AIIMS

51st ANNUAL REPORT

2006–2007

All India Institute of Medical Sciences
New Delhi 110029
The All India Institute of Medical Sciences (AIIMS) was established by an Act of Parliament in 1956 as an institution of national importance. Its main objectives were 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.

AIIMS has comprehensive facilities for teaching, research and patient care. Medical and paramedical courses are taught at AIIMS. The institution awards its own undergraduate, postgraduate and doctorate degrees.

Teaching and research are conducted in 50 disciplines. AIIMS plays a leading role in the field of medical research, having more than 1300 research publications by its faculty and researchers in a year. AIIMS also has a College of Nursing, which awards BSc (Hons) Nursing and BSc Nursing (Post-certificate) degrees.

Twenty-five clinical departments, including six superspecialty centres, manage practically all types of disease conditions with support from pre-clinical and para-clinical departments. AIIMS also runs a 60-bedded hospital at 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

ORGANISATION

Institute Body

Governance Body

Finance Committee
Selection Committee
Academic Committee
Estate Committee
Hospital Affairs Committee

All India Institute of Medical Sciences
New Delhi
## CONTENTS

1. **Director’s Review** .......................................................... 1
2. **The Institute and its Committees** ................................. 6
3. **Academic Section** ......................................................... 13
4. **Examination Section** .................................................. 27
5. **General Administration** .................................................. 33
6. **Hospital** ........................................................................ 38
7. **College of Nursing** ......................................................... 64
8. **Research Section** .......................................................... 70
9. **DEPARTMENTS** ............................................................
   9.1 **Anaesthesiology** ...................................................... 125
   9.2 **Anatomy** .................................................................. 132
   9.3 **Biochemistry** .......................................................... 141
   9.4 **Biomedical Engineering** ........................................... 155
   9.5 **Biophysics** .............................................................. 163
   9.6 **Biostatistics** ............................................................ 171
   9.7 **Biotechnology** ......................................................... 179
   9.8 **Centre for Community Medicine** ................................ 186
   9.9 **Dermatology and Venereology** .................................. 208
   9.10 **Endocrinology and Metabolism** .............................. 214
   9.11 **Forensic Medicine** .................................................. 223
   9.12 **Gastroenterology and Human Nutrition** .................... 227
   9.13 **Gastrointestinal Surgery** .......................................... 238
   9.14 **Haematology** .......................................................... 244
   9.15 **Hospital Administration** .......................................... 260
   9.16 **Laboratory Medicine** ............................................... 267
   9.17 **Medicine** ............................................................... 281
   9.18 **Microbiology** .......................................................... 306
   9.19 **Nephrology** ........................................................... 320
   9.20 **Nuclear Medicine** .................................................... 327
   9.21 **Nuclear Magnetic Resonance** ................................... 333
   9.22 **Obstetrics and Gynaecology** .................................... 340
   9.23 **Orthopaedics** ........................................................ 365
   9.24 **Otorhinolaryngology (ENT)** .................................... 377
1. Director’s Review

I am glad to present the Fifty-First Annual Report and audited statement of accounts for the year 2006-2007.

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 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 an autonomous institution and awards its own degrees. The AIIMS continues to be a leader in the field of medical education, research and patient-care in keeping with the mandate from Parliament.

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

During the 2006-2007 academic session (i.e. for courses commencing in July 2006 and January 2007), 393 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, 945 postgraduate and post-doctoral students were on the rolls in various courses and 250 students qualified for their degrees. AIIMS provides full time postgraduate and post-doctoral courses in 47 disciplines. The guiding principle in postgraduate training is to train them as teachers, researchers and competent doctors, who can investigate, manage and treat patients independently.

This year AIIMS admitted 50 students to its MB,BS course (including 7 SC and 4 ST students), 36 students to the B.Sc. Nursing (post-certificate) course (including 3 each from SC and ST students), 51 students to the B.Sc. (Hons) in Nursing course (including 8 SC and 3 ST students), 37 students to the B.Sc. (Hons.) in Ophthalmic Techniques course (including 2 SC students and one ST student) and 21 students to the B.Sc. (Hons.) in Medical Technology in Radiography course (including one SC student). Twenty-three SC and 7 ST students were admitted to MD/MS courses, 3 SC and 7 ST students to MSc courses, 5 SC and 1 ST student to PhD courses and one each to DM/MCh courses.

AIIMS also provides short/long term training to doctors from various organizations and State Governments, WHO-in-Country Fellowship and elective training to Foreign Nationals students. Four hundred and fifty-three (453) candidates received short/long 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 neighbouring countries under bilateral agreements or under the aegis of international agencies. During 2006-2007, the Institute trained 58 WHO-sponsored/WHO-in-country fellowship candidates to fulfill its international obligations.

The details for the period 01.04.2006 to 31.03.2007 are as under:-

1. Short term training 447
2. Long term training 06
3. WHO-in-country fellowship 32
4. WHO-sponsored foreign nationals 26
5. Elective training 75
6. Foreign nationals 48

The MB,BS course is spread over 5½ years, divided into 1 year for pre-clinical, 1½ year for para-clinical and 2 years for clinical subjects 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 Institute organized a number of workshops, symposia, conferences and training programmes in collaboration with various national and international agencies during the year. Health care professionals from various institutions all over the country participated in these seminars and workshops. Guest and public lectures were organized 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 430 research projects were ongoing during this period. Research grants totaling Rs 52 crores (approx.) were received from various international and national funding agencies during the year 2006-2007. During this period have been 1481 scientific publications by the faculty of AIIMS. In addition they have contributed to 279 Books/monographs/chapters in books.

During the year 2006-2007, the AIIMS hospital catered not only to patients from India but also from neighbouring countries, such as Nepal, Bangladesh, Sri Lanka, Bhutan and other Asian countries. In 2006-07, AIIMS had 15,25,410 OPD attendances and 79,171 in-patient admissions; and 82,503 surgical procedures were conducted in the hospital. In addition, at the Cardiothoracic and Neurosciences Centre (CN Centre), 2,10,611 patients were attended to in the OPDs (92,921 in Cardiology, 28,097 in Cardiothoracic and Vascular Surgery, 57,752 in Neurology and 31,841 in Neurosurgery), 24,966 patients were admitted and 6,465 surgeries were performed at the Centre. The Emergency Care Services (Casualty) attended to 1,76,959 patients in 2006-07.

The Jai Prakash Narain Trauma Centre is functional since 27 November 2006, with 28 faculty members, along with all other categories of staff. It 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 short period since it started functioning, the Trauma Centre has attended to 1,700 patients, with 625 admitted and 442 operated. A total of 5,764 radiological investigations have also been performed at the Centre.

The Dr. B.R. Ambedkar Institute Rotary Cancer Hospital now 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, Anaesthesiology, Radiodiagnosis and Preventive and Community Oncology. Dr. BRAIRCH attended to 74,273 patients in the OPD (14,209 new cases and 60,064 old cases) and admitted 29,826 patients (18,235 short admissions and 2,501 regular admissions), while 3,889 patients were operated upon during the year.

Dr. Rajendra Prasad Centre for Ophthalmic Sciences (Dr. R.P. Centre) attended to 2,23,382 patients in the general OPD, 44,045 patients in the emergency and 1,67,616 patients in specialty clinics, totalling 4,35,043 patients during the financial year 2006-2007. The number of admitted patients was 25,986 and surgical procedures were conducted on 23,637 patients. The average percentage of bed occupancy was 81%. On an average, the Centre handles 1,465 cases and performs 65 operations per working day. Average indoor admissions per working day were 71 and the average length of stay was 4.8 days.

The Organ Retrieval Banking Organization (ORBO), a national facility and nodal centre for the country at All India Institute of Medical Sciences (AIIMS), New Delhi, with its objective of encouraging organ donations, fair and equitable distribution of human organs and optimum utilization of human organs, continues to work round-the-clock. A dedicated four-digit-help line 1,060 and the website (www.orbo.org) with a facility to download donor forms and email facility for correspondence, remains available to the public for enquiries regarding organ donation and transplantation.

The Cardiothoracic Centre, while standardizing various surgical procedures with very high success rate, has brought down the cost of operations. Laparoscopic and endoscopic surgeries are now actively performed in different disciplines. The Institute has kept abreast with state-of-the-art surgical procedures. The Department of Dental Surgery is all set to start a full-fledged Dental college. The department is the nodal centre for the National Oral Health Policy of the Government of India. A Centre for Dental Education and Research working, at present in the Department of Dental Surgery conducts an MDS (postgraduate course) in the speciality.

The Centre for Behavioural Sciences (National Drug Dependence Treatment Centre), AIIMS, at Ghaziabad is a 50 bedded centre with full OPD and other services.

Due to expansion of facilities like OPD, emergency service, private wards and use of innovative 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 operations performed have all
increased. The average length of stay is around 4.8 days; the average bed occupancy, 77.4% and the net death rate, 2.5%, which is at par with any health standards 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 level.

Medicines are supplied to all patients attending the Casualty free of cost. During the financial year 2006-07, an amount of Rs 3,00,23,718/- has been distributed to 1,784 poor and indigent patients.

Community-based programmes have been an integral part of the Institute’s clinical and research activities. The Rural Health Centre at Ballabhgarh, being run under the supervision of the Centre of Community Medicine (CCM), is a unique experiment. Besides, departments of Obstetrics and Gynecology, Rehabilitation and Physical Medicine, Paediatrics and Dr. Rajendra Prasad Centre for Ophthalmic Sciences organize regular camps in the rural community. The outpatient facilities for patients with ophthalmic and dental problems are drawing more and more patients.

The Centre for Community Medicine (CCM) 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 villages covered, it also has a secondary level care hospital at Ballabgarh with 50 beds, which attracts patients from far and wide. The number of patients attended to in the hospital included 1,57,851 in the OPD and 21,582 in the casualty, while 6,967 patients were admitted. The project has achieved significant success in terms of improving the health of mothers and children of the area. With zero Maternal Mortality Rate and Crude Death Rate of 6.6, it is well ahead of targets set by Government of India for 2010.

The Urban Health Programme and Family Health Exercise programmes also cater to urban slums of Delhi having a population of about 60,000. A Mobile Health Clinic of CCM visits these slums 5 times a week and provides preventive, promotive and primary level curative services. Domiciliary services in these slum areas are provided through para-medical workers. These services attended to 25,901 patients in 2006-07.

The CCM has now established a Disease Outbreak Response Cell (DORC) for ensuring a rapid response to infectious disease outbreaks that may occur from time to time in the region.

The AIIMS has an AIDS Education and Training Cell for prevention of HIV/AIDS. Amongst its various activities, this cell also operates an interactive telephone helpline called ‘Shubhchintak’ to answer queries of the general public on HIV/AIDS. This helpline is quite popular and also has an internet based helpline called “e-shubhchintak”. CCM also runs a Sex and Marriage Counselling Clinic (SMCC) in AIIMS Hospital.

Despite increasing pressures, the Institute has constantly tried to demonstrate its commitment to professionalism and service to the common people at affordable cost. Thousands of patients from all over the country come to AIIMS everyday to get the best health care available in the country.

AIIMS faculty have been providing leadership to various illustrious national bodies and institutions. Faculty on lien/deputation include Prof. M.K. Bhan, Secretary, Department of Biotechnology, Ministry of Science and Technology, Government of India, New Delhi, Prof. K.K.
Talwar, Director, Postgraduate Institute of Medical Education and Research, Chandigarh, Prof. A.K. Mahapatra, Director, Sanjay Gandhi Post-graduate Institute of Medical Sciences, Lucknow, Prof. R.K. Sarma, Director, NEGRIMS, Shillong and Prof. K.S. Reddy, President, Public Health Foundation of India, New Delhi.

The medical college of the Institute has been adjudged the best in the country for the 6th consecutive year by national surveys.

Prof. P. Venugopal
Director, AIIMS
All India Institute of Medical Sciences
New Delhi
2. The Institute and its Committees

INSTITUTE BODY from 1.4.2006 to 31.3.2007

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

2. Dr Akhilesh Das
   Member of Parliament (Rajya Sabha)
   11, Lodhi Estate
   New Delhi 110001

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

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

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

5. Dr Deepak Pental
   Vice Chancellor
   University of Delhi
   Delhi 110007

6. Shri P.K. Hota
   Secretary (Health)
   (up to 1.11.2006)

   Shri Naresh Dayal
   Secretary (Health)
   Ministry of Health and Family Welfare
   Nirman Bhawan, New Delhi 110011
   (w.e.f. 2.11.2006)
7. **Dr R.K. Srivastava**
   Member
   Directorate General of Health Services
   Nirman Bhawan, New Delhi 110011

8. **Professor A. Rajasekaran**
   Member
   President
   (up to 10.8.2006)
   National Board of Examinations
   New Delhi

9. **Dr Shyam Prasad**
   Member
   (w.e.f. 11.8.2006)
   National Board of Examinations
   New Delhi

10. **Dr S.S. Agarwal**
    Member
    Central Drug Research Institute
    Chattar Manzil Palace
    Post Box No. 173, Lucknow 226001

    **Dr S.S. Agarwal**
    Former Director, SGPGI
    D-13, Vivekanandpuri, Lucknow 226007

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

12. **Shri Sudeep Banerjee**
    Member
    Secretary
    Department of Secondary Education and Higher Education
    Ministry of Human Resource Development (HRD)
    Shastri Bhawan (Gate No. 6), New Delhi 110001

13. **Professor K.K. Talwar**
    Member
    Director
    Postgraduate Institute of Medical Education and Research, Chandigarh
13. **Professor Kartar Singh**  
   Member  
   Director  
   Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow

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

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

16. **Shri Sanjiv Misra**  
   Member  
   Additional Secretary and Financial Adviser  
   (up to 3.7.2006)

   **Shri Raghbir Singh**  
   Member  
   Addl. Secretary and Financial Advisor  
   Ministry of Health and Family Welfare  
   Nirman Bhawan, New Delhi 110011

17. **Professor P. Venugopal**  
   Member-Secretary  
   Director, AIIMS

18. **Smt Bhavani Thyagarajan**  
   Special Invitee  
   Joint Secretary  
   Ministry of Health and Family Welfare  
   Nirman Bhawan, New Delhi 110011

19. Dean (Academic), AIIMS  
   Special Invitee

20. **Dr T.P. Singh**  
   Special Invitee  
   (up to 31.8.2006)  
   Professor and Head  
   Department of Biophysics  
   AIIMS, New Delhi
GOVERNING BODY

1. Dr Anbumani Ramadoss Chairman
2. Dr Akhilesh Das Member (up to 30.5.2006)
   Shri R.K. Dhawan Member (w.e.f. 21.6.2006)
3. Dr Karan Singh Yadav Member
4. Shri P.K. Hota Member (up to 1.11.2006)
   Shri Naresh Dayal Member (w.e.f. 21.12.2006)
5. Dr R.K. Srivastava Member (Ex-Officio)
6. Shri Sanjiv Misra Member (up to 3.7.2006)
   Shri Raghubir Singh Member (w.e.f. 21.12.2006)
7. Professor A. Rajasekaran Member (up to 10.8.2006)
   Dr Shyam Prasad Member (w.e.f. 21.12.2006)
8. Professor K.K. Talwar Member
9. Professor Kartar Singh Member
10. Professor R. Surendran Member
11. Professor P. Venugopal Member-Secretary
12. Smt Bhavani Thyagarajan Special Invitee
13. Dean (Academic), AIIMS Special Invitee
14. Dr T.P. Singh Special Invitee (up to 31.8.2006)
   Dr T.D. Dogra Special Invitee (w.e.f.10.1.2007)

STANDING FINANCE COMMITTEE

1. Shri P.K. Hota Chairman (up to 1.11.2006)
   Shri Naresh Dayal Chairman (w.e.f. 21.12.2006)
2. Professor Vijay Kumar Malhotra Member
3. Dr Akhilesh Das Member (up to 30.5.2006)
   Shri R.K. Dhawan Member (w.e.f. 21.6.2006)
4. Dr R.K. Srivastava Member (w.e.f. 21.6.2006)
5. Shri Sanjiv Misra Member (up to 3.7.2006)
   Shri Raghubir Singh Member (w.e.f. 21.12.2006)
6. Professor A. Rajasekaran Member (up to 10.8.2006)
   Dr Shyam Prasad Member (w.e.f. 21.12.2006)
7. Shri Sudeep Banerjee Member
8. Dr S.S. Agarwal Member
9. Professor P. Venugopal Member-Secretary
10. Dean (Academic), AIIMS Special Invitee
11. Smt Bhavani Thyagarajan Special Invitee
HOSPITAL AFFAIRS COMMITTEE

1. Professor S.S. Agarwal Chairman
2. Dr Akhilesh Das Member (up to 30.5.2006)
   Shri R.K. Dhawan Member (w.e.f. 21.6.2006)
3. Professor Karan Singh Yadav Member
4. Dr R.K. Srivastava Member (w.e.f. 21.6.2006)
5. Shri P.K. Hota Member (w.e.f. 1.11.2006)
   Shri Naresh Dayal Member (w.e.f. 21.12.2006)
6. Shri Sanjiv Misra Member (up to 3.7.2006)
   Shri Raghubir Singh Member (w.e.f. 21.12.2006)
7. Professor Nilima Arun Kshirsagar Member
8. Professor K.K. Talwar Member
9. Dr Shyam Prasad Member (w.e.f. 21.12.2006)
10. Professor P. Venugopal Member-Secretary

ESTATE COMMITTEE

1. Professor Vijay Kumar Malhotra Chairman
2. Professor Karan Singh Yadav Member
3. Dr R.K. Srivastava Member (w.e.f. 21.6.2006)
4. Dr S.S. Agarwal Member
5. Shri P.K. Hota Member (up to 1.11.2006)
   Shri Naresh Dayal Member (w.e.f. 21.12.2006)
6. Professor Deepak Pental Member
7. Shri Sanjiv Misra Member (up to 3.7.2006)
   Shri Raghubir Singh Member (w.e.f. 21.12.2006)
8. Shri Sudeep Banerjee Member
9. Professor P. Venugopal Member-Secretary

ACADEMIC COMMITTEE

1. Professor Nilima Arun Kshirsagar Chairperson (w.e.f.21.6.2006)
2. Professor R. Surendran Member
3. Professor Kartar Singh Member
4. Professor K.K. Talwar Member
5. Professor Nilima Arun Kshirsagar Member (up to 20.6.2006)
   Dr R.K. Srivastava Member (w.e.f. 21.6.2006)
6. Professor A. Rajasekaran, Member (up to 10.8.2006)
   Dr Shyam Prasad, Member (w.e.f. 21.12.2006)
7. Professor B.P. Chatterjee, Member
8. Shri Sudeep Banerjee, Member (w.e.f. 21.6.2006)
9. Professor P. Venugopal, Member-Secretary

**SELECTION COMMITTEE**

1. Professor A. Rajasekaran, Chairman (up to 10.8.2006)
   Professor R. Surendran, Chairman (w.e.f. 21.12.2006)
2. Dr Akhilesh Das, Member (up to 30.5.2006)
   Professor Karan Singh Yadav, Member (w.e.f. 21.6.2006)
3. Dr R.K. Srivastava, Member (w.e.f. 21.6.2006)
4. Professor K.K. Talwar, Member
5. Professor Kartar Singh, Member
6. Shri Sudeep Banerjee, Member
7. Professor Nilima Arun Kshirsagar, Member
8. Professor R. Surendran, Member (up to 20.12.2006)
9. Dr Shyam Prasad, Member (w.e.f. 21.12.2006)
10. Professor P. Venugopal, Member-Secretary
3. Academic Section

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
<th>Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acting Dean</td>
<td>T.P. Singh</td>
<td>(w.e.f. 10.4.2006 to 4.5.2006)</td>
</tr>
<tr>
<td>Dean</td>
<td>R.C. Deka</td>
<td>(w.e.f. 4.5.2006)</td>
</tr>
<tr>
<td>Sub-Deans</td>
<td>Nikhil Tandon Neerja Bhatla Sunil Chumber</td>
<td>(up to 3.4.2006) (w.e.f. 3.4.2006 to 14.6.2006) (w.e.f. 14.6.2006)</td>
</tr>
<tr>
<td></td>
<td>Sandeep Guleria</td>
<td>(w.e.f. 2.11.2006)</td>
</tr>
<tr>
<td>Registrar</td>
<td>V.P. Gupta Sandeep Agarwala</td>
<td>(up to 22.2.2007) (w.e.f. 13.3.2007)</td>
</tr>
<tr>
<td>Administrative Officer</td>
<td>S.K. Vashist</td>
<td>(w.e.f. 21.08.2006)</td>
</tr>
</tbody>
</table>

The Academic Section develops policies and 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 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 onwards. 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)  

Every year 50 students are admitted to the MB,BS course. Out of 50 seats, 5 seats are reserved for foreign nationals and the screening and admissions for these 5 seats is done on the recommendations of the Ministry of External Affairs, Government of India. For the remaining 45 seats (7 for Scheduled Caste, 4 for Scheduled Tribe and 34 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 1,67,148 applicants, and 1,25,829 candidates appeared in the entrance examination for these 45 seats. The total number of undergraduate students as on 31 March 2007 was 256 including 49 interns.

Merit scholarships of Rs 750 per month and Rs 500 per month were awarded to 6 students who secured first and second in the 1st, 2nd and final MB,BS examination.

Summer fellowships were awarded to 6 students 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 51 students was admitted for the BSc (Hons) Nursing in August 2006. 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>36</td>
</tr>
<tr>
<td>BSc (Hons) Nursing</td>
<td>202</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Paramedical courses</th>
<th>Number of students</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSc (Hons) Ophthalmic Techniques</td>
<td>37</td>
</tr>
<tr>
<td>BSc (Hons) Medical Technology in Radiography</td>
<td>21</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 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 393 students, including 23 state-sponsored and 10 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 2007 was 945. The subject wise distribution of postgraduate students is given below.

A total of 250 postgraduate students MS/MS/MDS/DM/MCh/PhD/MSc/M. Biotech passed out during the year 2006–2007.

<table>
<thead>
<tr>
<th>PhD</th>
<th>General</th>
<th>Sponsored</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anatomy</td>
<td>14</td>
<td>–</td>
</tr>
<tr>
<td>Biochemistry</td>
<td>38</td>
<td>–</td>
</tr>
<tr>
<td>Biophysics</td>
<td>17</td>
<td>–</td>
</tr>
<tr>
<td>Biostatistics</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Biotechnology</td>
<td>15</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>7</td>
<td>–</td>
</tr>
<tr>
<td>Haematology</td>
<td>9</td>
<td>–</td>
</tr>
<tr>
<td>CTVS</td>
<td>3</td>
<td>–</td>
</tr>
<tr>
<td>Laboratory Medicine</td>
<td>12</td>
<td>–</td>
</tr>
<tr>
<td>Medical Oncology</td>
<td>5</td>
<td>–</td>
</tr>
<tr>
<td>Medical Physics</td>
<td>2</td>
<td>–</td>
</tr>
<tr>
<td>Medicine</td>
<td>10</td>
<td>–</td>
</tr>
<tr>
<td>Microbiology</td>
<td>36</td>
<td>–</td>
</tr>
<tr>
<td>Neurology</td>
<td>8</td>
<td>–</td>
</tr>
<tr>
<td>Nuclear Magnetic Resonance</td>
<td>2</td>
<td>–</td>
</tr>
<tr>
<td>Nuclear Medicine</td>
<td>2</td>
<td>–</td>
</tr>
<tr>
<td>Otorhinolaryngology (ENT)</td>
<td>2</td>
<td>–</td>
</tr>
<tr>
<td>Ophthalmology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ocular Pharmacology</td>
<td>4</td>
<td>–</td>
</tr>
<tr>
<td>Ocular Microbiology</td>
<td>1</td>
<td>–</td>
</tr>
<tr>
<td>Community Ophthalmology</td>
<td>1</td>
<td>–</td>
</tr>
<tr>
<td>Ocular Pathology</td>
<td>1</td>
<td>–</td>
</tr>
<tr>
<td>Ocular Biochemistry</td>
<td>2</td>
<td>–</td>
</tr>
<tr>
<td>Paediatrics</td>
<td>7</td>
<td>–</td>
</tr>
<tr>
<td>Pathology</td>
<td>10</td>
<td>–</td>
</tr>
<tr>
<td>Centre for Community Medicine</td>
<td>1</td>
<td>–</td>
</tr>
<tr>
<td>Endocrinology</td>
<td>4</td>
<td>–</td>
</tr>
<tr>
<td>Paediatric Surgery</td>
<td>1</td>
<td>–</td>
</tr>
<tr>
<td>Neuro-Biochemistry</td>
<td>5</td>
<td>–</td>
</tr>
<tr>
<td>Pharmacology</td>
<td>11</td>
<td>–</td>
</tr>
<tr>
<td>Specialty</td>
<td>DM General</td>
<td>DM Sponsored</td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Cardiac Anaesthesiology</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Cardiology</td>
<td>16</td>
<td>3</td>
</tr>
<tr>
<td>Clinical Haematology</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Endocrinology</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>Gastroenterology</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>Haemato-Pathology</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Medical Oncology</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>Neonatology</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Nephrology</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>Neuro-Anaesthesiology</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Neurology</td>
<td>13</td>
<td>1</td>
</tr>
<tr>
<td>Neuroradiology</td>
<td>3</td>
<td>–</td>
</tr>
<tr>
<td>Paediatric Neurology</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Clinical Pharmacology</td>
<td>1</td>
<td>–</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>124</td>
<td>94</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Specialty</th>
<th>MCh General</th>
<th>MCh Sponsored</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiothoracic and Vascular Surgery</td>
<td>16</td>
<td>–</td>
</tr>
<tr>
<td>Gastrointestinal Surgery</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Neurosurgery</td>
<td>27</td>
<td>3</td>
</tr>
<tr>
<td>Paediatric Surgery</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>Urology</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>77</td>
<td>67</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Specialty</th>
<th>MD General</th>
<th>MD Sponsored</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anaesthesiology</td>
<td>21</td>
<td>–</td>
</tr>
<tr>
<td>Anatomy</td>
<td>11</td>
<td>–</td>
</tr>
<tr>
<td>Biochemistry</td>
<td>7</td>
<td>–</td>
</tr>
<tr>
<td>Biophysics</td>
<td>7</td>
<td>–</td>
</tr>
<tr>
<td>Community Medicine</td>
<td>11</td>
<td>–</td>
</tr>
<tr>
<td>Dermatology and Venereology</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>Course</td>
<td>General</td>
<td>Sponsored</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>---------</td>
<td>-----------</td>
</tr>
<tr>
<td>Forensic Medicine</td>
<td>5</td>
<td>–</td>
</tr>
<tr>
<td>Hospital Administration</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Laboratory Medicine</td>
<td>5</td>
<td>–</td>
</tr>
<tr>
<td>Medicine</td>
<td>34</td>
<td>3</td>
</tr>
<tr>
<td>Microbiology</td>
<td>6</td>
<td>–</td>
</tr>
<tr>
<td>Nuclear Medicine</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Obstetrics and Gynaecology</td>
<td>24</td>
<td>–</td>
</tr>
<tr>
<td>Ophthalmology</td>
<td>65</td>
<td>–</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>18</td>
<td>1</td>
</tr>
<tr>
<td>Pathology</td>
<td>14</td>
<td>1</td>
</tr>
<tr>
<td>Pharmacology</td>
<td>7</td>
<td>–</td>
</tr>
<tr>
<td>Physical Medicine and Rehabilitation</td>
<td>3</td>
<td>–</td>
</tr>
<tr>
<td>Physiology</td>
<td>8</td>
<td>–</td>
</tr>
<tr>
<td>Psychiatry</td>
<td>16</td>
<td>1</td>
</tr>
<tr>
<td>Radiodiagnosis</td>
<td>16</td>
<td>3</td>
</tr>
<tr>
<td>Radiotherapy</td>
<td>5</td>
<td>–</td>
</tr>
</tbody>
</table>

**MS**

<table>
<thead>
<tr>
<th>Course</th>
<th>General</th>
<th>Sponsored</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orthopaedics</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>Otorhinolaryngology</td>
<td>9</td>
<td>–</td>
</tr>
<tr>
<td>Surgery</td>
<td>28</td>
<td>2</td>
</tr>
</tbody>
</table>

**MDS**

<table>
<thead>
<tr>
<th>Course</th>
<th>General</th>
<th>Sponsored</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conservative Dentistry and Endodontics</td>
<td>6</td>
<td>–</td>
</tr>
<tr>
<td>Orthodontics</td>
<td>6</td>
<td>–</td>
</tr>
<tr>
<td>Prosthodontics</td>
<td>5</td>
<td>–</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>391</strong></td>
<td><strong>367</strong></td>
</tr>
</tbody>
</table>

**MSc**

<table>
<thead>
<tr>
<th>Course</th>
<th>General</th>
<th>Sponsored</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anatomy</td>
<td>1</td>
<td>–</td>
</tr>
<tr>
<td>Biochemistry</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Biophysics</td>
<td>1</td>
<td>–</td>
</tr>
<tr>
<td>Perfusion Technology</td>
<td>3</td>
<td>–</td>
</tr>
<tr>
<td>Biotechnology</td>
<td>18</td>
<td>2</td>
</tr>
<tr>
<td>Nuclear Medicine Technology</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Pharmacology</td>
<td>5</td>
<td>–</td>
</tr>
<tr>
<td>Physiology</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Urology Technology</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>
MSc Nursing
Oncological Nursing 4 –
Cardiological/CTVS Nursing 4 –
Nephrological Nursing 4 –
Neurosciences Nursing 4 –
Paediatric Nursing 4 –
Psychiatric Nursing 4 –
Critical Care Nursing 3 2
TOTAL 76 68 8

Salaries: The present salary of residents, as recommended by the Fifth Pay Commission is:

Junior Residents Rs 9400–9725–10050 plus allowances as per rules
Senior Residents Rs 10940–11295–11050 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 447 short- and 6 long-term trainees. In addition 26 WHO Fellows (Foreign Nationals) under the WHO fellowship programme and 48 foreign trainees and 32 WHO Fellows (Indian Nationals) for WHO-In-Country Fellowship training programme (2006–2007) were imparted training in various departments. The elective posting of foreign undergraduate medical students is also handled by the section. During the year, 75 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:

Staff Council 1 09.01.2007
Dean’s Committee 1 28.08.2006
Faculty Meetings 11 18.04.2006
08.08.2006
19.09.2006
17.10.2006
07.11.2006
21.11.2006
16.01.2007
06.02.2007
20.02.2007
06.03.2007
20.03.2007

RESEARCH
Intramural research funds and its allocation are handled by the Section. The details of intramural research conducted during the year are given in Appendix I.

1. The research grant allocated to faculty members ranges from Rs 25,000 to Rs 50,000 per annum depending on the research project.
2. Project review by specialty review groups—15 March.
3. Final recommendations of the Research Committee—31 March.

ORATIONS
The Academic Section organized the following Orations during 2006–2007.

