring for osteo-odonto-keratoprosthesis in patients with end-stage Steven Johnson syndrome (with Ophthalmology)

3. Correlation between splenic volume with splenic vein diameter, portal pressure before and after the shunt, grade of varices in extrahepatic portal vein obstruction (with Paediatric Surgery)

4. Comparison of seizure recurrence in neurocysticercosis patients with calcified and non calcified healed lesions (with Paediatrics)

5. Incidence of acute kidney injury in sick, hospitalized children: A prospective observational study (with Paediatrics)

6. To study the clinical and neurodevelopmental profile in children with Tuberous sclerosis (with Paediatrics)

7. Molecular Genetic Studies in patients with Leukodystrophy. (with Paediatrics)

8. Efficacy of Zinc supplement as an adjunct with ATT in children below 15 years of age with pulmonary tuberculosis in reducing time to sputum conversion, a randomized blind trial (with Paediatrics)

9. Study of non alcoholic fatty liver disease and atherosclerosis in Asian Indians (with Medicine)

10. Evaluation of testicular blood flow and volume in patients undergoing laparoscopic inguinal hernia repair (with Surgery)

11. Evaluation of pancreatic tumours (with Surgery)

12. Prevalence of metabolic syndrome in obstructive sleep apnea and the effect of treatment with continuous positive airway pressure (CPAP) on metabolic syndrome (with Department of medicine)

13. Study of clinical and neurodevelopmental profile in patients of Tuberous Sclerosis (with Paediatrics)

14. Optic nerve sheath diameter measurement for raised ICP in severe head injury patients (with Neurosurgery)
15. Utility of PET scan in assessing extent of disease and response to treatment in sarcoidosis (with Medicine)

16. Correlation between splenic volume with- splenic vein diameter, portal pressure before and after the shunt, grade of varices in extrahepatic portal vein obstruction (with Paediatric Surgery)

17. A clinical and cephalometric study of temporary anchorage device (TAD) supported anchorage in the management of maximum discrepancy extraction cases (with Dental Surgery)

18. Clinical and radiographic hand abnormalities in patients with Systemic Sclerosis and their correlation with systemic features of the disease (with Medicine)

19. Oncology adequacy and functional outcome of transoral laser microsurgery (tlm) for early and moderately advanced laryngeal and hypopharyngeal cancers (with ENT)

20. Plastination of brain sections by Silicone(S-10) and polyester(P-40) techniques (with Anatomy)

21. Structural and functional abnormalities in lungs in Achalasia cardia patients-Pre and Post treatment evaluation (with Surgery)

22. Study of rheumatic musculoskeletal symptoms/disease and osteoarthritis of knee in older patient (with Medicine)

23. Role of PET-CT in diagnosing unknown primary of head and neck cancer with cervical metastases (with ENT)

24. Gastrointestinal involvement in systemic sclerosis—a cross sectional study (with Medicine)

25. Role of whole body 18F-fluorodeoxyglucose (FDG) Positron emission tomography (PET)–CT scan in the diagnosis, disease activity and monitoring response to therapy in patients with sarcoidosis (with Medicine)

26. Role of MRI in evaluation of pelvic organ prolapsed and its relationship with POPQ classification relationship of fetal Doppler velocimetry to biophysical profile and foetal outcome in normal pregnancies and in pregnancies with intrauterine growth retardation (with Obstetrics and Gynaecology)

27. Evaluation of PET Scan in preoperative assessment of cases of endometrial carcinoma (with Obstetrics and Gynaecology)

28. Feasibility of Virtopsy: Minimally invasive autopsy using ultrasonography and percutaneous organ biopsies as an alternative to open body autopsy in fetal abnormality (with Obstetrics and Gynaecology)

29. Correlation of stage and imaging of endometriosis with fertility outcome (with Obstetrics and Gynaecology)

30. Endothelial dysfunction in systemic sclerosis (with Medicine)

31. Evaluation of the efficacy of thrice weekly DOTS regimen in TB pleural effusion at six months (with Medicine)
32. A Survey on the prevalence of tuberculosis (with Medicine)
33. Prevalence of dyslipidemia in children with chronic kidney disease and measurement of carotid intima-media thickness and flow mediated vasodilatation (with Paediatrics)
34. Study of visual function and fundus findings in orbital tumours and their alterations after surgery (with Ophthalmology)
35. Randomized study comparing up front surgery followed by chemotherapy versus upfront chemotherapy followed by interval debulking surgery in previously untreated epithelial ovarian cancer stage 3C and stage 4 (pleural effusion only) (with Medical Oncology)
36. Validation of gel dosimetry as 3D verification tool in highly conformal radiotherapy techniques (with Neurobiochemistry and Radiotherapy)
37. Prospective comparative evaluation of 3D CT based treatment planning and 2D radiography based treatment planning for intracavitary brachytherapy in carcinoma cervix (with Radiotherapy)
38. A study of angiogenesis, proliferative activity and DNA ploidy in squamous cell carcinoma of larynx and their correlation with lymph node metastasis (with Pathology)
39. The role of multidetector computed tomographic dacryocystography in patients with epiphora (with Ophthalmology)
40. Incremental role of F-18 FDG PET-CT in evaluating response to primary treatment in advanced epithelial ovarian cancer patients (with Nuclear Medicine)
41. Follow up of patients of cirrhosis for detection of Hepatocellular carcinoma-a cohort study (with Gastroenterology)
42. Validation of the symptom complex for prediction of Hepatocellular carcinoma in patients of cirrhosis of liver (with Gastroenterology)
43. Randomized controlled trial of Radiofrequency ablation versus Percutaneous acetic therapy for the treatment of small hepatocellular carcinoma (with Gastroenterology)
44. Randomized control trial of Transarterial chemoembolisation (TACE) versus TACE plus oral chemotherapy in the treatment of Unresectable Hepatocellular carcinoma (with Gastroenterology)
45. Randomized control trial of Transarterial chemotherapy (TAC) versus Oral chemotherapy in the treatment of Unresectable Hepatocellular carcinoma (with Gastroenterology)
46. Randomized Control Trial of N-Acetylcysteine in Prevention of Renal Failure in Hepatocellular Carcinoma patients undergoing Transarterial Chemotherapy and Transarterial Chemoembolisation (with Gastroenterology)
47. Randomized control trial of Oral chemotherapy versus supportive therapy in the treatment of Unresectable Hepatocellular carcinoma. (with Gastroenterology)
48. Comparison of minimally invasive techniques and conservative treatment in vertebral collapse (with Orthopaedics)
49. Clinico-radiological evaluation of total knee arthroplasty short term retrospective-prospective study (with Orthopaedics)

50. Arthroscopic and MR evaluation of elbow in patients (with Rheumatoid Arthritis)

51. Intralesional autologous bone marrow stem cell injection in avascular necrosis of femoral head: Follow up with bone scan, PET scan and MRI (with Orthopaedics)

52. Pattern of peripheral arterial diseases in tertiary care surgical practice (Indian scenario) (with Surgery)

53. Safety and efficacy of autologous stem cells in prevention of amputation in patients with chronic critical limb ischemia (with Surgery)

54. A comparative Evaluation of changes in ultrasonographic dimensions of masseter muscle with EMG activity prior and subsequent to twin blocks therapy (with Dental Surgery)

55. USG evaluation of Intimal-medial thickness of carotid artery in patients with SLE (with Medicine)

56. To study the effect of cricoids split with interpositioning rib cartilage graft for subglottic with or without tracheal or glottis stenosis (with Otorhinolaryngology)

**PUBLICATIONS**

**Journals**


**Abstract**


6. Paul SB, Gamanagatti SR, Sreenivas V, Madan K, Baba CS, Gulati MS, *et al.* Serum leptin does not correlate with hepatic fibrosis in patients with non alcoholic fatty liver disease (NAFLD) and chronic hepatitis C (CHC). *J Gastroenterol Hepatol* 2008;23 (Suppl. 5):A65.


BOOKS


Chapters in Books


**PATIENT CARE**

**Radiological procedures**

Details of Investigations for the period April 2008–March 2009.

**Routine X-rays**

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPD</td>
<td>1,08,108</td>
</tr>
<tr>
<td>Indoor</td>
<td>23,339</td>
</tr>
<tr>
<td>Casualty</td>
<td>26,140</td>
</tr>
<tr>
<td>Portable</td>
<td>42,144</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,99,731</strong></td>
</tr>
</tbody>
</table>

**Special Investigations**

**Contrast Studies**

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barium studies</td>
<td>2,941</td>
</tr>
<tr>
<td>Intravenous pyelography</td>
<td>1,701</td>
</tr>
<tr>
<td>Micturating cystourethrography</td>
<td>1,745</td>
</tr>
<tr>
<td>Hysterosalpingography</td>
<td>254</td>
</tr>
<tr>
<td>Operation theatre studoes</td>
<td>51</td>
</tr>
<tr>
<td>Other contract studies: sonogram,fistulogram etc</td>
<td>1,025</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>7,717</strong></td>
</tr>
</tbody>
</table>

AIIMS 2007-2008 / 532
Mammography

Mammogram 1,487

Ultrasound

Routine 23,582
Emergency 16,497
Doppler (routine + casualty) 3107
Total 43,186

CT

Body 10,611
Head 4,852
Total 15,463

Vascular Studies

Digital substraction arteriography (DSA) 132
Venography 53
Total 185

Special Achievements

Dr Sanjay Thulkar


Dr Ashu Seith Bhalla

Elected as Executive Member of ‘Indian Society of Vascular and Interventional Radiologists’ for 2008–2009.

Dr Shashi B. Paul

Won the ISG-Win Medicare Award at the 49th Annual Conference of Indian Society of Gastroenterology, New Delhi; September 2008 for the poster—‘Acetic acid ablative therapy for hepatocellular carcinoma: A promising and affordable option’.

Dr Smriti Hari

Won the Best Poster Presentation award at the Conference of All India Coordination Committee: Royal College of Obstetricians and Gynaecologists- North Zone, New Delhi; 1–2 March, 2009 for the poster- Magnetic resonance imaging (MRI) findings in women with suspected tubercular tubo-ovarian masses.
MRI

MRI 2,636

Interventional Procedures

Ultrasound-guided 1,906
CT-guided 455
Vascular 1,505
Total 3866

Grand Total 2,74,271
(Total of routine and special investigations) 4,74,002

New equipment

- Definium 8000 Dual Detector System (Digital X-ray Machine), GE.
- Sonosite Micromax Portable Ultrasound–Two units.
- Radiofrequency Ablation System.
- Digital Flat Panel Detector System (Digital X-ray Machine), Siemens.
- Motorised X-ray Film Viewer, Planilux.
- Computerized Radiography System (CR System), Agfa.
- Dry star camera (Agfa).
EDUCATION

Undergraduate/Postgraduate Training

- PhD/DM/MD/MS- 9 candidates.
- Postgraduate-MD Laboratory Medicine Students in Central RIA Facility.

Short-term and long-term training

Long-term training

Two trainees as WHO fellowship (6 months)

Short-term

Short-term training was provided to 4 students

Continuing Medical Education

Nil

National and International Conferences/Workshops


Lectures delivered

Professor Anand Kumar

- ‘Recent trends in biochemistry’, National Seminar Pondicherry University, Pondicherry.
Dr A. Halder

- ‘FISH on Clinical Genetics’, SGPGIMS, Lucknow in ICMR Course on Genetic Counseling.
- Dynamics of Pre-Zygotic and Post-Zygotic sex ratio’ISHG Annual Conference on ‘’, Delhi; March 2009.
- ‘Understanding dynamics of sex ratio’ISSRF Annual Conference on ‘, IISc, Bangalore; February 2009.

Dr N. N. Sarkar

- Dr N. N. Sarkar also attended ‘Indian Science Congress’, NEHU in Shillong, Meghalaya; 3–7 January 2009.
- Dr N. N. Sarkar attended the Second Congress of the Asia-Pacific Council on Contraception (APCOC), Macau, China; 4–6 December 2008.

RESEARCH

Funded Projects

**Ongoing**


2. Rapid Detection of Chromosome X,Y,21,18 and 13 aneuploidy by primed in situ labeling (intramural/AIIMS) for 2 years. Funds: Rs 2 lakh, (1 lakh for each year)


4. Quality control for hCG kits procured by HLL Lifecare Limited, Gurgaon done by the Department under Professor Anand Kumar.

**Completed**

1. Secretion of progesterone and expression of hypoxia inducible factor 1á during hypoxia induced by cobalt chloride in MA 10 cells. Anand Kumar. Funded by ICMR, RIA Project.

2. Evaluation of sexually transmitted diseases among adolescents and young adults in India (Literature review).

3. Enumeration of elucidation of barriers to condom use (Literature review).
RESEARCH

Departmental

Ongoing
1. Role of hypoxia on progesterone and vascular endothelial growth factor secretions in MA-10 cells
2. Regulation of proliferation of prostatic cancer cell line LNCaP
3. Regulation of granulosa cell steroidogenesis
4. Genetic and endocrine factor in primary testicular failure
5. Role of cobalt chloride induced hypoxia on MA-10 cells
6. Evaluation of the impact of intimate partner violence on woman’s reproductive health and pregnancy outcome
7. Evaluation of the hormonal profiles behind the heart of a man
8. Evaluation of emergency contraception, a contraceptive intervention confronting ethical and cultural barriers

Completed
1. Childhood sexual or physical abuse and its impact on woman’s life (Literature review)
2. Evaluation of the impact of intimate partner violence on woman’s reproductive health and pregnancy outcome (Literature review)
4. Chromosome aneuploidy and mosaicism in preimplantation embryo (on mouse model and human embryo; PhD thesis)
5. An investigation on underlying etiology on primary testicular failure
6. Dynamics of sex ratio

Collaborative Research

Ongoing
1. Characterization of chromosomal anomalies in multiple myeloma patients using cytogenetics and FISH. PhD project of Raksh Verma, Med Oncology. IRCH. Dr Lalit Kumar, Dr Ashutosh Halder, Dr Lalit Kumar, Dr Ashutosh Halder. Funded by DBT.
2. Several others collaborative researches with IRCH (Dr Atul Sharma, Dr Raina, et al.), Pathology (Dr Chitra Sarkar, Dr Vaisali Suri, Dr Sandeep Mathur, et al.), etc.
3. Use of letrozole versus clomiphene citrate combined with gonadotropins in superovulation and IUI cycles. Dr Alka Kriplani, Obstetrics and Gynaecology.

4. Effect of oral contraceptive containing ethinyl estradiol combined with drospirenone vs desogestrel on clinical and biochemical parameters in patients of polycystic ovarian syndrome. Dr Alka Kriplani, Obstetrics and Gynaecology.

**PUBLICATIONS**


**PATIENT CARE**

Routine assays for LH, FSH, Prolactin, T3, T4, TSH, Testosterone, Estradiol, Progesterone, alpha Feto-Protein, Prostate Specific Antigen (PSA), Beta hCG, CA-125 and cortisol in the blood samples of patients were carried out in the facility.
<table>
<thead>
<tr>
<th>Name of Assays</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSH</td>
<td>2,928</td>
</tr>
<tr>
<td>LH</td>
<td>2,448</td>
</tr>
<tr>
<td>Prolactin</td>
<td>2,203</td>
</tr>
<tr>
<td>T3</td>
<td>4,895</td>
</tr>
<tr>
<td>T4</td>
<td>5,997</td>
</tr>
<tr>
<td>TSH</td>
<td>10,727</td>
</tr>
<tr>
<td>Testosterone</td>
<td>1,282</td>
</tr>
<tr>
<td>Estradiol</td>
<td>915</td>
</tr>
<tr>
<td>Progesterone</td>
<td>318</td>
</tr>
<tr>
<td>AFP</td>
<td>2,597</td>
</tr>
<tr>
<td>PSA</td>
<td>1,761</td>
</tr>
<tr>
<td>Beta hCG</td>
<td>706</td>
</tr>
<tr>
<td>CA-125</td>
<td>1,214</td>
</tr>
<tr>
<td>Cortisol</td>
<td>312</td>
</tr>
<tr>
<td><strong>Total number of tests</strong></td>
<td><strong>38,303</strong></td>
</tr>
</tbody>
</table>

Sample number has been increased from 33419 last year to 38303 this year 14.6% increase.

- **Andrological examinations**
  - Semen Examination 364
  - Seminal Fructose 188

- Genetic investigations and counseling: About 200 cases were referred, though not on regular basis, to the department for reproductive genetic investigations and counseling.

**AWARDS, HONOURS AND SIGNIFICANT EVENTS**

**Professor Anand Kumar** member Advisory Committee of the UGC-SAP programme in Zoology of M.L. Sukhadia University, Udaipur. Life Member of Indian Society of Comparative Endocrinology and Member of International Federation of Comparative Endocrine Society, February 2009. Member Editorial Board, the Open Andrology Journal (Bentham) since 14 October 2008. Nominated as an Expert-member of the NIHFW for promotion of Readers to Professor. Appointed as an External Paper Setter and evaluator for the MSc. Biochemistry of the National Dairy Research Institute, Karnal. Appointed as an Expert in Faculty Selection Committee meeting of Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow. Reviewer of Indian Journal of Medical and
Pediatric Oncology. Nominee of the Committee for the Purpose of Control and Supervision of Experiments on Animals (CPCSEA) to the Institutional Animal Ethics Committee of Dr B.R. Ambedkar Centre of Biomedical Research, University of Delhi, Delhi. Served as Referee to the prestigious Journal of Fertility and Sterility.

**Dr Ashutosh Halder** continuing as Executive Committee Member, ADNAT (Association for the Promotion of DNA Fingerprinting and other DNA Technologies), CCMB, Hyderabad in its second year. Member, Board of Specialty of Medical Genetics, Medical Council of India. Nominated for DM Medical Genetics Examiner of SGPGIMS, Lucknow Appointed as member, Board of Speciality of Medical Genetics by Medical council of India and drafted MD Medical Genetics Curriculum.


**Dr P.K. Chaturvedi** selected as member of membership committee of Society for the Study of Reproduction (SSR), USA. Nominee for purchase committee of NIHFW, New Delhi.
## EDUCATION

### Short-term training

1. Dr Okidi, Okechukwu O (1 May–1 November 2008) (Six months).

### Elective Training

1. Ms. Anina Zeumer, Germany (4 February–3 May 2008) (Four months)
7. Mr. Donovan Eu Kum Chuen, Singapore (5–28 May 2008) (23 days)
10. Ms Lim Jia Yang, Singapore (5–28 May 2008) (23 days)
11. Mr. Kosalarajah Paheenthararajah, Germany (29 September–23 November 2008) (1m 25 days)
Continuing Medical Education

Organized by the Department

Professor M.C. Misra

Course Director for

- 14th ‘Training course in operative laparoscopy—basic and advanced’; 5–9 January 2009.
- 12th ‘Training course in operative laparoscopy—basic and advanced’; 10–14 November 2008.
- 10th ‘Training course in operative laparoscopy—basic and advanced’; 1–5 September 2008.
- 9th ‘Training course in operative laparoscopy—basic and advanced’; 7–11 July 2008.

Conference


Professor Anurag Srivastava


Dr Sandeep Guleria

Dr Sandeep Agarwal


Dr V.K. Bansal


He was also Course Coordinator for the following training courses in laparoscopic surgery:

- 14th ‘Training course in operative laparoscopy—basic and advanced’; 5–9 January 2009.
- 12th ‘Training course in operative laparoscopy—basic and advanced’; 10–14 November 2008.
- 10th ‘Training course in operative laparoscopy—basic and advanced’; 1–5 September 2008.
- 9th ‘Training course in operative laparoscopy—basic and advanced’; 7–11 July 2008.
- 8th ‘Training course in operative laparoscopy—basic and advanced’; 31 March–4 April 2008.

Guest Faculty and Invited Lectures

Professor M.C. Misra

- Surgical Meet, BP Koirala Institute of Health Sciences; 25–26 April 2008.
- Inspection of Renal Transplant Facilities, Base Hospital, New Delhi; 3 May 2008.
- Obesity Fortis Hospital, Vasant Kunj; 4 May 2008.
- Laparoscopic inguinal hernia repair with TEP technique’ and participate in the establishment of Micro Invasive a Hernia Repair Therapy and Training Centre, Beijing, China; 20–25 May 2008.
- Congress President, 2nd National Conference of Indian Hernia Society, Srinagar; 6–8 June 2008.
- State Civil Hospital, Naharlagun; 11–12 July 2008.
- Chaired a session ASICON CME, Jaipur Golden Hospital; 27 July 2008.
- ‘Constitution of national task force on ksharsutra’, The Department of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopath (AYUSH), Ministry of Health and Family Welfare; 24–25 August.
- Visit of teams of Senior Doctors, AIIMS, Ladakh; 1–8 September 2008.
- Appointed examiner, IMRCS Part 3 Examinations, Delhi; 8–12 September 2008.
- Technical Experts Committee Review meeting, HDR Brachytherapy and Modular OT’s, Delhi Cancer Institute, Delhi; 22 September 2008.
- Assisted the Interview Board for Selection of the GDMOs, FAZAL Chamber, SCOPE Convention Centre, Lodhi Road; 27 September 2008.
- ATLS Course, UAE; 29 October–6 November 2008.
- Visited Imphal, Member of a committee constituted by MOH to look into the additional requirements of RIMS, Imphal; 22–23 December 2008.
- Upgradation, Government Medical College, the second phase of PMSSY, Nagpur; 21–22 January 2009.
• Meeting of the Members of the Board- finalization of curriculum in the Specialty of General Surgery, Medical Council of India.

• Delivered guest lecture and performed liver Laparoscopic Surgery, Baba Raghav Das Medical College, Gorakhpur; 7–8 February 2009.


• Guest Faculty, Live Laparoscopic workshop of Gynaecology and Surgery, Singrauli; 27–28 February 2009.

• Guest Faculty, Indo Australian Workshop on Biomedical Devices, New Delhi; 5 March 2009.

• Delivered guest lecture, Laparoscopic workshop cum CME, Shillong; 20–21 March 2009.

• IMRCS Part 3 examination, Dubai; 27 March–3 April 2009.

Professor Anurag Srivastava

‘Diagnosis and management of breast cancer’, Breast CME at the following places.

• Kamla Nehru Regional Cancer Centre, Allahabad.

• Kastubra Medical College, Manipal.

• M.V.J Medical College, Bangalore.

Dr Sandeep Guleria

Lectures Given


• chaired session, Obesity Fortis Hospital, Vasant Kunj; 4 May 2008.

• IMA East Zone ‘Surgical aspects of renal transplantation’, Max Hospital, Patparganj; 25 May 2008.

• Deh Daan Samiti, Organ Donation.

• Chaired session on Varicose Veins, Mata Channan Devi Hospital, the ASICON CME; 29 June 2008.

• Chaired session in ASICON CME, Jaipur Golden Hospital; 27 July 2008.


• ‘Medical and legal aspects of transplantation’, AIIMS in Legal Conference organized; AIIMS; 30 August 2008.

• Simultaneous kidney pancreas transplantation, Asian Congress of Urology, 2 October 2008.


• Post Transplant Malignancy, Sindh Institute of Urology and transplantation Karachi Pakistan; 24 October 2008.

• New onset diabetes mellitus Sindh Institute of Urology and transplantation, Karachi Pakistan; 24 October 2008.

• Evidence-based surgery Delhi State chapter Association of Surgeons of India Annual Meeting Action Hospital; 28 November 2008.

• Current status of Organ Transplantation, Association of Surgeons of Rajasthan (ASIRAJ), India; 30 November 2008.

• Organ harvesting, Trauma Conference, Sirifort Auditorium, New Delhi; 7 December 2008.


• ‘Organ transplantation’ IMA Jalandhar; 8 March 2009.

• IMRCS Part 3 Examination, Dubai; 27 March–3 April 2009.

Dr Sandeep Agarwal


Invited Faculty

• First Asian Consensus Meeting, Metabolic Surgery, Trivandrum; August 2008.

• ‘Consensus in diagnosis and management of obesity and metabolic syndrome’, Obesity and Metabolic Summit, New Delhi; November 2008.
Dr Virinder K. Bansal

- ‘Laparoscopic management of hydatid cyst of the liver’, Live workshop on laparoscopic surgery, Nazreth Hospital, Shillong; 20–21 March 2009.
- ‘Laparoscopic management of incisional hernias’, Live workshop on laparoscopic surgery at Nazreth Hospital, Shillong; 20–21 March 2009.
- Chaired two sessions on Live operative laparoscopic surgery at Second National Conference of Indian Hernia Society, GMCH, Srinagar; 5–7 June 2008.

Papers Presented by the Faculty in conferences

Professor M.C. Misra

- ‘Friction burn—a clinical study’, 14th Congress of International Society for Burn Injuries, Montreal, Canada; September 2008.
- ‘Balloon dissection vs telescopic dissection in TEP, Second National Conference of Indian Hernia Society, Srinagar; June 2008.


Dr Sandeep Guleria

• ‘Are protocol biopsies indicated in a live related renal transplant Programme?’ , XXII International Conference of the Transplantation Society, Sydney, Australia.

• ‘NGAL as a biomarker to predict ATN in renal transplant recipients’, XXII, International Conference of the Transplantation Society, Sydney, Australia.

• ‘Is laparoscopic donor Nephrectomy really the way ahead?’, XXII, International Conference of the Transplantation Society, Sydney, Australia.


Dr Rajinder Parshad


Dr Sandeep Agarwal

• ‘Is laparoscopic donor Nephrectomy really the way ahead’, XXII International Conference of the Transplantation Society, Sydney, Australia.

Dr V.K. Bansal

• ‘Laparoscopic incisional hernia repair using composite mesh’, Second National Conference of Indian Hernia Society, Srinagar; June 2008.

• Laparoscopic incisional hernia using polypropylene mesh’, Second National Conference of Indian Hernia Society, Srinagar; June 2008.


• ‘Balloon dissection vs telescopic dissection in TEP’, Second National Conference of Indian Hernia Society, Srinagar; June 2008.
• ‘TEP Repair in groin hernia—prospective evaluation in testing care centre’, Second National Conference of Indian Hernia Society, Srinagar; June 2008.


• ‘Use of pre-shaped mesh groin hernia repair’, Second National Conference of Indian Hernia Society, Srinagar; June 2008.


Dr Anita Dhar


• ‘Role of FDG PET-CT in evaluation of axillary lymph node involvement in T1 T2 N0 M0 breast cancer in comparison with sentinel node Biopsy’, SURGICON 2008; 29 November 2008.

• ‘Role of centchroman in regression of fibroadenoma and its correlation to histopathology and estrogen and progesterone receptor’, 3rd award in the competition session in Surgicon, 2008.

RESEARCH

Funded Projects


2. To evaluate the efficacy and Tolerability of Tacrolimus in patients undergoing renal transplantation. Funded by Panacea Biotec. Funds: Rs 6 lakh.

3. To evaluate the risk factors for new onset diabetes mellitus after renal transplantation. Sandeep Guleria. Funded by Institute Research. Funds: Rs 80,000.

4. Induction of therapeutic angiogenesis in limb ischemia by intra-arterial delivery of autologous bone marrow derived stem cells. Funded by A DBT. Sanjeev Sharma, Sandeep Guleria, VK Bansal. (with Department of Cardiac-Radiology, Cardiology and Surgical Disciplines)

5. Cost effectiveness analysis and comparison of single stage vs two stage management of patients with concomitant gall stone disease and common bile duct stones—a randomized controlled trial.

**Departmental Projects**

**Completed**

1. BhCG expression in patients with benign and malignant breast diseases (June 2008)
2. To study the clinical efficacy of transvaginal cholecystectomy in patients with uncomplicated gall stones with the new instruments (March 2008)
3. Efficacy of training of laparoscopic hepatico-jejunostomy using porcine model—a prospective study
5. Quality of life of live renal Donors
7. Genetic polymorphisms in Cox-2 gene in breast cancer patients (with Department of biophysics and Biotechnology)
8. Advanced sentinel lymph node evaluation in carcinoma breast (with Departments of Pathology and Nuclear Medicine)
9. Characterization of thymoma using F18 fluorodeoxyglucose positron emission tomography (FDG PET-CT) and its correlation with histopathology (with Departments of Pathology and Nuclear Medicine).
10. Feasibility of fast track discharge in breast cancer patients; undergoing definitive surgery and impact on Quality of Life; Co
11. Guide BhCG expression in patients with benign and Malignant breast diseases
12. To study the clinical efficacy of Transvaginal cholecystectomy in patients with uncomplicated gall stones with the new Instruments (March 2008)
14. Role of FDG PET-CT in evaluation of axillary lymph node involvement in T1 T2 N0 M0 breast cancer in comparison with Sentinel node Biopsy
15. Role of Centchroman in regression of Mastalgia and regression of Fibroadenoma and its correlation to histopathology and estrogen and progesterone receptor

**Ongoing**

1. A randomized controlled study of comparison of single stage vs two stage treatment for patients with gall stones and common bile duct stones

2. Comparison of chronic groin pain, testicular functions and quality of life after open and laparoscopic inguinal hernia repair: A prospective randomized control trial

3. Comparison of various imaging modalities in the diagnosis and staging of the periampullary tumors and study of various perioperative factors in predicting the outcome of the patients with periampullary tumors

4. Laparoscopic suturing skills acquisition: A comparison between trained and novice surgeons

5. Prospective evaluation of laparoscopic skills acquisition in a short term focused training programme on a phantom model using porcine gall bladder

6. Major trauma outcome study in a level–I trauma centre

7. A prospective randomized control trial of sutured vs tacker fixation of mesh in patients undergoing laparoscopic incisional hernia repair

8. A prospective randomized comparison of TAPP vs TEP repair in patients undergoing laparoscopic inguinal hernia repair

9. The effect of renal transplantation on coronary artery calcification and carotid artery intima medial thickness

10. To study the incidence and risk factors for new onset diabetes Mellitus

11. Evaluation of donor kidney weight on renal transplant outcomes

12. Feasibility of fast track discharge in breast cancer patients

13. Structural and functional abnormalities in lungs in achalasia cardia patients—pre- and post-treatment evaluation

14. Feasibility of fast track discharge in breast cancer patients undergoing definitive surgery and impact on quality of life

15. To assess the impact of renal transplantation on cognitive function on patients on haemodialysis

16. To assess and compare mini-donor nephrectomy with laparoscopic donor nephrectomy

**PUBLICATIONS**

**Journals**


Books


SIGNIFICANT EVENTS

Professor M.C. Misra, Convener, Society of Endoscopic and Laparoscopic surgeons of India. Team Leader of the group of Doctors and Nurses to take ATLS Provider and Instructor course in Furairah, UAE; 29 October–4 November 2008.

Professor Anurag Srivastavsa was involved in enriching the research experience of the faculty by conducting teaching workshops on ‘Introduction to Research Methodology at Clinical Epidemiology Unit, The Clinical Epidemiology Unit of AIIMS. This was attended by faculty and residents.

Dr Sandeep Guleria was elected as secretary of the Indian Society of Organ Transplantation. He was also awarded the Dr D.S. Rana memorial oration by the Maulana Azad Medical College.
**9.35 Transplant Immunology & Immunogenetics**

<table>
<thead>
<tr>
<th>Professor and Head</th>
<th>N.K Mehra</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate Professor</td>
<td>D.K Mitra</td>
</tr>
<tr>
<td>Scientists</td>
<td></td>
</tr>
<tr>
<td>Uma Kanga</td>
<td></td>
</tr>
<tr>
<td>Arundhati Panigrahi</td>
<td></td>
</tr>
<tr>
<td>Gurvinder Kaur</td>
<td></td>
</tr>
<tr>
<td>Sunil Kumar</td>
<td></td>
</tr>
<tr>
<td>Sanjeev Goswami*</td>
<td></td>
</tr>
</tbody>
</table>

* Joined the department from December 2008

**EDUCATION**

**Short-term training**

The department provided short term training to the junior residents of Pathology and Laboratory Medicine and senior residents (DM Students) of the Department of Nephrology and Haematology. During the year, 14 students from various universities and institutions as well as doctors from hospitals in and around Delhi received 4–6 months’ training for laboratory techniques in HLA testing and other immunological investigations.

**Long-term training**

One doctor (Lt Col) from the Armed Forces Medical Services (AFMS) has underwent long term training in Clinical Immunogenetics.

Training to DM students: Several DM students from the Departments of Pathology, Nephrology, Medical Oncology and AIIMS undertook training in the Department and learnt techniques in HLA testing and other immunological investigations.

**Continuing Medical Education**

The faculty 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 flowcytometry-based assays have been regularly given to students and visiting trainees. The Faculty also delivered special lectures in various department of the institute (Biotechnology, Medical Oncology, Medicine) as part of the academic curriculum of these departments.

**National and International Conferences**

*Lectures delivered*

**National**

**Professor N.K. Mehra**

- ‘Haematopoietic stem cell transplantation’, National Symposium on Tribal Health, organized by Indian Medical Association, Chanderpur (M.S.); 4 April 2008.

• ‘Cross match test: How is it done and how to improve sensitivity and specificity?’, Postgraduate Nephrology Course, Shimla; 22 April 2008.

• ‘Strides in medicine and biology: Can man live for 150 years?’, SMS Medical College, Jaipur; 18 July 2008.

• Session Chair—International Congress on ‘Role of microbicides’, New Delhi; 6–10 May 2008.

• ‘Asian Indian donor marrow registry: Status and requirements’, International Steering Committee Meeting on Indian Bone Marrow Registries, Udaipur; 8 August 2008.


• ‘Genetics of HIV transmission and disease progression’, National HIV Science Symposium, YRG Care, Discussant in the Session on HIV Genetics.


• ‘Haematopoietic stem cell transplantation: Immunological perspectives’, Institute Rotary Cancer Hospital, AIIMS, New Delhi; 13 October 2008.

• ‘Planning and design of a transplant immunology facility’, South Asian Conference and CME on Synergy in Healthcare, New Delhi; 3–6 November 2008.

• ‘Probiotic immunomodulation in health and disease’, 2nd Probiotic Symposium on Health and Disease, New Delhi; 7–8 November 2008


• ‘Antibody basis of graft rejection during organ transplantation’, ICMR-INSERM Workshop on Translational Research: Biotherapies and Stem Cell Research, Centre for Celluar and Molecular Biology, Hyderabad (AP); 17–18 November 2008.

• ‘Genetic architecture of infectious diseases’, Indo-German Conference on Molecular Epidemiology of infectious diseases, Hyderabad (AP); 28–30 November 2008.


• ‘Haematopoietic stem cell transplantation: Challenges and opportunities’, National Conference of stem cell’ voice of India, New Delhi; 6 December 2008.

• ‘Strides in immunology: Can man live for 150 years’, National Symposium on Recent Advances in Immunology, Deshbandhu College, Delhi University, Delhi; 30 January 2009.

• ‘A journey into the world of HLA and Medicine’, DBT Workshop on HLA, SGPGI, Lucknow; 20 February 2009.

• ‘Antibody basis of graft rejection: Role of flowcytometry’, Symposium on advanced clinical applications of flowcytometry, Mumbai; 25 February 2009.

• ‘A journey into the world of HLA and Medicine’, International Symposium on Tribal Health, Jabalpur; 27 February–1 March 2009.

• ‘A Journey into the world of HLA in Medicine and Biology’, Seminars in Molecular Medicine and Biotechnology, AIIMS, New Delhi; 13 March 2009.

• ‘Immunogenetics in health and disease’, National Symposium on Biotechnology, Punjab University, Chandigarh; 28 February 2009.

• “Strides in immunology: Can man live for 150 years?”, Biosparks-2009, Jawaharlal Nehru University, New Delhi; 6 March 2009.


International


• ‘Genetics of HIV infection, transmission and disease progression’, JACIN 2008 (Jakarta Allergy and Clinical Immunology network) Conference, Jakarta; 27–29 June 2008.


• Delivered 10 more lectures and chaired a ‘Mini Symposium’ at the 15th International Histocompatibility and Immunogenetics Workshop Conference, Rio de Janeiro, Brazil; 17–20 September 2008.

• ‘Predictive Cytokine polymorphic genes in organ and hematopoietic stem cell transplantation’, 4th FIMSA Congress of Immunology, Taipei, Taiwan; 17–20 October 2008.

**Dr D.K. Mitra**

‘Regulatory T-cells in tuberculosis at the Department of Biotechnology’, AIIMS, New Delhi, 2 April 2008; Colorado State University, Colorado, USA, 10 January 2009; Stanford University, CA, USA, 17 January 2009; UC Davis, USA, 14 January 2009.

**Dr Uma Kanga**

Scientist-II participated in the International Steering Committee meeting on Unrelated Donor Marrow Registries, Udaipur; 8 August 2008; Delivered lecture on Immunogenetics of Type 1 Diabetes at 15th International Histocompatibility and Immunogenetics Workshop Conference, Rio de Janeiro, Brazil; 17–20 September 2008; Type 1 Diabetes Genetics Consortium (T1DGC) Investigators meeting, Washington DC, USA; 22–25 October 2008.

**Dr Gurvinder Kaur**


**Organized by department**


**RESEARCH**

**Funded Projects**

**Ongoing**


3. ICMR-INSERM Project on Type 1 Diabetes. N.K Mehra. Funded by ICMR for 5 years (2004–2009). Funds: Rs 120.20 lakh.


**PUBLICATIONS**

**Journals**


**Chapters in book**


**PATIENT CARE**

**Laboratory services**

**Transplantation**

<table>
<thead>
<tr>
<th>HLA matching</th>
<th>Recipients</th>
<th>Donors</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renal Transplant Patients</td>
<td>250</td>
<td>285</td>
<td>535</td>
</tr>
<tr>
<td>Bone Marrow Transplant patients</td>
<td>15</td>
<td>23</td>
<td>38</td>
</tr>
<tr>
<td>Leukemia</td>
<td>41</td>
<td>86</td>
<td>127</td>
</tr>
<tr>
<td>Aplastic anemia</td>
<td>46</td>
<td>66</td>
<td>112</td>
</tr>
<tr>
<td>Acute Leukemia</td>
<td>38</td>
<td>63</td>
<td>110</td>
</tr>
<tr>
<td>Others</td>
<td>63</td>
<td>106</td>
<td>169</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>203</strong></td>
<td><strong>342</strong></td>
<td><strong>545</strong></td>
</tr>
</tbody>
</table>

**Cadaver donor organ transplantation**

- Cadaver Donor                      | 15         |
- Kidney recipients                  | 10         |
- Heart recipients                   | 0          |

**Cross match test**

- Serology                           | 450        |
- Flow cytometry                     | 120        |
- Panel reactive antibody (PRA)      | 625        |
- Flow PRA                           | 20         |
- ELISA PRA                          | 350        |
Diagnostics

Spondyloarthropathies 610

Other diseases

Chimerism studies in BMT

Immunophenotyping of Leukemia Patients 250

Unrelated Donor search for BMT 325

A total of 325 requests for search of unrelated HLA matched donor from the Asian Indian Donor Marrow Registry for bone marrow transplantation (BMT) were received. These included 135 from USA, 72 from Europe, 80 from various Asian countries and 38 from India.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor N.K. Mehra was awarded the ‘Four Decades Trust Oration of the SMS Medical College, Jaipur for the year 2008; ‘Honorary Professorship, Guru Nanak Dev University, Amritsar; Member, Indian delegation to Hungary to sign the DST’s Collaborative agreement on Science and Technology between two countries, May 2008; Plenary Speaker, JACIN 2008 (Jakarta Allergy and Clinical Immunology Network), Scientific Conference at Jakarta, Indonesia, June 2008; ‘Symposium Speaker’ at XVII Lancefield International Symposium on Streptococci and Streptococcal diseases, Porto Heli, Greece, June 2008; ‘invited speaker’ 4th FIMSA Congress of Immunology, Taipei, Taiwan (October 2008) and at the Type 1 Diabetes Genetics Consortium (T1DGC) Investigators meeting at Washington DC; October 2008; as ‘Chair’ of the ‘MHC and Infection Disease’ study of the 15th International Histocompatibility and Immunogenetics Workshop (15IHIWC), Buzios, Brazil; September 2008; ‘Invited International Speaker’, 15IHIW Conference, Rio de Janeiro, Brazil; September 2008; ‘Vice President’ of the Federation of Immunological Societies of Asia Oceania (FIMSA), and ‘International Councillor’ for the Australasian and South East Asian Tissue Typing Association (ASEATTA); Member, ICMR Expert Group on Stem Cell Research; ICMR Special Review Committee on North East projects; Expert Group on Human Resource Development, Technical Committee of the ICMR; Task Force on Immunology; Expert Group on Study on Camel Milk; Steering Committee of ICMR Advanced Centre on Type 1 Diabetes; Project Review Committee of ICMR on Cellular and Molecular Biology, Allergy and Biochemistry, Immunology, Organ Transplantation and Physiology; Expert Group on Diabetes, Expert Group on Creation of Primate Breeding Facility at NIRRH, Mumbai; Expert Group on creation of Centre for Molecular Medicine at SMS Medical College, Jaipur and Expert Group on creation of Modern Biology Facility at Guru Nanak Dev University, Amritsar.

Professor Mehra was a Member, Scientific Advisory Committee of: (i) National Institute of Immunology, New Delhi (ii) Institute of Cytology and Preventive Oncology, Noida (iii) Central JALMA Institute for Leprosy and other Mycobacterial Diseases, Agra, (iii) Tuberculosis Research Centre, Chennai (iv) Institute of Immunohaematology, Mumbai, (v) LV Prasad Eye Institute, Hyderabad (vi) Research Advisory Council of the Institute of Life Sciences, Bhubaneswar (vii) National AIDS Research Institute, Pune; (viii) Institute of Pathology, Safdarjung Hospital, New Delhi; Professor Mehra is a Member of the Biomedical Research Board of the ICMR and Scientific Advisory Group of the Basic Medical Sciences and of the Non-Communicable Disease Division; Member of various committees of the Department of Biotechnology: (i) Task Force on Stem Cell Research and
Regenerative Medicine, (ii) Inter Disciplinary Research Committee (IDRC), (iii) Expert Group on Indo-German Research Projects; (iv) Expert-cum-monitoring group on MW projects and Chair of MW Research Group on Immunological studies.

Professor Mehra was a Member of the Selection Committee of the National Institute of Immunology and an Expert for PGIMER, Chandigarh; Member, Selection Committee for selection of Scientists in the Institute of Cytology and Preventive Oncology, (ICMR), Noida; Member, Selection Committee to select faculty for Punjab University, Chandigarh and Member of the DST Expert group on International Research projects and cooperation.

He was a Member of the Core Assessment Committee of the ICMR and Selection Committee and of the Guru Nanak Dev University, Amritsar for faculty posts; Jury Member, Ranbaxy Science Foundation Awards; Member, CSIR Travel Grant Award Committee; Member, Editorial Board of Several International journals—Tissue Antigens: Immune Response Genes (Australia); Journal of Clinical Immunology (USA); Modern Rheumatology (Japan); Open Immunology Journal (Bentham Science Publishers); Asia Pacific Journal of Allergy and Immunology (Thailand); International Journal of Human Genetics (India); Open Pathology Journal and Member, Editorial Board of ‘Current Science’. Professor Mehra was invited as ‘Guest Speaker’ in several national and international meetings.

**Dr Uma Kanga**, Scientist-II spent a period of six months under the Commonwealth Academic Staff Fellowship at the Anthony Nolan Research Institute, Royal Free Hospital, London, UK; October 2008–March 2009. She continued as the ‘Councillor’ for the Australasian and South East Asian Tissue Typing Association (ASEATTA).

**Dr Arundhati Panigrahi** (Scientist I) received the ‘Best paper presentation award’ at the Annual meeting of Indian society of Organ Transplantation, Ludhiana; October 2008; visited Fort Collins, Colorado, USA to attend the Advanced Training for Mo Flo XDP, High Speed Cell Sorter; 10–24 January 2009.

**VISITING SCIENTISTS**

i)  Delegation from Hungary (Professor Miklos Zrinyi and Dr Ildiko); 29 July 2008.

ii) Professor Vijay Kuchroo, Harvard Medical School, Boston, USA; 18 August 2008.

iii) Dr Mark Allen, Vice Dean, Bostaon University, USA; 1 October 2008.

iv) Professor Csaba Nyakas, Semmelweiss University, Budapest, Hungary; 20 November 2008.

v) Professor Ronald Covly and team from Boston University, USA; 13 January 2009.

vi) Dr Eckart Wurzner, Mayor of the City of Heilderberg, Germany and team, Germany; 2 April 2009.
9.36 Urology

**Professor and Head**
N.P. Gupta

**Professors**
A.K. Hemal
(Long term leave since 30.9.07)

**Additional Professor**
Amlesh Seth

**Associate Professor**
Rajeev Kumar

**Assistant Professors**
A.P. Bhalla
Jyotsna Punj
Rashmi Ramachandran

**Vanlal M. Darlong**
R. Pandey
Rani Sunder
Anjolie Chabbra

**EDUCATION**

The department imparted lectures for the undergraduates and nursing students. 11 postgraduates were trained for the degree of MCh in Urology over a period of 3 year.

The department had observers and postgraduate students in Urology from various Indian Medical Colleges and abroad to observe and learn Robotics, Endourology, Laparoscopy, Robotic and Microsurgery in Urology.

The faculty of the department continued to be 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 examination and facilities for Urology postgraduate courses. The faculty also participated as experts in various committees of Government of India.

**Continuing Medical Education**

**Conducted by the department**

- The department organized the 9th Asian Congress of Urology; 1–5 October 2008 and live operative Workshop, AIIMS, New Delhi; 1 October. This was the largest Urological meeting held in India and was attended by over 1500 faculty and delegates from 49 countries.

**Professor NP Gupta**

- Pre-Congress (9th ACU) Live Operative Workshop, AIIMS, New Delhi; 1 October 2008.

**Dr Rajeev Kumar**

- Joint Andrology Workshop, Erectile function and dysfunction.
New Delhi; 27–28 December 2008

- Annual Conference of North Zone Chapter of Urological Society of India, Live operative demonstration: Laparoscopic Nephrectomy.
- Chairperson: Videos presentations.
- 9th Asian Congress of Urology, New Delhi; 2–5 October 2008

National and International Conference

Lectures delivered during Conferences

Professor N.P. Gupta

- Advances in renal stones and Advances in GUTB. 60th Western Section of Urological Assoc Conference, Japan; 6–8 November 2008.
- Advances in GUTB. Annual Meeting of Hong Kong Urol Assoc, 8–9 November 2008.
- Dr Himadari Sarkar Memorial Oration on Transition from open to laparoscopic to robotic surgery. USICON 2009, Indore; 22–25 January 2009.

Professor PN Dogra

Dr Rajeev Kumar


- ‘Effects of tobacco consumption on male sexuality and fertility’, 14th World Congress on Tobacco or Health, Mumbai; 8–12 March 2009.


**RESEARCH**

**Funded Projects**

**Ongoing**

1. Evaluation of oxidative stress as a cause for idiopathic male infertility and the role of Addyzoa in its treatment randomized, double blind placebo controlled trial: Extramurally. Dr Rajeev Kumar.

**Completed**

1. Evaluation of various types of intussusception techniques of microsurgical vasoepididymostomy

**Ongoing**

1. Discordant clinical and FNAC findings in suspected obstructed azoospermia: Surgical and pathological correlation

2. Causes of negative surgical explorations in men with obstructive azoospermia

3. Simplified two-layer vasoepididymostomy for vasectomy reversal: Evaluation of a new technique

4. Superior calyceal access in paediatric PCNL: safety and efficacy

5. Role of Laser in post-traumatic obliteratorive urethral strictures

6. Urethroplasty for anterior and posterior urethral strictures, different techniques
7. Role of PET CT in Urooncology
9. Evaluation of TUVRP and Holmium laser prostatectomy for BPH
10. Evaluation of Robotic Radical Prostatectomy
11. Evaluation of Robotic Reconstructive Surgery for Upper Urinary Tract
12. Evaluation of Robotic Radical Cystectomy

Collaborative Projects

Completed
1. 3-dimensional Chemical shift imaging and Diffusion weighted imaging using Proton MRS in the diagnosis of carcinoma prostate (with Department of NMR)
2. CFTR gene mutations in obstructive azoospermia (with Paediatrics)

Ongoing
1. Mitochondrial genes and Y chromosome deletions in male infertility (with Anatomy).

PUBLICATIONS

Journals


**Book**


**PATIENT CARE**

**OPD and Specialty Clinics**

**Surgical procedures**

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open</td>
<td>338</td>
</tr>
<tr>
<td>Endourology</td>
<td>960</td>
</tr>
<tr>
<td>Lower tract</td>
<td>656</td>
</tr>
<tr>
<td>Upper tract</td>
<td>304</td>
</tr>
<tr>
<td>Percutaneous renal surgery</td>
<td>183</td>
</tr>
<tr>
<td>Ureterorenoscopy</td>
<td>121</td>
</tr>
<tr>
<td>Microsurgery</td>
<td>52</td>
</tr>
<tr>
<td>Laparoscopic surgery</td>
<td>27</td>
</tr>
<tr>
<td>Robotic Surgery</td>
<td>77</td>
</tr>
<tr>
<td>Radical prostatectomy</td>
<td>34</td>
</tr>
<tr>
<td>Pyeloplasty</td>
<td>23</td>
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<tr>
<td>Radical cystectomy</td>
<td>05</td>
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<tr>
<td>Others</td>
<td>15</td>
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**Minor OT**

<table>
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<tr>
<th>Procedure</th>
<th>Count</th>
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<tbody>
<tr>
<td>Cystoscopy</td>
<td>1,745</td>
</tr>
<tr>
<td>Minor cases</td>
<td>3,584</td>
</tr>
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</table>

**Extra corporeal Shock Wave Lithotripsy (ESWL)**

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>New cases</td>
<td>317</td>
</tr>
<tr>
<td>Re-do cases</td>
<td>523</td>
</tr>
</tbody>
</table>
**Urodynamic procedures**

Uroflowmetry 3,273  
CPE + DJR 1,839  
Minor cases 3,826  
CMG 318  
Open cases 36  

**Ultrasound procedures**

USG KUB 42  
Suprapubic cystostomy 56  
Percutaneous nephrostomy 75  
Kidney biopsy 1  
TRUS biopsy prostate 118  

Total 292  

**AWARDS AND HONOURS**

**Professor N.P. Gupta**

1. Awarded *Lok Vigyan Samman* by Gunjan Kala Sadan, Jabalpur; September 2008.;
2. Chairman 9th Asian Congress of Urology, New Delhi; 1–5 October 2008.;
3. President, Urological Association of Asia; 4 October 2008.

**Dr Rajeev Kumar**

1. Appointed Chief Editor-The Asian Urology-official publication of the Urological Association of Asia.
4. Served as organizing secretary, 9th Asian Congress of Urology.
5. Appointed core-member: Education Cell; Urological Society of India.

**COMMUNITY SERVICE**

The faculty of department of Urology participated in the following community service:

Professor NP Gupta participated in the Live TV programme of Delhi Doordarshan on Diseases of Prostate Gland; Programmes on Urological diseases in Doordarshan and All India Radio.
10.1 Cardiothoracic Sciences Centre

**Chief**
A. Sampath Kumar

**CARDIOTHORACIC AND VASCULAR SURGERY**

**Professor and Head**
A. Sampath Kumar

**Professor**
Balram Airan

**Additional Professors**
U.K. Chowdhury  
S.K. Choudhary  
A.K. Bisoi

**Assistant Professors**
Sachin Talwar*  
V. Devagourou  
Milind Hote

*Dr Sachin Talwar is abroad on fellowship for one year and will join back in May 2009.

**CARDIOLOGY**

**Professor and Head**
V.K. Bahl

**Professors**
Anita Saxena  
S.S. Kothari  
K.C. Goswami  
Balram Bhargava

**Additional Professors**
R. Juneja  
R. Narang

**Associate Professors**
S. Seth  
N. Naik  
Rakesh Yadav

**Assistant Professors**
G. Karthikeyan  
Gautam Sharma  
S. Singh

Ambuj Roy  
S. Ramakrishnan

**CARDIAC ANAESTHESIA**

**Professor and Head**
Usha Kiran

**Professor**
Sandeep Chauhan

**Associate Professors**
Neeti Makhija  
Poonam Malhotra  
Minati Choudhary
Assistant Professors
Shambhu Nath Das Parag Gharde Vishwas Mallik

BLOOD TRANSFUSION SERVICES (CARDIAC NEURO CENTRE)

Senior Chief Medical Officer
Rama Bhasin

Chief Medical Officer
Anjali Hazarika

Senior Technical Officer
Kalpana Misra

Technical Officers
Bijay Majhi Suresh Kumar Gulshan Mehta
G.S. Chauhan Avdesh K. Tangri P.S. Rajput
Anita Rani

Technical Assistants
Shanti Kumar Sushma Rani

Laboratory Technicians
Jeevan Singh Bisht William R. Mashi B.S. Bisht
Sanjay Tiwari Santosh Kumar Upender Singh
Chitra Sharma Rahul Gautam

Staff Nurses
Louly Jacob Vandana Dhawan Sarla
Kuldeep Kaur

Medical Social Service Officer
Veena Belani

Social Guide
Rajni Sharma Anita Pandey

Upper Division Clerk
Mariamma M.A.

Laboratory Attendants
Dalbir Singh Raghubir Singh Hari Om
Om Prakash Narender Munna Lal
Dinesh Sanjeet Ashok

CARDIAC BIOCHEMISTRY

Associate Professor
R. Lakshmy
EDUCATION

Cardiothoracic and Vascular Surgery

- Dr Peter Aseyo Sore from Nairobi, Kenya trained in Cardiac Surgery
- Dr Sachin Kuthe joined Short Term Trainee for 2 weeks
- Four physiotherapist: Observers from Jamia Hamdard, New Delhi. Master of Physiotherapy (Cardiopulmonary) curriculum
- One Physiotherapist: Observer from out campus. Jamia Hamdard, New Delhi Master of Physiotherapy (Cardiopulmonary) curriculum.

Cardiac Anaesthesia

DM Cardiac Anaesthesia

- In DM Cardiac Anaesthesia Programme: Four new candidates were selected for postdoctoral training including one sponsored. One DM candidates passed the examination successfully in July 2008 and two in December 2008. At present nine are pursuing DM Cardiac Anaesthesia course with ICU training as well. Three of the nine DM students are sponsored candidates, two of them are Lt. Col. from the Army.