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of Oration</th>
<th>Name of Orator</th>
<th>Date of Oration, Time and Venue</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Second Professor Kesho Ram Laumas Memorial Oration</td>
<td>Dr Chander P. Puri, Director, National Institute for Research in Reproductive Health, Indian Council of Medical Research, Jehangir Merwanji Street, Parel, Mumbai 400012</td>
<td>Monday, 6 November 2006 at 4.00 pm in LT-I, AIIMS</td>
</tr>
<tr>
<td>2.</td>
<td>Eighteenth AIIMS Silver Jubilee Oration</td>
<td>Dr Vinay Kumar, MB, BS, MD, FRCPath, Alice Hogge and Arthur A. Baer Professor, Chairman, Department of Pathology, Vice-Dean of Biologic Sciences Division and Pritzker Medical School, University of Chicago</td>
<td>Thursday, 23 November 2006 at 4.00 pm in LT-I, AIIMS</td>
</tr>
<tr>
<td>3.</td>
<td>Seventeenth Sarveshwari Memorial Oration</td>
<td>Professor Arnold Menezes, Vice-Chairman, Department of Neurosurgery, University of IOWA, USA</td>
<td>Wednesday, 14 February 2007 at 4.00 pm in LT-I, AIIMS</td>
</tr>
</tbody>
</table>
### Statement of Institute Research Grant for the year 2006–2007

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name, Designation</th>
<th>Department</th>
<th>Title</th>
<th>Amount</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Suman Bhasker, Assistant Professor</td>
<td>BRA IRCH</td>
<td>A study of acute radiation toxicity in patient of curable head and neck cancers undergoing radical versus postoperative radiotherapy</td>
<td>1,00,000</td>
<td>2 years</td>
</tr>
<tr>
<td>2.</td>
<td>Deepak Agrawal, Assistant Professor</td>
<td>Neurosurgery</td>
<td>Acute thalamic involvement in severe head injury: An autopsy study with histopathological correlation</td>
<td>60,000</td>
<td>3 years</td>
</tr>
<tr>
<td>3.</td>
<td>M. Vanathi, Assistant Professor</td>
<td>Ophthalmology, Dr. R.P. Centre</td>
<td>Topical application of new antifungal agent (micafungin) in the treatment of fungal corneal ulcers</td>
<td>60,000</td>
<td>2 years</td>
</tr>
<tr>
<td>4.</td>
<td>Ramesh Agarwal, Assistant Professor</td>
<td>Paediatrics</td>
<td>Correlation of cord serum retinol level in preterm very low birth weight infants with maternal serum retinol level at delivery</td>
<td>1,00,000</td>
<td>1 year</td>
</tr>
<tr>
<td>5.</td>
<td>Sushma, Assistant Professor</td>
<td>Surgery</td>
<td>Prospective study to evaluate the role of Helicobacter pylori in benign and malignant hepatobiliary disease</td>
<td>60,000</td>
<td>2 years</td>
</tr>
<tr>
<td>6.</td>
<td>Rachna Seth, Assistant Professor</td>
<td>Paediatrics</td>
<td>Assessment of psychosocial and neurocognitive outcomes in childhood leukemias</td>
<td>67,000</td>
<td>3 years</td>
</tr>
<tr>
<td>7.</td>
<td>Viveka P. Jyotsna, Assistant Professor</td>
<td>Endocrinology and Metabolism</td>
<td>Bone health in patients of hyperthyroid Graves disease in relation to: a) Duration of thyrotoxicosis b) Improvement after patient becomes euthyroid</td>
<td>45,000</td>
<td>2 years</td>
</tr>
<tr>
<td>8.</td>
<td>Ritu Gupta, Assistant Professor</td>
<td>Laboratory Oncology, BRA IRCH</td>
<td>Assessment of multi-drug resistance pattern in acute myeloid leukemia and response to therapy</td>
<td>90,000</td>
<td>2 years</td>
</tr>
<tr>
<td>No.</td>
<td>Name</td>
<td>Department</td>
<td>Title</td>
<td>Funding (Rs)</td>
<td>Duration</td>
</tr>
<tr>
<td>-----</td>
<td>-------------------------------</td>
<td>---------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>--------------</td>
<td>----------</td>
</tr>
<tr>
<td>9.</td>
<td>Minati Choudhury, Assistant Professor</td>
<td>Cardiac Anaesthesia C.T.C.</td>
<td>Imbalance between endothelin-I and plasma nitric oxide products influences the outcome in children suffering from severe pulmonary hypertension due to congenital heart disease</td>
<td>1,00,000</td>
<td>3 years</td>
</tr>
<tr>
<td>10.</td>
<td>Kalpana Luthra, Associate Professor</td>
<td>Biochemistry</td>
<td>HIV-1 resistance conferring polymorphisms in DC-SIGN in high-risk individuals: A pilot study</td>
<td>1,45,000</td>
<td>2 years</td>
</tr>
<tr>
<td>11.</td>
<td>Ramakrishnan, Assistant Professor</td>
<td>Cardiology</td>
<td>Evaluation of NT-pro-BNP levels in the differentiation of constrictive pericarditis from restrictive cardiomyopathy</td>
<td>55,000</td>
<td>2 years</td>
</tr>
<tr>
<td>12.</td>
<td>Binod K. Khaitan, Associate Professor</td>
<td>Dermatology and Venereology</td>
<td>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</td>
<td>95,000</td>
<td>1 year</td>
</tr>
<tr>
<td>13.</td>
<td>R. Goswami, Associate Professor</td>
<td>Endocrinology and Metabolism</td>
<td>Calcium sensing receptor gene sequence analysis in patients with sporadic idiopathic hypoparathyroidism in India</td>
<td>98,000</td>
<td>1 year</td>
</tr>
<tr>
<td>14.</td>
<td>Govind K. Makharia, Assistant Professor</td>
<td>Gastroenterology</td>
<td>Screening of patients with functional bowel disease, short stature, metabolic bone disease, amenorrhea and infertility for celiac disease</td>
<td>47,000</td>
<td>2 years</td>
</tr>
<tr>
<td>15.</td>
<td>Neeti Makhija, Associate Professor</td>
<td>Cardiac Anaesthesia</td>
<td>Role of coenzyme Q 10 and alpha lipoic acid in attenuating the oxidative stress &amp; systemic inflammatory response in patients undergoing coronary artery bypass graft surgery</td>
<td>1,00,000</td>
<td>3 years</td>
</tr>
<tr>
<td>16.</td>
<td>Sanjay Kumar Sood, Assistant Professor</td>
<td>Physiology</td>
<td>Neural correlates of conflict: An event related functional magnetic resonance imaging study</td>
<td>80,000</td>
<td>2 years</td>
</tr>
<tr>
<td>No.</td>
<td>Name of the Investigator, Position</td>
<td>Department</td>
<td>Title of the Research Project</td>
<td>Duration</td>
<td>Funding (Rs)</td>
</tr>
<tr>
<td>-----</td>
<td>-----------------------------------</td>
<td>------------</td>
<td>-------------------------------</td>
<td>----------</td>
<td>--------------</td>
</tr>
<tr>
<td>17.</td>
<td>Vandana Jain, Assistant Professor</td>
<td>Paediatrics</td>
<td>Vitamin D status of exclusively breastfed term healthy infants at a mean age of 3 months and its correlation with maternal vitamin D status</td>
<td>1 year</td>
<td>1,00,000</td>
</tr>
<tr>
<td>18.</td>
<td>Rajeev Kumar, Assistant Professor</td>
<td>Urology</td>
<td>Homocysteine: A marker of male infertility</td>
<td>2 years</td>
<td>1,00,000</td>
</tr>
<tr>
<td>19.</td>
<td>Anant Mohan, Assistant Professor</td>
<td>Medicine</td>
<td>Effect of feeding pectin on blood glucose level and antioxidant enzyme status in type 2 diabetes (NIDDM)</td>
<td>2 years</td>
<td>1,00,000</td>
</tr>
<tr>
<td>20.</td>
<td>Virinder Kumar Bansal, Assistant Professor</td>
<td>Surgery</td>
<td>Prospective case-control study to evaluate the role of Glutathione S transferases (GSTT 1 and GSTM 1) gene deletion in breast carcinoma and its prognostic significance</td>
<td>1 year</td>
<td>20,000</td>
</tr>
<tr>
<td>21.</td>
<td>Raj Kumar Yadav, Assistant Professor</td>
<td>Physiology</td>
<td>Autonomic status and leptin levels in serum and peritoneal fluid of patients with pelvic endometriosis (EM)</td>
<td>1 year</td>
<td>1,00,000</td>
</tr>
<tr>
<td>22.</td>
<td>Sandeep Seth, Associate Professor</td>
<td>Cardiology</td>
<td>Screening for preclinical hypertrophic cardiomyopathy (HCM) by tissue Doppler imaging</td>
<td>3 years</td>
<td>30,000</td>
</tr>
<tr>
<td>23.</td>
<td>Anjana Talwar, Assistant Professor</td>
<td>Physiology</td>
<td>The effect of smoking on stress-induced changes in cognitive functions</td>
<td>2 years</td>
<td>1,00,000</td>
</tr>
<tr>
<td>24.</td>
<td>J.P.K. Katyal, Assistant Professor</td>
<td>Pharmacology</td>
<td>Pharmacokinetics interaction between thalidomide and dexamethasone in patients with multiple myeloma</td>
<td>1 year</td>
<td>41,200</td>
</tr>
<tr>
<td>25.</td>
<td>Ashutosh Halder, Assistant Professor</td>
<td>Reproductive Biology</td>
<td>An investigation on chromosome mosaicism and aneuploidy on preimplantation embryos</td>
<td>1 year</td>
<td>60,000</td>
</tr>
<tr>
<td>26.</td>
<td>Anushree Gupta, Assistant Professor</td>
<td>Biotechnology</td>
<td>Modulation of endothelin-1 in coronary artery bypass grafting patients imparted with pre-operative relaxation therapy</td>
<td>1 year</td>
<td>1,00,000</td>
</tr>
<tr>
<td>No.</td>
<td>Name</td>
<td>Department</td>
<td>Project Title</td>
<td>Funding (in Rs.)</td>
<td>Duration</td>
</tr>
<tr>
<td>------</td>
<td>---------------------</td>
<td>-----------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>27.</td>
<td>Sarma Singh</td>
<td>Laboratory Medicine</td>
<td>To study the immunogenic effect of kinesin motor domain gene against visceral</td>
<td>1,00,000</td>
<td>2 years</td>
</tr>
<tr>
<td>28.</td>
<td>Surender Singh</td>
<td>Pharmacology</td>
<td>Evaluation of anti-inflammatory activity of plant lipids containing-linolenic acid</td>
<td>1,05,000</td>
<td>1 year</td>
</tr>
<tr>
<td>29.</td>
<td>Tanuj Dada</td>
<td>Ophthalmology Dr. R.P. Centre</td>
<td>Mutation spectrum of the CYPIBI gene in North Indian primary congenital glaucoma patients</td>
<td>1,00,000</td>
<td>3 years</td>
</tr>
<tr>
<td>30.</td>
<td>Rima Dada</td>
<td>Anatomy</td>
<td>Mutation in the oxidative phosphorylation (oxphos) pathway and spermatogenic arrest in infertile males</td>
<td>1,25,000</td>
<td>2 years</td>
</tr>
<tr>
<td>31.</td>
<td>Madhuri Behari</td>
<td>Neurology</td>
<td>Effect of dehydroepiandrosterone sulfate (DHEA-S) on EEG of the cortex and striatum after dopaminergic priming in the 6-OHDA rat model of Parkinson disease</td>
<td>55,000</td>
<td>2 years</td>
</tr>
<tr>
<td>32.</td>
<td>Venkateswaran K. Iyer</td>
<td>Pathology</td>
<td>Evaluation of chromosome 1p and 11p deletions in hepatoblastoma and hepatocellular carcinoma</td>
<td>1,25,000</td>
<td>3 years</td>
</tr>
<tr>
<td>33.</td>
<td>Kh Reeta</td>
<td>Pharmacology</td>
<td>Evaluation of the effect of curcumin on phenytoin induced cognitive impairment and oxidative stress in rats</td>
<td>1,06,000</td>
<td>1 year</td>
</tr>
<tr>
<td>34.</td>
<td>Taposh K. Das</td>
<td>Anatomy</td>
<td>Ultrastructural localization of proteins modified by fluoride-induced lipid peroxidation, and to study the preventive role of dietary antioxidants</td>
<td>1,00,000</td>
<td>1 year</td>
</tr>
<tr>
<td>35.</td>
<td>Radhika Tandon</td>
<td>Ophthalmology Dr. R.P. Centre</td>
<td>Culture of human retinal pigment epithelial (hRPE) cells on human amniotic membrane (hAM)</td>
<td>40,000</td>
<td>2 years</td>
</tr>
<tr>
<td>36.</td>
<td>Suman Jain</td>
<td>Physiology</td>
<td>Histochemical investigations into the possible neural substrates responsible for sucrose-induced pain modulation</td>
<td>1,00,000</td>
<td>1 year</td>
</tr>
<tr>
<td>No.</td>
<td>Name</td>
<td>Department</td>
<td>Title</td>
<td>Funding (in Rs)</td>
<td>Duration</td>
</tr>
<tr>
<td>-----</td>
<td>------------------</td>
<td>-------------------</td>
<td>----------------------------------------------------------------------</td>
<td>----------------</td>
<td>----------</td>
</tr>
<tr>
<td>37</td>
<td>Sandeep Mathur,</td>
<td>Pathology</td>
<td>Utility of immunocytochemistry using antibodies to calretinin and Ber-EP4 in distinguishing reactive mesothelial cell proliferation from metastatic adenocarcinoma</td>
<td>65,000</td>
<td>1 year</td>
</tr>
<tr>
<td></td>
<td>Assistant Professor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>D.S. Arya</td>
<td>Pharmacology</td>
<td>Pharmacological studies on thalidomide in ischaemia reperfusion model of myocardial infarction in rats</td>
<td>50,000</td>
<td>1 year</td>
</tr>
<tr>
<td></td>
<td>Assistant Professor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>Vijay L. Kumar,</td>
<td>Pharmacology</td>
<td>Studies on the effect of latex of calotropis procera against renal complications in diabetes</td>
<td>30,000</td>
<td>1 year</td>
</tr>
<tr>
<td></td>
<td>Professor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>Arundhati Sharma,</td>
<td>Anatomy</td>
<td>Mutation analysis of the 5q31-linked autosomal dominant corneal dystrophies in the North Indian patients</td>
<td>80,000</td>
<td>1 year</td>
</tr>
<tr>
<td></td>
<td>Associate Professor of Genetics</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>41</td>
<td>Ratna Sharma,</td>
<td>Physiolog</td>
<td>The effect of stress-induced changes in theta and alpha bands during memory retrieval</td>
<td>1,00,000</td>
<td>2 years</td>
</tr>
<tr>
<td></td>
<td>Associate Professor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>42</td>
<td>N.C. Chandra,</td>
<td>Biochemistry</td>
<td>To study the role of insulin, oestradiol and epidermal growth factor on the transcriptional regulation of LDL-receptor (LDLR)</td>
<td>1,00,000</td>
<td>1 year</td>
</tr>
<tr>
<td></td>
<td>Assistant Professor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>43</td>
<td>T.C. Nag.</td>
<td>Anatomy</td>
<td>Localization of markers of oxidative phosphorylation in the ageing human photoreceptors: An immunohistochemical study</td>
<td>50,000</td>
<td>1 year</td>
</tr>
<tr>
<td></td>
<td>Assistant Professor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>44</td>
<td>Neena Malhotra,</td>
<td>Obstetrics and Gynaecology</td>
<td>Level of angiogenics cytokinines (Interleukin II-8 and leptin) in peritoneal fluid of Indian women with endometriosis</td>
<td>60,000</td>
<td>1 year</td>
</tr>
<tr>
<td></td>
<td>Associate Professor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>45</td>
<td>Immaculata Xess,</td>
<td>Microbiology</td>
<td>Rapid detection technique in candidemia in critically ill patients and its therapeutic outcome</td>
<td>80,000</td>
<td>1 year</td>
</tr>
<tr>
<td></td>
<td>Associate Professor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>46</td>
<td>Sameer Bakhshi,</td>
<td>Pediatric Oncology</td>
<td>Study of her2-neu and p-53 expression in osteosarcoma by immunohistochemical methods</td>
<td>1,00,000</td>
<td>1 year</td>
</tr>
<tr>
<td></td>
<td>Associate Professor</td>
<td>IRCH</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No.</td>
<td>Name</td>
<td>Department</td>
<td>Title</td>
<td>Budget (in Rs)</td>
<td>Duration</td>
</tr>
<tr>
<td>-----</td>
<td>-----------------------</td>
<td>------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------</td>
<td>----------------</td>
<td>----------</td>
</tr>
<tr>
<td>47</td>
<td>S.B. Ray, Additional</td>
<td>Anatomy</td>
<td>Role of cyclic AMP response element-binding (CREB) protein expression in the spinal cord of rat in nimodipine induced potentiation of morphine analgesia: An immunohistochemical study</td>
<td>99,600</td>
<td>2 years</td>
</tr>
<tr>
<td>48</td>
<td>Seema Tyagi, Associate</td>
<td>Haematology</td>
<td>Molecular cytogenetics in myelodysplastic syndromes and acute myeloid leukemia: Diagnosis and prognostic significance</td>
<td>53,000</td>
<td>1 year</td>
</tr>
<tr>
<td>49</td>
<td>Rohit Saxena, Assistant</td>
<td>Ophthalmology</td>
<td>Evaluation of various parameters for early detection of ethambutol induced optic neuropathy and correlating them with serum levels of ethambutol</td>
<td>46,150</td>
<td>1 year</td>
</tr>
<tr>
<td>50</td>
<td>K. Anand, Assistant</td>
<td>Community Medicine</td>
<td>School-based healthy lifestyle programme in Ballabgarh town</td>
<td>1,00,000</td>
<td>10 months</td>
</tr>
<tr>
<td>51</td>
<td>Y.S. Kusuma, Assistant</td>
<td>Community Medicine</td>
<td>Social and cultural dimensions of hypertension in neo-and settled migrants in Delhi: A preliminary study</td>
<td>97,000</td>
<td>1 year</td>
</tr>
<tr>
<td>52</td>
<td>Sanjeev Kumar Gupta</td>
<td>Community Medicine</td>
<td>Rapid assessment of prevalence of hypertension and diabetes mellitus and their risk factors in rural Ballabgarh</td>
<td>1,00,000</td>
<td>1 year</td>
</tr>
<tr>
<td>53</td>
<td>Vinay Goyal, Associate</td>
<td>Neurology</td>
<td>To study the bone mineral status and prevalence of osteoporosis and osteomalacia in patients taking valproic acid monotherapy</td>
<td>50,000</td>
<td>1 year</td>
</tr>
<tr>
<td>54</td>
<td>P.K. Chaturvedi, Assistant</td>
<td>Reproductive Biology</td>
<td>Effect of cryo-freezing on human spermatozoa Sperm functions and ultrastucture study</td>
<td>50,0000</td>
<td>2 years</td>
</tr>
<tr>
<td>55</td>
<td>Lakshmy Ramakrishnan</td>
<td>Cardiac Biochemistry</td>
<td>Development of long-acting penicillins for rheumatic fever prophylaxis: Preliminary evaluation of the current 3 weekly schedule in</td>
<td>50,000</td>
<td>1 year</td>
</tr>
<tr>
<td>No.</td>
<td>Name</td>
<td>Department</td>
<td>Title</td>
<td>Amount (Rs)</td>
<td>Duration</td>
</tr>
<tr>
<td>-----</td>
<td>-------------------------------</td>
<td>-----------------------</td>
<td>----------------------------------------------------------------------</td>
<td>-------------</td>
<td>----------</td>
</tr>
<tr>
<td>56</td>
<td>T. Velpandian, Assistant Prof</td>
<td>Ocular Pharmacology</td>
<td>Evaluation of the role of retinal P-glycoprotein drug transporters in the ocular disposition of drugs</td>
<td>48,000</td>
<td>2 years</td>
</tr>
<tr>
<td>57</td>
<td>Jasbir Kaur, Assistant Prof</td>
<td>Ocular, Biochemistry</td>
<td>Expression of p53 and mdm2 in human malignant eyelid tumours</td>
<td>50,000</td>
<td>2 years</td>
</tr>
<tr>
<td>58</td>
<td>Manju Aron, Assistant Prof</td>
<td>Pathology</td>
<td>Diagnostic utility of Hep Parl pCEA and CD34 in differentiating non-neoplastic and metastatic liver lesions from primary hepatocellular carcinoma in fine needle aspiration samples</td>
<td>50,000</td>
<td>3 years</td>
</tr>
<tr>
<td>59</td>
<td>Jagriti Bhatia, Assistant Prof</td>
<td>Pharmacology</td>
<td>Evaluation of terminalia arjuna as a potential ‘prophylactic antihypertensive’</td>
<td>70,000</td>
<td>1 year</td>
</tr>
<tr>
<td>60</td>
<td>Pankaj Hari, Assistant Prof</td>
<td>Paediatrics</td>
<td>Serum, cystatin C assay for the detection of early renal insufficiency in malnourished children with chronic kidney disease</td>
<td>10,000</td>
<td>2 years</td>
</tr>
<tr>
<td>61</td>
<td>Poonam Malhotra Kapoor, Assistant Prof</td>
<td>Cardiac Anaesthesia C.N.C.</td>
<td>Audit of early goal directed therapy in patients undergoing cardiac surgery</td>
<td>1,25,000</td>
<td>2 years</td>
</tr>
</tbody>
</table>

Total funds available : Rs 50,00,000  
Total allocated      : Rs 47,22,950  
Balance              : Rs 2,77,050
## 4. Examination Section

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dean (Exams)</strong></td>
<td>T.P. Singh</td>
<td>(01.04.2006 to 31.08.2006)</td>
</tr>
<tr>
<td></td>
<td>T.D. Dogra</td>
<td>(01.09.2006 to 31.03.2007)</td>
</tr>
<tr>
<td><strong>Professor-in-charge (Exams)</strong></td>
<td>K.K. Deepak</td>
<td></td>
</tr>
<tr>
<td><strong>Sub-Dean (Exams)</strong></td>
<td>K.K. Deepak</td>
<td>(01.04.2006 to 11.09.2006)</td>
</tr>
<tr>
<td></td>
<td>A.K. Dinda</td>
<td>(12.09.2006 to 31.03.2007)</td>
</tr>
<tr>
<td><strong>Assistant Controller of Exams</strong></td>
<td>Rajesh Bharadwaj</td>
<td>(01.04.2006 to 03.07.2006)</td>
</tr>
<tr>
<td></td>
<td>K.M. Gupta (officiating)</td>
<td>(04.07.2006 to 30.09.2006)</td>
</tr>
<tr>
<td></td>
<td>R.K. Dabral (officiating)</td>
<td>(01.10.2006 to 31.03.2007)</td>
</tr>
<tr>
<td><strong>Administrative Officer</strong></td>
<td>K.M. Gupta</td>
<td>(01.04.2006 to 30.09.2006)</td>
</tr>
<tr>
<td></td>
<td>R.K. Dabral</td>
<td>(23.08.2006 to 31.03.2007)</td>
</tr>
<tr>
<td><strong>Accounts Officer</strong></td>
<td>N.K. Bajaj</td>
<td></td>
</tr>
</tbody>
</table>

During the period under review (2006–2007), the Examination Section conducted the following Professional and Entrance Examinations.

### POSTGRADUATE AND UNDERGRADUATE EXAMINATIONS

Details of various undergraduate and postgraduate professional examinations conducted by AIIMS from 1.4.2006 to 31.3.2007.
<table>
<thead>
<tr>
<th>S. No.</th>
<th>Month and Year</th>
<th>Examination</th>
<th>Number of students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Appeared</td>
</tr>
<tr>
<td>1</td>
<td>MAY 2006</td>
<td>Final Postgraduate/Post-doctoral</td>
<td>110</td>
</tr>
<tr>
<td>2</td>
<td>-do-</td>
<td>MSc (Nursing) Phase I</td>
<td>15</td>
</tr>
<tr>
<td>3</td>
<td>-do-</td>
<td>MSc (Nursing) Phase II</td>
<td>13</td>
</tr>
<tr>
<td>4</td>
<td>-do-</td>
<td>Final MB,BS (Supplementary)</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>-do-</td>
<td>Second MB,BS (Supplementary)</td>
<td>8</td>
</tr>
<tr>
<td>6</td>
<td>-do-</td>
<td>BSc Nursing (Post-certificate), Phase I</td>
<td>16</td>
</tr>
<tr>
<td>7</td>
<td>-do-</td>
<td>BSc Nursing (Post-certificate), Phase II (new scheme)</td>
<td>17</td>
</tr>
<tr>
<td>8</td>
<td>-do-</td>
<td>BSc (Hons) Nursing, Phase I</td>
<td>51</td>
</tr>
<tr>
<td>9</td>
<td>-do-</td>
<td>BSc (Hons) Nursing, Phase II</td>
<td>50</td>
</tr>
<tr>
<td>10</td>
<td>-do-</td>
<td>BSc (Hons) Nursing, Phase III</td>
<td>50</td>
</tr>
<tr>
<td>11</td>
<td>-do-</td>
<td>BSc (Hons) Nursing, Phase IV</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>C.F.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>B.F.</td>
</tr>
<tr>
<td>12</td>
<td>JULY 2006</td>
<td>First Professional MB,BS</td>
<td>56</td>
</tr>
<tr>
<td>13</td>
<td>-do-</td>
<td>BSc (Hons) Ophthalmic Techniques, Phase I</td>
<td>12</td>
</tr>
<tr>
<td>14</td>
<td>-do-</td>
<td>BSc (Hons) Ophthalmic Techniques, Phase II</td>
<td>10</td>
</tr>
<tr>
<td>15</td>
<td>-do-</td>
<td>BSc (Hons) Ophthalmic Techniques, Phase III</td>
<td>8</td>
</tr>
<tr>
<td>16</td>
<td>-do-</td>
<td>BSc (Hons) Medical Technology in Radiography, Phase I</td>
<td>7</td>
</tr>
<tr>
<td>17</td>
<td>-do-</td>
<td>BSc (Hons) Medical Technology in Radiography, Phase II</td>
<td>5</td>
</tr>
<tr>
<td>18</td>
<td>-do-</td>
<td>BSc (Hons) Medical Technology in Radiography, Phase III</td>
<td>3</td>
</tr>
<tr>
<td>19</td>
<td>AUG 2006</td>
<td>First MB,BS Professional (Supplementary)</td>
<td>3</td>
</tr>
<tr>
<td>20</td>
<td>NOV 2006</td>
<td>BSc (Hons) Ophthalmic Techniques, Phase I (Supplementary)</td>
<td>4</td>
</tr>
<tr>
<td>21</td>
<td>-do-</td>
<td>BSc (Hons) Ophthalmic Techniques, Phase II (Supplementary)</td>
<td>6</td>
</tr>
<tr>
<td>22</td>
<td>-do-</td>
<td>BSc (Hons) Ophthalmic Techniques, Phase III (Supplementary)</td>
<td>1</td>
</tr>
<tr>
<td>23</td>
<td>-do-</td>
<td>BSc (Hons) Medical Techniques in Radiography Phase I (Supplementary)</td>
<td>1</td>
</tr>
<tr>
<td>24</td>
<td>DEC 2006</td>
<td>Final Postgraduate/Post-doctoral</td>
<td>114</td>
</tr>
<tr>
<td>25</td>
<td>-do-</td>
<td>MSc (Nursing), Phase I (Supplementary)</td>
<td>1</td>
</tr>
<tr>
<td>26</td>
<td>-do-</td>
<td>Final MB,BS</td>
<td>53</td>
</tr>
<tr>
<td>27</td>
<td>-do-</td>
<td>Second MB,BS</td>
<td>47</td>
</tr>
<tr>
<td>28</td>
<td>-do-</td>
<td>BSc Nursing (Post-certificate), Phase I (Supplementary)</td>
<td>4</td>
</tr>
<tr>
<td>29</td>
<td>-do-</td>
<td>BSc Nursing (Post-certificate), Phase II</td>
<td>1</td>
</tr>
<tr>
<td>S. No.</td>
<td>Month and Year</td>
<td>Examination</td>
<td>Number of students</td>
</tr>
<tr>
<td>-------</td>
<td>----------------</td>
<td>-------------</td>
<td>-------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Appeared</td>
</tr>
<tr>
<td>30</td>
<td>-do- BSc (Hons) Nursing, Phase I (Supplementary)</td>
<td>1</td>
<td>–</td>
</tr>
<tr>
<td>31</td>
<td>-do- BSc (Hons) Nursing, Phase II (Supplementary)</td>
<td>1</td>
<td>–</td>
</tr>
<tr>
<td>32</td>
<td>-do- BSc (Hons) Nursing, Phase III (Supplementary)</td>
<td>4</td>
<td>–</td>
</tr>
<tr>
<td>33</td>
<td>-do- BSc (Hons) Nursing, Phase IV (Supplementary)</td>
<td>5</td>
<td>–</td>
</tr>
<tr>
<td>34</td>
<td>JAN 2007 First MB,BS (Re-examination for failed students)</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>35</td>
<td>FEB 2007 First MB,BS (Compartmental examination)</td>
<td>2</td>
<td>–</td>
</tr>
</tbody>
</table>

Grand Total 731 6 663 64

Entrance Examinations for Undergraduate and Postgraduate courses

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Courses</th>
<th>Date of Examination</th>
<th>Number of students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>MD/MS/MDS (AIIMS) July Session 2006</td>
<td>7 May 2006</td>
<td>15,596</td>
</tr>
<tr>
<td>2.</td>
<td>DM/MCh/MHA July Session 2006</td>
<td>21 May 2006</td>
<td>1,496</td>
</tr>
<tr>
<td>3.</td>
<td>MB,BS (AIIMS) August Session 2006</td>
<td>1 June 2006</td>
<td>75,702</td>
</tr>
<tr>
<td>4.</td>
<td>BSc (Hons) Nursing 2006</td>
<td>18 June 2006</td>
<td>1,926</td>
</tr>
<tr>
<td>5.</td>
<td>BSc Nursing (Post-certificate) 2006</td>
<td>14 June 2006</td>
<td>69</td>
</tr>
<tr>
<td>6.</td>
<td>BSc (Hons) Paramedical Courses 2006</td>
<td>7 June 2006</td>
<td>753</td>
</tr>
<tr>
<td>7.</td>
<td>MSc Courses 2006</td>
<td>8 July 2006</td>
<td>253</td>
</tr>
<tr>
<td>8.</td>
<td>MSc Nursing 2006</td>
<td>1 July 2006</td>
<td>304</td>
</tr>
<tr>
<td>9.</td>
<td>MBiotechnology Entrance Examination 2006</td>
<td>22 July 2006</td>
<td>847</td>
</tr>
<tr>
<td>11.</td>
<td>Senior Residents Entrance Examination July 2006 Session</td>
<td>17 June 2006</td>
<td>503</td>
</tr>
<tr>
<td>12.</td>
<td>MD/MS/MCh (6 years)/MDS (AIIMS) Jan. Session 2007</td>
<td>12 Nov 2006</td>
<td>18,057</td>
</tr>
<tr>
<td>14.</td>
<td>DM/MCh/MHA January Session 2007</td>
<td>17 Dec. 2006</td>
<td>1,682</td>
</tr>
<tr>
<td>15.</td>
<td>All India PG Entrance Exam: MD/MS/Diploma/MDS</td>
<td>14 Jan. 2007</td>
<td>48,458</td>
</tr>
</tbody>
</table>

TOTAL 1,67,148 1,25,829

Examination for recruitment

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Examinations</th>
<th>Date of Examination</th>
<th>Number of students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Sister Grade II</td>
<td>24 Sept. 2006</td>
<td>9,563</td>
</tr>
<tr>
<td>2.</td>
<td>JE (Civil/ Electrical/A/c &amp; Refrigeration)</td>
<td>26 Nov. 2006</td>
<td>1,025</td>
</tr>
<tr>
<td>3.</td>
<td>Jr Accounts Officer</td>
<td>29 April 2006</td>
<td>107</td>
</tr>
</tbody>
</table>

TOTAL 10,695 6,750

Details of entrance examination

Number of entrance exams conducted: 16
Number of applicants: 1,67,148 (One lakh sixty-seven thousand one hundred forty-eight)
Number of candidates appeared: 1,25,829 (One lakh twenty-five thousand eight hundred twenty-nine)
Candidates Passed in PhD Viva-Voce

AIIMS 2006-2007 / 29
SIGNIFICANT EVENTS

The MBiotechnology entrance examination has now been separated from other MSc courses with effect from August 2006 session, in order to facilitate the candidate to apply for other MSc courses as well as for MBiotechnology. The Examination Section has also been conducting the BSc (Speech and Hearing) Entrance Examination of All India Institute of Speech and Hearing, Mysore since 2004. The examination for the year 2006 was held on 3 June 2006.

As a further step towards introduction of more checks and balances, so as to maintain complete confidentiality and integrity of the examination system, question papers for outstation centres are now kept in the safe custody of Sate Bank of India branches. In order to avoid any case of impersonation, all candidates are digitally photographed and thumb impressions obtained during the entrance examination. In addition to this, physical frisking has also been started from the year 2006.

Examination section is also providing technical expertise to various universities and institutions in India and abroad for conducting their entrance examinations.

In All-India PG entrance examination, each candidate was provided a pen to write. This was done to prevent use of any electronic feature inbuilt in the pen carried by them.

Frisking of every candidate on main entrance of the examination centre has been introduced to prevent the usage of electronic gadgets during the examination.

Photography (Snapshot) is being done in cases of doubtful identity of a candidate during the course of the examination.

Cash transaction has been minimized by sending 90%–95% amount through Demand Draft/Bankers cheque in advance to the designated exam centres.

Important entrance examinations conducted

1. All-India PG entrance examination for admission to MD/MS/Diploma/MDS courses against 50% open merit seats quota was held in 103 centres (local 20, outstation 83) in 15 cities of India on 14 January 2007. The results were declared on 15 February 2007.

2. The AIIMS PG entrance examination for admission to the MD/MS/MDS courses for the session starting from July 2006 was conducted in Delhi at 36 centres on 7 May 2006 and 12 November 2006 for January 2007 session at 37 centres. The results were declared on 17 May 2006 and 18 November 2006, respectively.

3. Selections for various Post-doctoral (super-specialty) courses viz. DM/MCh and Masters in Hospital Administration for July 2006 and January 2007 sessions were made on the basis of a three-stage performance evaluation carried out from 21 May 2006 to 26 May 2006 and 17 December 2006 to 22 December 2006, respectively.

4. The Institute also conducted the entrance examination for the post of Senior Residents/Demonstrators on 17 June 2006 and 23 December 2006. All the candidates who had scored 50% or above marks in the written examination were called merit wise for the departmental assessment, which was held on 21 and 22 June 2006 and 27 and 28...
December 2006, respectively. Selection for the post of Senior Residents/Demonstrators is held twice in a year in the months of June and December.

5. Selections of candidates for registration to the PhD programme for July 2006 and January 2007 sessions were held from 15 to 20 July 2006 and 20 to 25 January 2007. The results were declared on 23 July 2006 and 21 January 2007, respectively.

6. The entrance examination for admission to the MB,BS course of AIIMS for August 2006 session was held in 155 centres (local 82, outstation 73) in 10 cities of India on 1 June 2006.

7. The entrance examination for admission to the BSc (Hons) Nursing course was held in Delhi and Thiruvananthapuram on 18 June 2006.

8. The entrance examination for admission to the MSc/MBiotechnology courses for the August 2006 session was held in Delhi on 8 July 2006 and 22 July 2006, respectively.

9. The entrance examination for admission to the MSc Nursing course was introduced from the year 2005. This examination was held on 1 July 2006 in Delhi only. Admission was made by allotment of seats on merit basis through counselling held on 19 July 2006 and 25 July 2006.

10. The entrance examination for admission to the BSc Nursing (Post-certificate) course was held in Delhi on 14 June 2006, followed by the personal assessment of candidates on 16 June 2006.

11. The entrance examination for admission to Paramedical courses—BSc (Hons) Ophthalmic Techniques and BSc (Hons) Medical Technology in Radiography for the August 2006 session was held in Delhi at two centres on 07 June 2006. Admissions to these two courses were made by allotment of seats on merit basis through counselling held on 17 July 2006 and 27 July 2006, respectively.

12. The examination section has also conducted the written/skill test for recruitment to the following posts at the institute:
   i) Written test for the post of Statistical Assistant at AIIMS on 8 April 2006.
   ii) On the direction of Hon’ble Supreme Court of India, MDS Merit Assessment Test of K.M. Shah Dental College and Hospital, Vadodara, Gujarat, was held on 13 September 2006.
   iii) Written test for recruitment to the post of Sister Grade-II at AIIMS was held on 24 September 2006 at 15 centres in Delhi. The interviews were held on 11 November 2006 and 12 November 2006 (two days).
   iv) Skill test for the post of Stenographer was conducted on 14 and 15 October 2006.
   v) Interviews for the post of Lab Technician were conducted by the Examination Section on 18 November 2006 and 19 November 2006.
   vi) The written test for the post of Junior Engineers was conducted on 26 November 2006. The interviews for the post of Junior Engineers were held on 17 January 2007.
   vii) Skill test for departmental candidates for the post of LDC was conducted on 24 March 2007.
viii) Written test for the post of Medical Social Service Officer (MSSO) Grade-II at AIIMS was conducted on 25 March 2007.

**Participation in other events**

1. The Examination Section actively participates in the counselling for admission to the AIIMS Postgraduate, BSc (Hons) Paramedical, MSc (Nursing) courses and interviews for the BSc (Nursing) Post-certificate course.
2. Professor-in-charge (Exam) has been co-ordinating the evaluation of PG students thesis from B.P. Koirala Institute of Health Sciences, Dharan, Nepal.
3. The Institute is also providing assistance in conducting the Entrance Examination for admission to BSc (Hons) Speech and Hearing course of All India Institute of Speech and Hearing, Mysore since the year 2004. This year the examination was conducted on 3 June 2006.
5. General Administration

Deputy Director (Administration)
Debashish Panda, IAS

Chief Administrative Officer
Attar Singh

Senior Administrative Officers
Prem Ballabh  R.D. Pandey  K.M. Gupta
(up to 28.09.2006)  (up to 30.09.2006)
B.S. Sharma  (w.e.f. 15.12.2006 A/N)

Administrative Officers
K.C. Choker  E.L. Lakra  S.K. Vashisht
Sanjay Kumar  Sanjay Kumar  Kundan Kumar
(up to 3.10.2006)  (w.e.f. 1.06.2006)  
K.K. Vaid  Ajay Kumar  R.K. Dabral
(w.e.f. 1.06.2006)  (w.e.f. 20.12.2006)

Administrative Officer (General) and Estate Manager
K.K. Vaid

Deputy Chief Security Officer
Rajiv Lochan

Store Officers
R.L. Prasad (under suspension)  S.S. Bhaduria
K.D. Sharma  Pradeep Kumar Gupta

ENGINEERING SERVICES DEPARTMENT

Superintending Engineer
Rajesh Kumar (up to 28.02.2007)

Executive Engineers
S. Bhasker (Civil-I)  M. Rastogi (Civil-II)  Sanjay Ram (Electrical)
B.S. Anand (Airconditioning)

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 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, employees’ welfare are looked after by the administration.