Postgraduate training

- Six postgraduate students from the Department of General Anaesthesia, AIIMS were posted for a period of 2 months each for training in cardiac anaesthesia from 1 April 2006 to 31 March 2007.

Short-term superspeciality training

- One faculty member Dr Jimmie member from Kenya, Africa underwent ‘Hands on’ training in cardiac anaesthesia

MSc perfusion technology and classes coordinated by faculty

- New candidates joined for perfusion technology MSc and 3 candidates have undertwentypractical training (internship) for six months in perfusion technology.

Cardiac Biochemistry

- Two students are pursuing PhD in the department
- Co-guide for Seven MD/DM students
Cardiac Nuclear Medicine

- No. of Postgraduate students: 3 (training of post graduates on rotational basis in Nuclear Cardiology)
- No. of Thesis/research papers completed: 3
- No. of lectures for postgraduate students: 10
- Moderator in Journal Club/Seminars: 10
- No. of lectures for undergraduate/paramedical: 0
- No. New thesis started: 3

Stem Cell Facility

Under-graduate, post-graduate and paramedical

- The Department participates in PhD programme.

Short-term and long-term training

- Eleven graduate and post-graduate students have underwent short term training.

Continuing Medical Education (CME)

Cardiology

Organized by the department

- Second consensus meeting on ‘Management of congenital heart diseases in India’, AIIMS; 13 September 2008.
- Second Medical Technology Submit under the Stanford India Biodesign Programme, New Delhi; 2008.

Lectures delivered

Balram Bhargava

- ‘Prevention of heart disease: A recipe for a lifetime’, Invited Public Lecture, the India International Centre, New Delhi, India; 2009.
**Rakesh Yadav**

- Recent advances in biventricular pacing and AICD—CME, ‘Recent Advances in Rhythm Disorders’, PGI, Chandigarh; 14–15 March 2009.

**Ambuj Roy**

- Invited faculty at core committee workshop on ‘Drafting cardiovascular assessment and management guidelines booklet for India’, Department of Cardiology, RML on behalf of Ministry of Health and Family Welfare (MHFW), GoI and WHO, India.
- Faculty for Workshop on training Medical officers under the National Programme for Prevention and Control of diabetes, Cardiovascular diseases and Stroke (NPDCS) organized by MHFW, GoI in collaboration with PHFI, WHO India and CCDC.
- ‘Polypill–Do we need it now?’, Medicine Update 2008, MAMC, New Delhi.

**S. Ramakrishnan**


**Cardiac Radiology**

- Conducted the 11th Annual Registry meeting cum CME of ISVIR, AIIMS; 25–26 April 2009.

**Guest lectures**

**Dr Sanjiv Sharma**

- 31st Annual Academic Sessions of Kandy Society of Medicine, Sri Lanka, Kandy; 11–17 February 2009. Sri Lanka and visited the department of radiology and interventional radiology at Kandy General Hospital for two days afterwards.
- Faculty for the International Critical Care Congress 2009 and 15th Annual Conference of Indian Society of Critical Care Medicine, Agra; 22 February 2009.
- Guest speaker, department of Radiology, New University of Lisbon, Portugal, 26–28 March 2009.
  —Interventional Radiology: An overview
  —Recent advances in the interventional management of critical limb ischemia
  —Endovascular treatment of cervical carotid artery stenosis
  —Endovascular repair of aortic aneurysms and dissections.
• ISVIR Midterm CME-2008, Vellore; 30 August 2008. Lectured on:
  —Recent advances in preventing deep venous reflux
  —IVC filters, when and why
• European Congress of Cardiovascular and International Radiology, Copenhagen, Denmark; 13–17 September 2008.
• Participated in workshop (live case) on Endovascular Interventions, SGPGI, Lucknow; 27 September 2008.
• Guest Faculty for the 60th Annual Conference of the Cardiological Society of India and delivered a scientific talk on ‘Hemoptysis management’, Chennai; 4 December 2008.
• Faculty of Dr Mahadevan Pillai Memorial Workshop-2008, Trivandrum; 3 October 2008. Topics covered
  —Cyanotic congenital heart disease
  —MR of cardiac masses
  —Cardiomyopathies
  —Imaging in aortic dissection and aneurysm, role of MR in endovascular therapy
• External Examiner, MSc Medical Tech (Radiodiagnosis) part-II and viva voce examination, PGI, Chandigarh; 1 May 2009.
• External Expert, meeting of the Core Technical Committee ‘A’ scheduled, PGIMER, Chandigarh; 16 January 2009.

**Dr Gurpreet S. Gulati**

• ‘Embolotherapy in pulmonary arterio—venous malformations’, Papworth Hospital, University of Cambridge, UK; 5 June 2008.
• ‘Interventions in Budd-Chiari Syndrome’, Wednesday Forum in Addenbrooke’s Hospital, University of Cambridge, UK; 18 June 2008.
• ‘How to perform a cardiac MRI?’, CME on ‘Essentials of cardiac imaging’, Auspices of the Cardiovascular and Interventional Radiology Research and Education Foundation of India, AIIMS, New Delhi; 18 October 2008.
• ‘Imaging in ischaemic heart disease’, CME on ‘Essentials of Cardiac Imaging’ organized under auspices of the Cardiovascular and Interventional Radiology Research and Education Foundation of India, AIIMS, New Delhi; 18 October 2008.

• ‘Overview of cardiac imaging’. Workshop on Chest and Cardiac Imaging. Organized by the faculty of Medicine, Kuwait University, Kuwait; 25–26 January 2009.

• ‘Normal and anomalous cardiac anatomy’, Workshop on Chest and Cardiac Imaging. Organized by the faculty of Medicine, Kuwait University, Kuwait; 25–26 January 2009.

• Current status of coronary CT angiography. Workshop on Chest and Cardiac Imaging. Organized by the faculty of Medicine, Kuwait University, Kuwait; 25–26 January 2009.

• ‘Looking beyond the coronaries’, Workshop on Chest and Cardiac Imaging. Organized by the faculty of Medicine, Kuwait University, Kuwait; 25–26 January 2009.


Dr Priya Jagia


• ‘How to perform a Cardiac CT?’ , CME ‘Essentials of cardiac imaging’, Auspices of the Cardiovascular and Interventional Radiology Research and Education Foundation of India, AIIMS, New Delhi; 18 October 2008.


• ‘Interventional radiology, management of non-atherosclerotic disease of aorto-iliac segment’

• Interventional radiology, management of non-ateromatous renal artery stenosis’

• ‘MR in evaluation of congenital heart disease’, Annual Radiology CME held by Haryana branch of Indian Association of Radiology, Rohtak Medical College, Rohtak; 29 March 2009.

Cadiac Biochemistry

• Invited speaker at the World Conference on Tobacco OR Health (WCTOH), Mumbai, India from 8–12 March 2009;Presented a paper entitled ‘Tobacco related biomarkers for cardiovascular disease’, 14th.
Member of Technical advisory committee for fast HPV project conducted by ICPO in collaboration with PATH supported by Milinda and Bill Gates foundation.

National and International Conference

Cardiothoracic and Vascular Surgery

Professor A. Sampath Kumar

- Live Surgery Workshop organized by Jayadeva Institute of Cardiology, Bangalore; April 2008.
- attended the launch of the WHO surgical safety list, WHO Headquarters, Washington; May 2008.
- attended Sri Jayadeva Surgical Oration, Indian College of Cardiology, Cochin, Kerala; October 2008.
- attended 1st Rheumatic Mitral Valve summit at Bangkok, Thailand and demonstrated technique on mitral valve repair, March 2009.
- delivered a lecture on mitral valve repair at 1st Rheumatic Mitral Valve summit, Bangkok, Thailand; March 2009.

Professor Balram Airan

- Participated in STICH Investigator Meeting, Munich, Germany.
- Invited and delivered ‘Professor K.V. Naidu Memorial Oration’ during AP CSI 16th Annual Conference, Hyderabad.
- Invited and participated as an expert in Health Programme live telecast by Doordarshan News, New Delhi; ‘Heart Transplant’.

Professor U.K. Chowdhury

- Delivered guest lecture on ‘Lactate concentration gradient and noninvasive haemodynamic management in cardiac surgical patients’ during Annual ISA Conference, Delhi Branch; 2008.
• Delivered guest lecture on Janak Mehta Award Paper session—‘Comparative study of Lactate, Pyruvate and Lactate Pyruvate ratio as Markers of myocardial Ischemia in Adult patients undergoing open heart surgery’ during Annual ISA Conference, Delhi Branch; 2008.

• Delivered guest lecture on ‘Role of inhaled versus intravenous nitroglycerin in pulmonary hypertension in valvular heart surgery’, Annual SCA conference, Delhi Branch; 22 March 2009.

Dr S.K. Choudhary

• Member, PCSI task force which discussed guidelines for post-operative drug therapy following surgery in children.

Dr Sachin Talwar

• ‘Surgical management of congenital heart diseases’, the CME in Pediatrics organized by SMS Medical College, Jaipur; April 2008.

• Invited speaker in the Panel discussion ‘Indications for surgery in Pulmonary hypertension’, the 10th Annual Conference of the Paediatric Cardiac Society of India, Kochi; 7–8 November 2008.

• Invited speaker in the Panel discussion ‘Training pediatric Cardiac Surgeons for the future’, the 10th Annual conference of the Paediatric Cardiac Society of India, Kochi; 7–8 November 2008.

Dr V. Devagourou

• conducted a workshop on mitral valve reparative surgery, Pune; March 2009.

Cardiology

Lectures Delivered

V.K. Bahl

• Infective endocarditis guidelines: Are they applicable in developing countries?, European Society of Cardiology (ESC 2008), Munich, Germany.

• Pharamocolgical management of heart failure, American College of Cardiology (ACC 2009), Orlando, USA.

Anita Saxena

• Invited lectures at World Congress of Cardiology, Buenos Aires, Argentina.

S.S. Kothari

• Training of cardiologists in India-Quantity and Quality. 60th Annual Conference of Cardiological Society of India (CSI), Chennai; 2008.

• Evaluation of operability of children with pulmonary hypertension and shunt lesion. 10th Annual Conference of Pediatric Cardiac Society of India, Kochi; 2008.
Balram Bhargava

- ‘Stem cell therapy for acute MI: Where are we at present?’, National Conference of the Association of Physicians of India, Noida, India; 2009.

K.C. Goswami

- ‘Echocardiography in acute rheumatic fever’, 60th Annual Conference of Cardiological Society of India (CSI), Chennai 2008

R. Juneja

- ‘ECG in congenital heart disease: Role and relevance’, 60th Annual Conference of Cardiological Society of India (CSI), Chennai; 2008.
- ‘Thrombolysis for pyopericardium’, Presented at European Society of Cardiology (ESC 2008), Munich, Germany.

Sandeep Mishra

- ‘Time course of angiogenesis, arteriodenesis and peripheral conductance after plasmid VEGF delivery in rat model of hind limb ischemia’, World Congress of Cardiology, Buenos Aires, Argentina.
- ‘Hot to do LIMA interventions’, China Intervention Therapeutics; 2009.

S. Ramakrishnan

- ‘Prosthetic heart valve thrombosis in children’, European Society of Cardiology (ESC 2008), Munich, Germany.
- ‘Nocturnal hypoxemia in patients with eisenmenger syndrome’, American College of Cardiology (ACC 2009), Orlando, USA.
Cardiac Anaesthesia

Lectures delivered

Usha Kiran

- Chaired a session 3rd World Congress of Clinical and Preventive cardiology, 20 September 2008 on the topic from sick care to health care—a need for paradigm shift, 19 September 2008.
- Chaired a session in CME on ‘Emergenices in anaesthesia on topic cardio neuro emergenices’, Safdarjung Hospital VMMC in collaboration with Indian College of Anaesthetist and ISA Delhi; 22 November 2008.
- Chaired a session on ‘Physical therapy in Parkinson’s disease’, 2nd Asian Occian Parkinson’s Disease and Movement disorder Congress, 15 February 2009.

Sandeep Chouhan

- ‘ECMO is an important device for India’, PCSI, Kochi; 8 September 2008.

Neeti Makhija

- ‘Anaesthesia for non—cardiac surgery in a cardiac patient’, First Conference of Society of Cardiac Anaesthesiology, Delhi and NCR Branch, AIIMS, New Delhi; 22 March 2009.

Poonam Malhotra

- ‘Can’t give heparin–then what?’, IACTA Conference; 2008
• ‘Arterial wave form audits interpretation’; ‘Flotrac and its uses in cardiac Surgery’; ‘Early goal directed therapy in moderate to high risk cardiac surgical patients’; ‘Predictors of myocardial function in adult patients undergoing open heart surgery myocardial lactate vs plasma lactate’, Delhi Heart Lung Institute, Delhi; 11 April 2008.


• ‘Newer and costlier inhalational agents are better than the older one—PRO’, RSACP Conference, Calcutta; November 2008.

• ‘Haemodynamic monitoring in cardiac surgical patients’ and ‘Role of TEE in ischaemic heart disease’, Cardiac Anaesthesia, Kolkata; 13–15 December 2008.

• ‘Perioperative non invasive cardiac output monitoring’, First meeting of Society of Cardiac Anaesthesiology Delhi and NCR Branch Conference, Delhi; 22 March 2009.

Miniti Choudhry

• ‘Mechanical ventilation’ and ‘Microbiology and Intensive Care’; ‘Newer modes of Ventilation’—Diagnosis and management of Arrhythmia, Mixed Venous oxygen saturation and invasive ventilation, ISAJAC 1008 NEIGRIHMS, Shillong; 12–14 September 2008.

• Teaching and training of Pulmonologist, Intensivist and Anaesthesiologist. Regarding mechanical ventilation, anaesthesia for cardiac surgery, haemodynamic monitoring, arrythmia management and arterial blood gas analysis, IGH, Rourkela; 7–12 October 2008.


• ‘Prosthetic heart valve and TEE’, 3rd Annual Perioperative and Critical Care transesophageal echocardiography workshop, PGIMER, Chandigarh; 27–1 March 2009.

• ‘Robotic CABG’ SCA Delhi NCR Branch; 22 March 2009.

Sambhunath Das

• ‘Anaesthetic management and outcome of arterial switch operation’, 10th National Annual Conference of the Pediatric Cardiac Society of India, Cochin; 7–9 November 2008.

• Panel member for discussion on cardiac patients for non cardiac surgery in Ist Conference of Society of Cardiac Anaesthesiologist, Delhi and NCR; 22 March 2009.

Dr Parag Gharde

• Participated in Workshop on Intra operative TEE for valve surgery, 7–8 March 2009.

• Panelist for discussion on Cardiac patient for non cardiac surgery in Ist Conference of Society of Cardiac Anaesiologist, Delhi and NCR; 22 March 2009.
Vishwas Mallik

- Panelist for discussion on ‘Cardiac patient for non cardiac surgery’, 1st Conference of Society of Cardiac Anaesiologist, Delhi and NCR; 22 March 2009.

Stem Cell Facility

Conferences, Seminars, Workshops


Lectures delivered

- Indian Academia of Social Science, Jamia Millia Islamia; 20 December 2008.
- 12th Asian Oceania Congress of Neurology and 16th Annual Conference of the Indian Academy of Neurology (AOCN-IANCON 2008).
- Stem cell Voice of India Medifeast, 6 December 2008.

RESEARCH

Cardiothoracic and Vascular Surgery

Funded projects

Ongoing

- STICH Trial; for treatment of congestive cardiac failure—an international multicentric trial study
- FREEDOM Trial—an International study project
- CORONARY—international multi-centric study comparing Off Pump vs On Pump CABG
- Role of stem cell injection in patients with ischemic cardiomyopathy in patients undergoing CABG. Funded by DBT.
- Genetic polymorphism in patients suffering from coronary artery disease: A comparison between diabetic versus nondiabetic patients (ICMR Grant)
- Imbalance between Endothelin-1 and Nitric oxide products influences the clinical outcome in children suffering from congenital heart disease and pulmonary arterial hypertension

Departmental Projects

Ongoing
• Long term follow up of patients undergoing valve replacement
• Comparison of two antibiotic regimens in Open Heart Surgery
• AML length in Mitral valve repair
• Comparison of Carpentier ring vs. Teflon felt, a prospective double blind study for mitral valve repair technique
• Aortic valve replacement with autologous pericardium
• Tissue valves as substitutes in young patients
• Allopurinol in cardiac valve surgery
• Pentoxiphyllin in open heart surgery
• Aortic valve morphology in normal population
• Remote ischemic preconditioning of the myocardium using sphygmomanometer cuff in patients undergoing CABG
• Measurement of plasma and vascular asymmetric dimethylarginine (ADMA), tetrahydrobiopterin (BH4) and oxidized BH4 levels in patients undergoing coronary artery bypass grafting and their correlation with oxidative stress (ICMR Funded Project)
• Mitral valve replacement with and without chordal preservation in a rheumatic population: Assessment of left ventricular ejection fraction and regional wall motion using magnetic resonance imaging and dynamic radionuclide study
• Evaluation of flow dynamics in Fontan circuits using magnetic resonance imaging
• Histopathology and morphometry of the pulmonary vasculature in patients undergoing bi-directional Glenn and total cavopulmonary connection
• A prospective study of individual pulmonary vein size and survival in patients with totally anomalous pulmonary venous connection: How small is too small for survival after surgical correction of totally anomalous pulmonary venous connection?
• Comparison of clinical and angiographic outcome in patients undergoing on pump CABG with radial artery graft pretreated with phenoxybenzamine vs. papaverine
• Histopathology of the ascending aorta and the risk factors related to histopathological conditions and aortic dilatation in patients undergoing corrective surgery for cyanotic congenital heart diseases
• Functional tricuspid regurgitation with and without tricuspid valve annuloplasty: Serial echocardiographic assessment of tricuspid valve and right ventricular function.
• Congenital left atrial appendage aneurysms: Collective review.
• Mitral valve replacement using bioprosthetic valves in patients with rheumatic heart diseases aged below 40 year.
• Role of positron emission tomography in the patients with chronic constrictive pericarditis and restrictive cardiomyopathy
• Short and long-term prognostic value of coronary sinus derived- Cardiac Troponin I, Creatine kinase- MB, Lactate, Pyrivate and Lactate- Pyruvate Ratio in adult patients undergoing open heart surgery
• Postoperative assessment of univentricular repair by multislice computed tomographic angiography
• Evaluation of early thromboembolism and valve thrombosis in patients with rheumatic heart disease undergoing mitral tissue valve replacement in the presence of atrial fibrillation with or without left atrium / left atrial appendage clot
• Comparative study of Lactate, Pyruvate and Lactate Pyruvate ratio as Markers of myocardial Ischemia in Adult patients undergoing open heart surgery
• A comparative study of acute effects of inhaled Nitroglycerin with intravenous dobutamine on haemodynamic and oxygenation in adult patients with pulmonary arterial hypertension undergoing valve surgery under cardio pulmonary bypass
• Efficacy of lactate concentration gradient from right atrium to pulmonary artery in goal-directed haemodynamic management in cardiac surgical patients
• Brain natriuretic peptide, stroke volume variation and E/A ratio as non-invasive markers of diastolic dysfunction in patients undergoing pericardiectomy
• Comparison of phenoxybengamine vs papaverive use for radial artery conduit during coronary artery bypass grafting
• Flotrac and its use as non-invasive cardiac output monitor in cardiac surgical patients.
• Comparison of Tranexamic acid and Trasylol in tetrology of Fallot patients

Cardiology

Funded Projects

Ongoing

1. Intravascular Ultrasound for severe pulmonary artery hypertension in congenital heart diseases. R. Juneja, Department of science and technology


Completed

1. Evaluation of NT-pro-BNP levels in the differentiation of constrictive pericarditis from restrictive cardiomyopathy. S. Ramakrishnan. Funding by Faculty research grant (2006–2007). Funds: Rs 55,000
Departmental Projects

Ongoing

1. Brain Natriuretic peptide level (BNP) estimation in chronic constrictive pericarditis and restrictive Cardiomyopathy
2. DPG PET imaging in chronic constrictive pericarditis and restrictive Cardiomyopathy
3. Inflammatory markers in Eisenmenger syndrome
4. Strain and Tissue Doppler Imaging in TGA
5. Strain and Tissue Doppler Imaging in normal neonates
6. Initial study of safety and Efficacy of Betablockers in Eisenmenger Syndrome
7. Tissue Doppler and strain rate imaging in patients with acute hypertensive heart failure
8. Propranolol in children with VSD and Heart Failure (VSD PHF Study)
9. Acute hemodynamic effects of tobacco chewing
10. Sleep study in Eisenmenger syndrome

Completed

1. Multicentric Clinical Evaluation of an Indigenous Paclitaxel-eluting Stent in De-novo Coronary Artery Stenosis
2. Preliminary evaluation of the current 3-weekly penicillin prophylaxis

Collaborative Projects

1. SPIRIT V: The SPIRIT Clinical Trial Programme consists of six studies evaluating the XIENCE® V Everolimus Eluting Coronary Stent System for the treatment of coronary artery disease. V.K. Bahl. Funded by Abbot Vascular Inc., USA
4. RED HF study: A double blind randomized placebo-controlled, multicentre study to assess the efficacy and safety of Darbepoetin alfa treatment on mortality and morbidity in Heart failure (HF) subjects with symptomatic left ventricular systolic dysfunction and Anaemia. V.K. Bahl. Funded by Amgen Technology Pvt. Ltd.
5. TOPSS trial. V.K. Bahl. Funded by EuroCOR.
6. INDICOR Trial. V.K. Bahl. Funded by B. Braun.
7. BIPPS Study (Bivalirudin monotherapy in patients with STEMI undergoing a primary PCI strategy). V.K. Bahl. Funded by Sun Pharma Inc. India.

8. CVD Biomarker profiling in acute coronary events by antibodies and antigen array. V.K. Bahl. Funded by ICMR.

9. STITCH (Surgical Treatment of Ischemic Heart Failure) trial. V.K. Bahl. Funded by NIH, Bethesda, MD, USA.

10. RELEASE T Study. V.K. Bahl.


Cardiac Anaesthesia

Funded Projects

Completed

1. Role of coenzyme Q10 and alpha lipoic acid in attenuating the oxidative stress and systemic inflammatory response in patients undergoing coronary artery bypass graft surgery. Neeti Makhija.


Ongoing


Departmental Projects

Completed

1. A comparative study of acute effects of inhaled Nitroglycerin with intravenous dobutamine on haemodynamics and oxygenation in adult patients with pulmonary arterial hypertension undergoing valve surgery under cardio pulmonary bypass.

2. Comparative study of Lactate, Pyruvate and Lactate Pyruvate ratio as Markers of myocardial Ischemia in Adult patients undergoing open heart surgery.

3. Role of nitroglycerin inhalation in adult valvular surgery. Does it reduce pulmonary hypertension?

4. The role of transthoracic echocardiography as a monitoring tool during induction of anaesthesia in cardiac surgical patients.

5. Nosocomial infections in children under two years undergoing cardiac surgery.
6. Effects of two different rewarming strategies on Neuropsychological function in patients undergoing CABG with CPB

7. Effects of two different rewarming strategies on Neuropsychological function in patients undergoing TOF correction with CPB

8. Role of transthoracic echocardiography during induction of anaesthesia in cardiac surgical patients

9. Role of intravenous amiodarone in patients undergoing mitral valve replacement

10. Role of coenzyme Q10 and alpha lipoic acid in attenuating the oxidative stress and systemic inflammatory response in patients undergoing coronary artery bypass graft surgery

**Ongoing**

1. Efficacy of lactate concentration gradient from right atrium to pulmonary artery in goal-directed haemodynamic management in cardiac surgical patients

2. Brain natriuretic peptide, stroke volume variation and E/A ratio as non-invasive markers of diastolic dysfunction in patients undergoing pericardectomy

3. Comparison of phenoxybenzamine vs papaverive use for radial artery conduit during coronary artery bypass grafting

4. Flotrac and its use as non-invasive cardiac output monitor in cardiac surgical patients

5. Functional tricuspid regurgitation with and without tricuspid valve annuloplasty: Serial echocardiographic assessment of tricuspid valve and right ventricular function.

6. Comparison of various doses of aprotin in atrial switch operation

7. Role of magnesium in arrhythmia prevention in infants undergoing cardiac surgery

8. Validation of Euro Score in Indian population

9. Comparison of thiopentone Etomidate propofol and milrinone in patients undergoing coronary artery bypass grafting

10. Comparison of inhaled nitroglycerine inhaled milrinone in children suffering from severe pulmonary artery hypertension

11. Comparison of magnesium versus magnesium plus Vitamin C in atrial for—prophylaxis in patients undergoing coronary artery bypass grafting

12. Evaluation of prophylactic Vasopressin in patients on the angiotensin Converting Enzyme Inhibitor ramipril undergoing Coronary Artery Bypass Surgery

13. Rectal diclofenac suppository in postoperative pain relief in adult cardiac surgical patients.

14. Etomidate for children in cathlab diagnostic procedure

15. Role of prognostic markers in complex congenital cardiac surgery
16. Comparative study of Lactate, Pyruvate and Lactate Pyruvate ratio as Markers of myocardial Ischemia in adult’s patients undergoing open heart surgery

17. Relation between plasma endothelin level and quality of sleep in patients undergoing coronary bypass grafting

**Cardiac Radiology**

**Ongoing**

1. ‘Induction of therapeutic angiogenesis in critical limb ischemia by intra-arterial delivery of autologous bone-marrow derived stem cells’. Ethically cleared pilot project under financial grant from the Department of Biotechnology, Ministry of Science and Technology, Government of India.

2. ‘MRI for *in vivo*-tracking of iron oxide labeled mesenchymal stem cells in a rat model of heart failure’. Under financial grant from the Department of Biotechnology, Ministry of Science and Technology, Government of India.

3. MD thesis ‘Correlation of Clinical Disease Activity with Imaging Modalities in Takayasu Arteritis’

4. MCh (CTVS) research project: ‘Role of Nicorandil in patients undergoing coronary artery bypass surgery using radial artery’

5. MD (Radiodiagnosis) Thesis: ‘Utility of Cardiac MRI in RV function evaluation in health and disease’.


7. DM (Cardiology) project: ‘Atherogenesis and altered endothelial function in cyanotic congenital heart disease: Role of hypoxic preconditioning’

8. DM (Cardiology) project: ‘Value of Dual Source Computed Tomography in Assessment of Chronic Total Occlusion of Coronary Arteries’


10. DM (Cardiology) project: ‘Study of clinical characteristics and MRI features of restrictive cardiomyopathy (RCMP) and to devise MRI criteria for diagnosis of EMF’


**Completed**

1. MD (Medicine) thesis: ‘Assessment of atherosclerosis by carotid intimomedial thickness in patients with rheumatoid arthritis’

2. MD (Medicine) thesis: ‘Role of 18-FDG PET-CT scan in diagnosis and assessment of disease activity of primary systemic necrotising vasculitis’
3. DM (Cardiology) project: ‘Detection of pericardial inflammation by F-18 FDG PET-CT in chronic constrictive pericarditis’

4. MD (Pharmacology) project: ‘Effects of Atorvastatin and Pioglitazone on endothelial dysfunction in non-diabetic normolipidemic coronary artery disease (CAD) patients’

5. Mch (CTVS) project: ‘To study the effect of continuous pulmonary perfusion and low tidal volume ventilation on lung function in patients undergoing cardiopulmonary bypass’

6. MP Th (Cardiopulmonary) research project: ‘Compare the efficacy of PNF techniques and conventional breathing exercises for pleural effusions after CABG with LIMA as one of the grafts’

**Cadiac Biochemistry**

**Funded Projects**

**Completed**


**Ongoing**

- Relation of APOA-V gene variants to serial changes in childhood body mass index and coronary artery disease risk factors in young adulthood. Funded by ICMR for 3 years (2005–2010). Funds: Rs 35 lakh.

- Role of Telomere shortening and Telomerase activity on EPC senescence in premature CAD patients and controls (2008–2010) DBT. Funds: Rs 28 lakh.

- Lab coordinator in ‘Low dose magnesium sulphate regimen for management of eclampsia—a randomized controlled trial’. Funded by ICMR for 3 years (2007–2010). Funds: Rs 2.5 lakh.

- Serum fatty acid levels and their correlation with other CVD risk factors in Industrial population from Delhi and Trivandrum. Funded by ICMR for 3 years (2005–2009). Funds: Rs 14 lakh.


**Collaborative Research**

- Role of Homocysteine in Coronary Artery Disease: Genetic and Epigenetic studies (with Cardiology and Institute of Genomics and Integrated Biology)
• Rural-urban migration: Effects on obesity and diabetes in Indians (with Cardiology and University of Bristol)

• Prevalence of obesity and associated diseases amongst children in 5–18 years of age in the National Capital territory of Delhi (with Human Nutrition Unit)

• Auditing of early goal direct therapy in patients undergoing cardiac surgery. (with Cardiac Anesthesia)

• Paraoxonase and its gene variants in relation to coronary artery disease. (with Biochemistry)

• Role of oral coenzyme Q10 in patients undergoing coronary artery bypass graft surgery with Cardiac (with Cardiac Anesthesia)

• Non-invasive detection of sub clinical disease in patients with established rheumatic valvular heart disease (with Cardiology)

• Relationship of Growth in Infancy and Childhood to Adult Endothelial Function and Body Composition; the New Delhi Birth Cohort (with Endocrinology)

• Effect of diets rich in omega-3 fatty acids and sterol esters on the composite risk profile of dyslipidemic adults (with Cardiology)

• Development of long acting penicillins for rheumatic fever prophylaxis: Preliminary evaluation of the current 3 weekly schedule in terms of disease control. (with Cardiology)

• Nutritional challenges, abdominal adiposity and type 2 diabetes in Indians. Funded by Welcome trust (with Centre for chronic disease control [CCDC])

**Cardiac Pathology**

**Departmental projects**

• Histopathological and morphometric evaluation of surgically excised specimens of thoracic aortic aneurysms

**Collaborative projects**

• Histomorphometric analysis of intrapulmonary vessels in patients undergoing Bi-Directional Glenn and total cavopulmonary connection.

• Left ventricular muscle biopsy in patients with Transposition of great arteries with prepared and regressed left ventricle.

**Cardiac Nuclear Medicine**

**Funded projects**

**Completed**

**Ongoing**

2. ‘Use of autologous bone marrow stem cells for myocardium regeneration’. Funded by Department of Biotechnology (2006).
3. Labeling of stem cells with Technetium-99m hexamethylene propylene amine oxine (Tc99m HMPAO) and to detect the homing of stem cells in the myocardium after intra coronary injection. Applied for Institute fund (2007).
5. ‘Efficacy of stem cells in improvement of left ventricular function in patients with acute myocardial infarction’. Funded by Department of Biotechnology (2008).

**Collaborative Projects**

**Completed**

2. Prevalence of symptomatic and asymptomatic coronary artery disease in stroke patients. DM research paper (with Neurology, Cardiology and Nuclear Medicine)
3. Role of F-18 FDG PET in cardiomyopathies. DM research paper (with Cardiology and Nuclear Medicine)

**Ongoing**

1. F-18 FDG in detecting ischemia at rest in patients with known coronary artery disease (with Nuclear Medicine and Cardiology)

**Guide for Thesis**

**Collaborative projects**

**Completed**

1. Correlation between cardiovascular autonomic function and indicators of Myocardial ischemia in patients presenting anginal symptoms. Co-guide in PhD thesis of Rita Khadka (with PhD, Physiology)
2. Prevalence of symptomatic and asymptomatic coronary artery disease in stroke patients. Co-guide in DM research paper of Kapil Agarwal (with DM Neurology)
3. Role of F-18 FDG PET in cardiomyopathies. Co-guide in DM research paper of Sameer Mehrotra (with DM Cardiology)
Ongoing

1. Role of PET-CT in initial staging and post therapy assessment in patients of carcinoma ovary—Chief Guide in MD thesis of Dr G.R.M. Reddy (with Nuclear Medicine MD)

2. Role of F-18 FDG PET/CT in prognostication and restaging of locally recurrent cancer cervix. Co-guide in MD thesis of Dr Sagar Maharjan (with Nuclear Medicine MD, 2008–2010)

3. Role of PET/CT in initial staging of locally advanced breast cancer and comparison with conventional modalities. Co-guide in MS thesis of Dr Sanjay Kumar (with MS Surgery, 2008–2010)


Stem Cell Facility

Funded projects

Ongoing

- Isolation and expansion of Mesenchymal stem cells (MSC) from human bone marrow/umbilical cord and evaluation of its cardiomyogenic and neurogenic differentiation potential. Sujata Mohanty. Funded by ICMR for 3 years. Funds: Rs 20 lakh.

- Transplantation of Mesenchymal Stem Cell in animal models of Myocardial Infraction and Parkinson’s disorder. Sujata Mohanty. Funded by DBT. Funds: Rs 44.45 lakh.

Departmental projects

Completed

- Expression status of HLA II molecules on undifferentiated and differentiated Mesenchymal Stem Cells—an in vitro study. Sujata Mohanty.

Collaborative Research

- Use of autologous bone marrow stem cells for myocardium regeneration. Balram Airan. Funded by DBT for 3 years. Funds: Rs 98.234 lakh.

- Efficacy of Stem Cell in improvement of left ventricular function in patients with acute myocardial infraction. Balram Bhargava. Funded by DBT for 1.5 years. Funds: Rs 26.397 lakh.

- DBT Centre of Excellence for Stem Cell Research: Basic and Transplantation (Core Grant), Balram Airan. Funded by DBT for 5 years. Funds: Rs 867.90 lakh.

- Culture of limbal stem cell for ocular surface reconstruction in stem cell deficiency disorder. Radhika Tandon. Funded by DBT for 3 years. Funds: Rs 27 lakh.

- Induction of therapeutic angiogenesis in critical limb ischemia by intra-arterial delivery of autologous bone marrow derived stem cells. Sanjiv Sharma. Funded by DBT for 9 months. Funds: Rs 23.097 lakh.
Use of Autologous Bone Marrow Derived Stem cells For Rehabilitation of patients with Dry Age Related Macular Degeneration and Retinitis Pigmentosa: A Phase-I Clinical Trial. Atul Kumar. Funded by ICMR for 3 years. Funds: Rs 20.61 lakh.

Intravenous Autologous bone marrow stromal or mononuclear cells for patients with acute ischemic stroke: A Multi Institutional project. Rohit Bhatia. Funded by DBT for 3 years. Funds: Rs 75 lakh.

Safety and Efficacy of Autologous Stem Cell in prevention of amputation in patients with chronic critical limb ischemia. Anita Dhar. For 2 years. Funds: Rs 50.65 lakh.

To study the role of bone marrow derived pluripotent cells in peripheral nerve repair in adult rats. Vaishali Suri. Funded by ICMR. Funds: Rs 30 lakh.

Effect of bone marrow stromal cells transplantation and magnetic stimulatationsory in the secondary motor functional recovery of spinalised rats. Dr Rashmi Mathur. Funded by ICMR for 3 years. Funds: Rs 17 lakh.


Exploring the role of MHC and co-stimulatory molecules in the immune evasion mechanism of glioma stem cells. S. Vivekanandhan. 3 years, 22.15 lakh.

To evaluate the potential role of bio-polymer to support the culture of corneal epithelial cells. Namrata Sharma. (Institute Project).


PUBLICATIONS

Cardiothoracic and Vascular Surgery


PUBLICATIONS

**Cardiology**

**Journals**


14. Parakh N, Bhargava B. Alcohol Septal Ablation for hypertrophic obstructive cardiomyopathy: The joys are brief; the results are lasting. *JACC Interventions. 2009-01-01.*


**Chapters in Book**


Cardiac Anaesthesia

Journals


**Books**


**Chapters in book**


**Cardiac Radiology**

**Journals**


7. Gulati GS, Gupta A, Jagia P, Juneja R, Sharma S. Analyze this Image: MRI of a 45-year-old female with cutaneous lesions and mild dysphagia and a recent history of chest discomfort,
exertional dyspnea and palpitations. Cardiosource Web Site, American College of Cardiology Foundation.


**Chapters in Book**


**Cadiac Biochemistry**

**Journal**


**Cardiac Pathology**

**Journals**


**Cardiac Nuclear Medicine**

**Abstracts**


**Chapter in Book**

Stem Cell Facility

Journals

Abstracts

PATIENT CARE

Cardiothoracic and Vascular Surgery

**Total operations performed** Open heart surgery 2,589

Closed heart surgery 878

**Total operations** 3,477

34,738 patients have attended and were seen in the Cardiothoracic and Vascular surgery.

Cardiology

<table>
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Patient Services

<table>
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<td>Ambulatory BP</td>
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Cath Lab Services

Diagnostic
Coronary angiograms 2,254
Catheterization studies 1,700

Interventions
Coronary Interventions 905
Mitral valve dilatations 285
Device closures 65
Pacemakers 216
ICD/BiV/Combo 41
Other interventions 238

Cardiac Anaesthesia

Operation Theatre
7-operation theatres work from 8 a.m.–5 p.m. Monday - Friday and on Saturday upto 2 p.m.

CT Angio
CT Angiography of children in multi-slice CT scanner room under monitored anaesthesia care/ general anaesthesia/sedation in 64 slice multi scanner room.

Pre-anaesthesia Round
Pre anaesthesia round from 6.30–8.30 pm for all the patients scheduled for operation.

Cath Laboratory
- General anaesthesia/LA/MAC for children undergoing ASD/VSD/PSD closure.
- In adults GA/LA monitored anaesthesia care for adult Automated cardiovertor device implantation (AICD) and dual chamber pace maker implantation.

Aortic Stent
- Placement in cath lab, for patient of Aortic aneurysm under general anaesthesia MAC.

MRI Angio
- In MRI angiography room under general anaesthesia and/or monitored anaesthesia care. All MRI compatible equipment is kept inside.
**Stress Management Programme**

- Stress management programme for patients and their family, for patients admitted in CT3 CT4 CT5 ward, Health education in CT5 Ward Meditation Room.
- Relaxation therapy by mind body interaction for hospital staff every day 1–2.30 pm in CT 5 meditation room.

**Emergency Services**

- Emergency services by the residents and faculty for emergency surgery.

**Resuscitative and Ventilatory Management**

- Resuscitative and ventilatory management in CCU, CTVS, ICU-A and ICU-B and CT5 and recovery room.

**Blood Transfusion Services (Cardiac Neurosciences Centre)**

*Blood units collected*

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Replacement donors</td>
<td>17,879</td>
</tr>
<tr>
<td>Voluntary donors</td>
<td></td>
</tr>
<tr>
<td>in the department</td>
<td>111</td>
</tr>
<tr>
<td>through blood mobiles</td>
<td>941</td>
</tr>
<tr>
<td>Blood received from IRCS</td>
<td>46</td>
</tr>
<tr>
<td>Blood received from Hospital Blood Bank, AIIMS</td>
<td>99</td>
</tr>
<tr>
<td>Blood received from other hospitals</td>
<td>500</td>
</tr>
</tbody>
</table>

**Total No. of Blood units collected** 19,576

*Blood units issued*

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood units issued to CTVS/NS</td>
<td>21,950</td>
</tr>
<tr>
<td>to Hospital Blood Bank, AIIMS</td>
<td>1,192</td>
</tr>
<tr>
<td>to JPNATC BB</td>
<td>3,114</td>
</tr>
<tr>
<td>to IRCS</td>
<td>1</td>
</tr>
<tr>
<td>to other hospital</td>
<td>844</td>
</tr>
<tr>
<td>HIV/HBsAg/HCVreactive units discarded</td>
<td>467</td>
</tr>
</tbody>
</table>

**Total blood units issued** 27,568

*Laboratory Procedures*

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Blood grouping (ABO)</td>
<td>76,766</td>
</tr>
</tbody>
</table>
Number of Rh grouping 57,190
Number of cross-matching done 75,623

*Infectin markers tested*

<table>
<thead>
<tr>
<th>Marker</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV</td>
<td>23,487</td>
</tr>
<tr>
<td>HBV</td>
<td>23,799</td>
</tr>
<tr>
<td>HCV</td>
<td>24,066</td>
</tr>
<tr>
<td>VDRL</td>
<td>21,869</td>
</tr>
<tr>
<td>MP</td>
<td>6,000</td>
</tr>
<tr>
<td>CMV</td>
<td>312</td>
</tr>
<tr>
<td>HBV confirmatory tests</td>
<td>525</td>
</tr>
</tbody>
</table>

**Total** 1,00,058

*Blood Components*

<table>
<thead>
<tr>
<th>Component</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fresh Frozen Plasma (FFP)</td>
<td>16,838</td>
</tr>
<tr>
<td>Platelet Rich Plasma (PRP)</td>
<td>151</td>
</tr>
<tr>
<td>Platelet Concentrate</td>
<td>15,625</td>
</tr>
<tr>
<td>Recovered plasma</td>
<td>1,599</td>
</tr>
<tr>
<td>Cryoprecipitate</td>
<td>571</td>
</tr>
<tr>
<td>Packed red blood cells</td>
<td>17,409</td>
</tr>
</tbody>
</table>

**Total** 52,193

*Special procedures*

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single donor plateletpheresis</td>
<td>10</td>
</tr>
</tbody>
</table>

*Cardiac Radiology*

Total number of cine-angiography done for.

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cine fluoroscopy</td>
<td></td>
</tr>
<tr>
<td>Vascular catheter procedures</td>
<td>5,718</td>
</tr>
<tr>
<td>Ultrasound/Doppler</td>
<td>1,912</td>
</tr>
<tr>
<td>CT</td>
<td>1,636</td>
</tr>
<tr>
<td>MRI</td>
<td>475</td>
</tr>
</tbody>
</table>

OPD Data: Routine X-ray for CTVS and Cardiology 61,093
Cadiac Biochemistry

The cardiac biochemistry laboratory is externally validated by BIRMINGHAM, UK through quality control programmes for clinical chemistry.

The various tests being carried out in Cardiac Biochemistry Lab for patients include:

Name of the investigation

Routine chemistry analysis
Routine haematology
PT, APTT, FDP, Protein C and Protein S, Fibrinogen
CK, CK-MB, LDH

Lipid Profile
Cholesterol-total
Cholesterol-HDL
Cholesterol-LDL
Cholesterol-VLDL
Triglycerides

Specialized investigations

Name of the investigation
Digoxin
Cyclosporine
Thyroid hormones-T₃, T₄, TSH
ASLO
CRP
Homocystiene
Vitamin B12 and Folate
Lipoprotein(a)
Apo(a)
Apo(b)
RA factor
Catecholamines (plasma and urine)
VMA (urine)
Glycosylated haemoglobin
LDL subfraction
HLA-A, B, C, DR, DQ

Cardiac Pathology

**Cardiac Pathology**

<table>
<thead>
<tr>
<th>Type</th>
<th>Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Routine</td>
<td>236 cases</td>
</tr>
<tr>
<td>Research</td>
<td>156 cases</td>
</tr>
<tr>
<td>Poly. L Lysine Coated slides</td>
<td>20,026 slides</td>
</tr>
<tr>
<td>HE</td>
<td>232 slides</td>
</tr>
<tr>
<td>Special stains</td>
<td>312 slides</td>
</tr>
<tr>
<td>Unstained</td>
<td>126 slides</td>
</tr>
</tbody>
</table>

**Cardiac Nuclear Medicine**

The department is equipped with a dual head SPECT Gamma camera catering to patients referred for cardiac studies from CN centre and other departments of the hospital. Both thallium and tetrofosmin gated SPECT myocardial perfusion studies are performed. The department also performs MUGA studies for assessment of left ventricular function in CAD patients referred from the centre and from IRCH for cardiac evaluation in patients receiving chemotherapy.

Total Number of patients investigated in Nuclear Cardiology from 1 April 2008–31 March 2009.

<table>
<thead>
<tr>
<th>Type</th>
<th>Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stress Thallium</td>
<td>892</td>
</tr>
<tr>
<td>Stress Tetrofosmin</td>
<td>452</td>
</tr>
<tr>
<td>MUGA study</td>
<td>1,565</td>
</tr>
<tr>
<td>Misc</td>
<td>34</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2,943</td>
</tr>
</tbody>
</table>

**Stem Cell Facility**

Stem cell transplantations under various clinical trials: 95

- Corneal surface reconstruction:
  - Limbal stem cell transplantation: 18
  - Oral Mucosal Transplantation: 7
• Cord blood stem cell Cryopreservation: 7
• Bone Marrow stem Cryopreservation: 14

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Cardiothoracic and Vascular Surgery

• Professor A. Sampath Kumar elected as Editorial Board member of Annals of Thoracic Surgery, USA.

• Professor Balram Airan is elected as Vice President (North) for Heart failure Society of India;

• Member ,Inspection team for accreditation of Heart Transplant Programme, Sir Ganga Ram Hospital, New Delhi and Research and Referral Army Hospital, New Delhi;

• Member, Editorial Board, Annals of Paediatric Cardiology, the official publication of Paediatric Cardiac Society of India;

• honoured as Professor K.V. Naidu Orator by AP CSI.


• Dr Sachin Talwar, Assistant Professor of CTVS was awarded ‘the prestigious Evart’s A Memorial Graham fellowship’ by the American Association of Thoracic Surgery for the year 2008–2009 for training in Paediatric Cardiac Surgery.

Cardiology


Anita Saxena visiting Professor to University of Manitoba, Canada.

S.S. Kothari Member, Editorial Board of JACC Imaging and Images in Paediatric Cardiology.

Balram Bhargava awarded Fellowship of the Royal College of Physicians (FRCP), Glasgow, UK. Vasvik award for Biomedical Technology Innovation 2008.

Ambuj Roy selected as a Fellow to the ‘41st Ten day Teaching seminar in cardiovascular disease epidemiology and prevention’ organized by International Society of Cardiovascular disease epidemiology and prevention at Oxford UK (2008) amongst several International applicants.

S. Ramakrishnan awarded ‘Nanada Young Investigator award’ for best Echocardiography paper at CSI 2008, Chennai.
Cardiac Anaesthesia

Dr Usha Kiran, Professor Head, life time Achievement award bestowed upon by ‘Her Excellency’ Ms Prabha Singh Patil, Hon’ble President of India, President House; 22 September; continued. Vice President of ‘PRAN’, Parkinson Related Awareness Network; Member, reviewing of the articles of Indian Journal of Anaesthesia. Editorial Board Member for International Journal of Biosciences. Contributed a chapter ‘Healing Head and Heart’ in the book titled ‘Spirituality and Mental Health edited by Dr Awdesh Sharma published by Indian Psychiatry Society.

Dr Sandeep Chauhan, Professor elected as Associate Vice President of IACTA.

Dr Neeti Makhija, Co-author in paper ‘Echocardiography in congenital heart disease—interesting cases’, 3rd Annual Perioperative and Critical Care Transesophageal Echocardiography Workshop, Chandigarh; 1–3 February 2009. The paper was judged as the best paper presented.

Dr Poonam Malhotra, nominated as Treasurer of India. Association of Cardiac Anaesthesiologists continuing as member of the Editorial Board of Annals of Cardiac Anaesthesia. The National Journal of IACTA, nominated as Secretary of ‘The Society of Cardiac Anaesthesiology, Delhi and NCR Branch’, Translated in Hindi, Co-Authored and Co-Editor of book entitled ‘Care and Safety of OT Equipment—Our responsibility’ written and Edited the souvenir for the 1st Conference of ‘The Society of Cardiac Anaesthesiology—Delhi and NCR Branch’ written and Edited two issues (August 2008 and January 2009) of Newsletters of IACTA.

Dr Minati Choudhary, invited member in the review board of International Journal of Medical Monitors and Journal of Clinical Anaesthesia.

Dr Sambhunath Nath Das, received Nanda Young Investigation Award in National Conference of Cardiology Society of India, Chennai; December 2008. Book in Hindi ‘Care and Safety of OT equipment co-edited by all the faculty of the Department.

Cardiac Radiology

Dr Gurpreet S. Gulati

1. Visiting Faculty, Workshop on ‘Chest and cardiac imaging’, Organized by the faculty of Medicine, Kuwait University, Kuwait; 25–26 January 2009.


Dr Priya Jagia


2. Reviewer for Pediatric Radiology, Eastern Journal of Medicine, Indian Journal of Radiology and Imaging.
Blood Transfusion Services (Cardiac Neuro Centre)

Dr Rama Bhasin was assigned as an Expert by NACO to inspect Stand alone Blood banks in private sector in the states of UP and Delh; attended the NABH assessors course for Blood Bank Accreditation from 18–22 August 2008 following which She successfully passed the written examination; appointed Assessor, NABH ,Blood Bank Accreditation; invited by National AIDS Control Organization (NACO) to be a resource person during training programme on Blood Banks for Medical officers, RML Hospital; February 2009.

Dr Anjali Hazarika, was Secretary of Indian Society of Blood Transfusion and Immunohaematology, Delhi Chapter and organized several academic meets, workshops and national seminars in the field of transfusion medicine; he was Organizing Secretary of National CME on ‘Basics of transfusion medicine’ organized, AIIMS; 5 April 2008; presented a lecture on ‘Problem of Impersonation in Blood Transfusion Services’, the CME; was resource person during ‘Programme for Training in Blood Safety’ for medical officers and technicians, organized by National Aids Control Organization in RML Hospital; 11 January–23 February 2009. Gave presentation on ‘Impersonation by Blood Donors—A Threat to Blood Safety’ and ‘Relevance of Leucoreduction in Transfusion Practice’.

Staff Members

Following staff members attended National Training Programme on Blood Safety organized by NACO:

1. Ms. Chitra Sharma  Technician
2. Mr. Rahul Gautam   Technician

Stem Cell Facility

The Department of Biotechnology, Government of India approved the establishment of ‘Centre of Excellence’ in the field of Stem Cell, Stem Cell Facility, AIIMS.

FACILITY AVAILABLE

Stem Cell Facility

- Stem cell isolation
- Stem cell enumerations by flow cytometer
- Cryopreservation of stem cells

FOREIGN VISITORS

Cardiothoracic and Vascular Surgery

1. Dr Taweesak Chotivatanapong, Head, Department of Cardiovascular Surgery, Chest Disease Hospital, Bangkok visited AIIMS, New Delhi and delivered a guest lecture on ‘Ross procedure’.

2. Dr Naren Vyavahare from Clemson University visited AIIMS, New Delhi and delivered a guest lecture on ‘Anti Calcification Treatment on Tissue Valve’.
Cardiac Radiology

Dr Gurpreet S Gulati

1. Presented ‘MRI including delayed enhancement technique in the evaluation of suspected arrhythmogenic right ventricular dysplasia (ARVD)’. UKRC, Birmingham, UK; 2–4 June 2008.

2. Organizing Secretary and presented 2 talks ‘CME on essentials of cardiac imaging’, All India Institute of Medical Sciences, New Delhi; 18 October 2008.


6. Presented 4 lectures ‘Workshop on Chest and Cardiac Imaging’. Organized by the faculty of Medicine, Kuwait University, Kuwait; 25–26 January 2009.

Dr Priya Jagia


2. Organizing Secretary and gave 2 talks. CME on Essentials of Cardiac Imaging, All India Institute of Medical Sciences, New Delhi; 18 October 2008.


10.2 National Drug Dependence Treatment Centre

**Professor and Chief**
Rajat Ray

**Professors**
- B.M. Tripathi
- Raka Jain
- Meera Vaswani
- Rakesh Lal
- N. Kaw
- Sonali Jhanjee
- Atul Ambekar

**Associate Professor**
Anju Dhawan

**Assistant Professors**
Anju Dhawan

**Senior Research Officer**
H.K. Sharma (Retd. October 2008)

**Scientists**
Anita Chopra
Hem Sethi

**Medical Social Service Officer**
Brahm Prakash
Deepak Yadav
Ratnesh Kumar
Seema Yadav

**Finance and Accounts Officer**
S.P. Mahla
(Additional Charge)

**Administrative Officer**
Ajay Kumar (July 2008)

**Assistant Store Officers**
Kishan Chand
(till July 2008)
Rakesh Sharma
(July 2008 onwards)

**Medical Record Office**
N. Bisht

**Senior Pharmacist**
Parveen Kumar

**Pharmacist**
Ruby Mishra

**Secretarial Staff**
Anita Gulati
Mahinder Pal
Suman Bhatia
Meera Kaul
EDUCATION

Undergraduate

During their posting in the Department of Psychiatry, they are posted for a day in the Centre.

Postgraduate

Residents doing MD (Psychiatry) are posted for 6 months during their entire course duration.

PhD and Postgraduate teaching

- *Journal discussion—weekly
- *Seminar—weekly
- *Case Conference—weekly
- *Faculty/Staff presentation—weekly
- Seminars—weekly (NDDTC, GZB)
- CCR and CGR two in every semester

*Note: These are conjoint activity of the department of Psychiatry and the Centre.

Continuing Medical Education

Conferences, workshops, seminars, symposium, training courses organised by the Centre

- Sensitization meeting, ‘Drug abuse among adolescents’ for teachers from Delhi, Vasant Valley School, New Delhi; 8 April 2008.
- Annual Day Symposium, ‘Role of nursing and paramedical professionals in management of substance use disorder’. Funded by WHO (India), NDDTC, AIIMS; 15 April 2008
- Training by trainers’ programme on ‘Substance abuse disorder’ for doctors, Funded by WHO (India), RIMS, Imphal; 11–12 November 2008.
Faculty, Senior Residents and Research Officer and Scientists delivered lectures in the aforesaid training courses

Lectures delivered

Dr Atul Ambekar

- Delivered lectures on multiple topics, ‘Training Programme for Doctors, the District Hospital, Meerut; 28 November 2008.
- Delivered lectures on multiple topics on ‘Substance Use Treatment’, Training Programme for Medical Doctors at RIMS, Imphal; 3–4 December 2008.

Dr Sonali Jhanjee

- Delivered a talk to participants of Training Programme for Psychiatrists, Government of Punjab; 28 April–3 May 2008.

Dr Anju Dhawan

• ‘Magnitude of Adolescent Drug Abuse’ in Sensitization meeting for teachers from Delhi, Vasant Valley School, New Delhi; 8 April 2008.

• ‘Training on Assessment and Management Issues in Oral Substitution with Buprenorphine’, Workshop on Training of staff from NGOs on Oral Substitution with Buprenorphine, UNODC (ROSA) and NISD, New Delhi; 16 April 2008.