The total sanctioned staff of AIIMS is 8653, 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>585</td>
<td>469</td>
</tr>
<tr>
<td>2.</td>
<td>Group ‘A’</td>
<td>300</td>
<td>188</td>
</tr>
<tr>
<td>3.</td>
<td>Group ‘B’</td>
<td>696</td>
<td>567</td>
</tr>
<tr>
<td>4.</td>
<td>Group ‘C’</td>
<td>5,200</td>
<td>4,323</td>
</tr>
<tr>
<td>5.</td>
<td>Group ‘D’</td>
<td>1,872</td>
<td>1,538</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>8,653</strong></td>
<td><strong>7,085</strong></td>
</tr>
</tbody>
</table>

The following major works were undertaken during the year.

Construction of Jai Prakash Narayan Apex Trauma Centre at AIIMS
An ultramodern trauma centre of 186 beds capacity has been completed. The facility has been made operational partially w.e.f. November 2006. Presently the casualty with 30 triage beds are functional. Two wards having 60 beds are operational. The diagnostic wing of the Centre housing CT Scan, MRI, Ultrasound, Digital X-Ray, etc. have been made operational. Two state of art operation theatres are also in use. The balance facilities and wards are being put to use in phased a manner.

Developing additional Private wards (57)
A total of 57 deluxe suites have been added in the last year. This have been made functional. Thus presently 117 additional private ward rooms are augmenting the existing 63 private ward rooms in the main hospital.

Additional tower for the C.N. Centre
The ambitious project of C.N. Tower housing 63 private wards has been completed and put to use thus making way for creation of additional bed capacity in the Centre. Also, the rooms earlier used for private wards in the existing C.N. Centre buildings have been vacated and the same are being put to use for alternate patient care facilities. Four new operation theatres have been completed and are in the process of being commissioned.
Construction of the Centre for Dental Education and Research
The 80 dental chaired centre is on the verge of completion and is expected to be commissioned by June 2007.

Covering of nallah on the east side of Ansari Nagar
The covering work of the 600 metre out of the total 1.218 km stretch of nallah is almost complete. The same is expected to be put to use by end of June 2007. This would provide an additional entry access to the Ansari Nagar Campus, thus leading to decongestion of the existing entry points.

Construction of the Surgical Block at AIIMS
The detailed project report of the said centre has been prepared by the consultant. The proposal for the approval of EFC has been sent to the Ministry for accord of sanction. The drawings and plans for the proposed centre have already been finalised. Work would be taken up further on receipt of the approval of the EFC.

Installation of 9 additional lifts in the OPD and wards
CPWD has already engaged a consultant for the said work and submission drawings have been prepared and submitted to NDMC for approval. Tender inviting procedure has already been initiated by the CPWD.

Developing IVF facility at AIIMS
The engineering works pertaining to the said facility have been completed.

Airconditioning of OPD
The main OPD wing of the hospital except for the ground floor and physiotherapy wing, has been provided with central airconditioning in the current year, thus providing relief to the visiting patients and their attendants from the excessive heat and humidity in the crowded consultation rooms and the waiting areas/corridors.

Renovation of Ward/OPD
The OPD of gynecology has been renovated with optimum utilization of space available for care. The same has now been decongested and made aesthetically and clinically more patient friendly. The AB-3, D-7, D-2 (half), AB-8 (recovery area) wards have been remodeled and renovated, in the current year. The work of renovation of C-7 ward is also on verge of completion.

Commissioning of New Mortuary/Forensic department
A new state of art Mortuary building has been commissioned and put to use in the current year. Also the Department of Forensic Sciences and Toxicology have been shifted in the new building with enhanced spaces, facilities for museum, conference room, lecture room, laboratories, etc.
5.1 Office of Liaison Officer

<table>
<thead>
<tr>
<th>Liaison Officer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prof. J.S. Titiyal</td>
</tr>
<tr>
<td>Principal Private Secretary</td>
</tr>
<tr>
<td>Mr. Tej Bir Singh</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SC/ST Cell, AIIMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office Superintendent</td>
</tr>
<tr>
<td>Mr. Prakash Singh</td>
</tr>
<tr>
<td>UDC</td>
</tr>
<tr>
<td>Mr. Harish Ahuja</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SC/ST Students Cell (Academic Section)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office Superintendent</td>
</tr>
<tr>
<td>Mr. Somdutt</td>
</tr>
<tr>
<td>UDC</td>
</tr>
</tbody>
</table>

Mr. Narottam Anand

Dr. J.S. Titiyal, Professor of Ophthalmology took over as Liaison Officer, AIIMS as per order of Director, AIIMS in October, 2005.

Office of Liaison Officer

The AIIMS administration introduced a separate SC/ST cell working under the administrative control of Liaison Officer in administrative block of AIIMS for the welfare of SC/ST employees. First Liaison Officer Mr. S.R. Chakravorty, F&CAO was appointed by the Director, AIIMS in 1981 and till 2003, grievances of SC/ST employees was being looked after in the establishment section itself.

Main aim to appoint a Liaison Officer is to look after the grievances of SC/ST candidates in their service matters and to ascertain that vacant reserved posts for SC/ST candidates in various category group the A, B, C & D are filled and proper reservation is identified in newly created posts as pen reservation roster decided by Govt. of India in promotion through DPC and in open competitive examinations.

Prof. Sukhadeo Thorat, Chairman, UGC and Chairman of a committee to look into the complaints from Member of Parliament, media reports and other representations on the
alleged harassment to SC/ST students in AIIMS visited on 8th December, 2006. It was apprised of the reasons of resentment amongst the reserved students.

SC/ST student cell in Academic Section
As per suggestions of Mr. K.M. Shyam Prasad, one SC/ST cell has also been formed in March, 2007 in the academic section to look after the grievances of Undergraduate and Post-graduate students.

Departmental Promotion Committee
All files of group A,B,C & D category (except faculty posts) pertain to DPC or posts for advertisement for direct recruitment are examined by the Liaison Officer prior to holding of DPC meeting. The Liaison Officer is also appointed as one of the members of the selection committee in DPCs as a representative of SC/ST category in the selection committee meetings are held.

Grievances
During the year 2006-2007 (1st April, 2006 – 31st March 2007) various representations were received from the candidates of SC/ST category regarding their departmental promotion, anomaly in fixing their seniority at appropriate place in the cadre for the purpose of promotion and appointment on compassionate grounds of deceased employee dependants. Most of the cases were discussed with the Senior Administrative Officer(Rectt.), Chief Admn. Officer and Deputy Director (Admn.) to solve the problems of the employees.
6. Hospital

Medical Superintendent
D.K. Sharma

Additional Professor
Siddhartha Satpathy (Department of Hospital Administration)

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

GENERAL INFORMATION

<table>
<thead>
<tr>
<th>Item</th>
<th>Current year</th>
<th>Past year</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of beds</td>
<td>1,428</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main Hospital and private wards</td>
<td>1,043</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bassinets</td>
<td>25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CNC</td>
<td>360</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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>4.8</td>
<td>5.4</td>
<td>Indicates effective utilization of beds</td>
</tr>
<tr>
<td>Average bed occupancy rate (%)</td>
<td>77.4</td>
<td>82.4</td>
<td>Indicates fair occupancy</td>
</tr>
<tr>
<td>Net death rate (%)</td>
<td>2.5</td>
<td>3.0</td>
<td>Indicates low mortality rate despite the fact that a large number of critically ill patients are admitted to the hospital</td>
</tr>
<tr>
<td>Combined crude infection rate</td>
<td>7.63</td>
<td>8.48</td>
<td></td>
</tr>
</tbody>
</table>

Please see Appendix I and II for details
6.1 Medical Records Services (Hospital)

Chief Medical Record Officer
and
Sub-Registrar, Births and Deaths

N.K. Sharma

Education and Training
Shri G.V. Vishnu Kumar, Statistical Assistant was deputed for one week for training in coding of Indoor Cases and Deaths on the basis of ICD-10 volume of WHO under guidance of Shri N.K. Sharma.

Shri Ashish Kumar, MRT, Ms Rekha Kaushal, DEO, Grade A and Ms Pooja Pandey, LDC had attended Training by NDMC for on-line Registration of Birth and Death Records.

During the year, a group of 15 doctors of Border Security Force and a group of students of the Medical Records Degree and Diploma from St. Stephens Hospital, New Delhi visited the Medical Records Section.

Meetings
Three Casualty Death Review Committee meetings were held in the year 2006–07.

Court attendance
A total of 1894 summons (average 6 summons per day) were attended to by the Medical Records Personnel in Delhi and outside Delhi.

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

Inpatient Services
The hospital has maintained its tradition of services and quality of patient care, in spite of ever increasing number of patients that come to this hospital from all over the country as well as from abroad. A total of 79,171 patients were admitted during the year in the various
clinical units of the Main Hospital and CNC. The department-wise, state-wise and gender-wise admissions are given in Appendix III and IV. 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 retrieval. All in-patient records of the C.N. Centre are maintained by the Medical Records 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 enquiries regarding patients, departments, doctors and centres are provided from this office.

This office functions round the clock, i.e. 365 days × 24 hours. Therefore, the staff works in shifts. This office is manned by the Junior Reception Officer, Receptionist, Medical Records Technicians and other ministerial and hospital staff.

**Outpatient department and specialty clinics**
A total of 15,25,410 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.
<table>
<thead>
<tr>
<th>Main Hospital</th>
<th>CNC</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total patient admitted</strong></td>
<td>61,318</td>
<td>17,853</td>
</tr>
<tr>
<td>a. Adults and children</td>
<td>59,468</td>
<td>—</td>
</tr>
<tr>
<td>b. Newborn infants</td>
<td>1,850</td>
<td>—</td>
</tr>
<tr>
<td><strong>Total number of patients discharged</strong></td>
<td>55,568</td>
<td>14,401</td>
</tr>
<tr>
<td>a. Adult and children</td>
<td>54,072</td>
<td>—</td>
</tr>
<tr>
<td>b. Newborn infants</td>
<td>1,496</td>
<td>—</td>
</tr>
<tr>
<td><strong>Total days of care</strong></td>
<td>265,165</td>
<td>86,113</td>
</tr>
<tr>
<td>a. Adult and children</td>
<td>255,532</td>
<td>—</td>
</tr>
<tr>
<td>b. Newborn infants</td>
<td>9,633</td>
<td>—</td>
</tr>
<tr>
<td><strong>Average length of stay (ALS)</strong></td>
<td>4.8</td>
<td>6.0</td>
</tr>
<tr>
<td>a. Adults and children</td>
<td>4.7</td>
<td>—</td>
</tr>
<tr>
<td>b. Newborn infants</td>
<td>6.4</td>
<td>—</td>
</tr>
<tr>
<td><strong>Total number of patient care days in hospital (as per daily census)</strong></td>
<td>289,124</td>
<td>109,092</td>
</tr>
<tr>
<td>a. Adults and children</td>
<td>283,912</td>
<td>—</td>
</tr>
<tr>
<td>b. Newborn infants</td>
<td>5,212</td>
<td>—</td>
</tr>
<tr>
<td><strong>Daily average number of patients</strong></td>
<td>792</td>
<td>299</td>
</tr>
<tr>
<td>a. Adults and children</td>
<td>778</td>
<td>—</td>
</tr>
<tr>
<td>b. Newborn infants</td>
<td>14</td>
<td>—</td>
</tr>
<tr>
<td><strong>Average bed occupancy (%)</strong></td>
<td>75.5</td>
<td>83.1</td>
</tr>
<tr>
<td>a. Adults and children</td>
<td>76.0</td>
<td>—</td>
</tr>
<tr>
<td>b. Newborn infants</td>
<td>56.0</td>
<td>—</td>
</tr>
<tr>
<td><strong>Births in hospital</strong></td>
<td>1,850</td>
<td>—</td>
</tr>
<tr>
<td>a. Male babies</td>
<td>985</td>
<td>—</td>
</tr>
<tr>
<td>b. Female babies</td>
<td>864</td>
<td>—</td>
</tr>
<tr>
<td>c. Intersex</td>
<td>1</td>
<td>—</td>
</tr>
<tr>
<td><strong>Total deaths (including newborns)</strong></td>
<td>1,969</td>
<td>1,047</td>
</tr>
<tr>
<td>a. Death under 48 hours</td>
<td>621</td>
<td>268</td>
</tr>
<tr>
<td>b. Death over 48 hours</td>
<td>1,348</td>
<td>779</td>
</tr>
<tr>
<td>c. Gross death rate (%)</td>
<td>3.5</td>
<td>7.3</td>
</tr>
<tr>
<td>d. Net death rate (%)</td>
<td>2.5</td>
<td>5.5</td>
</tr>
</tbody>
</table>
## APPENDIX II

<table>
<thead>
<tr>
<th>S. No</th>
<th>Departments/Sections</th>
<th>Admissions</th>
<th>Discharges</th>
<th>Days of care</th>
<th>Average length of stay</th>
<th>Total deaths</th>
<th>Deaths under 48 hrs</th>
<th>Deaths over 48 hrs</th>
<th>Gross deaths (Rate in %)</th>
<th>Net deaths (Rate in %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Medicine</td>
<td>4,136</td>
<td>3,515</td>
<td>28,202</td>
<td>8.0</td>
<td>694</td>
<td>244</td>
<td>450</td>
<td>19.7</td>
<td>13.8</td>
</tr>
<tr>
<td>2</td>
<td>Endocrinology</td>
<td>405</td>
<td>333</td>
<td>5,486</td>
<td>16.5</td>
<td>11</td>
<td>2</td>
<td>9</td>
<td>3.3</td>
<td>2.7</td>
</tr>
<tr>
<td>3</td>
<td>Gastroenterology</td>
<td>2,398</td>
<td>1,996</td>
<td>10,565</td>
<td>5.3</td>
<td>304</td>
<td>99</td>
<td>205</td>
<td>15.2</td>
<td>10.8</td>
</tr>
<tr>
<td>4</td>
<td>Urology</td>
<td>4,805</td>
<td>4,581</td>
<td>15,879</td>
<td>3.5</td>
<td>33</td>
<td>8</td>
<td>25</td>
<td>0.7</td>
<td>0.5</td>
</tr>
<tr>
<td>5</td>
<td>General Surgery</td>
<td>5,832</td>
<td>5,169</td>
<td>34,141</td>
<td>6.6</td>
<td>152</td>
<td>33</td>
<td>119</td>
<td>2.9</td>
<td>2.3</td>
</tr>
<tr>
<td>6</td>
<td>Orthopaedics</td>
<td>3,831</td>
<td>3,494</td>
<td>27,479</td>
<td>7.9</td>
<td>30</td>
<td>8</td>
<td>22</td>
<td>0.9</td>
<td>0.6</td>
</tr>
<tr>
<td>7</td>
<td>Paediatric</td>
<td>5,767</td>
<td>5,151</td>
<td>20,158</td>
<td>3.9</td>
<td>205</td>
<td>61</td>
<td>144</td>
<td>4.0</td>
<td>2.8</td>
</tr>
<tr>
<td>8</td>
<td>Dental Surgery</td>
<td>175</td>
<td>167</td>
<td>1,168</td>
<td>7.0</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>9</td>
<td>Paediatric Surgery</td>
<td>2,437</td>
<td>2,202</td>
<td>12,970</td>
<td>5.9</td>
<td>58</td>
<td>10</td>
<td>48</td>
<td>2.6</td>
<td>2.2</td>
</tr>
<tr>
<td>10</td>
<td>Psychiatry</td>
<td>400</td>
<td>294</td>
<td>6,680</td>
<td>22.7</td>
<td>1</td>
<td>1</td>
<td>—</td>
<td>0.3</td>
<td>—</td>
</tr>
<tr>
<td>11</td>
<td>Otorhinolaryngology</td>
<td>3,965</td>
<td>3,793</td>
<td>13,773</td>
<td>3.6</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td>0.2</td>
<td>0.1</td>
</tr>
<tr>
<td>12</td>
<td>Dermatology</td>
<td>3,142</td>
<td>2,994</td>
<td>9,362</td>
<td>3.1</td>
<td>14</td>
<td>—</td>
<td>14</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>13</td>
<td>Obstetrics and Gynaecology</td>
<td>8,221</td>
<td>7,166</td>
<td>30,607</td>
<td>4.3</td>
<td>22</td>
<td>6</td>
<td>16</td>
<td>0.3</td>
<td>0.2</td>
</tr>
<tr>
<td>14</td>
<td>Neonatology</td>
<td>1,850</td>
<td>1,496</td>
<td>9,633</td>
<td>6.4</td>
<td>44</td>
<td>16</td>
<td>28</td>
<td>2.9</td>
<td>1.9</td>
</tr>
<tr>
<td>15</td>
<td>Radiotherapy</td>
<td>72</td>
<td>93</td>
<td>554</td>
<td>6.0</td>
<td>9</td>
<td>5</td>
<td>4</td>
<td>9.7</td>
<td>4.5</td>
</tr>
<tr>
<td>16</td>
<td>Nuclear Medicine</td>
<td>544</td>
<td>425</td>
<td>637</td>
<td>1.5</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>17</td>
<td>Gastrointestinal and Liver Transplantation Services</td>
<td>613</td>
<td>484</td>
<td>7,697</td>
<td>15.9</td>
<td>41</td>
<td>7</td>
<td>34</td>
<td>8.5</td>
<td>7.1</td>
</tr>
<tr>
<td>18</td>
<td>Nephrology</td>
<td>4,190</td>
<td>3,939</td>
<td>12,091</td>
<td>3.1</td>
<td>166</td>
<td>57</td>
<td>109</td>
<td>4.2</td>
<td>2.8</td>
</tr>
<tr>
<td>19</td>
<td>Haematology</td>
<td>7,526</td>
<td>7,388</td>
<td>12,661</td>
<td>1.7</td>
<td>112</td>
<td>32</td>
<td>80</td>
<td>1.5</td>
<td>1.1</td>
</tr>
<tr>
<td>20</td>
<td>Physical Medicine and Rehabilitation</td>
<td>29</td>
<td>25</td>
<td>848</td>
<td>33.9</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>21</td>
<td>Anaesthesiology</td>
<td>458</td>
<td>442</td>
<td>442</td>
<td>1.0</td>
<td>1</td>
<td>—</td>
<td>1</td>
<td>0.2</td>
<td>0.2</td>
</tr>
<tr>
<td>22</td>
<td>IRCH (Private ward) Sub-Total (MAIN)</td>
<td>61,318</td>
<td>55,568</td>
<td>265,165</td>
<td>4.8</td>
<td>1,969</td>
<td>621</td>
<td>1,348</td>
<td>15.7</td>
<td>9.0</td>
</tr>
<tr>
<td>23</td>
<td>Cardiology</td>
<td>7,723</td>
<td>6,850</td>
<td>22,174</td>
<td>3.2</td>
<td>207</td>
<td>84</td>
<td>123</td>
<td>3.0</td>
<td>1.8</td>
</tr>
<tr>
<td>24</td>
<td>Neurology</td>
<td>2,865</td>
<td>2,146</td>
<td>18,433</td>
<td>8.6</td>
<td>184</td>
<td>40</td>
<td>144</td>
<td>8.6</td>
<td>6.8</td>
</tr>
<tr>
<td>25</td>
<td>Neurosurgery</td>
<td>4,248</td>
<td>2,927</td>
<td>23,249</td>
<td>7.9</td>
<td>442</td>
<td>117</td>
<td>325</td>
<td>15.1</td>
<td>11.6</td>
</tr>
<tr>
<td>26</td>
<td>Cardiothoracic Vascular Surgery</td>
<td>3,017</td>
<td>2,478</td>
<td>22,257</td>
<td>9.0</td>
<td>214</td>
<td>27</td>
<td>187</td>
<td>8.6</td>
<td>7.6</td>
</tr>
<tr>
<td>27</td>
<td>Neuro-anaesthesia</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>Sub-Total (CNC)</td>
<td>17,853</td>
<td>14,401</td>
<td>86,113</td>
<td>6.0</td>
<td>1,047</td>
<td>268</td>
<td>779</td>
<td>7.3</td>
<td>5.5</td>
</tr>
<tr>
<td></td>
<td>GRAND TOTAL (Main+ CNC)</td>
<td>79,171</td>
<td>69,969</td>
<td>351,278</td>
<td>5.0</td>
<td>3,016</td>
<td>889</td>
<td>2,127</td>
<td>4.3</td>
<td>3.1</td>
</tr>
</tbody>
</table>
## APPENDIX III

Department-wise distribution of inpatients (2006–2007)

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Departments/Sections</th>
<th>Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Medicine</td>
<td>4,136</td>
</tr>
<tr>
<td>2</td>
<td>Endocrinology</td>
<td>405</td>
</tr>
<tr>
<td>3</td>
<td>Gastroenterology</td>
<td>2,398</td>
</tr>
<tr>
<td>4</td>
<td>Urology</td>
<td>4,805</td>
</tr>
<tr>
<td>5</td>
<td>General Surgery</td>
<td>5,832</td>
</tr>
<tr>
<td>6</td>
<td>Orthopaedics</td>
<td>3,831</td>
</tr>
<tr>
<td>7</td>
<td>Paediatric</td>
<td>5,767</td>
</tr>
<tr>
<td>8</td>
<td>Dental Surgery</td>
<td>175</td>
</tr>
<tr>
<td>9</td>
<td>Paediatric Surgery</td>
<td>2,437</td>
</tr>
<tr>
<td>10</td>
<td>Psychiatry</td>
<td>400</td>
</tr>
<tr>
<td>11</td>
<td>Otorhinolaryngology</td>
<td>3,965</td>
</tr>
<tr>
<td>12</td>
<td>Dermatology</td>
<td>3,142</td>
</tr>
<tr>
<td>13</td>
<td>Obstetrics and Gynaecology</td>
<td>8,221</td>
</tr>
<tr>
<td>14</td>
<td>Neonatology</td>
<td>1,850</td>
</tr>
<tr>
<td>15</td>
<td>Radiotherapy</td>
<td>72</td>
</tr>
<tr>
<td>16</td>
<td>Nuclear Medicine</td>
<td>544</td>
</tr>
<tr>
<td>17</td>
<td>Gastrointestinal Surgery</td>
<td>613</td>
</tr>
<tr>
<td>18</td>
<td>Nephrology</td>
<td>4,190</td>
</tr>
<tr>
<td>19</td>
<td>Haematology</td>
<td>7,526</td>
</tr>
<tr>
<td>20</td>
<td>Physical Medicine and Rehabilitation</td>
<td>29</td>
</tr>
<tr>
<td>21</td>
<td>Anaesthesiology</td>
<td>458</td>
</tr>
<tr>
<td>22</td>
<td>IRCH (Private ward)</td>
<td>522</td>
</tr>
<tr>
<td></td>
<td><strong>Sub-Total (MAIN)</strong></td>
<td><strong>61,318</strong></td>
</tr>
<tr>
<td>23</td>
<td>Cardiology</td>
<td>7,723</td>
</tr>
<tr>
<td>24</td>
<td>Neurology</td>
<td>2,865</td>
</tr>
<tr>
<td>25</td>
<td>Neurosurgery</td>
<td>4,248</td>
</tr>
<tr>
<td>26</td>
<td>Cardiotoracic Vascular Surgery</td>
<td>3,017</td>
</tr>
<tr>
<td>27</td>
<td>Neuro-anaesthesia</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td><strong>Sub-Total (CNC)</strong></td>
<td><strong>17,853</strong></td>
</tr>
<tr>
<td></td>
<td><strong>GRAND TOTAL</strong></td>
<td><strong>79,171</strong></td>
</tr>
</tbody>
</table>
APPENDIX IV


<table>
<thead>
<tr>
<th>State</th>
<th>Number of patients</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Main</td>
<td>CNC</td>
<td>Total</td>
</tr>
<tr>
<td>Delhi</td>
<td>33,550</td>
<td>7,170</td>
<td>40,720</td>
<td></td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>10,480</td>
<td>3,246</td>
<td>13,726</td>
<td></td>
</tr>
<tr>
<td>Haryana</td>
<td>7,066</td>
<td>2,050</td>
<td>9,116</td>
<td></td>
</tr>
<tr>
<td>Bihar</td>
<td>4,695</td>
<td>2,148</td>
<td>6,843</td>
<td></td>
</tr>
<tr>
<td>Rajasthan</td>
<td>923</td>
<td>566</td>
<td>1,489</td>
<td></td>
</tr>
<tr>
<td>Punjab</td>
<td>236</td>
<td>319</td>
<td>555</td>
<td></td>
</tr>
<tr>
<td>Other states</td>
<td>4,037</td>
<td>2,276</td>
<td>6,313</td>
<td></td>
</tr>
<tr>
<td>Other countries</td>
<td>331</td>
<td>78</td>
<td>409</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>61,318</strong></td>
<td><strong>17,853</strong></td>
<td><strong>79,171</strong></td>
<td></td>
</tr>
</tbody>
</table>

(Main Hospital and C.N. Centre)

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th>Females</th>
<th>Male children</th>
<th>Female children</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Hospital</td>
<td>25,291</td>
<td>22,309</td>
<td>9,527</td>
<td>4,191</td>
<td>61,318</td>
</tr>
<tr>
<td>CNC</td>
<td>9,810</td>
<td>4,077</td>
<td>2,722</td>
<td>1,244</td>
<td>17,853</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>35,101</strong></td>
<td><strong>26,386</strong></td>
<td><strong>12,249</strong></td>
<td><strong>5,435</strong></td>
<td><strong>79,171</strong></td>
</tr>
</tbody>
</table>
# APPENDIX V

## Surgical procedures (2006–2007)

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Department</th>
<th>Major</th>
<th>Minor</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Casualty</td>
<td>1</td>
<td>8,606</td>
<td>8,607</td>
</tr>
<tr>
<td>2.</td>
<td>Dental Surgery</td>
<td>2,637</td>
<td>3,552</td>
<td>6,189</td>
</tr>
<tr>
<td>3.</td>
<td>General Surgery</td>
<td>2,866</td>
<td>10,187</td>
<td>13,053</td>
</tr>
<tr>
<td>4.</td>
<td>Gynaecology</td>
<td>1,390</td>
<td>1,495</td>
<td>2,885</td>
</tr>
<tr>
<td>5.</td>
<td>Obstetrics</td>
<td>692</td>
<td>650</td>
<td>1,342</td>
</tr>
<tr>
<td>6.</td>
<td>Orthopeadics</td>
<td>2,186</td>
<td>1,350</td>
<td>3,536</td>
</tr>
<tr>
<td>7.</td>
<td>Otorhinolaryngology</td>
<td>2,126</td>
<td>23,374</td>
<td>25,500</td>
</tr>
<tr>
<td>8.</td>
<td>Paediatric Surgery</td>
<td>1,405</td>
<td>2,913</td>
<td>4,318</td>
</tr>
<tr>
<td>9.</td>
<td>Urology</td>
<td>1,315</td>
<td>8,838</td>
<td>10,153</td>
</tr>
<tr>
<td>10.</td>
<td>Gastrointestinal Surgery</td>
<td>456</td>
<td>6</td>
<td>462</td>
</tr>
<tr>
<td></td>
<td><strong>Sub-Total (MAIN)</strong></td>
<td>15,074</td>
<td>60,971</td>
<td>76,045</td>
</tr>
<tr>
<td>11.</td>
<td>Cardiothoracic and Vascular Surgery</td>
<td>3,141</td>
<td>3</td>
<td>3,144</td>
</tr>
<tr>
<td>12.</td>
<td>Neurosurgery</td>
<td>2,812</td>
<td>502</td>
<td>3,314</td>
</tr>
<tr>
<td></td>
<td><strong>Sub-Total (CNC)</strong></td>
<td>5,953</td>
<td>505</td>
<td>6,458</td>
</tr>
<tr>
<td></td>
<td><strong>GRAND TOTAL</strong></td>
<td>21,027</td>
<td>61,476</td>
<td>82,503</td>
</tr>
</tbody>
</table>
## APPENDIX VI

### Attendance in OPDs and Specialty Clinics (2006–2007)

<table>
<thead>
<tr>
<th>(A) Medical Disciplines</th>
<th>New cases</th>
<th>Old cases</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. General Medicine</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>General OPD</strong></td>
<td>65,456</td>
<td>61,000</td>
<td>126,456</td>
</tr>
<tr>
<td><strong>Specialty Clinics</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chest</td>
<td>1,755</td>
<td>4,040</td>
<td>5,795</td>
</tr>
<tr>
<td>Renal</td>
<td>4,979</td>
<td>18,348</td>
<td>23,327</td>
</tr>
<tr>
<td>Endocrinology</td>
<td>9,093</td>
<td>18,979</td>
<td>28,072</td>
</tr>
<tr>
<td>Nuclear Medicine</td>
<td>1,270</td>
<td>2,047</td>
<td>3,317</td>
</tr>
<tr>
<td>Renal Transplant Clinic</td>
<td>125</td>
<td>4,801</td>
<td>4,926</td>
</tr>
<tr>
<td>Rheumatology Clinic</td>
<td>437</td>
<td>7,210</td>
<td>7,647</td>
</tr>
<tr>
<td>Geriatric Clinic</td>
<td>141</td>
<td>530</td>
<td>671</td>
</tr>
<tr>
<td><strong>2. Haematology Clinic</strong></td>
<td>3,965</td>
<td>17,531</td>
<td>21,496</td>
</tr>
<tr>
<td><strong>3. Gastroenterology</strong></td>
<td>17,315</td>
<td>30,529</td>
<td>47,844</td>
</tr>
<tr>
<td><strong>4. Paediatrics</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>General OPD</strong></td>
<td>28,219</td>
<td>34,837</td>
<td>63,056</td>
</tr>
<tr>
<td><strong>Specialty Clinics</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Well Baby</td>
<td>439</td>
<td>145</td>
<td>584</td>
</tr>
<tr>
<td>Follow-up TB</td>
<td>212</td>
<td>1,654</td>
<td>1,866</td>
</tr>
<tr>
<td>Genetic and Birth Defect Clinic</td>
<td>1,292</td>
<td>1,067</td>
<td>2,359</td>
</tr>
<tr>
<td>Renal</td>
<td>491</td>
<td>3,563</td>
<td>4,054</td>
</tr>
<tr>
<td>Paediatric Neurology</td>
<td>1,849</td>
<td>3,845</td>
<td>5,694</td>
</tr>
<tr>
<td>Paediatric Chest Clinic</td>
<td>518</td>
<td>3,435</td>
<td>3,953</td>
</tr>
<tr>
<td>High-risk Neonatal</td>
<td>269</td>
<td>817</td>
<td>1,086</td>
</tr>
<tr>
<td><strong>5. Dermatology</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>General OPD</strong></td>
<td>30,772</td>
<td>26,817</td>
<td>57,589</td>
</tr>
<tr>
<td><strong>Specialty Clinics</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexually Transmitted Disease</td>
<td>872</td>
<td>1,396</td>
<td>2,268</td>
</tr>
<tr>
<td>Allergy</td>
<td>509</td>
<td>933</td>
<td>1,442</td>
</tr>
<tr>
<td>Leprosy</td>
<td>449</td>
<td>1,927</td>
<td>2,376</td>
</tr>
<tr>
<td>Pigmentation</td>
<td>582</td>
<td>1,747</td>
<td>2,329</td>
</tr>
<tr>
<td>Dermatology Surgery</td>
<td>379</td>
<td>617</td>
<td>996</td>
</tr>
<tr>
<td><strong>6. Psychiatry</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>General OPD</strong></td>
<td>1,715</td>
<td>—</td>
<td>1,715</td>
</tr>
<tr>
<td><strong>Specialty Clinics</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child guidance</td>
<td>430</td>
<td>313</td>
<td>743</td>
</tr>
<tr>
<td>Walk-in-clinic</td>
<td>12,328</td>
<td>21,377</td>
<td>33,705</td>
</tr>
<tr>
<td>(B) 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>1. General Surgery</td>
<td>36989</td>
<td>26699</td>
<td>63688</td>
</tr>
<tr>
<td>2. Urology</td>
<td>11341</td>
<td>21340</td>
<td>32681</td>
</tr>
<tr>
<td>3. GI Surgery</td>
<td>1724</td>
<td>4195</td>
<td>5919</td>
</tr>
</tbody>
</table>

4. Anaesthesia Clinics
   - Pain clinic: 1087, 2807, 3894
   - Pre-anaesthesia: 7509, 1500, 9009

5. Paediatric Surgery
   - General OPD: 6,519, 11,426, 17,945
   - Hydrocephalus: 22, 198, 220
   - Intersex Clinic: 20, 130, 150
   - Paediatric Urology: 315, 2,695, 3,010

6. Orthopaedics
   - General OPD: 76,363, 133,438, 209,801
   - Follow-up: –, 6603, 6603
   - Tuberculosis: –, –, –
   - Polio: 41, 23, 64
   - Scoliosis: 533, 925, 1458
   - Hand: 712, 1012, 1724
   - Club Foot (CTEV): 268, 1269, 1537

7. Otorhinolaryngology and RUAS
   - General OPD: 43,198, 35,339, 78,537
   - Audiology: 125, 137, 262
   - Speech: 1,219, 1,169, 2,388
   - Hearing: 719, 920, 1,639
   - Voice: 601, 766, 1,367
   - Vertigo: 90, 106, 196
   - Rhinology: 79, 92, 171

8. Obstetrics and Gynaecology
   - General OPD: 28,284, 37,832, 66,116
   - Postnatal: 118, 31, 149
   - Infertility: –, –, –
   - Family welfare: 4,219, 2,596, 6,815
   - Antenatal: 372, 2,433, 2,805
   - Endocrinology-gynaecology: 109, 160, 269
   - High-risk pregnancy: 1,991, 10,265, 12,256
<table>
<thead>
<tr>
<th>9.</th>
<th><strong>Radiotherapy</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General OPD</strong></td>
<td>3,657</td>
</tr>
<tr>
<td><strong>Specialty Clinics</strong></td>
<td></td>
</tr>
<tr>
<td>Radiotherapy in gynaecology</td>
<td>267</td>
</tr>
<tr>
<td>Radiotherapy in surgery</td>
<td>381</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>10.</th>
<th><strong>Dental Surgery</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General OPD</strong></td>
<td>28,385</td>
</tr>
<tr>
<td><strong>Specialty Clinics</strong></td>
<td></td>
</tr>
<tr>
<td>Orthodontics</td>
<td>858</td>
</tr>
<tr>
<td>Combined cleft palate</td>
<td>64</td>
</tr>
<tr>
<td>Tri-neuralgia</td>
<td>129</td>
</tr>
<tr>
<td>Restorative-cum-endodontic</td>
<td>2,889</td>
</tr>
<tr>
<td>Oral prophylaxis</td>
<td>942</td>
</tr>
<tr>
<td>Prosthodontics-cum-maxillofacial prosthesis</td>
<td>1,572</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(C) Others</th>
<th>New cases</th>
<th>Old cases</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. EHS</td>
<td>107,922</td>
<td>71,946</td>
<td>179,868</td>
</tr>
<tr>
<td>2. Casualty</td>
<td>176,959</td>
<td>–</td>
<td>176,959</td>
</tr>
<tr>
<td>3. Nutrition</td>
<td>2,099</td>
<td>444</td>
<td>2,543</td>
</tr>
<tr>
<td>4. Marriage counselling</td>
<td>11,265</td>
<td>2,601</td>
<td>13,866</td>
</tr>
<tr>
<td>5. Physical medicine and rehabilitation</td>
<td>2,294</td>
<td>7,557</td>
<td>9,851</td>
</tr>
</tbody>
</table>

**Total** | **750,111** | **775,299** | **1525,410** |
6.2 Hospital Dietetics Services

Chief Dietician
Alka Mohan Chutani (Officiating)

Dietician
Swapna Chaturvedi

Assistant Dieticians
R. Vasuki (from April 2006 to Nov 2006, posted to JPNTC Dec 2006 onwards)
Gurdeep Kaur
Richa Jaiswal

EDUCATION
1. Dietetic short-term training for MSc Nutrition students for 6–12 weeks
2. Dietetics short-term training for PG Diploma Dietetic students for 3 months
3. Dietetics short-term training for BSc Nursing and Post-certificate nursing students
4. Department conducts Nutrition classes for BSc (Hons) Nursing, first year as part of the curriculum
5. Department also undertakes Nutrition classes for medical students
6. The Department of Dietetics runs a daily clinic for outdoor patients for nutrition counselling.