Dr Rakesh Lal


Dr Raka Jain

• ‘Role of Laboratory Services’, Annual Day, NDDTC; 15 April 2008.


• ‘Screening of body fluids’, to participants of National Workshop on ‘Development of curriculum on agonist Maintenance’. Funded by WHO (India), NDDTC, AIIMS; 11–12 November 2008.

• ‘Role of screening of body fluids’, to participants of training course ‘Agonist Maintenance’ for doctors. Funded by WHO (India), NDDTC, AIIMS; 24–28 March 2008.

Dr Rajat Ray


• ‘Drug abuse-social consequences’, Regional Training of Trainers Programme and the NACEN Campus, Faridabad; 23 October and 6 November 2008.


Seema Yadav


National Conferences/Workshops/Symposium/Seminars/Training Programmes

Dr Atul Ambekar


• Participated in the National Workshop on ‘Alcohol; Revisiting the Current Situation and Planning Ahead’, AIIMS; 14–15 October 2008.


Dr Sonali Jhanjee


• ‘Tobacco use Pattern and severity of dependence in drug dependent patients’ (Jhanjee S, Balhara Y.P), Sethi H., 61st Annual National Conference of Indian Psychiatric Society, Agra; 8–11 January 2009.

Dr Anju Dhawan

• ‘Oral substitution with buprenorphine’, CME North Zone Indian Psychiatric Society, Jammu; 27 April 2008.

• ‘Agonist maintenance treatment’, Regional Workshop on Development of a National Treatment Policy for Drug and Alcohol Use, Chandigarh Medical College; 18 October 2008.


Dr Rakesh Lal


• Participated in ‘CME on ethical and legal issues in medical practice’, AIIMS; 30 April 2008 (invited delegate).


• ‘Nurses awareness programme’, 2nd year students, Safdarjung Hospital; 5 November 2008.

Dr Raka Jain


• Regional Advocacy Workshop on ‘Tobacco control law and measures,’ Chandigarh; 16–17 January 2009.
Dr Rajat Ray


Seema Yadav


International Conferences

Dr Anju Dawn


Dr Meera Vaswani

- ‘Epigenetic and genetics of alcoholism’, International Association of Neuroscience (IAN), Cochin; December 2008 (invited speaker).
• ‘Role of alcohol metabolizing genes in alcohol induced pancreatitis’, HUGO’s Genome meeting, Hyderabad; September 2008 (invited speaker).

Dr Raka Jain
• Participated in ‘14th World Conference on Tobacco or Health’, Mumbai; 8–12 March 2009.

Dr Rajat Ray

RESEARCH

Funded projects

Ongoing


Departmental projects

Completed


Collaborative Research

Ongoing


Completed


PUBLICATIONS

Journal


**Books\Chapters in Books\Reports\Proceedings**


2. Ambekar A, Sinha Deb K. *Substance Use Disorder*. Chapter submitted to IGNOU New Delhi as a part of Course material for Post-graduate diploma in Family Counselling, 2008.


**PATIENT CARE**

**General information**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of beds</td>
<td>50</td>
</tr>
<tr>
<td>General ward beds</td>
<td>50</td>
</tr>
<tr>
<td>Private ward beds</td>
<td>Nil</td>
</tr>
<tr>
<td>OPD attendance (NDDTC, Trilokpuri Community)</td>
<td>37,471</td>
</tr>
<tr>
<td>OPD attendance (Sundar Nagri Mobile Clinic)</td>
<td>9,044</td>
</tr>
<tr>
<td>EHS patient attendance</td>
<td>1,484</td>
</tr>
<tr>
<td>Admission</td>
<td>867</td>
</tr>
<tr>
<td>Discharge</td>
<td>867</td>
</tr>
</tbody>
</table>

### OPD and specialty clinics attendance

<table>
<thead>
<tr>
<th>OPD and specialty clinics attendance</th>
<th>New cases</th>
<th>Old cases</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>General OPD</td>
<td>2,874</td>
<td>32,004</td>
<td>34,878</td>
</tr>
<tr>
<td>Specialty Clinic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tobacco use cessation clinic</td>
<td>36</td>
<td>761</td>
<td>797</td>
</tr>
<tr>
<td>Adolescent clinic</td>
<td>34</td>
<td>27</td>
<td>61</td>
</tr>
<tr>
<td>Dual diagnosis clinic</td>
<td>44</td>
<td>207</td>
<td>251</td>
</tr>
<tr>
<td>EHS (NDDTC)</td>
<td>1,484</td>
<td>1,484</td>
<td>251</td>
</tr>
</tbody>
</table>

**Total**

2,988 34,483 37,471

<table>
<thead>
<tr>
<th>Clinic</th>
<th>New cases</th>
<th>Old cases</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trilokpuri Community Clinic</td>
<td>163</td>
<td>27,499</td>
<td>27,662</td>
</tr>
<tr>
<td>Sundar Nagri Mobile Clinic</td>
<td>35</td>
<td>9,009</td>
<td>9,044</td>
</tr>
</tbody>
</table>
Laboratory investigations for patient care

a) Total number of drugs of abuse screened in urine samples 18,665

<table>
<thead>
<tr>
<th>Drug</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morphine</td>
<td>2,354</td>
</tr>
<tr>
<td>Codeine</td>
<td>2,160</td>
</tr>
<tr>
<td>Buprenorphine</td>
<td>2,160</td>
</tr>
<tr>
<td>Dextropropoxyphene</td>
<td>2,160</td>
</tr>
<tr>
<td>Pentazocine</td>
<td>607</td>
</tr>
<tr>
<td>Naltrexone</td>
<td>115</td>
</tr>
<tr>
<td>Naloxone</td>
<td>438</td>
</tr>
<tr>
<td>Pheniramine (Avil)</td>
<td>1,611</td>
</tr>
<tr>
<td>Nitrazepam</td>
<td>2,217</td>
</tr>
<tr>
<td>Diazepam</td>
<td>2,217</td>
</tr>
<tr>
<td>Chlordiazepoxide</td>
<td>2,217</td>
</tr>
<tr>
<td>Canabinoids</td>
<td>109</td>
</tr>
<tr>
<td>Cotinine</td>
<td>300</td>
</tr>
</tbody>
</table>

b) Biochemical investigations 17,500

c) Hematological investigations 5,700
d) HIV screening 323

AWARDS, HONOURS AND SIGNIFICANT EVENTS

**Dr Sonali Jhanjee** acted as a resource person for Sensitization Workshop on ‘Drug abuse among adolescents’, Vasant Valley School, New Delhi, 8 April 2008; Resource Person for Sensitization meeting on Oral Substitution Treatment (OST) in Prison, Hotel Ashoka, New Delhi, 9–10 July 2008; Resource Person for Training on Oral Substitution Treatment (OST) in the Prison setting on at Tihar prisons and community clinic, Trilokpuri, New Delhi, 15–16 September 2008; nominated by Ministry of Health and FW to participate in Regional Advocacy Workshop on Tobacco Control Law and measures, Chandigarh, 16–17 January 2009 hosted by PGIMER, Chandigarh in collaboration with MOH&FW, GoI with the broad objectives of preparation of state wise enforcement action plan for effective implementation of Tobacco control laws and sensitization of stakeholders; attended Massive Awareness campaign (Health Mela) against Tobacco, Female Foeticide, Alcohol, and Drugs and Junk Food, Amritsar, 21 February 2009, Ministry of Health and Family Welfare (MOHand FW).

**Dr Anju Dhawan** prepared a ‘Draft report on outcome of treatment in Government De-Addiction Centres’ for submission to the parliamentary committee. Also did technical editing of the school modules on life skills for prevention of drug abuse as part of project G86, developed by UNODC (ROSA); coordinated WHO Biennium activities on Substance Use Disorder; prepared project proposal
Dr Meera Vaswani was awarded Travel grants from International Society of Biological research on Alcoholism (ISBRA) for delivering symposia lecture in Washington DC, USA; invited to Chair Scientific Sessions in APA meeting in Washington DC; nominated for Membership on the BOARD OF DIRECTORS in recognition of contributions to advancement of Science by virtue of the Authority of the University and Nomination of Scientific Council of Skibbereen University, United Kingdom (UK); participated in a Programme of National Importance on ‘National Convention on Testing and Evaluation’ from National Testing Service-India, a Central Scheme of Ministry of Human Resource Development (MHRD).

Dr Raka Jain was recipient of NIDA-ISAM travel award fellowship to attend X Annual Scientific Meeting of ISAM, Cape Town, South Africa, 28–30 November 2008; chaired the symposium on ‘Substance use disorder’ of XVI National Conference of the Indian Association for Social Psychiatry, AIIMS, New Delhi, 28–30 November 2008; chaired the Poster Session 5 of the International Conference of Translation Pharmacology and 41st Annual Conference of Indian Pharmacological Society, AIIMS, New Delhi, 18–20 December 2008; nominated by MoH and FW, GoI to participate in ‘14th World Conference on Tobacco or Health’, Mumbai, 8–12 March 2009 and also honoured to chair the Session entitled ‘Health Effects, Screening and Biomarkers’; nominated by Ministry of Health and FW to participate in Regional Advocacy Workshop on Tobacco Control Law and measures at Chandigarh, hosted by PGIMER, Chandigarh in collaboration with Ministry Of Health and Family Welfare, GoI with the broad objectives of preparation of state wise enforcement action plan for effective implementation of Tobacco control laws and sensitization of stakeholders, 16–17 January 2009.

Dr Rakesh Lal was appointed as coordinator of ‘National Treatment Policy for Drug and Alcohol Abuse’ for various institutions, Central Institute of Psychiatry, Ranchi, 28 March 2008; Department of Psychiatry, Medical College, Guwahati; 25–26 April 2008; Department of Psychiatry, KEM hospital, Mumbai, 30 July 2008; Department of Psychiatry, Government Medical College, Chandigarh, 19 October 2008; appointed as expert for selection of Professor and HoD, Psychiatry, BPKIHS, Dharan; 23 October 2008; appointed as MD (Psychiatry) examiner, AIIMS, 10–11 December 2008 and PG examiner for Central Institute of Psychiatry, Ranchi, 28–29 April 2008; Organizing committee member IASP, AIIMS, New Delhi, 28–30 November 2008.

Dr Rajat Ray was appointed as member Expert Advisory Panel to Punjab State Planning Board; 21 May 2008; Member, Expert Advisory Body for the 61st session of WHO Regional Committee, South East Asia; July 2008; Became a member of the Expert Committee for selection of SRA-Scientist-II, CSIR; July 2008; Became a member of the Committee constituted by the Ministry of Statistics and Programme Implementation, GoI to carry out a National Survey on Drug Abuse, July 2008; participated and chaired a Theme Symposium on ‘Social Psychiatry and Clinical Practice’, 16th National Conference of Indian Association for Social Psychiatry, New Delhi, 28–30 November 2008.

The centre has initiated and carried out the various activities as part of WHO Biennium Activities (2007–2008) as part of National Drug Abuse Control Programme (Rajat Ray, BM Tripathi, Rakesh
Lal, Anju Dhawan, Atul Ambekar, Deepak Yadav). Funded by WHO (India) for 2 years (2008–2009). Funds: Rs 27.5 lakh.

- Development of a Manual; Minimum Standards of Care for Drug Users. Funds: Rs 1.3 lakh.
- Symposium on Alcohol—Revisiting the current situation and planning ahead. Funds: Rs 3.7 lakh.
- Training Programme on ‘Agonist Maintenance for Substance Use Disorder’ at AIIMS and RIMS. Funds: Rs 4.12 lakh.
- Management of Substance Use Disorder in Primary Care Setting- A Demonstration Project. Funds: Rs 5 lakh.
- Assessment of Substance Abuse among Out of School Adolescents. Funds: Rs 8 lacs.
- Drug Abuse Monitoring System-District Based Activity.
- Training of Trainers on ‘Substance Use Disorder’ at RIMS and Srinagar Medical College. Funds: Rs 2.01 lakh.

The faculty of the centre participated in Training of Medical Doctors (Assam Government) on Substance use and HIV, NDDTC, AIIMS and the District Administration, Moregaon, Assam; 22–25 April 2008. (Dr A. Ambekar, Dr R. Lal)

1. The faculty of the centre participated in the Workshop on the launch of the project, ‘Managing Alcohol and Drug Dependence in Primary Care Setting,’ Meerut; 2 August 2008. Dr R. Ray, Dr R. Lal, Dr A. Dhawan.


3. The faculty visited several sites (visits to De-addiction centres in various states; Manipur, Mizoram and Nagaland) to access outcome of patients with Drug Dependent Disorder following their treatment. A report to be forwarded to the Parliamentary Committee. Dr A. Ambekar.


5. Study Tour, visit by delegation from Maldives on OST, project supported by UNODC-ROSA; 15 July 2008.

6. Study Tour, visit by delegation from Pakistan on OST, project supported by UNODC-ROSA; 22 July 2008.

7. Three weeks project training in ‘Drug Abuse Testing’ was imparted to one 2nd year student of B-Tech Biotechnology.

10.3 Centre for Dental Education & Research

Chief
Naseem Shah

Professor
O.P. Kharbanda

Additional Professor
Ritu Duggal

Associate Professor
Veena Jain

Ajoy Roychoudhury

Assistant Professor
Veena Jain

Ongkila Bhutia

Dr. Vijay Prakash Mathur

Dr. Ajay Logani

EDUCATION

Undergraduate

The centre conducted the teaching programme of MB,BS undergraduate students during their clinical posting.

Postgraduate

At present the centre is conducting postgraduate programme in Orthodontics, Conservative Dentistry and Endodontics, Prosthodontics and Oral and Maxillofacial Surgery.

Short-term training

The centre provided short-term (6 months) training to 19 graduate and postgraduate candidates from various Dental Institutions of the county.

Four Dental Surgeons from North Korea got training in the Centre as WHO fellows for 3 months.

Continuing Medical Education

Conferences, seminars, workshops

• ‘Comprehensive oral rehabilitation strategies – A Perio-Endo-Prosth (PEP) talk!’ in collaboration with Sri Govind Tricentenary Dental College and University of Detroit Mercy School of Dentistry Michigan, USA, 22 March 2009

• Update in Orthodontics ‘Six Thinking Hats Course’, Department of Orthodontics in collaboration with Orthodontic Study Group of Delhi, 14–15 September 2008.

• ‘Full Mouth Rehabilitation: Enigma Simplified’, 11th national Postgraduate Student Convention of Indian Prosthodontic Society, New Delhi, 26 February –1 March 2009.
Lectures delivered

Professor Naseem Shah

- ‘Regenerative endodontics: Inducing apexogenesis/apexification in non-vital, infected immature teeth’, Stem Cell Symposium, Department of Paediatric Surgery, AIIMS; August 2008.

Professor Kharbanda

- ‘Cleft Maxilla’ during mid year convention, Indian Orthodontic Society, Bangalore; 2 August 2008.
- ‘Mid Face Deficiency and Cleft Deformities’, organized by Kalka Dental College in collaboration with Delhi and NCR Chapter of Association of Oral and Maxillofacial Surgeons of India and Orthodontic Study Group of Delhi, Kalka Dental College, Meerut 30 September 2008.
- ‘Anchorage control with microplates: When it is justified? Can we do without it?’, 13th Postgraduate Students’ Convention, Indian Orthodontic Society, Davangere, Karnataka; 1 March 2009.

Dr Ajoy Roychoudhury

- ‘Mandibular lateral body and angular fractures’, AO principles course on Craniomaxillofacial, New Delhi; May 2008.
Dr Vijay Mathur

- ‘Dentistry against tobacco: Awareness, education and implementation’, 14th World Conference on Tobacco, Mumbai, 8 March 2009.

Dr Ajay Logani

- ‘Comprehensive management of the traumatized tooth—an endodontic perspective’, symposium on comprehensive oral rehabilitation strategies, CDER, AIIMS; 22 March 2009.

International Conferences

Paper presented

Professor Naseem Shah


Dr Ritu Duggal


Dr Ajoy Roychoudhury

- ‘Biomechanics, classification and diagnosis of midface fractures and condylar fractures’, AO principles course on cranioMaxillofacial (CMF), Davos, Switzerland; December 2008.

Dr Vijay Mathur


Dr Ajay Logani

Paper presented by residents under faculty’s guidance

Sarita B.


Singh A.

- ‘Ex-vivo study evaluating and comparing the retention of chair-side fabricated fiber reinforced composite (FRC) posts to that of prefabricated metal and FRC posts before and after cyclic loading’, 9th National Federation Operative Dentistry of India and Indian Endodontic Society Postgraduate Students’ Convention, Goa; May 2008.

Gupta A.


Singhla M.


Sinha N.


Dharmani U.


Vilas Samrit

- Was awarded Best Poster titled ‘Does bone density affect the success of temporary anchorage device?’, 13th Indian Orthodontic Society Postgraduate Students’ Convention, Davangere, Karnataka; 1 March 2009.

Poonam Chaudhary

Gupta Anand


Sikka S.


Nanda A.


Singhal N


Arora N.


Kumar P.


Kumar G.


Purthi G.

**RESEARCH**

**Funded Projects**

**Completed**


**Ongoing**


2. A new endodontic treatment protocol of inducing natural apical seal (Bio-seal) and healing for pulp and periapically involved teeth. Naseem Shah. Self Study (December 2008).


**Departmental Projects**

1. Effect of different design preparation on flexural and fracture strength of fiber reinforced composite fixed partial dentures: an *in-vitro* study.

2. Effectiveness of home bleaching agents on the color change and surface characteristics of direct composite veneering materials and discoloration. SEM Study.
3. Preliminary *ex-vivo* and an animal model evaluation of *ocimum sanctum* (holy basil) essential oil extract for its proposed use as an intracanal medicament.

4. A new endodontic treatment protocol of inducing natural apical seal (Bio-seal) and healing for pulp and periapically involved teeth.

5. 3D finite element study of stress distribution and displacement of various craniofacial structures following application of transverse force in cleft lip and palate patients.

6. A clinical and cephalometric study of temporary anchorage device (TAD) supported anchorage in the management of maximum discrepancy extraction cases.

7. A comparative evaluation of ultra sonographic dimension of masseter muscle with electromyographic activity prior and subsequent to twin blocks therapy.

8. Levels of Interleukin-1â in gingival crevicular fluid after active orthodontic treatment.


11. Lamotrigine vs pregablin in the management of trigeminal neuralgia refractory to carbamazepine: An open label, randomized active-comparator controlled crossover trial.

12. Effect of distraction osteogenesis on blood oxygen saturation level in retrognathic patients.

13. Comparison of single tube vs two tube technique of submental intubation.

14. To evaluate the facial nerve morbity for the management of condylar neck and subcondylar fractures through retromandibular transparotid approach: A longitudinal study.


16. An *in-vitro* pilot study to evaluate the effect of incorporation of sapphire (ceramic) whiskers and silver fillers on the thermal and mechanical properties of denture base resins.


18. Speech analysis in maxillectomy patients with full bulb and reduce bulb height of hollow bulb obturator.

**Collaborative Projects**

1. Ocular surface reconstruction with alternative autografts of non-occular surface origin. Funded by DST (with RP Centre).
PUBLICATION

Journals


Chapter in Books


AWARDS AND HONOURS

Professor Kharbanda took over as President of the Indian Orthodontic Society on 21 December 2008; President of the Indian Society for Cleft Lip Palate and Craniofacial Anomalies in February 2009; Member, Board of Studies in Banaras Hindu University, Varanasi and Aligarh Muslim University; Member, International Editorial Board, American Journal of Orthodontics and Dentofacial Orthopedics, British Journal of Orthodontics and Australian Orthodontic Journal; Co-editor, Journal of Clinical Paediatric Dentistry, and member, board of Indian Orthodontic Society Journal and Journal of Pierre Fauchard Academy.

Vijay Mathur received travel grant from AIIMS for attending Federation Dental International (FDI) World Dental Congress ,Stockholm, Sweden.
SIGNIFICANT EVENTS

Professor Naseem Shah was a member of UGC Experts Committee for assessing XI Plan (2007–12) requirement and Review of X Plan; As a UGC Expert she visited Dr Ram Manohar Lohia Avadh University, Faizabad (UP) 24–25 October 2008 and University College of Medical Sciences (UCMS) 9–10 August 2008; Member, Board of Postgraduate Studies of Pt B.D. Sharma University of Health Sciences, Rohtak; member, Advisory Board of MGM University of Health Sciences, Navi Mumbai; nominated by the Ministry of Health and Family Welfare, (Government of India) to participate in the 14th World Congress on ‘Tobacco or Health’ Mumbai 8–12 March 2009; chaired a scientific session, 23rd Federation Operative Dentistry of India and 16th Indian Endodontic Society Conference, Chandigarh, 21–23 November 2008; Guest of Honour, 20th Annual Dental Conference Faridabad, 7 December 2008, Indian Dental Association, Faridabad Branch.

Professor Kharbanda has been invited as a Visiting Professor at the Department of Orthodontics, Dental School, University of Connecticut, Connecticut USA. He was invited by ICMR as subject expert to review the research projects in the field of Oral Health and Advisory Committee to the research grant to the postgraduates. He served as an expert in the field of Biomedical Engineering in the Department of Biotechnology. He also served as an expert to the Selection Committee for the posts of faculty to Punjab University, Chandigarh and Aligarh Muslim University, Aligarh, University of Delhi, Delhi, Maulana Azad Medical College, New Delhi and HRD Ministry for the selection of Commonwealth Fellowship. He was invited by the DD News to participate in ‘Oral Hygiene and Dental Health’ on 25 January 2009 and again invited to participate in ‘Total Health’ at DD News on 8 February 2009. He advised Dental Council of India on framing Screening Test Regulation, 2008 u/s 20 of the Dentists Act, 1948 for the purpose of recognition of foreign degrees.

Dr Ritu Duggal was invited as an expert in a meeting of Global Child Dental Health Task Force, New Delhi, 11 April 2008; appointed by the Dental Council Inspector for approval of M.D.S courses at various Dental colleges in India.

Dr Ajoy roychoudhury hosted a Phone-in programme on dental health in Lok Sabha TV.

Dr Vijay P. Mathur was appointed by the Ministry of Health and Family Welfare, Government of India to conduct inspection of the facilities available as per BDS/MDS course regulations 2007 and for starting BDS/MDS courses in various Dental Colleges. He was a member in a meeting of Global Child Dental Health Task Force – India Section held at Maulana Azad Institute of Dental Sciences, New Delhi, 11 April 2008. He was a panelist in a day-long forum ‘addressing the Global Epidemic of Childhood Caries’ at Stockholm, Sweden on 24 September 2008. He was a rapporteur for Pedodontics Update 2008: Continuing Dental Education Programme, held at ITS Dental College and Hospital, Murad Nagar, 9 August 2008; chaired a free paper session at 62nd Indian Dental Conference, Nagpur, January 2009; invited as a penalist in Commonwealth Asia Symposium, Migration of Health Workers, Faridabad, 17 November 2008.

VISITING SCIENTISTS

Dr Ravi Nanda, Head Craniofacial Sciences, Dental School University of Connecticut CT USA, 14–15 September 2008.

Professor Leon Dogon, Professor of Restorative Dentistry and Director of Dental Health Education, Harvard School of Dental Medicine visited the Centre, 27 March 2009.
### Professor and Chief
G.K. Rath (Radiation Oncology)

### Professors
- P.K. Julka (Radiation Oncology)
- N.K. Shukla (Surgical Oncology)
- Subhash Chander (Radiation Oncology)
- Rajive Kumar (Laboratory Oncology)
- Vinod Raina (Medical Oncology)
- Lalit Kumar (Medical Oncology)
- B.K. Mohanti (Medical Oncology)
- V inod Raina (Surgical Oncology)
- G. K. Rath (Radiation Oncology)
- P. K. Julka (Radiation Oncology)
- S. V. S. Deo (Surgical Oncology)
- Sanjay Thulkar (Radiodiagnosis)
- Atul Sharma (Medical Oncology)
- Sushma Bhatnagar (Anaesthesiology)
- Sushmita Pathy (Radiation Oncology)
- Lalit Kumar (Medical Oncology)
- Sameer Bakhshi (Medical Oncology)
- D. N. Sharma (Radiation Oncology)
- Seema Mishra (Anaesthesiology)
- B.K. Mohanti (Medical Oncology)
- Pratik Kumar (Medical Physics)
- Suman Bhaskar (Radiation Oncology)
- Ritu Gupta (Laboratory Oncology)
- Sameer Bakhshi (Radiation Oncology)
- Suman Bhaskar (Radiation Oncology)
- D. N. Sharma (Radiation Oncology)

### Additional Professor
Sidhartha Satpathy (Hospital Administration)

### Associate Professors
- S.V.S. Deo (Surgical Oncology)
- Atul Sharma (Medical Oncology)
- Sushma Bhatnagar (Anaesthesiology)
- Sameer Bakhshi (Medical Oncology)

### Assistant Professors
- Pratik Kumar (Medical Physics)
- Seema Mishra (Anaesthesiology)
- Suman Bhaskar (Radiation Oncology)
- D. N. Sharma (Radiation Oncology)
- Sushmita Pathy (Radiation Oncology)
- Ritu Gupta (Laboratory Oncology)

### EDUCATION

#### Anaesthesiology

The following activities are conducted:
- IRCH Seminar - Every Monday and Thursday at 8.15 a.m.
- Unit Seminar - Every Monday at 2.30 p.m.
- Unit Journal Club - Every Saturday at 10:00 a.m.
- Unit Radio Conference - Every Saturday at 9:00 a.m.

#### Laboratory Oncology

- Department provides training to students of MD Pathology and DM Medical Oncology

#### Medical Oncology

##### Undergraduate
- The department participated in the undergraduate teaching programme
Postgraduate

DM Programme

• Medical Oncology is running a DM programme under which there are 13 regular students

PhD training

• Five students underwent PhD training
• Others
• Dr Kunjahari Medhi, Senior Research Associate (Pool Officer), CSIR
• 10 Research Officers on various projects

Short-term and Long-term training

• Dr Kapil Garg, Assistant Professor, SMS Medical College, Jaipur, underwent two weeks training in Paediatric Medical Oncology; February 1–15 2009

Medical Physics Unit

Undergraduate and Postgraduate training

• The Medical Physics unit has actively participated in imparting education in the field of radiation protection, radiation physics and quality in radiological imaging to the students doing MD Radiology, MBBS, BSc (Hons) Nursing, BSc (Hons) Radiography. In addition, the unit has 2 PhD students undergoing training

Radiation Oncology

Under Graduate and Post graduate training

• The department is involved in undergraduate, postgraduate, BSc Nursing and PhD teaching programmes.

Short-term training

• Dr Ashutosh Mukherji, Senior Resident, Department of Radiotherapy, Maulana Azad Medical College and Lok Nayak Hospital
• Dr Sunil Kumar, Dr Shagun Misra, SGPGI, Lucknow
• Dr Anita Malik, Resident, Department of Radiotherapy, SG Government Cancer Hospital, MRH Hospital, Indore.
• Dr Rakesh Mahawar, Resident, Department of Radiotherapy, Government Cancer Hospital, MGM Medical College, Indore.
• Dr Vikash Kumar, Senior Resident, Department of Radiotherapy, Lok Nayak Hospital, New Delhi.
• Monica and Lokesh Yadav, two medical undergraduate students of AIIMS received observership exposure to clinical audit in radiotherapy.
Surgical Oncology

Undergraduate
The faculty were involved in undergraduate teaching by giving didactic lectures and participating in and moderating seminars on topics in oncology.

Postgraduate
The faculty were involved in teaching and training of 12 surgical oncology senior residents, DM medical oncology residents, MD radiotherapy junior residents by giving didactic lectures, moderating seminars, journal clubs, etc. and clinical teaching during ward rounds and in special cancer clinics of IRCH. Dr Shukla acted as Co-guide and Co-supervisors in DM medical oncology thesis, MD radiation oncology thesis and PhD students from different Department of IRCH and AIIMS.

Paraclinical
The faculty were involved in the teaching of the BSc nursing students.

Short-term training
Dr N. Panda, Surgical specialist from Government Medical College, Kolkatta under went short-term training in Surgical Oncology for a period of three month; 1 December 2008 – 28 February 2009.

Delhi Cancer Registry
The registry has an active teaching and training programme being imparted to the Medical Social Service Officers (MSSO’s) and other staff of the cancer Registry by Dr B.B. Tyagi and Mr N. Manoharan regarding the working of cancer registry, technical guidance in interviewing the cancer patients from various departments viz. radiotherapy, pathology and medical records of all collaborating hospitals.

Field staff were also trained in cancer registration methodology, diagnostic and treatment methods available for cancer, cancer epidemiology and coding of cancer patients data as per International Classification of Diseases for Oncology (ICD.O) third edition and International Classification of Diseases (ICD.10) tenth revision.

Continuing Medical Education (CME)

Anesthesiology
- Organized 16th International Conference on Indian association of Palliative Care; 13–15 February 2009.
- Organized 8th Foundation Course on ‘Palliative care’, for Medical Practitioners and Nursing Staff treating cancer patients in and around Delhi; 15–16 January 2009.
- Nodal centre for IAPC certificate course in Palliative Care, Dr B.R.A. IRCH.

Medical Physics
The faculty and staff of Medical Physics Unit delivered guest lectures for imaging personnel in workshops and CME organized for radiologists, radiographers and Physicists.
**Radiodiagnosis**


**Radiotherapy**

- Department organized following CME programmes:
- Department of Radiation Oncology, 1st SAARC and XI National conference of Association of Radiation Therapy Technologists of India (AARTICON), AIIMS, New Delhi, India; 5–7 October 2007.

**Surgical Oncology**

Department took part in following CME programmes

**Dr N.K. Shukla**

- Attended and chaired a session, Indian Breast Cancer Initiative Congress 08, Artemis Health Institute, Gurgoan; 12 April 2008.
- Attended ATLAS collaborators meeting, Clinical Trial Service Unit, University of Oxford, UK; 26–27 April.
- participated in the XXV National Continuing Medical Education Programme, Maulana Azad Medical College, New Delhi; Participated in a Panel Discussion on Locally Advanced Breast Cancer; 22 September 2008.

**National and International Conference**

**Anaesthesiology**

**Dr Sushma Bhatnagar**

- ‘Care of elderly’, IAPC certificate course, Jaipur; 6–7 December 2008.
- ‘Cancer pain management’, IAPC certificate course, Dr B.R.A. IRCH, AIIMS; 13 November 2008

**Dr Seema Mishra**

• ‘Interventional pain management: Need an hour’, Cadaveric Workshop, 16th International Conference on Indian Association of Palliative Care, AIIMS, Unit of Anesthesiologist, Dr B.R.A. IRCH, AIIMS; 12 February 2009.

• ‘Experience of paediatric cancer pain management’, IRCH, AIIMS 16th International Conference on Indian association of Palliative Care, AIIMS; 13–15 February 2009, Unit of Anaesthesiologist, Dr BRA, IRCH, AIIMS.

• Attended National Workshop of Faculty Group, Calicut; 31 October–1 November 2008.


Dr Sushma Bhtanagar


• ‘Total freedom from cancer pain at tertiary care centre in India: A retrospective analysis of 3238 patients’, 27th annual Scientific Meeting of the American Pain society, Tampa, FL, USA; 8–10 May 2008.


• ‘Prevalence and management of neuropathic pain in cancer patients at tertiary care cancer patients: A retrospective analysis’, 5th World Conference, World Pain Institute, New York, USA; 13–16 March 2009.

Dr Deepak Gupta


Dr Gaurav N. Goyal


Delhi Cancer Registry

Training Programme/Meetings Attended

• Dr B.B. Tyagi and Mr N. Manoharan attended UICC ICRETT Training Workshop on ‘Cancer Registration, Epidemiology and Analysis of Time Trends’, Tata Memorial Hospital, Mumbai; 22–27 September 2008.
• Dr B.B. Tyagi and Mr. N. Manoharan attended the XXIV Pre-Annual Review Meeting Workshop and XXIV Annual Review Meeting of National Cancer Registry Programme, Cancer Hospital, Agartala, Tripura; 14–17 October 2008.

**Laboratory Oncology**

**Dr Rajive Kumar**

• Invited to chair oral presentation session, XII International Myeloma Workshop Myeloma Workshop, Washington; 26 February–1 March 2009.

**Dr Ritu Gupta**

• Invited talk on ‘Flow cytometry for red blood cell disorders’, XV National CME, Haematology and Haemato-Oncology, Mumbai Hospital, Mumbai, India; January 2009.

**Medical Oncology**

**Professor V. Raina**

• Investigators’ Meeting for NU07B1 (Weekly Paclitaxel + Sorafenib) Trial, Mumbai; August 2008.
• Steering Committee Meeting of unrelated donor registry for India, Udaipur; August 2008.
• Investigators’ Meeting, Goa; July 2008.
• Investigators Meeting, Barcelona, Spain; 23–24 June 2008.

**Professor Lalit Kumar**

• Allogeneic BM transplantation, SMS Medical College, Jaipur; 6 April 2008.
• How to write a good proposal for research grant, ICMR-Institute of Cytology and Preventive Oncology; 30 July 2008.
• ‘Basis of chemotherapy in Gynae malignancy AOGIN-India’, Department of Obstetric and Gynaecology, AIIMS; 27 August 2008.
• Chairperson: ‘Multiple myeloma: Management in Indian setting’, 49th Annual Conference of Indian Society of Hematology and Transfusion Medicine, ISHTM, JIPMER, Pondicherry; 19 September 2008.
• ‘BM failure syndromes: Role of haemopoietic stem cell transplantation’, Annual meeting of Indian Association of Clinical Medicine, Hyderabad; 21 September 2008.

• ‘Acute complications in Stem cell transplantation’, Army Hospital (R&R) Delhi Cantt., New Delhi; 05 October 2008.

• Workshop: ‘How to conduct PHOCON-2008, a randomized Clinical Trial’, Sir Ganga Ram Hospital, New Delhi; 07 November 2008.

• ‘Recent advances in Dharamshila Cancer Hospital Chemotherapeutic management of Advance stage ovarian cancer’, Noida, Delhi; 23 November 2008.


• ‘Prognostic and predictive factors in multiple myeloma’, CSM Medical University; 16 December 2008.

• Meet the Professor Session Topic: Multiple Myloma, APICON-09, Noida; 29 January 2009.


• Experience at AIIMS Indian Society of Medical and Oncology and Indian Society of Oncology, Chennai.

• Chairperson: During the session on Screening the Ovary and Endometrium 24th Annual AIICC Conference-09, Maulana Azad Medical College, New Delhi; 28 February 2009.

Dr Atul Sharma

• Participated as faculty during Best of ASCO 2008, Delhi; 13 July 2008.

• Conducted panel discussion on ‘Chemotherapy in head and neck cancer’. During Annual Meeting of Federation of Head and Neck Oncology, Cuttack; 5 December 2008.

• Participated in panel discussion during Asia Pacific Lung Cancer Conference, Hyderabad; 6–7 December 2008.

• ‘Ovarian metastases: Treatment and outcome’, 3rd Ovarian Cancer Symposium, AIIMS; 28 March 2009.

• Conducted the panel discussion on ‘Advanced esophageal cancer’, 8th Annual International Conference of RGCON; 29 March 2009.

Dr Sameer Bakhshi

• Faculty for National Training Project: Practical Pediatric Oncology, PHO Chapter of IAP at RGCI, New Delhi; 10–11 May 2008.
• ‘Paediatric acute lymphoblastic leukemia in India’, IAP-BPS and CHAFB Paediatric Oncology Update 2008, Command Air Force Hospital, Bangalore; 14 September 2008.

• Chairperson, ‘Paediatric Acute Lymphoblastic Leukemia’ Annual Conference of Indian Society of Haematology and Transfusion Medicine, JIPMER, Pondicherry; 19–21 September 2008.

• Presented a poster on ‘Outpatient consolidation therapy of paediatric acute myeloid leukemia: A paradigm shift’ at Annual Conference of International Society of Paediatric Oncology (SIOP), Berlin, Germany; 2–6 October 2008.


• ‘Paediatric soft tissue sarcomas’, PHOCON, New Delhi; 8–9 November 2008.


• ‘Early complications of chemotherapy in paediatric cancer patient’, Evidence-based Medicine, Tata Memorial Hospital, Mumbai; 28 February 2009.

• Faculty for ‘Meet the Expert Session on Wilms tumor and Nasopharyngeal Carcinoma’, 8th INCTR Annual Meeting, Antalya, Turkey; 22–24 March 2009.

• Chaired, ‘Ovarian germ cell tumors’ and was a panelist in the same in Symposium on Ovarian Cancers, AIIMS, New Delhi; 27–28 March 2009.

**Medical Physics**

**Dr Pratik Kumar**


Radiation Oncology

Dr G.K. Rath

- Panelist in the panel discussion on ‘Management of locally advanced oral cancer’, the International Conference on Head and Neck Oncology (MCSCON 2008), Mahavir Cancer Sansthan, Patna; 5–6 April 2008.

- Chaired the Keynote Address by Professor K.A. Dinshaw, Director TMH,, Indian Breast Cancer Initiative, Artemis, Gurgaon; 11 April 2008.

- ‘Success in cancer treatment is dependent on sufficient knowledge, training, and acquired clinical experience’, Inauguration Ceremony of the Installation of Bhabatron II tele-cobalt radiotherapy machine, Agartala; 21 April 2008.

- Attended the project review and steering committee meeting of the Ministry of communication and information technology, Department of Information Technology, Government of India, to review the progress of ‘Development of linacs under Jai Vigyan Project’, SAMEER, Kharghar, Navi Mumbai; 23 April 2008.


- Chief Guest at the inaugural function of the Workshop on ‘High dose brachytherapy’, The Indian Brachytherapy Society, Hyderabad; 3 May 2008.


- ‘IGRT in ca prostate’ Indian College of Radiation Oncology, of Association of Radiation Oncologists of India, Gokula Curie Cancer Centre, Bangalore; 7–8 June 2008.


- Attended the RCC Directors meeting for implementation of National Cancer Control Programme in 11th five year plan, Thiruvananthapuram; 29–30 September 2008.

- Chaired a panel discussion on ‘Making cancer a notifiable disease in the state of Tripura’, the XXIV Annual review meeting of National Cancer Registry Programme of ICMR, Agartala; 16–17 October 2008.


• ‘Planning and designing of Radiotherapy facility: Special consideration from a clinical perspective’, the South Asian conference and CME on synergy in health care (SASHON-2008), AIIMS, New Delhi; 3–6 November 2008.


• ‘Recent advances in radiation oncology’, World Health Organization-Expert Committee workshop on Patterns of care and survival and studies on breast cancer, cancer cervix and head and neck cancers at the National Institute of Advanced Studies (NIAS), Indian Institute of Science campus, Bangalore; 1–2 December 2008.

• ‘National cancer control programme’, 8th national conference of foundation for head and neck oncology (FHNO), Cuttack; 7 December 2008.

• 3rd Asia Pacific lung cancer conference (APLCC), Hyderabad; 5–7 December 2008.

• ‘Principles of Image guided radiation therapy and its clinical relevance including the role of nuclear imaging’ Recent advances in molecular imaging and radiation oncology (RAMIRO) of the Indian Nuclear Society, TMH, Mumbai; 16 January 2009.

• ‘PET based treatment planning in radiotherapy-a new standard’ Conference on Recent advances in molecular imaging and radiation oncology (RAMIRO) of the Indian Nuclear Society at Bangalore; 18–19 January 2009.

• ‘Recent advances in oncology’, the meeting of the Association of Radiation Oncologists of India, Gujrat and Rajasthan Chapter, SMS Medical College, Jaipur; 25 January 2009.


• ‘Indian experience in newer RT techniques in breast cancer’ in a symposium on breast cancer during the Biennial national conference of Indian society of medical and paediatric oncology and Indian society of Oncology, Chennai; 14 February 2009.

• Conducted telemedicine sessions with Dr B. Borooah Cancer centre, Guwahati, AHRCC, Cuttack and RCC, Srinagar.

**Dr P.K. Julka**

• Breast Cancer Meeting, Korea; 19 April 2008.
• Triple Negative Breast Cancer, New Delhi; 27 April 2008.
• Moderator on UFT in Metastatic Colorectal Cancer; 30 April 2008.
• Metastatic Renal Cell Carcinoma, Nepal Oncology Society, Katmandu; 3 May 2008.
• American Society of Clinical Oncology (ASCO) Meeting, Chicago; 30 May–3 June 2008.
• Breast Cancer Video Conference with MD, Anderson University; 21 June 2008.
• ‘Chemoradiotherapy in Advanced NSCLC—recent advances’; 22 June 2008.
• Moderator in Panel Discussion on Advanced Breast Cancer, New Delhi; 23 August 2008.
• Lilly Oncology Meeting at Gurgaon, Haryana; 27 August 2008.
• MCH Gynae-Oncology Meeting at Lady Hardinge Medical College, New Delhi; 28 August 2008.
• Malaysian Oncology Society Meeting, Malaysia; 17–19 October 2008.
• Guest Lecture on EGFR: A Target in Oncology, New Delhi; 18 October 2008.
• Participated in Meet the Professor Session on Breast Cancer, New Delhi; 18 October 2008.
• Guest Lecture on ‘Multimodality management of brain tumours’, Kita Kama, Malaysia; 19 October 2008.
• ‘Recent advances in glioblastoma multiforme management, VIMHANS, New Delhi; 26 October 2008.
• ‘Targeted therapy in head and neck cancers’; 7 December 2008.
• District Cancer Control Programme, District Cancer Centre, New Delhi; 10 December 2008.
• Neurooncology Society Meeting, New Delhi; 11 December 2008.
• Management of Febrile Neutropenia at East Delhi Physician Association Meeting; 14 December 2008.

Dr B.K. Mohanti

• ‘Introduction to Palliative Care’ Indian Association of Palliative Care (IAPC) Foundation course, AIIMS, New Delhi; 14 June 2008.
• Two lectures ‘Management of other Physical symptoms’ and ‘End-of-life care Issues’ at Indian Association of Palliative Care (IAPC) course, PGIMER, Chandigarh; 29 June 2008.

• ‘Palliative Radiotherapy in Childhood Cancers’ at Annual Conference of Paediatric Haematology Oncology (PHOCON 2008), Sir Gangaram Hospital, New Delhi; 6 November 2008.


• ‘Advances in Radiation Oncology’ Foundation Day of Dr BRA IRCH, AIIMS; 23 November 2008.

• Principal Investigator, National Cancer Registry Programme, ‘Patterns of Care and Survival in Cancer of Head and Neck, Breast, Cervix’, Bangalore; 1–2 December 2008.

• National Faculty Member- Indian Association of Palliative Care and Helpage India Workshop, AIIMS, New Delhi; 12 February 2008.

• Chairperson, 2 scientific sessions, XVI International Conference of Indian Association of Palliative Care, Delhi; 13–15 February 2009.

• ‘Ethics in Pain and Palliative Care’, XVI International Conference of Indian Association of Palliative Care, Delhi; 13–15 February 2009.

• ‘Improvements in Radiation Oncology: From conventional 2D to 3D’ 2nd International Radiation Oncology Conference, National Oncology Centre, Royal Hospital, Muscat, Oman; 26–27 February 2009.

• Conducted 3 Tele-medicine teaching sessions with the faculty and post-graduate residents of Regional Cancer Centre, Cuttack and SKIMS, Srinagar.

• Conducted 2 Telemedicine patient care consultations with doctors of SKIMS, Srinagar.

Dr D.N. Sharma


Dr V. Subramani (Medical Physicist)


Mr A. K. Bansal (Medical Physicist)


Dr R. Prabhakar (Medical Physicist)

‘Impact of different breathing conditions on the dose to surrounding normal structures in tangential field breast radiotherapy’, ESTRO 27, Goteborg, Sweden; 14–18 September 2008.


Advances in Radiotherapy, Tumour’s Update, CMAI, New Delhi; 12 February 2009.

Surgical Oncology

Dr N.K. Shukla


Dr Ramesh


RESEARCH

Funded ProjectsAnaesthesiology

Completed

1. Evaluating the correlation of serum levels of morphine and its metabolites on pain in cancer patients. Sushma Bhatnagar. Funding by AIIMS Research Grant.


Laboratory Oncology

Ongoing

1. Immunophenotypic characterization of plasma cells by flow cytometry in health and disease with particular reference to plasma cell myeloma. Ritu Gupta. Funded by DST for 3 years. Funds: Rs 8.7 lakh.


6. To study the molecular biology of multiple myeloma. Ritu Gupta. Funded by DBT for 3 years. Funds: Rs 33 lakh

Medical Oncology

Completed


3. A randomized phase 3 trial; of ALIMTA ® (Pemetrexed) and Carboplatin versus Etoposide and Carboplatin in extensive stage small cell lung cancer. Vinod Raina. Funded by Eli Lilly and Co. (January 2009).


Ongoing

1. A treatment protocol for patients with gastrointestinal stromal tumor who are ineligible for participation in other SU011248 protocols and are refractory to or intolerant of imatinib mesylate. Vinod Raina. Funded by Pfizer for 3 years. Funds: Rs 15 lakh.
2. A SU011248 expanded access protocol for systemic therapy of patients with metastatic renal cell carcinoma who is ineligible for participation in other SU011248 protocols but may derive benefit from the treatment with SU011248. Vinod Raina. Funded by Pfizer for 3 years. Funds: Rs 15 lakh.

3. An open label multicenter phase I/II study to evaluate safety and efficacy of P276-00 in Patients with relapsed and/or relapsed/refractory multiple myeloma. Dr Vinod Raina. Funded by Nicholas for 1 year (12 May 2008–11 May 2009). Funds: Rs 6 lakh.


13. Randomized study comparing upfront surgery followed by chemotherapy versus upfront chemotherapy followed by interval debulking surgery in previously untreated epithelial ovarian
cancer stage III C and stage IV (pleural effusion only). Lalit Kumar. Funded by ICMR (till June 2009). Funds: Rs 70 lakh.


16. Combination of P53, EGFR and tumor grading in determining the outcome of early stage epithelial ovarian cancer. Lalit Kumar. Funded by DBT, Government of India. Funds: Rs 2 lakh.

17. Expansion of bone marrow and cord blood haematopoietic stem cells and their differentiation into hepatocytes. Lalit Kumar. Funded by ICMR (till 2009).


23. Phase II, multicenteric, open label randomized study of mapatumumab (TRM-1), a fully human monoclonal antibody to TRAIL-1 in combination Bortezomib (Velcade), and bortezomib (Velcade) alone in subject with relapsed or refractory multiple myeloma. Atul Sharma. Funded by Parexel International on behalf of HGS, USA for 2007 (continuing). Funds: Rs 8.8 lakh.


27. To study chromosomal abnormalities and FLT3 internal tandem duplication (ITD) mutations in acute myeloid leukemia. Sameer Bakhshi, Funded by AIIMS Research Grant for over 3 years (since Oct 2007). Funds: Rs 3 lakh.

29. Pharmacokinetic and toxicity profile of high dose methotrexate: Relationship with serum creatinine and MTHFR Polymorphisms in Indian Children. Sameer Bakhshi. Funded by JIV DAYA Foundation for 2 years (since October 2008). Funds: Rs 7.9 lakh.

Radiotherapy

Completed

1. A randomized controlled comparative trial to evaluate the efficacy and safety of 2-Deoxy-D-Glucose (2DG) as a radio modifier in the treatment of Glioblastoma Multiforme. Dr GK Rath, Dr PK Julka, Dr DN Sharma, Dr Omana Nair, Dr T. Puri, Dr Haresh KP. Funded by Dr Reddys for 3 years (2006–2009). Funds: Rs 3.58 lakh.

2. A centrally randomized open multi center study evaluating the efficacy and safety of combination therapy with intermax Alpha™ and vinblastine versus vinblastine monotherapy in patients with Advanced Renal Cell Carcinoma. Dr PK Julka, Dr GK Rath, Dr Amlesh Seth, Dr Omana Nair, Dr Renita Bhamrah, Dr Ashish Chaudhary. Funded by Sterling for 8 years (2001–2008). Funds: Rs 6.18 lakh.

3. A phase 2 open label randomized controlled study to evaluate the dose tolerance safety and efficacy of VT-122 regimen for the treatment of cachexia in subjects with stage IV non-small cell lung cancer. Dr PK Julka, Dr GK Rath, Dr Omana Nair, Dr Tarun Puri, Dr Renita Bhamrah. Funded by Reliance for 1 year (2007–2008). Funds: Rs 2.1 lakh.

4. A multicentric study to evaluate palanosetron and ondansetron in chemotherapy induced nausea and vomiting. Dr PK Julka, Dr GK Rath, Dr Omana Nair, Dr Gursimran Kaur. Funded by Dr Reddys for 6 months (2008–2008). Funds: Rs 2.5 lakh.


Ongoing

1. BCIRG 006—a multicentric phase III randomized trial comparing doxorubicin and cyclophosphamide followed by Docetaxel (ACât) with Doxorubicin and cyclophosphamide followed by docetaxel and trastuzumab (Herceptin) (ACâTH) and with docetaxel, carboplatin and trastuzumab (TCH) in the adjuvant treatment of node positive and high risk node negative patients with operable Breast cancer containing the HER2 alteration. Dr PK Julka, Dr GK Rath, Dr Rajinder Parshad, Dr Omana Nair, Dr Simran. Funded by Aventis for year 2004. Funds: Rs 1,62,313.

2. A phase 2 study of sequential neoadjuvant gemcitabine plus doxorubicin and gemcitabine plus cisplatin in large T_{2} (e” 3cm) and locally advanced (T_{3}, T_{4} or N_{2}) operable breast cancer. Dr PK
3. A randomized, double-blind, parallel-group, multicentre, phase-III study comparing the efficacy and tolerability of fulvestrant (FASLODEX™) 500 mg with Fulvestrant (FASLODEX™) 250 mg in postmenopausal women with estrogen receptor positive advanced breast cancer progressing or relapsing after previous endocrine therapy. P.K. Julka, Dr G K Rath, Dr Rajinder Parshad, Dr Omana Nair, Dr Gursimran Kaur. Funded by Quintiles for year 2006. Funds: Rs 2,45,700.

4. An open label randomized multi-centre phase III study of Trastuzumab in combination with a fluoropyrimidine and Cisplatin versus chemotherapy alone as first-line therapy in patients with HER2 positive advanced gastric cancer. Dr PK Julka, Dr GK Rath, Dr NR Dash, Dr Omana Nair, Dr Tarun Puri, Dr Renita Bhamrah, Dr Gursimran Kaur, Dr Amit Bahl, Dr Pushpa Lata. Funded by Siro for year 2007. Funds: Rs 1.5 lakh.

5. A phase 1/2, modified dose escalation, open label trial to determine the therapeutic effect and safety of INCB007839 combined with trastuzumab in patients with previously untreated her2 positive metastatic breast cancer. Dr PK Julka, Dr GK Rath, Dr Tarun Puri, Dr Gursimran Kaur, Dr Pushpa Lata. Funded by Siro for year 2008. Funds: Rs 3,49,780.

6. A randomized phase 3 study of pemetrexed in combination with cisplatin versus cisplatin monotherapy in patients with recurrent or metastatic head and neck cancer. Dr PK Julka, Dr GK Rath, Dr Alok Thakar, Dr Sudhir Bahadur, Dr Omana Nair, Dr Tarun Puri, Dr Renita Bhamrah. Funded by Eli Lilly for year 2007. Funds: Rs 1.32 lakh.

7. A randomized phase 3 study of Enzastaurin versus Lomustine in the treatment of recurrent, Intracranial GBM. Dr PK Julka, Dr GK Rath, Dr Chitra Sarkar, Dr Omana Nair, Dr Tarun Puri, Dr Renita Bhamrah. Funded by Eli Lilly for year 2006. Funds: Rs 1.86 lakh.

8. An open label prospective multicentric study to evaluate the safety and efficacy of BIOMAB-EGFR (Nimotuzumab) as induction and maintainence therapy in combination with radiotherapy plus temozolomide (concomitant and adjuvant) in Indian patients with Glioblastoma multiforme. Dr PK Julka, Dr GK Rath, Dr DN Sharma, Dr O Nair, Dr C Sarkar, Dr BS Sharma, Dr T Puri, Dr R Bamrah, Dr KP Haresh. Funded by Clingene for year 2008. Funds: Rs 1.80 lakh.

9. Patterns of care and survival studies in cancers of head and neck, breast and cervix at Dr BRAIRCH, AIIMS (as part of National Cancer Registry Programme by ICMR) I-508. Dr BK Mohanti, Dr BB Tyagi. Funded by Grant from National Cancer Registry Programme, ICMR for year 2007. Funds: Rs 3.6 lakh per year.

10. A study to assess economic costs of cancer care in Indian patients receiving radiotherapy with or without chemotherapy/surgery at a Regional Cancer Centre (Collaborative study between IRCH, AIIMS and Indian Statistical Institute, Delhi. Dr Sanghamitra Das (ISI), Dr B.K. Mohanti. Funded by Grant from Indian Statistical Institute, Delhi for year 2007. Funds: Rs 2.2 lakh per year.

11. A randomized, double-blind, placebo- controlled, multi-centre phase 3 study of denosumab on prolonging bone metastasis-free survival in men with hormone-refractory prostate cancer. Dr PK Julka, Dr GK Rath, Dr Rajinder Parshad, Dr Ramesh Dawar, Dr Omana Nair, Dr Renita Bhamrah. Funded by Eli Lilly for year 2003. Funds: Rs 4.72 lakh.
Julka, Dr Amlesh Seth, Dr Omana Nair, Dr Gursimran Kaur, Dr Renita Bhamrah. Funded by Quintiles for year 2007. Funds: Rs 2,93,267.

12. Protocol 1839IL/0706: A phase II randomized, double blind, placebo controlled, multicentre comparative study of ZD1839 250 mg or 500 mg (Iressa™) given either continuously or concomitantly with Cisplatin plus Radiotherapy for the treatment of patients with previously untreated unresected Late Stage III/IV Non-metastatic Head and Neck Squamous Cell Carcinoma. Dr P.K. Julka, Dr G.K. Rath, Dr D.N. Sharma, Dr Sudhir Bahadur, Dr Omana Nair, Dr Tarun Puri, Dr R. Prabhakar. Funded by Quintiles for year 2004. Funds: Rs 13,15,781.