CME
1. Nutrition lectures were organized on 21 August 2006 at MS Seminar Room on ‘Role of diet in epilepsy’ and ‘Nutrition in ICU’.
2. Nutrition lectures were organized on 18 December 2006 at AIIMS on ‘Epidemiology of CHD in India’ and ‘Role of homocysteine in CVD’.

National and International Conferences

Lectures delivered
Swapna Chaturvedi
2. ‘Diet for diabetics’, NTPC, on the occasion of Diabetes Education-cum-screening
programme, Thermal Power Station, Badarpur; 19 July 2006.
3. ‘Role of nutrition in tackling childhood obesity’, Asian Conference on ‘Management
and prevention of childhood obesity through nutrition strategies and physical activity’,
International Life Sciences Institute (ILSI), Le Meridien Hotel, New Delhi; 14 October
2006.
4. ‘Promoting production and consumption of coarse grains, pulses, glv’s and other foods
from milk and milk products to achieve food and nutrition security, along with role of
instant mixes to combat malnutrition under 2 years of age’, ‘World Food Day’ organized
by the Ministry of Women and Child Development, Food and Nutrition Board, New
Delhi at Rehabilitation Centre, Lajpat Nagar; 16 October 2006.
5. ‘Nutrition assessment and monitoring—anthropometry, dietary, biochemical and clinical
methods’, Workshop of 12th Annual Conference of the Indian Society for Parenteral
and Enteral Nutrition (ISPEN), Science Centre, Kolkata; 4 November 2006.
6. ‘Importance of balanced diet in growing children’, Mitter Foundation, Children’s Day at
Special Protection Group Complex, Dwarka; 14 November 2006.
7. ‘Diet-related chronic diseases, role of fruit and vegetables, fibre and antioxidants’,
‘Nutrition for elderly—diet for healthy ageing’, ‘Inculcating healthy eating and life styles
in children’, during orientation training courses for trainers of ICDS, Government of
Haryana, organized by Ministry of Women and Child Development, Food and Nutrition
Board, at Vikas Sadan, Gurgaon; 29 November 2006 and the same topic on 22 December
2006 at School Health Services for trainers of ICDS, Government of Uttar Pradesh at
NOIDA, (UP).
8. ‘Nutrition, health and hygiene for adolescent girls’, Department of Social Welfare and
NGO in programme of Kishori Shakti Yojna at Chaman Wara, Tilak Bazaar, Delhi; 29
December 2006.

Gurdeep Kaur
1. ‘Healthy eating habits’, Health Awareness Programme at Modicare Ltd, New Delhi; 28
November 2006.
Hindon Airforce Hospital, Hindon Airforce Station; 8 March 2007.
3. ‘Proteins and their importance’ and ‘The role of fat in balanced diet’ for BSc (Hons)
Nursing at the Nursing College, AIIMS; 18 September 2006, 19 September 2006, 25

Richa Jaiswal
1. ‘Energy: Measurement of energy, requirement in different categories of people, BMI,
BMR, determinants and factors affecting, carbohydrates—classification, RDA, dietary
sources, functions, digestion, absorption and storage, metabolism of carbohydrates,
PATIENT CARE

1. Assessment of nutritional status of indoor patients, planning normal and therapeutic diets and nutrition counselling for indoor patients and outdoor patients.
2. Indoor and outdoor patients referred from different wards and Specialty clinics like Endocrinology, Gastroenterology, Paediatrics, Orthopaedics, Nephrology, Haematology, GI Surgery, Oncology, Transplant cases and AIDS patients are assessed and counselled for diet as per disease condition based on dietetics principles.
3. The Department organized diet stalls and diet exhibits for participants of ‘Diabetes Mela’ organized by Diabetics Self Care Foundation.
4. The Department of Dietetics participated in Health Awareness Week for Hon’ble MPs at Parliament House for diet counselling.
5. The Department of Dietetics is involved in diet preparations for patients of Main Hospital, C.N. Centre, R.P. Centre and BRA IRCH.

Number of indoor patients served different diets:

<table>
<thead>
<tr>
<th>Diet Type</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of diets</td>
<td>5,59,357</td>
</tr>
<tr>
<td>Normal diets</td>
<td>3,05,882</td>
</tr>
<tr>
<td>Semisolid</td>
<td>21,540</td>
</tr>
<tr>
<td>Therapeutic diets</td>
<td>1,31,088</td>
</tr>
<tr>
<td>Enteral feeds</td>
<td>39,728</td>
</tr>
<tr>
<td>Private ward diets</td>
<td>61,119</td>
</tr>
</tbody>
</table>

Nutrition clinic—outpatients:

<table>
<thead>
<tr>
<th>Patient Type</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>New patients</td>
<td>7,274</td>
</tr>
<tr>
<td>Old patients</td>
<td>1,490</td>
</tr>
</tbody>
</table>
Medical Social Welfare Services were organized in various OPDs, wards, clinics and the casualty by present strength of two Chief Medical Social Service Officer, two Supervising Medical Social Service Officers; two Medical Social Service Officers Grade I; three Medical Social Service Officers Grade II and 16 part-time Social Guides under the able guidance supervision of the Medical Superintendent.

This unit provides central services in the form of guidance to patients, financial assistance from the Poor Fund, exemption of levy charges to poor and indigent patients, counselling, accommodation in the *dharamshala* for outstation patients, adoption of orphans, coordination regarding these activities in different departments and centres, help in obtaining railway concession to specific patients.

During peak hours, this unit provides guidance and counselling to patients and try to sort out their minor grievances on spot, which helps in smooth running of the OPDs. On an average, 2,700 patients every day require guidance and counselling in all OPDs including the Emergency. To achieve this, the part-time social guides are deployed at important places such as the main enquiry counter, X-ray counter, Emergency, Blood Collection centre as well as all the OPDs counters in five floors.

**Counselling**
Over 40,000 patients were given counselling and information about their diagnosis, prognosis and treatment after discussion with concerned doctors.

Over 6000 patients were given special counselling and case work services. Services were also offered to solve their social, emotional and psychosomatic problems which come in the way of achieving best results of treatment. Patients were also motivated and helped for regular follow-up whenever required. Over 25 home visits were also made.

**Rehabilitation services**
Over 350 destitute/unknown/unattended/road accident patients were rehabilitated in different rehabilitation centres under the Delhi Administration and other welfare institutions as well as their homes.

Twenty patients were rehabilitated by helping them to get jobs or find work avenues. Fifteen wheelchairs, 4 tricycles, 2 sewing machines, 45 crutches and 2 weighing machines, were given to poor and needy patients. Fifteen unwed mothers were rehabilitated in other agencies till their delivery as their parents were unable to keep them at home.

Relatives of over 2200 patients were informed about unknown/unattended patients.
About 5500 senior citizens were provided special help in OPDs and laboratories.
**Financial assistance**
A total of Rs 69,902 was given to 198 poor patients from the ‘Fund for Poor Patients’ provided by the hospital authorities, whereas another large number were helped from other sources such as donations from philanthropic organizations for very expensive drugs and appliances such as crutches, wheel chairs, hearing aids, etc. Necessary help was also extended for food, travel and funeral to a large number of cases.

Over 175 patients were given blankets and clothes. Over 20 patients were given chappals. A large number of patients were referred to the Ali Yaver Jung Institute for the Hearing Handicapped. Over 50 patients were given colostomy bags.

A total of 577 patients were provided expensive chemotherapy drugs costing Rs 7,32,038 with the help from the Cancer Patients Aid Association and over Rs 1,00,000 from other associations. Besides this many other articles such as books, radios, chocolates, sweets, fruits, tape recorders were distributed among poor cancer patients by Cancer Patients Aid Association.

Cancer Patients Aid Association also created a play-room in Paediatric ward complete with all the equipment such as toys, games, colours, books, cycle, etc.

Medicines worth more than Rs 40,000 were distributed to patients suffering from tuberculosis of any organ/part other than chest, for full course of antituberculosis medicines from a philanthropic organization—Sewa Prakash Mandal Trust. Over 150 urograftin vials costing nearly Rs 25,000 were given to poor patients from donations received.

Over 391 patients were motivated and guided to obtain necessary financial help from the Prime Minister’s and Health Minister’s Discretionary Funds out of which 159 patients got grant worth Rs2,21,31,280/-. Food was provided to over 2000 poor patients.

**Railway concession facilities**
Over 17,200 patients suffering from cancer, tuberculosis, leprosy, etc. were helped to obtain railway concession facilities for coming to hospital and going back home. A similar facility was also provided to deaf and dumb patients.

**Accommodation**
Nearly 2000 patients and their attendants who came from outside Delhi were helped in obtaining accommodation in different dharamshalas in the vicinity of the hospital at cheaper rates.

**Exemption of levy charges**
Over 2600 indigent and poor patients were exempted from payment of different types of investigations and admission charges.
Referral
About 1400 patients of pulmonary tuberculosis and other diseases were referred to different TB hospitals/clinics of respective areas for treatment and issuance of drugs. Over 23,500 patients from Casualty were referred to other hospitals.

Health education
Demonstrations in wards like Children, Surgical and Gynae wards were given with the help of students of Social Work and NSS workers on maintenance of personal hygiene, balanced nutrition, health and family welfare, Preoperative and Postoperative care.

Festivals such as Diwali, Rose Day and Christmas were celebrated in the wards and a puppet show was organized for the entertainment of patients in children’s ward. Toys were distributed in the children’s surgical ward on Good Friday.

Special help
Five patients were helped in getting an instant grant of Rs 3,00,000 for their cardiac surgery.

A large number of patients were helped during Dengue outbreak.

Over 550 of poor indoor patients were provided life-saving drugs/medicines worth over a couple of lakh rupees from the medical stores/local purchase after proper scrutiny and work-up by the Medical Social Service Officers.

Training and teaching
Orientations were given to visitors from various organizations. Besides this about 40 National Services Scheme (NSS) volunteers from various schools and colleges were also given orientation in dealing with patients and hospital-related problems.

Six postgraduate students of MSW from the Department of Social Work, Delhi and other Institutes, and 2 undergraduate students from Aditi College, 3 undergraduate students from Ambedkar College Delhi University, and 2 postgraduate students from Kaladi University were given on-the-job/field work training in Medical Social Services under close supervision during this period. A team of 2 students from Kuttikkanam, Kerala were given on-the-job training for 30 days.
Patients and employees welfare services were organized by the Welfare Officer, Mrs Preeti Ahluwalia.

**Patients Welfare**

Patient care: Rs 58,58,000 (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 8,83,500</td>
<td>Shri Sai Bhakta Samaj (Regd.)</td>
</tr>
<tr>
<td></td>
<td>Rs 2,55,000</td>
<td>Indo Global Social Service Society</td>
</tr>
<tr>
<td></td>
<td>Rs 2,99,500/-</td>
<td>Sahu Jain Trust</td>
</tr>
<tr>
<td></td>
<td>Rs 1,19,500</td>
<td>Anmol Sahara</td>
</tr>
<tr>
<td></td>
<td>Rs 71,707</td>
<td>Sewa Prakalp Mahila Mandal Trust</td>
</tr>
<tr>
<td></td>
<td>Rs 70,000</td>
<td>Lal Devi Charitable Trust</td>
</tr>
<tr>
<td></td>
<td>Rs 65,000</td>
<td>Rajendra Bhawan Trust</td>
</tr>
<tr>
<td></td>
<td>Rs 32,557</td>
<td>Other Donors</td>
</tr>
<tr>
<td></td>
<td>Rs 25,000</td>
<td>Industrial Importers</td>
</tr>
<tr>
<td></td>
<td>Rs 25,000</td>
<td>Shri Deepak Sharma</td>
</tr>
<tr>
<td></td>
<td>Rs 13,000</td>
<td>Vijaya Gujral Foundation</td>
</tr>
<tr>
<td>AIIMS Poor Fund Account</td>
<td>Rs 5,000</td>
<td>Shri B.R. Bhatia</td>
</tr>
<tr>
<td></td>
<td>Rs 5,000</td>
<td>Shri N.B. Mathur</td>
</tr>
<tr>
<td></td>
<td>Rs 5,000</td>
<td>Smt Poonam Mathur</td>
</tr>
<tr>
<td></td>
<td>Rs 2,000</td>
<td>Smt Vimmi Bhutani</td>
</tr>
<tr>
<td>Anti-cancer drugs provided Free to cancer patients by Gopal Foundation.</td>
<td>Rs 32,76,609</td>
<td>Gopal Foundation</td>
</tr>
<tr>
<td>For purchase of battery-operated vehicles to ferry patients in the Hospital and Centres</td>
<td>Rs 7,05,000</td>
<td>Smt Usha Sharma</td>
</tr>
</tbody>
</table>

In addition to the above, poor and needy patients are also assisted financially from the Prime Minister National Relief Fund. In this regard, an amount of Rs 8,37,500 was sanctioned from P.M. National Relief Fund for the treatment and surgery of poor patients. Further, patients living below the poverty line were assisted to avail financial assistance for their
treatment from *Rashtriya Arogya Nidhi* (National Illness Assistance Fund) and other sources. Assistance to poor patients from the Hospital Poor Patient Fund was also extended and they were also helped the admission, exemption of levy charges and investigation charges, etc. Sewing machines were also provided for the rehabilitation of two patients namely Kumari Pinki and Smt Neeraj and two folding wheelchairs were provided to physically impaired patients namely Shri Pammi and Shri Bijender Kumar by Sewa Prakalp Mahila Mandal Trust.

**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 18,500 patients and their attendants who were undergoing treatment at the Institute and it’s Centres. In special cases, food was arranged for the needy poor patients/attendants who were staying in the Vishram Sadan through individual donors.

Seven hundred and eighty woollen blankets were received as donation from various donors for the Vishram Sadans while 153 blankets were distributed to the inmates by ‘Shristi’, an NGO.

**Employees’ Welfare**

*Appointment on compassionate grounds*
Cases for appointment on compassionate grounds were dealt with. Counselling services and moral support was provided to family members so as to assist them to accept/overcome the great loss they had suffered and thereby enable them to shoulder the responsibilities that had fallen on them. Assistance for funeral expenses were also provided, where ever 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 provided for redressal of grievances to staff members and patients.

**Communal Harmony Campaign Week**
The Communal Harmony Campaign Week was observed from 19–25 November 2006 and Flag Day on 24 November 2006. On this occasion a Painting competition, Essay writing competition and Slogan writing competition was organized for the ‘AIIMS Family’. Besides this, an evening of Dance and Qawwali was organized which was sponsored by Sahitya
Kala Parishad. A sum of Rs 6,500 was collected through donation on Flag Day for the National Foundation for Communal Harmony.

**Assistance for education**

Assistance for education is being provided to the needy and deserving children of employees/patients through donors. Scholarships for the poor and needy students was arranged through Shri Sai Bhakta Samaj. They are also extended guidance and assistance for vocational rehabilitation/employment.

**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.

Mrs Vimmi Bhutani celebrated Diwali with the wards of our employees studying in the Nursery and Primary School being run by MIRWA
6.5 Hospital Billing Section

Following is the amount of donation received and payments made to the patients during the financial year 2006–2007.

Donations received from donors: Rs 1,18,407.49  
(Bank interest + donations + Poor fund boxes)

Payment made to [78+120] patients: Rs 69,902.00

(The amount disbursed to these poor patients is from the donations received from donors during the year as well as from the previous balance lying in the ‘AIIMS Poor Fund Account’).
## 6.6 Casualty

Census for the year 2006–07

<table>
<thead>
<tr>
<th>Month</th>
<th>Total patients</th>
<th>Admissions</th>
<th>Transfers</th>
<th>Total deaths</th>
<th>Brought dead</th>
<th>Total EHS</th>
<th>Total surgeries</th>
</tr>
</thead>
<tbody>
<tr>
<td>April</td>
<td>14,735</td>
<td>362</td>
<td>1,041</td>
<td>51</td>
<td>115</td>
<td>16</td>
<td>12</td>
</tr>
<tr>
<td>May</td>
<td>11,224</td>
<td>345</td>
<td>366</td>
<td>59</td>
<td>97</td>
<td>38</td>
<td>11</td>
</tr>
<tr>
<td>June</td>
<td>13,899</td>
<td>480</td>
<td>902</td>
<td>35</td>
<td>121</td>
<td>32</td>
<td>10</td>
</tr>
<tr>
<td>July</td>
<td>14,529</td>
<td>350</td>
<td>910</td>
<td>41</td>
<td>147</td>
<td>51</td>
<td>13</td>
</tr>
<tr>
<td>August</td>
<td>15,579</td>
<td>298</td>
<td>942</td>
<td>24</td>
<td>190</td>
<td>34</td>
<td>14</td>
</tr>
<tr>
<td>September</td>
<td>16,234</td>
<td>329</td>
<td>1006</td>
<td>14</td>
<td>189</td>
<td>42</td>
<td>17</td>
</tr>
<tr>
<td>October</td>
<td>30,759</td>
<td>417</td>
<td>950</td>
<td>08</td>
<td>115</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>November</td>
<td>13,906</td>
<td>149</td>
<td>964</td>
<td>16</td>
<td>178</td>
<td>41</td>
<td>20</td>
</tr>
<tr>
<td>December</td>
<td>11,040</td>
<td>408</td>
<td>950</td>
<td>07</td>
<td>122</td>
<td>39</td>
<td>13</td>
</tr>
<tr>
<td>January</td>
<td>10,583</td>
<td>312</td>
<td>867</td>
<td>03</td>
<td>126</td>
<td>41</td>
<td>14</td>
</tr>
<tr>
<td>February</td>
<td>10,990</td>
<td>281</td>
<td>882</td>
<td>04</td>
<td>102</td>
<td>25</td>
<td>18</td>
</tr>
<tr>
<td>March</td>
<td>13,481</td>
<td>324</td>
<td>934</td>
<td>09</td>
<td>136</td>
<td>29</td>
<td>06</td>
</tr>
<tr>
<td>Annual census (2006–07)</td>
<td>1,76,959</td>
<td>4,055</td>
<td>10,714</td>
<td>271</td>
<td>372</td>
<td>1,660</td>
<td>413</td>
</tr>
<tr>
<td>Average Monthly census*</td>
<td>14,747</td>
<td>338</td>
<td>893</td>
<td>23</td>
<td>29</td>
<td>138</td>
<td>34</td>
</tr>
<tr>
<td>Average Daily census*</td>
<td>492</td>
<td>11</td>
<td>30</td>
<td>1</td>
<td>1</td>
<td>6</td>
<td>1</td>
</tr>
</tbody>
</table>

*Figures in decimals have been rounded off to the nearest whole numbers
### 6.7 CSSD

**1.4.2006 to 31.3.2007**

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of Sterilizers</th>
<th>Capacity</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Bulk M. Shah No. I to II</td>
<td>96 cu.ft</td>
<td>2</td>
</tr>
<tr>
<td>2.</td>
<td>Small M. Shah No. I to VII</td>
<td>36 cu.ft</td>
<td>7</td>
</tr>
<tr>
<td>3.</td>
<td>NAT Steel No. I to II</td>
<td>36 cu.ft</td>
<td>2</td>
</tr>
</tbody>
</table>

**TOTAL** 11

**Manpower**

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Category</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Technical Assistant.</td>
<td>1</td>
</tr>
<tr>
<td>2.</td>
<td>OT Technician</td>
<td>4</td>
</tr>
<tr>
<td>3.</td>
<td>OTA</td>
<td>6</td>
</tr>
<tr>
<td>4.</td>
<td>Hospital Attendant</td>
<td>27 + 1</td>
</tr>
<tr>
<td>5.</td>
<td>Sanitary Attendant</td>
<td>2</td>
</tr>
</tbody>
</table>

**Autoclaving Workload cu.ft**

**1.4.2006 to 31.3.2007**

<table>
<thead>
<tr>
<th>Month</th>
<th>Year</th>
<th>Total Workload</th>
</tr>
</thead>
<tbody>
<tr>
<td>April</td>
<td>2006</td>
<td>38,598 cu.ft</td>
</tr>
<tr>
<td>May</td>
<td>2006</td>
<td>30,768 cu.ft</td>
</tr>
<tr>
<td>June</td>
<td>2006</td>
<td>32,692 cu.ft</td>
</tr>
<tr>
<td>July</td>
<td>2006</td>
<td>37,180 cu.ft</td>
</tr>
<tr>
<td>August</td>
<td>2006</td>
<td>39,844 cu.ft</td>
</tr>
<tr>
<td>September</td>
<td>2006</td>
<td>40,720 cu.ft</td>
</tr>
<tr>
<td>October</td>
<td>2006</td>
<td>37,251 cu.ft</td>
</tr>
<tr>
<td>November</td>
<td>2006</td>
<td>38,368 cu.ft</td>
</tr>
<tr>
<td>December</td>
<td>2006</td>
<td>40,232 cu.ft</td>
</tr>
<tr>
<td>January</td>
<td>2007</td>
<td>39,616 cu.ft</td>
</tr>
<tr>
<td>February</td>
<td>2007</td>
<td>37,580 cu.ft</td>
</tr>
<tr>
<td>March</td>
<td>2007</td>
<td>43,310 cu.ft</td>
</tr>
</tbody>
</table>

**TOTAL** 456,159 cu.ft

(Four lakh fifty-six thousand one hundred and fifty-nine)
6.8 Hospital Laundry

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

Hospital Laundry was visited by several batches of Hospital Administrators attending 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 a similar system in their respective hospitals.

**Workload during the year 2006–2007**

1. Total pieces processed 49,33,838
2. Total weight (in kg) 15,17,829
3. Total cost of washing material (Rs) 11,77,641
4. Cost of washing material per piece 0.2386
5. Cost of washing material per kg of linen 0.7758
6.9 Blood Bank (Hospital)

ACTIVITIES

Blood collection in donor room

1. Total relative donors 22,267
2. Total voluntary donors 8,639
   (From donation camps 7,759)
   (From AIIMS Blood Bank 882)
   (From Mobile Donation Nil)
3. Collected from CNC 1,495
   IRCS 308
   Others 796
Total collection 33,505

Total camps organized 108

Routine Laboratory

1. Total patients 46,551
2. Total ABO grouping 1,13,561
3. Total Rh 70,299
4. Total OPD grouping and Rh 3,289
5. Total cross-match (Emergency and Routine) 55,767
6. Total donor grouping 67,010
7. Total ICT 804
   ICT-positive 139
8. Total titre 101
9. Total A/B 43,262
10. Total DCT 300
    DCT-positive 25
11. Total blood issued 33,648
12. Total receive back 675
13. Total small units 660
14. Total blood discarded 943
15. Blood issued but not transfused Nil
16. Total blood issued to private ward 2,127
17. Total component issued to private ward 2,599
18. Total blood issued to outside hospital 1,532
19. Total component issued to outside hospital 476
20. Total cross-match but not transfused 10,502
   IRCS Nil
   CNC 161
Total 4,57,720

Special Procedure Laboratory
1. Minor grouping 432
2. Platelet antibody 78
3. Reagent cell thawing 720
4. Cell freezing 1,596
5. DAT 21
6. Cross matching discrepancy 65
7. Group discrepancy 08
8. AB screening 44
9. Blood thawing 08
Total 2,972

10. Quality control 6,202
11. Students trained 18

Component Laboratory
1. Platelet-rich concentrate 24,147
2. Fresh-frozen plasma 15,553
3. Liquid plasma 14,848
4. Cryoprecipitate 630
5. Red blood cells 29,401
6. Single donor platelet pheresis (SDP) 124
Total components prepared 84,703

7. Platelet pheresis in IRCH 1,054
8. Stem cell (IRCH) 97
9. Stem cell in blood bank Nil

Infection Laboratory
1. HIV test 48,770
2. HBV test 40,179
3. Anti-HBc test 39,303
4. HCV test 42,418
5. VDRL 36,507
Total 2,17,177
7. College of Nursing

<table>
<thead>
<tr>
<th>Principal</th>
<th>Manju Vatsa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecturers</td>
<td></td>
</tr>
<tr>
<td>Meena Agarwal</td>
<td>Sandhya Gupta</td>
</tr>
<tr>
<td>Ashia Qureshi</td>
<td>Deepika C. Khakha</td>
</tr>
<tr>
<td></td>
<td>Rachel Andrews</td>
</tr>
<tr>
<td>Senior Nursing Tutor</td>
<td>Geeta Razdan</td>
</tr>
<tr>
<td>Nursing Tutors</td>
<td></td>
</tr>
<tr>
<td>M. Sharma</td>
<td>Kiran Singh Simak</td>
</tr>
<tr>
<td>Poonam Joshi</td>
<td>Sucheta</td>
</tr>
<tr>
<td>Shashi Mawar</td>
<td>Babita Sahoo</td>
</tr>
<tr>
<td></td>
<td>Gayatri Batra</td>
</tr>
<tr>
<td></td>
<td>Manju Dhandapani</td>
</tr>
</tbody>
</table>

EDUCATION

Undergraduate
Fifty-three students graduated from the four-year BSc (Hons) Nursing course, while 16 students graduated from the two-year BSc Nursing (Post-certificate) course.

Postgraduate
MSc (Hons) Nursing: 13 students graduated from MSc Nursing course. There are 15 students continuing in the second year MSc Nursing course and 14 students have joined the programme this year (13 Indian and 1 from Nepal) in the following seven 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 (CNE programmes).
A ten-day workshop on ‘Quality assurance in nursing’ was held for nursing personnel from the northern region of India, sponsored by the Ministry of Health and Family Welfare. A total of 34 participants registered for the workshop. Coordinator: Sandhya Gupta.

- A two-day workshop on ‘Substance use disorder nursing’ was held for 20 nurses from NDDTC, AIIMS. Coordinator: Sandhya Gupta.

- ‘Cardiology Nursing Update’ was held for two days. A total of 28 nurses from AIIMS attended the update. Coordinator: Rachel Andrews.

- ‘Oncology Nursing Update’ was held for two days. A total of 22 nurses from AIIMS attended the update. Coordinator: Rachel Andrews.

- ‘Nephrology Nursing Update’ was held for two days. A total of 20 nurses from AIIMS attended the update. Coordinator: Deepika Khakha.

- Workshop on ‘Paediatric intensive care nursing’ sponsored by Indian Nursing Council was held for two days. A total of 30 nurses from hospitals of Delhi and AIIM attended the workshop. Coordinators: Manju Vatsa and Poonam Joshi.

- ‘Mental Health Nursing Update’ was held for two days. A total of 39 nurses from AIIMS attended the update. Coordinator: Sandhya Gupta.

- ‘Neurological Nursing Update’ was held for two days. A total of 20 nurses from AIIMS attended the update. Coordinator: Meena Agarwal.

- A three-month ‘Clinical training programme’ was organized for two WHO fellows from Myanmar from 2 January 2007 to 27 April 2007.

- Workshop on ‘Domestic Violence Act’ was held for one day. A total of 370 participants from AIIMS attended the workshop. Coordinator: Sandhya Gupta.

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

- Two groups of visitors from abroad and 8 groups of visitors from various educational institutions of India visited the department.

RESEARCH
Ongoing Projects
1. Pilot delivery of model HIV prevention and health promotion programme in India by nurses, Sub-project of ICOHRTA for AIDS/TB, UCLA. Manju Vatsa, AIIMS and Adey Nyamathi, School of Nursing, UCLA, USA.
CLINICAL AND COMMUNITY SERVICES
1. The faculty and students participated in outdoor and indoor patient-care activities of all the departments of the Institute.

2. The faculty and students organized and conducted Pulse Polio programme at 45 centres of South Delhi, organized by the Government of the NCT of Delhi. A. Qureshi and Kiran Singh coordinated and supervised the programme.

- Fifty health education sessions in rural areas and 100 in urban slums and OPDs on various health issues such as hygiene, HIV/AIDS, prevention and treatment of URI, diarrhoeal diseases, tuberculosis, family welfare, etc.

- Street plays (10) and exhibitions on various health-related topics for urban slums.

- Health talks and exhibition on AIDS on the occasion of international AIDS Day in the urban community.

- ‘Prevention of substance abuse’, a community awareness and educational camp was held in Trilok Puri.

- ‘Prevention of health and psychosocial problems of adolescent girls’, an educational camp was organized in Navodaya girl’s school, Trilok Puri.

PUBLICATIONS
Journals


6. Gupta S. ‘Role of nurses in Substance abuse in community health care settings’,

**AWARDS AND HONOURS**

Dr Manju Vatsa is continuing as a Member of the faculty of Nursing at the Baba Farid University of Health Sciences, Faridkot, Punjab; Member, Indian Nursing Council and its Executive, Education and Equivalence Committees; National Advisory Board Member for *Prism’s Nursing Practice, Journal of Clinical Nursing, Education, Training and career development*. She has also been nominated as Organizing Secretary, VI International Neonatal Nursing Conference to be held in New Delhi in 2007; nominated as Coordinator for KMC and Lactation management workshop during Annual Convention of National Neonatology Forum at Varanasi; nominated as Expert Member, Indian Nursing Council for expert committee on Amendment of the MTP Act, Ministry of Health and Family Welfare.

Dr Manju Vatsa and Ms Sandhya Gupta continue to be in Review Panel of the *Indian Journal of Nursing and Midwifery*.

Ms Sandhya Gupta has been nominated as a Member of the Board of Studies, Punjab University, Chandigarh and as a Chairperson, Scientific sessions for sixth National Conference of the Indian Society of Psychiatric Nurses, Ludhiana; March 2007.

**CONSULTANCY AND PARTICIPATION AS EXPERT**

1. Dr Manju Vatsa participated as a core group member for ‘Development of PhD consortium in India’, coordinated by the Indian Nursing Council; as an expert member for establishing ‘National Institute for advancement of standards in Nursing’, Ministry of Health and Family Welfare; as an expert for revision of MSc Nursing curriculum and ANM curriculum of the Indian Nursing Council; as an expert member for development of ‘Strategic framework for Nursing in India’ by Sir Edward Dunlop Hospitals, coordinated by Indian Nursing Council.

Dr Vatsa is guiding five PhD students of the PhD consortium of Indian Nursing Council, WHO and Rajiv Gandhi University of Health Sciences; as an examiner for PhD candidates of RGUHS and Manipal academy of Higher Education, Manipal; TOT in ‘Essential Newborn Care’, Government of Gujarat; Attended National consultation for accelerating pre-service IMNCl–WHO CC, Department of Paediatric, AIIMS; Conducted 6 Video-conferencing teaching sessions for PhD scholars of the consortium of PhD in nursing by Indian Nursing council, WHO and RGUHS; Appointed as organizing secretary of VI International neonatal nursing conference being organized at Delhi in September 2007.

2. Manju Vatsa, Sandhya Gupta and Deepika Khakha participated as experts for development of curriculum for training programme and resource materials for trainers for HIV/AIDS
initiative organized by Clinton foundation in collaboration with NACO and the Indian Nursing Council under ‘Nurses Training Initiative—Clinton Foundation’; Review of modules for trainers and for nurses in HIV/AIDS, organized by Clinton foundation in collaboration with NACO and the Indian Nursing Council.

3. Rachel Andrews and Deepika Khakha participated in two TOT programmes for HIV/AIDS initiative organized by Clinton foundation in collaboration with NACO and the Indian Nursing Council, held in Hyderabad and Mumbai.

4. Sandhya Gupta presented a paper on ‘Role of nurses in substance abuse in community healthcare settings’, WHO-SEARO Consultative Meeting held at NDDTC, AIIMS; Took educational and consultative sessions for Telemedicine conferences organized by department of Computer Facility, AIIMS.

5. Kamlesh Sharma participated in Revision of ANM curriculum as a co-opted member of education committee of Indian Nursing Council; as Resource person ‘Neocon XXVI at Varanasi’ in December 2006; as Resource person for ‘Tool preparation for assessment of ANM Training schools’ for Indian Nursing Council.

6. Faculty members of the College participated in the conduct of inspections and examinations in various colleges of nursing and universities in India.