Anaesthesiology

Departmental projects

Ongoing

1. Prospective, randomized placebo controlled, double blind study of tranexamic acid in patients undergoing lower GIT/GUT cancer surgery

2. To compare the effect of radiotherapy and vertebroplasty on pain relief and quality of life in cancer patients with vertebral collapse caused by spinal metastases

3. Psychosocial concerns in advanced cancer patients: An observational study, Dr BRAIRCH, AIIMS.

4. A prospective evaluation of the incidence and characteristics of breakthrough cancer pain episodes (BTCP) in head and neck cancer patients

5. Preemptive analgesia with pregabline and dexibubrufen in malignant breast surgeries: A prospective double blind placebo controlled study

6. Redefining laryngeal mask airway classic™ insertion with no-intraoral-index-finger technique

Medical Oncology

Ongoing

• A study of triple negative breast cancer with reference to clinical feature and outcome.

• A study of basal cytokeratin and egfr in triple negative breast cancer.

• Molecular genetic analysis for the prognostic evaluation of biological markers in acute lymphoblastic leukemia (ALL).

• A prospective study on infections in febrile neutropenia, August 2008.

• Serum galactomannan assay for the diagnosis of invasive aspergillosis in hematological malignancies and stem cell transplant, October 2008.

• Retrospective analysis of peripheral T cell lymphomas; incidence, clinical characteristics, prognostic features and treatment outcomes, since January 2008).

• Quantitative estimation of bcr-abl transcripts, to see molecular remission status in patients of Chronic Myeloid Leukemia, since March 2008).
• Analysis of efficacy of chemotherapy (irinotecan and oxaliplatin-based) in advanced colorectal cancer. Dr Atul Sharma. No grant 2007–2009.

• Prothrombotic factors in patients with newly diagnosed multiple myeloma—an Observational Study. Dr Atul Sharma. No grant 2008.

• Use of autologous bone marrow stem cells for myocardium regeneration. Funded by Department of Biotechnology, Government of India for 2006.

• Oral voriconazole versus intravenous amphotericin B as antifungal prophylaxis in pediatric acute leukemia induction therapy: A randomized controlled study. Dr Sameer Bakhshi (since February 2008)

Completed

• Evaluation of efficacy of chemotherapy in advanced colorectal cancer. Dr Atul Sharma. No funding.

• ‘A randomized controlled trial comparing best supportive care, 5 – fu + folinic acid and gemcitabine + oxaliplatin in management of unresectable gallbladder cancer’. Dr Atul Sharma. No funding.

Medical Physics

Completed

1. Development of protocol for quality control of ultrasonography and US Doppler
2. Doppler ultrasonography-based tumour vascularity index and its use
3. Quality Assurance of image monitors

Ongoing

1. Development of protocol for quality assurance of medical image laser printer
2. Characterization of atherosclerotic plaque using CT scan
3. Development of Microsoft Acess based image reporting module
5. Patients’ dose determination in fluoroscopy guided RF ablation procedures

Radiodiagnosis

Completed

1. MRI and PET CT evaluation of soft tissue sarcomas

Ongoing

1. Ultrasound and CT evaluation of the neck for assessment of lymph node metastases in clinically No patients with squamous cell carcinomas of the upper aerodigestive tract
Radiotherapy

Completed

1. To evaluate neoadjuvant chemotherapy followed by postoperative chemotherapy and assess the expression of multidrug resistance gene and cell cycle specificity in locally advanced gastric and gastro esophageal junction adeno carcinoma. Funded by Dr Ahitagni Biswas, Dr B.K. Mohanti, Dr G.K. Rath, Dr V. Raina, Dr A. Sharma, Dr N.K. Shukla, Dr S.V.S. Deo, Dr S.N. Das, Dr S.D. Gupta.

2. Dosimetric studies in Interstitial and Intracavitary Brachytherapy of cancer cervix. AK Bansal, Dr G.K. Rath, Dr P.K. Julka, Dr D.N. Sharma, Dr M.K. Semwal, Dr Sanjay Thulkar.

3. A study to assess the effectiveness of Aloe Vera gel in preventing skin reactions associated with radiotherapy: A prospective randomized controlled trial. Jisa George T (MSc Nursing student), Dr B.K. Mohanti.

Ongoing

1. Randomized trial comparing IMRT vs. brachytherapy boost in early stage squamous cell carcinoma of the oropharynx. Dr B.K. Mohanti.

2. Clinical correlation of ER, PR and Her 2 neu expression and BRCA-I gene mutations in Indian Breast Cancer patients. Dr Gursimran Kaur, Dr P.K. Julka, Dr G.K. Rath, Dr S.D. Gupta, Dr R. Parshad, Dr S.N. Das, Dr M. Kabra.

3. The correlation of VEGF and TGF-beta expression to clinicopathological response, ER, PR and Her 2 Neu status in locally advanced breast cancer- A pilot study. Dr N. Joshi, Dr P.K. Julka, Dr G.K. Rath, Dr D.N. Sharma, Dr O. Nair, Dr A. Srivasthava, Dr S.D. Gupta, Dr S.N. Dwivedi.

4. Comparison of two different schedule of HDR-ICRT in Carcinoma of Cervix of 7Gy vs. 9Gy at Point A in 3 and 2 weekly fractions respectively: A Prospective Randomized cohort study. Dr Vinay Kumar, Dr G.K. Rath, Dr P.K. Julka, Dr D.N. Sharma.

5. PET CT in predicting response to chemo radiotherapy in carcinoma cervix. Dr Jagdeeshan, Dr D.N. Sharma, Dr G.K. Rath, Dr Rakesh Kumar, Dr Sunesh Kumar, Dr A. Malhotra.

6. Prospective comparative analysis of 3D-CT based treatment planning with 2D radiography based treatment planning for ICRT of Ca cervix. Dr Renu Madan, Dr S. Pathy, Dr B.K. Mohanti, Dr S. Thulkar, Dr V. Subramani, Dr Vatsala, Dr L. Kumar.

7. A comparative assessment of quality of life of head and neck cancer patients treated with surgery and postoperative radiotherapy versus chemoradiotherapy. Dr Subhash, Dr S. Bhasker, Dr B.K. Mohanti, Dr A. Sharma, Dr A. Thakkar.


9. Validation of gel dosimetry as 3D verification tool for highly conformal radiotherapy techniques. N. Gopishankar, Dr S. Vivekanandan, Dr G.K. Rath, Dr S.S. Kale, Dr V. Subramani, Dr S. Thulkar. Funded by AERB. Funds: Rs 5.8 lakh.
Surgical Oncology

**Ongoing**

1. A prospective study comparing histopathologic versus biomarker assessment of surgical margins in operable oral cancer patients
2. Functional assessment of oral cancer patients after radical surgery and radiotherapy
3. Oncoplastic breast surgery – prospective evaluation of patient profile and outcome
4. Assessment of Skin involvement in Breast cancer patients with T4b lesions
5. Prophylactic antibiotics in surgical oncology patients

**Collaborative research**

**Completed/Ongoing**

1. A Randomized controlled Trial Comparing: Best Supportive Care, 5-FU + Folinic Acid and Gemcitabine + Oxaliplatin in management of Unresectable Gallbladder Cancer. (with Medical Oncology, Surgical Oncology, Radiation Oncology and Gastroenterology)
2. Beclin-1 in oral cancer (with Biotechnology and Radiotherapy)
3. Genetic polymorphisms in Cox-2 gene in oral cancer patients (with Biotechnology and Radiotherapy)
5. Prospective evaluation of quality of life in advanced stage cancer patients receiving short course palliative radiotherapy by using EORTC-QLQ-C15-PAL questionnaire module (with Radiation oncology and Anesthesiology)
6. Adjuvant Tamoxifen long against short (ATLAS): Multi center international trial, Oxford, UK. Surgical Oncology, Medical oncology and Radiation Oncology. Funded by ATLAS.
7. Randomized study of Preoperative short course radiotherapy (25 Gy) vs. preoperative Concurrent radiotherapy (45 Gy) and chemotherapy followed by Surgery in rectal cancer (with Radiation Oncology, Surgical Oncology, Medical Oncology, Pathology, Radiodiagnosis)
8. National Retinoblastoma Registry-Delhi site, a collaborative study under ICMR, New Delhi, India (with Radiation oncology and ICMR, New Delhi)
9. Evaluation of Curcumin in the management of advanced cancer cervix (with Radiotherapy, Gynecology, Biochemistry and Pathology)
10. Evaluation of circulating Tumor DNA in Serum of breast cancer patients (with Medical Oncology and Surgical Oncology)
11. MRI and PET-CT IN Soft tissue sarcoma (STS) (with Radio diagnosis, Surgical Oncology, Nuclear Medicine)

12. Adjuvant tamoxifen long against short (ATLAS). Multi centre international trial, Oxford, UK (with Surgical and Medical oncology)

13. Cell cycle regulatory proteins WAF-e and p 16 in human esophageal cancer (with Surgical oncology, Biochemistry, Pathology)

14. Multicentric national programme on evaluation and validation of molecular markers in oral cancer: A cross sectional study (with Surgical Oncology and Biochemistry)

15. To evaluated microsatellite instabilities in different chromosomes in Indian female breast cancer patients (with Surgical Oncology and Biosciences, Jamila Milia Islamia, New Delhi)

16. Role of CT scan and MRI in the evaluation of locally advanced oral cancer.

17. Molecular evaluation of p 21 WAF -1 gene in Indian Female Breast Cancer Patients (with Surgical oncology and Bio Sciences, Jamia Milia Islamia)

18. Molecular basis of tobacco associated oral carcinogenesis (with Biochemistry and Surgical Oncology)

19. A randomized, double-blind, placebo-controlled, multi-center phase III study to evaluate the efficacy and safety of pazopanib (GW786034) compared to placebo in patients with locally advanced and/or metastatic renal cell carcinoma. VEG105192. (with Medical Oncology and Surgical Oncology)

20. An open label, non-randomized phase II trial of oxaliplatin, docetaxel and capecitabine in advanced esophageal and gastric adenocarcinoma. Protocol 0701. (with Medical Oncology, Surgical Oncology, and Radiation Oncology)

21. A randomized, double-blind, multicentre, placebo controlled study of adjuvant lapatinib in women with early stage ErbB2 over expressing breast cancer. (with Medical Oncology and Surgical Oncology)

22. A randomized, open label multicentre study of single agent larotaxel (XRP9881) at 90 MG/M2 every 3 weeks compared to continuos admn. Of 5-FU for the treatment of patients with advanced pancreatic cancer previously treated with a gemcitabine-containing regimen (with Medical Oncology and Surgical Oncology)

23. Ligand based selection from combinatorial libraries for generating recombinant antibodies to the placental (oncofetal) isozyme of alkaline phosphatase: Characterization and validation in clinical cancers (with Biochemistry and Surgical Oncology)

24. Dose reduction in CT while, maintaining diagnostic confidence (with Medical Physics Unit and Radiology AIIMS)

25. Verification of CT displayed dosimetric parameter (CTDI) for various scanning protocol (with Medical Physics Unit and Radiodiagnosis, Dr BRAIRCH)
26. Quality control of PET/CT (with Medical Physics Unit, IRCH and Nuclear Medicine, AIIMS)

27. Role of FDG PET CT in evaluation of patients with recurrent ovarian cancer: a pilot study (with Radiology)

28. Randomized study comparing up front surgery followed by chemotherapy versus upfront chemotherapy followed by interval debulking surgery in previously untreated epithelial ovarian cancer stage 3C and stage 4 (pleural effusion only) (with Radiology, Medical Oncology and gynaecology)

29. Validation of gel dosimetry as 3D verification tool in highly conformal radiotherapy techniques (with Radiology, Neurobiochemistry and Radiotherapy)

30. Prospective comparative evaluation of 3D CT based treatment planning and 2D radiography based treatment planning for intracavitary brachithetrapy in carcinoma cervix (with Radiology and Radiotherapy)

31. A study of angiogenesis, proliferative activity and DNA ploidy in squamous cell carcinoma of larynx and their correlation with lymph node metastasis (with Radiology and Pathology)

32. The role of multidetector computed tomographic dacryocystography in patients with epiphora (with Radiology and RPC)

33. Incremental role of F-18 FDG PET-CT in evaluating response to primary treatment in advanced epithelial ovarian cancer patients (with Radiology and Nuclear Medicine)

34. Role of Minimally invasive guided therapy in treatment of focal liver Neoplasms (with Anaesthesiology and, Radiodiagnosis)

35. Role of Minimally invasive guided therapy in treatment of lung metastasis (with Anaesthesiology and Collaboration, General Surgery)

36. Role of Minimally invasive guided therapy in treatment of focal bone Neoplasms (with Anaesthesiology Orthopaedics)

37. Pilot study of p16, p54, k-ead, and c-erb2 expression in non neoplastic and gall bladder cancer epithelium. Funding 1.0 Lac- AIIMS- extra mural grant (with Medical Oncology and Pathology)

38. Role of neoadjuvant chemoradiotherapy in gall bladder cancer (with Medical Oncology, GI Surgery, Radiation Oncology)

39. ‘Evaluation of vascular permeability by dynamic contrast enhanced—MRI and glucose metabolism by PET-CT scan as surrogate markers of angiogenesis in Osteosarcoma’ (with Medical Oncology, Radiology, Nuclear Medicine, Orthopaedics and Pathology)

40. ‘Role of PET-CT in osteosarcoma for initial staging and chemotherapy response evaluation; comparison with conventional radiological modalities (MRI scan, CT scan, and Bone scan) and histopathological tumour necrosis’ (with Medical Oncology, Radiology, Nuclear Medicine, Orthopaedics and Pathology)
41. Evaluation of expression of P-Glycoprotein in Retinoblastoma (with Medical Oncology, Ophthalmology, Ocular Pathology, Ocular Biochemistry and Ocular Pharmacology)

42. Use of autologous bone marrow stem cells for myocardium regeneration (with Medical Oncology, Surgical Oncology, Radiation Oncology)

43. ‘An open label, non-randomized phase II trial of oxaliplatin, docetaxel, and capecitabine in advanced esophageal and gastric adenocarcinoma’ Protocol 0601 (with Medical Oncology and Ocular Pharmacology)

44. Evaluation of percentage purity of anti-cancer and anti-microbial compounds using HPLC (with Medical Oncology and Laboratory Oncology)


46. Endothelial progenitor cells as a biomarker of disease in multiple myeloma. Dr Atul Sharma. Funded by DBT for 2007 (continue). Funds: Rs 17 lakh.

47. Assessment of multi drug resistance pattern in AML and response to therapy. Funding extra mural grant, AIIMS, for 2006 (continue) Dr Atul Sharma. Funds: Rs 1.9 lakh.

48. Role of PET-CT in staging and evaluation of early response to chemotherapy in patients of neuroblastoma and rhabdomyosarcoma (with Medical Oncology and Nuclear Medicine and Paediatric Surgery)

PUBLICATIONS

Journal


**Abstracts**


5. Gupta D, Prakash A, Jain R, Mishra S, Bhatnagar S. Suction catheter as a low-diameter emergency airway device in the setting of severe tracheal stenosis. ISA (Delhi chapter), New Delhi; 5–6 April 2008.

6. Gupta D, Mazumdar A, Singh M, Mishra S, Bhatnagar S. Pre-Catheterization Doppler ultrasound screening is highly recommended for central venous cannulation with blind technique. ISA (Delhi chapter), New Delhi; 5–6 April 2008.

8. Bhatnagar S, Mishra S, Upadhyay SP. A prospective evaluation of the incidence and characteristics of breakthrough cancer pain episodes (BTCP) in head and neck cancer patients. 16th International Conference of Indian Association of Palliative care, Jawaharlal Nehru Auditorium AIIMS , New Delhi, India; 13–15 February 2009.


10. Philip F, Bhatnagar S, Mishra S. What is happening to me!! I really don’t know. 16th International Conference of Indian Association of Palliative care, Jawaharlal Nehru Auditorium, AIIMS , New Delhi, India; 13–15 February 2009.

11. Himanshu K, Mishra S, Bhatnagar S. Palliative care in pediatric population: A challenge for all of us. 16th International Conference of Indian Association of Palliative care, Jawaharlal Nehru Auditorium, AIIMS , New Delhi, India; 13–15 February 2009.


15. Bhatnagar S, Mishra S, Rana SP. Retrospective audit of a newly developed palliative care ward in a tertiary care Institute. 16th International Conference of Indian Association of Palliative care, Jawaharlal Nehru Auditorium, AIIMS, New Delhi, India; 13–15 February 2009.

16. Bhatnagar S, Mishra S, Gogia V, Goyal GN. Incidence of neuropathic pain in cancer patients at a tertiary care cancer centre in India. 16th International Conference of Indian Association of Palliative care, Jawaharlal Nehru Auditorium, AIIMS , New Delhi, India; 13–15 February 2009.

17. Bhatnagar S, Mishra S, Kumar V, Upadhyay S. Journey of oncology patients from their home to pain and palliative clinic at DR BRA IRCH, AIIMS: A prospective study. 16th International Conference of Indian Association of Palliative care, Jawaharlal Nehru Auditorium, AIIMS, New Delhi, India; 13–15 February 2009.


21. Goyal GN, Upadhyay SP, Gupta D, Mishra S, Bhatnagar S. Conventional tracheal tubes for intubation through the intubating laryngeal mask airway are cost effective alternative to LMA-Fast Trach-Endotracheal tube. ISA (Delhi chapter), New Delhi; 5–6 April 2008.


27. Improving care in ovarian cancer: Role of the weekly clinic—pathological meeting ASCO Meeting, 2008;26:16542.


44. Value of 18F-FDG PET-CT scan in the evaluation of recurrent asymptomatic epithelial ovarian cancer patients with rising serum CA-125 ASCO Meeting 2008;26:16535.

Chapters in Books/Monographs


PATIENT CARE

**Total bed strength**

<table>
<thead>
<tr>
<th>Department</th>
<th>Total</th>
</tr>
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<tbody>
<tr>
<td>Medical Oncology (Regular and short-daycare)</td>
<td>78</td>
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<tr>
<td>Radiation Oncology</td>
<td>37</td>
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<tr>
<td>Surgical Oncology</td>
<td>55</td>
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<td>Palliative Care Unit</td>
<td>06</td>
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<tr>
<td>ICU (5th Floor)</td>
<td>06</td>
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AIIMS 2008-2009 / 676
Total OPD attendance 74,280
(Refer table below for details)
New cases 8,793
Old cases 65,487
Total Admissiona 23,822
Regular 4,786
Short(aycare) 19,036
Operation theatre services 6,651
Major 632
Minor 6019
Electro cardiogram (ECG) 2,265

Description of various OPD/Clinics at IRCH with work load during Year 2008–2009

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<th>No.</th>
<th>Name of the OPD/Clinic</th>
<th>New Registration</th>
<th>Revisits</th>
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<td></td>
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<td>Male</td>
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<tr>
<td>1.</td>
<td>Adult Medical Oncology Clinic (AMOC)</td>
<td>555</td>
<td>380</td>
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<td>2.</td>
<td>Adult Lymphoma Leukemia Clinic (ADLL)</td>
<td>306</td>
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<td>3.</td>
<td>Breast Cancer Clinic</td>
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<td>4.</td>
<td>Bone and Soft Tissue Clinic</td>
<td>144</td>
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<td>Gastro-Intestinal Clinic</td>
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<td>265</td>
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<td>8.</td>
<td>Head and Neck (Surgery)-A</td>
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<td>54</td>
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<td>9.</td>
<td>Head and Neck (ENT)-B</td>
<td>808</td>
<td>148</td>
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<td>10.</td>
<td>Lung Cancer Clinic</td>
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<td>11.</td>
<td>Ophthalmic Clinic</td>
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<td>12.</td>
<td>Paediatric Medical Oncology Clinic (PDMOC)</td>
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<td>13.</td>
<td>Paediatric Lymphoma Leukemia Clinic (PDLL)</td>
<td>34</td>
<td>14</td>
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<td>Paediatric Surgery Clinic</td>
<td>Pain Relief Clinic</td>
<td>Pain and Palliative Care Clinic (RT-II)</td>
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<td>14</td>
<td>87</td>
<td>48</td>
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<td>15</td>
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<td>16</td>
<td>04</td>
<td>01</td>
<td>05</td>
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<tr>
<td>17</td>
<td>1,579</td>
<td>1,315</td>
<td>2,894</td>
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<td>18</td>
<td>118</td>
<td>94</td>
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<td>05</td>
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<td>20</td>
<td>210</td>
<td>15</td>
<td>225</td>
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<td></td>
<td>TOTAL</td>
<td>4,739</td>
<td>4,054</td>
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</tbody>
</table>

Distribution of new patients according to place of residence for the year 2008–2009 (Total=8726)

- Assam 45
- Arunachal Pradesh 02
- Andhra Pradesh 08
- Bihar 1,072
- Chandigarh 0
- Chattisgarh 13
- Delhi 2,984
- Dadar Nagar Haveli 0
- Daman and Hiu 07
- Gujrat 02
- Goa 01
- Haryana 1,051
- Himachal Pradesh 40
- Jammu and Kashmir 73
- Jharkhand 101
- Kerala 09
- Karnataka 02
- Meghalaya 07
- Manipur 15
- Madhya Pradesh 85
Mizoram 01
Maharashtra 06
Nagaland 09
Orissa 63
Punjab 79
Rajasthan 173
Sikkim 26
Tripura 08
Tamil Nadu 03
Uttar Pradesh 2,403
Uttrakhand 363
West Bengal 75

Distribution (Other countries) for the year 2008–2009 (Total=67)
Afghanistan 05
Bangladesh 02
Canada 01
Fizi 01
Iran 01
Kenya 01
Nepal 55
Pakistan 01

Anaesthesiology Services
Facilities available in the department:
1. ICU facilities for post operative patients.
2. PAC and pain and palliative care clinic is run four times in a week in addition to the anaesthesiology related work.
3. Home support to patients with advanced malignancies by NGOs and keeping monthly meeting with them to know follow up reports
4. Providing critical care to patients of radio therapy, Medical Oncology, and Surgical Oncology.
5. Facility for Paediatric Radiotherapy.
6. Anaesthesia for minor paediatric oncology procedures like Bone marrow biopsy, Central line insertion, Bone marrow Harvesting and others.
7. Facility for Paediatric radiological procedures under anaesthesia, Radio frequency ablation for liver, lung, and breast carcinoma.

**Newer Facility**

1. Interventional pain management techniques: PNFS (Peripheral Nerve Field Stimulator) and percutaneous vertebroplasty.

2. PNFS in orbital neuralgia, nerve sheath tumour and percutaneous vertebroplasty in vertebral collapse in bone metastatic pain.

3. Started a certificate course named ‘Indian Association of Palliative Care’s Certificate Course in Palliative Care’.

4. Unit of Anesthesiology, Dr B.R.A IRCH is Nodal Center for conducting Indian Association of Palliative Care’s Certificate Course in Palliative Care.

**Laboratory oncology services (Total=65,475)**

- Haemogram (Hb, TLC, Platelets) 49,285
- Peripheral blood smear 5,701
- Bone marrow aspirate and touch preparation 2,650
- Cytochemistry 659
- Serum protein electrophoresis 1,649
- Immunofixation 382
- Urine electrophoresis 341
- ESR 2,007
- Flow 2,699
- Cytospin 02
- APAAP41 41
- FNAC Lymph Node 59

**Medical Oncology**

- Total chemotherapy in daycare 19,036
- OPD chemotherapy 8,871
- Admission
  - Ward4786 Day care 19036

**Total** 23,822

- OPD Procedure 12,864

**Diagnostic and therapeutic procedures**

- Bone marrow biopsy 502
- Bone marrow aspiration 660
Pleural tapping 79
Intra thecal methoxerate 767
Skin biopsy 3
Cerebral spinal fluid for cytology 36
Catherization 19

**Other Supportive Services**

Suture removal 93

**Laboratory services**

Cytogenetic reports 373
Cryo-preservation/Store at 80°C 31
Storage of PBSC at 4°C 60
Infusion of PBSC 85
Viability of PBSC 85
MNC 91
CD-34 91
Alloogenic/BMT/PBS CT 05
RT-PCR 159
GM ELISA 197

**Apheresis**

Single donor platelets (SDP) 1,089
Harvest peripheral blood stem cell (PBSE) 90
Haemogram 11,710

**Progress of Department**

1. Vast all round improvement in the department since April 2007.
2. A new look daycare of 30 beds is active and working well, 70-80 patients receive treatment daily in this facility.
3. Fully functional transplant floor with 9 rooms on 7th floor.
4. Fully functional 4 beds aphaeresis facility on 1st floor.
5. Anticancer Drug supplies to ward and OPD patients vastly improved.
6. The department performed approximately 70 transplants in this year.
7. Full-fledged clinical trials facility has been initiated on 4th floor.
8. Computerization of Day Care and Record Section in full swing.
Medical Physics–Department Statistic = 4,600

Number of blood bags irradiated 2,333
Quality assurance tests done on x-ray machines 1,275
Quality test done on film processor at room no. 10 (X-ray) 517
QA test done on film processor at room no. 46 (X-ray)(US, Mammo) 14
Radiation output measurements in X-ray units 163
Quality test done on film processor at room no. 77 Main Hospital 279
(Radiation protection survey (measurement) of X-ray installation 17
Advice in inadvertent exposure in pregnancy 02

Radiodignosis = 21,998

<table>
<thead>
<tr>
<th>Name of procedure</th>
<th>Number</th>
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<tbody>
<tr>
<td>X-rays (Routine)</td>
<td>11,190</td>
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<tr>
<td>Ultrasound</td>
<td>3,938</td>
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<tr>
<td>CT Scan</td>
<td>5148</td>
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<tr>
<td>Mammography</td>
<td>682</td>
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<tr>
<td>Intervention/IVP</td>
<td>1,034</td>
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<tr>
<td>Special investigations</td>
<td>06</td>
</tr>
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</table>

Radiotherapy Services = 1,62,177

| Total cases on radiotherapy | 70,444 |
| Total fields on radiotherapy | 1,78,326 |
| Cases on brachytherapy      | 1,040  |
| Treatment planning and simulations | 5,193 |
| 2D and 3D distribution      | 641    |
| Compensators                | 438    |
| Shielding blocks, immobilization devices, moulds | 1,573 |
| Radiation review clinic     | 7,263  |
| Number of cases on chemotherapy | 8,624 |
Number of injections 44,822
Radio frequency ablation (RFA) 4

Procedures and supportive services (Treatment room No. 15) = 12,864
Total Deaths = 281

Surgical Oncology

Facilities available in department

Minor Operation Theatre. Diagnostic and minor therapeutic procedures including lymph node biopsy, punch/trucut biopsy, excision of skin/oral tumours, soft tissue tumors, feeding jejunostomy, colostomy, insertion of Hickman’s catheter/chemo ports for long term Chemotherapy are available in the Minor OT.

Endoscopy services (diagnostic and therapeutic)

Diagnostic Endoscopy: Fibre optic upper G.I.endoscopy, side viewing duodenoscopy, Colonoscopy, Sigmoidoscopy, Bronchoscopy, Cystoscopy, Nasopharyngo laryngoscopy and laparoscopy.

Therapeutic Endoscopy: Stricture dilatation, Intra luminal Radiotherapy, Stenting and Percutaneous Endoscopic Gastrostomy.

Major cancer operation theatre

Facilities available for all major cancer surgeries including radical resection and reconstruction of tumours involving head and neck, GI tract, breast, bone and soft tissue, gynaecological malignancies and thoracic tumours. Advanced reconstructive surgical procedures including microvascular free tissue transfer are also available.

Advanced state of art technologies such as LASERS, CUSA, Harmonic Scalpel and Intra Operative Radiotherapy are also available.

Minor operations and endoscopic procedures performed: 6,019
Major cancer operations performed 632

Delhi Cancer Registry

1. The Delhi Cancer Registry is a Population Based Cancer Registry covers an urban area of 891.09 Square kilometers of Delhi Municipal Corporation, New Delhi Municipal Committee and Delhi Cantonment and 29 census town with an estimated population of 1,54,88,442 (Males : 85,19,141, Females :69,69,301) persons in year 2005.
2. The crude cancer incidence in Delhi during the year 2005 among males and females are 80.8 and 84 per 100,000 persons respectively.
3. The first five most common sites of cancer in Delhi among males during 2005 are lung (14.2), prostate (9.4), larynx (9.3), tongue (7.5) and mouth (6.1) as per World Age adjusted incidence rates per 100,000 persons.
4. The five leading sites of cancer in females during 2005 are breast (32.2), cervix uteri (18.9), ovary (7.5), gall bladder (7.4) and corpus uteri (4.7).

Community Service

Professor G.K. Rath

- Invited as the Guest of honor and distinguished expert at the cancer awareness meeting/camp to celebrate the World cancer day, IGIMS, Patna; 4 February 2009.
- Delivered a talk on ‘Cancer in women’, All India Radio.

Professor P.K. Julka

- AIR Phone-in Programme on Oral Cancer, 1 December 2008.
- Television Programme on Cancer Awareness on Aaj Tak TV, 24 October 2008.
- Television Programme on Cancer on Delhi Doordarshan, 16 June 2008.
- Television Programme on Cancer on Delhi Doordarshan, 23 May 2008.

Professor N.K. Shukla

- Dr N.K. Shukla was involved in care and advice to the ostomates (patients of colostomy, ileostomy and Urostomy).

Dr Pratik Kumar

- Appeared as an expert in an article published in Times of India, 14 March 2009 regarding medical X-ray investigations and radiation doses involved in medical imaging.

Dr D.N. Sharma


AWARDS AND HONOURS

Dr G.K. Rath delivered the Farooq Abdullah Oration ‘Cancer Control Programme in India’, International Conference of Medical Physics, Radiation protection and Radiobiology (ICMPRRR-2K9) and the 14th Annual convention of Northern chapter of Medical Physicists of India, SMS Medical college, Jaipur, 10 February 2009; Sir Dorabji Tata Oration Award, ‘Development of Radiation Oncology facilities in India-My Journey’, Combined biennial conference of Indian Society of Oncology and Indian Society of Medical and Paediatric Oncology, Chennai, 14 February 2009. Leader of the
team, Department of Atomic Energy, Government of India to visit Wahkaji Village, Meghalaya for KPM Uranium mining and milling project, Mawthabah, Meghalaya; 16–19 February 2009.

**Chairman** of Project Review and Steering Group of the project entitled ‘Development of Data Management system for Oncology with special reference to RCC Thiruvananthapuram, Data’, Centre for Development of Advanced Computing (C-DAC), organized by the Ministry of Communications and Information Technology, Government of India; Expert group of Cancer Screening programme of Gujarat state, Government of Gujarat; Steering committee of World Health Organization-Expert Committee workshop on Patterns of care and survival and studies on breast cancer, cancer cervix and head and neck cancers at the National Institute of Advanced Studies (NIAS), Indian Institute of Science campus, Bangalore, 1–2 December 2008; Curriculum committee for MD Radiotherapy of Medical Council of India; Steering Committee of National Cancer Registry Programme, ICMR; ICMR task force on cancer management guidelines; Project review and steering group of the project of ministry of Information and Technology, Government of India on ‘Design and development of Electronic portal imaging device for radiation therapy’ being carried out by CSIO and TSG integration; Ethics Committee, Institute of Cytology and Preventive Oncology (ICPO), ICMR;

**Member** of Expert Committees/Bodies of the following:

- Task force subcommittee on review of guidelines for the management of stomach cancer of the Indian Council of Medical Research, New Delhi.
- Scientific Advisory Group (SAG), Division of NCD, ICMR, New Delhi.
- Academic Senate of Manipal University.
- Appointed by MCI to inspect the standard of examination and other teaching facilities available at Indira Gandhi Government Medical College, Shimla for the recognition of MD Radiotherapy granted by Himachal Pradesh University.
- Expert to select the various faculty posts in Radiotherapy Department at the Uttarakhand Forest Hospital Trust, Haldwani and Nainital.
- External examiner for MD (Radiotherapy), at Nizam’s Institute of Medical Sciences, Hyderabad; 15 April 2008.
- External expert for the meeting of the board of studies of the department of Radiotherapy, SGPGI, Lucknow; 18 November 2008.
- External examiner for MD (Radiotherapy), SGPGI, Lucknow; 19 November 2008.
- Technical Advisory Group (TAG) for the demo project on Screening technologies to advanced rapid testing (START) project on a new HPV testing (Fast HPV or Care HPV) for the screening of cervical cancer in a rural community at Noida of ICPO.
- External examiner for MD (Radiotherapy), PGIMER, Chandigarh; 4 December 2008.
• External examiner for MSc (Radiology with Radiotherapy as special subject), PGIMER, Chandigarh; 4 December 2008.

• Expert group of Ministry of Health and Family Welfare to examine the issues regarding the taking over/funding and management of Dr B. Borooah cancer institute, Guwahati; 10–11 December 2008.

• External examiner for MD (Radiotherapy), Christian Medical College, Ludhiana; 8 January 2009.

• Chief Guest for the felicitation programme of the Society for cancer research and communication, Mumbai; 10 January 2009.

• Expert member for the technical specification committee meeting for the procurement of linear accelerator, AHRCC, Cuttack; 12 January 2009.

• Expert in the technical bid evaluation committee meeting of Chittaranjan National Cancer Institute to evaluate the technical offers of dual energy linear accelerator, Kolkata; 22 January 2009.

• Invited as the Guest of honor during the inauguration function and to chair the first scientific session of the international conference of medical physics, Radiation protection and Radiobiology (ICMPRRR-2K9) and the 14th Annual convention of Northern chapter of Medical physicists of India, SMS Medical College, Jaipur; 10–11 February 2009.

• Purchase Management Committee, Delhi State Cancer Institute (DSCI).

• Working Group for Medical Electronics and Telemedicine, Department of Information Technology, Government of India, New Delhi; 25 March 2009.

• Governing Bodies of four Regional Cancer Centres, Bikaner, Allahabad, Cuttack and Agartala.

• Governing Body of Delhi State Cancer Institute, New Delhi.

• Safety Review Committee for Application of Radiation (SARCAR), Atomic Energy Regulatory Board (AERB), Government of India.

• The sub group of Ministry of Information and Technology, Government of India to review the progress of the Jai Vigyan project, Ministry of Science and Technology, Government of India on development and deployment of 6 MV Medical Linear Accelerator.

• Standing Committee on Radiotherapy Development Programme, Ministry of Health and FW, Government of India.

• Rotary Cancer Foundation, Delhi.

• Advisory Committee, Dr BRA IRCH.

• Core Committee Member of the projects under the North East Initiative of the Indian Council of Medical Research.

• Project Review Committee on Working Group of Medical Electronics, Ministry of Information Technology, Government of India.

• Project Review Committee, Oncology:- Indian Council of Medical Research, New Delhi.
• Scientific Advisory Committee of three Institutes (a) Gujarat Cancer and Research Institute, Ahmedabad, (b) Institute of Pathology, ICMR and (c) Institute of Cytology and Preventive Oncology, ICMR.

• Member of Board of Studies of Radiotherapy and Radiation Medicine of Banaras Hindu University, Varanasi.


Professor V. Raina Guiding 5 DM students in their research. Principal guide of one PhD student. Co-guide of 4 PhD students.


Professor Lalit Kumar Chief Guide for 4 PhD students, Co-guide–2 PhD students, Guide and Co-guide for DM (Medical Oncology) and MD students in the department of Pharmacology, Ophthalmology, and of MSc Student in Biochemistry; External examiner, DM Medical Oncology, Dr MGR Medical University, Tamilnadu and Nizam's Institute of Medical Sciences, Hyderabad; Examiner for evaluation of PhD thesis (2008–2009), University of Madras, Chennai; Appraiser and examiner for DNB in Medical Oncology (2008); Examiner for evaluation of MD thesis (Medicine), PGIMER, Chandigarh; Member Expert committee (Task Force), Department of Biotechnology, Government of India to monitor/review the projects entitled ‘Curcumin and clinical trials in cancer and Mw related projects’ for the year 2008–2009; Chairman, Expert Committee for Curriculum in Medical Oncology and member, expert committee for curriculum in Gynaecologic Oncology for making curriculum for award of DM/MCh, Invited by Medical Council of India. Reviewer for Cancer related Research Projects submitted to the Department of Biotechnology, ICMR and other agencies. Member selection Committee to interview candidates for Commonwealth scholarship 2008. Reviewer for the Postgraduate Medical Journal, National Medical Journal of India, Paed Hematology Oncology, Indian J Biochemistry. Invited expert member for Ethics Committee to review projects related to Oncology (Dharmshila
Cancer Hospital, Delhi). Invited expert member for the management committee of the Indian Cancer Society, New Delhi. Member, advisory board of scientific research Committee, Cancer Institute, Adyar, Chennai (Madras). Organized (a) Symposium on Life style and Cancer: 28 November 2008 and (b) Symposium on Ovarian Cancer; 27–28 March 2009.

Dr Sameer Bakhshi, Bharat Jyoti Award on the Global Friendship Day, New Delhi; 2 January 2009 by India International Friendship Society.

Dr Sushma Bhatnagar, received a travel grant from DST to present a poster entitled ‘Total freedom from cancer pain at tertiary care centre in India. A retrospective analysis of 3238 patients’, 27th Annual Scientific Meeting of the American Pain society, 8–10 May 2008. Tampa, FL, USA and 23rd Annual Meeting, FL, USA, 1–4 2008. Received a travel grant to present a Poster entitled ‘Ultrasound guided Blocks in cancer patients’, 12th World Congress on Pain Glasgow, Scotland, UK; 17–22 August 2008; selected as an Editor of Indian Journal of Palliative Care; Organizing Secretary of 16th International Conference on Indian association of Palliative Care, AIIMS; 13–15 February 2009.

Dr Pratik Kumar was nominated as Referee for the manuscripts submitted to the Journal Radiation Measurements published by Elsevier, Netherlands. He was nominated Editor, Medical Physics Chronicle, a newsletter of Northern Chapter of Association of Medical Physicists of India (AMPI-NC). Continued to be the member of the Editorial Board of Journal of Medical Physics; Member of Electro-medical Equipment Sectional Committee, BIS, New Delhi; Member, Executive Committee, Association of Medical Physicists of India (AMPI), Referee for Journal of Medical Physics, Examiner for Annamalai University, Chidambaram, Tamilnadu, Questionsetter for Homi Bhabha National University, Mumbai and Examiner for Sher-I-Kashmir Institute of Medical Sciences, Srinagar.

Dr Seema Mishra received a travel bursary by Royal College of Physicians for ?? weeks Fellowship, Sir Michael Sobell House, Churchill Hospital, Oxford, UK; 2008; Advanced Course in Pain and Symptom Management, Sir Michael Sobell House, Churchill Hospital, Oxford, UK; 2–3 July 2008’ Member of Editorial Reviewer Board of American Journal of Hospice and Palliative Medicine.; Joint Secretary of 16th International Conference on Indian association of Palliative Care, AIIMS; 13–15 February 2009; attended national workshop of faculty group, Calicut; 31 October–1 November 2008. external examiner for IAPC certificate Course, Bhagavan Mahavir Cancer Hospital and Research centre, Jaipur; 10 January 2009 and Acharya Harihar RCC pain Clinic, Cuttack, Orrisa; 31 January 2009.

Dr D.N. Sharma Awarded UGC Tarvel grant for attending RSNA Conference 2008.

SIGNIFICANT EVENTS

Anaesthesiology

• Organised 16th International Conference on Indian association of Palliative Care 13–15 February 2009;
• Organized 8th Foundation Course on Palliative Care on 15–16 January 2009 for Medical Practitioners and Nursing Staff treating Cancer patients in and around Delhi;
• Nodal centre for IAPC certificate course in Palliative Care at DrBRA, IRCH
Radiodiagnosis

- Dr Sanjay Thulkar: elected as joint secretary of ‘Indian Society of Vascular and Interventional Radiologists’ for year 2008-09
- Dr Sanjay Thulkar: Nominated as the member of the Ethics Sub-committee, AIIMS.
- Dr Sanjay Thulkar: Nominated as the member of Ministry Of Health and Family Welfare advisory committee for strengthening of the civil hospital, Nahrlagun, Arunachal Pradesh.

Radiotherapy

- Started Image guided radiotherapy (IGRT) and stereotactic body radiotherapy (SBRT).
- Started 4D CT Scan for radiotherapy planning purposes.
- Started extracorporeal bone irradiation in bone tumours during surgery.

VISITING SCIENTISTS

1. Dr Anders Brahme, Radiation Physicst, Karolinska Institute, Sweden.
2. Dr Ashwatha Narayana from New York medical centre, USA.
3. Dr Sant Chawla medical oncologist from Sarcoma Oncology Centre in Santa Monica, CA.
4. Dr Anders Ahnesjo, Adjunct professor, Medical Radiation Physics, Uppsala University, Uppsala Sweden.
5. Dr Geoff Hank: Professor of palliative medicine, University of Bristol, UK.
6. Dr Ramarao Pasupuleti: Faculty at the Pain Institute, Whittington, USA.
7. Ms. Liliana De Lima: Executive director, International association for hospice and palliative Care (IAHPC), USA.
8. Dr Jan Stjernsward: Faculty at Borringe Kloster, Sweden.
9. Dr Max Wattson: Consultant Palliative Medicine, Northen Ireland Hospice.
10. Dr Bert Broeckaert: Professor at Interdisciplinary Centre for the study of religion and worldview, K.U. Leuven, Belgium.
11. Dr Kumar Ballani, USA.

ADMINISTRATION

Chief Professor G.K. Rath
Administration Officer Sh. Ram Rattan

Total No. of Staff of Dr BRAIRCH including Faculty:

Faculty 20
Group A and B 52
Technical staff 96
Nursing staff 183
Resident staff (SR, JR) 60
Stores staff 06
Ministerial staff 29
Group D staff 84
Daily wages 02
PTSG 04
Outsourced sanitation staff 167
Outsourced security staff 58½ duties per day
Outsourced data entry operators 10

**DELHI CANCER REGISTRY**

Scientist VI Dr B.B. Tyagi

**FINANCE**

Accounts Officer Shri D.P. Gangal

**STORES**

Assistant Store Officer Shri T.R. Mahajan
<table>
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<th>10.5 Neurosciences Centre</th>
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<tr>
<td><strong>Chief</strong></td>
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<tr>
<td>Hari Hara Dash</td>
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<tr>
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<td><strong>Professor and Head</strong></td>
</tr>
<tr>
<td>Hari Hara Dash</td>
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<tr>
<td><strong>Professor</strong></td>
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<tr>
<td>Parmod K. Bithal</td>
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<tr>
<td><strong>Additional Professor</strong></td>
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<tr>
<td>Arvind Chaturvedi</td>
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<tr>
<td><strong>Associate Professor</strong></td>
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<tr>
<td>Rajendra Singh Chouhan</td>
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<tr>
<td><strong>Assistant Professors</strong></td>
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<tr>
<td>Mihir Prakash Pandia</td>
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<tr>
<td>Girija Prasad Rath</td>
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<tr>
<td>Hemanshu Prabhakar</td>
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<tr>
<td><strong>NEUROLOGY</strong></td>
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<td>Madhuri Behari</td>
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<tr>
<td><strong>Professors</strong></td>
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<tr>
<td>Kameshwar Prasad</td>
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<tr>
<td>MV Padma Strivastava</td>
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<tr>
<td><strong>Associate Professor</strong></td>
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<tr>
<td>Manjari Tripathi</td>
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<tr>
<td>Sumit Singh</td>
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<tr>
<td>Garima Shukla</td>
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<tr>
<td>Mamta Bhushan Singh</td>
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<tr>
<td><strong>NEUROSURGERY</strong></td>
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<td><strong>Professor and Head</strong></td>
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<tr>
<td>B.S. Sharma</td>
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<tr>
<td><strong>Professor</strong></td>
</tr>
<tr>
<td>A.K. Mahapatra (on deputation)</td>
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<tr>
<td><strong>Associate Professors</strong></td>
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<tr>
<td>S.S. Kale</td>
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<tr>
<td>P.S. Chandra</td>
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<tr>
<td>Aditya Gupta</td>
</tr>
<tr>
<td><strong>Assistant Professors</strong></td>
</tr>
<tr>
<td>Rajender Kumar</td>
</tr>
<tr>
<td>Manmohan Singh</td>
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<tr>
<td>Manish Sharma</td>
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<tr>
<td><strong>Assistant professors (JPN Trauma Centre)</strong></td>
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<tr>
<td>D.K. Gupta</td>
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<tr>
<td>D. Aggarwal</td>
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<tr>
<td>G.D. Satyarthee</td>
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<tr>
<td>S. Sinha</td>
</tr>
</tbody>
</table>

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EDUCATION

Neurosurgery

- MCh Neurosurgery Programme: Post MS 3 years, Post-MBBS 6 years.
- Experimental Microneurosurgery Lab: Fully functional during this period.
- PhD Programme: 1 student.

Neurology

Actively involved in all teaching programmes of the department of Neurology and the institute, training undergraduate and post-graduate and postdoctoral (DM) students. This includes guidance for preparation and presentation of seminars, journal clubs and clinical combined rounds of the department.

- Trained one faculty member from SMS Hospital, Jaipur in reading and reporting PSGs and the basics of EEG.

- Following overseas students came for short-term training:
  - Ms Johanna Hauer, UK; 16–27 February 2009.
  - Ms Divya Mehta, New Zealand; 16–27 February 2009.
  - Dr Robin Maskey, Nepal; October 2008–March 2009.
Neurosurgery

Invited Faculty

- Sarveshwari Memorial Orator: Professor Anil Nanda, Chief of Neurosurgery, LSU HSC, Louisiana, United States.
- Microneurosurgery Workshop faculty: Professor V. Rajshekhar, Professor and Head of Neurosurgery, CMC Vellore.

Conference organized


Lectures delivered

- Professor B.S. Sharma, WFNS, Goa, July 2008; Annual Conference of Skull Base Surgery Society of India, Mumbai; October 2008; Annual Conference of Delhi Neurological Association; February 2009.
- Dr S.S. Kale Spine Workshop, National Hospital, Colombo; AO Spine Complications in Spine Surgery Course, Strasbourg, France.
- Dr P.S. Chandra attended CME, NSI, Pune, 2008; Electrocorticography, Role and controversies; CV junction anomalies; ISSICON; Shimla, 2008; CME, IEA, Patna, Bihar Chapter, Epilepsy Surgery; Guest Faculty; GEMIND; Guidelines for epilepsy surgery, India, IES.
- Dr A. Suri was invited to 15th Annual Meeting of the Japanese Society of Neuroendoscopy, Tokyo; 21–22 November 2008; 5th International Congress of the World Federation of Skull Base Societies, 19th Annual Meeting of the North American Skull Base Society joint meeting, Vancouver, Canada.,
- Dr A. Gupta Gamma Knife Society meeting, Quebec, May 2008 for presentation on GK therapy of Trigeminal Neuralgia; Conference of Indian Society for Cerebrovascular Surgery, Kolkata; October 2008.

Neuroanaesthesiology

Postgraduate teaching

- Six MD-Anaesthesiology students (Two months each) from Anaesthesiology department, AIIMS, and 4 PG students (3 from Lady Hardinge Medical College New Delhi-Two weeks each and 1 from VSS Medical College, Burla) received neuroanaesthesiology training.
- Twelve Senior Residents (8 from Department of Anaesthesiology, AIIMS and 4 from Bhim Rao Ambedkar Institute Rotary Cancer Hospital received training in Neuro-anaesthesiology for variable periods as a part of interdepartmental rotation on mutual exchange basis.
- One PDCC (Neuroanaesthesiology) student from Bangur Institute of Neurosciences and Psychiatry (15–30 April 2008); 3 DNB (Anaesthesiology) students, 2 from ESI Hospital, New Delhi (11–25
August 2008); one from Tata Motors Hospital, Jamshedpur (05–19 January 2009) received training in Neuroanaesthesiology.

- Once a week (Saturdays) Seminars, Journal club and case presentations as a part of departmental teaching programme were organized.

**Short-term training**

1. Dr Pryambodho, from Indonesia (01 April–30 June 2008).
2. Dr R. Hazarika, from Guwahati Medical College (12 June–23 July 2008).
3. Dr M.K. Jain from Institute of Human Behaviour and Allied Sciences, New Delhi (02 September–01 August 2008).

**Neuroradiology**

*Undergraduate teaching*

Faculty of the department was part of undergraduate teaching curriculum

**DM Neuroradiology** course started in July 2001. Two candidates were registered for this course.

**Short-term training**

One technician and one doctor had short-term training in the department. Residents from Neurology, Neurosurgery and Radiology had received training on rotation in this department. BSc student from Radiology department received training on rotation.

**Neuropathology Laboratory**

There was no change in the undergraduate and postgraduate teaching programme

Short-term and long-term training

Dr Kachnar Verma, Allahabad Medical College, short-term training in Neuropathology for three months.

**Continuing Medical Education (CME)**

**Neurology**

- Seventh Asia Pacific Parkinson’s Association Symposium, New Delhi; 15–16 February 2009.
- Workshop Meta-analysis, BP Koirala Institute of Health Sciences, Dharan; 11–12 August 2008.
- A patient awareness programme on Multiple Sclerosis, AIIMS; 16 January 2009 in collaboration with multiple sclerosis society of India.
• 9th Annual Conference of Indian Epilepsy Association and Indian Epilepsy Society (ECON), India Habitat Centre, New Delhi; 21–22 October 2008.

Lectures delivered by departmental faculty, residents and staff (only in CME programmes): Invited talks and panel discussions:

Dr Madhuri Behari

• Presidential Oration at 16th Annual Conference of Indian Academy of Neurology; October 2008
• South Asian Conference of Neurosciences, Bangladesh Medical College, Dhaka; November 2008.
• Presidential oration at 16th Annual Conference of Indian Academy of Neurology; October 2008.

Dr K. Prasad

• Minimum Statistics for Survival.
• Critical Analysis of medical papers to help in practice.
• Stem Cell Therapy for Stroke.
• Invited as a Tutor for the 7th Asia Pacific Evidence-Based Medicine and Nursing Workshop and Conference at National University of Singapore; 13–16 January 2009.
• Invited to facilitate the 14th Oxford Workshop on Teaching evidence-Based Practice, Oxford, UK; 8–12 September 2008.

Dr Manjari Tripathi

• Sleep Architecture Revisited—‘What is it and how is it relevant in psychiatry and Neurology?’ (Speaker), IHC-Delhi Neuroscientists meet; 22 June 2008.
• CME Seminar on Medical Emergencies, ‘Status Epilepticus and its Management’ Chandimandir Command Hospital (HR); 13–14 September 2008.


‘Essential neuroscience for the neuropsychiatrist and an approach to neuropsychiatric evaluation’, Clinical bedside neuropsychological evaluation at the Institute of Neurological Sciences- Voluntary Helath Services, Taramani, Chennai; 22–23 November 2008.


‘10th Annual Conference of the Indian Epilepsy Association and Indian Epilepsy Society (ECON)’, Sri Venkateswara Institute of Medical Sciences (SVIMS), Tirupati; 7–8 February 2009, ’EEG and SLEEP.

‘Cognitive Indices’ and Discussion on ‘Current Diagnostic constructs-relevance to India’. Chennai; 13–14 February 2009.


‘Randomized controlled clinical trial workshop’, Sponsored by the National Institutes of Health and the International Clinical Sciences Support Center, New Delhi, India; 30 April–2 May 2008.

Working Group on Universal Clinical Criteria for Dementia Classification—Core Committee, NBRC (HR); 21 June 2008.

• Panel Discussion: ‘Risk factors and diagnostic markers for disorders of ageing’ and as discussant ‘Current diagnostic constructs—relevance to India’, Chennai; 16 February 2009.


• AES–Meeting 2008 December, Seattle.

• AASM- Meeting 2008 June, Baltimore.

• COGTATE- Standardisation meet Dubai; February 2009.

Dr Vinay Goyal

• ‘Medical approach to refractory epilepsy’, Jalandhar; 10 September 2008.


• ‘Management of refractory epilepsy’, Indian Epilepsy Association (Punjab branch), Ludhiana; 16 November 2008.


• ‘New approaches to the treatment of diabetic neuropathic pain’, Mata Chanan Devi Hospital, New Delhi; 29 March 2009.

Dr Garima Shukla

• ‘Sleep disorders—diagnosis and management’ and on ‘Insomnia—recognizing types and management’, CME programmes organized by the local chapters of the IMA, Lucknow, Kanpur, Varanasi and Allahabad; March 2008.

• ‘Recognizing different seizure types and seizure mimics’, BAPICON, the Annual Conference of the Association of Physicians of India, Bihar chapter, Patna; 25 April 2009.

Dr Mamta Bhushan Singh

• Convened the pre-conference EEG workshop held before IAN 2009 and also delivered a talk ‘Polarity, Field Determination and Localization’ in the workshop.

• ‘Refractory epilepsy— recognition and management’.

• Kanpur ,Medical College MDH Institute of Neurosciences—The Brain and Spine Foundation.

• ‘Headache: When to treat, how to treat and when to refer?’; 29 March 2009.

**Neuroanesthesiology**

*Lectures delivered*

1. Dr P.K. Bithal conducted 7 workshops in various cities for training DNB teachers.

**Neuroanesthesiology**

*National and International Conferences*

The department faculty and residents attended 13 conferences (8 national and 5 international), 1 international symposium and one CME. Fourteen lectures (11 in national conferences and 3 in international conferences) were delivered by faculty members and 12 (7 international + 05 national) research papers were presented by faculty members and senior residents in the conferences.

**Neuroradiology**

*National and International Conferences*

The department faculty participated and delivered following lectures:

**Dr S.B. Gaikwad**

2. Third Anatolian Course on Interventional Neuroradiology. This meeting was jointly organized with intracranial stent meeting, Ankara, Turkey; 8–13 May 2008.
8. ‘Ramchandra Advanced Interventional Neuroradiology’ (RAIN) meeting and workshop, chaired a session on live case demonstration of intracranial stenting procedure during the workshop, Chennai; 10–12 December 2008.

AIIMS 2008-2009 / 698
Dr Ajay Garg

1. ‘DWI and DTI for the evaluation of Neonatal Brain’, Seminar on Advances in MRI, AIIMS, New Delhi; 22 March 2009.

Neuropathology Laboratory

Lectures delivered

International


National

Sarkar C.


Neuropathology laboratory

Lectures delivered

International conferences

Sarkar C.

- ‘1p and 19q deletions in astrocytic and oligodendroglial tumours’, First congress of the Asian Society of Neuropathology, Tokyo, Japan; 22 May 2008.

National conferences

- Jain A, Suri V, Sharma MC, Sarkar C. Demographic profile of gliomas at a tertiary institute in India, Delhi Chapter, IAPM; 5 April 2008.


- Shukla B, Suri V, Sharma MC, Sarkar C. Assessment of 1p/19 q status in oligodendrogial tumours by interphase FISH assay, Delhi Chapter IAPM; 5 April 2008.


**RESEARCH**

**Neurosurgery**

1. Cervical spine myelopathy international (CSMI) trial
3. Efficacy and safety of AP 12009 in adult patients with recurrent or refractory anaplastic astrocytoma (WHO Grade III): Randomized, open-label Phase III clinical trial


5. Phase II multicentre, open label dose confirmation study of interstitial I\textsuperscript{131}-chTNT 1bMoAb (COTARA) for the treatment of glioblastoma multiforme (at first relapse). Funded by Peregrine Pharmaceuticals, Texas, USA. Deepak Gupta, A.K. Mahapatra, Ashish Suri.

6. Prospective multi-centre, double-blind parallel group study to evaluate efficacy of clazosentan in reducing vasospasm related morbidity and all-cause mortality in adult patients with aneurysmal SAH treated with aneurysm clipping.

7. A double blind placebo controlled trial of progesterone with or without hypothermia in subjects with severe traumatic brain injury. Ongoing Project in the Department of Neurosurgery, Jai Prakash Narain Apex Trauma Center, All India Institute of Medical Sciences, New Delhi, India (partially funded by NIH).

8. Brain trial (Bradykinin B2 receptor antagonist in Neurotrauma): A multicentric randomized trial by London school of Hygiene and Tropical medicine.

9. DECRA trial (Decompressive craniectomy in severe head injury): A multicentric randomised trial being conducted in USA.

10. CRASH2 trial: A multicentric randomised trial by London school of hygiene and tropical medicine.

11. Genetics of developmental CV junction anomalies. Funded by DBT. Funds: Rs 20 lakh.

12. STICH II trial. Funded by MRC, UK.

13. ISS implantation in vascular dementias. Funded by BRAINSGATE.

14. Simultaneous fMRI and EEG to localize the epileptogenic foci in intractable epilepsy. Funded by DBT. Funds: Rs 35 lakh.

**Departmental projects**

1. Autopsy study in diffuse axonal injury.


3. Role of Simvastatin in prevention of vasospasm and improving functional outcome after aneurysmal Sub-Arachnoid hemorrhage: A Prospective Randomized Double blind Placebo controlled trial.

**Neurology**

**Funded projects**

**Completed**


3. Correlation of electrophysiological states and heamodynamic changes during simultaneous EEG-fMRI in Intractable Epilepsy. Funded by DBT, AIIMS.


5. To Assess whether saliva and serum free anti-epileptic drugs levels are equivalent. Funded by ICMR, AIIMS.

6. CAP-Analysis in Nocturnal intractable seizures. Funded by DBT.

7. A multicentre, randomized, double-blind, placebo-controlled, parallel-group trial, with placebo run-in, and an open-label treatment period, to evaluate the performance of the cogstate computerized neuropsychological battery and the adas-cog in generally cholinesterase-native AD patients randomized to either donepezil or placebo. Funded by Quintile.


9. Comprehensive etiological study in cerebro-vascular disease with special reference to Stroke in young. Project being conducted in AIIMS.

10. Surgical treatment of intracerebral lobar haemorrhage (STICH-II). International trial on surgical treatment of intracerebral haematomas, AIIMS.

11. Effects of amyloid beta on the morphology and protein profile of the rat hippocampus, Department of Anatomy.

12. A Comparison of Autonomic functions before and after surgical intervention in patients with temporal lobe Epilepsy, Department of physiology.

13. A study of quantitative EEG and sleep architecture changes, cognitive functions and stress in mild cognitive impairment and Alzheimer’s disease, Department of Physiology.

14. Autologous intra-arterial infusion of bone marrow mono nuclear cells for static encephalopathy with special reference to cerebral palsy. Funded by DST.

15. Normobaric oxygen therapy for acute ischemic stroke: A pilot study in Indian patients. ICMR.

16. Minocycline in acute ischemic stroke. Funded by ICMR.

17. ENOS.

18. Stem cell therapy in acute ischaemic stroke. Funded by DBT.

Ongoing

1. A randomized, double-blind, placebo-controlled, dose-escalation study of single and multiple oral dose administration of BIIB014 in subjects with moderate to late-stage Parkinson’s disease who are also receiving treatment with levodopa as PI. Funded by Biogen Idec for 1 year (2008–2009). Funds: Rs 10 lakh.


4. Identification of novel gene(s) for familial PD as CO-I. Funded by DBT for 3 years (2007–2010). Funds: Rs 95 lakh.

5. Clinical Correlation of Ach-R-Abs and MuSK-Abs in myasthenia gravis patients in context with phenotype and genotype variation as PI. Funded by ICMR for 3 years (2007–2010). Funds: Rs 28 lakh.


8. Central database management facility. Funded by Department of Biotechnology, Government of India.


11. Prevalence of the restless legs syndrome in women and its relationship with iron deficiency: A prospective case-controlled study from North India. Funding by All India Institute of Medical Sciences for 2 years. Funds: Rs 44,000

12. Generating knowledge for assessment of emerging technologies—the effects of continuous positive airway pressure therapy for prevention of new vascular events in patients with sleep disordered breathing and stroke: A randomized controlled study. Funding by Department of Science and Technology, Ministry of Science and Technology, Government of India for 3 years. Funds: 69 lakh.
Departmental projects

Completed

1. Clinical profile of familial vs non-familial Parkinson’s disease
2. Sleep Pattern in familial Parkinson’s disease
3. Prescription pattern of neurologists at a tertiary care hospital for migraine
4. Psychiatric co-morbidity in patients of medically refractory epilepsy—pre and post epilepsy surgery
5. Prevalence of Sleep disordered breathing in Stroke patients
6. Lower prevalence of sleep disturbances in familial Parkinson’s disease: A prospective case control study

Ongoing

1. Predictors of seizures in intractable epilepsy patients undergoing long term video EEG recording
2. Neuropsychiatric problems in patients with Parkinson’s disease
3. Care giver burden among caregivers of Parkinson’s disease patients
4. Long term prognosis and factors affecting prognosis in tubercular meningitis
5. Result of Mitoxantion therapy in multiple sclerosis
6. Ocular movements in familial Parkinson’s disease
7. Thrombolysis with intravenous rt-PA for acute ischaemic stroke: The third international stroke trial (IST-3). Funded by Medical Research Council, UK.
8. ENOS: Efficacy of nitric oxide in stroke—a prospective, international, multicentre, randomised, parallel-group, blinded, controlled, collaborative, factorial trial to investigate the safety and efficacy of treatment with transdermal glyceryl trinitrate, a nitric oxide donor, and of stopping or continuing prior antihypertensive therapy, in patients with acute stroke. Funded by Medical Research Council, UK.
9. Genetic basis of ischaemic stroke in an Indian population. Funded by UK-India Education Research Initiative, British Council, UK.
11. Prognostic factors for acute bacterial meningitis
12. Validation of diagnostic criteria for differentiating between pyogenic and tubercular meningitis
13. Predictors of inhospital mortality in patients with intracerebral hemorrhage
14. Excessive daytime sleepiness in patients with medically refractory epilepsy versus those with controlled epilepsy—a prospective study
**Collaborative projects**

**Completed**

1. Meeting for DC of Mr Sarvana Perumal S (PhD Student) (with Department of Pharmacology; 10 February 2009).
2. Meeting for DC of Mr Prabhakar Singh (PhD Student). (with Department of Anatomy; 31 March 2009).
3. Meeting for DC of ‘Evaluation of antiepileptic property of selected Indian plants and their mechanism of action’ (with Department of Pharmacology; 5 February 2009).
4. Meeting for DC Ms Shweta Sharma, (PhD Student) (with Department of Physiology; 24 April 2009).

**Neuroanaesthesiology**

**Completed**

1. A comparison of two anaesthetic techniques for paediatric spinal surgery: Sevoflurane versus Isoflurane
2. Anesthetic concerns and postoperative complications in repair of myelomeningocele: A retrospective study
3. Intraoperative non-invasive versus invasive haemodynamic monitoring during craniotomy for supratentorial tumour surgery: A cost effective-analysis
5. Bispectral index–guided administration of anesthesia for transsphenoidal resection of pituitary tumors: A comparison of three anesthetic techniques
6. A review of perioperative complications during frameless stereotactic surgery: Our institutional experience
7. Comparative study of thiopentone and propofol for brain protection during temporary clipping in intracranial aneurysm surgery
8. Comparative evaluation of percutaneous retrogasserian glycerol rhizolysis and radiofrequency thermocoagulation techniques in the management of trigeminal neuralgia

**Ongoing**

1. Comparative study of early and delayed extubation after transoral odontoidectomy and posterior fixation
2. Perioperative complications after transoral odontoidectomy and posterior fixation
3. Effect of avoiding nitrous oxide in patients undergoing surgery for supratentorial tumours
   Perioperative complications inpatients undergoing endoscopic surgery
Neuroradiology

Funded projects

Ongoing

1. Phase imaging and diffusion tensor imaging—Novel MR Contrasts in the evaluation of cryptogenic focal epilepsy, Ajay Garg. Funded by Department of Science and technology.

2. Quantitative vessel size imaging (VSI) in cerebral gliomas and correlation with histopathological grading and vascular endothelial growth factor expression. Ajay Garg. Funded by Department of Biotechnology.

Departmental projects

1. Role of diffusion tensor imaging in the evaluation of intracranial meningiomas.

2. Evaluation of angiographic features of CNS vasculitis

3. Diffusion tensor imaging and fiber tracking in spinal cord arteriovenous Fistulae and feasibility study of holocord DTI and tractography

4. Venous drainage pattern in patients with perimesencephalic and non-perimesencephalic angio-negative subarachnoid hemorrhage

5. Role of 3D rotational angiography in management of treated intracranial aneurysms.

6. Diffusion tensor imaging in the evaluation of intractable epilepsy

Neuropathology Laboratory

Funded projects

Ongoing


5. Efficacy and safety of AP 12009 in adult patients with recurrence or refractory anaplastic astrocytoma (WHO grade III) as compared to standard treatment with temozolomide or BCNU: A randomized actively controlled, open label clinical phase III study. Chitra Sarkar. Funded by Antisense Pharma, Germany (2007–2010). Funds: Rs 25 lakh (approx).
Departmental projects

Completed

1. p53, EGFR and HER2 receptor in osteogenic sarcomas
2. GBMs with long-term survival: Role of cell cycle regulatory genes.

Ongoing

1. Primary and secondary glioblastomas: A study of EGFR amplification, EGFR vIII mutants and p53 expression
2. Study of gliomagenesis: Possible involvement of CNS developmental pathway
3. Study of limb girdle muscular dystrophy (LGMD) patients in Indian population using Calpain-3, dysferlin and sarcoglycan protein analysis
4. Clinicopathological study of angiogenesis in glioblastoma multiforme
5. Childhood GBMs: A clinicopathological and molecular genetic study

Collaborative Research

Ongoing

1. Analysis of immunomodulation property of IFN-g on classical, non-classical MHC 1 and TGF-b expression in astrocytic tumors and their relevance in immunotherapy (with Neurobiochemistry)
2. Study of HIC-1 in tumorigenesis and cell response (with Biochemistry)
3. Effects of administration of human umbilical cord blood cells (HUCBG) in combination with melatonin versus HUCBG alone in rat with stroke (with Neurology)
4. Altered DNA sequences in gliomas: Characterization of changes and context sequences with reference to tumor type (with Biochemistry, AIIMS)
5. Characterization of the properties of an amplified region of DNA in primary meningeal tumours (with Biochemistry)
6. Analysis of FAT gene in glial tumours (with Biochemistry)
7. Pilocytic astrocytomas: Correlation of clinical features and outcome with proliferation index and angiogenesis (with Neurosurgery)

PUBLICATION

Neurosurgery

Journals


**Chapters in Book**


**Neurology**

**Journals**


Chapters in Books/Books


Abstracts presented in Conferences


6. Behari M. What is the cause of Parkinson’s disease?. 7th Asia Pacific Parkinson’s Association Programme; 2009.


15. Siddiqui NS, Behari M, Vivekanandhan S, Manral M. Trials of Multivitamins/antioxidant and nutritional supplements in Parkinson’s Disease patients. 2nd Asian and Oceanian Parkinson’s Disease and Movement Disorders Congress. 2009:64.


Neuroanaesthesiology

Journal


**Abstracts**


**Neuroradiology**

**Journals**


Neuropathology Laboratory

Journal


**Conference/Meeting Attended**

**Neurology**

**Dr M. Behari**

1. Investigator’s Meeting at Kuala Lumpur, Malaysia; 27–28 March 2009.
3. Investigator’s meeting at Hong Kong; 2–3 October 2008.
4. Selection Committee meeting for the Additional Professor post in Neurology Department as an expert, Bangalore; 15 October 2008.
5. 16th Annual Conference of the Indian Academy of Neurology, New Delhi; 23–26 October 2008, as President of Academy.
7. External expert for the selection Committee for selection/Assessment promotion of faculty members of the Department of Neurology at the SGPGI, Lucknow; 5 November 2008.
8. Invited speaker at South Asian Conference of Neurosciences at Bangladesh Medical College, Dhaka; November 2008.
9. Midterm EC of IAN meeting, Cochin; 7 March 2009. Invited by the Medical Council of India to inspect PSG Institute of Medical Sciences and Research, Coimbatore for starting DM (Neurology) course under, Dr MGR Medical University, Tamilnadu; 5 March 2009.

PATIENT CARE

Neurosurgery
1. The Department runs a busy Neurosurgical service, with Outpatient Clinics 4 times a week. During 2008–2009, the Department treated 20886 old cases and 9982 new cases. In the Gamma Knife follow-up Clinic, a total of 789 patients were seen.
2. Inpatient care comprises 25 ICU beds, 72 General ward beds. CN tower has become the Private Ward block, with Neurosurgical patients being admitted on 1st, 3rd, 5th and 6th Floors. During the last quarter of 2008, renovation of NS3 and NS2 wards has been carried out, which included provision of an HDU (high dependency unit) in both wards.
3. We have a total of 7 dedicated Neurosurgical Operating rooms, with 2 of these being currently under construction/renovation for the installation of the Intraoperative MR system (the ‘Brain Suite’). The entire range of Neurosurgical cases are operated and managed at our Department. During 2008–2009, a total of 2741 procedures were carried out, out of which 2452 were major, remainder being minor procedures. During the same period, a total of 239 Gamma Knife procedures were carried out.

Neurology

Community Services/Camps
1. Organized World Parkinson’s Disease Day for patients; 6 April 2008.
3. ‘PRAN’, Newer methods of treatment in PD; and Panelist in Public awareness program on World Parkinson’s disease, AIIMS, New Delhi; 5 April 2009.

5. Doordarshan (DD News); Total health; ‘Stroke: Diagnosis and management’, Public Awareness Program on DD News, 8.30–9.30 am; 12 April 2009.

Patient care

Indoor

Data will be provided by MRD section, AIIMS

Outdoor

Total Old and New Patients 68417

PROCEDURES DONE IN EMG/EEG Laboratory

Data to be provided by Dr Achal and Dr Mamta (not provided till now)

- EEG 3253
- Long and short-term VEEG 250
- Evoked Potentials 236
- NCV–EMG 3264
- QST 113
- ECG 1019

(In the patient care/supportive activities include information regarding: (a) facilities available in the department (including, special clinical and or special laboratory facilities (b) community services/camps, etc.)

The Department of Neurology organized following patient awareness programmes:

- Parkinson’s disease April 2008
- Epilepsy Nov 2008
- Headache August 2008
- Brain storm December 2008

The faculty members routinely give talks on radio and television on neurological disorders such as migraine, Parkinson’s disease, epilepsy, stroke, Myasthenia gravis, muscle disorders, etc.

Neuroanestesiology

Peri-operative Anaesthetic Care

1. Neurosurgical operations

<table>
<thead>
<tr>
<th>Type</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elective</td>
<td></td>
</tr>
<tr>
<td>Emergency</td>
<td>537</td>
</tr>
<tr>
<td>Total</td>
<td>2555</td>
</tr>
</tbody>
</table>

AIIMS 2008-2009 / 721
2. Neuroradiological procedures

Diagnostic  257
Therapeutic  106
Total  363

Neuro-intensive care unit

Neurosurgical  2000
Neurologic  156
Total  2156

Pain-clinic

A total of 829 patients (148 New and 681 Old) were attended in the OPD, 129 of them were treated with nerve blocks in the operation theatre.

Neuroradiology

<table>
<thead>
<tr>
<th>Procedures</th>
<th>Number of investigations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital Subtraction Angiography</td>
<td>654</td>
</tr>
<tr>
<td>Gamma Knife Angiogram</td>
<td>59</td>
</tr>
<tr>
<td>MRI</td>
<td>2,127</td>
</tr>
<tr>
<td>CT</td>
<td></td>
</tr>
<tr>
<td>Head</td>
<td>13,338</td>
</tr>
<tr>
<td>Chest</td>
<td>306</td>
</tr>
<tr>
<td>Abdomen</td>
<td>123</td>
</tr>
<tr>
<td>Spine</td>
<td>495</td>
</tr>
<tr>
<td>Image guided/CT guided study</td>
<td>112</td>
</tr>
<tr>
<td>Emergency CT</td>
<td>6,847</td>
</tr>
<tr>
<td>Ultrasound</td>
<td>1,332</td>
</tr>
<tr>
<td>Plain X-rays OPD/indoor</td>
<td>19,120</td>
</tr>
<tr>
<td>Private case reporting</td>
<td>2,633</td>
</tr>
<tr>
<td>Interventional procedures</td>
<td>139</td>
</tr>
<tr>
<td>Total</td>
<td>47,276</td>
</tr>
</tbody>
</table>
Neuropathology Laboratory

Neuropathology surgical specimens 2,744
Frozen sections 522
Muscle biopsies: Total number received 340
Muscle enzyme histochemistry 537
Diagnostic Immunohistochemistry 4,219
Myelin stain 155
Electron microscopy: Specimen received 1,109
Specimen processed 554

AWARDS AND HONOURS

Neurosurgery

Professor B.S. Sharma, Secretary, Neurological Society of India until December 2008; President, Skull Base Surgery Society of India, 2007–2008; Treasurer, Indian Society of Cerebrovascular surgery.

Dr S.S. Kale, invited as Honored Guest and Honorary member of Venezuelan Society of Neurosurgery, 2008.

Dr P.S. Chandra, Task force member, ILAE and Board of Director, International brain mapping society.

Dr A. Suri, Executive Member of the Skull Base Surgery Society of India.

Dr A. Gupta, completed BOYSCAST fellowship of Department of Science and Technology; awarded the title of ‘First Research Professor in Neurosurgery’, CJW Medical centre, United States.

Neurology


Dr Manjari Tripathi, American Academy of Sleep Medicine (AASM), International Scholar Mini Fellowship 2008- Northwestern University Chicago and Stanford SF, USA. DBT Young Investigator award- for Fmri and EEG as an essential tool in the Non-invasive investigation of patients with epilepsy which is Intractable. Several Travel scholarship awards. MANM Oration Allahbad.

Dr Garima Shukla, Awarded Fellowship in Epilepsy and Sleep Medicine, Epilepsy Centre of the prestigious Cleveland Clinic, Cleveland, Ohio. This was through selection as BOYSCAST fellow by the Department of Science and Technology, Ministry of Science and Technology, Government of India. Selected to receive the Young Investigator bursary award for paper submitted for presentation at the 28th International Epilepsy Congress, Budapest, Hungary; June 2009.
Dr Rohit Bhatia, Awarded fellowship in stroke at the prestigious Calgary Stroke Programme at the University of Calgary, Calgary, Canada; March 2009. List only awards, honors and named orations of national and international repute conferred (non-elected) memberships of fellowships of offices of the international and national societies and journals. Do not list the lectures delivered by the facility in CMI’s and conferences.

Academic, Administration, Finance, Engineering, Library, Central facilities, etc.

Dr Madhuri Behari, 2nd Asian Oceanian Congress of Parkinson’s Disease and Movement Disorders, New Delhi February 2009. 7th Asia Pacific Parkinson’s Association International Symposium, New Delhi; February 2009.

Dr K. Prasad, Director, Clinical Epidemiology Unit, AIIMS, New Delhi. Nominated as a member of an Expert Committee for expansion of infrastructure at ICGEB for clinical development of malaria vaccines. Continuing as ‘Member of the Executive Council’ of Pandit Bhagwat Dayal Sharma University of Medical Sciences, Rohtak for a term of two years (2008–2010).

Neuroaneasthesiology

Dr H.H. Dash has been selected as a member of the Editorial Board of the Journal of Neurosurgical Anesthesiology (USA). Attended Selection Committee for the selection for the faculties at Nizam’s Institute of Medical Sciences, Hyderabad, 08 December 2008. Assisted Standing Selection Committee for the interview of faculty posts at NEIGRIHMS, Shillong, New Delhi, 3–4 April 2009.

Dr A. Chaturvedi was selected a member of Editorial Board of Global Journal of Applied Physiology and Postoperative Pain (GJAPAS).

Neuroradiology

Dr N.K. Mishra, Member of the task force on basic research in modern biology, Department of Biotechnology, Government of India; Co-editor in chief and chairman of scientific committee for the Journal of Neuroradiology; Member Editorial Board for Interventional Neuroradiology, Indian Journal of Radiology and Imaging (IJRI).

Dr S.B. Gaikwad, Invited as visiting associate professor, Brigham and Womens’ Hospital, Neuroradiology Section, Harvard Medical School, Boston, Massachusetts, USA, January–June, 2009.

Dr Ajay Garg, Completed long-term Biotechnology Overseas Associateship Award at University of California at San Francisco, USA, January 2008–January 2009.

Neuropathology Laboratory

1. Dr Chitra Sarkar Elected as Fellow Royal College of Pathologists (FRCPath), London; April 2008.


**SIGNIFICANT EVENTS**

**Neurology**

Dr M. Behari Member, Institute body of NIMHANS, Bangalore, Scientific Advisory Board of Armed Forces Medical College, Ethics Committee of JNU, Committee constituted by Ministry of Health and Family Welfare on Diabetes, Stroke and Hypertension.

**Neuropathology Laboratory**

Dr Chitra Sarkar was included as one of the 100 distinguished ‘Women in science’ in India and her autobiography was published in a book entitled ‘Lilavati’s Daughters’, brought out by the Indian Academy of Sciences, Bangalore.


**VISITING SCIENTISTS**

**Neurology**

Dr Sudhansu Chokroverty, Co-Director of Neurology (Clinical Neurophysiology and Sleep Medicine) at the New Jersey Neuroscience Institute, JFK Medical Center, Edison, New Jersey, ‘The Rhythms and Rituals of the Sleeping Brain’, 20 February 2009.
10.6 Dr. Rajendra Prasad Centre for Ophthalmic Sciences

<table>
<thead>
<tr>
<th><strong>Chief &amp; Professor</strong></th>
<th>Supriyo Ghose</th>
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</thead>
<tbody>
<tr>
<td><strong>Professor</strong></td>
<td>Raj Vardhan Azad</td>
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<tr>
<td></td>
<td>Sat Pal Garg</td>
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<td></td>
<td>Atul Kumar</td>
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<td></td>
<td>Jeewan Singh Titiyal</td>
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<td></td>
<td>Sudarshan Khokhar</td>
</tr>
<tr>
<td><strong>Professor</strong></td>
<td>Rasik Behari Vajpayee</td>
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<tr>
<td></td>
<td>Anita Panda</td>
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<td></td>
<td>Pradeep Sharma</td>
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<tr>
<td></td>
<td>Radhika Tandon</td>
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<tr>
<td><strong>Professor</strong></td>
<td>Vimla Menon</td>
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<td></td>
<td>Yog Raj Sharma</td>
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<tr>
<td></td>
<td>Gita Satpathy</td>
</tr>
<tr>
<td></td>
<td>(Ocular Microbiology)</td>
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<td></td>
<td>Mahesh Chandra</td>
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<tr>
<th><strong>Medical Superintendent</strong></th>
<th>Shakti Kumar Gupta</th>
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<tbody>
<tr>
<td><strong>Additional Professors</strong></td>
<td>Dilip R. Shende</td>
</tr>
<tr>
<td></td>
<td>Rajpal</td>
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<tr>
<td></td>
<td>G.V. Satyanarayana Murthy</td>
</tr>
<tr>
<td></td>
<td>(Ocular Anaesthesiology)</td>
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<tr>
<td></td>
<td>Niranjan Nayak</td>
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<tr>
<td></td>
<td>(Ocular Microbiology)</td>
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<tr>
<td><strong>Associate Professors</strong></td>
<td>Seema Sen</td>
</tr>
<tr>
<td></td>
<td>(Ocular Pathology)</td>
</tr>
<tr>
<td></td>
<td>Namrata Venkatesh</td>
</tr>
<tr>
<td></td>
<td>Tanuj Dada</td>
</tr>
<tr>
<td></td>
<td>Sanjay Sharma</td>
</tr>
<tr>
<td></td>
<td>(Ocular Radiology)</td>
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<tr>
<td></td>
<td>Pradeep Venkatesh</td>
</tr>
<tr>
<td></td>
<td>Seema Kashyap</td>
</tr>
<tr>
<td></td>
<td>(Ocular Pathology)</td>
</tr>
<tr>
<td></td>
<td>Neelam Pushker</td>
</tr>
</tbody>
</table>

| **Assistant Professors**  | T. Velpandian |
|                         | (Ocular Pharmacology) |
|                         | Viney Gupta |
|                         | M. Vanathi |
|                         | Medha R. |
|                         | Praveen Vashist |
|                         | (Community Ophthalmology) |
|                         | Rohit Saxena |
|                         | Rajesh Sinha |
|                         | Renu Sinha |
|                         | (Ocular Anaesthesiology) |
|                         | Jasbir Kaur |
|                         | (Ocular Biochemistry) |
|                         | Tushar Agarwal |
|                         | Bhavna Chawla |
|                         | Parijat Chandra |

**EDUCATION**

<table>
<thead>
<tr>
<th><strong>Undergraduates</strong></th>
<th><strong>Post graduates</strong></th>
<th><strong>Paraclinical Pool Officers/</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>MBBS – 40</td>
<td>MD - (23 passed)</td>
<td>BSc (Hons) Ophthalmology Pool</td>
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<tr>
<td></td>
<td>PhD - 15</td>
<td>Course - 30 Officers - 05</td>
</tr>
<tr>
<td></td>
<td>SRs: Ophthalmology - 32</td>
<td>10 students passed</td>
</tr>
<tr>
<td></td>
<td>Ocular Anaesthesia - 06</td>
<td></td>
</tr>
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</table>

**Short- and long-term training**

Thirty Ophthalmologists from various parts of the country including 16 in ‘Training of trainers programme’ (ECCE/IOL) were trained in different fields of specialization.
Continuing Medical Education

The centre organized following Conferences/Seminars/Workshops on:

- Eye donation day celebration 8 September 2008
- National Workshop on cornea 30 April–1 May 2009
- corneal transplantation
- National Workshop on Phacoemulsification Surgery
  - Orientation programme 6–7 May 2008
  - Hospital waste management and 19 May 2008 and 13 September 2008
- Role of HKS
- National Workshop on strabismology 3–4 October 2008
- Ophthalmic nursing 20 January 2009

The faculty of the Centre participated in, various scientific forums, delivered 90 lectures including key note addresses and chaired 44 scientific sessions.

RESEARCH

Funded Projects

Completed

1. Immunophenotypic characterization of small lymphocytic lymphomas of the eye.
2. Clinical evaluation of refractive phakic intraocular lens.

Ongoing

1. Detection of HPV genome in malignant ocular lesions
2. Comparative genome hybridization in primary angle closure glaucoma families: A pilot study in Indian population
3. Evaluation of polymerase chain reaction assay for herpes simplex virus 1 (HSV 1) detection in tear specimen of suspected viral keratitis, particularly stromal and atypical epithelial keratitis
4. Development of small interfering RNAs (siRNAs) for inhibition of enterovirus-70 and coxsackievirusA24 viruses causing acute hemorrhagic conjunctivitis
5. Culture of human adult retinal pigment epithelial cells on human amniotic membrane
6. Transplantation of human retinal pigment epithelial cells in the 6–hydroxy dopamine lesioned rat model of Parkinson’s disease
7. Evaluation of the bio-disposition of xanthophylls in Indian donor eyes and detection of their content in commonly available fruits and vegetables

8. Evaluation of tear-fluid constituents in various ocular pathological conditions using tandem mass spectrometry

9. Phenotypic, molecular and ultrastructural study of coagulase negative staphylococci and their biofilms in device related infections

10. Evaluation of calcium dobesilate for various ocular conditions. A phase 2/3 randomized, controlled, double-masked, multi-centre, comparative trial, in parallel groups, to compare the safety and efficacy of intravitreous injections of 0.3 mg pegaptanib sodium (Macugen®), given as often as every 6 weeks for 2 years, to sham injections, in subjects with diabetic macular edema (DME) involving the centre of the macula

11. A 12-month randomized, pilot study to compare the efficacy and safety of verteporfin (visudyne) photodynamic therapy (standard fluence) plus intravitreal ranibizumab (Lucentis) versus verteporfin (visudyne) photodynamic therapy (reduced fluence) plus intravitreal ranibizumab (Lucentis) in patients with subfoveal or juxtafoveal choroidal neovascularization secondary to age-related macular degeneration

12. LX211-01-UV: A double-masked, placebo-controlled, parallel-group, multi-centre, dose-ranging study to assess the efficacy and safety of LX211 as therapy in subjects with active sight threatening, non-infectious intermediate-, anterior and intermediate-, posterior- or pan-uveitis

13. LX211-02-UV: A double-masked, placebo-controlled, multi-centre, parallel-group, dose-ranging study to assess the efficacy and safety of LX211 as therapy in subjects with clinically quiescent sight threatening, non-infectious intermediate-anterior and intermediate-, posterior- or pan-uveitis

14. LX211-03-UV: A double-masked, placebo-controlled, parallel-group, multi-centre, dose-ranging study to assess the efficacy and safety of LX211 as therapy in subjects with active sight threatening, non-infectious intermediate-, anterior uveitis

15. A phase II prospective randomized, multi-centre diabetic macular edema dose ranging comparator study evaluating the efficacy and safety of PF-04523655 versus laser therapy (DEGAS)

16. A pilot study to assess the adjunctive role of pegaptanib sodium (Macugen) for the treatment of severe, aggressive and progressive retinopathy of prematurity (ROP)

17. Clinical evaluation of blink and clean contact lens solution

Departmental projects

Completed

1. Clinical and chromosomal analysis of the congenital eyelid anomalies in a tertiary care hospital

2. To evaluate the role of oral corticosteroids in orbital cellulitis

3. Comparative evaluation of the effect of olopatadine (0.1%) and polyherbal eye drop formulation in patients having allergic conjunctivitis

AIIMS 2008-2009 / 728
4. Evaluation of four muscle recessions in nystagmus without eccentric null
5. Evaluate FD-2 (Frisby Davis-Distance) in surgical management of intermittent exotropia.
6. Correlation of visual functions with cortical activation patterns on functional magnetic resonance imaging (fMRI) in cases of optic neuritis
7. To evaluate the incidence of recurrence of amblyopia following discontinuation of amblyopia treatment in the cases of treated anisometropic amblyopia
9. Evaluation of combined trabeculectomy with mitomycin versus trabeculectomy with mitomycin alone in primary congenital glaucoma
10. Long term structural and functional outcomes in treated juvenile open angle glaucoma eyes
11. Clinical profile of patients of ocular trauma attending ocular emergency services at tertiary care hospital
12. Role of magnetic resonance imaging in management of soft tissue sarcoma

_Ongoing_

1. Evaluation of ocular toxicity of festival colors during the celebration of Holi
2. Development of a poly-herbal formulation for dry eye (computer vision syndrome)
3. Development of microdialysis technique to study intraocular kinetics of drugs
4. Evaluation of cassette dosing technique for the intraocular penetration of drugs
5. Modulation of transporters for the intraocular penetration of drugs
6. Evaluation of expression of P-glycoprotein (P-gp) in retinoblastoma
7. Identification and characterization of differentially expressed genes in human retinoblastoma
8. Regulation of apoptosis in human retinoblastoma
9. Molecular genetics of glaucoma
10. Development of a potential biopolymer to serve as an alternative substrate of human amniotic membrane for ex-vivo expansion of corneal epithelial stem cells
11. Photoreceptor changes in aging human retina and their possible link with oxidative stress
12. Phenotypic characterization of limbal epithelial cells cultured on amniotic membrane
13. Determination of plasma levels of ethambutol in tuberculosis patients having retinal toxicity
14. Bone marrow derived stem cell therapy and the trabecular meshwork: An experimental study
15. Mutational analysis of primary angle closure glaucoma and primary open angle glaucoma patients in Indian population
16. Use of autologous bone marrow derived stem cells (Phase-2 trial) and umbilical cord blood stem cells (pilot study), transplantation by intravitreal injection for rehabilitation of patients with retinitis pigmentosa and allied heredoretinal dystrophies

17. Single nucleotide polymorphisms associated with diabetic retinopathy

18. Immunohistochemical and molecular studies on WntB-Catenin signaling pathway in sebaceous cell carcinoma of the eyelid

19. Prevalence of vitamin A deficiency in children and nursing mothers co-related with corneal pathology a hospital based study

20. Evaluation of efficacy of probing in nasolacrimal duct obstruction with adjunctive mitomycin-C in adults

21. Modified lateral eyelid isolation flap for reconstruction of full thickness eyelid defects

22. Modified lateral plication for Marcus Gunn jaw winking phenomenon

23. Visual parameters in patients with regressed retinoblastoma

24. Study of visual functions and fundus findings in orbital tumours and their alterations after surgery

25. Serial ultrasonic evaluation and its clinico-pathological correlation in retinoblastoma patients undergoing chemo reduction and local treatment or enucleation

26. Randomized control trial using carboplatin 750mg/m² and 560 mg/m² for ocular salvage in group C and D retinoblastoma

27. Malignant tumours of the eye and orbit in children: The varied clinical profile and role of tumour markers in management

28. An integrated predictive model for evidence-based eye care

29. Health related quality of life in blind children (8–18 years) of retinoblastoma

30. Prospective comparative randomized evaluation of intravitreal avastin, intravitreal triamcinolone acetonide and laser treatment in non-responsive persistent diffuse diabetic macular edema

31. Multifocal electroretinogram in emmetropes, myopes and hypermetropes and its correlation with optical coherence tomography

32. Comparative evaluation of functional outcome of dye assisted internal limiting membrane peeling in macular hole surgery using multifocal electro retinogram

33. Comparative evaluation of combination therapies photodynamic therapy + ranibizumab vs photodynamic therapy + pegaptanib in the treatment of subfoveal classic choroidal neovascular membrane

34. A randomised prospective study of anatomic and functional outcomes in patients of central serous chorioretinopathy (CSC) with and without laser treatment
35. Comparative study of combination therapies using photodynamic therapy with intravitreal triamcinolone vis a vis photodynamic therapy with intravitreal bevacizumab in treatment of neovascular age-related macular degeneration

36. Qualitative and quantitative assessment of early lesions in diabetic retinopathy with multifocal electroretinogram

37. Role of intravitreal bevacizumab in diabetic vitrectomy

38. Role of avastin in vitreous surgery for diabetic non resolving vitreous hemorrhage

39. Comparative study of 25 gauge vs 20 gauge system for pars plana vitrectomy in the management of rhegmatogenous retinal detachment

40. Predictors of type 1 retinopathy of prematurity in preterm babies

41. Comparative evaluation of intravitreal pan anti-vascular endothelial growth factor with intravitreal selective anti-vascular endothelial growth factor in diabetic macular edema

42. A randomized prospective study for comparison of effects of pascal photocoagulation with conventional laser photocoagulation in diabetic macular edema and proliferative diabetic retinopathy

43. Role of bevacizumab in surgery for diabetic vitreous haemorrhage with or without traction retinal detachment

44. Study on the prevalence, therapeutic options and outcome measures of amblyopia

45. Assessment of magnitude and progression of myopia in school going children in Delhi

46. Long term changes in Heidelberg retinal tomography and visual fields in primary adult glaucoma patients

47. Role of computed tomography dacryocystography in the evaluation of patients with epiphora

48. Role of magnetic resonance imaging in characterization of sonographically indeterminate adenexal masses

**Collaborative projects**

**Completed**

1. Evaluation of the intraocular penetration of timolol in the in situ gel forming formulation. (with INMAS, Delhi)

2. Epidemiology of age-related eye disease-in India-INDEYE (with The London School of Hygiene and Tropical Medicine)

**Ongoing**

1. A genetic component to the INDEYE study of cataract and age-related macular degeneration in India (with INDGEN)
2. Evaluation of vitreous humor as a marker fluid in the autopsy drug level analysis (with Forensic Science Laboratory, New Delhi)

3. Assessment of safety and efficacy of relinethra CAu (an autologous bioengineered conjunctiva) in conjunctival disorders (with Reliance Life Sciences)

4. Outcome of optical penetrating keratoplasty in bilaterally blind patients (with Psychiatry)

5. Ocular surface reconstruction with autografts of non-ocular origin (with Dental Surgery)

6. Sentinel Surveillance Unit at the R. P. Centre, AIIMS, under the National Programme for Control of Blindness (with National Programme for Control of Blindness, Government of India)

7. Community ophthalmology activities in ORBIS (with RIO Child Eye Care Project)

PUBLICATIONS

Journals


**Chapters in Books and Monographs**


**Books**


**PATIENT CARE**

**Hospital services**

<table>
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<tr>
<th></th>
<th>New cases</th>
<th>Old cases</th>
<th>Total</th>
</tr>
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<tbody>
<tr>
<td>General OPD</td>
<td>116,390</td>
<td>81,538</td>
<td>1,97,928</td>
</tr>
<tr>
<td>Emergency</td>
<td>37,019</td>
<td>–</td>
<td>37,019</td>
</tr>
<tr>
<td>Total cases</td>
<td>153,409</td>
<td>81,538</td>
<td>2,34,947</td>
</tr>
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**Speciality clinics**

1. Cornea             | 6,019     | 15,414    | 21,433  |
2. Lens               | 816       | 793       | 1,609   |
3. Uvea                | 900       | 1,875     | 2,775   |
4. Contact lens        | 1,262     | 2,264     | 3,526   |
5. Glaucoma            | 2,761     | 6,731     | 9,492   |
6. Ophthalmoplasty     | 2,835     | 1,541     | 4,376   |
7. Paediatric ophthalmology | 796     | 361       | 1,157   |
8. Trauma clinic       | 1,162     | 1,040     | 2,202   |
9. Retina              | 2,509     | 4,059     | 6,568   |
10. Neuro-ophthalmology 1,616 1,152 2,768
11. Medical Ophthalmology 1,214 1,334 2,548
12. Vitreo retinal 1,915 1,137 3,052
13. Ocular surface disorder 41 49 90
14. a) Orthoptic 6,849 29,625 36,474
   b) Squint 6,830 31,400 38,230
15. Refraction – 29,667 29,667

Total cases 37,525 128,442 1,65,967
Grand total of cases 190,934 209,980 4,00,914

**Indoor admissions**
General ward 15,918
Casualty 2,029
Private ward 1,136
Short admissions 4,124
Daycare admissions 6,435
Total 29,642

**Operations**
Major 16,186
Daycare 6,039
Total major 22,225
Minor 7,051
Grand total 29,276
Deaths 02

**Yearly other figures**
Average bed occupancy ratio 86%
Average length of stay 4.7 Days
Average OPD attendance per working day 1345
Average number of indoor admission per working day 81
Average number of surgeries per working day 80

**Investigative Laboratories**
Fluorescein angiography + ICG 6,306
Ultrasonography 16,727
EUA 188
ECG 2,055
<table>
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<tr>
<th>Procedure</th>
<th>Count</th>
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<tbody>
<tr>
<td>Applanation tonometry</td>
<td>16,547</td>
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<tr>
<td>Indirect ophthalmoscopy</td>
<td>4,429</td>
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<tr>
<td>Goldmann perimetry</td>
<td>2,524</td>
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<tr>
<td>Automated perimetry</td>
<td>4,703</td>
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<tr>
<td>ERG</td>
<td>715</td>
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<tr>
<td>VER</td>
<td>4,995</td>
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<tr>
<td>EOG</td>
<td>48</td>
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<tr>
<td>ENG</td>
<td>28</td>
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<tr>
<td>Focimetry</td>
<td>6,765</td>
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<tr>
<td>Colour vision</td>
<td>3,633</td>
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<tr>
<td>LI</td>
<td>4,126</td>
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<tr>
<td>Ultrasonic pachymetry</td>
<td>1,107</td>
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<tr>
<td>Non-contact tonometry</td>
<td>18,823</td>
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<tr>
<td>Refraction</td>
<td>65,525</td>
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<tr>
<td>Auto refraction</td>
<td>26,516</td>
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<tr>
<td>Axial length</td>
<td>22,022</td>
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<tr>
<td>Keratometry</td>
<td>20,164</td>
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<tr>
<td>OCT</td>
<td>7,912</td>
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<tr>
<td>Contact lenses (Old + New)</td>
<td>3,452</td>
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<tr>
<td>Artificial eye</td>
<td>575</td>
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<td>Low vision aid</td>
<td>1,350</td>
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<td>PRP</td>
<td>4,087</td>
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<tr>
<td>Nd-Yag laser</td>
<td>3,038</td>
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<tr>
<td>Fundus photography</td>
<td>6,355</td>
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**Excimer workup (Lasik)**

- Lasik (operated) eyes: 131
- Lasik (unoperated) eyes: 465
- PTK (operated) eyes: 38
- PTK (unoperated) eyes: 94
- Phakic IOL (operated) eyes: -
- Phakic IOL (unoperated) eyes: 63
- Total number of other investigations in Lasik Lab: 8731

**Excimer Laser (inv. and surgeries) [R.No.101]:**

- Aberometry
- Orbscan
PDT 102
Injection lucentis 347
Injection macugen 148
Retinal camera Ret. CAM 422
Cornea service lab 19,845
Cornea research lab 12,014
Glaucoma research lab 42,108
**Total** 3,38,953

Ocular Radiology
Total number of X-rays 14,050
Total number of CTs 310
(Done in the main Department of Radiodiagnosis)
Total number of special investigations (DCG) 50 eyes

**Ocular Microbiology**

*Grand total* 13,822

**Bacterial culture and sensitivity** 9,665
Fungal culture 2,558
Cytology 578
Viral Ag detection 160
*Chlamydia* Ag detection 369
PCR for (*Chlamydia*) 5
PCR (HSV) 130
conjunctivitis (PCR) 34
*chlamydia* tissue culture 169
*chlamydia* serology 15
conjunctivitis (Ag detection) 22
conjunctivitis (tissue culture) 22
Culture for acanthamoeba 95

**Ocular Pathology**

Total investigations 49,525
Blood (TLC, DLC, PBS, ESR, BT/CT) 14,953
Urine 19,165
Histopathology, Cytopathology and Research 15,407

**Ocular Biochemistry (Clinical Chemistry)**

Total samples (apart from research) 11,488
Indoor 10,119
### Outdoor

**Ocular Pharmacology and Pharmacy**

- Free drugs (vials) supplied through Ocular Pharmacy: 77,505
- MK Media: 603

**Eye Bank**

- Total eyes: 644
- Surgery performed (Three corneas used for six patients): 512
- Unsuitable for clinical transplantation: 82
- Preserved in Glycerine: 35
- Histopathology/stem cell: 18

**Culture**

**Registration for Keratoplasty**

- Total: 790
- Called for admission: 879
- Balance remaining: 706
- Number of pledges in 2008: 248

**Community Ophthalmology**

**Eye Care Services in Slums**

**Primary Eye care Clinics**

- Slums covered for comprehensive eye-care services: 20
- Attendees at OPD in slums clinics: 13,640
- Refraction carried out in OPDs in slums clinics: 4,909
- Patients referred to R.P. Centre: 1,474
- Patients operated: 619
- Subsidized Spectacles issued in Slums: 2,609

**Training events and health education events:**

- General practitioners and Volunteers Training Programmes organized: 20
- General practitioners and Volunteers Trained: 231
- Eye Health Education Events: 22
- Participants in the education events: 1,138

**Comprehensive screening camps for Diabetic retinopathy, Glaucoma and cataract in Urban Slums of Delhi:**

- Comprehensive screening camps organized in urban slums: 17
- People examined: 2,347
Patients referred for at R.P. Centre 328
Patients operated 95
Refractions carried out in PEC Centres in slums Clinics 757

Reach-in-Programme for cataract surgery in Rural and remote areas:
Adult screening camps organized 20
People examined 4,250
Patients referred at R.P. Centre 1,093
Patients operated at R.P. Centre 930
Follow-up camps organized 19
Patients examined in follow-up camps 742
Paediatric screening camps organized 1
Children examined 101
children referred at R.P. Centre 19

School Eye Screening(SES) Programme
School covered under SES Programme 19
Teachers trained under School Vision Screening Programme 51
Children screened 6,254
Children prescribed spectacles 516
Children issued spectacles 501

Rehabilitation services
Blind patient counseled for rehabilitation services 83

AWARDS AND HONOURS

Professor S. Ghose, invited by the Executive of the Delhi Ophthalmological Society to receive on behalf of our Institution, the coveted Annual Awards(Trophies) and Certificates of Appreciation, for co-coordinating and conducting for RPC during 2008–2009; Invited to address the Expert Group at ICMR, on a Task Force for Retinoblastoma being created with ICMR, along with a National Retinoblastoma Registry, November 2008; Continued to be: Director of WHO Collaborating Centre for Prevention of Blindness; Honorary Advisor Ophthalmology to the Ministry of Health and Family Welfare, Government of India; Invited by the School of Health Sciences at Indira Gandhi National Open University (IGNOU) as Member of their Advisory Committee for organization and curriculum framing of their BSc (Hons) Optometry and Ophthalmic Techniques programme; Invited by the ICMR, DST, and CSIR amongst others as their Reviewer for Projects and nominated works for SSB Award submitted to them in the field of Ophthalmology, 2008–2009; Expert Member of the Technical Advisory Group on Visually Handicapped for Projects submitted to District Rehabilitation Centre Scheme, Ministry of Social Justice and Empowerment, Government of India, New Delhi 2008–2009; Invited Member Technical Advisory Group (TAG) for The Inclen Trust International study ‘Neuro-developmental Disabilities Among Children in India: An Inclen Study’ for their Second TAG
Meeting, New Delhi, April 2008; Expert Member to help the Sectional Committee of Ophthalmic Instruments and Appliances, MHD 5, Bureau of Indian Standards, New Delhi; Expert Member, Management Development Programmes on Operation, Maintenance and Repair of Optical and Ophthalmic Equipment sponsored by MEA, GOI under the aegis of the Central Scientific Instruments Organization (CSIO), a National Laboratory of CSIR, GoI; Invited speaker and Panel Member in their Educational Symposium in the area of Continuous Professional Development especially regarding Medical Knowledge, Interpersonal and Communication Skills during the International Educational Programme of the Education Subspeciality Day, World Congress of Ophthalmology 2008, Hong Kong, in conjunction with the Asia-Pacific Academy of Ophthalmology, June–July 2008; Invited by the Prevention of Blindness and Deafness (PBL), Team Leader at the World Health Organization (WHO) HQ Switzerland, to represent our WHO Collaborating Centre from India and present the achievements of our Centre at their Symposium entitled ‘WHO Collaborating Centres: Role in Education’ organized for the 2008 World Ophthalmology Congress at Hong Kong, June–July 2008; Vice President of the National Forum of Vision 2020: The Right to Sight–India.

Professor Rajvardhan Azad: Elected as Vice President, All India Ophthalmological Society, Annual Conference, Bangalore, 2008; President, Organising Committee, IX Biennial Conference of SAARC Academy of Ophthalmology, , India Habitat Centre, New Delhi, 4–6 September 2008; Awarded a Special Annual Award, Coeur d ‘or’ (Heart of Gold) initiated by the Kalra Hospital Sri Ram Cardio-Thoracic Neurosciences Centre on the occasion of World Heart Day, 28 September 2008; Appointed by the Medical Council of India as Inspector for inspecting: Subharti Medical College, Meerut, February 2009; Katuri Medical College and Hospital, Guntur, February 2009; Nil Ratan Sircar Medical College, Kolkata, November 2008 and January 2009; Sree Balaji Medical College and Hospital, Chennai, December 2008; Amrita School of Medicine, Cochin, Kerala, October 2008 and Padamshree Dr D.Y. Patil Medical College Hospital and Research Centre, Navi Mumbai, May 2008. Appointed Chairman, Expert Committee Established for Rajendra Nagar Superspeciality Hospital for Eye, Patna, State Health Society, Bihar, 18 March 2008; Joseph Eye Hospital, Tiruchirapalli, February 2008; Member Reviewers Committee, Indian Council of Medical Research (ICMR); Bio Med Central Ophthalmology, London; Ophthalmic Surgery Laser and Imaging; Indian Journal of Ophthalmology; Journal of American Association Paediatric Ophthalmology and Strabismus; Clinical and Experimental Ophthalmology; British Medical Journal of Ophthalmology; Indian Journal of Paediatrics; Acta Ophthalmologica; Expert Review of Ophthalmology; Continued to be: Expert Standing Selection Committee, PGI, Chandigarh; Appointed Chairman Ophthalmology Section, Bureau of Indian Standards (BIS) Ministry of Agriculture Food and Civil Supplies, Consumer Affairs and Public distribution; Secretary, SAARC Academy of Ophthalmology.


Professor Pradeep Sharma, Awarded Dr S.N. Mitter Oration Award for 2008–2009 by Delhi Ophthalmological Society.


**Dr Radhika Tandon**, Awarded Gold Medal by Intraocular Implant and Refractive Society of India, 22 August 2008 for achievements in Ophthalmology and contribution to teaching Ophthalmology; invited by SMS Medical College Jaipur and Four Decade Trust for delivering Jubilee oration on ‘Eye Banking and Corneal Transplantation–Newer trends’, 8 November 2008; Nominated as international Health Professional of the year by International Biographical Centre, Cambridge, England; Member, Task force in the priority areas of the Blindness programme in All India Ophthalmological Society; invited by Prova Eye Bank, B. C. Memorial Eye Foundation and Disha Eye Hospital and Research Centre, Barrackpore to provide technical guidance and assistance for helping the local ophthalmic surgeons start a keratoprosthesis service at their hospital. Successful Skills transfer workshop was conducted, 26 March 2009; appointed member of expert committee to examine documents to be released as Medical Standards for Eye Banking in India by Directorate General of Health Services, MOHFW (Ophthalmology Section); continued to be: Member of the core group for introduction of OSCE style examination by the National Board of Examination; Joint Secretary of Eye Bank Association of India; remained on the panel of examiners in Ophthalmology of Royal College of Surgeons, Edinburgh; adjunct faculty member, CMET, AIIMS.

**Dr G.V.S. Murthy**, Awarded the Dr G. Venkataswamy Memorial Award for exemplary individual contribution in Community Eye Care by the Community Ophthalmology Society of India at Venu Eye Institute and Research Centre, Delhi, 22 November 2008; Joined the International Centre for Eye Health, London School of Hygiene and Tropical Medicine, London as a Senior Clinical Lecturer in the Clinical Research Unit since, 1 October 2007; Technical Consultant for the National Nigeria Blindness and Low Vision Survey; Technical Consultant for the childhood disability project in Bangladesh and Pakistan. Continued to be: Secretary, International Society for Geographical and Epidemiological Ophthalmology; Member, Editorial Board of the *Journal of Community Eye Health*; Member, Operational Research Advisory Group of Vision 2020 India; Member, WHO Global Monitoring Committee of Implementation of Vision 2020 Initiative; invited faculty for the Community
Eye Health Diploma course at the L.V. Prasad Eye Institute, Hyderabad; Reviewer: BMC Ophthalmology; BMC Public Health; International Ophthalmology and Visual Science; Eye; Journal of Community Eye Health; National Medical Journal of India; International Ophthalmology; Acta Ophthalmologica; Indian Journal of Ophthalmology; On the Reviewer’s panel of British Journal of Ophthalmology; Lancet; Member, INDIACLEN; Member, ‘Expert- Group on Trachoma” by Blindness Control Division of the Ministry of Health and Family Welfare; Member, Academic Resources Advisory Committee of the National Programme for Control of Blindness.

Dr Sanjay Sharma, Reviewer, Journal of Vascular and Interventional Radiology.


Dr Praveen Vashist, Member, ‘Expert- group on trachoma’, Blindness Control Division of the Ministry of Health and Family Welfare; Member, Editorial Board, NPCB India, Quarterly Newsletter of National Programme for Control of Blindness; Reviewer for: Indian Journal of Community Medicine, 2008; Indian Journal of Ophthalmology; Resource person for the State Programme Manager and District Programme Manager’s training under NPCB.

SIGNIFICANT EVENTS

- Department of Ocular Pharmacology and Pharmacy, Dr R.P. Centre, AIIMS has recognized as DST-FIST sponsored by Department of Science and Technology (DST), Government of India, New Delhi.
- The Stem cell/Tissue and cell culture facility, established in the department of Ocular Biochemistry, is actively involved in research in ocular diseases. The Molecular Biology laboratory in the department of Ocular Biochemistry, is pivotal in research into the genetic basis of eye diseases. New investigations viz. (i) glycosylated haemoglobin, (ii) homocysteine and (iii) C-reactive protein has been started for patient care services in the department of Ocular Biochemistry.
- Molecular pathology laboratory has been started at department of ocular pathology.
- Drishti Project under National Association for the Blind collaborated by Reliance provides trephines and medication for post-operative patients.
- National Eye Donation Fortnight: 25 August–8 September 2008. Awareness drive for eye donation was launched, charts and pamphlets distributed. 12 eyes were received and 13 pledges were made for eye donation.
- Eye donation day was celebrated, 8 September 2008 at LT-6, 6th floor, Dr R.P. Centre. Various programmes were introduced to promote eye donation and spread throughout the country. Certificates and momento were distributed to the donor families.
- Personal visit of Officer-in-charge, Eye Bank with Grief Counsellor to various departments of AIIMS and Casualty. Awareness generated among the mortuary staff about eye donation counseling.
- Eye donation-related programme, at RML Hospital, 27 August 2008.
• Eye donation-related recording at 5 pm, Mandi House, Delhi Doordarshan ‘Evening live show’; 25 August 2008.