7. M. Vatsa and other faculty members participated as Resource persons/Committee Members for the following organizations:
   - 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
   - Adjunct faculty, CMET, AIIMS
   - National Medical Library, Book Selection Committee
   - Punjab University, Chandigarh: Board of Studies in Nursing.
   - PGI Chandigarh, BPKIHS, NEIGRIHMS Shillong, DAV Management Committee, 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
   - GGS Indraprastha University: Institutional Assessment Committee
   - Dharamshila Cancer Hospital
• VIMHANS
• National Institute of Social Defence
• Indian Academy of Hospital Administration
• Indian Society of Psychiatric Nurses
• NACO-Clinton Foundation
• Various committees at AIIMS
  — Convocation Committee
  — DPC
  — AIIMS website
  — Communal Harmony campaign
  — Dean’s Committee
  — Hindi Committee
  — Screening Committee
  — Supervisors for ‘Pulse’

8. Faculty members of the College attended 17 workshops/conferences and delivered 45 lectures for 20 CNE programmes held during this year.
8. Research Section

As per the mandate given to the All India Institute of Medical Sciences, research forms an important component. AIIMS has been at the forefront of conducting high quality research, both in the fields of basic and applied sciences. During the year under review, the faculty of AIIMS drew extramural grants for various research projects from national and international agencies amounting to nearly Rs 52 crore. At present, 430 extramurally funded projects are being conducted in the Institute.

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

1. Professor N.R. Jagannathan
   Professor and Head of Nuclear Magnetic Resonance
   Member

2. Dr P.P. Kotwal
   Professor and Head of Orthopaedics (w.e.f. 1.9.2006)
   Chairman

3. Dr Nikhil Tandon
   Academic Dean (Exam) (w.e.f. 1.9.2006)
   Member

4. Dr A.K. Dinda
   Academic Dean (Exam) (w.e.f. 1.9.2006)
   Member

5. Dr Neerja Bhatla
   Academic Dean (Exam) (w.e.f. 1.9.2006)
   Member

6. Dr S.K. Panda
   Professor and Head of Pathology (w.e.f. 1.2.2007)
   Member

7. Dr N.K. Meher
   Professor and Head of Radiotherapy
   Member

8. Dr K.R. Rathi
   Deputy Director (Administration)
   Member

9. Dr S.K. Panda
   Professor and Head of TII (w.e.f. 1.2.2007)
   Member

9. Dr K.K. Deepak
   Sub-Director (Exam) (w.e.f. 1.2.2007)
   Member

10. Dr G.K. Rath
    Professor and Head of Radiotherapy
    Member

11. Dr N.K. Mehra
    Professor and Head of Pathology (w.e.f. 1.2.2007)
    Member

12. Dr S.K. Panda
    Professor and Head of TII (w.e.f. 1.2.2007)
    Member

13. Dr N.K. Meher
    Professor and Head of Radiotherapy
    Member

14. Dr K.R. Rathi
    Deputy Director (Administration)
    Member

15. Dr S.K. Panda
    Professor and Head of TII (w.e.f. 1.2.2007)
    Member

16. Dr K.K. Deepak
    Sub-Director (Exam) (w.e.f. 1.2.2007)
    Member

17. Dr G.K. Rath
    Professor and Head of Radiotherapy
    Member

18. Dr N.K. Mehra
    Professor and Head of Pathology (w.e.f. 1.2.2007)
    Member

19. Dr S.K. Panda
    Professor and Head of TII (w.e.f. 1.2.2007)
    Member

20. Dr K.K. Deepak
    Sub-Director (Exam) (w.e.f. 1.2.2007)
    Member

21. Dr G.K. Rath
    Professor and Head of Radiotherapy
    Member

22. Dr N.K. Mehra
    Professor and Head of Pathology (w.e.f. 1.2.2007)
    Member

23. Dr S.K. Panda
    Professor and Head of TII (w.e.f. 1.2.2007)
    Member

24. Dr K.K. Deepak
    Sub-Director (Exam) (w.e.f. 1.2.2007)
    Member

This section deals with the administration of all the extramural research conducted at the Institute.
1. Dr A. Malhotra Member
   Professor and Head of Nuclear Medicine

2. Dr Subrata Sinha Member
   Professor and Head of Biochemistry

3. Dr K.S. Reddy Member
   Professor and Head of Cardiology (till 11.2.2007)

4. Dr V.K. Bahl Member
   Professor and Head of Cardiology (w.e.f. 12.2.2007)

5. Dr R.M. Pandey Member
   Professor and Head of Biostatistics (w.e.f. 12.2.2007)

6. Dr Kameshwar Prasad Member
   Professor of Neurology (w.e.f. 12.2.2007)

7. Dr S.P. Garg Member
   Professor of Ophthalmology (w.e.f. 12.2.2007)

8. Dr Shobha Broor Member
   Professor of Microbiology

9. Dr R. Guleria Member
   Professor of Medicine

10. Dr J.S. Tyagi Member
    Professor of Biotechnology (w.e.f. 12.2.2007)

11. Dr Nikhil Tandon Member
    Professor of Endocrinology and Metabolism

12. Dr S.P. Mahla Member
    Financial Adviser

13. Dr Chitra Sarkar Member
    Professor of Pathology (till 11.2.2007)

14. Dr N.K. Arora Member
    Professor of Pediatrics (w.e.f. 12.2.2007)

15. Prof. R.B. Vaghare Member
    Professor of Obstetrics and Gynecology

16. Prof. G.P. Sinha Member
    Professor of Microbiology

17. Prof. D.R. Chaudhury Member
    Professor of Biochemistry

18. Prof. D.S. Tiwari Member
    Professor of Medicine

19. Prof. D. Kumar Member
    Professor of Neurology (w.e.f. 12.2.2007)

20. Prof. K.V. Prasad Member
    Professor of Pediatrics (w.e.f. 12.2.2007)

21. Prof. D. K. Pradeep Member
    Professor and Head of Biostatistics (w.e.f. 12.2.2007)

22. Prof. R.V. Hari Member
    Professor and Head of Cardiology (w.e.f. 12.2.2007)

23. Prof. K.S. Reddy Member
    Professor and Head of Biostatistics

24. A representative of SYS Member
    Administration Officer (Research)
<table>
<thead>
<tr>
<th>Investigator</th>
<th>Project</th>
<th>Funding agency</th>
<th>Funds (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Anatomy</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 RANI KUMAR</td>
<td>Role of cell cycle regulatory genes in breast cancer patients: On hormonal therapy</td>
<td>DBT</td>
<td>4,99,569</td>
</tr>
<tr>
<td>2 RIMA DADA</td>
<td>Genomics of male infertility</td>
<td>ICMR</td>
<td>2,25,270</td>
</tr>
<tr>
<td>3 RIMA DADA</td>
<td>Genomic diversity in five ethnic groups of Rajasthani population</td>
<td>DBT</td>
<td>1,91,987</td>
</tr>
<tr>
<td>4 S.B. RAY</td>
<td>Effect of alterations in intracellular calcium concentration on ORL1 [opioid receptor-like 1] opioid receptors in the rat central nervous system during morphine tolerance</td>
<td>ICMR</td>
<td>2,41,990</td>
</tr>
<tr>
<td>5 SHASHI WADHWA</td>
<td>Effects of prenatal auditory stimulation on chick hippocampus</td>
<td>DBT</td>
<td>2,64,341</td>
</tr>
<tr>
<td><strong>Biochemistry</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 D.N. RAO</td>
<td>Developing new generation peptide-based vaccine using F1 and V antigens of <em>Yersinia pestis</em> (plague)</td>
<td>DST</td>
<td>11,19,910</td>
</tr>
<tr>
<td>7 D.N. RAO</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 bacterial infection in semen</td>
<td>ICMR</td>
<td>5,67,578</td>
</tr>
<tr>
<td>8 D.N.RAO</td>
<td>Technological feasibility and immunological potential of multivalent single-injection microsphere vaccine incorporating diphtheria, pertussis, tetanus and hepatitis B antigen</td>
<td>DBT</td>
<td>1,91,049</td>
</tr>
<tr>
<td></td>
<td>Last Name</td>
<td>First Name</td>
<td>Title</td>
</tr>
<tr>
<td>---</td>
<td>----------------</td>
<td>-----------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>9</td>
<td>KALPANA</td>
<td>LUTHRA</td>
<td>Frequency distribution of three HIV-I resistance conferring polymorphisms SDF 3 alpha CCR2-641, and CCR-5 delta 32 in Asian Indians</td>
</tr>
<tr>
<td>10</td>
<td>KALPANA</td>
<td>LUTHRA</td>
<td>Differential cell response of goat granulose cell to LH or hCG stress in cell culture system. To analyse the signal transduction pathway in the two</td>
</tr>
<tr>
<td>11</td>
<td>KALPANA</td>
<td>LUTHRA</td>
<td>Genetic polymorphism of cholesterol ester transfer protein in hyperlipidemic patients. A case–control study</td>
</tr>
<tr>
<td>12</td>
<td>M.R. RAJESWARI</td>
<td></td>
<td>Studies on expression of HMGA and their interaction with DNA</td>
</tr>
<tr>
<td>13</td>
<td>M.R. RAJESWARI</td>
<td></td>
<td>Proteomic analysis of outer membrane of Acinetobacter baumannii and its resistant strains</td>
</tr>
<tr>
<td>14</td>
<td>N.C. CHANDRA</td>
<td></td>
<td>Studies on the possible development of hyperlipomia by oral contraceptives: An <em>in vitro</em> model</td>
</tr>
<tr>
<td>15</td>
<td>NEETA SINGH</td>
<td></td>
<td>Functional analysis of S29 ribosomal protein in apoptosis</td>
</tr>
<tr>
<td>16</td>
<td>NEETA SINGH</td>
<td></td>
<td>Mitochondria in apoptosis and human cancer</td>
</tr>
<tr>
<td>17</td>
<td>NEETA SINGH</td>
<td></td>
<td>Identification of differentially expressed genes in lung cancer using cDNA library subtraction</td>
</tr>
<tr>
<td>18</td>
<td>NEETA SINGH</td>
<td></td>
<td>Development of HPV vaccine prototype</td>
</tr>
<tr>
<td>19</td>
<td>NEETA SINGH</td>
<td></td>
<td>Development of human papilloma virus vaccine prototype/s—Molecular epidemiology of HPV types prevalent in India and identification of HPV-16 L1 and E6 variants</td>
</tr>
</tbody>
</table>
20 NIBHRITI DAS  Expression and modulation of complement receptors: Significance in the pathophysiology and prognosis of autoimmune disorders  
CSIR  5,32,457

21 P.CHATTOPADHYAY  Effect of tumour-specific Hsp 90 inhibitor, geldanamycin, on CpG island methylation and survival of hypoxic glial tumour cell lines  
CSIR  2,04,231

22 P.CHATTOPADHYAY  Hypoxia and CpG island methylation of selected loci in tumour cell genome: Modulation of methylation and subsequent effects on cell proliferation and chemotherapeutic response  
ICMR  5,02,065

23 RANJU RALHAN  Role of genomic instability due to alterations of recombination factors p53 and breast in the pathogenesis of breast cancer  
ICMR  41,721

24 RANJU RALHAN  Functional analysis and clinical significance of novel molecular targets in cytoskeleton reorganization and locoregional spread of oral cancer using proteomics  
DBT  7,67,832

25 RANJU RALHAN  Designing of methylation target arrays for breast cancer  
DBT  5,08,963

26 S.S. CHAUHAN  Identification and characterization human cathepsin L. alternate promoter  
CSIR  2,00,000

27 S.S. CHAUHAN  Characterization of the positive regulatory region of the first exon of human cathepsin L gene  
DST  8,23,646

28 SUBRATA SINHA  Interaction of DNA repair genes and p53 in determining the cellular response to genotoxic agents in glial tumour cell-lines  
DST  5,02,545

29 SUBRATA SINHA  Funds for improvement of S&T infrastructure (FIST)  
DST  16,96,095
30 SUBRATA SINHA  Generation and characterization of phage displayed recombinant antibodies to biochemically and immunologically relevant epitopes of the oncodevelopmental antigen heat stable alkaline phosphatase

ICMR  4,70,145

31 SUBRATA SINHA  Expression of recombinant antibody in *E. Coli*: Processes for improving binding characteristics on antibodies to hepatitis B surface antigen (HbsAg)

DBT  2,91,460

32 SUBRATA SINHA  Ligand-based selection from combinatorial libraries for generating recombinant antibodies to the placental (oncofetal) isozyme of alkaline phosphatase: Characterization and validation in clinical cancers

DBT  6,41,373

**Biophysics**

33 A SRINIVASAN  Infrastructural support for clinical proteomics

DBT  27,493,22

34 A. SRINIVASAN  Proteomics of human body fluids: Structural characterization of proteins and target identifications for diagnosis and drug discovery

DBT  -5,62,575

35 KRISHNA DALAL  Improvement of S&T infrastructure in universities and higher educational institutions (FIST)

DST  1,08,925

36 KRISHNA DALAL  Randomized clinical trial (RCT) of reflexology therapy and usual drug treatment in the management of intractable epilepsy

Central Council for Research in Yoga and Naturopathy  7,08,718

37 NAGENDRA SINGH/ T.P. SINGH  Structure-based rational drug design inflammation, arthritis and rheumatism using phospholipase A-2 (PLA-2), cyclooxygenase-2 (COX2) and lipoxygenase as target macromolecules

DST  1,64,993
<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Project Description</th>
<th>Funding Agency</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>38</td>
<td>PUNIT KAUR</td>
<td>Three dimensional structure determination of disintegrin from venom of Indian saw scale by X-ray diffraction method and structure and functional relationship with its complex with integrin</td>
<td>CSIR</td>
<td>1,50,000</td>
</tr>
<tr>
<td>39</td>
<td>SAVITA YADAV</td>
<td>Purification crystallization and structure determination of disintegrin and integrin–disintegrin complex</td>
<td>DST</td>
<td>7,423</td>
</tr>
<tr>
<td>40</td>
<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>
<td>3,00,591</td>
</tr>
<tr>
<td>41</td>
<td>SHARMISTHA DEY</td>
<td>Design synthesis and evaluation of inhibitors of lipooxygenase anti-inflammatory agents</td>
<td>DST</td>
<td>9,22,200</td>
</tr>
<tr>
<td>42</td>
<td>SUJATA SHARMA</td>
<td>Search of a magic drug: Isolation, purification, crystallization and three-dimensional structure determination of the functional c-lobe and antimicrobial peptides of lactoferrin and their applications in antimicrobial drug discovery</td>
<td>DST</td>
<td>81,918</td>
</tr>
<tr>
<td>43</td>
<td>SUJATA SHARMA</td>
<td>Structural studies of signalling proteins expressed during involution/breast cancer and ligand design</td>
<td>DST</td>
<td>6,66,805</td>
</tr>
<tr>
<td>44</td>
<td>SUJATA SHARMA</td>
<td>Determination of amino acid sequence and three-dimensional structure of phospholipase A2 from Indian red scorpion</td>
<td>DST</td>
<td>3,63,750</td>
</tr>
<tr>
<td>45</td>
<td>SUJATA SHARMA</td>
<td>Isolation and three dimensional structure determination of the noval signalling protein SPX-40 from memory gland secretion during involution</td>
<td>DST</td>
<td>6,83,850</td>
</tr>
<tr>
<td>46</td>
<td>T.P. SINGH</td>
<td>Cloning expression and structural investigation on human endothelin receptors A and B</td>
<td>DST</td>
<td>1,47,332</td>
</tr>
<tr>
<td>Biostatistics</td>
<td>Development of appropriate prevention and intervention strategies for non-communicable nutrition-related disorders among women in post-reproductive period</td>
<td>DST</td>
<td>8,65,020</td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------</td>
<td>-----------</td>
<td>---------</td>
<td></td>
</tr>
<tr>
<td>R.M. PANDEY</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>48 S.N. DWIVEDI</td>
<td>Multilevel epidemiological analysis to assess the role of community level effects on public health/family welfare</td>
<td>ICMR</td>
<td>1,52,178</td>
<td></td>
</tr>
<tr>
<td>Biotechnology</td>
<td>Molecular basis of disregulation of interferon of generation and function in tuberculosis patients</td>
<td>ICMR</td>
<td>4,10,255</td>
<td></td>
</tr>
<tr>
<td>H.K. PRASAD</td>
<td>Study of transmission of livestock derived pathogenic mycobacteria and its prevalence among humans (zoonotic tuberculosis)</td>
<td>DBT</td>
<td>15,89,631</td>
<td></td>
</tr>
<tr>
<td>49 H.K. PRASAD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50 H.K. PRASAD</td>
<td>Isolation identification and characterization of peptides that interact with two component system proteins DEVR and RC 2027c of <em>Mycobacterium tuberculosis</em></td>
<td>CSIR</td>
<td>6,71,690</td>
<td></td>
</tr>
<tr>
<td>51 J.S. TYAGI</td>
<td>Evaluation of devR mutant of <em>Mycobacterium tuberculosis</em> in animal model of tuberculosis and in cultured bacilli: Virulence and gene expression analysis</td>
<td>DBT</td>
<td>4,87,416</td>
<td></td>
</tr>
<tr>
<td>J.S. TYAGI</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>52 J.S. TYAGI</td>
<td>High throughput PCR assays for diagnosing tuberculosis caused by <em>Mycobacterium tuberculosis</em> and <em>M. bovis</em> using molecular beacons</td>
<td>DBT</td>
<td>31,87,420</td>
<td></td>
</tr>
<tr>
<td>53 J.S. TYAGI</td>
<td>Evaluation of antiproliferative apoptotic and immuomodulatory activity of some Indian system and homeopathic anticancer drugs</td>
<td>Ministry of Health and Family welfare</td>
<td>2,59,450</td>
<td></td>
</tr>
<tr>
<td>54 SATYA N DAS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No.</td>
<td>Name</td>
<td>Project Description</td>
<td>Funding Agency</td>
<td>Amount</td>
</tr>
<tr>
<td>-----</td>
<td>----------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------</td>
<td>--------------</td>
</tr>
<tr>
<td>55</td>
<td>Y.D. SHARMA</td>
<td>Establishment of flowcytometry facility for financial assistance from DBT under creation of infrastructure facility</td>
<td>DBT</td>
<td>3,465</td>
</tr>
<tr>
<td>56</td>
<td>D.K. SHARMA</td>
<td>Prevention of infection and strengthening the blood banking system in the country</td>
<td>Ministry of</td>
<td>6,41,143</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Health and Family welfare</td>
<td></td>
<td></td>
</tr>
<tr>
<td>57</td>
<td>UJJWAL KR. CHAWDHARY</td>
<td>Emerging biochemical markers of myocardial injury following coronary artery bypass grafting (CABOC) with or without cardiopulmonary bypass (CPB)</td>
<td>ICMR</td>
<td>1,94,291</td>
</tr>
<tr>
<td>58</td>
<td>R. LAKSHMY</td>
<td>Recovery and stability of routine chemistry analytes and enzymes from serum/whole blood spotted on filter paper</td>
<td>ICMR</td>
<td>2,99,609</td>
</tr>
<tr>
<td>59</td>
<td>R. LAKSHMY</td>
<td>LDL particle heterogeneity and its association with other established risk factors for CHD in an industrial population: Role of CETP gene</td>
<td>ICMR</td>
<td>5,78,877</td>
</tr>
<tr>
<td>60</td>
<td>R. LAKSHMY</td>
<td>Association between low-birth weight and autoimmune markers of diabetes in a young Delhi cohort</td>
<td>ICMR</td>
<td>1,51,295</td>
</tr>
<tr>
<td>61</td>
<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>
<td>ICMR</td>
<td>9,34,085</td>
</tr>
<tr>
<td>62</td>
<td>BALRAM BHARGAVA</td>
<td>A twelve week, randomized, double-blind, parallel-group, multicentric, dose escalation study to evaluate the efficacy and safety of aliskiren administered alone and in combination with atenolol in patients with essential hypertension</td>
<td>Novartis India</td>
<td>12,906</td>
</tr>
</tbody>
</table>
63 G. KARTHIKEYAN  Comparison of plasma homocysteine levels in patients with mitral stenosis with and without left atrial thrombus  ICMR  39,267

64 G. KARTHIKEYAN  Role of homocysteine in coronary artery disease genetics and epigenetic studies  DBT  6,35,864

65 G. KARTHIKEYAN  Non-invasive detection of subclinical disease activity inpatients with established rheumatic valvular heart disease  DBT  12,85,000

**Cardiothoracic and Vascular Surgery**

66 BALRAM AIRAN  Surgical treatment for ischaemic heart (STICH) failure trial  Clinirx  17,38,705

**Centre for Behavioural Sciences (Psychiatry)**

67 MANJU MEHTA  Risk factors of substance use and abuse in offspring of substance abuse patients  ICMR  4,62,828

68 MANJU MEHTA  Road rage—a study of aggressive behaviour and intervention strategies  Ministry of Health and Family welfare  2,77,903

69 RAJESH SAGAR  A multi-centre, 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 subjects who are partial responders or non-responders to citalopram.  Synergy Network India  2,71,207

70 RAJESH SAGAR  Phase III randomized placebo-controlled, double-blind trial evaluating the safety and efficacy of sublingual asenapine vs olanzapine and placebo in inpatients with an acute manic episode (A7501005)  Pfizer  13,92,278
**Centre for Community Medicine**

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Title</th>
<th>Agency</th>
<th>Grant No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>71</td>
<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</td>
<td>4,57,578</td>
</tr>
</tbody>
</table>

**Dental Surgery**

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Title</th>
<th>Agency</th>
<th>Grant No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>72</td>
<td>RITU DUGGAL</td>
<td>Detection of apoptosis in human periodontal ligament during orthodontic tooth movement</td>
<td>ICMR</td>
<td>2,85,281</td>
</tr>
</tbody>
</table>

**Department of Dietetics**

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Title</th>
<th>Agency</th>
<th>Grant No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>73</td>
<td>REKHA SHARMA</td>
<td>Efficacy of soy phytoestrogens on osteoporosis and cardiovascular profile of postmenopausal women</td>
<td>DBT</td>
<td>98</td>
</tr>
</tbody>
</table>

**Dermatology and Venerology**

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Title</th>
<th>Agency</th>
<th>Grant No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>74</td>
<td>NEENA KHANNA</td>
<td>Evaluation of ovarian function in female patients with multibacillary leprosy</td>
<td>ICMR</td>
<td>6,19,023</td>
</tr>
<tr>
<td>75</td>
<td>NEENA KHANNA</td>
<td>Role of parthenium hysterophorus N pathogenesis and exacerbations of atopic dermatitis</td>
<td>DBT</td>
<td>1,88,436</td>
</tr>
</tbody>
</table>

**Dr B.R. Ambedkar Institute Rotary Cancer Hospital**

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Title</th>
<th>Agency</th>
<th>Grant No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>76</td>
<td>ATUL SHARMA</td>
<td>A multicentric, open comparative, randomized, study to optimize dose, duration safety, efficacy, and cost of two treatment regimens with liposomal amphotericin (fungisome) in the treatment of systemic fungal infections in India</td>
<td>DBT</td>
<td>18,06,356</td>
</tr>
<tr>
<td>77</td>
<td>B.K. MOHANTI</td>
<td>Patterns of care and survival studies in cancers registry programme</td>
<td>ICMR</td>
<td>1,82,000</td>
</tr>
<tr>
<td>78</td>
<td>LALIT KUMAR</td>
<td>Expansion of adult human bone marrow and cord blood stem cells for reprogramming into hepatocytes</td>
<td>ICMR</td>
<td>3,75,652</td>
</tr>
<tr>
<td>No.</td>
<td>Author(s)</td>
<td>Title</td>
<td>Institution</td>
<td>Code</td>
</tr>
<tr>
<td>-----</td>
<td>-----------------</td>
<td>----------------------------------------------------------------------</td>
<td>--------------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>79</td>
<td>LALIT KUMAR</td>
<td>Neoadjuvant chemotherapy followed by interval debulking surgery versus upfront surgery followed by chemotherapy in patients with state IIIC and stage IV (with pleural effusion) epithelial ovarian carcinoma: A randomized study</td>
<td>Dabur Research Foundation</td>
<td>95,893</td>
</tr>
<tr>
<td>80</td>
<td>LALIT KUMAR</td>
<td>In vitro expansion and establishment of human fetal liver hematopoietic stem cell line</td>
<td>DBT</td>
<td>27,71,403</td>
</tr>
<tr>
<td>81</td>
<td>LALIT KUMAR</td>
<td>Grastim (G-CSF) mobilized peripheral blood progenitor cell (PBPC) transplantation (allogeneic or autologous): A multicentric study</td>
<td>Dr Reddy's Laboratories</td>
<td>1,92,250</td>
</tr>
<tr>
<td>82</td>
<td>MADHABANANDA</td>
<td>In vivo magnetic resonance spectroscopic evaluation with pathological and radiological correlation of metabolic imaging of soft tissue tumours</td>
<td>DST</td>
<td>1,49,086</td>
</tr>
<tr>
<td>83</td>
<td>N.K. SHUKLA</td>
<td>Characterization and functional analysis of differentially expressed genes in esophageal cancer</td>
<td>DST</td>
<td>8,57,757</td>
</tr>
<tr>
<td>84</td>
<td>P.K. JULKA</td>
<td>A phase III trial of ALIMTA versus docetaxel in patients with locally advanced or metastatic non-small cell lung cancer</td>
<td>Ranbaxy/Eli Lilly</td>
<td>2,46,129</td>
</tr>
<tr>
<td>85</td>
<td>P.K. JULKA</td>
<td>A phase II randomized, double-blind, placebo controlled, multicentre comparative study of ZD 1839 250mg (Iressa TM) given either continuously or concomitantly with cisplatin plus radiotherapy for the treatment of patients with previously untreated unresected tumours</td>
<td>Quintiles Spectral India</td>
<td>11,99,963</td>
</tr>
<tr>
<td>86</td>
<td>P.K. JULKA</td>
<td>(Study 3066A1 -303-WW) A phase III randomized, double-blind study of oral CCI-779 administered in combination with letrozole vs letrozole alone as first-line hormonal therapy in postmenopausal women with locally advanced or metastatic breast cancer</td>
<td>Quintiles Spectral India</td>
<td>1,59,581</td>
</tr>
<tr>
<td>ID</td>
<td>Name</td>
<td>Study Title</td>
<td>Sponsor</td>
<td>Grant No.</td>
</tr>
<tr>
<td>----</td>
<td>-----------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>--------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>87</td>
<td>P.K. JULKA</td>
<td>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 carcinoma</td>
<td>Quintiles Spectral India</td>
<td>3,61,559</td>
</tr>
<tr>
<td>88</td>
<td>RAJIVE KUMAR</td>
<td>Characterization of testis-specific sperm associated antigen 9 (SPAG9) gene expression and humoral immune response in various human cancers</td>
<td>DBT</td>
<td>1,21,846</td>
</tr>
<tr>
<td>89</td>
<td>V. RAINA</td>
<td>A multicentre study of cremophor free, polymeric, nanoparticle formulation of paclitaxel (DONDR/O2) in locally advanced and metastatic breast cancer</td>
<td>Dabur Research Foundation</td>
<td>1,89,676</td>
</tr>
<tr>
<td>90</td>
<td>VINOD KOCHUPILLAI</td>
<td>Antioxidants as adjunct to chemotherapy of lung cancer: <em>In vitro</em> study</td>
<td>Dr Reddy’s Laboratories</td>
<td>3,14,305</td>
</tr>
<tr>
<td>91</td>
<td>VINOD KOCHUPILLAI</td>
<td>An <em>in vitro</em> study of antiproliferative and apoptotic effects of gefitinib on lung cancer cell lines</td>
<td>NATCO Pharma India</td>
<td>3,45,219</td>
</tr>
<tr>
<td></td>
<td><strong>Dr R.P. Centre for Ophthalmic Sciences</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>92</td>
<td>GITA SATPATHY</td>
<td>Novel molecular diagnostics for eye diseases and low vision enhancement devices</td>
<td>CSIR</td>
<td>4,92,833</td>
</tr>
<tr>
<td>93</td>
<td>NAZIMA NISAR/ N.R. BISWAS</td>
<td>Diagnostic approaches for the rapid and specific diagnosis of mycoplasma pneumonia infection in asthmatics</td>
<td>DST</td>
<td>1,70,109</td>
</tr>
<tr>
<td>94</td>
<td>NIRANJAN NAYAK</td>
<td>Standardization of antifungal susceptibility testing for filamentous fungi and characterization of drug-sensitive and drug-resistant fungal isolates in mycotic keratitis</td>
<td>ICMR</td>
<td>2,32,294</td>
</tr>
<tr>
<td>No.</td>
<td>Name</td>
<td>Title</td>
<td>Funding Agency</td>
<td>Amount</td>
</tr>
<tr>
<td>-----</td>
<td>-----------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------</td>
<td>----------------------</td>
<td>----------</td>
</tr>
<tr>
<td>95</td>
<td>ROHIT SAXENA</td>
<td>Study on the prevalence, therapeutic option and outcome measures of amblyopia</td>
<td>DST</td>
<td>7,42,473</td>
</tr>
<tr>
<td>96</td>
<td>T. VELPANIDAN</td>
<td>Evaluation of the bio-disposition of xanthophylls in Indian donor eyes and detection of their content in commonly available fruits and vegetables</td>
<td>DST</td>
<td>2,98,216</td>
</tr>
<tr>
<td>97</td>
<td>T. VELPANIDAN</td>
<td>Development of topical ocular formulation of calcium dobesilate and evaluation of its formulation characteristics</td>
<td>Ozone Pharmaceuticals</td>
<td>2,76,422</td>
</tr>
<tr>
<td>98</td>
<td>T. VELPANIDAN</td>
<td>Development and validation of sensitive HPLC method and evaluation of taxanes in various taxux species especially found in Himalayan regions to support the tribal welfare</td>
<td>Auxilium Management Services</td>
<td>50,000</td>
</tr>
</tbody>
</table>

**Endocrinology and Metabolism**

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Title</th>
<th>Funding Agency</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>99</td>
<td>A.C. AMMINI</td>
<td>Assessment of the prevalence of osteoporosis in adult population of India</td>
<td>ICMR</td>
<td>6,43,535</td>
</tr>
<tr>
<td>100</td>
<td>A.C. AMMINI</td>
<td>Comparison of efficacy of metformin and spironolactone in the management of polycystic ovarian syndrome</td>
<td>ICMR</td>
<td>2,00,299</td>
</tr>
<tr>
<td>101</td>
<td>A.C. AMMINI</td>
<td>Demographic and clinical profile of young diabetics in a tertiary care hospital in north India</td>
<td>ICMR</td>
<td>5,33,231</td>
</tr>
<tr>
<td>102</td>
<td>A.C. AMMINI</td>
<td>Postmenopausal evaluation and risk-reduction with lasofoxifene (Pearl)</td>
<td>Pfizer</td>
<td>14,98,521</td>
</tr>
<tr>
<td>103</td>
<td>A.C. AMMINI</td>
<td>Effects of arzoxifene on vertebral fracture incidence and on invasive breast cancer incidence in postmenopausal woman with osteoporosis or with low bone density</td>
<td>Quintiles Spectral India</td>
<td>19,83,022</td>
</tr>
<tr>
<td>Project Number</td>
<td>Name</td>
<td>Description</td>
<td>Sponsor</td>
<td>Fund (INR)</td>
</tr>
<tr>
<td>----------------</td>
<td>------</td>
<td>-------------</td>
<td>---------</td>
<td>-----------</td>
</tr>
<tr>
<td>104 NIKHIL TANDON</td>
<td>Hyperglycemia and its effect after acute myocardial infarction on cardiovascular outcomes in patients with type 2 diabetes (HEART2D)</td>
<td>Ranbaxy/Eli Lilly</td>
<td>1,76,357</td>
<td></td>
</tr>
<tr>
<td>105 NIKHIL TANDON</td>
<td>A multicentre, randomized, double-blind, active controlled study to compare the effect of 24 weeks treatment with combination therapy of LAF 237 and pioglitazone to LAF 237 monotherapy or pioglitazone monotherapy in drug-naive patients with type 2 diabetes</td>
<td>Novartis India</td>
<td>45,870</td>
<td></td>
</tr>
<tr>
<td>106 R. GOSWAMI</td>
<td>Diabetes mellitus and vulvovaginal candida prevalence of infection and its rational management</td>
<td>ICMR</td>
<td>1,24,668</td>
<td></td>
</tr>
<tr>
<td>107 R. GOSWAMI</td>
<td>Vitamin D status of subjects residing in rural north India</td>
<td>Vulimini Ramalingaswami Foundation</td>
<td>53,802</td>
<td></td>
</tr>
<tr>
<td>108 R. GOSWAMI</td>
<td>Encapsulation of potentially immunotherapeutic/ immunoprophylactic peptides in novel biocompatible nanosized carriers for targeted delivery in IDDM</td>
<td>DBT</td>
<td>2,71,177</td>
<td></td>
</tr>
</tbody>
</table>