• Eye donation-related programme, Dayal Singh College, New Delhi, 27 August 2008. Eye Donation related programme recording was done by All India Radio, 25 August 2008. Another radio programme was recorded and telecast through All India Radio, FM Gold 106.4; 28 August 2008.

• The team from Community Ophthalmology Department deputed to serve the flood relief rehabilitation camp at Bihar, organized by Hans Raj College, Delhi University; 9–15 September 2008 and also participated in the cataract surgical camp organized by R.P. Centre in District Godda, Jharkhand; 24–30 November 2008.

VISITING SCIENTISTS/FELLOWS AT RPC, AIIMS

• Dr Wahidul Islam, Country Director, Sightsavers International Bangla Desh.

• Mr Zelalem, ORBIS Ethiopia Programme Manager HCRP.

• Jeremy Watson, Journalist ‘Scotland on Sunday’

• Dr Anngayarkanni Narayanasami, Reader, Department of Ocular Biochemistry, Shankara Nethralaya.

• Dr Vanitha Thulasisanan, Staff Scientist Bio-Red Laboratory, Hercules USA.

• Dr Bhaskar Singh, Scientist, Department Bio-physics.

• Mr Sumit Mehna from Bio-red.
10.7 Jai Prakash Narayan Apex Trauma Centre

**Chief**
M.C. Misra

**Faculty In-charge**
John R. Bera (Ortho)

**Hospital Administration**

**Associate Professor**
Kamran Farooque (Ortho)

**Assistant Professors**

Babita Gupta
(Anaesthesia)
Shefali K. Sharma
(Emergency Medicine)
Sanjeev Lalwani
(Forensic Medicine)
Deepak Agrawal
(Neurosurgery)
Sumit Sinha
(Neurosurgery)
Vivek Trikha
(Ortho)
Amit Gupta
(Surgery)
Sushma
(Surgery)
Chhavi Shawney
(Anaesthesia)
Vinay Gulati
(Emergency Medicine)
Purva Mathur
(Laboratory Medicine)
Deepak K Gupta
(Neurosurgery)
Buddhadev Chaudhary
(Ortho)
Atin Kumar
(Radiodiagnosis)
Subodh Kumar
(Surgery)
Sanjeev Bhoi
(Emergency Medicine)
Adarsh Kumar
(Forensic Medicine)
S. Arul Selvi
(Laboratory Medicine)
G.D. Satyarthee
(Neurosurgery)
Vijay Sharma
(Ortho)
Shivanand G.
(Radiodiagnosis)
Maneesh Singhal
(Surgery)
Biplab Mishra
(Surgery)

**EDUCATION**

**Short-term training**

- Dr Okidi, Okechukwu O 01.05.08 – 01.11.08 (Six months)

**Elective training**

- Ms Anina Zeumer of Germany 04.02.08 – 03.05.08 (Three Months)
- Mr Bhagteshwar Singh of U.K. 01.11.07 – 31.01.08 (27 days)
- Ms Manvi Solanki of Mumbai 08.04.08 – 03.05.08 (26 days)
- Ms Ho Weng Yan of Singapore 05.05.08 – 28.05.08 (23 days)
- Ms Jenica Yong Su-Ern of Singapore 05.05.08 – 28.05.08 (23 days)
Ms Amanda Loh Wenying of Singapore 05.05.08 – 28.05.08 (23 days)
Mr Donovan Eu Kum Chuen of Singapore 05.05.08 – 28.05.08 (23 days)
Ms Michelle Lim Hui Ping of Singapore 05.05.08 – 28.05.08 (23 days)
Ms Ker Liang of Singapore 05.05.08 – 28.05.08 (23 days)
Ms Lim Jia Yang of Singapore 05.05.08 – 28.05.08 (23 days)
Mr Kosalarajah Paheenthararajah of Germany 29.09.08 – 23.11.08 (1m 25 days)
Ms Konika Chatterjee of Australia 16.11.08 – 29.11.08 (14 days)
Ms Marie-Laura Veronika Berger of Germany 08.12.08 – 02.03.09 (3 months)

Continuing Medical Education (CME)

Professor M.C. Misra

Course Director for

- 14th ‘Training Course in operative laparoscopy—basic and advanced’; 5–9 January 2009.
- 12th ‘Training Course in operative laparoscopy—basic and advanced’; 10–14 November 2008
- 3rd Training Course in laparoscopic suturing skills; 20–21 September 2008.
- 10th ‘Training Course in operative laparoscopy—basic and advanced’, 1–5 September 2008

Conference Organizational

Organizing Chairman, of Third AIIMS Surgical Week International Minimal Access Surgery Conference, CME cum Live Workshop, Endosurg 2009, All India Institute of Medical Sciences; 13–15 March 2009.

Lectures delivered:

- Surgical Meet, BP Koirala Institute of Health Sciences; 25–26 April 2008.
- Inspection of Renal transplant facilities at Base Hospital, New Delhi; 3rd May 2008.
- 2nd National Conference of Indian Hernia Society., Srinagar; 6–8 June 2008.
- Visited the State Civil Hospital, Naharlagun; 11–12 July 2008.
- Member, team of Senior Doctors from AIIMS to Ladakh; 1–8 September 2008.
- Faculty, IMRCS Part 3 Examinations, Delhi; 8–12 September 2008.
- Member Technical Experts Committee Review meeting for HDR Brachytherapy and Modular OT’s; 22 September 2008.
- Assisted the Interview board for selection of the GDMOs, FAZAL Chamber, SCOPE Convention Centre, Lodhi Road; 27 September 2008.
- Successfully completed ATLS Course, UAE; 29– October – 6 November 2008.
• Visited the Imphal committee constituted by Ministry Of Health to look into the additional requirements of RIMS; 22–23 December 2008.


• Conducted Symposium on ‘Ethical issues with doctor patient relationship’, Nainital; 11 January 2009.


• Upgradation in the second phase of PMSSY; 21–22 January 2009.

• Meeting of the Members of the Board—finalization of curriculum in the Specialty of General Surgery.

• Delivered a guest lecture at Baba Raghav Das Medical College, Gorakhpur; 7–8 February 2009.

• Attended Forth Annual Meeting of International Endohernia Society (IEHS) and Live Workshop held in New Delhi; 19–21 February 2009.

• Member, Global Clinical Advisory Board Meeting in North Haven, Ct, USA; 16–17 February 2009.

• Conducted Live Laparoscopic workshop of Gynaecology and Surgery, Singrauli; 27–28 February 2009.

• Guest Faculty for the Indo Australian Workshop on Biomedical Devices being organized; New Delhi; 5 March 2009.

• Laparoscopic workshop cum CME, Shillong; 20–21 March 2009.

• Faculty IMRCS Part 3 Examination, Dubai; 27 March to 3 April 2009.

**List of Papers Presented**

The following papers were presented at the below mentioned conferences by different residents and senior residents of surgery Unit IV.

• Friction Burn—A clinical Study, 14th Congress of International Society for Burn Injuries, Montreal, Canada; September 2008.

• Laparoscopic Incisional hernia repair using composite mesh, Second National Conference, Indian Hernia Society, Srinagar; June 2008.

• Laparoscopic Incisional hernia using Polypropylene mesh, Second National Conference of Indian Hernia Society, Srinagar; June 2008.

• TAPP vs TEP—Preliminary Results, Second National Conference of Indian Hernia Society, Srinagar; June 2008.

• Balloon dissection vs Telescopic dissection in TEP, Second National Conference of Indian Hernia Society, Srinagar; June 2008.
• TEP Repair in groin Hernia—prospective evaluation in testing care centre, Second National Conference of Indian Hernia Society, Srinagar; June 2008.

• Laparoscopic repair of Parastomal Hernia, Second National Conference of Indian Hernia Society, Srinagar; June 2008.

• Use of Pre-shaped mesh groin Hernia repair, Second National Conference of Indian Hernia Society, Srinagar; June 2008.


Dr Babita Gupta

• Course Director, ABCDE workshop concentrating on management of trauma victims, ‘Trauma 2008’ New Delhi; November 2008.

International Presentations

• Cerebral fat embolism: Diagnosis-based on magnetic resonance imaging”, Presented in ‘Asia Pacific Critical Care 2008 Congress’, Sydney, Australia (Presented by Senior Resident Dr Subir Das).


• Massive Hydrothorax following PCNL, ‘Asia Pacific Critical Care 2008 Congress’, Sydney, Australia (Presented by Senior Resident Dr Subir Das)

National Presentation

• Massive Hydrothorax following PCNL in ‘ISA’ Delhi Chapter; April 2007.


• Airway management in the Emergency department: Change in Scenario with protocol-based training programme, Trauma 2008, New Delhi.

• A case report of Anterior Screw extrusion diagnosed during Ryles tube insertion presented in Trauma 2008, New Delhi.


• Cerebral Fat Embolism: Diagnosis based on magnetic Resonance Imaging’, Presented in Trauma 2008, New Delhi.
Lectures delivered

- ‘Coagulopathy in Trauma’ Trauma Conference, Dubai; October 2008.

Lectures in National Conferences

- Assessment of Airway in ISACON, Indian Society of Anaesthesiologist, New Delhi.

Dr Chhavi Sawhney

Workshops

- APICON 2009, Noida (30.1.09 – 1.2.09) - Workshop on ‘Fluids and acid-base management’ and Workshop on ‘Mechanical ventilation’.
- BLS workshops for cops, PCR van drivers; 6 March and 28 March 2009.

Presentations

- ‘Recent advances in anaesthesia’, AIIMS (Poster presentation); 30 January – 1 February 2009.

Chapters

- Book on ‘Basic emergency care’.

Lectures


Dr Sanjeev Bhoi

Workshop

- Course Director, Basic Emergency Care Workshop, Seven such workshops have been conducted; 2008–2009.
- Course Director, ECG workshop, INDUS-EM 2008, Mangalore, India; 11 October 2008.
- Basic Life Support Courses for Junior Residents, Senior Residents, Nurses, Paramedics, Policeman.
- Advanced Cardiac Life Support Training for Junior Residents, Senior Residents, Nurses.
Lecture delivered

- Speaker: Development of Emergency Trauma Care Systems – AIIMS Experience at National consultation on human capacity building in emergency, trauma and disaster management: A programme for developing and strengthening Medical services and response, Pune; 13 March 2009.
- Speaker: Acid-base and electrolyte workshop, Greater Noida, India; 30 January 2009.
- Speaker: Trauma Care Systems in India, MUHS-CDC workshop, Pune, India; 13 October 2008.
- Speaker: Bombing patterns, CDC workshop, Baroda; 14th October 2008.

National and International Conferences

Paper Presentation

- To assess the door to needle time in patients who died of acute coronary syndrome in a tertiary care Emergency Department, Chicago, USA; 26–30 October 2008.
- Profile of patients presenting to the Emergency Department with poisoning, Chicago, USA; 26–30 October 2008.
- Does simulation as a teaching tool improves skill and coordination among the trauma team of an Emergency Department?, INDUS-EM 2008, Mangalore, India; 10 October 2008.

Dr Shefali K. Sharma

- Basic Life Support Courses for Junior Residents, Senior Residents, Nurses, Paramedics, Policeman.
- Advanced Cardiac Life Support Training for Junior Residents, Senior Residents, Nurses.
- Initial Resuscitation of Trauma Victims.
- Simulation as a teaching tool has been started and seven such sessions has been conducted so far. Clinical Evaluation of Patients: Workshop conducted during Rheumatology Update 2009, AIIMS, New Delhi; 22nd February, 2009.
- Co-Organizing Secretary, Rheumatology Update 2009, AIIMS, New Delhi; 22nd February 2009.

Dr Vinay Gulati

- Basic Life Support Courses for Junior Residents, Senior Residents, Nurses, Paramedics, Policeman.
- Advanced Cardiac Life Support Training for Junior Residents, Senior Residents, Nurses.
- Initial Resuscitation of Trauma Victims.
- DOTS PLUS Training Programme, Central TB Division, Government of India, Hyderabad; March 2009.
- Simulation as a teaching tool has been started and seven such sessions has been conducted so far.
Workshop

- Course Faculty, Mechanical Ventilation Workshop, APICON 2009, Greater Noida.
- Course Faculty, Sleep Workshop, APICON 2009, Greater Noida.
- Organizing Secretary, Medicine Update 2008, AIIMS, New Delhi.

Lectures Delivered

- ‘Safe Hospital Practices’, Infection Control Week, JPNA Trauma Centre; 20 October 2008.
- ‘Infection prevention in ICUs and judicious use of antimicrobials’, Infection Control Week, JPNA Trauma Centre; 22 October 2008.

Dr Adarsh Kumar

- Member, Organising Committee, TRAUMA -2008, the inaugural conference of ISTAC; 28–30 November 2008.
- Additional Organizing Secretary, 9th International Conference of ICFMT, SAFCON-2008, jointly organized by AIIMS and Amity University NOIDA; 10–12 October 2008.

Guest Lecture

- Police Officers from India as well as abroad, Advance Course on Scientific Investigation through Central Detective Training School, Chandigarh; 12–14 May 2008.
- Medico legal Aspect of Record Keeping, IMA, Lucknow; 1 March 2009.
- MLC of Dowry Death, Recording of Statement in Burn Cases to Delhi Higher Judicial Services Officers, NICFS, Delhi; 5 March 2009.
- ‘Medical Ethics and Law, Consumer Protection Act and Negligence, Organ transplantation Act’, 30th Annual Conference of Indian Academy of Forensic Medicine, Nagpur; 21–23 February 2009.
- Silver Jubilee World Congress ‘Pathology Update-2009’, Sydney, Australia; 12–15 March 2009. The paper ‘Challenges and remedies in delivering forensic pathology services—an Indian view point’ was accepted for Royal College of Pathologists, Australasia (RCPA) Grant.
- Workshop on ‘Introduction to Mortuary and Autopsy Practices’.
Dr Sanjeev Lalwani

Conferences

- Additional Organizing Secretary- SAFCON-2008, Amity University, Noida (UP); 9–12 October 2008.
- National Workshop on Alcohol: Revisiting the Current Situation and Planning Ahead, NDDTC and Department of Psychiatry; 14–15 October 2008.
- Convenor (Specialty of Forensic Medicine) and Member Organizing Committee, Trauma-2008, JPNATC AIIMS New Delhi; 28–30 November 2008.

Presentations/ Guest Lectures

Co-Chairman Scientific Session- SAFCON-2008, Amity University, Noida (UP); 10–12 October 2008.


‘Mortuary Services’ for participants of NIHFW and Hospital Administration, AIIMS on Department of Hospital Administration, AIIMS, New Delhi; 14 October 2008.

Member ‘Panel Discussion’ on ‘Data on Alcohol and Health Damage’ and presented Alcohol and Violence in National Workshop on Alcohol: Revisiting the Current Situation and Planning Ahead organized by Department of Psychiatry and NDDTC, AIIMS, New Delhi; 14 October 2008.

‘Medico legal and Financial Implications in Nosocomial Infections’, Hospital Infection Control Week, Department of Laboratory Medicine, JPNATC, AIIMS, New Delhi; 20–24 October 2008.


Moderator of Session. Session of Scope of Forensic Medicine in Private Practice Gaurav Aggarwal. Symposium on Recent Trends in Forensic Medicine, VMMC and Safdarjung Hospital, Delhi; 20 December 2008.

Interactive Session in strengthening of South Delhi Juvenile Police Unit DCP (South District, Delhi), 20 March 2008.

Dr Purva Mathur

Workshop organized

Infection Prevention Week, Department of Laboratory Medicine and the Hospital Infection Control Committee, JPNATC, AIIMS; 20–24 October 2008.

Guest Lectures


Overview of Infections in Trauma Patients. Infection Prevention Week, Department of Laboratory Medicine and Hospital Infection Control Committee, JPNATC, AIIMS; 20–24 October 2008.

‘HIV and Emergency Care’, Workshop, NACO, Department of Microbiology, AIIMS; February 2009.

Zero tolerance for nosocomial infections in endoscopic surgery. 3rd Endosurg Conference, Department of Surgical Disciplines, AIIMS; March 2009.
Scientific Papers Presented In Conferences


- Behera B, Mathur P. Spectrum of nosocomial infections and antimicrobial resistance at a level 1 Trauma Centre of India. Trauma 2008, Delhi, 2008

- Sanghi S, Mathur P, et al. Knowledge, Attitude and Practices of Infection Control amongst nursing staff at a level 1 Trauma Care centre. Trauma 2008, Delhi, 2008


Dr Deepak Kr. Gupta

Papers Presented


- Intrautumoral interstitial radiotherapy in recurrent glioblastoma multiforme: A series of 7 cases, 9th European skull base surgery congress, Rotterdam, Netherlands; 2009

- ‘Chiari malformations: A study of 45 cases’, ESBS Congress, European skull base surgery congress, Rotterdam, Netherlands; 2009

Dr Vijay Sharma

Organising Team

- Trauma 2008, New Delhi.


Faculty Lectures

- Guest Lecture-Paediatric Fractures Indo-US Summit Mangalore; 2008

- Fractures in children, Trauma 2008, New Delhi

- Shock Management in Aand E in ABCDE Workshop Trauma2008, New Delhi;

- Overview of Acetabular Fractures PUNCON; 2008.

Important Events

- AO Masters course Agra; 2008.
- Short term training in shoulder Arthroscopy, Perth Australia; January; 2009.

Dr John R. Bera


Guest Lectures


Books

Basic Emergency Care

Dr Vivek Trikha

International Presentation


National Presentation

Dr Shivanand Gamanagatti

Lectures Delivered


National Conferences


International Conferences


Dr Atin Kumar

Lectures Delivered


International Conferences


Dr Amit Gupta

- Coordinator, 2nd Indo-Israel International Course on ‘Trauma system and mass casualty management’, JPN Apex Trauma Centre, AIIMS and supported by MASHAV, Ministry of External Affairs Israel; 18–27 November 2008.
Co-Organizing Secretary- Trauma 2008, International conference, CME cum Live Workshop and Inaugural conference of the Indian Society Trauma and Acute Care (ISTAC); 28–30 November 2008.


Guest Lectures

International

- Trauma Scenario in India: The future dimensions. At Grand Rounds of Emergency and Trauma, Tampa General Hospital and University of South Florida, Tampa, Florida, USA; 24 July 2008.

National


Dr Biplab Mishra


Guest Lectures

International


National

Dr Maneesh Singhal


Guest Lectures

International


Dr Subodh Kumar

- Organizing Secretary, 2nd Indo-Israel International Course on ‘Trauma System and Mass Casualty Management’, JPN Apex Trauma Center, AIIMS and supported by MASHAV, Ministry of External Affairs Israel; 18–27 November 2008.
- Organizing Secretary- Trauma 2008, International Conference, CME cum Live Workshop and Inaugural conference of the Indian Society Trauma and Acute Care (ISTAC); 28–30 November 2008.

Guest Lectures

International


National


Dr Sushma

- Joint organizing Secretary: Third AIIMS Surgical week and Endosurg-2009.
- Scientific convener: Trauma 2008 AIIMS
• Faculty member: Save Life Foundation (NGO) for training of Police personnel and bystanders to provide First Aid to trauma victims.

**Guest Lectures**

**National**


• CSSD :Its Guidelines and Functioning at Trauma centre .Presented in the Infection Prevention Week, organized by the Department of Laboratory Medicine and Hospital Infection Control Committee, JPNA Trauma Centre, AIIMS; 20–24 October 2008.

• ‘Integrated approach on Management of Serial bomb blast-medical management’, Training programme for bomb blast management at National Institute of Disaster Management (NIDM), Delhi; 8 June 2008.

• ‘Surgery Census 2008’, Seminar on ‘Injury prevention a social responsibility’, in association with Centre of Disease Control, Atlanta, USA, JPN Apex Trauma Centre AIIMS; 12 March 2009.

**Papers presented**

**International**

• Goswami A, Sushma, Singhal M, Sinha T. Friction Burn: A clinical study, Proceedings of 14th conference of International Society of Burn Injuries, Toronto Canada 2008

**National**

• Gyan S, Sushma, Singhal M, Sagar R; Microsurgical penile re-plantation following self amputation in a patient with psychosis; proceedings of Trauma, AIIMS, New Delhi; 2008.

• Das K, Kumar V, Kumar S, Sushma, Gupta A. Spectrum of Surgical cases managed at level 1 trauma center, Proceedings of Trauma 2008, AIIMS, New Delhi;

• Goswami A, Sushma, Kumar S, Misra MC. Multidisciplinary approach to hemipelvectomy wound: proceedings Trauma, AIIMS, New Delhi; 2008.


**RESEARCH**

**Professor M.C. Misra**

**Funded projects**

1. Cost effectiveness analysis and comparison of single stage vs two stage management of patients with concomitant gall stone disease and common bile duct stones—a randomized controlled trial. Virinder Kumar Bansal, MC Misra, Parmod Garg, CS Pandav. In collaboration with Department of Gastroenterology and Community Medicine. Funded by SAGES. Funds: 30,000 US dollars.

**Collaborative projects**

**Completed**

1. BhCG expression in patients with benign and malignant breast diseases (June 2008)
2. To study the clinical efficacy of Transvaginal cholecystectomy in patients with uncomplicated gall stones with the new instruments (March 2008)
3. Efficacy of training of laparoscopic hepatico-jejunostomy using porcine model—a prospective study

**Ongoing**

1. A randomized controlled study of comparison of single stage vs two stage treatment for patients with gall stones and common bile duct stones
2. Comparison of chronic groin pain, testicular functions and quality of life after open and laparoscopic inguinal hernia repair- a prospective randomized control trial
3. Comparison of various imaging modalities in the diagnosis and staging of the periampullary tumors and study of various perioperative factors in predicting the outcome of the patients with periampullary tumors
4. Laparoscopic suturing skills acquisition- a comparison between trained and novice surgeons
5. Prospective evaluation of laparoscopic skills acquisition in a short term focused training programme on a phantom model using porcine gall bladder
6. Major trauma outcome study in a level – I Trauma Centre

**Dr Babita Gupta**

**Collaborative projects**

**Ongoing**

1. Phenotypic characterization of invasive Candida isolates, obtained from critically ill trauma patients (with Microbiology, AIIMS and JPNATC, Anaesthesia)
2. A prospective controlled double blind study on the efficacy of tranexamic acis versus aprotinin to reduce blood loss in traumatic spine surgeries.

3. Evaluation of serum Procalcitonin levels for diagnosis of sepsis in trauma patients admitted in ICU (Microbiology, JPNATC, Department of Anaesthesia).

**Dr Shefali K. Sharma**

**Funded projects**

1. Applied to CSIR for funding a project: To Study the Profile of Admitted Fracture Patients using DUAL Energy X-Ray Absorptiometry (DEXA), Serum Calcium, Serum Phosphorus, Vitamin D and Parathyroid levels.

**Departmental Projects**

**Ongoing**

1. A study of sub-clinical atherosclerosis in Ankylosing Spondylitis
2. Serum IL-6 level as marker of disease activity in Ankylosing Spondylitis without peripheral arthritis

**Dr Sanjeev Lalwani**

**Departmental**

4. Evaluation of vitreous humour as a biomatrix for the quantification of drugs and chemicals in postmortem forensic investigation. Supriyo Ghosh, (Co-Supervisor and Member Doctoral Committee, Sanjeev Lalwani).

**Dr Purva Mathur**

**Funded Projects**

1. Evaluation of serum procalcitonin levels for diagnosis of sepsis in trauma patients admitted to intensive care units. Funded by AIIMS.
2. Molecular and epidemiological study of Streptococcus pyogenes in India. Funded by ICMR.
3. Efficacy of a short course of prophylactic antibiotic treatment for prevention of post operative infections in open reduction and internal fixation of closed fractures. Funded by ICMR.
**Short-term trainees**

1. Thesis of MSc Short-term trainee: ‘Detection of Amp C production in multidrug resistant Gram negative bacteria at a tertiary trauma care centre of India’.

**Dr Deepak Agrawal**

**Funded Projects**

1. Role of Thalamus in diffuse axonal injury: An autopsy study with histopathological correlation. Funded by AIIMS. Funds: Rs 2.3 lakh.

2. A registry for comparing catheter-related infection rates among various shunt systems in the treatment of hydrocephalus. Funded by Codman Corporation, USA. Funds: Rs 5 lakh.

**Dr Sumit Sinha**

**Funded Projects**

**Ongoing**

**As a Chief Investigator:**

1. Role of Simvastatin in prevention of vasospasm and improving functional outcome after aneurysmal sub-Arachnoid haemorrhage: A prospective randomized double blind placebo controlled trial. Department of Neurosurgery, All India Institute of Medical Sciences, New Delhi, India (Intramural Project)

2. A double blind placebo controlled trial of Progesterone with or without hypothermia in subjects with severe traumatic brain injury. Department of Neurosurgery, Jai Prakash Narain Apex Trauma Centre, AIIMS India. Partially funded by NIH.


2. DECRA trial (Decompressive craniectomy in severe head injury): A multicentric Randomised trial (being conducted in USA)

3. CRASH2 trial: A multicentric randomised trial. Funded by London school of Hygiene and Tropical Medicine.

**MCh THESIS PRODUCED**

**As Co-Guide:**


**Dr John R. Bera**

1. Major Trauma Outcome Study at Level 1 Trauma Centre
2. Randomized Control Clinical Trial of Early Versus Late Tracheostomy to compare length of mechanical ventilation; length of ICU stay in Critically Ill Trauma Patient.
3. Study on use of Transexamic acid in patients undergoing surgery post accidents, safety and effectiveness
4. To collect retrospective pilot data on Bomb blast injury in India from multiple cities using CDC blast injury surveillance form

**Dr Vijay Sharma**

**Funded Projects**

1. Efficacy of a short course of prophylactic antibiotic treatment for prevention of post operative infections in open reduction and internal fixation of closed fractures. Funded by the ICMR

**Thesis**

**Co-Guide**

1. Randomised Controlled Study Comparison of Open Versus Minimal invasive fixation in the management of fractures of the calcaneum.
2. Knee Arthrography

**Dr Atin Kumar and Dr Shivanand Gamanagatti**

**Funded project**

**Completed**


**Departmental project**

**Completed**

1. Comparison of Color doppler, CT portography and MR Portography in paediatric EHPVO

**Ongoing**

1. MR imaging of wrist pain
2. Comparison of MDCT, MRI, Endoscopic Ultrasound and PET-CT in evaluation of suspected pancreatic neoplasm.
3. Percutaneous management of malignant biliary obstructions
4. MRI evaluation of internal derangement of knee
5. Comparative evaluation of image guided and palpation guided core biopsy of palpable breast masses
6. Radiofrequency ablation of varicose veins
7. MDCT and MRI evaluation of renal masses
8. Role of CECT and splenic artery embolisation in management of traumatic splenic injuries
9. Differentiating recurrent gliomas from post radiotherapy changes: Utility of advanced MRI techniques and their correlation with $^{99m}$Tc-glucodihexonic acid (GHA) brain SPECT
10. Imaging and intervention in vascular malformations of the extremities.
11. Role of MDCT in staging of laryngeal carcinoma with limited MRI correlation
12. Role of ultrasound in mamographically detected breast carcinomas.
13. Radiological evaluation of cystic lesions of the jaw.

**Collaborative projects**

**Completed**

1. Assessment of endothelial dysfunction and oxidative stress in chronic kidney disease of varying severity and after renal transplantation (with Nephrology)
2. Role of FDG-PET and MRI in assessment of Osteosarcoma: Prechemotherapy and Post chemotherapy (with Medical Oncology)
3. Comparison of FDG-PET and Dynamic MRI in correlation of VEGF expression on tumour cells in patients with Osteosarcoma (with Medical Oncology)
4. A comparative Evaluation of changes in ultrasonographic dimensions of masseter muscle with EMG activity prior and subsequent to twin block therapy (with Dental Sciences)

**Ongoing**

1. Study of non alcoholic fatty liver disease and atherosclerosis in Asian Indians (with Medicine)
2. Evaluation of testicular blood flow and volume in patients undergoing laparoscopic inguinal hernia repair (with Surgery)
3. Evaluation of pancreatic tumors (with Surgery)
4. Abdominal fat estimation in patients of obstructive sleep apnoea (with Medicine)
5. Study of clinical and neuro-developmental profile in patients of Tuberous Sclerosis (with Paediatrics)
6. Optic nerve sheath diameter measurement for raised ICP in severe head injury patients (with Neurosurgery)
7. Comparison of minimally invasive techniques and conservative treatment in vertebral collapse (with Orthopedics)

8. Clinico-radiological evaluation of total knee arthroplasty short term retrospective-prospective study (with Orthopedics)

9. Arthroscopic and MR evaluation of elbow in patients with rheumatoid arthritis (with Orthopedics)

10. Intralesional autologous bone marrow stem cell injection in avascular necrosis of femoral head: Follow up with bone scan, PET scan and MRI (with Orthopedics)

11. Randomized controlled trial of Radiofrequency ablation versus Percutaneous acetic therapy for the treatment of small hepatocellular carcinoma (with Gastroenterology)

12. Randomized control trial of Transarterial chemoembolisation (TACE) versus TACE plus oral chemotherapy in the treatment of Unresectable Hepatocellular carcinoma (with Gastroenterology)

13. Randomized control trial of Transarterial chemotherapy (TAC) versus Oral chemotherapy in the treatment of Unresectable Hepatocellular carcinoma (with Gastroenterology)

14. Randomized control trial of N-Acetylcysteine in Prevention of Renal Failure in Hepatocellular Carcinoma patients undergoing Transarterial Chemotherapy and Transarterial Chemoembolisation (with Gastroenterology)

15. Randomized control trial of oral chemotherapy versus supportive therapy in the treatment of Unresectable Hepatocellular carcinoma (with Gastroenterology)

16. Pattern of peripheral arterial diseases in tertiary care surgical practice (Indian scenario) (with Surgery)

17. Safety and efficacy of autologous stem cells in prevention of amputation in patients with chronic critical limb ischemia (with Surgery)

18. A comparative Evaluation of changes in ultrasonographic dimensions of masseter muscle with EMG activity prior and subsequent to twin block therapy (with Dental Sciences)

19. USG evaluation of Intimal-medial thickness of carotid artery in patients with SLE (with Medicine)

20. To study the effect of cricoids split with interpositioning rib cartilage graft for subglottic with or without tracheal or glottis stenosis (with Otorhinolaryngology)

**(Completed)**

**Dr Subodh Kumar**

1. A randomized controlled trial of laparoscopic inguinal hernia repair-Trans-abdominal pre peritoneal versus totally extra peritoneal approach

2. Efficacy of training of laparoscopic hepatico-jejunostomy using porcine model—a prospective study

**Dr Sushma**

1. BhCG expression in patients with benign and malignant breast diseases (June 2008)
**Ongoing**

**Dr Amit Gupta**
1. Prospective randomized control trial of early versus late tracheostomy in critically ill trauma patients. Funded by AIIMS.
2. Immunological changes in patients of shock due to trauma. Funded by ICMR.

**Dr Biplab Mishra**
1. Ultrasonic debridement of post traumatic wounds
2. Comparative study of sustained silver ion releasing semipermeable 3D foam dressing and conventional paraffin gauze dressing for skin graft donor site
3. Comparison of conventional paraffin gauze dressing and femtotechnology-based sustained silver ion in calcium alginate foam dressing for acute wounds
4. Feasibility of fast track discharge in breast cancer patients undergoing definitive surgery and impact on quality of life
5. Percutaneous management of malignant biliary obstruction
6. Role of CECT and splenic artery embolization in management of blunt splenic injury

**Dr Maneesh Singhal**
1. Comparison of Sustained silver ion releasing foam based dressing with conventional paraffin gauze dressing in donor area
2. Ultrasonic debridement of post traumatic wounds
3. Role of silver releasing femto technology based dressing on acute traumatic wound

**Dr Subodh Kumar**
1. Role of computed tomography and splenic artery embolisation in blunt splenic trauma
2. Major Trauma Outcome Study in a level – I Trauma Centre
3. Comparison of chronic groin pain, testicular functions and quality of life after open and laparoscopic inguinal hernia repair- a prospective randomized control trial
4. Comparison of various imaging modalities in the diagnosis and staging of the periampullary tumours and study of various perioperative factors in predicting the outcome of the patients with periampullary tumours
5. A prospective randomized comparison of TAPP vs TEP repair in patients undergoing laparoscopic inguinal hernia repair

**Dr Sushma**
1. Major trauma outcome study at level I Trauma Centre
2. Comparison of Sustained silver ion releasing foam based dressing with conventional paraffin gauze dressing in donor area
3. Ultrasonic debridement of post traumatic wounds
4. Role of silver releasing femto technology-based dressing on acute traumatic wound

**PUBLICATIONS**

**Journals**


45. Sinha Sumit, Sharma BS. Microsurgical management of giant acoustic neuromas: An institutional series of 400 cases. *Asian J Neurosurg* 2008;2:


52. Borkar SA, Sinha Sumit, Sharma BS. Remote site Extradural Hematoma. *J Clin Neurosci* (Accepted for publication)


**Abstracts**

2. Paul SB, Gamanagatti SR, Sreenivas V, Madan K, Baba CS, Gulati MS, et al. Serum leptin does not correlate with hepatic fibrosis in patients with non alcoholic fatty liver disease (NAFLD) and chronic hepatitis C (CHC). *Journal of Gastroenterology and Hepatology* 2008;23 (Suppl.5): A65.


4. Das K, Kumar V, Kumar S, Sushma, Gupta A. Spectrum of Surgical cases managed at level 1 Trauma Centre: In proceedings of Trauma 2008, International conference, CME cum Live Workshop and Inaugural conference of the Indian Society Trauma and Acute Care (ISTAC), New Delhi; November 2008.


Chapters in Books


Articles


**AWARDS /HONOURS**

**Dr Babita Gupta**

- Successfully completed ‘ACLS Instructor Course’; September 2008.
- Successfully completed the ‘Indo-Israel Mass Casualty Training Course’, Israeli Team October, 2008.
- Successfully completed ‘ATLS’ instructor course conducted by American Heart Association in Fijirah, UAE; October–November 2008.

**Dr Chhavi Sawhney**

- Complied Book on Basic Emergency Care.
- BLS and ACLS training: Provider as well as instructor course done.

**Dr Sanjeev K Bhoi**

- Co-Director: [Emergency Medicine and Trauma Education Centre for Health](http://www.onlinejets.org/editors.asp)
- Assistant Editor: *Journal of Emergencies, Trauma and Shock*
- [http://www.onlinejets.org/editors.asp](http://www.onlinejets.org/editors.asp)
- Member Editorial Board: Cases Journal [http://www.casesjournal.com/edboard/default.asp#Editor%2Din%2DDChief](http://www.casesjournal.com/edboard/default.asp#Editor%2Din%2DDChief)
- Reviewer: *Journal of Paediatric Infectious Disease, Emergency Medicine Journal, Journal of Emergencies, Trauma and Shock*

**Dr Shefali K. Sharma**

- Member of the Scientific Committee and Core Group for forming Consensus Recommendations on Adult Immunization in India
• Advanced HAZMAT Life Support, Provider course, March 2009.

**Dr Vinay Gulati**

• Reviewer: *Indian Journal of Chest Diseases and Allied Sciences*
• Member of the Scientific Committee and Core Group for forming Consensus Recommendations on Adult Immunization in India
• Member Editorial Board: Adult Immunization, published March 2009
• Organizing Secretary: Annual conference of department of Medicine, Medicine Update, August 10, 2008, AIIMS, New Delhi
• Advanced HAZMAT Life Support, Provider and Instructor course; March 2009.
• Indo-US Emergency Ultrasound Workshop, New Delhi; March 2009

**Dr Adarsh Kumar**

• ‘Future trends in medico legal documentation—pros and cons of virtopsy’ was adjudged one of the best poster at International Conference SAFCON–2008; 10–12 October 2008.

**Dr Sanjeev Lalwani**

• Awarded Fellowship, ICFMT- 2008, SAFCON-2008
• Award for Meritorious Performance, Presented a Scroll of Honour, Pakistan Society of Forensic Medicine and Toxicology, Professor Mian Abdul Rashid, Pakistan, SAFCON 2008.
• Member, Indian Society of Trauma and Acute Care.
• Associate Editor and Reviewer of articles- *International Journal of Medical Toxicology and Legal Medicine*.
• Deputy Executive Editor and Reviewer of Articles—*Journal of Forensic Medicine and Toxicology*.
• Article Reviewer, *Indian Police Journal*.
• Medico-legal assistance for Cadaver donation of ‘Liver and kidneys at JPNATC’.

**Teaching experience**

• Undergraduate and postgraduate teaching, AIIMS.
• Participation and Organization of numerous training lectures and autopsy demonstration for participants from
• LNJN National Institute of Criminology and Forensic Sciences, Delhi
• CBI Academy Ghaziabad
• Delhi Judicial Academy, Delhi
• Amity University, Delhi
Dr Deepak Agrawal

- Awarded the ‘CSNS young neurosurgeon of the year-2008’ award by the American Congress of Neurological surgeons (CNS) for indigenization of fiducials for image guided neurosurgery.
- Received best paper award for co-authoring the study titled ‘Effect of PEEP on CVP in ventilated patients’, DNACon, AIIMS, New Delhi; 7–8 February 2009.

Dr Deepak Gupta

Invited speaker in conference

- Chaired session on Posterior fossa lesions in 9th European skull base surgery congress, Rotterdam, Netherlands; 2009.
- Management of Cervical spine injuries: Indian society of Trauma and Acute Care; November 2009.
- Neurotrauma workshop on ICP monitoring and Spinal instrumentations in ISTAC; November 2009.

Scholarships

- World federation of neurological sciences and World international initiative committee fellowship for attending Middle East Workshop, Amman, Jordan; (7–9 January 2009).
- Karl Storz stipendia and fellowship for attending 9th European skull base Surgery Congress, Rotterdam, Netherlands; 2009.
Executive committee membership

- Executive committee Member, National Neurotrauma Society, India.
- Executive committee member, Delhi Neurological Association, India.

Dr Sumit Sinha

Fellowships


Memberships

- Member of Skull Base Surgery Society of India (SBSSI)
- Member of Indian Society of Paediatric Neurosurgery (ISPN)
- Member of Asian Conference of Neurological Surgeons (ACNS)
- Member of International Society for Brachial Plexus and Peripheral Nerve Injury (ISBPPNI)
- Member of AO Spine Surgeons International
- Member of Association of Spine Surgeons of India (ASSI)
- Member of Neurotrauma Society of India (NTSI)
- Member of American Association of Neurological Surgeons (AANS)
- Member of Congress of Neurological Surgeons (CNS)
- Member of National Neurotrauma Society (NTS)
- Member of American Spinal Injury Association (ASIA)

Dr John R. Bera

- Invited as faculty for the discussion of Osteo Arthritis of joints, the treatment and prevention in Lok Sabha TV; 10 September 2008.
- Invited as faculty for the discussion of Spinal Injury in patients, the treatment available now, the future perspective in advances in treatment and the Rehabilitation in Lok Sabha TV program; 12 December 2008.
- Awarded Life Membership, World Association for Disaster and Emergency Medicine, USA.
- Awarded Life Membership, Indian Society for Trauma and Acute Care (ISTAC).

Dr Vijay Sharma

- Life Member, Punjab Orthopaedic Association 2009.

Dr Vivek Trikha

- Johnson & Johnson IOA Traveling Fellowship, the most prestigious inland fellowship awarded by the Indian Orthopaedic Association; December 2008–January 2009.
Dr Shivanand Gamanagatti

- Editorial Member of International Journal of Bio Sciences and Technology
- Editorial Member of International Journal of Medical Sciences and Technology
- Editorial Member of International Journal of Life Sciences and Technology
- Editorial member of International Journal of BioSciences, Alternative and Holistic Medicine (IJBSAHM)
- Editorial member of International Journal of Biological Sciences and Technology (IJBLST)
- Editorial member International Journal of BioSciences, Psychiatry and Technology (IJBSPT)

Dr Amit Gupta

- Awarded the Indian Council Medical Research (ICMR) International Fellowship, for Young Bio-Medical Scientists 2007–2008. Application of Hi Fidelity Simulation in Trauma and Acute Care Education. Tampa General Hospital and University of South Florida, Tampa, Florida, USA.
- Qualified the Advanced Trauma Life Support Course ATLS® of American College of Surgeons – Committee on Trauma. USF, USA
- Member Committee to draft the EMS Legislation for Government of NCT Delhi. Under the Emergency Medical Council, Government of NCT Delhi.
- Member (Technical), Core Committee: Centralized Accident and Trauma Services (CATS) Government of National Capital Territory (NCT), Delhi
- Member, Proposal Review Committee for the PPP Project of the Pre-Hospital Emergency Medical Response (Ambulance) Service. Government of National Capital Territory (NCT), Delhi
- Member, CBRN co-ordination committee, National Disaster Management Authority, Government of India.
- Awarded membership, World Association for Disaster and Emergency Medicine (WCDEM), USA.

Dr Biplab Mishra

- Nominated by Ministry of Health and Family Welfare, Government of India to attend Advanced Trauma Life Support (ATLS), Provider and Instructor courses, Fujairah Hospital, Fujairah, UAE; 30 October – 4 November 2008.
- Nominated by AIIMS to attend 2nd Indo-Israel international course on ‘Trauma System and Mass Casualty Management’, JPN Apex Trauma Centre, AIIMS and supported by MASHAV, Ministry of External Affairs Israel; 18–27 November 2008.
Dr Maneesh Singhal

- Nominated by AIIMS to attend 2nd Indo-Israel international course on ‘Trauma system and mass casualty management’, JPN Apex Trauma Centre, AIIMS and supported by MASHAV, Ministry of External Affairs Israel; 18–27 November 2008.

Dr Subodh Kumar

- National Programme Coordinator, ATLS–India programme
- Member, CBRN co-ordination committee, National Disaster Management Authority, Government of India.
- Awarded membership, World Association for Disaster and Emergency Medicine (WCDEM), USA.
- Awarded life membership, Indian Medical Association.

Dr Sushma

- Member, Editorial board, AIIMS annual report
- Member, Editorial board, Journal of Society for Wound Care and Research (JWSCR)
- Awarded membership, World Association for Disaster and Emergency Medicine (WADEM)
- Awarded membership, European Society for Trauma and Emergency Surgery (ESTES)
- Examiner, AIIMS undergraduate professional examinations

SIGNIFICANT EVENTS

‘Trauma 2008’

International conference, CME cum Live Workshop and Inaugural conference of the Indian Society Trauma and Acute Care (ISTAC)

28–30 November 2008

J.P.N. Apex Trauma Centre at AIIMS aims to provide quality trauma patient care facilities, which can act as a role model to other trauma centres of the country. More than providing best patient care facilities the role of this apex trauma centre has been envisaged as an apex research and training institution which will help the nation’s administrators to formulate policies regarding organization of trauma care facilities throughout the country.
Training of manpower in Acute Care and pre-hospital services should be taken on priority. Proper organization and administration of trauma Services along with Legislative backup will go a long way in strengthening India’s Essential Trauma Care Services. Keeping this in mind ‘Trauma 2008’—an International Conference, CME cum Live Workshop and Inaugural Conference of the Indian Society for Trauma and Acute Care (ISTAC ®) was organized under the chairmanship of Prof. M.C. Misra.

The theme of the conference was ‘Resuscitation to Rehabilitation’. The conference was inaugurated by the chief guest Lt. Governor Hon’ble Shri Tejendra Khanna. The main attraction of the inauguration ceremony was a panel discussion on ‘Injury prevention and Road Safety’ by eminent panelists representing all sections of the society. All the specialists working in the field of trauma were brought under one roof. This was for the first time that a conference dedicated to trauma care was organized under the leadership of Apex Trauma centre AIIMS. Seven workshops (ABCD, Maxillo-facial, Trauma radiology, Neurosurgery, Cost-effective computerization in hospital, Trauma nurse- coordinator and Physiotherapy workshops) interactive lectures, symposia, and panel discussions were attended by more than 700 delegates and 100 international and national faculties. Trauma nurse coordinator workshop and Physiotherapy workshop were the highlights of the conference and were especially organized for the first time to spread a message about holistic care of a trauma victim. Postgraduate medical students, nurse and technicians were awarded for best paper presentations. The conference was considered a huge success as reflected by the feedback forms received from delegates.

**PATIENT CARE**

**Department of Anaesthesia**

Total number of cases under Anaesthesia

<table>
<thead>
<tr>
<th>Total cases</th>
<th>3761</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orthopaedics</td>
<td>1470</td>
</tr>
<tr>
<td>Surgery</td>
<td>1044</td>
</tr>
<tr>
<td>Neurosurgery</td>
<td>1247</td>
</tr>
</tbody>
</table>

Total number of patients treated in general ICU

| Total admissions | 284 |

**DEPARTMENT OF EMERGENCY MEDICINE**

1. 30-bedded divided into red area, yellow and green area
2. 7 Resuscitation bay including paediatric resuscitation bay
3. Each bay is equipped with its monitor
4. Protocol-based treatment
5. Trained manpower
6. Emergency sonography
7. ABG
8. Fluid warmer
9. Minor OT
10. Plaster room
11. Ultrasound guided Nerve Blocks, Vascular access, and ocular Ultrasound in the ED (By Emergency Physicians)

DEPARTMENT OF SURGERY
- Total patients attended ED 37,177 (4–5 patients/hr)
- Total surgical patients attended ED 21,456
- Total patients who stayed < 24 hrs 19,226
- Total surgical cases admitted (>24hrs) 1,128
- Operative procedures done under anaesthesia 971
- Mortality rate: 55/1128 (4.4%)
- Follow up OPD attendance 6547

DEPARTMENT OF RADIOLOGY

Routine X-rays
<table>
<thead>
<tr>
<th>S. No.</th>
<th>X-rays</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Portable X-rays</td>
<td>11,645</td>
</tr>
<tr>
<td>2.</td>
<td>Casualty X-rays</td>
<td>51,541</td>
</tr>
</tbody>
</table>

Total routine X-rays 63,186

II. Special Investigations
<table>
<thead>
<tr>
<th>S. No.</th>
<th>Investigation</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.</td>
<td>Digital subtraction angiography</td>
<td>50</td>
</tr>
<tr>
<td>14.</td>
<td>MRI</td>
<td>1,576</td>
</tr>
<tr>
<td>15.</td>
<td>Ultrasound + Doppler</td>
<td>5,191</td>
</tr>
<tr>
<td>20.</td>
<td>CT</td>
<td>16,375</td>
</tr>
</tbody>
</table>

Total 23,192

Grand total 63,186 + 23,192 = 86,378

New equipment
Digital subtraction angiography (DSA)
DEPARTMENT OF LABORATORY MEDICINE

Tests conducted in the Department of Laboratory Medicine, JPNA Trauma Centre

1. Haematology

Hemoglobin 17,856
Total leukocyte count 14,453
Differential count 8,471
HCT 14,180
RBC 9,941
MCH 8,469
MCHC 8,469
MCV 8,469
RDW 8,469
Platelet count 14,441
Reticulocyte count 34
ESR 1,436
Peripheral smear 65
Total 1,16,851

Coagulation

PT 9,929
APTT 9,241
TT 1,052
Fibrinogen 333
D-dimer 373
Total 20,928

Fluid tests

Urine routine 605
Fluid routine 576
Total 1181

Grand total 1,38,960
## 2. Biochemistry

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Total</td>
<td>2,09,508</td>
</tr>
<tr>
<td>Sugar</td>
<td>4497</td>
</tr>
<tr>
<td>Urea</td>
<td>23,423</td>
</tr>
<tr>
<td>Creatinine</td>
<td>17,718</td>
</tr>
<tr>
<td>Calcium</td>
<td>10,446</td>
</tr>
<tr>
<td>Phosphate</td>
<td>9285</td>
</tr>
<tr>
<td>Uric acid</td>
<td>7397</td>
</tr>
<tr>
<td>Sodium</td>
<td>23,134</td>
</tr>
<tr>
<td>Potassium</td>
<td>23,134</td>
</tr>
<tr>
<td>TBIL</td>
<td>13,644</td>
</tr>
<tr>
<td>DBIL</td>
<td>13,603</td>
</tr>
<tr>
<td>TP</td>
<td>7594</td>
</tr>
<tr>
<td>ALB</td>
<td>8,882</td>
</tr>
<tr>
<td>AST</td>
<td>9,239</td>
</tr>
<tr>
<td>ALT</td>
<td>9,222</td>
</tr>
<tr>
<td>ALP</td>
<td>9,253</td>
</tr>
<tr>
<td>AMY</td>
<td>3,051</td>
</tr>
<tr>
<td>CK</td>
<td>14</td>
</tr>
<tr>
<td>CKMB</td>
<td>22</td>
</tr>
<tr>
<td>CRP</td>
<td>207</td>
</tr>
</tbody>
</table>

## Lipid Profile

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHOL</td>
<td>2,925</td>
</tr>
<tr>
<td>HDLD</td>
<td>1,725</td>
</tr>
<tr>
<td>LDLD</td>
<td>1,726</td>
</tr>
<tr>
<td>TG</td>
<td>1,729</td>
</tr>
<tr>
<td>VLDL</td>
<td>1,729</td>
</tr>
</tbody>
</table>

## Fluids

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSF sugar</td>
<td>785</td>
</tr>
<tr>
<td>CSF M-TP</td>
<td>785</td>
</tr>
<tr>
<td>Peritoneal sugar</td>
<td>256</td>
</tr>
</tbody>
</table>
Peritoneal M-TP 271
Urine sugar 755
Urine M-TP 755

3. Microbiology
A. Total bacterial cultures: 8664

B. Antibiotic sensitivity
By VITEK 1,718
By Disc diffusion 1,718
Total 3,436

C. HIV serology: 286
D. Hepatitis B serology: 255
E. Hepatitis C serology: 196
Viral Markers Total 737
F. Hospital Infection surveillance cultures: 1467

Microbiology Grand Total 12,837
Grand Total 3,62,772

DEPARTMENT OF BLOOD BANK

<table>
<thead>
<tr>
<th>Total Statistics of Blood Bank JPNATC</th>
<th>Donor bled Tested for HIV</th>
<th>Donor Tested for HBV</th>
<th>Donor Tested for HCV</th>
<th>Donor Tested for VDRL</th>
<th>Donor Tested for MP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total donor screened</td>
<td>9241</td>
<td>5973</td>
<td>5973</td>
<td>5973</td>
<td>5973</td>
</tr>
<tr>
<td>% Pos 0.45%</td>
<td>% pos 2%</td>
<td>% Pos0.6%</td>
<td>% pos 1.25%</td>
<td>%Pos 0.06%</td>
<td></td>
</tr>
<tr>
<td>Total X-match done</td>
<td>Total Blood issued</td>
<td>Total FFP issued</td>
<td>Total platelet issued</td>
<td>Total cryo issued</td>
<td>Total donor grouping done</td>
</tr>
<tr>
<td>18,518</td>
<td>8128</td>
<td>5783</td>
<td>5649</td>
<td>313</td>
<td>17919</td>
</tr>
</tbody>
</table>

Blood and blood component stock
Total blood stock record 6901
Total FFP stock record 5533
Total platelet stock record 4701
Total cryoprecipitate stock record 221

**Work load of blood donation complex from 28th March 2008 to 31 March 2009**

<table>
<thead>
<tr>
<th>Description</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number blood donors screened</td>
<td>9,241</td>
</tr>
<tr>
<td>Total number of donors found unfit for donation</td>
<td>3,227</td>
</tr>
<tr>
<td>Total number blood donors bled</td>
<td>5,973</td>
</tr>
<tr>
<td>Number of replacement donors</td>
<td>5,477</td>
</tr>
<tr>
<td>Number of voluntary blood donors</td>
<td>496</td>
</tr>
</tbody>
</table>

**Work load of issue (emergency lab) of JPNATC Blood Bank AIIMS**

<table>
<thead>
<tr>
<th>Description</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total cross match done</td>
<td>18,518</td>
</tr>
<tr>
<td>Total blood issued</td>
<td>8,128</td>
</tr>
<tr>
<td>Total FFP Issued</td>
<td>5,783</td>
</tr>
<tr>
<td>Total platelet issued</td>
<td>5,649</td>
</tr>
<tr>
<td>Total cryoprecipitate issued</td>
<td>313</td>
</tr>
</tbody>
</table>

**Work load of component laboratory**

<table>
<thead>
<tr>
<th>Description</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total pack RBC prepared</td>
<td>5,961</td>
</tr>
<tr>
<td>Total FFP prepared</td>
<td>5,905</td>
</tr>
<tr>
<td>Total platelet prepared</td>
<td>5,580</td>
</tr>
<tr>
<td>Quality control of Blood and Blood Component</td>
<td>40 Bags</td>
</tr>
</tbody>
</table>

**Blood and blood component issued to main blood bank, CNC blood bank and other hospitals**

<table>
<thead>
<tr>
<th>Description</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood issued to CNC blood bank</td>
<td>219 units</td>
</tr>
<tr>
<td>Blood issued to main blood bank</td>
<td>151</td>
</tr>
<tr>
<td>Blood issued to other hospital</td>
<td>08 units</td>
</tr>
<tr>
<td>FFP issued to main blood bank</td>
<td>25 units</td>
</tr>
<tr>
<td>FFP issued to other blood bank</td>
<td>52 units</td>
</tr>
<tr>
<td>Platelet issued to main blood bank</td>
<td>2217 units</td>
</tr>
<tr>
<td>Cryoprecipitate issued to main blood bank</td>
<td>10 units</td>
</tr>
</tbody>
</table>

**Work load of infection marker laboratory Percentage of reactive blood donor**

<table>
<thead>
<tr>
<th>Description</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV</td>
<td>0.45%</td>
</tr>
<tr>
<td>HBsAg</td>
<td>2%</td>
</tr>
<tr>
<td>HCV</td>
<td>0.6%</td>
</tr>
<tr>
<td>VDRL</td>
<td>1.25%</td>
</tr>
<tr>
<td>MP</td>
<td>0.06%</td>
</tr>
</tbody>
</table>
**Record of blood sent for incineration (Blood and FFP)**

Platelet units sent for Incineration due to viral marker reactive report, leakage, lipemic plasma units and expired units

<table>
<thead>
<tr>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total blood sent for incineration</td>
<td>556</td>
</tr>
<tr>
<td>Total FFP Sent for Incineration</td>
<td>596</td>
</tr>
<tr>
<td>Total platelet sent for incineration</td>
<td>922</td>
</tr>
<tr>
<td>Total cryoprecipitate sent for incineration</td>
<td>49</td>
</tr>
</tbody>
</table>

**DEPARTMENT OF FORENSIC MEDICINE**

Total number of autopsy at JPNATC- 893 (April 2008 – March 2009)

The department provided consultation services to the CBI, crime branch and other investigating agencies from various states in complicated medico-legal postmortem conducted at other centres of the country and also participated in board postmortems.

**Court attendance by the members of the department**

Faculty of the department also attended court on behalf of the Medical Superintendent, other doctors who have left AIIMS, as directed by the court.

**Clinical Forensic Medicine**

The department examined cases of age estimation, medical examination, marriage disputes, potency, DNA fingerprinting etc referred by the court, CBI and other investigating agencies.

**Community services**

The department participated in training programme organized by the Academy of CBI and NICFS. Lectures and demonstrations were held for CBI officials, police officers, medical officers, judges public prosecutors and Forensic Science experts from all over country.

**MEDICAL RECORD SECTION**

Faculty In-Charge: Dr Adarsh Kumar

<table>
<thead>
<tr>
<th>Jr M R O</th>
<th>M R T</th>
<th>Receptionists</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr Raju Yohunna</td>
<td>Mr Saurabh</td>
<td>Mr Shailendra Jaiswal</td>
</tr>
<tr>
<td>Mr Aditya</td>
<td>Ms Kakujyoti Borha</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mr Rajender Singh</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mr Tasvir Singh</td>
<td></td>
</tr>
</tbody>
</table>
Beside above mentioned regular staff few DEO and Sulabh workers are also helping in day-to-day management of various functioning of medical record section. The statistical data for the period is as under.

- Total ED attendance: 42,050
- Total Number of admissions: 4,640
- Total number of operations performed: 3,978
- Total number of follow-up OPD attendance: 23,359

MRS of JPNATC is the first Government Hospital who has started Online registration of death at NDMC.

MRS is also disposing of summons from various Hon’ble Courts in Delhi as well as other states (total 16 summons). MRS is also handling various Insurance Policy matters of patients who attended JPNATC in any case whether alive or dead. MRS has also entertained police requests for issuing x-rays. During Mehrauli Bomb Blast episode, the MRS efficiently handled various information pertaining to deceased as asked by Delhi Government for proper compensation. Several RTI queries were also answered by MRS during the year. MRS is striving for computerization of whole registration process.

**MEDICAL SOCIAL WELFARE UNIT**

<table>
<thead>
<tr>
<th>Faculty In-Charge</th>
<th>Sup. MSSO</th>
<th>MSSO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr Adarsh Kumar</td>
<td>Mr S. Bhattacharya</td>
<td>Mr Naveen Kumar</td>
</tr>
</tbody>
</table>

The MSW Unit was developed with the help of one MSSO and afterwards one Sup. MSSO and one NGO, i.e. SAPNA. Initially the primary work was providing financial help, medicines, clothes, etc. to poor and needy patients by certifying as ‘BPL’ which afterwards extended to rehabilitation of unknown and without attendant patients. During the period of reporting 46 such patients was rehabilitated at various Ashrams/ Shelter Homes and 413 patients were handed over to their relative by following various administrative procedures.

Afterwards with the help of various agencies like CISF, CRPF and companies; Blood Donation Camps were arranged for Blood Bank of JPNATC. First camp was organized on occasion of Teacher’s Day (5 Sept 2008) and afterwards two more camps were organized with approximately 100 units of donations.

MSW Unit is coordinating with CMET and Sr Administrative Officer for providing information to various media agencies, TV channels in case of Unknown patients.

MSW Unit is coordinating with IHBHAS in rehabilitation of mentally ill (Psychiatric) patients, who were admitted as victim of trauma.

MSW Unit arranged to get One Dead Body donated for teaching purpose to Department of Anatomy.
TIMINGS AND MEMBERSHIP

The library is kept open round the clock on all days of the week including Sundays and holidays. It has 2300 regular members and an average of 800 readers visit the library every day.

SERVICES

The library continued to extend the following services to the users. These services had been modernized, updated and strengthened.

Book alert service
This is a monthly service listing of new books, monographs and pamphlets added to the library.

Periodical alert service
This is a fortnightly listing of new periodicals received in the library during the previous fortnight.

Bibliographies on demand
The staff of the library compiled bibliographies on various topics as and when requested by the readers.

Interlibrary loan services
Interlibrary loan services with several local libraries are being maintained to help users procure documents that are not available in the library.

Reprographic services
The library has eight machines to meet the demands of the readers, viz. two Modi Xerox 1025, two 5834, one Duplex digital copier model WCPRO-35, two WC5638 WRH and one WC 7242 colour. During the year 1,13,892 pages were photocopied, on payment basis, as a service to the readers.

CD-ROM printout services
During the year 13,427 computer printouts containing abstracts of articles were made available to the readers on a payment basis.

Book Bank
The Book Bank has 92 students (undergraduates and interns) as its members. It has 2,600 books which are issued on a long-term basis to the students.
**Microforms section**

The library is equipped with two microfilm readers and one microfilm/microfiche reader-cum-printer. The library has 1,627 microforms in its collection.

**Audiovisual section**

The library has four colour television sets and four video cassette recorders. The number of video cassettes available in the library is 308. It also has four audio cassette playback decks and 109 audio cassettes.

**CD-based services**

The library has different databases on CD-ROM, i.e. MEDLINE, POPLINE, ONCO DISC and LISA, etc. Different encyclopaedias and dictionaries have also been acquired on CD-ROM. The number of CDs currently is 807.

**CD-NET**

A CD-NET workstation has been operational in the library since January 1993. At a time, fifteen users can search different databases loaded in a CD-NET tower. A printing facility is also available. The library has expanded this facility by adding one more CD tower with 28 drives.

**Library automation**

The library has an ALPHA Digital Personal Workstation (DPW) 433 AU with 16 terminals, 10 laser printers, one line printer and three local dot matrix printers. Housekeeping operations of the library (viz. acquisition, cataloguing, series control and circulation) have been automated. An upgraded version of the existing LIBSYS software named LS Premia, a web-centric library management software package has been installed and is used regularly.

**Computerized thesis search**

Over 5,000 theses received so far in the library can be retrieved through a computer search. Information about each thesis such as author, title, department, guide’s name, co-guides and other bibliographical details are available on the computer.

**Online journals**

The library received 300 online journals for the current year, made available to it by the publishers along with the print versions of the journal.

**OPAC (Online public access catalogue)**

All the records from 1985 onwards can also be retrieved through the Online Public Access Catalogue (OPAC). The searchable databases (through OPAC) are video cassettes, audio cassettes and compact discs. Six online public access terminals are placed in the lobby at the entrance of the library where users can search bibliographic databases and find specific information online. Information about journals and recent arrivals can also be retrieved through OPAC.
Multimedia

The library has two multimedia sets. Few multimedia titles are also available.

E-mail

The library participates actively in DELNET (Developing Library Network). An e-mail modem has been provided by DELNET for communicating with other libraries. Besides this, the library also has an e-mail connection provided by the Institute.

Internet

This facility is available in the library from 10 am to 10 pm from Monday to Friday and till 8:30 pm on Saturdays. Eighteen nodes are available to the users. Fifteen wireless access points have been installed inside the library building to access the internet facility through Wi-Fi technology.

New additions

The library added 682 new books to its collection and now has a total of 71,496 books. Also 146 bound volumes of journals and 68 pamphlets/reports were added to the collection. The total number of bound volumes of journals and reports/pamphlet are increased to 66,496 and 16,805, respectively. The library subscribes to 633 journals in various fields of health sciences, 300 of these are online along with their print versions. Twenty-eight journals subscribed in print and electronic version on behalf of the National Drug Dependence Treatment Centre (NDDTC) are also being received

AWARDS, HONOURS AND SIGNIFICANT EVENTS


2. Mr M. K. Vishwakarma, Librarian Grade-II attended and presented a poster on ‘Electronic resources: a boon for health science professionals’ at the International Conference of Asian Special Libraries (ICoASL-2008), New Delhi, 25–28 November 2008.

3. Mr Jahangir Khan, Librarian Grade-III attended the training programme ‘I.T. application in libraries and information management’ held at National Institute of Health and Family Welfare, New Delhi, 20–24 October 2008; attended and presented a paper ‘Changing scenario of journals from print to online’ at National Conference on Digitization and Digital Presentation held at DESIDOC, DRDO, New Delhi, 11–12 December 2008.

4. Mr Rakesh Rawat, Data Entry Operator was awarded first prize in Hindi Typing examination, Department of Official Language, Ministry of Home Affairs, Government of India.
## 11.2 Cafeteria

**Chairman**  
Deputy Director  
(Administration)

**Faculty-in-charge**  
O.P. Kharbanda

**Accounts Officer**  
S. K. Gupta

**General Manager**  
S. K. Kaushik

**Deputy General Manager**  
K. K. Sharma

### AIMS AND OBJECTIVES

The AIIMS cafeteria, established in 1972, provides wholesome food at reasonable prices to AIIMS employees. In 1983 it was registered with the Director of Canteen, Department of Personnel and Training, Government of India. In October 1991, the cafeteria was taken over by the Institute and since then all employees are treated at par with other AIIMS employees. The cafeteria is being run in accordance with guidelines issued by Department of Personnel and Training, Government of India from time to time on No-Profit, No Loss basis, without any financial assistance from the Institute.

### MANAGEMENT COMMITTEE

A managing committee constituted by Director, AIIMS takes policy decisions pertaining to the Cafeteria. The members of the committee during the year were:

1. Deputy Director, Administration  
   Chairperson
2. Professor S. Rastogi  
   Member
3. Professor V.K. Paul  
   Member
4. Professor Bir Singh  
   Member
5. Shri Sandeep Lal, Sr F.A.  
   Member
6. Smt Basanti Dalal, F.A.  
   Member
7. Shri B.S. Anand, S.E.  
   Member
8. Shri S.K. Gupta, Accounts Officer  
   Member
9. Smt Preeti Ahluwalia, Welfare Officer  
   Special Invitee
10. Dr (Smt) Parmeet Kaur, Chief Dietician  
    Member
11. Representative of RDA  
    Member
12. Representative of Officers’ Association 
13. Representative of Nurses’ Union 
14. Representative of Karamchari Union 
15. Representative of FAIMS 
16. Professor O. P. Kharbanda 
17. Shri S.K. Kaushik, General Manager, Cafeteria

SERVICE FACILITIES
The cafeteria runs 7 units to provide services to about 9000 employees of the Institute. These are:

1. Main cafeteria (24-hour service) situated near Jawahar Lal Nehru Auditorium
2. Main Operation Theatre cafeteria on the 9th floor of the main hospital
3. Cardiothoracic Neurosciences Centre cafeteria on the 2nd floor of the centre
4. Dr Rajendra Prasad Centre Operation Theatre cafeteria on the 5th floor of the centre
5. Apex Jaiprakash Narain Trauma Centre
6. Faculty Room cafeteria near the Main cafeteria
7. Dr B.R. Ambedkar Institute Rotary Cancer Hospital cafeteria on the 3rd floor of the centre

In addition, the cafeteria provides services to the Director, Dean, Deputy Director (Administration), Medical Superintendent and Faculty Members for their day-to-day as well as special requirements for important meetings. It also provides catering services for the examinations conducted by the Examination Section at AIIMS as well as for meetings of the Institute body, Governing body and other Standing Committees.

STAFF STRENGTH
Eighty-five employees (regular/ad hoc/temporary) are on the rolls of the Cafeteria Department. Catering services were provided for official meetings, conferences and symposia held at AIIMS.

ANNUAL TURNOVER
The total turn over of the cafeteria is approximately Rs 1 crore 83 lakh.

DEVELOPMENT ACTIVITIES
Several changes were introduced in the cafeteria. Complete renovation of the kitchen and store area which includes proper ventilation using the latest technology is in progress.

FUTURE PLANS
There is a proposal for complete renovation of the Cafeteria, to be equipped with the latest technology to maintain more healthy and hygienic conditions in the Cafeteria Department.
11.3 Central Workshop

Faculty Co-ordinator
Shashi Kant (from June 2008)

Chief Technical Officer
Adarsh Kumar Sharma (from 4.7.2008)

Technical Officers

<table>
<thead>
<tr>
<th>Kalu Ram</th>
<th>Swaraj Kumar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harinder Pal</td>
<td>Nitin Srivastava</td>
</tr>
</tbody>
</table>

The Central Workshop has been mainly engaged in the repair and maintenance of instruments used for medical education, scientific research and hospital services. In spite of increased load of above-mentioned activities, it has also continued to cater for fabrication and design of new instruments. It has the following sections:

1. Electronic  
2. Electrical  
3. Refrigeration  
4. Mechanical  
5. Carpentry  
6. Painting  

STAFF STRENGTH

The Central Workshop has the following staff:

- Technician (Grade I) 7
- Technician (Grade II) 7
- Workshop Assistant (Painter) 2
- Workshop Assistant 6
- Assistant (NS) 1
- UDC 1
- Peon 1
- Khalasi 7

FABRICATION AND GUIDANCE

The Central Workshop has been able to continue to help the research activities of the Institute by modification of instruments and fabrication of useful gadgets. In many cases it has been possible to design and fabricate items that were previously imported by departments with locally available components. A total of 79 jobs of fabrication were carried out. Some of the important specialized fabrication jobs done for various departments include:

1. Testicular prosthesis (Department of Paediatric Surgery)
2. Fumigation chamber (Main operation theatre 6 and 7)
3. Ampoule cutter box (Main operation theatre)
4. Sample/Specimen carrying tray (Private ward III)
5. Paediatric rolls (Main operation theatre 6 and 7)
<table>
<thead>
<tr>
<th></th>
<th>Item Description</th>
<th>Location/Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Wooden block for skin graft</td>
<td>(Main operation theatre 10 and 11)</td>
</tr>
<tr>
<td>7</td>
<td>Auto CPAP connector</td>
<td>(Department of Medicine)</td>
</tr>
<tr>
<td>8</td>
<td>Metal stand for remote control</td>
<td>(Main operation theatre 10 and 11)</td>
</tr>
<tr>
<td>9</td>
<td>Bender</td>
<td>(Neurosurgery operation theatre)</td>
</tr>
<tr>
<td>10</td>
<td>UV Light Stand for operation theatre</td>
<td>(Department of Surgery)</td>
</tr>
<tr>
<td>11</td>
<td>CO2 chamber</td>
<td>(Department of Anatomy)</td>
</tr>
<tr>
<td>12</td>
<td>Elevated plus Maze with camera stand</td>
<td>(Clinical Epidemiology Unit)</td>
</tr>
<tr>
<td>13</td>
<td>Foot fault apparatus</td>
<td>(Clinical Epidemiology Unit)</td>
</tr>
<tr>
<td>14</td>
<td>Signal wire for Sleep lab</td>
<td>(Department of Physiology)</td>
</tr>
<tr>
<td>15</td>
<td>OT table Mattress</td>
<td>(MTP operation theatre)</td>
</tr>
<tr>
<td>16</td>
<td>Stillete</td>
<td>(NS2 ward)</td>
</tr>
<tr>
<td>17</td>
<td>Abduction stand for arthroscopy</td>
<td>(Orthopaedics operation theatre)</td>
</tr>
<tr>
<td>18</td>
<td>Hand rest stand for arthroscopy</td>
<td>(Orthopaedics operation theatre)</td>
</tr>
<tr>
<td>19</td>
<td>Part of MRI machine as per sample</td>
<td>(NMR Department)</td>
</tr>
<tr>
<td>20</td>
<td>Copper strip for boiler</td>
<td>(CSSD Department)</td>
</tr>
<tr>
<td>21</td>
<td>Wooden block as per sample</td>
<td>(Private Ward 5th floor)</td>
</tr>
<tr>
<td>22</td>
<td>Slide rack</td>
<td>(Department of Anatomy)</td>
</tr>
<tr>
<td>23</td>
<td>Operation theatre light handle</td>
<td>(Department of CTVS)</td>
</tr>
<tr>
<td>24</td>
<td>Aluminum angle piece</td>
<td>(Orthopaedics operation theatre)</td>
</tr>
<tr>
<td>25</td>
<td>Cushion for Settee</td>
<td>(CNC Blood Bank)</td>
</tr>
<tr>
<td>26</td>
<td>Hangers for intravenous fluid bottles</td>
<td>(COPD)</td>
</tr>
<tr>
<td>27</td>
<td>Garbage trolley</td>
<td>(Cardiothoracic Neurosciences Centre)</td>
</tr>
<tr>
<td>28</td>
<td>Plexi glass chamber</td>
<td>(Department of Physiology)</td>
</tr>
<tr>
<td>29</td>
<td>X-ray container</td>
<td>(Central Animal Facility)</td>
</tr>
<tr>
<td>30</td>
<td>Rat chamber with massy table and perspex box</td>
<td>(Department of Anatomy)</td>
</tr>
<tr>
<td>31</td>
<td>Perspex box as per sample for research</td>
<td>(Department of Anatomy)</td>
</tr>
<tr>
<td>32</td>
<td>Rat restrainer</td>
<td>(Department of Neurology)</td>
</tr>
<tr>
<td>33</td>
<td>Panel with trolley for display</td>
<td>(Dr BRA IRCH)</td>
</tr>
<tr>
<td>34</td>
<td>Bakelite support board for patients</td>
<td>(Cardiac Catheterization Laboratory)</td>
</tr>
<tr>
<td>35</td>
<td>Supporting stand for rats</td>
<td>(Department of Anatomy)</td>
</tr>
<tr>
<td>36</td>
<td>Filter plate for MRI machine</td>
<td>(NMR Department)</td>
</tr>
</tbody>
</table>
37. Wet box (Perspex)  
38. Metal dies  
39. Hip spica stand  
40. ‘L’ support

**REPAIR AND MAINTENANCE**

The Central Workshop has been carried out repair and maintenance of all types of biomedical equipment including blood pressure instruments, electrosurgical units, ECG machines, infusion pumps, multiparameter monitors, defibrillators, patient warmers, operation theatre tables, refrigerators, ice machine, cold labs, water chillers, cryostats, deep freezers, UV spectrophotometer, electronic weighing machines, audiometer, ultrasound therapy unit, operation theatre light, tissue processor, cold centrifuge, microscope, needle destroyer, water bath, X-ray view box, OT care machine, suction machine, oxygen regulator flowmeter, servo stabilizer, boilers, hot plates, tabletop centrifuge, microwave ovens, incubators, patient bed, patient trolley, loading trolley, intravenous stands, wheel chair, side screen, bedside locker, push carts, stainless steel drum, surgical instruments, etc.

The Central Workshop has been economically and successfully repairing many electronic types of equipments declared irreparable by the manufacturing companies. These include patient monitors, defibrillators, infusion pumps, patient warmers, etc.

The Central Workshop has been taking repair and painting jobs of all hospital furniture such as patient beds, patient lockers, intravenous stands, instruments trolleys, loading trolleys, fowler beds, etc. The Central Workshop attended to a total of 6,820 repair jobs.

**SHORT-TERM TRAINING**

The Central Workshop has been actively involved in providing guidance and imparting short-term summer training (4–6 weeks) to eight B. Tech students from Dayal Bagh Engineering College, Agra and other technical institutes.
**11.4 K.L. Wig Centre for Medical Education and Technology**

**Professor-in-Charge**  
Rita Sood  
(up to 3.2.2009)  
Siddharth Datta Gupta  
(from 4.2.2009)

**Coordinator**  
O. P. Kharbanda

**Educationist**  
B. V. Adkoli (on leave)

**Education Media Generalist**  
Yogesh Kumar

**Adjunct faculty**  
Faculty members covering all undergraduate disciplines besides Dental, Nursing, Hospital Administration and Computer Facility

<table>
<thead>
<tr>
<th>Name</th>
<th>Name</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suneeta Mittal</td>
<td>V.K. Paul</td>
<td>Anurag Srivastava</td>
</tr>
<tr>
<td>Nibhriti Das</td>
<td>Manju Vatsa</td>
<td>Manju Mehta</td>
</tr>
<tr>
<td>Bir Singh</td>
<td>Peush Sahni</td>
<td>Radhika Tandon</td>
</tr>
<tr>
<td>Lalit Dar</td>
<td>A. Shariff</td>
<td>Nalin Mehta</td>
</tr>
<tr>
<td>Sandhya Gupta</td>
<td>S.K. Maulik</td>
<td>Sanjay Arya</td>
</tr>
<tr>
<td>Smriti Hari</td>
<td>Rajiva Gupta</td>
<td>Vandana Jain</td>
</tr>
<tr>
<td>Kalpana Luthra</td>
<td></td>
<td>S.N. Ragukumar</td>
</tr>
</tbody>
</table>

**EDUCATION**

**Undergraduate, postgraduate, paramedical**

Dr Rita Sood coordinated an ‘Orientation Programme for Interns’ on 6–7 February 2009 for the new batch of interns at AIIMS. Many CMET adjunct faculty were resource persons for the programme; provided inputs to the MB, BS curriculum committee deliberations of phase 1 and phase 2; organized and moderated a panel discussion for undergraduates on ‘How to be a good doctor’.

Mr Yogesh Kumar conducted 10 sessions (2 hours each) for MSc Nursing students of College of Nursing, AIIMS on topics related to media and communication.

**Continuing Medical Education**

**Conferences/workshops organized**

CMET organized 5 in-house workshops: Three on Tips and Tricks in MS Word and PowerPoint, one on Information Retrieval in health sciences and one on Ethics in Medical Education for the faculty, junior, senior residents and secretarial staff. Adjunct faculty participated as resource persons delivered lectures.

CMET also provided space and facility to conduct 22 CMEs/workshops organized by other departments of AIIMS.
National and International Conferences

CMET organized a 3-day national workshop, ‘Teaching Learning Methods in Health Professions’ Education: TLM-HPE 2008’, 10–12 November, 2008. This workshop was planned to facilitate development and improve teaching practices among health professions’ teachers. The programme was planned to deliberate on good teaching practices based on adult learning principles, and building interactivity into large group and small group learning. The programme also dealt with teaching of communications skills, professional and ethical behaviour, and clinical and procedural skills. The sessions on appropriate use of technology to improve instructional methods and microteaching were also planned.

Dr S. Datta Gupta, Rita Sood, Lalit Dar, Nalin Mehta and Kalpana Luthra, and Mr Yogesh Kumar participated in the International Conference organized by Medical Council of India to celebrate its Platinum Jubilee.

Lectures delivered

Dr Rita Sood

- Conducted sessions on (i) Student assessment, (ii) Validity and reliability in assessment, (iii) Project management, and (iv) Developing educational scholarship at 2nd PSG-FAIMER regional institute faculty development program in medical education, Coimbatore, Tamil Nadu; 15–23 April 2008.
- Conducted sessions on (i) Project management, (ii) Qualitative research, and (iii) Educational scholarship, 4th GSMC-FAIMER regional Institute Course in Medical Education, KEM hospital and GSMC, Mumbai; 15–18 June 2008.
- Conducted sessions on (i) Student assessment, (ii) MCQs and item analysis, (iii) One-minute preceptor, and (iv) Giving effective feedback, First Advanced MUHS workshop for medical teachers, MUHS, Pune; 6–8 August 2008.
- ‘What is integrated teaching and why do we need it?’, National workshop on Integrated teaching at Kameinini Institute of Medical Sciences, Narketpally, Andhra Pradesh; 25–26 July 2008.
- Panelist for a panel discussion ‘Healing head and heart’ (Teaching values in health care), 15th National conference on Mind, Body and Medicine, Mount Abu, Rajasthan; 27–29 July 2008.

• ‘Written communication’, Interns orientation programme, AIIMS; February 2009.

• Faculty, MUHS Deans’ consultation meeting on ‘Capacity building in medical education and leadership’, 12–13 January 2009.

• ‘Quality based Medical Education–A vision’, Commemorative International workshop of Medical Council of India, New Delhi; 1–3 March 2009.

Dr Kalpana Luthra

• National workshop, Assessment methods for learning evaluation in Basic Medical Sciences, September 2008

• Invited speaker, Workshop, ‘How to plan a research project and write a proposal’ for PG students, AIIMS, October 2008,

• ‘MCQs as assessment tool’, Department of Physiology, AIIMS, August 2008

Dr Nalin Mehta

• Convener, In-house workshop, ‘Ethics in Medical Education’, Conducted most of the sessions.

Mr Yogesh Kumar


• In-house workshop, ‘Tips and Tricks in Word and PowerPoint’ for Secretarial Staff, 7–10 July 2009.

• ‘Table and Graphs’, 1st Annual Clinical and Epidemiological Research Methods and Leadership Training workshop, INCLEN in collaboration with CMET, 13 July 2009.

• ‘Ethics in Medical Photography’, In-house workshop on Ethics in Medical Education, 7–9 August 2008.

• In-house workshops ‘Tips and Tricks in Word and PowerPoint’ for Resident doctors, 3–4 and 11–12 September 2009.

• ‘Advantage of Poster and Video Session’, 9th Asian Congress of Urology, Urological Association of Asia, 2–5 October 2008

• Demo lecture, Effective presentation for PG students and faculty of Centre for Community Medicine, 26 March 2009.

Mr S.N. Ragu Kumar

• Convener, In-house workshop on ‘Information Retrieval in health sciences’, conducted all the sessions.
PUBLICATIONS

Journals

Books

SERVICES

Media production

<table>
<thead>
<tr>
<th>Type of media produced</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical photography</td>
<td>2135 (408 requisitions)</td>
</tr>
<tr>
<td>X-ray, specimen, gel, etc.</td>
<td>4980 (512 requisitions)</td>
</tr>
<tr>
<td>Photographic prints (black and white, and colour)</td>
<td>562 (215 requisitions)</td>
</tr>
<tr>
<td>Scanning of images (slides, documents)</td>
<td>475</td>
</tr>
<tr>
<td>Scanning of slides</td>
<td>300</td>
</tr>
<tr>
<td>Video recording, editing (non-linear) including tape to CD conversion</td>
<td>437</td>
</tr>
<tr>
<td>Designing/printing of large format posters</td>
<td>1200</td>
</tr>
<tr>
<td>Book binding, paper cutting and offset printing</td>
<td>65</td>
</tr>
</tbody>
</table>

Highlights of media work

- Produced 2 series of video films for WHO funded modules developed by Department of Paediatrics: (1). Optimal feeding of low birth weight infants, (2). Essential newborn care course for nursing. Total: 19 films of 5–10 minute duration were produced.
- Institute day 2008: Exhibition was organized by CMET. More than 200 large size posters, especially designed for public health education were displayed.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

- **Dr Rita Sood** was Member, International Advisory Board, 7th edition of Text book of Clinical Medicine by Kumar and Clark; Executive Committee Member, South East Asian Regional Association of Medical Education (SEARAME); Member, Association for the Study of Medical Education in Europe (ASME); Editorial Board, South East Asian Journal of Medical Education
(SEAJME), Published from Chulalongkorn University, Bangkok, Thailand; Commissioned to write a paper on Medical Education in India for the series ‘Medical education around the world’ in the journal Medical Teacher; invited expert, Medical Council of India for undergraduate and postgraduate curriculum revision in Medicine and Family Medicine, October 2008 and develop Curriculum for Basic and Advanced courses on Medical education for teaching faculty, March 2009; Reviewer for Int J Med Edu, Med Teacher, Yonsei Med J, Natl Med J India and Postgrad Med J; Temporary Advisor to WHO, Expert group meeting to review and finalize module on ‘Teaching of ethics in undergraduate medical curriculum’, WHO, SEARO, New Delhi, 25–26 September 2008; Coordinated a collaborative learning programme for undergraduate medical students at CMET, AIIMS with 10 institutes across the world for a session on Stroke delivered from Dundee, UK.
11.5 Computer Facility

**Deputy Director and Head**
R.S Tyagi

**Systems Analyst**
S.N. Ragu Kumar Satish Prasad

**Senior Programmers**
Sushil Kumar Meher Sanjay Gupta V.K Jindal
S.P.Singh Vinay Pande

**Programmers**
Hari Shankar Pawan Kumar Manoj Kumar Singh
Tripta Sharma Sushma Dhama Amit Kumar Yadav
Sanjeev Kumar Amit Ankita Saini
Shyama Barua

**EDUCATION**

**Postgraduate**
Computer programming classes covering both theory and practical aspects were conducted for postgraduate students of the Department of Biotechnology and of the College of Nursing. Bioinformatics classes for students of the Department of Biotechnology were also conducted. Training was provided to Armed Force officers deputed to study Medical Informatics. This training was for a period of 2-years.

**Undergraduate**
A three-month course on basics of computers, internet, Windows applications, computer-aided learning, database and biostatistics was given to the BSc (Hons) Nursing students of AIIMS. A computer course for students of BSc Nursing (Post-certificate) was also conducted.

**Continuing Medical Education**
Members of the facility participated in and delivered lectures in continuing medical education programmes, symposia, international and national conferences. Members of the facility also guided various software projects for students of Computer Applications (leading to BCA, BE, BTech, MCA and MCM) from various engineering colleges in and outside Delhi. Lectures of faculty members of AIIMS for medical colleges/hospitals all over the country were organized through videoconferencing.

**SERVICES**
**Hospital computerization**
The following software design, development and implementation activities were done by the computer facility during this year.
Continuous maintenance and enhancement/upgradation of modules developed for Dr BRA IRCH OPD (New and Old patients) and Inpatients, New patients OPD registration for Main hospital, Dental OPD at CDER, Casualty registration, Admission registration (for both short- and long admission) for the Main hospital and centres except RP Centre and discharge summaries for clinical departments such as Gastroenterology, Orthopaedics, Cardiothoracic and Vascular Surgery and Physical Medicine and Rehabilitation.

Software for Main Hospital for OPD, Central Admission and Casualty for Main Hospital and software for Dental Centre have been developed. Functionalities covered for all these modules are available

The software that has been updated include:

1. Main hospital: MRI patient information system
2. BRA IRCH: Successfully implemented Day care registration, Appointment for Day care patients and discharge of cancer patients, e-billing during the period April 2008–March 2009. All these modules are running successfully.
3. CT and NS Centre: Successfully implemented electronic registration of new patients both for OPD and clinics at Cardiac and Neurosciences Centre since February 2009. Backlog entries of old records are being entered at both Cardiac and Neurosciences Medical Record Section and more than 20,000 records are stored in the system. A LAN based discharge summary for Neurosurgery in-patients has been developed and is running successfully.

**Academic Section Management and Information System**

This system is under development and will enable complete automation of the undergraduate, postgraduate and para-medical courses covering all functionalities from the beginning till completion of the course. It will also have (i) Report generation package for the academic Section, (ii) Modifications and maintenance in CMET requisition system and (iii) Maintenance of hostel reservation system.

**Research section**

The modules automated and running successfully include

1. Administration including (i) Research project management, (ii) recruitment management, (iii) project employee management, (iv) project employee EHS management, and (v) research fellowship management.
3. Stores including requisition, supply order and financial transaction.

The computer facility has migrated to SQL server 2005. A web-based application is under development and some of the functionalities are being implemented.

**Administrative computerization**

- Continued the payroll processing, administrative, accounts and finance systems using in-house software development.
Technical co-ordination for the new telephone directory committee at AIIMS.

Software for cheque printing for Budget section

**Examination section computerization**

- Computer Facility has coordinated and conducted the computerized online counseling for MD/MS/MDS and the selection of Junior Residence (non-Academic) for the year 2008–09.
- Hosted all examination results and notices online on the AIIMS website servers.

**IT infrastructure and Networking, Internet and Intranet management activities**

1. Implemented the User Id based internet access system, also demonstrated it to all computer facility staff.

2. Conducted an END point protection system demonstration at computer facility.

3. Prepared the Network audit and ISMS audit requirement study and RFP proposals, tendering, demonstrations, presentation, evaluation analysis, and award contract- Study, design, development and co-ordination done.

4. Network based endpoint antivirus system: Requirement study, RFP proposal development, Technical specification development and co-ordination in technical specification committee, tender document preparations, demonstration and evaluation analysis though evaluation committee co-ordination, draft of award contract, and implementation plan and execution.

5. Facility Management for Wireless Networking: System requirement, contract development, implementation of support systems and call centers for student support.

6. Web portal RFP proposal development in consultation with all department and centres at AIIMS.

7. Proposal for DHCP and authentication systems for wired network.

8. New webmail system testing and installation done.


10. User room upgradation done with new personal computer and internet for students and doctors.

11. Conducted website content provider meetings with all departments for continuous updating and upgradation of the AIIMS website and its updating policies.

12. Based on meetings of content providers, the Web portal RFP proposal is under development in consultation with all the department and centres.

13. Successfully implemented the wireless networking zones at 18 hostel locations, creating wi-fi zones for internet, information and online journals access to students and resident doctors. So far 230 students have availed of this facility and during the next year all the students at hostels will be enrolled for this facility.
### Details of wireless connection users (course-wise) up to March 2009

<table>
<thead>
<tr>
<th>Course</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSc</td>
<td>9</td>
</tr>
<tr>
<td>DM</td>
<td>7</td>
</tr>
<tr>
<td>Junior residents</td>
<td>24</td>
</tr>
<tr>
<td>MCh</td>
<td>9</td>
</tr>
<tr>
<td>MSc</td>
<td>11</td>
</tr>
<tr>
<td>MB,BS</td>
<td>52</td>
</tr>
<tr>
<td>MD</td>
<td>31</td>
</tr>
<tr>
<td>MS</td>
<td>5</td>
</tr>
<tr>
<td>PhD</td>
<td>51</td>
</tr>
<tr>
<td>Computer facility</td>
<td>4</td>
</tr>
<tr>
<td>Senior residents</td>
<td>27</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>230</td>
</tr>
</tbody>
</table>

### Details of wireless connection users (location-wise) up to March 2009

<table>
<thead>
<tr>
<th>Location</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number 1</td>
<td>18</td>
</tr>
<tr>
<td>Number 2</td>
<td>13</td>
</tr>
<tr>
<td>Number 3</td>
<td>13</td>
</tr>
<tr>
<td>Number 4</td>
<td>7</td>
</tr>
<tr>
<td>Number 5</td>
<td>12</td>
</tr>
<tr>
<td>Number 6</td>
<td>17</td>
</tr>
<tr>
<td>Number 7</td>
<td>34</td>
</tr>
<tr>
<td>Number 8</td>
<td>31</td>
</tr>
<tr>
<td>Number 9</td>
<td>6</td>
</tr>
<tr>
<td>Number 10</td>
<td>11</td>
</tr>
<tr>
<td>Number 11</td>
<td>2</td>
</tr>
<tr>
<td>RPC-1</td>
<td>14</td>
</tr>
<tr>
<td>RPC-2</td>
<td>1</td>
</tr>
<tr>
<td>F-type</td>
<td>3</td>
</tr>
<tr>
<td>Faculty transit accommodation</td>
<td>5</td>
</tr>
<tr>
<td>Type III, Ayurvigyan Nagar</td>
<td>2</td>
</tr>
<tr>
<td>Computer facility</td>
<td>4</td>
</tr>
<tr>
<td>Masjid Moth Resident doctors</td>
<td>35</td>
</tr>
<tr>
<td>Masjid Moth Nurses</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>230</td>
</tr>
</tbody>
</table>
14. Co-ordination of the training programme for concerned staff and officers on ‘the Indian Government tenders information system’ for online tender information.

15. Implementing wi-fi zone at B.B. Dikshit Library for internet and online journal access for students.

16. Networking requirements study for Brain Lab, Neurosciences facility.

17. Networking requirements study for ADMIN, Radiology new OPD.

18. Continuation of UTM based perimeter network security and webmail facility.

19. The website of www.aiims.edu, www.aiims.ac.in are being maintained in-house by the department.

20. Internet facility for faculty and students was maintained 24x7x365 days on the AIIMS network at around 1500 nodes

21. Full commissioning of 45 Mbps (1:4) leased line with Radio link backup facility from Education and research network (ERNET India, Ministry of information and communication technology, GOI)

22. Creation and maintenance of users accounts for 665 www.aiims.ac.in domain email users.

23. Total number of visitors to AIIMS website were approx. 24 lakhs.

24. Maintenance of Web server, Proxy server, Messaging server 24x7x365 days.

25. Provision of new internet connections to faculty and officers on regular basis.

26. Facility management and call maintenance for internet and network users complaints and resolution.

27. The software modules for the website are developed in house.

28. Design, Development and Modifications in the entrance exam’s online information System.

29. Technical co-ordination for Online journal access and provision of journal access using internet and PC at the Duty rooms and common rooms for scholars and Sr. / Jr. Resident doctors at AIIMS.

**Details of pages updated and created on AIIMS website**

<table>
<thead>
<tr>
<th>Details</th>
<th>No. of pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total pages (under departments and centres)</td>
<td>505</td>
</tr>
<tr>
<td>Conferences, workshops, lectures and orations</td>
<td>215</td>
</tr>
<tr>
<td>Recruitment for faculty and other posts</td>
<td>42</td>
</tr>
<tr>
<td>Admission notices, results and others under ‘Current events’</td>
<td>600</td>
</tr>
<tr>
<td>Members of Institute body and other standing committees</td>
<td>89</td>
</tr>
<tr>
<td>Central facilities</td>
<td>32</td>
</tr>
<tr>
<td>RTI information, notices, health information, hostel, etc.</td>
<td>145</td>
</tr>
<tr>
<td>Administration, Academic, About AIIMS, Annual report, etc.</td>
<td>901</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2520</strong></td>
</tr>
</tbody>
</table>
Other web-based activities

<table>
<thead>
<tr>
<th>Activity</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data uploaded on Exam server</td>
<td>124 MB (approx)</td>
</tr>
<tr>
<td>Number of email users at <a href="http://www.aiims.ac.in">www.aiims.ac.in</a></td>
<td>665</td>
</tr>
<tr>
<td>Number of tenders uploaded on <a href="http://tenders.gov.in">http://tenders.gov.in</a> website</td>
<td>1,187</td>
</tr>
<tr>
<td>Number of internet users at the user room</td>
<td>22,267</td>
</tr>
<tr>
<td>Number of virus mails detected</td>
<td>3,888</td>
</tr>
<tr>
<td>Number of valid mails</td>
<td>4,44,600</td>
</tr>
<tr>
<td>Number of spam mails detected and filtered</td>
<td>73,79,556</td>
</tr>
<tr>
<td>Total data transferred (as of June 2008)</td>
<td>1,86,444 MB</td>
</tr>
<tr>
<td>Number of internet nodes</td>
<td>1500 approx</td>
</tr>
</tbody>
</table>

Other facilities

The following were maintained during the year:

1. Email and FTP facility
2. Medical and educational information access facility
3. Laser printing and scanning
4. Consultancy for software and hardware

SIGNIFICANT EVENTS

**Dr R. S. Tyagi** was awarded the CIO Connect Award 2008; attended the United Kingdom and India Education and Research Initiative meeting for the development of Telemedicine at University of Loughborough, UK, 11–26 October 2008.

**Mr S. Kailash** was nominated by the Ministry of Communication and Information Technology, Government of India to attend a meeting of Project Review and Steering Group (PRSG) for Projects ‘Development of Framework for Logging and Analysis of Network Traffic for Securing Network Infrastructure at Assam, Gauhati and Manipur Universities; Selection Committee expert for promotion of S and T officers of ERNET, Ministry of Information Technology, Government of India in December 2008; attended and chaired a scientific session in the Silver Jubilee National Conference of Indian Society for Medical Statistics (ISMS), Nainital, Uttarakhand, 7–9 November 2008.

**Mr S.N. Ragu Kumar** delivered a talk on ‘Role of Information Technology in healthcare education & research organization’, 2nd National Conference on Education and Research ‘Confer-2009’, Cochin, Kerala, 11–14 March 2009; invited as an author delegate to attend the eIndia/eHealth national conference, New Delhi; attended 11th Association of anti-virus Asia researchers International Conference, New Delhi, 10–12 December 2008; conducted one-day session on Information retrieval and management in bioinformatics as part of 2 Bio-informatics workshops organized by Department of Biophysics for ICMR sponsored participants (April 2008 and January 2009); conducted a session
on Literature search using Internet for reproductive health research as part of National Workshop organized by Department of Obstetrics and Gynaecology, AIIMS; conducted a session on Literature review using Internet for clinical research as part of National Workshop organized by INCLLEN, AIIMS; As Organizing Secretary conducted a workshop, ‘Effective information retrieval in health sciences using Internet and Intranet’ spanning 3 half day sessions by delivering lecture, demonstrations and hand-on training covering topics such as Search engines, Database, advanced Google, Pubmed, NCBI, NLM resources, etc. to Faculty and Residents doctors; co-ordinated the technical setup for ‘web-based interactive learning through online collaboration software’ involving students from many parts of the world as a prototype testing for the Centre for Medical Education and Technology; Delivered a talk on ‘Telemedicine experiences’, Symposium on Advances in information technology in medical sciences, Lady Hardinge Medical College, New Delhi, 28 February 2009; Delivered a lecture on ‘DP and R 201 Informatics in Disaster Preparedness and Rehabilitation’ as part of PG diploma course, Guru Gobind Singh IP University, New Delhi; Nominated expert for IT infrastructure development at Indian National Science Academy, New Delhi; Nominated expert member for Computerization in Safdarjang Hospital and VMMC, New Delhi; Co-opted Expert member, ‘National Health Information Network’, Ministry of Health and Family Welfare for implementation of recommendations of National Knowledge Commission.


11.6 Electron Microscope Facility

**Officer-in-charge**
Shashi Wadhwa

**Associate Professor**
Taposh K. Das

**Technical Officer**
Rajesh Pathania

**Technical Assistant**
Mr Sandeep Arya

**EDUCATION**

1. Twenty-four students along with two faculty members from North Bengal University visited EM laboratory on 12 February 2009.

2. A training programme on Scanning electron microscopy (SEM) and Transmission electron microscopy (TEM) was conducted for 13 MTech (Nanotechnology) and MSc (Nanoscience) students of Amity Institute of Nanotechnology, Amity Campus, Noida, 16–21 February 2009.

3. Four Postgraduate Anatomy students attended the EM course, 20 February–6 March 2009.

4. Five WHO fellows visited EM laboratory on 13 March 2009 and were instructed on principles of electron microscopy and processing of biological samples for EM observation.

5. Eight MBiotech students of the Department of Biotechnology, AIIMS, received 2 weeks training, 18–29 August 2008.

**Continuing Medical Education**

1. The 24th National Training Programme in Electron Microscopy for Scientific Investigators was held from 3rd to 18th November 2008. Sixteen candidates from different parts of the country participated in this training programme.

2. The 19th National Training Programme in Electron Microscopy for Technical Personnel was held from 2nd to 10th February 2009. Nine technical personnel from different parts of the country participated in this course. In all, 20 lectures were delivered by Professor Shashi Wadhwa, Dr Taposh K. Das and Dr T.C. Nag to the participants of the above courses.

3. A 6-week Summer Training Course for Technical Personnel in Electron Microscopy was held from 15th May to 30th June 2008. Four candidates from Central Marine Fisheries Research Institute, Kerala, National Institute of Nutrition, Andhra Pradesh and IARI, New Delhi, were trained in sample processing, microtomy, CPD, sputter coating, TEM and SEM viewing, photography and routine maintenance.
RESEARCH

Funded projects

Ongoing


2. To study the regional differences in amyloid beta induced microglia activation in vivo. Taposh K. Das. Funded by AIIMS for 1 year (2008–09). Funds: Rs 1 lakh.

Completed

1. Role of free radical scavengers and the effect of antioxidants on their levels in patients with ankylosing spondylitis—to investigate the possible role of antioxidants as therapeutic agents in ankylosing spondylitis. Taposh K. Das. Funded by ICMR for 3 years (2005–08). Funds: Rs 14.23 lakh.


Departmental projects

Ongoing


2. Role of oxidative stress in fluorosis. Taposh K. Das.


Collaborative projects

Ongoing


PUBLICATIONS

Journals


2. Dutta R, Mondal AM, Arora V, Nag TC, Das N. Immunomodulatory effect of DDT (bis[4-chlorophenyl]-1,1,1-trichloroethane) on complement system and macrophages. Toxicology 2008;252:78–85.


**Abstracts**


**PATIENT CARE**

**Special laboratory facilities**

During the year, special laboratory facilities provided for research and patient care were as follows:

<table>
<thead>
<tr>
<th>Facility</th>
<th>Users (n)</th>
<th>Specimens analysed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Internal</td>
<td>External</td>
</tr>
<tr>
<td>Transmission electron microscope</td>
<td>117</td>
<td>278</td>
</tr>
<tr>
<td>Scanning electron microscope</td>
<td>68</td>
<td>197</td>
</tr>
<tr>
<td>Immuno-electron microscope</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Elemental analysis (EDAX)</td>
<td>2</td>
<td>5</td>
</tr>
</tbody>
</table>

**AWARDS, HONOURS AND SIGNIFICANT EVENTS**

**Dr Taposh K. Das** delivered a keynote talk on ‘Recent Advances in Electron Microscopy’ at the Electron Microscope Workshop at BRD School of Bioscience, Sardar Patel University, Vallabh Vidyanagar, Gujarat, 19 January 2009; delivered a lecture on ‘Current concept in Electron Microscopy: Applications in Biomedical Sciences’ at Jamia Milia Islamia, New Delhi, 12 February 2009.

**Dr T.C. Nag** attended and delivered an oral presentation at XXVI Annual Conference Indian Academy of Neurosciences, CUSAT, Cochin, 12–25 December 2008. He was invited to review a paper for *Histol Histopathol*.

**VISITING SCIENTISTS**

Professor M.G. Stewart of Milton Keynes Open University, UK, delivered guest lectures to trainees of the XXIV National Training Programme in Electron Microscopy for Scientific Investigators, 10 November 2008.
11.7 Central Animal Facility

Various activities of the facility are categorized as follows.

**SMALL ANIMALS FACILITY (RODENTS)**

The following small animals (average/month) have been maintained throughout the year:

- Rats (Wistar) 1,538
- Mice (Swiss) 1,453
- Rabbits (New Zealand) 83
- Guinea Pigs (Dunkin Hartley) 99

A total of 3,070 small animals (rats, mice, rabbit and guinea pigs) were supplied to various departments of the Institute and considerable numbers of animals were also sold to other institutions in and outside Delhi, i.e. rats—145, mice—70 and guinea pigs—12. Rabbits (25) and guinea pigs (30) purchased from the Indian Veterinary Research Institute, Izatnagar, Bareilly, UP were used for breeding purposes.

**LARGE ANIMALS (SHEEP)**

The facility housed 6 sheep for research work conducted by the Department of Microbiology.

**NON-HUMAN PRIMATES (MONKEYS)**

**Census report**

- Total number of monkeys on 1 April 2008: 58
- Number of deaths: 4
- Born in the colony: 13
- Total number of monkeys on 31 March 2009: 67

**Breeding programme**

Breeding of monkeys was done in cage and in open run. A total of 13 female monkeys were mated by cage breeding and 6 female monkeys were put in run formatting. While 4 monkeys have been born in the colony another 9 have been conceived and pregnancies are in progress. Monkeys have three indoor runs that are used for providing exercise to all those that are housed in cages.

**Rehabilitation facility**

A programme for rehabilitation of monkeys was started in 2000. All monkeys that had been used in experiments were 3–5 years old and older monkeys were put in open run and monkey cages. Most
of these monkeys were permanently rehabilitated (after experiment with old monkeys) to animal welfare organizations.

**Clinical procedures conducted**

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood samples collected</td>
<td>95</td>
</tr>
<tr>
<td>Physical examination, testing for tuberculosis and weight</td>
<td>94</td>
</tr>
<tr>
<td>Haematology</td>
<td>95</td>
</tr>
<tr>
<td>Blood chemistry</td>
<td>95</td>
</tr>
<tr>
<td>X-ray</td>
<td>105</td>
</tr>
<tr>
<td>Rectal palpation</td>
<td>13</td>
</tr>
<tr>
<td>Parasitology (stool examination)</td>
<td>Nil</td>
</tr>
<tr>
<td>Other procedures</td>
<td>251</td>
</tr>
</tbody>
</table>

(Management of trauma, obstetrics procedures, ASD treatment, etc.)

**EXPERIMENTAL SURGERY**

Fifty-eight surgical procedures and radiological investigations were performed by various departments of the institute. These include Surgery, Biomedical Engineering Unit, Neurosurgery, Paediatric Surgery, and Endocrinology and Metabolism.

**INSTITUTIONAL ANIMAL ETHICS COMMITTEE (IAEC)**

The IAEC cleared 26 projects on small animals (rodents) and 1 project (continuing) on large animals (monkeys).

**SERVICES PROVIDED**

A wing has been operational for maintaining animals belonging to the departments of Microbiology, Biomedical Engineering Unit, Biochemistry, Biotechnology, Paediatric Surgery, Reproductive Biology, Anatomy, Psychiatry, Pathology, Laboratory Medicine, Neurosurgery, and Endocrinology and Metabolism. This facility housed the following number of animals—rats 55–146, mice 510–800, rabbits 30–41, guinea pigs 2–6 and monkeys 5.

The facility provided laboratory support to various investigators for vacuum drying of sera and storage of serum samples, haematology, clinical biochemistry, X-ray and Microscope facility.

**SIGNIFICANT EVENTS**

Dr P.K. Yadav attend the training programme for training on Laparoscopic Neutering at Thane Municipal Corporation, Maharashtra, 14–16 July 2008; attended the CPCSEA National Conference on Ethical use of Animals in Research and Education and Dissemination of Norms & Guidelines of CPCSEA at Dr Marri Chenna Reddy Human Resource Development Institute, Hyderabad, Andhra Pradesh, 29–30 January 2009; Delivered lecture ‘Care, breeding and management of laboratory animals’ at 1- and 2-week training programme on animal welfare of the National Institute of Animal Welfare, Ministry of Environment and Forest.

Dr P.K. Yadav and Mr Dhananjay Kumar, Animal House Attendant assisted with animals in the Minimally Invasive Surgery Training Centre, Department of Surgical Disciplines, AIIMS.
There are several halls of residents with a capacity of 1221 single/double rooms and 176 rooms for married personnel, 422 rooms for nurses and nursing students. These are spread over different hostels and residences in the AIIMS Main campus, Masjid Moth, Ayurvigyan Nagar, Faculty Transit Accommodation Hostel and Jai Prakash Narain Apex Trauma Centre Hostel (Raj Nagar).

### RESIDENCES

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Hostel</th>
<th>Location</th>
<th>Single room</th>
<th>Double/Three/Four/Five seater</th>
<th>Guest rooms capacity (with 2 beds)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>GENTS HOSTELS</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>1.</td>
<td>I (Charak)</td>
<td>Main Campus</td>
<td>62</td>
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<tr>
<td>2.</td>
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<td>55</td>
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<tr>
<td>3.</td>
<td>III (Sushruta)</td>
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</tr>
<tr>
<td></td>
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<td>Floor</td>
<td>Room 1</td>
<td>Room 2</td>
<td>Room 3</td>
</tr>
<tr>
<td>---</td>
<td>---------------------</td>
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<td>--------</td>
<td>--------</td>
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<tr>
<td>4.</td>
<td>IV (Madhava)</td>
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<td>53</td>
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<tr>
<td>5.</td>
<td>V (Nagarjuna)</td>
<td>Main Campus</td>
<td>53</td>
<td>5</td>
<td>-</td>
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<td>6.</td>
<td>VI (Vagbhatta)</td>
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<td>7.</td>
<td>VII (Ashwini)</td>
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<td>8.</td>
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<td>9.</td>
<td>RPC-I (Dhanwantri)</td>
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<td>10.</td>
<td>MMRDH (Single)</td>
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<td>11.</td>
<td>JPNATC</td>
<td>Masjid Moth</td>
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<td>12.</td>
<td>NNH</td>
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<td>160</td>
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Staff nurses: 34

Total nurses: 1,363

**LADIES HOSTELS**

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<th>Floor</th>
<th>Room 1</th>
<th>Room 2</th>
<th>Room 3</th>
<th>Room 4</th>
<th>Beds/Seats</th>
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<tr>
<td>1.</td>
<td>IX (Saraswati)</td>
<td>Main Campus</td>
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<td>Ladies Hostel XI</td>
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Total: 280

**MARRIED QUARTERS**

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<th>Room 2</th>
<th>Room 3</th>
<th>Room 4</th>
<th>Beds/Seats</th>
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<tbody>
<tr>
<td>1.</td>
<td>F type (married)</td>
<td>Ansari Nagar (West)</td>
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<td>9 (two seater)</td>
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<td>2.</td>
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<td>3.</td>
<td>Ayurvigyan Nagar</td>
<td>Ayurvigyan Nagar</td>
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<td>4.</td>
<td>FTA</td>
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<td>5.</td>
<td>JPNATC</td>
<td>Raj Nagar</td>
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Total: 176

**Grand Total: 1,819**

**SIGNIFICANT EVENTS**

1. Ground floor mess of hostel no. VIII has been renovated. The mess kitchen has been fully renovated with tiles and new civil/electrical fittings in Resident Doctors hostel and New Nurses Hostel, Masjid Moth. The mess hall, kitchen and store of JPNATC hostel have been renovated. The renovation work of Co-operative mess in hostel no. II is continuing.