**ENT (Otorhinolaryngology)**

<table>
<thead>
<tr>
<th>Project Number</th>
<th>Name</th>
<th>Description</th>
<th>Sponsor</th>
<th>Fund (INR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>109 R.C. DEKA</td>
<td>Amphotericin B nasal lavage and corticosteroid nasal spray combination therapy in allergic fungal sinusitis</td>
<td>ICMR</td>
<td>1,50,552</td>
<td></td>
</tr>
<tr>
<td>110 R.C. DEKA</td>
<td>Development of educational and training material for rehabilitation chochlear implantees and Empowerment</td>
<td>Ministry of Social Justice</td>
<td>-31,941</td>
<td></td>
</tr>
<tr>
<td>111 SUDHIR BAHADUR</td>
<td>Phase II/III randomized placebo controlled clinical trial of curcumin in squamous head and neck cancers</td>
<td>DBT</td>
<td>20,96,314</td>
<td></td>
</tr>
<tr>
<td>Study ID</td>
<td>Investigator</td>
<td>Title</td>
<td>Funding Agency</td>
<td>Budget</td>
</tr>
<tr>
<td>---------</td>
<td>----------------------</td>
<td>----------------------------------------------------------------------</td>
<td>----------------</td>
<td>--------</td>
</tr>
<tr>
<td>112</td>
<td>ANOOP SARAYA</td>
<td>Role of enteral nutrition in preventing complications in severe acute pancreatitis in a randomized control trial</td>
<td>ICMR</td>
<td>1,56,924</td>
</tr>
<tr>
<td>113</td>
<td>GOVIND K. MAKHARIA</td>
<td>Double-blind randomized placebo-controlled study of a probiotic preparation VSL $3 for the treatment of mild to moderate active ulcerative colitis</td>
<td>CD Pharma India</td>
<td>4,77,261</td>
</tr>
<tr>
<td>114</td>
<td>PRAMOD GARG</td>
<td>Role of genetic factors in tropical pancreatitis</td>
<td>ICMR</td>
<td>88,176</td>
</tr>
<tr>
<td>115</td>
<td>RAKESH AGGARWAL</td>
<td>Epidemiological studies on hepatitis E</td>
<td>DBT</td>
<td>2,52,681</td>
</tr>
<tr>
<td>116</td>
<td>S.K. ACHARYA</td>
<td>FIST infrastructure in universities and higher educational institutes</td>
<td>DST</td>
<td>53,35,000</td>
</tr>
<tr>
<td>117</td>
<td>S.K. ACHARYA</td>
<td>Multicentric study of interferon–glycyrrhizin combination therapy and interferon–ribavirin combination therapy in the management of chronic hepatitis C (coordinating centre)</td>
<td>ICMR</td>
<td>2,34,176</td>
</tr>
<tr>
<td>118</td>
<td>S.K. ACHARYA</td>
<td>Multicentric study of interferon–glycyrrhizin combination therapy and interferon–ribavirin combination therapy in the management of chronic hepatitis C (study centre)</td>
<td>ICMR</td>
<td>2,87,193</td>
</tr>
<tr>
<td>119</td>
<td>S.K. ACHARYA</td>
<td>Advanced Centre for Liver Diseases</td>
<td>ICMR</td>
<td>53,89,730</td>
</tr>
<tr>
<td>120</td>
<td>S.K. ACHARYA</td>
<td>Randomized controlled trial of pegylated interferon (PEG-IFN) monotherapy and combination of PEG-INF with lamivudine among patients with chronic hepatitis B</td>
<td>Fulford India</td>
<td>9,38,039</td>
</tr>
<tr>
<td>121</td>
<td>UMESH KAPIL</td>
<td>Prevalence of obesity and associated diseases among well-to-do adolescent children in the National Capital Territory of Delhi</td>
<td>ICMR</td>
<td>8,42,767</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Title</th>
<th>Funding Agency</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>122</td>
<td>UMESH KAPIL</td>
<td>Epidemiology of gallbladder cancer with special reference to nutritional risk factor</td>
<td>ICMR</td>
<td>3,97,401</td>
</tr>
<tr>
<td>123</td>
<td>UMESH KAPIL</td>
<td>Resolution of Bitot spots after administration of megadose of vitamin A in a cohort of children in 1–5 years of age with Bitot spots</td>
<td>ICMR</td>
<td>5,99,089</td>
</tr>
<tr>
<td>124</td>
<td>UMESH KAPIL</td>
<td>Food safety and quality control of drugs</td>
<td>National Institute of Nutrition</td>
<td>2,84,736</td>
</tr>
<tr>
<td>125</td>
<td>UMESH KAPIL</td>
<td>Assessment of zinc deficiency among children of 6 months of age in different regions of India</td>
<td>DBT</td>
<td>16,12,126</td>
</tr>
<tr>
<td>126</td>
<td>VINEET AHUJA</td>
<td>Comparison of diagnostic efficacy of immunohistochemistry with histology (Warthin Starry stain) and urea-based tests (rapid urea test, C-14 urea before and after eradication therapy for <em>H. Pylori</em> in peptic ulcer disease)</td>
<td>ICMR</td>
<td>1,00,246</td>
</tr>
<tr>
<td>127</td>
<td>VINEET AHUJA</td>
<td>Curcumin for the treatment of ulcerative colitis</td>
<td>Himalaya Drug</td>
<td>1,71,329</td>
</tr>
<tr>
<td>128</td>
<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 (mesalazine) 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 Pharmaceutical Development India</td>
<td>6,07,915</td>
</tr>
<tr>
<td>129</td>
<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</td>
<td>4,46,043</td>
</tr>
<tr>
<td>130</td>
<td>Y.K. JOSHI</td>
<td>Effect of glutamine of intestinal structure and function in patients with inflammatory bowel diseases</td>
<td>ICMR</td>
<td>4,99,007</td>
</tr>
</tbody>
</table>
### Gastrointestinal Surgery

<table>
<thead>
<tr>
<th>Project Code</th>
<th>Name</th>
<th>Description</th>
<th>Funding Body</th>
<th>Funding (INR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>131</td>
<td>PEUSH SAHNI</td>
<td>Design and development of syringe pump and online peristaltic pump for drug delivery</td>
<td>Ministry of Communication and Information Technology</td>
<td>0,50,944</td>
</tr>
</tbody>
</table>

### Haematology

<table>
<thead>
<tr>
<th>Project Code</th>
<th>Name</th>
<th>Description</th>
<th>Funding Body</th>
<th>Funding (INR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>132</td>
<td>RENU SAXENA</td>
<td>A study to characterize the von Willebrand disease and its correlation with molecular defects</td>
<td>DST</td>
<td>4,31,595</td>
</tr>
<tr>
<td>133</td>
<td>RENU SAXENA</td>
<td>Fund for improvement of S&amp;T infrastructure in university and higher educational institutions (FIST)</td>
<td>DST</td>
<td>-5,29,838</td>
</tr>
<tr>
<td>134</td>
<td>RENU SAXENA</td>
<td>Organization of proficiency testing programme for testing haemogram</td>
<td>DST</td>
<td>2,15,904</td>
</tr>
<tr>
<td>135</td>
<td>RENU SAXENA</td>
<td>Haemostatic and molecular defects predisposing to acute non-embolic stroke in children and young Indians</td>
<td>ICMR</td>
<td>1,99,779</td>
</tr>
<tr>
<td>136</td>
<td>RENU SAXENA</td>
<td>Elucidation of molecular genetics of acute leukemia in India</td>
<td>ICMR</td>
<td>5,59,288</td>
</tr>
<tr>
<td>137</td>
<td>RENU SAXENA</td>
<td>Characterization of mutations underlying haemophilia A and B</td>
<td>DBT</td>
<td>3,26,559</td>
</tr>
<tr>
<td>138</td>
<td>RENU SAXENA</td>
<td>Diagnosis and counselling of genetic disorders using cytogenetics and molecular methods</td>
<td>DBT</td>
<td>6,02,081</td>
</tr>
<tr>
<td>139</td>
<td>RENU SAXENA</td>
<td>Organization of ISHTM AIIMS external quality assurance programme</td>
<td>ISHTM</td>
<td>2,27,637</td>
</tr>
<tr>
<td>140</td>
<td>TULIKA SETH</td>
<td>Evaluation of the thermal camera pre-cancer lesions or cancers in early stages and to study the effect of pranayam and sudershan kriya (breathing processes) in reversing pre-cancerous lesions</td>
<td>DST</td>
<td>3,94,363</td>
</tr>
<tr>
<td>No.</td>
<td>Name</td>
<td>Project Description</td>
<td>Organization</td>
<td>Funding</td>
</tr>
<tr>
<td>------</td>
<td>--------------------</td>
<td>-------------------------------------------------------------------------------------</td>
<td>-----------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>141</td>
<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>2,31,750</td>
</tr>
<tr>
<td>142</td>
<td>V.P. CHOUDHRY</td>
<td>Thalassemia awareness and screening programme for detection of thalassemia trait</td>
<td>National Thalassemia Welfare Society</td>
<td>96,084</td>
</tr>
<tr>
<td></td>
<td><strong>Labotary Medicine</strong></td>
<td><strong>Development of rapid diagnostic test for detection of auto antibodies in myasthenia gravis by plate and dot-blot ELISA</strong></td>
<td>ICMR</td>
<td>3,64,049</td>
</tr>
<tr>
<td>143</td>
<td>M. IRSHAD</td>
<td>Prevalence and significance of transfusion transmitted virus (TTV) in various forms of liver diseases</td>
<td>ICMR</td>
<td>8,01,439</td>
</tr>
<tr>
<td>144</td>
<td>M. IRSHAD</td>
<td>Optimization of carbohydrate–protein conjugates as vaccine for prevention of enteric fevers</td>
<td>DBT</td>
<td>8,94,744</td>
</tr>
<tr>
<td>145</td>
<td>M. IRSHAD</td>
<td>Evaluation of toxicity and anti-leishmanial efficacy of liposomal amphotericin B (KALSOMETM) in a mouse model</td>
<td>DST</td>
<td>8,21,751</td>
</tr>
<tr>
<td>146</td>
<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>6,79,000</td>
</tr>
<tr>
<td>147</td>
<td>SARMAN SINGH</td>
<td>Rapid and accurate diagnosis of tuberculosis using a novel set of primers directly from clinical samples</td>
<td>ICMR</td>
<td>7,60,293</td>
</tr>
<tr>
<td>148</td>
<td>SARMAN SINGH</td>
<td>Expression, purification and characterization of recombinant kinesin-like protein of VL and PKDL causing Indian strains of leishmania donovani and developing ELI-SA and other rapid test methods</td>
<td>DBT</td>
<td>70,032</td>
</tr>
<tr>
<td>No.</td>
<td>Author(s)</td>
<td>Title</td>
<td>Institution/Department</td>
<td>Enrollment</td>
</tr>
<tr>
<td>-----</td>
<td>----------------------</td>
<td>----------------------------------------------------------------------</td>
<td>------------------------------------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>150</td>
<td>SARMAN SINGH</td>
<td>Comparative evaluation of various <em>in vitro</em> methods for diagnosing pulmonary and extra-pulmonary tuberculosis</td>
<td>Biomerieux India</td>
<td>1,01,206</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>151</td>
<td>A.B. DEY</td>
<td>Determinants of the functional status of the older Indian</td>
<td>ICMR</td>
<td>10,24,774</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>152</td>
<td>A.B. DEY</td>
<td>Assessment of bone health in older Indian women</td>
<td>Helpage India</td>
<td>27,966</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>153</td>
<td>ASHOK KUMAR</td>
<td>Methotrexate in rheumatoid arthritis: Pharmacogenetics and clinico-immunological correlates</td>
<td>DBT</td>
<td>1,29,404</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>154</td>
<td>G.C. KHILNANI</td>
<td>Effect of outdoor and indoor air pollution in children’s health in Delhi: A controlled study</td>
<td>Ministry of Environment and Forest</td>
<td>3,40,967</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>155</td>
<td>AVAL K. VIKRAM</td>
<td>To investigate the relationship between growth hormone insulin-like growth factor axis and hypothalamopituitary adrenal axis body composition insulin sensitivity</td>
<td>DST</td>
<td>14,784</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>156</td>
<td>NAVAL K. VIKRAM</td>
<td>Double-blind randomized placebo-controlled trial of our herbal compound MA-471 for diabetes mellitus</td>
<td>Maharishi Ayurveda</td>
<td>322</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>157</td>
<td>R. HANDBA</td>
<td>Prevalence of osteoporosis in Indian patients with RA</td>
<td>Bone and Joint Decade India</td>
<td>9,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>158</td>
<td>RANDEEP GULERIA</td>
<td>Assessment of efficacy of hydroxychloroquine as an alternative to corticosteroids in the treatment of sacroïdosis</td>
<td>DST</td>
<td>4,02,027</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>159</td>
<td>RANDEEP GULERIA</td>
<td>Spectrum of pulmonary infection in HIV-positive patients: Indian scenario</td>
<td>Ministry of Health and Family Welfare (NACO)</td>
<td>8,30,674</td>
</tr>
<tr>
<td>Project Number</td>
<td>Investigator(s)</td>
<td>Project Title</td>
<td>Funding Agency</td>
<td>Amount (INR)</td>
</tr>
<tr>
<td>----------------</td>
<td>--------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>-----------------------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>160</td>
<td>RANDEEP GULERIA</td>
<td>Design and development of personal use respiratory device for patients with</td>
<td>Ministry of Information and Technology</td>
<td>6,78,444</td>
</tr>
<tr>
<td></td>
<td></td>
<td>respiratory failure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>161</td>
<td>RANDEEP GULERIA</td>
<td>Double-blind randomized placebo-controlled trial of herbal compound MA-364 in</td>
<td>Maharishi Ayurveda</td>
<td>53,600</td>
</tr>
<tr>
<td></td>
<td></td>
<td>patients with mild to moderate bronchial asthma</td>
<td></td>
<td></td>
</tr>
<tr>
<td>162</td>
<td>ROHINI HANDA</td>
<td>Herbal-based preparations for degenerative disorders: Osteoarthritis (OA) and</td>
<td>CSIR</td>
<td>34,451</td>
</tr>
<tr>
<td></td>
<td></td>
<td>rheumatoid arthritis (RA)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>163</td>
<td>S.K. SHARMA</td>
<td>Genomic and molecular studies on the immunopathogenesis of bronchial asthma</td>
<td>DBT</td>
<td>2,74,750</td>
</tr>
<tr>
<td>164</td>
<td>S.K. SHARMA</td>
<td>Efficacy and safety of immunomodulator <em>Mycobacterium</em> w, mw as an adjunct</td>
<td>DBT</td>
<td>60,52,985</td>
</tr>
<tr>
<td></td>
<td></td>
<td>therapy in pulmonary tuberculosis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>165</td>
<td>S.K. SHARMA</td>
<td>Anti-retroviral treatment</td>
<td>Ministry of Health and Family welfare</td>
<td>8,62,131</td>
</tr>
<tr>
<td>166</td>
<td>S.K. SHARMA</td>
<td>Treatment outcome and drug resistance among category II pulmonary tuberculosis</td>
<td>Delhi Tapedik Unmulan Samiti</td>
<td>3,89,379</td>
</tr>
<tr>
<td></td>
<td></td>
<td>under RNTCP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>167</td>
<td>S.K. SHARMA</td>
<td>Programme support for immuno-proteomics based diagnostics of infectious</td>
<td>DBT</td>
<td>1,16,400</td>
</tr>
<tr>
<td></td>
<td></td>
<td>diseases</td>
<td></td>
<td></td>
</tr>
<tr>
<td>168</td>
<td>SANJEEV SINHA</td>
<td>Study of early versus delayed initiation of antiretroviral therapy for HIV</td>
<td>Ministry of Health and Family Welfare</td>
<td>20,46,591</td>
</tr>
<tr>
<td></td>
<td></td>
<td>infected patients with tuberculosis on antituberculosis chemotherapy in Indian</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>subjects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Microbiology</td>
<td>Study Title</td>
<td>Institute</td>
<td>Grant No.</td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------------------------------------------------</td>
<td>--------------------</td>
<td>--------------</td>
<td></td>
</tr>
<tr>
<td>169 ARTI KAPIL</td>
<td>Study of carbapenemase production among nosocomial isolates of Gram-negative bacteria in a tertiary care hospital</td>
<td>ICMR</td>
<td>4,48,848</td>
<td></td>
</tr>
<tr>
<td>170 B.K. DAS</td>
<td>Study of haemophilus influence isolates from invasive and non-invasive disease</td>
<td>DST</td>
<td>5,32,438</td>
<td></td>
</tr>
<tr>
<td>171 B.K. DAS</td>
<td>Pneumococcal surface adhesin A (Psa.A) DNA construct as a vaccine candidate against <em>Streptococcus pneumoniae</em>—An immune response study</td>
<td>DBT</td>
<td>5,94,444</td>
<td></td>
</tr>
<tr>
<td>172 B.K. DAS</td>
<td>Optimization of lab diagnosis of pertussis</td>
<td>DBT</td>
<td>8,24,408</td>
<td></td>
</tr>
<tr>
<td>173 B.R MIRDHA</td>
<td>DNA amplification study by polymerase chain reaction (PCR) to detect subclinical <em>Pneumocystis carinii</em> infection and colonization in at-risk patients with for (or without respiratory symptoms)</td>
<td>DST</td>
<td>3,29,796</td>
<td></td>
</tr>
<tr>
<td>174 B.R MIRDHA</td>
<td>Detection, identification and molecular characterization of intestinal coccidia and microsporidia in patients with chronic diarrhoea and malabsorption syndromes</td>
<td>ICMR</td>
<td>1,93,697</td>
<td></td>
</tr>
<tr>
<td>175 BENU DHAWAN</td>
<td>Role of ureaplasma urealyticum in prematurity and diseases in the newborn</td>
<td>DST</td>
<td>4,542</td>
<td></td>
</tr>
<tr>
<td>176 BENU DHAWAN</td>
<td>Phenotypic and genotypic characterization of methicillin and mupirocin research staphylococci</td>
<td>DBT</td>
<td>7,27,374</td>
<td></td>
</tr>
<tr>
<td>177 LALIT DAR</td>
<td>Congenital CMV infection in offsprings of immune mothers</td>
<td>ICMR</td>
<td>13,43,873</td>
<td></td>
</tr>
<tr>
<td>178 LALIT DAR</td>
<td>Health programme-central plan scheme of national HIV/AIDS reference centre</td>
<td>Ministry of Health and Family Welfare (NACO)</td>
<td>3,10,000</td>
<td></td>
</tr>
<tr>
<td>Project Number</td>
<td>Applicant Name</td>
<td>Project Title</td>
<td>Funding Agency</td>
<td>Funding Amount</td>
</tr>
<tr>
<td>----------------</td>
<td>------------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>---------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>179</td>
<td>MADHU VAJPAYEE</td>
<td>External quality assessment programme</td>
<td>Ministry of Health and Family Welfare (NACO)</td>
<td>2,70,000</td>
</tr>
<tr>
<td>180</td>
<td>MADHU VAJPAYEE</td>
<td>Voluntary counselling and testing centre (VCTC)</td>
<td>Ministry of Health and Family Welfare (NACO)</td>
<td>2,36,581</td>
</tr>
<tr>
<td>181</td>
<td>PRADEEP SETH</td>
<td>Screening of western Himalayan plants for anti-HIV (human immunodeficiency virus) activity</td>
<td>Ministry of Health and Family Welfare</td>
<td>26,463</td>
</tr>
<tr>
<td>182</td>
<td>RAMA CHAUDHARY</td>
<td>Cloning and expression of mycoplasma pneumoniae P1 gene and its fragments to study their role in cytoadherence</td>
<td>ICMR</td>
<td>6,44,565</td>
</tr>
<tr>
<td>183</td>
<td>RAMA CHAUDHARY</td>
<td>Development of multiplex real time quantitative PCR assay to detect Chlamydia pneumoniae, legionella pneumophila and Mycoplasma pneumoniae in community-acquired pneumonia</td>
<td>DBT</td>
<td>8,59,171</td>
</tr>
<tr>
<td>184</td>
<td>SHOBHA BROOR</td>
<td>A multicentric study on detection and characterization of human calciviruses (HuVCs) in acute gastroenteritis and food-borne disease</td>
<td>ICMR</td>
<td>3,06,453</td>
</tr>
<tr>
<td>185</td>
<td>SHOBHA BROOR</td>
<td>Multisite monitoring of human influenza viruses in India</td>
<td>ICMR</td>
<td>12,502,66</td>
</tr>
<tr>
<td>186</td>
<td>SHOBHA BROOR</td>
<td>Research programme on SARS virus detection systems, research biology and mechanism of pathogenesis (development of PCR test for SARS virus)</td>
<td>DBT</td>
<td>3,86,871</td>
</tr>
<tr>
<td>Project Title</td>
<td>Principal Investigator(s)</td>
<td>Funding Agency</td>
<td>Funding Amount</td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------</td>
<td>---------------------------------------------------------</td>
<td>----------------</td>
<td>----------------</td>
<td></td>
</tr>
<tr>
<td>A post-marketing surveillance of addnole-N</td>
<td>RAJAT RAY</td>
<td>Russian Pharma</td>
<td>6,75,000</td>
<td></td>
</tr>
<tr>
<td>Study to evaluate the safety and efficacy of ESD-27 for insomnia in patients with major depressive disorder</td>
<td>RAKESH LAL</td>
<td>Himalaya Drug</td>
<td>3,79,984</td>
<td></td>
</tr>
<tr>
<td>An open labelled prospective, multicentric trial to evaluate the efficacy and safety of lanthanum carbonate in patients of hyperphosphatemia of chronic kidney disease</td>
<td>S.K. AGARWAL</td>
<td>Panacea Biotech</td>
<td>1,04,233</td>
<td></td>
</tr>
<tr>
<td>Linezolid vs vancomycin in the treatment of haemodialysis patients with catheter-related Gram-positive blood stream infections</td>
<td>S.K. AGARWAL</td>
<td>Pfizer</td>
<td>2,99,135</td>
<td></td>
</tr>
<tr>
<td>Impact of nutritional strategies and multiple antioxidant therapy of progression and management of Parkinson’s disease</td>
<td>S.VIVEKANANDHAN</td>
<td>ICMR</td>
<td>2,55,873</td>
<td></td>
</tr>
<tr>
<td>Molecular study on mitochondria dysfunction in Parkinson’s disease</td>
<td>S.VIVEKANANDHAN</td>
<td>ICMR</td>
<td>9,693</td>
<td></td>
</tr>
<tr>
<td>Genetic polymorphism of drug metabolizing enzymes CYP2D6, CYP2C19 and CYP2C9 and GST genes in patients developing toxicity to specific antiepileptic drug-phenytoin</td>
<td>S.VIVEKANANDHAN</td>
<td>ICMR</td>
<td>2,39,470</td>
<td></td>
</tr>
<tr>
<td>A longitudinal study to estimate proportion of patients with dementia and cognitive decline in Parkinson’s disease, its clinical correlates with special reference to apolipoprotein E alleles</td>
<td>MADHURI BEHARI</td>
<td>ICMR</td>
<td>5,43,663</td>
<td></td>
</tr>
</tbody>
</table>
195 MADHURI BEHARI  
Phase III, double-blind, placebo-controlled study to determine the efficacy and safety of a low 50–100 mg/day and high (150–200 mg/day) dose range of safinamide, as add-on therapy, in patients with early idiopathic Parkinson’s disease treated with a stable dose of a single dopamine agonist  
Quintiles  
Spectral India  
14,74,465

Neurosurgery
196 RAJINDER KUMAR  
A randomized, double-blind, placebo-controlled, multi-centre, dose-escalation study to evaluate the safety and preliminary efficiency of recombinant factor via (Novoseven/Nita stase) in subjects with brain contusions  
Nova Nordisk  
India  
1,71,050

Nuclear Magnetic Resonance
197 N.R. JAGANNATHAN  
Evaluation of the role of proton MR spectroscopy in non-invasive detection, assessment of treatment response and tumour metabolism in breast cancer  
DST  
6,27,358

198 N.R. JAGANNATHAN  
Upgradation of the existing animal MR scanner for biomedical research  
DST  
19,68,810

Nuclear Medicine
199 G.P. BANDOPADHYAYA  
To evaluate radionabelling and efficacy of radiolabelled betacyclodextrin for infection imaging  
ICMR  
3,96,076

200 G.S. PANT  
Radiation-induced chromosome aberrations and their use in biodosimetry  
Atomic Energy Regulatory Board  
1,94,060

Obstetrics and Gynaecology
201 ALKA KRIPLANI  
Diagnosis of genital tuberculosis in infertile women and the effect of anti-tubercular therapy  
ICMR  
4,30,523
<table>
<thead>
<tr>
<th>No.</th>
<th>Author</th>
<th>Title</th>
<th>Organization</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>202</td>
<td>ALKA KRIPLANI</td>
<td>Efficacy and safety of administration of evanova capsules in the management of menopausal symptoms</td>
<td>Charak Pharma</td>
<td>1,47,586</td>
</tr>
<tr>
<td>203</td>
<td>DEEPIKA DEKA</td>
<td>I.V Ig for the treatment the recurrent abortions</td>
<td>Bharat Serums and Vaccines</td>
<td>81,623</td>
</tr>
<tr>
<td>204</td>
<td>NEERJA BHATLA</td>
<td>Association of chlamydia infection with cervical intraepithelial neoplasia and cervical cancer</td>
<td>ICMR</td>
<td>2,26,449</td>
</tr>
<tr>
<td>205</td>
<td>NEERJA BHATLA</td>
<td>A comparative study of VIA cytodiagnosis, HPV testing and colposcopy as tools for cancer screening</td>
<td>DBT</td>
<td>2,72,437</td>
</tr>
<tr>
<td>206</td>
<td>NEERJA BHATLA</td>
<td>Development of HPV candidate vaccine/s preparation of clinical trial site/cohort for vaccine testing</td>
<td>DBT</td>
<td>29,43,759</td>
</tr>
<tr>
<td>207</td>
<td>NUTAN AGGARWAL</td>
<td>Weekly 70 mg oral alendronate therapy in postmenopausal osteopenic women</td>
<td>Troikaa Pharmaceutical</td>
<td>1,34,858</td>
</tr>
<tr>
<td>208</td>
<td>NUTAN AGGARWAL</td>
<td>Clinical effects of human placental extract (placentrex) in pelvic inflammatory disease.</td>
<td>Khandelwal Laboratories</td>
<td>18,682</td>
</tr>
<tr>
<td>209</td>
<td>SUNEETA MITTAL</td>
<td>Human Reproduction Research Centre</td>
<td>ICMR</td>
<td>14,65,000</td>
</tr>
<tr>
<td>210</td>
<td>SUNEETA MITTAL</td>
<td>Clinical trial with pippalyadi yoga</td>
<td>Central Council for Research in Ayurveda and Sidha</td>
<td>15,92,623</td>
</tr>
<tr>
<td>211</td>
<td>SUNEETA MITTAL</td>
<td>Prevention of mother-to-child transmission of HIV</td>
<td>Delhi State Control Society/AIDS</td>
<td>1,70,400</td>
</tr>
<tr>
<td>No.</td>
<td>Author(s)</td>
<td>Title</td>
<td>Fund</td>
<td>Amount</td>
</tr>
<tr>
<td>-----</td>
<td>---------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------</td>
<td>------------</td>
</tr>
<tr>
<td>212</td>
<td>SUNEETA MITTAL</td>
<td>Sexual and reproductive health for rural and urban women with application of molecular genetics</td>
<td>DBT</td>
<td>6,44,014</td>
</tr>
<tr>
<td>213</td>
<td>SUNEETA MITTAL</td>
<td>Aneuploidies leading to mental retardation and fetardation and fetal loss</td>
<td>DBT</td>
<td>6,83,426</td>
</tr>
<tr>
<td>214</td>
<td>SUNEETH JAIN</td>
<td>Evaluation of curcumin in the management of advanced cancer cervix</td>
<td>DBT</td>
<td>27,27,000</td>
</tr>
<tr>
<td>215</td>
<td>A. JAYASWAL</td>
<td>Role of free radical scavengers and the effects of antioxidants on their levels in patients with ankylosing spondylitis to investigate the possible role of antioxidants as therapeutic agents in ankylosing spondylitis</td>
<td>ICMR</td>
<td>2,97,050</td>
</tr>
<tr>
<td>216</td>
<td>RAJESH MALHOTRA</td>
<td>Comparison of recovery and complications and recurrence rate after endoscopic versus open carpal tunnel release</td>
<td>ICMR</td>
<td>95,223</td>
</tr>
<tr>
<td>217</td>
<td>SURYA BHAN</td>
<td>A new hip hemiarthroplasty option based on femoral stem design suitable for the morphology of proximal femur of elderly Indian population</td>
<td>CSIR</td>
<td>6,05,922</td>
</tr>
<tr>
<td>218</td>
<td>D.K. GUPTA</td>
<td>N-myc gene amplification by polymerase chain reaction in neuroblastoma tumour surveillance by detecting tyrosine hydroxylase protein using RT-PCR</td>
<td>DBT</td>
<td>3,67,971</td>
</tr>
<tr>
<td>219</td>
<td>M. BAJPAI</td>
<td>Pelvi-ureteric junction obstruction: A study on apoptosis and mRNA upregulation in patients with ACE I/D gene polymorphism with respect to disease aetiopathogenesis and monitoring therapy by molecular markers or renin angiotensin system activation</td>
<td>DST</td>
<td>11,25,200</td>
</tr>
<tr>
<td>Project Code</td>
<td>PI Name</td>
<td>Description</td>
<td>Sponsor</td>
<td>Grant Amount</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>220</td>
<td>MINU BAJPAI</td>
<td>ACE I/D gene polymorphism in posterior urethral valve and its correlation with transforming growth factor-B tumour necrosis factor (TNF)-a soluble TNF receptor - I, interleukin-6 (IL-6), microalbuminurea, angiotensin II and plasma renin activity in the early diagnosis of renal damage</td>
<td>DST</td>
<td>3,03,845</td>
</tr>
<tr>
<td>221</td>
<td>MINU BAJPAI</td>
<td>Study of angiotensin-converting enzyme insertion/deletion gene polymorphism in vesicoureteric reflux and its correlation with molecular markers of renin angiotensin system activity in the early diagnosis of renal damage</td>
<td>DBT</td>
<td>7,33,268</td>
</tr>
<tr>
<td><strong>Paediatrics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>222</td>
<td>ARVIND BAGGA</td>
<td>An open label long term study to evaluate the safety of eplerenone in the treatment of hypertension in children</td>
<td>Pfizer</td>
<td>4,70,045</td>
</tr>
<tr>
<td>223</td>
<td>ARVIND BAGGA</td>
<td>A double-blind, randomized, multi-centre study followed by 12 months open-label treatment to evaluate the dose response and safety of valsartan in paediatrics hypertensive patients 1–5 years of age</td>
<td>Novartis India</td>
<td>3,54,136</td>
</tr>
<tr>
<td>224</td>
<td>ARVIND BAGGA</td>
<td>Dose ranging study to evaluate the safety and efficacy of olmesartan medoxomil in children and adolescents with hypertension</td>
<td>Quintiles</td>
<td>8,09,218</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Spectral India</td>
<td></td>
</tr>
<tr>
<td>225</td>
<td>MADHULIKA KABRA</td>
<td>An integrated approach for mutation analysis and identification of new gene (S) for X-linked mental retardation</td>
<td>DBT</td>
<td>4,77,478</td>
</tr>
<tr>
<td>226</td>
<td>PRATIMA RAY</td>
<td>Cloning and expression of NSP4 enterotoxin of rotavirus in E. coli and evaluation of NSP4-specific immune responses during natural rotavirus infection in children</td>
<td>DST</td>
<td>8,35,176</td>
</tr>
<tr>
<td>ID</td>
<td>Author(s)</td>
<td>Title</td>
<td>Funding Agency</td>
<td>Budget (in Rs)</td>
</tr>
<tr>
<td>------</td>
<td>-------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------</td>
<td>----------------</td>
<td>---------------</td>
</tr>
<tr>
<td>227</td>
<td>PRATIMA RAY</td>
<td>Reactogenicity and immunogenicity of live, attenuated rotavirus vaccine candidate strains 116E and I321 in health adults</td>
<td>DBT</td>
<td>3,07,704</td>
</tr>
<tr>
<td>228</td>
<td>PRATIMA RAY</td>
<td>Characterization of rotavirus strains from a multicentric rotavirus surveillance study at AIIMS, New Delhi</td>
<td>DBT</td>
<td>11,20,389</td>
</tr>
<tr>
<td>229</td>
<td>RACHNA SETH</td>
<td>To understand the deviation in cell signalling pathway autism through neurotrophic factors (insulin-like growth factor-1) and undertake a randomized blind trial with olanzapine to evaluate its effects on insulin-like growth factor-1 (IGF-1) clinical symptom</td>
<td>DST</td>
<td>1,90,000</td>
</tr>
<tr>
<td>230</td>
<td>S.K. KABRA</td>
<td>Effectiveness of 3-day amoxycillin versus 5-day co-trimoxazole in the treatment of non-severe pneumonia in children aged 2–59 months of age—A multicentric open-labelled trial</td>
<td>ICMR</td>
<td>1,70,604</td>
</tr>
<tr>
<td>231</td>
<td>S.K. KABRA</td>
<td>High dose and low dose azithromycin in cystic fibrosis: An intervention study to evaluate effect on disease parameter</td>
<td>ICMR</td>
<td>2,05,292</td>
</tr>
<tr>
<td>232</td>
<td>S.K. KABRA</td>
<td>Capacity building for sweat chloride estimation test by indigenously developed method</td>
<td>Solvey Pharma</td>
<td>1,20,051</td>
</tr>
<tr>
<td>233</td>
<td>SAMPATH MUKHOPADHAYAY/M.K.BHAN</td>
<td>Impact of zinc when it interacts on iron and copper status in children</td>
<td>DST</td>
<td>1,19,003</td>
</tr>
<tr>
<td>234</td>
<td>SHEFFALI GULATI</td>
<td>National Polio Certification Committee for polio eradication</td>
<td>Ministry of Health and Family welfare</td>
<td>4,48,462</td>
</tr>
<tr>
<td>235</td>
<td>SHINJINI BHATNAGAR</td>
<td>Aetiological significance of microscopic colitis in chronic diarrhoea in children and its pathogenesis</td>
<td>ICMR</td>
<td>3,87,320</td>
</tr>
<tr>
<td>Project ID</td>
<td>Principal Investigator</td>
<td>Title</td>
<td>Funding Agency</td>
<td>Funding Amount</td>
</tr>
<tr>
<td>------------</td>
<td>------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>----------------</td>
<td>----------------</td>
</tr>
<tr>
<td>236</td>
<td>SHINJINI BHATNAGAR</td>
<td>Zinc as an immunomodulator in the treatment of possible serious</td>
<td>DBT</td>
<td>11,221,53</td>
</tr>
<tr>
<td></td>
<td></td>
<td>bacterial infections in infants more than 7 days and up to 2 months</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>of age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>237</td>
<td>VEENA KALRA</td>
<td>FIST in subject area life sciences for level II support</td>
<td>DST</td>
<td>87,30,000</td>
</tr>
<tr>
<td>238</td>
<td>VEENA KALRA</td>
<td>Molecular, biological and serological detection of parameters of</td>
<td>DBT</td>
<td>2,68,410</td>
</tr>
<tr>
<td></td>
<td></td>
<td>association of <em>Campylobacter jejuni</em> infection in children with</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Guillain–Barre syndrome</td>
<td></td>
<td></td>
</tr>
<tr>
<td>239</td>
<td>VEENA KALRA</td>
<td>Lead pollution and health in Delhi—a follow up study</td>
<td>Ministry of</td>
<td>1,68,777</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Environment and Forest</td>
<td></td>
<td></td>
</tr>
<tr>
<td>240</td>
<td>A.K. DINDA</td>
<td>Development of biodegradable hydrogel for controlled drug</td>
<td>Ministry of</td>
<td>Nil</td>
</tr>
<tr>
<td></td>
<td></td>
<td>release for the treatment of osteomyelitis: Phase II. To evaluate</td>
<td>Defence</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>immunotoxicity of implantable network polymers (IPNs) hydrogels for</td>
<td>(DRDO)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>human uses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>241</td>
<td>A.K. DINDA</td>
<td>Genomic and molecular studies on the immunopathogenesis of</td>
<td>DBT</td>
<td>1,66,966</td>
</tr>
<tr>
<td></td>
<td></td>
<td>bronchial asthma</td>
<td></td>
<td></td>
</tr>
<tr>
<td>242</td>
<td>CHITRA SARKAR</td>
<td>Myopathic disorders: A comparative clinico-pathological and in vitro</td>
<td>ICMR</td>
<td>5,92,973</td>
</tr>
<tr>
<td></td>
<td></td>
<td>proton magnetic resonance spectroscopy study on muscle biopsies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>243</td>
<td>S. DUTTA GUPTA</td>
<td>Multicentric study of interferon–glycyrrhizin combination therapy</td>
<td>ICMR</td>
<td>2,08,463</td>
</tr>
<tr>
<td></td>
<td></td>
<td>and interferon–ribavirin combination therapy in the management of</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>chronic hepatitis C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>244</td>
<td>S.K. PANDA</td>
<td>To study of site reflection of hepatitis E virus (HEV) by</td>
<td>DST</td>
<td>11,28,017</td>
</tr>
<tr>
<td></td>
<td></td>
<td>localizing the viral replicase (RdRq) into the subcellular</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>compartments by transfection studies using HepG2/Huh 7 cells and a</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>fusion reporter construct</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Code</td>
<td>Investigator(s)</td>
<td>Title of the Project</td>
<td>Funding Agency</td>
<td>Funding Amount</td>
</tr>
<tr>
<td>--------------</td>
<td>----------------</td>
<td>----------------------</td>
<td>----------------</td>
<td>---------------</td>
</tr>
<tr>
<td>245 S.K.PANDA</td>
<td>Development of non-radioactive antigen specific reporter release cytotoxicity assay and analysis of cytotoxicity against HEV proteins</td>
<td>DBT</td>
<td>17,60,179</td>
<td></td>
</tr>
<tr>
<td>246 S.K. PANDA</td>
<td>Development of small interfering RNAs (siRNAs) for inhibition of hepatitis E virus (HEV) replication and transcription</td>
<td>DBT</td>
<td>10,03,560</td>
<td></td>
</tr>
<tr>
<td>Pharmacology</td>
<td>Development of herbal formulation(s) used in treatment of neurodegenerative diseases like Alzheimer’s</td>
<td>DBT</td>
<td>2,86,703</td>
<td></td>
</tr>
<tr>
<td>248 D.S. ARYA</td>
<td>Pharmacological and molecular studies on cardioprotective potential</td>
<td>CSIR</td>
<td>3,34,515</td>
<td></td>
</tr>
<tr>
<td>249 D.S. ARYA</td>
<td>Pharmacological and molecular studies on cardioprotective potential of medicinal plants</td>
<td>Ministry of Health and Family welfare</td>
<td>3,06,912</td>
<td></td>
</tr>
<tr>
<td>250 D.S. ARYA</td>
<td>Pharmacological and molecular studies on cardioprotective potential of some Unani drugs in experimentally induced myocardial infarction</td>
<td>Central Council for Research in Unani Medicine</td>
<td>8,03,700</td>
<td></td>
</tr>
<tr>
<td>251 N.R. BISWAS</td>
<td>Ophthalmic drug formulations using polymeric nanoparticles as carriers</td>
<td>ICMR</td>
<td>60,000</td>
<td></td>
</tr>
<tr>
<td>252 S.K. MAULIK</td>
<td>Moldulatory effect of phytoadaptogens on cardiovascular and neurological changes induced by experimental stress in rats</td>
<td>DST</td>
<td>8,24,500</td>
<td></td>
</tr>
<tr>
<td>253 S.K. MAULIK</td>
<td>Clinical trial of a standardized preparation of <em>Terminalia arjuna</em> in patients with left ventricular dysfunction</td>
<td>DBT</td>
<td>6,69,130</td>
<td></td>
</tr>
<tr>
<td>No.</td>
<td>Author</td>
<td>Title</td>
<td>Funding Agency</td>
<td>Amount</td>
</tr>
<tr>
<td>-----</td>
<td>--------------</td>
<td>----------------------------------------------------------------------</td>
<td>---------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>254</td>
<td>Y.K. GUPTA</td>
<td>Evaluation of herbal compounds in a rat model of sporadic dementia of Alzheimer’s type</td>
<td>DST</td>
<td>2,01,947</td>
</tr>
<tr>
<td>255</td>
<td>Y.K. GUPTA</td>
<td>Antiemetic study of ginger against cancer chemotherapy induced emesis</td>
<td>Dabur Research Foundation</td>
<td>8,14,042</td>
</tr>
<tr>
<td>256</td>
<td>Y.K. GUPTA</td>
<td>National Pharmacovigilance Programme</td>
<td>Ministry of Health and Family welfare</td>
<td>1,10,920</td>
</tr>
<tr>
<td>257</td>
<td>DEBABRATA GHOSH</td>
<td>An mRNA expression array cluster analysis of human first trimester placental trophoblast cell functions</td>
<td>DST</td>
<td>4,60,000</td>
</tr>
<tr>
<td>258</td>
<td>DEBABRATA GHOSH</td>
<td>Effect of (Ala 8,13,18)-magainin II amide on human trophoblast cells in vitro</td>
<td>ICMR</td>
<td>4,04,048</td>
</tr>
<tr>
<td>259</td>
<td>H.N. MALLICK</td>
<td>Role of the warm receptors of the preoptic area in altering sleep</td>
<td>Ministry of Defence (DRDO)</td>
<td>1,40,204</td>
</tr>
<tr>
<td>260</td>
<td>K.K. DEEPAK</td>
<td>Development of digital ECG amplifier and essential hardware for the autonomic function tests (heart rate variability)</td>
<td>DST</td>
<td>5,27,262</td>
</tr>
<tr>
<td>261</td>
<td>K.K. DEEPAK</td>
<td>Yogic relaxation in the management of ulcerative colitis</td>
<td>Central Council for Research in Yoga and Naturopathy</td>
<td>1,83,163</td>
</tr>
<tr>
<td>262</td>
<td>K.K. DEEPAK</td>
<td>A psychrophilosophical study: Application of Astang yoga as a tool in the treatment of psychosomatic disorders</td>
<td>Indian Council of Philosophical Research</td>
<td>69,000</td>
</tr>
</tbody>
</table>
263 K.K. DEEPAK
Multicentric trial of integrated software for quantification of autonomic tone
Ministry of Information and Technology 12,77,007

264 RASHMI MATHUR
Motor responses to noxious/non-noxious stimuli in spinalized humans and rats: Role of electromagnetic stimulation in recovery
DST 11,23,163

265 RATNA SHARMA
Randomized controlled trial on the efficacy of yogic intervention in premenstrual syndrome
ICMR 4,38,335

266 RATNA SHARMA
A study to assess acute mental stress induced changes in EEG, cognitive behaviour and nuroteroids across the menstrual cycle and effect of meditation on stress-induced changes
Central Council for Research in Yoga And Naturopathy 8,13,155

Surgery
267 ANURAG SRIVASTAVA
Relationship between genetic polymorphism in drug metabolizing enzymes, cyptial and gastmi and risk of developing oral precancer and cancer among consumers of tobacco and chewing products
ICMR 18,68,860

268 SANDEEP GULARIA
Evaluation of efficacy and tolerability of tacrolimus in patients undergoing renal transplantation
Panacea Biotech 1,83,940

Transplant Immunology and Immunogenetics
269 N.K. MEHRA
Comparative study on the immunogenetic similarities between European gypsies and north Indians to improve the utilization of bone marrow donor registries for diverse ethnic groups and to function Genome Programme
DST 1,80,000

270 N.K. MEHRA
Monitoring T-cell activation markers and cytokine production following allogenic renal transplantation
ICMR 4,80,443
271 N.K. MEHRA          Programme support for advanced programme in histocompatibility and transplant immunology (PS-APHTI)          DBT          9,30,712

Ongoing research projects funded by World Health Organization

<table>
<thead>
<tr>
<th>Investigator</th>
<th>Project</th>
<th>Funds (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Centre for Community Medicine</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 K. ANAND</td>
<td>Sentinel health monitoring centres in India: Risk factors surveillance for non-communicable disease</td>
<td>1,24,156</td>
</tr>
<tr>
<td><strong>ENT (Otorhinolaryngology)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 R.C. DEKA</td>
<td>Assessment of aetiological factors for conductive hearing impairment in rural population</td>
<td>18,890</td>
</tr>
<tr>
<td><strong>Haematology</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 RENU SAXENA</td>
<td>A multicentric study to test the efficacy and the feasibility of using the haemoglobin colour scale for haemoglobin estimation in Indian setting</td>
<td>8,52,046</td>
</tr>
<tr>
<td><strong>Neurology</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 MANJARI TRIPATHI</td>
<td>A prospective study in Indian women: How pregnancy and epilepsy interact to produce psychological and mental health morbidity</td>
<td>53,084</td>
</tr>
<tr>
<td><strong>Obstetrics and Gynecology</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 NEERJA BHATLA</td>
<td>Evaluation of the comparative efficacy of single- and double-freeze technique of cryotherapy in controlling CIN lesion: Multicentre randomized clinical trial</td>
<td>2,14,316</td>
</tr>
<tr>
<td><strong>Paediatrics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 A.K. DEORARI</td>
<td>Multicentric study of clinical sign of predicting illness in young infants</td>
<td>3,95,693</td>
</tr>
</tbody>
</table>
7. ARVIND BAGGA  
Impact of zinc supplementation on mortality and hospitalization in children aged 2–23 months  
2,21,525

8. V.K. PAUL  
South East Asia regional neonatal–perinatal database network  
3,65,400

## Ongoing research projects funded by international agencies

<table>
<thead>
<tr>
<th>Investigator</th>
<th>Project</th>
<th>Funding Agency</th>
<th>Funds (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Biochemistry</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 KALPANA LUTHRA</td>
<td>Characterization of HIV-1 subtypes from Indian subjects</td>
<td>National Institutes of Health, USA</td>
<td>5,81,271</td>
</tr>
<tr>
<td><strong>Biotechnology</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 H.K. PRASAD</td>
<td>Immune reactivity of specific secreted antigens of <em>M. tuberculosis</em> in TB patients and their contacts</td>
<td>INDO-US</td>
<td>2,371</td>
</tr>
<tr>
<td><strong>Centre for Community Medicine</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 C.S. PANDAV</td>
<td>Health systems reforms and ethics: Private practitioners in poor neighbourhoods in urban India, Indonesia and Thailand: A multidisciplinary comparative study</td>
<td>DANDIA Research Council</td>
<td>1,73,218</td>
</tr>
<tr>
<td>4 K. ANAND</td>
<td>Evaluation of safe water systems intervention project in urban slums of Dehradun and Haridwar</td>
<td>INCLEN and USAID</td>
<td>13,77,538</td>
</tr>
<tr>
<td>5 K. ANAND</td>
<td>Strengthening health services in rural area using information technology development of a replicable model for India</td>
<td>Media Lab Asia</td>
<td>10,56,169</td>
</tr>
<tr>
<td>6 K. ANAND</td>
<td>Monitoring and evaluation of community-based intervention for integrated prevention of non-communicable diseases—Ballabgarh, Haryana</td>
<td>KOBE, Japan</td>
<td>9,41,232</td>
</tr>
</tbody>
</table>
### Computer Facility

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Title</th>
<th>Funding Agency</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>R.S. TYAGI</td>
<td>Mainstreaming HIV/AIDS concerns in ongoing drugs demand reduction programmes in South Asia</td>
<td>UN International Drug and crime Control Programme</td>
<td>10,31,876</td>
</tr>
</tbody>
</table>

### Dermatology and Venereology

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Title</th>
<th>Funding Agency</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>V.K. SHARMA</td>
<td>A prospective, randomized, double-blind, placebo-controlled, parallel group, multicentre, 52-week trial to assess the efficacy and safety of adjunct mycophenolate mofetil (mmf) to achieve remission with reduced corticosteroids in subjects with active PEM</td>
<td>Aspreva Pharmaceutical Corporation, Canada</td>
<td>2,13,917</td>
</tr>
<tr>
<td>9</td>
<td>V.K. SHARMA</td>
<td>A randomized, double-blinded study to evaluate the safety and efficacy of intralesional administration of PCNA synthetic chimeric ribozyme (VIT 100) (Chelase) in the treatment of keloids and hypertrophic scars when administered concurrently with 5 FU and kanalog</td>
<td>Clincyte, USA</td>
<td>4,92,500</td>
</tr>
</tbody>
</table>

### Dr B.R. Ambedkar Institute Rotary Cancer Hospital

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Title</th>
<th>Funding Agency</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>V. RAINA</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>Institute of Cancer Research UK Co-ordination Committee</td>
<td>6,85,067</td>
</tr>
<tr>
<td>11</td>
<td>V. RAINA</td>
<td>Adjuvant tamoxifen long against short (ATLAS) trial</td>
<td>Oxford University, UK</td>
<td>8,69,625</td>
</tr>
<tr>
<td>12</td>
<td>VINOD KOCHUPILLAI</td>
<td>Role of antioxidant vitamins in human lung cancer: A randomized study</td>
<td>Terry Fox Foundation/ Canadian High Commission</td>
<td>91,000</td>
</tr>
<tr>
<td><strong>Haematology</strong></td>
<td><strong>13 RENU SAXENA</strong></td>
<td>Molecular characterization and treatment of acute lymphoblastic leukemia on protocol MCP-943</td>
<td>INCTR, USA</td>
<td>10,00,752</td>
</tr>
<tr>
<td></td>
<td><strong>14 TULIKA SETH</strong></td>
<td>Training in low cost cancer screening methods for medical health workers: A pilot study</td>
<td>Terry Fox Foundation/ Canadian High Commission</td>
<td>27,595</td>
</tr>
</tbody>
</table>

| **Medicine** | **15 NAVEET WIG** | Phase I planning grant to the international clinical, operational and health services research training for AIDS/TB programmes | National Institutes of Health, USA | 58,42,216 |
| | **16 S.K. SHARMA** | Evaluation of management strategy for pulmonary embolism | International Atomic Energy Agency | 2,50,253 |
| | **17 S.K. SHARMA** | A double-blind, placebo-controlled, parallel, multicentre study on extended VTE prophylaxis in acutely ill medical patients with prolonged immobilization | Aventis Pharmaceuticals, USA | 1,46,254 |

| **Microbiology** | **18 RAMA CHAUDHARY** | Prevention of infection in India neonates | University of Maryland | 8,02,889 |
| | **19 SHOBHA BROOR** | Metapneumovirus infection of children in India | The University of Alabama, USA | 35,55,344 |

<p>| <strong>National Drug Dependence Treatment Centre</strong> | <strong>20 ANJU DAWAN</strong> | To test the effectiveness of oral substitution with | UN | 17,99,486 |</p>
<table>
<thead>
<tr>
<th>Nuclear Medicine</th>
<th>21 CHETAN D. PATEL</th>
<th>Role of cerebral perfusion SPECT in the differential diagnosis of dementia</th>
<th>International Drug and Crime Control Programme 4,84,154</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>22 RAKESH KUMAR</td>
<td>Role of radionuclide technique in the management of neonatal hydronephrosis</td>
<td>International Atomic Energy Agency 2,04,553</td>
</tr>
<tr>
<td>Paediatrics</td>
<td>23 ARVIND BAGGA</td>
<td>Impact of zinc supplementation in low birth weight infants on severe morbidity and zinc status: A randomized controlled trial</td>
<td>KLPF, USA 18,59,112</td>
</tr>
<tr>
<td></td>
<td>24 MADHULIKA KABRA</td>
<td>Gene mapping of non-syndromic hearing impairment: A multicentric study</td>
<td>National Institutes of Health, USA 57,456</td>
</tr>
<tr>
<td></td>
<td>25 PRATIMA RAY</td>
<td>The Indo-US collaboration to develop rotavirus vaccine</td>
<td>National Institutes of Health, USA 12,28,543</td>
</tr>
<tr>
<td></td>
<td>26 S.K. KABRA</td>
<td>Randomized blind placebo-controlled trial of amoxycillin in the treatment of non-severe pneumonia with wheeze in children aged 2–59 months of age: A multi-centric double-blind trial</td>
<td>INCLEN and USAID 16,322</td>
</tr>
</tbody>
</table>
27 S.K. KABRA  Development of Continuing Medical Education (CME) programmes to strengthen AIDS treatment in India  National Institutes of Health, USA


29 SHEFFALI GULATI  Model infection centres (MICs): A programme to improve infection practices in the country  INCLEN and USAID

30 SHINJINI BHATNAGAR  Institutional capacity and competence building in research and education for promotion of child health and nutrition in South Asia  University of Bergen, Norway

31 SHINJINI BHATNAGAR  Extended studies on safety and efficacy of zinc ORS compared to alone in hospitalized children with severe and complicated acute diarrhoea  Norad, Norway

32 SHINJINI BHATNAGAR  Specific targeted research or innovation project  University of Bergen, Norway

33 V.K. PAUL  Enhancing networking capacity for advancing newborn health in South East Asia  Saving Newborn Lives, USA

Radio Diagnosis
34 D.N.SRIVASTAVA  Management of liver cancer using radionuclide methods with special emphasis on early diagnosis, intra-arterial locoregional therapy  International Atomic Energy Agency

Surgery
<table>
<thead>
<tr>
<th>#</th>
<th>Investigator</th>
<th>Project</th>
<th>Funding Agency</th>
<th>Funds (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>35</td>
<td>ANURAG SRIVASTAVA</td>
<td>Adjuvant tamoxifen: Longer against shorter (ATLAS) for breast cancer patients</td>
<td>Oxford University, UK</td>
<td>76,063</td>
</tr>
</tbody>
</table>

**New research projects funded by national agencies**

<table>
<thead>
<tr>
<th>Anatomy</th>
<th>Investigator</th>
<th>Project</th>
<th>Funding Agency</th>
<th>Funds (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<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>7,86,240</td>
</tr>
</tbody>
</table>

**Biochemistry**

<table>
<thead>
<tr>
<th>#</th>
<th>Investigator</th>
<th>Project</th>
<th>Funding Agency</th>
<th>Funds (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>D.N. RAO</td>
<td>Development defensin(s) as a mucosal adjuvant/imicrobicife with peptide antigens of HIV</td>
<td>ICMR</td>
<td>62,400</td>
</tr>
<tr>
<td>3</td>
<td>D.N. RAO</td>
<td>Development defensin(s) as a mucosal adjuvant/imicrobicife with peptide antigens of HIV</td>
<td>DBT</td>
<td>9,23,000</td>
</tr>
<tr>
<td>4</td>
<td>N.C. CHANDRA</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</td>
<td>1,100,000</td>
</tr>
<tr>
<td>5</td>
<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>
<td>3,06,702</td>
</tr>
<tr>
<td>No.</td>
<td>Name</td>
<td>Title</td>
<td>Funding Authority</td>
<td>Amount</td>
</tr>
<tr>
<td>-----</td>
<td>---------------------</td>
<td>----------------------------------------------------------------------</td>
<td>-------------------</td>
<td>----------</td>
</tr>
<tr>
<td>6</td>
<td>NEETA SINGH</td>
<td>A study of molecular and biological factors in pathogenesis of ovarian cancer</td>
<td>ICMR</td>
<td>1,97,512</td>
</tr>
<tr>
<td>7</td>
<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>
<td>6,71,560</td>
</tr>
<tr>
<td>8</td>
<td>SUBRATA SINHA</td>
<td>Therapy of infectious and chronic diseases. Targeted gene delivery and long-term specific modulation of gene expression</td>
<td>DBT</td>
<td>55,48,000</td>
</tr>
</tbody>
</table>

**Biomedical Engineering Unit**

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Title</th>
<th>Funding Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>J.C. BHARDWAJ</td>
<td>Reversibility of injectable intravasal contraceptive for the male technology development and multicentric non-human primates study</td>
<td>Ministry of Health and Family welfare</td>
</tr>
<tr>
<td>10</td>
<td>J.C. BHARDWAJ</td>
<td>Study of fallopian tube function with luminal implant</td>
<td>Markansas Research Division</td>
</tr>
</tbody>
</table>

**Biophysics**

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Title</th>
<th>Funding Authority</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<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>
<td>2,98,185</td>
</tr>
<tr>
<td>12</td>
<td>PUNIT KAUR</td>
<td>Setting up bioinformatics centres at AIIMS, New Delhi</td>
<td>ICMR</td>
<td>7,90,316</td>
</tr>
<tr>
<td>13</td>
<td>SUJATA SHARMA</td>
<td>Clinical proteomics: Structural and functional studies of proteins present in pleural fluid</td>
<td>DST</td>
<td>5,55,000</td>
</tr>
</tbody>
</table>

**Biostatistics**

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Title</th>
<th>Funding Authority</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>V. SREENIVAS</td>
<td>A multicentric randomized controlled clinical trial of</td>
<td>ICMR</td>
<td>96,980</td>
</tr>
</tbody>
</table>
lamivudine, lamivudine and adefovir, glycyrrhizin and adefovir in HBV related decompensated cirrhosis

| Cardiac Anaesthesiology | POONAM MALHOTRA KAPOOR | Myocardial preconditioning against infarction in patients undergoing coronary artery bypass surgery: A comparison of isoflurane and sevoflurane | ICMR | 3,07,476 |

| Cardiac Radiology | SANJEEV SHARMA | Induction of therapeutic angiogenesis in critical limb ischaemia by intra-arterial delivery of autologous bone marrow derived stem cells | DBT | 20,09,000 |

| Cardiology | D. PRABHAKARAN | Serum fatty acid levels and their correlation with other CVD risk factors in industrial populations from Delhi and Trivandrum | ICMR | 8,80,441 |

| Centre for Behavioural Sciences (Psychiatry) | MANJU MEHTA | National Mental Health Programme | Ministry of Health and Family Welfare | 1,50,000 |

| CTVS, CNC | P. VENUGOPAL | Use of autologous bone marrow stem cells for myocardium regeneration | DBT | 80,42,600 |

| Dental Surgery | AJOY ROYCHOUDHRY | A randomized double-blind placebo-controlled study of efficacy of lactobacillus CD2 lozenge in patients with chronic periodontitis | CD Pharma India | 3,30,166 |

|  | O.P. KHARBANDA | Development of visual analog scale for smile characteristics | ICMR | 3,21,592 |
following orthodontic treatment and its correlation with the treatment outcome

**Dermatology and Venereology**

<table>
<thead>
<tr>
<th>No.</th>
<th>Author(s)</th>
<th>Title</th>
<th>Funding Agency</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>22</td>
<td>KAUSHAL K.VERMA</td>
<td>Randomized clinical trial of azathioprine weekly pulse versus daily azathioprine for the treatment of parthenium dermatitis</td>
<td>ICMR</td>
<td>1,86,072</td>
</tr>
<tr>
<td>23</td>
<td>V.K. SHARMA</td>
<td>Evaluation of cytophosphamide pulse therapy as adjuvant in the management of pemphigus</td>
<td>ICMR</td>
<td>1,10,680</td>
</tr>
</tbody>
</table>

**Dr B.R. Ambedkar Institute Rotary Cancer Hospital**

<table>
<thead>
<tr>
<th>No.</th>
<th>Author(s)</th>
<th>Title</th>
<th>Funding Agency</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>RITU GUPTA</td>
<td>SERC fast track scheme immunophenotypic characterization of plasma cells by flow cytometry in health and disease with particular reference to plasma cell myeloma</td>
<td>DST</td>
<td>6,76,000</td>
</tr>
<tr>
<td>25</td>
<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</td>
<td>1,34,036</td>
</tr>
<tr>
<td>26</td>
<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 Laboratories</td>
<td>1,07,461</td>
</tr>
<tr>
<td>27</td>
<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>
<td>ICMR</td>
<td>2,13,622</td>
</tr>
<tr>
<td>28</td>
<td>V. RAINA</td>
<td>A treatment protocol for patients with gastrointestinal stromal tumour who are ineligible for participation in other SU011248 protocols and are refractory to or intolerant of imatinib mesylate</td>
<td>Pfizer</td>
<td>89,624</td>
</tr>
<tr>
<td>No.</td>
<td>Authors</td>
<td>Title</td>
<td>Funding Agency</td>
<td>Amount</td>
</tr>
<tr>
<td>-----</td>
<td>---------</td>
<td>-------</td>
<td>----------------</td>
<td>--------</td>
</tr>
<tr>
<td>29</td>
<td>V. RAINA</td>
<td>An ascending dose, sequential group, placebo-controlled, multicentre, phase I study of RWJ 800088 in subject with cancer receiving platinum based chemotherapy regimens protocol 800088-NAP-1002:phase I</td>
<td>Johnson and Johnson</td>
<td>94,390</td>
</tr>
<tr>
<td>30</td>
<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 protocols but may derive benefit from the treatment with SU011248</td>
<td>Pfizer</td>
<td>1,47,107</td>
</tr>
<tr>
<td></td>
<td><strong>Dr R.P. Centre for Ophthalmic Sciences</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>GITA SATPATHY</td>
<td>Evaluation of polymerase chain reaction assay (PCR) for detection of HSV genome in tear specimens as a rapid diagnostic tool for laboratory diagnosis of HSV keratitis particularly stromal keratitis and atypical epithelial keratitis vis-a-vis antigen detection and genomic DNA detection by PCR assay in corneal scraping</td>
<td>ICMR</td>
<td>2,74,100</td>
</tr>
<tr>
<td>32</td>
<td>RADHIKA TANDON</td>
<td>Ocular surface reconstruction with alternative autografts of non-ocular origin</td>
<td>DST</td>
<td>4,80,000</td>
</tr>
<tr>
<td>33</td>
<td>T. VELPANIDAN</td>
<td>Evaluation of characterization of colours and documentation of their ocular toxicity in the northern states of India during the festival of colours (Holi)</td>
<td>DST</td>
<td>2,00,000</td>
</tr>
<tr>
<td></td>
<td><strong>Endocrinology and Metabolism</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>M.L. KHURANA</td>
<td>A pilot study to assess micronutrient profile among preschool children (6–71 months) of Assam and Rajasthan—A multicentre study</td>
<td>ICMR</td>
<td>18,91,703</td>
</tr>
<tr>
<td>35</td>
<td>M.L. KHURANA</td>
<td>Nutritional profile of Assam, Manipur and Meghalaya—An ICMR task-force multicentre study</td>
<td>ICMR</td>
<td>39,29,659</td>
</tr>
<tr>
<td>No.</td>
<td>Name</td>
<td>Project Title</td>
<td>Organization</td>
<td>Budget</td>
</tr>
<tr>
<td>-----</td>
<td>-----------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>--------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>36</td>
<td>NIKHIL TANDON</td>
<td>Registry of people with diabetes in India with young age at onset</td>
<td>ICMR</td>
<td>6,36,458</td>
</tr>
<tr>
<td>37</td>
<td>NIKHIL TANDON</td>
<td>A multicentre, double-blinded, randomized, placebo-controlled, study of the MK-0431 in patients with type 2 diabetes mellitus who have inadequate glycaemic control</td>
<td>MSD, India</td>
<td>9,59,769</td>
</tr>
<tr>
<td>38</td>
<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-nalv patients with type 2 diabetes mellitus</td>
<td>Ranbaxy/Eli Lilly</td>
<td>1,28,865</td>
</tr>
<tr>
<td>39</td>
<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 patient with type I diabetes mellitus</td>
<td>Ranbaxy/Eli Lilly</td>
<td>1,11,413</td>
</tr>
<tr>
<td>40</td>
<td>R. 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>Ministry of Defence (DRDO)</td>
<td>4,27,000</td>
</tr>
<tr>
<td>41</td>
<td>RAVINDER GOSWAMI</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>21,51,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>ENT (Otorhinolaryngology)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>42</td>
<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>
<td>ICMR</td>
<td>1,80,765</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Gastroenterology and Human Nutrition</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>43</td>
<td>ANOOP SARAYA</td>
<td>Genetic basis of alcohol-induced pancreatic disorders</td>
<td>ICMR</td>
<td>97,166</td>
</tr>
<tr>
<td>No.</td>
<td>Name</td>
<td>Title</td>
<td>Funding Body</td>
<td>Funding Amount</td>
</tr>
<tr>
<td>-----</td>
<td>-----------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>--------------</td>
<td>---------------</td>
</tr>
<tr>
<td>44</td>
<td>RAKESH AGGARWAL</td>
<td>A mathematical decision-analysis model to study the efficacy and cost-effectiveness of prophylactic cholecystectomy in preventing complications, especially gallbladder cancer in patients with a symptomatic gallstones</td>
<td>ICMR</td>
<td>2,40,978</td>
</tr>
<tr>
<td>45</td>
<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>
<td>ICMR</td>
<td>3,07,980</td>
</tr>
<tr>
<td>46</td>
<td>Y.K. JOSHI</td>
<td>Assessment of intestinal permeability in chronic liver disease and its consequences</td>
<td>ICMR</td>
<td>17,06,669</td>
</tr>
<tr>
<td></td>
<td><strong>Laboratory Medicine</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>47</td>
<td>SARMAN SINGH</td>
<td>Proteomic analysis of the <em>M. Tuberculosis</em> during the stage of acquisition of resistance to the isoniazid and rifampicin</td>
<td>DBT</td>
<td>9,00,000</td>
</tr>
<tr>
<td></td>
<td><strong>Medicine</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>48</td>
<td>ANANT MOHAN</td>
<td>Study of the prevalence of respiratory virus infections in hospitalized patients with acute exacerbation of chronic obstructive pulmonary disease and their impact on morbidity and mortality</td>
<td>ICMR</td>
<td>2,00,603</td>
</tr>
<tr>
<td>49</td>
<td>NAVAL K. VIKRAM</td>
<td>Investigation of genetic basis and gene-lifestyle interactions in generalized and regional obesity, insulin resistance and diabetes in Asians</td>
<td>DBT</td>
<td>21,39,000</td>
</tr>
<tr>
<td>50</td>
<td>R. HANDA</td>
<td>Prevalence of rheumatic disorders in Ballabgarh Tehsil, district Faridabad NCR Delhi</td>
<td>Bone and Joint Decade India</td>
<td>1,90,000</td>
</tr>
<tr>
<td>51</td>
<td>RANDEEP GULERIA</td>
<td>Assessment of nutritional and antioxidant enzyme status in mechanically ventilated critically ill patients. Effect on</td>
<td>DST</td>
<td>10,00,000</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Project Description</th>
<th>Funding Agency</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>52</td>
<td>S.K. SHARMA</td>
<td>Efficacy of thrice weekly intermittent short course antituberculosis chemotherapy in tuberculosis patients with and without HIV infection</td>
<td>Ministry of Health and Family Welfare (NACO)</td>
<td>29,13,000</td>
</tr>
<tr>
<td>53</td>
<td>S.K. SHARMA</td>
<td>Incidence of deep venous thrombosis (DVT) among patients admitted in medical wards and intensive care unit (ICU) of a tertiary care hospital—A protocol study</td>
<td>Pfizer.</td>
<td>4,05,877</td>
</tr>
<tr>
<td>54</td>
<td>S.K. SHARMA</td>
<td>A population-based study of prevalence and risk factors in sleep disorders breathing in south Delhi</td>
<td>Pfizer</td>
<td>2,50,000</td>
</tr>
<tr>
<td>55</td>
<td>S.K. SHARMA</td>
<td>Evaluation of the efficacy of thrice weekly DOTS regimen in TB pleural effusion at 6 months</td>
<td>Directorate General of Health Services</td>
<td>7,18,308</td>
</tr>
<tr>
<td>56</td>
<td>S.K. SHARMA</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>6,06,000</td>
</tr>
<tr>
<td>57</td>
<td>S.K. SHARMA</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>8,37,000</td>
</tr>
<tr>
<td>58</td>
<td>S.K. SHARMA</td>
<td>Efficacy and safety of immunomodulator (Mycobacterium w) as an adjunct therapy in category I pulmonary tuberculosis along with assessment of immunological parameters</td>
<td>DBT</td>
<td>17,89,000</td>
</tr>
<tr>
<td>59</td>
<td>SANJEEV SINHA</td>
<td>Study of prevalence and types of baseline HIV drug resistance in the antiretroviral treatment-naive and previously treated HIV</td>
<td>Ministry of Health and Family Welfare</td>
<td>47,29,440</td>
</tr>
<tr>
<td>Microbiology</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>60 B.K. DAS</strong></td>
<td>Pneumolysin DNA construct as a vaccine candidate against <em>Streptococcus pneumoniae</em>—An immune response study</td>
<td>DST</td>
<td>10,00,000</td>
<td></td>
</tr>
<tr>
<td><strong>61 BENU DHAWAN</strong></td>
<td>Detection of ureaplasma urealyticum and <em>Mycoplasma hominis</em> in patients with lower genitourinary tract infection by PCR assay: Association of urealyticum biovars with clinical outcome</td>
<td>ICMR</td>
<td>3,48,076</td>
<td></td>
</tr>
<tr>
<td><strong>62 RAMA CHAUDHARY</strong></td>
<td>Detection and identification of thermophilic <em>Campylobacter</em> spp. (C.j, C.C, C.U and C.L) and molecular sub-typing of <em>Campylobacter jejuni</em> in fecal samples of diarrhoeic patients and in food samples using multiplex PCR, PCR REFO and PRGE</td>
<td>ICMR</td>
<td>2,74,236</td>
<td></td>
</tr>
<tr>
<td><strong>63 RAMA CHAUDHARY</strong></td>
<td>To study colonization and immunomodulatory effect of probiotic strains in Indian children</td>
<td>DBT</td>
<td>76,76,580</td>
<td></td>
</tr>
<tr>
<td><strong>64 SHOBHA BROOR</strong></td>
<td>Multi-site epidemiological and virological monitoring of human influenza viruses in India</td>
<td>Sanofi Pasteur India</td>
<td>60,000</td>
<td></td>
</tr>
<tr>
<td><strong>65 URVASHI B. SINGH</strong></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>
<td>DBT</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nephrology</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>66 S.K. AGARWAL</strong></td>
</tr>
</tbody>
</table>
67 S.K. AGARWAL  Detection of HCV core antigen (HCVc-Ag) for diagnostic screening of HCV infection in patients on maintenance haemodialysis  ICMR  4,91,024

**Neurology**
68 KAMESHWAR PRASAD  Intravenous autologous bone marrow stromal cells (MSC) or mononuclear cells (MMC) for patients with acute ischaemic stroke: A multi-institutional project  DBT  20,48,000

69 MADHURI BEHARI  A phase III, double-blind, placebo-controlled study to determine the efficacy and safety of a low (50–100 mg/day) and high (150–200 mg/day) dose range of safinamide as add-on therapy, in patients with idiopathic Parkinson’s disease with motor fluctuations  Clinirx Research  1,17,987

70 MADHURI BEHARI  Implantation of adult human retinal pigment epithelial (hRPE) cells in the 6-OHDA lesioned rat model of Parkinson’s disease  DBT  20,77,400

**Neuroradiology**
71 AJAY GARG  SERC fast track proposal for young scientist scheme phase imaging and diffusion tensor imaging novel MR contrasts in the evaluation of cryptogenic focal epilepsy  DST  7,40,000

**Neurosurgery**
72 B.S. SHARMA  DST FIST Programme 2006  DST  70,00,000

**Nuclear Medicine**
73 G.P. BANDOPADHYAYA  Synthesis and chemical characterization of different formulations of alginate-tamoxifen beads  DST  8,30,000