2. Main staircase of Resident doctors Hostel, Masjid Moth has been renovated with tiles.

3. Wi-Fi internet facility has been introduced in all the 19 hostels.

4. Five married quarters with attached kitchen and bathrooms have been renovated in the Resident Doctors Hostel, Masjid Moth.
5. Staff Nurses vacant rooms on first and second floor have been renovated.
6. Reverse osmosis plants have been installed in all hostels in the Main Campus as well as in the mess hall in JPNATC hostel.
7. New electrical fittings wiring/rewiring has been done in all Gents hostels (Hostels I to VIII bathrooms and corridors.
8. Lavatory numbers 1, 3 and 5 in Hostels I and III, lavatory numbers 2, 4 and 12 in Hostel IX, lavatory numbers 1 to 15 in Hostel X and all lavatories in Hostel VII have been renovated.
9. The outer open area behind Hostels VII and VIII has been cemented with tiles. The entrance floor in Hostels I and II has been cemented with tiles.
10. The water tanks on the roof of JPNATC hostel have been covered by I.R.C. fabric for the safety of drinking water.
11. Two temporary shops have been constructed under the staircases till permanent shops are provided.
12. The following items have been purchased and issued to Mess/Café, students/residents and guest rooms in the hostels: 100 steel chairs with arm, 165 mattress, 20 tables, 10 dining tables, 60 plastic moulded chairs, new bed sheets and pillow covers.
13. The hostel office has been augmented with 4 new computers and peripherals and one new computer with accessories has been provided to RPC-I hostel.
14. A new photocopier machine has been purchased for the hostel office.

FUTURE PLANS
1. Construction of new hostel with modern amenities to accommodate 1000 students and resident doctors.
2. Installation of air conditioners in hostel section or to shift the office to another building with proper roof as the existing office has a tin roof.
3. Renovation of store in hostel II, mess in hostel VII, lavatories in hostel IX, 37 married rooms in Resident Doctors Hostel at Masjid Moth, Ground and first floor co-operative messes of hostel IV, bathrooms and mess in RPC-I hostel, attached bathrooms on 3rd to 7th floor and common bathrooms from 1st to 7th floor in New Nurses Hostel, Masjid Moth.
4. Replacement of three lifts in Resident Doctors Hostel at Masjid Moth.
5. Allotment status and updated waiting list of hostels on AIIMS website.
6. All the computers of hostel section to be connected through LAN/Networking.
7. Installation of reverse osmosis system in hostel XI and in all floors of RPC-I hostel.
### 11.9 Institution Ethics Committee

<table>
<thead>
<tr>
<th><strong>Chairperson</strong></th>
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</thead>
<tbody>
<tr>
<td>J. S. Guleria</td>
<td>J. P. Wali</td>
</tr>
<tr>
<td>(up to 13 July 2008)</td>
<td>(from 14 July 2008)</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Member-Secretary</strong></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Nikhil Tandon</td>
<td>Renu Saxena</td>
</tr>
<tr>
<td>(up to 13 July 2008)</td>
<td>(from 14 July 2008)</td>
</tr>
</tbody>
</table>

#### Ethics Committee Members

The members from **1 April 2008 to 13 July 2008** were:

1. Professor J.S. Guleria, New Delhi, Chairman
2. Professor R.C. Deka, Dean, AIIMS, Member
3. Professor Kusum Verma, Ex-Dean, AIIMS, Member
4. Professor M.C. Misra, Head, Department of Surgery, AIIMS, Member
5. Professor K.S. Reddy, Head, Department of Cardiology, AIIMS, Member
6. Professor Y.K. Gupta, Head, Department of Cardiology, AIIMS, Member
7. Professor P.P. Kotwal, Department of Orthopedics, AIIMS, Member
8. Professor K.K. Deepak, Department of Physiology, AIIMS, Member
9. Justice Balakrishna Eradi, New Delhi, Member
10. Dr B.N. Dhawan, Lucknow, Member
11. Dr K. Satyanarayana, Indian Council of Medical Research, New Delhi, Member
12. Professor Nikhil Tandon, Department of Endocrinology and Metabolism, AIIMS, Member-Secretary

The members from **14 July 2008 to 31 March 2009** were:

1. Professor J.P. Wali, New Delhi, Chairman
2. Professor R.C. Deka, Dean, AIIMS, Member
3. Professor Suneeta Mittal, Head, Department of Obstetrics and Gynaecology, Member
4. Professor Y.K. Gupta, Head, Department of Pharmacology, Member
5. Justice S.R. Singh, New Delhi, Member
6. Dr Ganga Prasad Vimal, New Delhi, Member
7. Dr Vijay Kumar, Indian Council of Medical Research, New Delhi, Member
8. Professor R.P. Anand, Member, Jawaharlal Nehru University, New Delhi, Member
9. Dr Peush Sahni, Member, Editor, *The National Medical Journal of India*, AIIMS, Member
10. Professor Renu Saxena, Head, Department of Hematology, Member-Secretary

An **Institution Ethics Sub-Committee** was formed in July 2008 to assist the **Institution Ethics Committee** in evaluation of ethical issues of DM/MCh/PhD/MD/MS/MDS/MHA/MBiotech/MSc thesis/dissertation. Its members were:

1. Professor Ravinder Kumar Batra, Department of Anaesthesiology, AIIMS, Chairman
2. Professor Renu Saxena, Head, Department of Haematology, AIIMS, Convenor
3. Professor Kamal Kishore, Department of Pharmacology, AIIMS, Member
4. Dr Kalpana Luthra, Associate Professor, Department of Biochemistry, AIIMS, Member
5. Professor Arvind Bagga, Department of Paediatrics, AIIMS, Member.
6. Professor Ashok Kumar, Department of Obstetrics and Gynaecology, Maulana Azad Medical College, New Delhi, Member
7. Dr Vineet Ahuja, Associate Professor, Department of Gastroenterology, AIIMS, Member
8. Professor Praveen Aggarwal, Department of Emergency Medicine, AIIMS, Member
9. Dr Raju Sharma, Additional Professor, Department of Radiodiagnosis, AIIMS, Member
10. Dr Pradeep Venkatesh, Associate Professor, Dr R.P. Centre for Ophthalmic Sciences, AIIMS, Member
11. Dr Rajinder Parshad, Additional Professor, Department of Surgery, AIIMS, Member
12. Professor Shashi Kant, Centre for Community Medicine, AIIMS, Member
13. Dr Rakesh Yadav, Associate Professor, Department of Cardiology, AIIMS, Member
14. Dr Rakesh Mahajan, Senior Vascular Surgeon, Apollo Hospital, New Delhi, Member
15. Dr Sanjay Thulkar, Associate Professor, Department of Radiodiagnosis, Dr BRA IRCH, AIIMS, Member
16. Dr Sunil Chumber, Sub-Dean (Academic), AIIMS, Member-Secretary

**EDUCATION**

**Continuing Medical Education**

Two Workshops on ‘How to plan a research project’ and ‘Write a protocol’ were held for DM/MCh/PhD/MD/MS/MDS/MHA/MBiotech/MSc students. Topics included were:

1. Selection of topic and guide
   - Dr Renu Saxena
2. Introduction and need for this workshop
   - Dr R.C. Deka
3. Purpose and process of thesis  
   Dr Ravinder K. Batra
4. Study design and Types of study  
   Dr Kalpana Luthra
Presentation, review of the protocol and ethical considerations  
   Dr Sunil Chumber
5. Submission of the protocol  
   Dr Ravinder K. Batra

**Short-term training**

Three months training in ‘Ethics in Research’ was provided to one student.

The meetings of ethics committee were held as follows:

<table>
<thead>
<tr>
<th>Institution Ethics Sub-Committee for Thesis and Dissertation</th>
<th>Institution Ethics Committee</th>
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<tbody>
<tr>
<td>5 May 2008</td>
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<tr>
<td>2 August 2008</td>
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<td>29 August 2008</td>
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<td>3 October 2008</td>
<td>6 October 2008</td>
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<td>31 October 2008</td>
<td>3 November 2008</td>
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<td>28 November 2008</td>
<td>1 December 2008</td>
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<td>2 January 2009</td>
<td>5 January 2009</td>
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<td>30 January 2009</td>
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<td>27 February 2009</td>
<td>2 March 2009</td>
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<tr>
<td><strong>Total</strong></td>
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Number of projects reviewed by the Institution Ethics Committee and Institution Ethics Sub-Committee

**New:** 617  
**Old:** 174

In addition the ethics committee continued to receive notification of serious adverse reactions, six monthly progress report and completion report, etc.

The Institutional Ethics committee Standard Operating Procedures (SOPs) were formulated and made available on the AIIMS website.

**SIGNIFICANT EVENTS**

1. AIIMS website for Institution Ethics Committee: A link has been created at the AIIMS website, which gives the following information:
   b. Notices and Circulars
c. **Institution Ethics Committee:** Submission Format, Model Participant Information Sheet, Model Participants Informed Consent Form, Participant Informed Consent Form (Hindi), Model Six-monthly report format and Standard Operating Procedure.

d. **Institution Ethics Sub-Committee:**

Submission Format, Model Participant Information Sheet, Model Participants Informed Consent Form, Participant Informed Consent Form (Hindi), Model Six-monthly report format and Standard Operating Procedure.

e. Downloadable forms in MS-word Format for both Institutional Ethics Committee and Institutional Ethics Sub-Committee for Thesis and Dissertation: Submission Format, Model Participant Information Sheet, Model Participants Informed Consent Form, Model Six-monthly report format and Standard Operating Procedure.

12.1 Finance Division

Senior Financial Advisor
Sandeep Lall

Financial Advisor (Offtg.)
Basanti Dalal

F&CAO
S.P. Mahla

Account Officers
D.P. Gangal   S.K. Yadav   Bhom Singh
S.K. Gupta    N.D. Sharma  M.S. Negi
M.J. Rajdan   M.K. Bhatt   R.K. Sharma

The Institute gets grants under the Heads ‘Plan’ and ‘Non-Plan’ from the Government of India, Ministry of Health and Family Welfare. In addition, Plan grants are received for National Drug Dependence Treatment, VVIP care and College of Nursing, etc. Besides, extramural grants are also received from various external funding agencies such as ICMR, DST, CSIR, WHO, UNICEF, DBT, etc. for various research projects. Plan and Non-Plan grant received from the Government of India and other agencies are further allocated to Superspecialities Centres/Departments/Research Projects as per their projections/requirements.

Finance Division of the Institute monitor/control the expenditure against the above funds/budget by obtaining monthly expenditure from the respective centers/units/departments and also administers day to day financial matters, payment of salaries to faculty and staff, payment of personal claims, pension and GPF in respect of the employees of the Institute. At the time of making the payment, all the checks which have been prescribed by the Government of India are being exercised by the respective DDOs. Apart from this Finance Division do the internal audit.

All the above works are executed by the Financial Advisor, Finance and Chief Accounts Officers (F&CAOs)/Accounts Officer under the overall control of Senior Financial Advisor.
### ALL INDIA INSTITUTE OF MEDICAL SCIENCES

#### BALANCE SHEET AS ON 31.03.2009

**AIIMS(Main) (A)**

<table>
<thead>
<tr>
<th>LIABILITIES</th>
<th>2008-09</th>
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<td><strong>AIIMS (MAIN)</strong></td>
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<td>4 Centralised Accident</td>
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<td>and Trauma Services</td>
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**After correction as per Audit para A.2.2**

<p>| 19 | Pot Fund |
| i) Upto 2007-2008 | 827944 |
| ii) During 2008-09 | 306114 |
| 20 | N.A.C.O. |
| a) Machinery &amp; Equipment | 1932605 |
| 21 | Revolving funds |
| a) Upto 2007-08 | 70998310 |
| i) Receipt | 60006547 |
| ii) Expenditure during 2008-09 | 39390883 |
| 22 | Post Partum Programme |
| a) Upto 2007-08 | 425105 |
| b) Receipts during 2008-09 | 400000 |
| c) Expenditure during 2008-09 | 738000 |
| 23 | V.V.I.P |
| 24 | College of Nursing |
| (i) | 68630 |
| (ii) | Expenditure During 2008-09 | 68630 |
| 25 | VVIP Care at Parliament |
| House Annexe Upto 08-09 | 7600 |
| 26 | Cochlear Patient treatment |
| A/c | 16283526 |
| Upto 2007-08 | 32887000 |
| a) Receipt | 17977000 |
| b) Expenditure | 7168000 |
| c) Expenditure against advance payment | 7168000 |</p>
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|   |                                                                            | 118000000
| O | Central Public Works Department, SJHPD for Dr.Hostel                        | 1181250
|   |                                                                            | 1181250
| P | Central Public Works Department, SJHPD for construction of sub-station      | 5000000
|   |                                                                            | 5000000
| Q | M/s Delhi Metro Rail Corporation                                            | 600000000
|   | a) Upto 07-08                                                              | 60842700
|   | b) during 08-09                                                             | 600000000
| R | New Delhi Municipal Corporation                                             | 127555000
|   | for augmenting L.T-Line in Eastern & Western Campus                          | 12755500
|   |                                                                            | 7463500
|   |                                                                            | 7463500
| S | New Delhi Municipal Corporation                                             | 153383000
|   | for HT Transformer and laying of cable                                      | 153383000
| T | Covering of Nallah                                                          | 127555000
|   |                                                                            | 12755500
| U | Central Public Works Department for Lift                                    | 140000000
|   |                                                                            | 14000000
| V | Central Public Works Department                                             | 171177000
|   | for Surgical Ward                                                           | 17117700
| W | Caryair Equipment India Private limited for building construction           | 192602
|   |                                                                            | 192602
| X | Indian Oil Corporation                                                      | 3194680
|   | for Lubricant Diesel Oil                                                    | 4974786
|   | a) Upto 07-08                                                               | 4974786
|   | b) during 08-09                                                              | 3194680
| Y | New Delhi Municipal Corporation                                             | 3194680
|   | for Building Construction                                                   | 187230000
|   |                                                                            | 18723000
| Z | Upgrading Architectural cell of Engineering Services Department             | 45132
|   | at AIIMS                                                                    | 45132
| AA) Chief Controller of Accounts (M/s Deepak Elect. Co.)                    | 190890
<p>| AB) Chief Controller of Accounts (M/s Sanico Ind.)                           |</p>
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<td>a) Up to 2007-2008</td>
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recoverable from outside patients

a) Up to 2007-08  6427868
b) During 2008-09  4382369
c) Amount recovered during 2008-09  7467462  3342775  6427868

23 Amount recoverable from the cashier

a) Upto 2007-08  307426
b) During 2008-09 -
c) Recovery - 307426  307426

POOR PATIENT A/C

1 AIIMS (Main)

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<td>iii) Interest on FDR's</td>
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POOR PATIENT A/C

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PATIENT TREATMENT ACCOUNTS

1 AIIMS

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PATIENT TREATMENT ACCOUNTS

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## HOSTELS

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## EXCESS OF INCOME OVER EXPENDITURE

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Sub-Total (A) 10517513462 9158687944

## EXCESS OF EXPENDITURE OVER INCOME

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## HOSTELS

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## EXCESS OF INCOME OVER EXPENDITURE

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<th>DR. RAJENDER PRASAD CENTRE FOR OPHTHALMIC SCIENCES (B)</th>
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<tr>
<td>1 Balances</td>
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<td>Amount due but not paid</td>
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## DR. RAJENDER PRASAD CENTRE FOR OPHTHALMIC SCIENCES (B)

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<thead>
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<th>Furniture condemned</th>
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<td>during 2008-09</td>
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<td>a) Scooter</td>
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<table>
<thead>
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<th>Machinery &amp; Equipment condemned</th>
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<td>b) received during 2008-2009</td>
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<td>c) Expenditure during 2008-2009</td>
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| xxxv) Cataract Surgery (NPCB)    |  
|----------------------------------|---|
| a) Upto 2007-2008                | 280000 |
| b) received during 2008-2009     | 176000 |
| c) Expenditure during 2008-2009  | 253636 |
|                                   | 202364 |
|                                   | 280000 |

| xxxvi) CGD In Primary Angle Closure Glucoma |  
|---------------------------------------------|---|
| a) received during 2007-2008                | 305444 |
| b) During 2008-2009                         | - |
| c) Expenditure during 2008-2009             | 263999 |
|                                           | 41445  |
|                                           | 305444 |

| xxxvii) FAME Study                      |  
|----------------------------------------|---|
| a) Upto 2007-2008                      | 1468973 |
| b) received during 2008-2009           | 1018976 |
| c) Expenditure during 2008-2009        | 960992  |
|                                       | 1526957 |
|                                       | 1468973 |

| xxxviii) CLINICAL STUDY ON KRECTRO CONJECTIVITIES(Allergan India Ltd.) |  
|---------------------------------------------------------------|---|
| a) Upto 2007-2008                                             | 45000  |
| b) received during 2008-2009                                  | 45000  |
| c) Expenditure during 2008-2009                               | 45000  |
|                                                             | 0      |
|                                                             | 0      |

| xxxix) PDT-Visudene |  
|--------------------|---|
| a) Upto 2007-2008   | 1797 |
| b) received during 2008-2009 | 96489 |
| c) Expenditure during 2008-2009 | 92894 |
|                             | 5392  |
|                             | 1797  |

| xli) AKROSOFT (BAUCH & LOMB) |  
|-----------------------------|---|
|                            | 102473 |
|                            | 144364 |
|                            | 75519  |
|                            | 117410 |
|                            | 25513  |
|                            | 68300  |
|                            | 17213  |
|                            | 25513  |
|                            | 280000 |
|                            | 176000 |
|                            | 253636 |
|                            | 202364 |
|                            | 280000 |
|                            | 305444 |
|                            | 263999 |
|                            | 41445  |
|                            | 305444 |
|                            | 1468973|
|                            | 1018976|
|                            | 960992 |
|                            | 1526957|
|                            | 1468973|
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|                            | 96489  |
|                            | 92894  |
|                            | 5392   |
|                            | 1797   |
|-----------------|----------------|----------------|
| a) & 798 & - & 798 |

|xlii) DME |
|-----------------|----------------|----------------|
| a) 116160 & b) 1404538 & c) 1153419 367279 116160 |

| xliii) WHO DSTG |
|-----------------|----------------|----------------|
| a) 80000 & b) - & c) 67950 12050 80000 |

| xliv) INMAS Human Pharmacology |
|-----------------|----------------|----------------|
| a) 485000 & b) 219451 265549 485000 & c) |

| xlv) INMAS Biomedical Products |
|-----------------|----------------|----------------|
| a) 485000 & b) 30000 455000 485000 & c) |

| xlvi) Lux-PRA International |
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| a) 32537 & b) 246154 & c) 274877 3814 32537 |

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b) Donations 25243

c) Payments 11110

d) Closing Balance 95562 81429

**C.T. PATIENT A/C**

1 Fixed Deposits 25000000 23000000

2 Cash at Bank 16978464 12970986

**ANGIOGRAPHY PATIENT A/C**

1 Cash recoverable from Sh. Dal Chand Verma, Cashier 3245441 3245441

2 Fixed Deposits 50000000 75000000

3 Cash in hand 32769115 2803934

**GAMMA KNIFE PATIENT A/C**

1 Fixed Deposit 117500000 119138203

2 Cash at Bank 21748291 3304760

**NEURO SURGERY PATIENT A/C**

1 Fixed Deposits 32000000 32000000

2 Cash at Bank 3831850 10902678

**EXCESS OF INCOME OVER EXPENDITURE**

1 C.N.C.  
   a) During 2008-09  
       correction as per Audit Par No.B.1.2 SAR for the year 2007-08  22666538
   b) Excess of expenditure Over income (2007-08)  6705822 15960716

2 C.T. PATIENT A/C  
   i) Upto 2007-08  242970986

**EXCESS OF EXPENDITURE OVER INCOME**

1 C.N.C.  
   a) During 2008-09  
       (i) Upto 2007-08 (-)  
       (ii) During 2008-09  6705822
ii) Add excess of income over expenditure 08-09 2503257
iii) Less fresh cheques issued against cancelled cheques 1025049 266978464 242970986

3 ANGIOGRAPHY PATIENT A/C
i) Upto 2007-08 81049375
ii) (-) Excess of income over expenditure 2008-09 5906614
iii) Less fresh cheques issued against cancelled cheques 941433 86014556 81049375

4 GAMMA KNIFE PATIENT A/C
i) Upto 2007-08 122442963 109323583
during 2008-09 16805328 13049480
ii) Cancelled Cheque 139248291 69900

5 NEURO SURGERY PATIENT A/C
i) Upto 2007-08 42902678
ii) (-) Excess of expenditure over income 2008-09 6783197
iii) Fresh Cheques 287631 35831850 42902678

Sub-Total (C) 3733694951 3416556525

Dr. B.R.A. INSTITUTE ROTARY CANCER HOSPITAL (D)

1 Capital Grant
Upto 2007-08 1239828660
1 Cash at Bank 27792396 34272417

2 Furniture & Fixtures
(a) Add during 2008-09 90000000
(b) Less Grant refunded to AIIMS(M) 5000000
(a) Upto 2007-2008 10892588
(b) During 2008-09 94978
(c) Less Funds Transfer to Urology 1600000
c) Less condemnation of Furniture as per CSD/
(d) Less condemnation of Machinery & Equipment 7997907
(d) Store Section letter No. X-1-4/2004-05/Budget/Vol.V 5270 10982296 10892588
(d) As per CSD/Store Section letter No.X-1-4/2004-05/ Budget/Vol.V 5270 1315225483 1239828660 3 Computer Advance (i) Upto 07-08 259340 (ii) During 08-09


3 Medical Oncology Fund (i) Upto 2007-2008 756890 (ii) Add during 2008-2009 601855 (iii) Less payment during 2008-09 1358745 756890 4 Car/HBA/Scooter Advance 171750

5 Mach. & Equip. (i) Upto 2007-2008 587311836 (ii) Add during 2008-2009 601855 (iii) Less payment during 2008-09 1358745 756890 587311836 6 Advance Payments to foreign purchase for Machinery & Equipment (a) Upto 07-08 315492935 (b) Add during 2008-2009(+) 46048051 (c) Less adjustment of advances (LCs) during 2008-09 19230014
d) Less Custom Duty/PDA unadjusted 5340633

e) Less Custom Duty unadjusted as per DGACR Audit Party Half Margin Memo No.-10 dated 18.08.2008 2640389 334329950 315492935

8 Security Deposit with New Delhi Municipal Corporation as per Audit Objection during 2004-05 vide objection under SAR advised vide Para No.2.6 2626000 2626000

9(i) Building Construction
   Upto 2007-08 296256915
(ii) Less received from HSCC during 2008-09 1800000 294456915 296256915

10 Vehicle
a) Upto 2007-2008 1909596
b) During 2008-09 - 1909596 1909596

11 Capital Works
a) Upto 2007-08 12292016
b) During 2008-09 8570446 20862462 12292016

12 Advance payment to Custom Duty & PDA Account
(i) Upto 2007-08 5340633
(ii) Add during 2008-09 15800000
(iii) Less Custom Duty adjust. 7789973 13350660

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POOR PATIENT A/C

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<td>e) Grants</td>
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<td>f) Cheque Cancelled</td>
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<td>g) Dly. Interest</td>
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<td>h) Interest</td>
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**PATIENT TREATMENT A/C**

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**EXCESS OF INCOME OVER EXPENDITURE**

(I) Upto 2007-08 | 17038660 |
(ii) During 2008-09 | 2356283  |

Sub-Total (D) | 1377922279 |

**EXCESS OF EXPENDITURE OVER INCOME**

| (I) Upto 2007-08 | 17215421 |
| (ii) During 2008-09 | 9897962 |

**NATIONAL DRUG DEPENDENCE TREATMENT CENTRE & UNDCP PROJECT (F)**

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<thead>
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<td>c) Motor Vehicle</td>
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<td>d) Furniture</td>
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<td>b) During 2008-2009</td>
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<table>
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<td>b) During 2008-2009</td>
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<table>
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<tr>
<th>3 Books &amp; Publication</th>
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<td>---</td>
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<td>Institute Recovery</td>
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<td>ii)</td>
<td>2008-09</td>
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<td>3</td>
<td>Security Deposit</td>
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<td>a)</td>
<td>Upto 2007-08</td>
</tr>
<tr>
<td>b)</td>
<td>During 2008-09</td>
</tr>
<tr>
<td>c)</td>
<td>Refund 2008-09</td>
</tr>
<tr>
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<td>Furniture &amp; Fixture</td>
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<td>b)</td>
<td>During 2008-09</td>
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<td>a)</td>
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<td>b)</td>
<td>During 2008-09</td>
</tr>
<tr>
<td>6</td>
<td>Vehicle</td>
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<td>a)</td>
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</tr>
<tr>
<td>b)</td>
<td>During 2008-09</td>
</tr>
<tr>
<td>c)</td>
<td>Vehicle condemned</td>
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<td>7</td>
<td>Outside recovery</td>
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<td>a)</td>
<td>Upto 2007-08</td>
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<tr>
<td>b)</td>
<td>During 2008-09</td>
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<td>8</td>
<td>Car Advance</td>
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<td>a)</td>
<td>Upto 2007-08</td>
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<tr>
<td>b)</td>
<td>Adjustment during 2008-09</td>
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<td>Material &amp; Supply</td>
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<td>Upto 2007-08</td>
</tr>
<tr>
<td>b)</td>
<td>Refund</td>
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<tr>
<td>c)</td>
<td>Add during 2008-09</td>
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**NATIONAL DRUG DEPENDENCE TREATMENT CENTRE (N.D.D.T.C.) (UNDCP PROJECT)**

- Opening balance: 407834 316153
- Bank balance: 316153 407834
- Cash in hand: 239532 407834
### Excess of Income Over Expenditure

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<td>During 2008-09</td>
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### JPN Apex Trauma Centre (F)

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<td>1206925635</td>
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<tr>
<td>Construction of Building</td>
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<td></td>
</tr>
<tr>
<td>Advance paid to M/s HSCC</td>
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<tr>
<td>Advance to M/s HSCC during 2007-08 towards construction of buildings</td>
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<td></td>
</tr>
<tr>
<td>Add during 2008-09</td>
<td></td>
<td>121912064</td>
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<td>121912064</td>
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<tr>
<td>Description</td>
<td>Amount 1</td>
<td>Amount 2</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td>(iii) Adjusted during 08-09</td>
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<td>(iv) Add as per correction</td>
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<tr>
<td>(ii) Capital Works upto 07-08</td>
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<tr>
<td>during 2008-09</td>
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<td></td>
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<tr>
<td>6 Land Account transferred from AIIMS(M) Account</td>
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<tr>
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**EXCESS OF INCOME OVER EXPENDITURE**

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<th>Amount 3</th>
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**EXCESS OF EXPENDITURE OVER INCOME**

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<td>During 08-09</td>
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<table>
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<table>
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<td>9</td>
<td>184589</td>
<td>184589</td>
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EXCESS OF INCOME OVER EXPENDITURE

1 CENTRE FOR DENTAL EDUCATION & RESEARCH
i) Upto 07-08 1741730
ii) Add during 08-09 1748614 3490344 1741730

Sub-Total (G) 427804748 368299834

Grand Total (A) to (G) 18409666326 16359353138

EXCESS OF EXPENDITURE OVER INCOME

Note:

1 The accounts have been prepared on actual Receipts and Expenditure basis.
2 No depreciation on Machinery & Equipment, vehicles etc. has been provided as the Institute is fully funded by the Govt. of India.
3 A statement showing the expenditure made by various Project Investigators during 2008-09 is attached at Appendix-A-I. It may be mentioned that on completion of Research Projects, the equipments are either returned to the funding agencies or used in the Departments.
5 The amount shown under four patient Accounts viz. C.T. Patient A/c, Angio Patient A/c, N.S. Patient Account and Gammaknife Patient A/c on the asset side of the Balance Sheet represents the amount as “Excess of Income over Expenditure” and the same is invested in term deposits. The amount is accumulated during the previous years on introduction of package charges in the year 1995. Package was introduced for convenience of patients and to ensure that quality products are used at reasonable rates. The package rates included service charges and ICU charges which were approved by Standing Finance Committee and ratified by Governing Body. Later on it was decided not to levy such charges from the patients and was withdrawn in the year 2000. During that period(1995-2000) accumulated balance amount and also the earned interest were invested in term deposits. A part of the interest only has however been utilised for treatment of poor patients as is reflected in the Receipt & Payment Account. The accumulated balance has not been utilised during the years as such in the absence of a guideline regarding its utilisation. Institute is in the process of framing some guidelines for using this accumulated amount.

(Smt. Basanti Dalal)           (Sandeep Lall)    (R.C. Deka)
Financial Advisor(Offtg.)      Senior Financial Advisor        DIRECTOR
# ALL INDIA INSTITUTE OF MEDICAL SCIENCES
## INCOME AND EXPENDITURE ACCOUNT
### FOR THE YEAR 2008-2009

**AIIMS(Main) (A)**

<table>
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<th>EXPENDITURE</th>
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<th>2007-08</th>
<th>INCOME</th>
<th>2008-09</th>
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**EXCESS OF INCOME OVER EXPENDITURE**
1. AIIMS (Main) 54566780
2. Hostel 167318

**EXCESS OF EXPENDITURE OVER INCOME**
1. AIIMS(Main) 43698824

**HOSTELS**
1. Miscellaneous Receipts 63270
2. Interest 164774

**HOSTELS**
1. Miscellaneous Receipts 63270
2. Interest 164774
### DR. RAJENDER PRASAD CENTRE FOR OPHTHALMIC SCIENCES (B)

<table>
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### CARDIO-THORACIC & NEURO SCIENCES CENTRE (C)

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<td>(b) Non-Plan</td>
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### C.T. PATIENT A/C

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<td>196141082</td>
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<th>Amount 2</th>
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<td>Hospital Receipts</td>
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### Excess of Income Over Expenditure

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### Excess of Expenditure Over Income

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<th>1</th>
<th>National Drug Dependence Treatment Centre &amp; UNDCP Project (E)</th>
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<tr>
<td>1</td>
<td>Pay &amp; Allowances</td>
</tr>
<tr>
<td>2</td>
<td>Wages</td>
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<td>Material &amp; Supply 2008-09</td>
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<td>Pilot Project</td>
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<tr>
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<td>Grant-in-aid (Plan)</td>
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<td>2</td>
<td>Machinery &amp; Equipment Motor</td>
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<td>3</td>
<td>Vehicle</td>
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<td>Books &amp; Publications</td>
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<thead>
<tr>
<th>1</th>
<th>National Drug Dependence Treatment Centre (N.D.D.T.C.) (UNDCP Project)</th>
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<tbody>
<tr>
<td>1</td>
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<td>DA</td>
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<td>Misc./Office Contingency</td>
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<td>Transfer to NDDTC a/c</td>
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<tr>
<td>5</td>
<td>Bank Charges</td>
</tr>
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<td>6</td>
<td>Pay &amp; Allowances</td>
</tr>
<tr>
<td>7</td>
<td>Correspondences</td>
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<td>8</td>
<td>Transportation</td>
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<td>9</td>
<td>Outstanding (Temporary Advance)</td>
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### National Drug Dependence Treatment Centre (N.D.D.T.C.) (UNDCP Project)

| 1 | Grant-in-aid (Plan) | 992570 | 1543164 |
| 2 | Miscellaneous Receipt | 80650 | 23000 |

| Sub-Total (E) | 70110472 | 45654884 | 70110472 | 45654884 |
## J.P. N. APEX TRAUMA CENTRE (F)

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**EXCESS OF INCOME OVER EXPENDITURE**

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<td>Sub-Total (F)</td>
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## CENTRE FOR DENTAL EDUCATION AND RESEARCH (G)

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<th>Material &amp; Supply (Plan)</th>
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<tr>
<td>1 Pay &amp; Allowances</td>
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**EXCESS OF INCOME OVER EXPENDITURE**

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**EXCESS OF EXPENDITURE OVER INCOME**

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**Grand Total (A) to (G)**

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<td>(Smt. Basanti Dalal) Financial Advisor(Offtg.)</td>
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<td>(Sandeep Lall) Senior Financial Advisor</td>
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<td>(R.C. Deka) DIRECTOR</td>
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## Receipts & Payment Account

**For the Year 2008-2009**

**AIIMS(Main) (A)**

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<th>PAYMENTS</th>
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**PATIENT TREATMENT ACCOUNTS**

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**CLOSING BALANCES**

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**B CASH IN HAND (IMPREST)**

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### POOR PATIENT ACCOUNT

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#### (B) FDR’S

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### DR. RAJENDER PRASAD CENTRE FOR OPTHALMIC SCIENCES (B)

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**ORBIS-PECP**

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b)Pay & Conty. 1441453 1546942

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**DME:***

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- b)Pay & Conty.

- a)M&E
- b)Pay & Conty.

- a)M&E
- b)Pay & Conty.

- a)M&E
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### POOR PATIENT ACCOUNTS

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### CARDIO-THORACIC & NEURO SCIENCES CENTRE (C)

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| Sub-Total (B)             | 549614043 | 353265109 | 24192176  | 16997408  |

#### Stores (Non-Plan)

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| Sub-Total (B)             | 18013112  | 12501251  | 166557398 | 130351256 |

### Stores (PLAN)

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<p>| Sub-Total (B)             | 185941729 | 204667810 | 67648684  | 67648684  |</p>
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**C.T. PATIENT A/C**

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<td>Patient’s Refunds</td>
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d) Add Poor Patient’s treatment out of interest earned during 2008-09 3095464 207308470 196141082

| 2 | a) Interest during 2006-07 correction carried out in compliance special audit of report para 8.1 | 11618852 |
|   | b) Interest during 08-09 | 20686238 |
|   | c) Less Poor Patient’s treatment expenditure 08-09 | 3095464 29209626 4776021 |

| 3 | Cancelled Cheques | 5219802 1881696 |

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| 3 | Bank Charges | 840 330 |
| 4 | Fresh Cheque | 941433 890683 |

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<th>GAMMA KNIFE PATIENT A/C</th>
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| 3 | Bank Charges | 1450 |

<p>| 2 | Interest includes the figure of Rs. 25.81 lakh in compliance of Audit Para No. B.1.4 | 8653920 3315690 |</p>
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<td>d) Interest 2006-07</td>
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<td>e) Interest 2007-08</td>
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<td>g) during 2007-08</td>
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**POOR PATIENT ACCOUNTS**

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### Closing Balances

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#### D POOR PATIENT ACCOUNT

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Dr. B.R.A. INSTITUTE ROTARY CANCER HOSPITAL (D)

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**POOR PATIENT ACCOUNTS**

i) (a) I.R.C.H.                             | 290300     | 205825     |
(ii) Interest on FDR’s                     | 562742     | 484514     |

**PATIENT TREATMENT ACCOUNTS**

Receipt during 2008-09                     | 45172567   | 45950380   |

**POOR PATIENT ACCOUNTS**

During 2008-09                             | 635245     | 265230     |
Wrongly debited                            | 2000       |

**PATIENT TREATMENT ACCOUNTS**

During 2008-09                             | 39945429   | 40424504   |
### OPENING BALANCES

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### NATIONAL DRUG DEPENDENCE TREATMENT CENTRE & UNDCP PROJECT (E)

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**NATIONAL DRUG DEPENDENCE TREATMENT CENTRE (N.D.D.T.C.) (UNDCP PROJECT)**

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## CLOSING BALANCES

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### J.P.N. APEX TRAUMA CENTRE (F)

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### CENTRE FOR DENTAL EDUCATION AND RESEARCH (G)

#### OPENING BALANCES

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- Office expenses: 1981760
- 3018903

#### Material & Supply
- 32739280
- 1150716

#### Plan (EFC)
- 19300000
- 8900000

#### Plan (Non-EFC)
- 80700000
- 5000000

#### Manpower & consumables for Engg. maintenances on contract
- 6343499
- 1902639

#### Building Capital Works
- 6343499
- 1902639

#### Machinery & Equipment
- Actual Payment
  - Advance payments made to Foreign purchases: 26188764
  - 3685390
  - 13824684

#### Hospital Receipt
- 1062642
- 26990

#### Advance paid to HSCC
- 7000000

#### Advance paid to NDMC
- 4040000
- 2404500

#### Advance paid to DGS&D
- 469471

#### Advance paid to Voltas ltd.
- 184589

#### Security Refund
- 32800

#### CLOSING BALANCES

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(Smt. Basanti Dalal) Financial Advisor (Offg.)  (Sandeep Lall) Senior Financial Advisor  (R.C. Deka) DIRECTOR
## ALL INDIA INSTITUTE OF MEDICAL SCIENCES

### STATEMENT SHOWING THE EXPENDITURE OF THE GRANT RECEIVED FOR THE SPECIFIC PURPOSE FOR THE YEAR 2008-09

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(Smt. Basanti Dalal)
Financial Advisor(Offtg.)
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**GRAND TOTAL**

159,408,590

(Smt. Basanti Dalal)
Financial Advisor(Offtg.)
## Appendix B

**ALL INDIA INSTITUTE OF MEDICAL SCIENCES**  
**LIST OF SUNDRY DEBTORS (SCHEME CELL)**

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*(Smt. Basanti Dalal)*  
Financial Advisor (Ofttg.)
### Appendix-C

**ALL INDIA INSTITUTE OF MEDICAL SCIENCES**

**STATEMENT SHOWING THE DONATIONS & INVESTMENT AS ON 31-03-09**

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(Smt. Basanti Dalal)
Financial Advisor (Offtg.)
## Appendix-D

**ALL INDIA INSTITUTE OF MEDICAL SCIENCES**

Details of Misc. Donations as on 31.3.2009

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*(Smt. Basanti Dalal)*

Financial Advisor (Offtg.)
Appendix-E

ALL INDIA INSTITUTE OF MEDICAL SCIENCES
Details of Misc. Deposits as on 31.3.2009
2008-2009

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(Smt. Basanti Dalal)
Financial Advisor(Offtg.)

Appendix - F

ALL INDIA INSTITUTE OF MEDICAL SCIENCES
Details of GPF Investment
2008-2009

Opening Balance of Investment as on 1.4.2008 1729693465
Investment during 2008-09 495500000
Closing balance as on 31.3.2009 17231023

2242424488

Investment matured during 2008-09 442000000

1800424488

Details of NPS Investment 2008-2009

Opening Balance of Investment as on 1.4.2008 25000000
Investment during 2008-09 62200000
Add Closing Balance of C.B. as on 31.3.2009 23713651
after correction as per audit para A.2.2 110913651
Investment matured during 2008-09 1000000

100913651

(Smt. Basanti Dalal)
Financial Advisor(Offtg.)
12.2 Audit Report

Separate Audit Report of the Comptroller & Auditor General of India on the Accounts of All India Institute of Medical Sciences (AIIMS) for the year ended 31 March 2009

We have audited the attached Balance Sheet of All India Institute of Medical Sciences (AIIMS) as on 31 March 2009 and the Income & Expenditure Account/Receipts & Payment 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 All India Institute of Medical Sciences Act, 1956. These financial statements are the responsibility of the AIIMS’s 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 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/Comptroller and Auditor Generals’ 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, evidences 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 and Income & Expenditure Account/Receipt & Payment Account dealt with by this report have not been drawn up in the format approved by the Ministry of Finance, Department of Expenditure, Controller General of Accounts.

iii In our opinion, proper books of accounts 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 Balance Sheet

A.1 Assets
A.1.1 Understatement of assets by Rs. 19.71 lakh (AIIMS Main)
Institute had shown vehicles condemned worth Rs. 19,70,729 and reduced the same amount from the head “Vehicles” on the asset side of balance sheet and from capital fund on the liabilities side though the condemned vehicles were not auctioned as on 31.03.2009. This resulted in understatement of Assets and Capital funds by Rs. 19,70,729.

A.1.2 Understatement of assets by Rs. 15.51 crore (AIIMS Main)

The closing balance of GPF bank account was Rs. 17,23,10,203 while the Institute had shown it as Rs. 1,72,31,023 resulting in understatement of assets and liabilities by Rs. 15,50,79,180.

A.1.3 Understatement of assets by Rs. 1,85,75,917 and overstatement of capital fund by Rs. 1,77,76,216 Dr. BRA Institute Rotary Cancer Hospital (D)

The Institute had received LC (letter of credit) of Rs. 1,85,74,917 from the bank pertaining to the year 2006-07 including interest of Rs. 7,98,701 as Machinery and Equipment (Plan) refund and taken it as Grant-in-aid (Plan) on receipt side of Receipt and Payment Account of IRCH. However, the Institute deducted the same amount from the head “Machinery and Equipment” on the asset side of Balance Sheet instead of deducting it from the head “Advance payment to foreign purchase for Machinery and Equipment” in which the amount of Rs. 1,77,76,216 in respect of LC was placed for adjustment. This resulted in overstatement of head “Advance payment to foreign purchase for Machinery and Equipment” by Rs. 1,77,76,216 and understatement of head “Machinery and Equipment” by Rs. 1,85,74,917 in the Balance Sheet. Moreover, as the same amount of Rs. 1,77,76,216 was capitalized during 2006-07, and when refund was received, this amount was supposed to be reduced from capital fund also. As this was not reduced, this resulted in overstatement of capital fund by Rs. 1,77,76,216.

A.1.4 Understatement of assets by Rs. 1.75 crore Dr. BRA Institute Rotary Cancer Hospital (D)

Machinery of Rs. 1.75 crore which was received during the year 2007-08 (Payment made on 12.12.2007 for LC no. 7/316) had not been included under the head “Machinery and Equipment” on the asset side of the Balance Sheet but still lying under the head “Advance payment to foreign purchase for Machinery and Equipment”. This resulted in overstatement of advance and under statement of “Machinery and Equipment” by Rs. 1.75 crore.

A.1.5 Understatement of capital fund by 3.09 crore Dr. BRA Institute Rotary Cancer Hospital (D)

Institute had shown assets of Rs. 11,43,48,296, created during the year, on assets side of balance sheet while the Institute capitalised only Rs. 8,34,00,000 on the Liabilities side. This resulted in understatement of Capital Fund by Rs. 3,09,48,296.
A.1.6 Overstatement of assets by Rs. 3.96 lakh (Patient Treatment Account - Institute Rotary Cancer Hospital)

The closing balance of Rs. 2,89,67,307 in respect of Patient Treatment Account (IRCH) had been shown as per bank statement instead of cash book balance which was Rs. 2,85,71,796 resulting in overstatement of closing balance by Rs. 3,95,511 in the Balance Sheet.

A.1.7 Fixed assets

No depreciation was provided on fixed assets resulting in overstatement of assets and under statement of expenditure.

The schedule of fixed assets showing the opening balance, additions, deletion, depreciation and closing balance have not been attached.

A.1.8 Investments-Non adherence to the approved pattern of investment for G. P. Fund accumulations.

The investment of accumulated funds of General Provident fund balance of Rs. 178.32 crore was not made as per the pattern prescribed by the Ministry of Finance vide notification no. F.5 (53)/2002-ECB & PR dated 24.1.2005.

A.2 Liabilities

A.2.1 Understatement of liabilities – Capital Fund by Rs. 3.82 crore (J.P.N. Apex Trauma Centre)

The Institute had shown assets of Rs. 12,43,79,510 created during the year while it capitalised only Rs. 8,62,00,505 on the Liabilities side. This resulted in understatement of Capital Fund by Rs. 3,81,79,005.

B Income and Expenditure Account

B.1 Income

B.1.1 Understatement of income Dr. BRA Institute Rotary Cancer Hospital (D)

An amount of Rs. 1.86 crore refunded by bank (L.C. amount) under the head “Machinery & Equipment (Plan)” also includes interest of Rs. 7.99 lakh but the Institute had not taken it as income resulting in understatement of income by Rs. 7.99 lakh.

B.1.2 Understatement of income by Rs. 13.74 lakh (Neuro Surgery Patient Accounts)

Interest of Rs. 13.74 lakh earned on the FDRs had not been taken as income resulting in understatement of income by Rs. 13.74 lakh.

B 1.3 Understatement of income by Rs. 45.10 lakh (Gamma Knife Patient Accounts)
Interest of Rs. 45.10 lakh earned on FDRs was not been taken as income resulting in underatement of income by Rs. 45.10 lakh.

B 1.4 Overstatement of income by Rs. 115.29 lakh (J.P.N. Apex Trauma Centre)

The Institute had shown income of Rs. 1,15,29,018 as hospital receipts (Rs. 77,53,981) and Interest on TDRs (Rs. 37,75,037) on the Income side which was incorrect as the Institute had already created assets of this income and taken in the balance sheet during the year. This resulted in overstatement of Income by Rs. 1,15,29,018.

C. Receipts & Payment Accounts

C.1.1 Understatement of Receipts and Payment by Rs. 5.72 lakh (Neuro Surgery Patient Accounts)

The payment of Rs. 5.72 lakh was made to CN Centre and was deducted from the receipt side instead of showing it on the payment side. This not only resulted in understatement of receipts by Rs. 5.72 lakh but also payments side by the same amount.

C.1.2 Understatement of Receipts by Rs. 6.42 lakh (Patient Treatment Account - Institute Rotary Cancer Hospital)

The centre had deducted “Cheques deposited but not credited by the bank” amounting to Rs. 6,41,800 from the total receipt resulting in understatement of receipts by Rs. 6,41,800

C.1.3 Understatement of payment by Rs. 10.37 lakh (Patient Treatment Account of Institute Rotary Cancer Hospital)

The centre had deducted “Cheques issued but not debited by the bank” amounting to Rs. 10,37,311 from the total expenditure resulting in understatement of payment by Rs. 10,37,311.

D. General

D.1.1 Difference between the closing balances shown in the Balance sheet and of broadsheet

There was a difference between the closing balances shown in the Balance sheet and in the broadsheet of various advances for the year 2008-09, the details of which are given below :-
<table>
<thead>
<tr>
<th>Name of advances</th>
<th>Closing balance</th>
<th>Difference(Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>As per balance</td>
<td>As per broad</td>
</tr>
<tr>
<td></td>
<td>sheet (Rs.)</td>
<td>sheet (Rs.)</td>
</tr>
<tr>
<td>Car Advance</td>
<td>2535716</td>
<td>2929801</td>
</tr>
<tr>
<td>Motor Cycle advance</td>
<td>970183</td>
<td>1239726</td>
</tr>
<tr>
<td>Bicycle advance</td>
<td>129028</td>
<td>143349</td>
</tr>
<tr>
<td>Computer Advance</td>
<td>3594493</td>
<td>3606358</td>
</tr>
<tr>
<td>HBA</td>
<td>18772400</td>
<td>19405021</td>
</tr>
</tbody>
</table>

The above differences need to be reconciled.

E  Grants in aid

The institute is mainly financed from the grants of Government of India. During the year 2008-09 the institute received grants of Rs. 660.92 crore {Plan Rs. 218.00 crore and Non-Plan Rs. 435.42 crore and Rs. 7.50 crore (Plan) for NDDTC.} It also had its own income of Rs. 101.09 crore from hospital receipts, tuition fee, examination fee, license fee and interest income etc. The total plan expenditure was Rs. 118.62 crore and Rs. 111.95 crore was utilised for giving advances for various purposes. The total non plan expenditure was Rs. 489.20 crore and Rs. 2.09 crore was given to suppliers etc. as advances. The institute received grants for various schemes for Rs. 47.25 crore and incurred an expenditure of Rs. 44.00 crore.

F  Management letter: Deficiencies which have not been included in the Audit Report have been brought to the notice of the Director, AIIMS, through a management letter issued separately for remedial/corrective action.

v. Subject to our observations in the preceding paragraphs, we report that the Balance sheet and Income and Expenditure Account/Receipts and Payments Account dealt with by this report are in agreement with the books of accounts.

vi. In our opinion and to the best of our information and according to the explanations 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 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 2009; and

b. In so far as it relates to Income and Expenditure Account of the surplus for the year ended on that date
Annexure to Audit Report

1. Adequacy of internal audit system
   - The Institute did not have any internal audit manual.
   - As per the audit plan, 70 units were to be audited during 2008-09 but due to non-availability of staff no unit was audited during the year.

2. System of physical verification of fixed assets
   - The physical verification of fixed assets had not been conducted during 2008-09.

3. Regularity in payment of statutory dues
   - As per the accounts, no statutory dues over six months were outstanding.
Replies/comments to the Separate Audit Report of the Comptroller & Auditor General of India on the Accounts of All India Institute of Medical Sciences (AIIMS) for the year ended 31 March 2009

A.1.1 Understatement of assets by Rs. 19.71 lakh (AIIMS Main)

The amount of Rs.19,70,729/- has been reduced from Capital fund and Assets side of Balance Sheet due to fact that the vehicles have been actually condemned during the year 2008-09. However, the point has been noted for future compliance and sale proceeds will be credited as revenue receipt as and when condemned item are auctioned.

A.1.2 Understatement of assets by Rs. 15.51 crore (AIIMS Main)

In this connection it is stated that figure Rs.1,72,31,023/- shown in the balance sheet is due to typographical error. The facts stated in the memo are correct. However, discrepancy as pointed out will be rectified while preparing next years Annual Accounts.

A.1.3 Understatement of assets by Rs. 1,85,75,917 and overstatement of capital fund by Rs. 1,77,76,216 (Institute Rotary Cancer Hospital)

The discrepancies pointed out by Audit has been noted and would be made good/rectified in the Annual Account for the year 2009-10.

A.1.4 Understatement of assets by Rs. 1.75 crore (Institute Rotary Cancer Hospital)

The discrepancies pointed out by Audit has been noted and would be made good/rectified in the Annual Account for the year 2009-10.

A.1.5 Understatement of capital fund by 3.09 crore (Institute Rotary Cancer Hospital)

The discrepancies pointed out by Audit has been noted and would be made good/rectified in the Annual Account for the year 2009-10.

A.1.6 Overstatement of assets by Rs. 3.96 lakh (Patient Treatment Account - Institute Rotary Cancer Hospital)

The discrepancies pointed out by Audit has been noted and would be made good/rectified in the Annual Account for the year 2009-10.

A.1.7 Fixed assets

The Institute prepares its accounts on actual receipt & expenditure basis. Further, no depreciation on machinery & equipment, vehicles etc. has been provided as the AIIMS is fully funded by the Government of India. A foot-note in this regard has already been given in the balance sheet to justify the action taken.

A.1.8 Investments-Non adherence to the approved pattern of investment for G. P. Fund accumulations.

All investments have been made keeping in view the safety of the funds of the employees. Hence, to earn interest on the funds while maintaining the safety investments have been made mainly with public sector banks in terms of Ministry of Finance, Deptt. Of Expenditure’s O.M. No. F.No.7(2)/E Coord/2007 dated 15th January, 2008 (copy enclosed) Para 3 of the ibid O.M provides as under:-
“It has also been brought to the notice of the Government that in recent times there is an emerging practice of inviting competitive bids for placing bulk deposits with banks. As consequence, there is undesirable competition amongst banks leading to arbitrary hikes in deposit rate (even for short periods) which have consequences for the economy. “It is therefore, advised that the practice of inviting competitive bids for bulk deposits should be discontinued forthwith. Any department/Ministry or any of the agencies/entities/bodies referred to in para 2 above should place their bulk deposits with the banks (s) with whom they have regular course of business, including public sector banks”

Further, Prior to the issue of this O.M dated 15th January 2008 the Institute has been following the investment pattern to the maximum extent as prescribed by the Ministry of Finance vide notification No.F.5(53)/2002-ECB& PR dated 24th January, 2005.

In view of above facts audit observation may be treated as settled.

A.2.1 Understatement of liabilities – Capital Fund by Rs. 3.82 crore (J.P.N. Apex Trauma Centre)

The discrepancies as pointed out by Audit has been noted and will be rectified by giving the effect in the next year Annual Accounts accordingly.

B.1.1 Understatement of income (Institute of Rotary Cancer Hospital)

The discrepancies pointed out by Audit has been noted and would be made good/rectified in the Annual Account for the year 2009-10.

B.1.2 Understatement of income by Rs. 13.74 lakh (Neuro Surgery Patient Accounts)

In this regards it is stated that due to oversight the FDs in question could not be renewed in March, 2009. However, FDs were renewed in the next financial year with retrospective effect i.e from the due dates i.e from 14.3.09, 22.3.09 and 30.3.09 respectively. As such there is no loss of interest on FDs in question. The interest has already appeared in Bank statement and will be taken into account for the year 2009-10.

In view of above facts, the observation may be treated as settled.

B 1.3 Understatement of income by Rs. 45.10 lakh (Gamma Knife Patient Accounts)

In this regards it is stated that due to oversight the FDs in question could not be renewed in 2008-09. However, FDs were renewed in the next financial year with retrospective effect i.e from the due dates i.e from 20.02.09 and 30.3.09 respectively. As such there is no loss of interest on FDs in question. The interest has already appeared in Bank statement and will be taken into account for the year 2009-10.

In view of above facts, the observation may be treated as settled.

B 1.4 Overstatement of income by Rs. 115.29 lakh (J.P.N. Apex Trauma Centre)

The receipt amount shown as income of Rs.1,15,29,018 as Hospital Receipts and interest on TDRs is correct. However, the audit observations i.e the revenue receipts amounting to
Rs.1,15,29,018/- had been incurred only for creating assets is not acceptable as the total allocation of the funds under the head Plan including revenue receipts was utilized for construction of building, machinery & equipment, furniture & fixtures, material & supply, pay and allowances and office expenses etc. Hence, it is not given to understand how the audit viewed that the above said revenue receipt had specifically been incurred for creating assets.

It is further, elaborated that JPNATC is a newly created centre during the current plan period. From the next Plan period the expenditure of JPNATC shall be divided into Plan and Non-Plan expenditure and will also be possible to categorise under the head Plan and Non-Plan.

In view of above facts the observation may be treated as settled.

C.1.1 Understatement of Receipts and Payment by Rs. 5.72 lakh (Neuro Surgery Patient Accounts)

It is stated that the amount of Rs.5.72 lac was transferred from NS Patient A/c to CNC Account since it was the receipt of CNC account from NS package charges received from patients. In view of this it was deducted from NS Patient Account receipt and was taken to CNC Account receipt. However, the point has been noted for future compliance.

Hence, observation may be treated as settled.

C.1.2 Understatement of Receipts by Rs. 6.42 lakh (Patient Treatment Account - Institute Rotary Cancer Hospital)

The discrepancies pointed out by Audit has been noted and would be made good/rectified in the Annual Account for the year 2009-10.

C.1.3 Understatement of payment by Rs. 10.37 lakh (Patient Treatment Account of Institute Rotary Cancer Hospital)

The discrepancies pointed out by Audit has been noted and would be made good/rectified in the Annual Account for the year 2009-10.

D.1.1 Difference between the closing balances shown in the Balance sheet and of broadsheet

There is no difference during the year 2008-09. The difference pertains to previous years for which efforts are being taken to reconcile the same.

E. Grant-in-aid

Facts – No comments.