**Obstetrics and Gynaecology**
74 ALKA KRIPLANI  Role of mifepristone (RU-486) in the management of uterine bleeding  ICMR  1,80,636
<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Title</th>
<th>Funding Agency</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>75</td>
<td>ALKA KRIPLANI</td>
<td>Phase-I phase-II clinical trials on safety and capability of probiotic selected strains of lactobacilli to colonize in vagina for reproductive health of women</td>
<td>DBT</td>
<td>2,16,600</td>
</tr>
<tr>
<td>76</td>
<td>SUNEETA MITTAL</td>
<td>Pretreatment with misoprostol before vacuum aspiration versus MVA: A double-blind RCT</td>
<td>Ministry of Health and Family welfare</td>
<td>5,00,000</td>
</tr>
</tbody>
</table>

**Orthopaedics**

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Title</th>
<th>Funding Agency</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>77</td>
<td>SURYA BHAN</td>
<td>Some medico-technical issues determining mechanical properties of ligaments and development of stereop-cameras for operative/anatomic videosequences</td>
<td>ICMR</td>
<td>4,40,682</td>
</tr>
<tr>
<td>78</td>
<td>SURYA BHAN</td>
<td>Evaluation of efficacy of platelet concentrate in the treatment of non-union of fractures of long bones</td>
<td>ICMR</td>
<td>3,57,668</td>
</tr>
</tbody>
</table>

**Paediatrics**

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Title</th>
<th>Funding Agency</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>79</td>
<td>ARVIND BAGGA</td>
<td>Daily corticosteroids to prevent infection-associated relapses in patients with frequently relapsing nephrotic syndrome</td>
<td>ICMR</td>
<td>3,09,536</td>
</tr>
<tr>
<td>80</td>
<td>PANKAJ HARI</td>
<td>Antibiotic prophylaxis in the management of vesicoureteric reflux: A multicentric randomized double-blind placebo-controlled trial</td>
<td>ICMR</td>
<td>3,80,605</td>
</tr>
<tr>
<td>81</td>
<td>SHINJINI BHATNAGAR</td>
<td>Efficacy of stem cell in improvement of left ventricular function in patients with acute myocardial infarction</td>
<td>DBT</td>
<td>5,59,600</td>
</tr>
</tbody>
</table>

**Pathology**

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Title</th>
<th>Funding Agency</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>82</td>
<td>A.K. DINDA</td>
<td>Development of nanoparticular system for selective receptor specific macrophage targeting</td>
<td>DBT</td>
<td>17,76,000</td>
</tr>
<tr>
<td>83</td>
<td>S.K. PANDA</td>
<td>FIST Programme</td>
<td>DST</td>
<td>17,000,00</td>
</tr>
<tr>
<td>Field</td>
<td>Name</td>
<td>Title</td>
<td>Funding Agency</td>
<td>Grant Amount</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------</td>
<td>----------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Pharmacology</td>
<td>SURENDER SINGH</td>
<td>Standardization and pharmacological studies of widely practised anti-arthritis Unani preparation <em>Majoon Suranjam</em> based on clinical Unani literature</td>
<td>ICMR</td>
<td>441,392</td>
</tr>
<tr>
<td>Physiology</td>
<td>DEBABRATA GHOSH</td>
<td>Defining endometrial receptivity for blastocyst implantation using cDNA-based array technology</td>
<td>DST</td>
<td>17,50,000</td>
</tr>
<tr>
<td></td>
<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>1,09,744</td>
</tr>
<tr>
<td></td>
<td>SUMAN JAIN</td>
<td>Prenatal auditory sound stimulation: Effect on spatial memory and expression of synaptic protein in chick hippocampus</td>
<td>CSIR</td>
<td>5,59,667</td>
</tr>
<tr>
<td>Reproductive Biology</td>
<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>
<td>ICMR</td>
<td>3,46,934</td>
</tr>
<tr>
<td>Surgery</td>
<td>SANDEEP GULERIA</td>
<td>Save the Kidney</td>
<td>Rajiv Gandhi Foundation</td>
<td>3,20,101</td>
</tr>
<tr>
<td>Transplant Immunology and Immunogenetics</td>
<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>8,22,000</td>
</tr>
<tr>
<td></td>
<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,</td>
<td>DBT</td>
<td>10,00,000</td>
</tr>
</tbody>
</table>
92 D.K. MITRA  
**Studies on T-cell mediated suppression of immunity in visceral leishmaniasis patients**  
DBT  24,00,000

93 N.K. MEHRA  
**HLA profile of raica community of Rajasthan**  
ICMR  10,07,546

94 N.K. MEHRA  
**Genomic analysis of MHC genes (HLA and non HLA) in type 1 diabetes in the Indian population**  
ICMR  8,37,413

**Urology**

95 AMLESH SETH  
**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**  
ICMR  4,71,922

**New research projects funded by World Health Organization**

<table>
<thead>
<tr>
<th>Investigator</th>
<th>Project</th>
<th>Funds (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dental Surgery</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 NASEEM SHAH</td>
<td>Analysis of data for multicentric oral health survey</td>
<td>1,03,800</td>
</tr>
<tr>
<td><strong>Haematology</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 RENU SAXENA</td>
<td>Evaluation of efficacy of haemoglobin colour scale with Sahlis method for haemoglobin estimation</td>
<td>1,60,800</td>
</tr>
<tr>
<td><strong>Medicine</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 A.B. DEY</td>
<td>Evaluation of health status and health needs of old home residents and establishment of minimum standards of health services on long stay institutions in India</td>
<td>1,35,000</td>
</tr>
</tbody>
</table>
### Paediatrics

<table>
<thead>
<tr>
<th>No.</th>
<th>Investigator</th>
<th>Project Description</th>
<th>Funding agency</th>
<th>Funds (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>SHINJINI BHATNAGAR</td>
<td>Efficacy of zinc (given as an adjunct) in the treatment of severe and very severe</td>
<td></td>
<td>17,43,267</td>
</tr>
<tr>
<td></td>
<td></td>
<td>pneumonia in hospitalized children 2–24 months of age</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### New research projects funded by international agencies

**Investigator**

<table>
<thead>
<tr>
<th>No.</th>
<th>Investigator</th>
<th>Project Description</th>
<th>Funding agency</th>
<th>Funds (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ATUL SHARMA</td>
<td>A randomized phase 3 study of the efficacy and safety of glufosfamide compared</td>
<td>Threshold Pharmaceuticals, USA</td>
<td>2,94,759</td>
</tr>
<tr>
<td></td>
<td></td>
<td>with best supportive care in metastatic pancreatic adenocarcinoma previously</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>treated with gemcitabine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>P.K. JULKA</td>
<td>An open label randomized multicentre phase III study of trastuzumab in combination</td>
<td>Siro Clin Pharma</td>
<td>44,625</td>
</tr>
<tr>
<td></td>
<td></td>
<td>with a fluoropyrimidine and cisplatin versus chemotherapy alone as first-line</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>therapy in patients with HER2-positive advanced gastric cancer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>V. RAINA</td>
<td>Indox Cancer Trials Network Centre</td>
<td>Oxford University, UK</td>
<td>10,62,500</td>
</tr>
<tr>
<td>4</td>
<td>V. RAINA</td>
<td>An open-label study to evaluate the efficacy and safety of human recombinant</td>
<td>Clinigene International</td>
<td>1,52,232</td>
</tr>
<tr>
<td></td>
<td></td>
<td>granulocyte colony stimulating factor (G-CSF) in patients with chemotherapy</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>induced neutropenia</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Gastroenterology and Human Nutrition

<table>
<thead>
<tr>
<th>No.</th>
<th>Investigator</th>
<th>Project Description</th>
<th>Funding agency</th>
<th>Funds (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>RAKESH AGGARWAL</td>
<td>Landscape analysis of zinc and its effect on child morbidity and</td>
<td>National Institutes of Health, USA</td>
<td>3,56,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>mortality</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Medicine

<table>
<thead>
<tr>
<th>No.</th>
<th>Investigator</th>
<th>Project Description</th>
<th>Funding agency</th>
<th>Funds (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>NAVAL K. VIKRAM</td>
<td>Evaluation of efficacy and safety of ‘SD 002’ tablets in newly diagnosed</td>
<td>Solumiks Herbaceuticals</td>
<td>2,62,700</td>
</tr>
<tr>
<td></td>
<td></td>
<td>patients with type 2 diabetes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No.</td>
<td>Author(s)</td>
<td>Title</td>
<td>Type</td>
<td>Company/Institution</td>
</tr>
<tr>
<td>-----</td>
<td>-----------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>-------------------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>7</td>
<td>Naval K. Vikram</td>
<td>Body fat and its relationship with metabolic syndrome indicators in overweight pre-adolescents and adolescents</td>
<td>International</td>
<td>Atomic Energy Agency</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Nephrology</td>
<td></td>
</tr>
<tr>
<td>8</td>
<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 erthrematosus (SLE) patients with a history of renal disease</td>
<td>Lajolla</td>
<td>Pharmaceutical Company, California</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Neurosurgery</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Ashish Suri</td>
<td>A multi-national, multicentre, 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</td>
<td>Antisense</td>
<td>Pharma GmbH, Germany</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Nuclear Medicine</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Rakesh Kumar</td>
<td>Role of nuclear cardiology techniques in ischemia assessment with exercise imaging in asymptomatic diabetes</td>
<td>International</td>
<td>Atomic Energy Agency</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Obstetrics and Gynecology</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Neerja Bhatla</td>
<td>A phase III B, double-blind, randomized, controlled study to evaluate the immunogenicity and safety of Glaxosmithkine biologics HPV-16/18...18–35 years</td>
<td>GlaxoSmith Kline</td>
<td>Asia</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Paediatrics</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Madhulika Kabra</td>
<td>Economic modelling study non-invasive (NI) RhD testing in Europe and Asia under SAFE Network</td>
<td>University of Warwick, UK</td>
<td></td>
</tr>
</tbody>
</table>
13 RAKESH LODHA
Integrated management of neonatal and childhood illnesses: Baseline assessment of childhood morbidity and mortality in selected districts in India
UNICEF
18,266,79

14 S.K. KABRA
Strengthening of cystic fibrosis services at AIIMS
Cystic Fibrosis/World Wide, USA
4,10,525

15 SHINJINI BHATNAGAR
Efficacy of zinc (given as an adjunct) in the treatment of severe and very severe pneumonia in hospitalized children 2–24 months of age
Johns Hopkins Bloomberg School of Public Health (JHBSPH)
11,96,000

Physiology
16 H.N. MALLICK
Role of glutamate in the preoptic area in the regulation of sleep-wakefulness
Ajinomota, Japan
4,45,250

Transplant Immunology and Immunogenetics
17 N.K. MEHRA
Type 1 Diabetes Genetics Consortium (TIDGC): An international effort
National Institutes of Health, USA
1,17,400
9.1 Anaesthesiology

Professor and Head
Chandrakekha (till 28 November 2006)
Ravi Saksena (w.e.f. 29 November 2006)

Professors
M.K. Arora  D.K. Pawar  R.K. Batra
S. Rajeswari  A. Trikha  Maya Dehran

Additional Professors
D. Shende (RPC)  L. Kashyap  G. Prasad

Associate Professors
V. K. Mohan  V. Rewari

Assistant Professors
A.P. Bhalla  Rani Sunder  V. Darlong
Anjolie Chhabra  Renu Sinha (RPC)  Chhavi Sawhney (JPNATC)
Jyotsna Punj  Babita (JPNATC)  R. Pandey
Rashmi Ramachandran  Sanjay Verma (ad hoc)  (Casualty)

Dr Babita and Dr Chhavi were shifted to Trauma Centre in October 2006
Dr Lokesh Kashyap, who was abroad, re-joined the Department in January 2007

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, tensive are management, pain medicine and emergency care is continuing.

SHORT-TERM TRAINING OF DOCTORS FROM VARIOUS MEDICAL COLLEGES IN
—Pain clinic  1
—ICU  2
—Anaesthesia  1

Continuing Medical Education
Lecture delivered
Professor M.K. Arora
• ‘Morbidly obese patient’, at UCMS and GTBH; 11 September 2006
Professor A. Trikha
• ‘Fiberoptic intubation’, 6th Annual CME, Hyderabad branch of ISA; August 2006.

Dr V. Rewari
• ‘Recovery and discharge criteria in day care patients; What is safe?’, 6th Annual CME (HYCOME ISA 2006), Hyderabad; 12–13 August 2006.

National and International Conference
International Conference on ‘Paediatric anaesthesia’, Department of Anaesthesia; 4–5 November 2006.

Lectures delivered
Dr Rani Sunder

Professor S. Rajeshwari
• ‘Perioperative management of phaeochromocytoma’, ENDOSURG 2007, Department of Surgery, AIIMS; March 2007.

Dr A. Chhabra

Professor A. Trikha
• ‘Only general anaesthesia should be delivered in severe PIH’, National Conference of the Research Society of Anaesthesiology Clinical Pharmacology, Pune; November 2006.
Dr V. Rewari

• Key points for short case discussion. The teleconferencing session for DNB students at IGNOU, New Delhi; 22 January 2007.
• Airway Management Workshop at JLN Hospital and Research Centre, Bhilai; 24–25 March 2007.

Dr Ravinder Kumar Batra delivered the following lectures:

• “Advances in Anaesthesia” at IGNOU, New Delhi, 13th April, 2007
• “Protocol, Research and Thesis” Moderated the panel discussion on 3rd May, 2007 at teleconferencing session at IGNOU.
• “How to attempt short questions with examples from previous year papers” at IGNOU teleconferencing session on 17th May, 2007.
• Moderated session on Trauma and Resuscitation and took lecture on “Airway Management in trauma patients”, 31st May, 2007

RESEARCH

Funded Projects Nil

Department Projects

Completed

1. Airway anaesthesia for awake fibreoptic guided orotracheal intubation: Comparison of three different techniques.
2. Comparison of efficacy of continuous epidural infusion of morphine, fentanyl and combination of morphine and fentanyl with bupivacaine for post-operative analgesia in children.

Ongoing

1. Effect of glutamine supplementation in critically ill patients
2. Peri-operative entrophy in paediatric day care surgery
4. Efficacy of paravertebral block as analgesic technique for laparoscopic cholecystectomy
5. Topical analgesia for cataract surgery in infants: Comparison with fentanyl
6. Comparison of four analgesia regimen for pain relief after enucleation for retinoblastoma in children
7. To study the effect of dexamethasone on post-operative pain in day care laparoscopic operative gynaecological surgery. A dose response study
8. Intramuscular ketorolac versus intramuscular diclofenac for post-operative analgesia in children undergoing lower abdominal surgery under spinal anaesthesia
9. Advancement of epidural catheter up to thoracic intervertebral space in Children – comparison of two gauzes catheter

**Collaborative Projects**

**Ongoing**
1. Comparison of single tube vs two tube technique of submental intubation (with Dental Surgery)
2. Evaluation of the effect of epidural volume extension during CSE anaesthesia (with Obstetrics and Gynaecology)
3. Safety and efficacy of regional anaesthesia for laparoscopic hernia repair (with Surgery)
4. Feasibility of minimally invasive parathyroid surgery for hyper parathyroidism (with Surgery)
5. Comparison of pain and post-operative nausea vomiting following vitreoretinal surgery under general anaesthesia with sub-tenons block versus general anaesthesia with intravenous fentanyl in paediatric patients (with Ophthalmology)

**PUBLICATIONS**

**Journals**


29. Sunder RA, Aggarwal A. Anaesthetic management of a patient with orithine transcarbamylase


**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 done in the operation theatre on Thursdays.

**Number of operations/procedures done**

1. **Main Operation Theatres**

<table>
<thead>
<tr>
<th>Speciality</th>
<th>Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Surgery</td>
<td>2,384</td>
</tr>
<tr>
<td>Gastrointestinal Surgery</td>
<td>329</td>
</tr>
<tr>
<td>Urology</td>
<td>1,246</td>
</tr>
<tr>
<td>Otorhinolaryngology</td>
<td>1,070</td>
</tr>
<tr>
<td>Gynaecology</td>
<td>998</td>
</tr>
<tr>
<td>Paediatric Surgery</td>
<td>1,451</td>
</tr>
<tr>
<td>Dental Surgery</td>
<td>125</td>
</tr>
</tbody>
</table>

2. **Peripheral Operation Theatres**

<table>
<thead>
<tr>
<th>Speciality</th>
<th>Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternity OT</td>
<td>1,585</td>
</tr>
<tr>
<td>Orthopaedics</td>
<td>2,090</td>
</tr>
<tr>
<td>Dr R.P. Centre for Ophthalmic Sciences</td>
<td>5,377</td>
</tr>
<tr>
<td>Casualty OT</td>
<td>3</td>
</tr>
</tbody>
</table>

3. **Interventional pain management procedures**

   | Procedures                                     | 441        |

4. **Procedures done under GA in peripheral areas**

<table>
<thead>
<tr>
<th>Procedures</th>
<th>Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modified ECTs (Psychiatry OPD)</td>
<td>462</td>
</tr>
<tr>
<td>MRI</td>
<td>244</td>
</tr>
<tr>
<td>Paediatric USG (RPC)</td>
<td>121</td>
</tr>
<tr>
<td>CECT</td>
<td>686</td>
</tr>
</tbody>
</table>

**AB8/ICU**

<table>
<thead>
<tr>
<th>Procedures</th>
<th>Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of patients admitted</td>
<td>388</td>
</tr>
<tr>
<td>Number of patients discharged</td>
<td>314</td>
</tr>
</tbody>
</table>

AIIMS 2006-2007 / 130
Number of deaths 73

**AB8 emergency duty**

Emergency operations done 3,161
Emergency calls attended 2,274
(from wards, peripheral ICUs and casualty)

OPD CLINICS: Total number of patients attended the clinic
Pre-anaesthesia clinic 7,439
Pain clinic 3,728

**Voluntary community service**

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.

She also provided medical service at the OPD of the dispensary at Bhatti Centre on all Sundays of the year except on weekend emergency call duty at AIIMS.

Dr R.K. Batra provided Anaesthesia services for a Charitable orthpaedics camp organized by Shri Anandpur Charitable Hospital, Shri Anandpur, Distt Ashok Nagar MP from 29th Jan to 2nd Feb, 2007.

**AWARDS AND HONOURS**

Dr Ravindra Pandey was appointed as a Judge to assess the ‘Poster cum free paper presentation session’ in 22nd Annual National Conference of Indian Society for study of pain (ISSPCON 2007) held in SGPGI MS, Lucknow; 2–4 February 2007.

Dr Ganga Prasad became Member of Bureau of Indian Standards and is also an Executive Member of India Society of Anaesthesiologists (Delhi); Dr Ganga was invited as Technical Expert for the selection of Medical Officer for selection of Medical Officers by UPSC, Allahabad (UP).

Dr R.K. Batra is teleconferencing Co-ordinator at AIIMS: Co-ordinator from Department of Anaesthesiology for teleconferencing session. He is an active member of “Curriculum Committee for Anaesthesia”, National Board of Examinations, New Delhi. He is a team leader of OSCE formation group for DNB, Anaesthesia Examination at National Board of Examinations, New Delhi.
9.2 Anatomy

Professor and Head
Kiran Kucheria
(superannuated on 30 April 2006)
Rani Kumar
(w.e.f. 01 May 2007)

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

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

Associate Professors
T.K. Das
Rima Dada
Arundhati Sharma
(T.Electron Microscopy)
(Genetics)

T.C. Nag
Renu Dhingra

(Electron Microscopy)

Assistant Professor
Ritu Sehgal

EDUCATION

Undergraduate
The department conducts MBBS, BSc (Hons) Nursing and post-certificate Nursing, Ophthalmic, Radiographic technique and Speech Therapy training courses. Five MBBS students from AIIMS were awarded Summer Research Fellowships for carrying out research in Genetics/ Neuroanatomy and submitted short-term projects under Kishore Vagyanik Puruskar Yojna (KVPY).

Postgraduate
Besides training MD, MSc and PhD anatomy students, the department conducted course on gross and developmental neuroanatomy for students of DM Paediatric Neurology. A new course on Human Genetics has been introduced for the PG students of the Department of Biotechnology, AIIMS. The faculty taught human genetics (practical and theory) to these students. A MSc student from Jiwaji University, Gwalior was trained in neuroanatomical techniques. A PhD student from DIPAS was trained in neurohistology and image analysis.

Short-term training
A WHO trainee from Burma was trained for one month in neuroanatomical techniques. A student from Bundelkhand University and student from AIIMS, MMS 5th semester received short-term training in genetics. The department provided training in genetics to 6 WHO fellows from different parts of India. Two MSc Biotechnology students from Mahatma Jyoti Rao Phoole, PG Mahila Vidyalaya, Jaipur, 2 MSc Biotechnology students from MD

AIIMS 2006-2007 / 132
University, Rohtak and one biomedical engineering student from BITS, Mesra received training on basic cyto- and molecular genetic techniques.

**Continuing Medical Education**
A National Symposium on ‘Neural plasticity and a repair’ and a workshop on ‘Evaluation of plasticity in pain’ was organized at AIIMS along with the Department of Physiology.

**National and International Conferences**

**Lectures delivered**

**Professor Rani Kumar**
- ‘Modified technique for viewing deeper structures and their interrelationship in situ’, Department of Anatomy and Cell Biology, Medical University of Vienna, Austria.

**Professor S. Wadhwa, Professor T.S. Roy, Dr S.B. Ray, Dr Rima Dada and Dr Arundhati Sharma**
- A series of 14 lectures for MSc Neurosciences, MSc Molecular Genetics at the Department of Zoology, School of Life Sciences, Jiwaji University, Gwalior.

**Dr P. Dhar**
- ‘Toxicological impacts of arsenic on human health and bioethics in medical sciences’, Indraprastha University, Delhi and NISTADS, Delhi, respectively.

**Attended/participated**

**Professor Rani Kumar**
- 13th International Conference on ‘Plastination’, Medical University of Vienna, Austria.

**Professor S. Wadhwa, Professor T.S. Roy, Dr P. Dhar and Dr T.C. Nag**
- Symposium on ‘Neural plasticity and repair’ and workshop on ‘Evaluation of plasticity in pain’, AIIMS; 18–19 October 2006. **Dr R. Sehgal** also participated in the symposium.

**Professor S. Wadhwa, Professor T.S. Roy and Dr R. Sehgal**
- 3rd International Conference, NBRC; 13–15 December 2006. Professor Wadhwa chaired a session in the symposium.

**Professor S. Wadhwa, Professor R.D. Mehra and Dr P. Dhar**
- International update on ‘Basic and clinical neuroscience advances’ and XXIV Annual Conference of Indian Academy of Neurosciences, Lucknow; 17–20 December 2006. Professor S. Wadhwa, Professor R.D. Mehra and Professor T.S. Roy chaired sessions in various symposiums.
Professor R.D. Mehra, Dr S.B. Ray and Dr R. Dada
• 54th Annual Conference of the Anatomical Society of India, AIMS, Kochin, Kerala; December 2006.

Professor S. Wadhwa and Professor T.S. Roy

Professor Shashi Wadhwa
• Chaired a session at the Centenary commemoration of Alzheimer’s disease and 12th Annual Conference of Alzheimer’s and Related Disorders Society of India, AIIMS; 9–11 November 2006.

Professor R.D. Mehra
• 3rd International Winter School in Immunology at Goa; August 2006.
• Resource faculty for IBRO-APSN and NSSL International workshop on ‘Molecular biology’ and symposium on ‘Neurodegeneration and stem cell research’.
• ‘In-situ hybridization histochemistry—theory and practice’ and carried out a laboratory workshop on the in-situ hybridization histochemistry techniques, Colombo.

Dr P. Dhar

Dr Rima Dada
Participated
• Asian Congress of Andrology, Shanghai, China in October, 2006.
• ICMR meeting and symposium on ‘Indian contraceptive technology’, New Delhi in June 2006.
• International conference and workshop on ‘Genetics and the basis and diagnosis of genetic disorders’, Sri Ramachandra Medical College and Research Institute in February, 2007.
• Indo-US workshop on ‘Mitochondrial medicine and research’, CCMB, Hyderabad
• ICMR symposium on ‘Hazards of environmental pollution and changing lifestyle on human reproduction’, Indian Institute of Science, Bangalore
• Workshop cum symposium on ‘Electromagnetic fields in environment: Implications
and solutions’, School of Environmental Sciences, JNU, New Delhi and Conference on ‘Recent advances and challenges in reproductive health research’, ICMR and ISSRF, Delhi.

• Presented papers on ‘Yq microdeletion and reproductive failure, chromosomal aneuploidies and human reproduction’; ‘Genetic basis of infertility’; ‘Role of genetics and occupational factors on male reproductive health: Impact of environment and genetic factors’ and ‘Recent advances and challenges in reproductive health research’ in various conferences.

• Presented a poster on ‘Genetic screening in men with oligozoospermia and non-obstructive azoospermia’.

Dr Arundhati Sharma

• National workshop on ‘Emerging trends in medical education’, KL Wig CMET, AIIMS.

Dr Renu Dhingra

• Guest lecture on ‘Anatomy of flexors of hand in IOACON’, New Delhi.

RESEARCH

Funded Projects

Completed


Ongoing

Departmental Projects
Completed
1. AZF microdeletions and their correlation with cryptorchidism
2. Comparison of Yq microdeletions in geneomic DNA isolated from blood and sperm

Ongoing
1. Role of cell cycle regulatory molecules in breast cancer patients
2. Apoptotic changes in pre-eclamptic patients at different gestational ages
3. Apoptosis in trophoblastic cells in human placenta in pre-eclampsia
4. Hippocampal regulation of immune mechanism
5. Development of the human auditory system
6. Age changes in the human oculomotor nerve
7. Age changes in the human cochlear nerve
8. Morphology of the fetal and adult human pancreatic duct system
9. Effects of arsenic exposure during early postnatal period on the rat hippocampus
10. Effects of perinatal arsenic exposure on rat testis: A morphological study
11. Effect of lipoic acid as an anti-oxidant supplement on arsenic induced toxicity in developing rat hippocampus
Collaborative Research
Ongoing
1. Mutation spectrum of the CYP1B1 gene in north Indian primary congenital glaucoma patients (with RP Centre, AIIMS)
2. Mutational analysis of corneal dystrophies in north Indian patient population. Department of Biotechnology funded project (with RP Centre, AIIMS)
3. Mutation analysis of 5q31-linked autosomal dominant corneal dystrophy in north Indian patients. AIIMS funded project (with RP Centre, AIIMS)

PUBLICATIONS
Journals


### Abstracts


Chapters in Books

PATIENT CARE
Embalmig of dead bodies 472
Cytogenetic analysis 256
Yq microdeletion analysis 182
Chromosome analysis 161
Amniotic fluid/CVS/cord blood 62
DNA/PCR (Yq microdeletion analysis)

Fluorosis diagnostic laboratory: Fluoride estimation

<table>
<thead>
<tr>
<th>Sample</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urine</td>
<td>72</td>
</tr>
<tr>
<td>Blood/serum</td>
<td>67</td>
</tr>
<tr>
<td>Drinking water</td>
<td>124</td>
</tr>
</tbody>
</table>

AWARDS, HONOURS
Rakesh Kumar, PhD Scholar, received the GP Talwar Gold Medal Award for the best poster presentation at the conference on ‘Recent advances and challenges in reproductive health research 2007’.

SIGNIFICANT EVENTS
Professor Rani Kumar was invited as a visiting professor in the Department of Human Anatomy at the Oman Medical College, Muscat, November 2006; invited as a Member, Publication Advisory Committee, National Academy of Medical Sciences; Member, Editorial Board, Journal of Anatomical Society of India; continued to be a Member, Gulf Medical College, Ajman (UAE); Chairperson, Store Purchase Committee and Curriculum Committee phase-1 MB,BS, AIIMS.
Professor Shashi Wadhwa was nominated and acted as member of Selection Committee of SSB awardees; Advisory Panel for election of Fellows of NAMS and syllabus revision committee of UPSC; nominated Subject Expert, Punjab Public Service Commission; continues as member, Board of Studies and Scientific Advisory Committee (SAC), National Brain Research Centre (NBRC), Manesar, Gurgaon; invited as Subject Expert, Selection Committee, Jawaharlal Nehru University, New Delhi; continued to be a Member, Travel Awards committee of CSIR; Member, Editorial Boards, *J Biosciences*, *J Anatomical Society of India* and *Annals of Neurosciences*.

Professor Raj D. Mehra was invited as Visiting Professor at the Department of Human Anatomy, Oman Medical College; Chaired the sessions on Tulsabai Somani Educational Trust Award and Dr D.M. Kar prize in Annual Conference of Indian Academy of Neurosciences; invited as a member, Selection Committee of the Punjab Public Service Commission.

Professor T.S. Roy was member of the Expert Committee for upgradation of Kolkata Medical College and Grant Medical College, Sir JJ Group of Hospitals, Mumbai, under the Pradhan Mantri Swastha Suraksha Yojna; continued to be a member, Editorial Board of *Pancreas*.

Dr P. Dhar continues as Vice president of All India Association of Bioethics.

Dr P. Dhar, Dr S.B. Ray and Dr Rima Dada chaired Scientific Sessions at 54th National Conference of the Anatomical Society of India, held at Kochi, Kerala.

Dr Rima Dada chaired a scientific session in the meeting of the Asian Congress of Andrology at Shanghai, China; helped Delhi Police in sex identification of unidentified bodies; invited for meeting as a Member, Ethics Committee in Delhi University; Member of Editorial Board, *Indian Journal of Practicing Doctor*, *Online Journal of Health and Allied Sciences*.

Dr R. Dhingra became a member of International Society of Plastination.

VISITING SCIENTISTS
1. Howard Nornes, Colorado State University, USA delivered a lecture on ‘Attempts to make CNS/spinal cord more receptive to transplant by upregulation of Trk receptors’.
2. Curtis L Lowery, University of Arkansas for Medical Sciences, Arkansas, USA delivered a lecture on ‘In utero fetal brain assessment with fetal magnetoencephalography’.
## EDUCATION

### Undergraduate
The department continues with its undergraduate teaching programmes which include MBBS (two semesters), Nursing (one semester) and BSc (Hons) Nursing (one semester). For the MBBS students, an innovative blend of problem-based/case-oriented small group discussions, interactive lectures and lab-based exercises is streamlined to facilitate self-directed reason-based learning of biochemical concepts and their applications in clinical problem-solving. New problem-based modules on pH and electrolyte balance, endocrine–metabolic interrelationships have been incorporated to facilitate the understanding of various concepts of biochemical regulation and molecular medicine.

### Postgraduate
These include 8 MSc (1st year and 2nd year) students and 8 MD students. The department also has 40 PhD students.

### Short-term training
Summer training in research was provided to MBBS students from AIIMS. Eight MBBS (1st year) students conducted projects for the KVPY Scheme of the DST in different labs of the department and one student has been awarded the fellowship. Twenty students from India received short-term training for 3 to 6 months. The department also imparted short-term training (one month) to 2 MSc students from Dr B.P. Koirala Institute for Health Sciences, Dharan, Nepal.

### Continuing Medical Education

---

### 9.3 Biochemistry

<table>
<thead>
<tr>
<th>Professor and Head</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subrata Sinha</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Professors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neeta Singh</td>
</tr>
<tr>
<td>D.N. Rao</td>
</tr>
<tr>
<td>Nibhriti Das</td>
</tr>
<tr>
<td>Ranju Ralhan</td>
</tr>
<tr>
<td>S.S. Chauhan</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Additional Professor</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.R. Rajeswari</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Associate Professors</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.P. Chattopadhyay</td>
</tr>
<tr>
<td>Kalpana Luthra</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assistant Professors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alpana Sharma</td>
</tr>
<tr>
<td>Kunzang Chosdol</td>
</tr>
<tr>
<td>N.C. Chandra*</td>
</tr>
</tbody>
</table>

(*adhoc)

**National and International Conferences**

**Lectures delivered**

**Dr Subrata Sinha**

- ‘Role of genomics and proteomics in cancer’, Institute of Cytology and Preventive Oncology, Noida; 20 September 2006

**Dr Neeta Singh**

- ‘HPV vaccine and cervical cancer’, Cancer Update, Smt Susheela Tiwari Forest Hospital, Haldwani, Uttarakand; 11 December 2006.

**Dr D.N. Rao**

- Biotechnology meeting, Andhra University, Vishakhapatnam; 8–10 October 2006.
Dr Nibhriti Das

Dr Ranju Ralhan
- ‘Novel potential targets in head and neck cancer: Challenges and opportunities’, Charles A Le Maistre visiting professor lecture, MD Anderson Cancer Center, Houston, USA; November 2006.

Dr S.S. Chauhan

Dr M.R. Rajeswari

Dr Kalpana Luthra
• ‘Pharmacogenomics symposium’, Delhi; May 2006.

Dr Alpana Sharma
• 33rd National Conference of the Association of Clinical Biochemists of India (33rd ACBICON 2006), Pune; 23–26 November 2006.

RESEARCH
Funded Projects
Completed
10. Characterization of novel genetic alterations preferentially involved in low grade

Ongoing


11. 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 (2006–2009). Funds: Rs 15 lakh.


29. HIV resistance conferring polymorphisms in DCSIGN in high-risk individuals: A...


38. Culture of limbal stem cells for ocular surface reconstruction in stem cell deficiency disorders. Radhika Tandon (PI) and Neeta Singh (Co-PI). Funded by DBT for 3 years (2005–2008). Funds: Rs 27.10 lakh.


42. Molecular analysis of gene markers in urine cytology and tissue histology specimens

Departmental Research

Ongoing
1. Molecular detection and genotyping of HPV in uterine cervix: A population-based study
3. Effect of curcumin on advanced cervical cancer
4. Development of HPV-16 candidate vaccine prototype
5. Evaluation of efficacy of curcumin as an adjuvant along with radiotherapy and chemotherapy in advanced cases of cervical carcinoma
6. Role of eNOS gene polymorphisms in coronary artery disease in the Indian subjects
7. Paraoxonase and its gene polymorphism in relation to CAD
8. Elucidation of the expression of complement regulatory proteins in relation to the pathophysiology and severity of SLE
9. Role of complement receptors in cell signaling and microbicidal properties of macrophages in relation to mycobacterium tuberculosi
10. Complement receptor 1 and its gene polymorphism in relation to the pathophysiology and susceptibility to severe malaria

Collaborative Projects

Completed
1. A study of the expression and targeting of IAPs in vitro and an analysis of their expression in head and neck cancer
2. Study of the function of mitochondria in apoptosis and human disease
3. Analysis of apoptotic signalling mechanism induced by benzamide riboside and ATP analogs
4. Evaluation of molecular markers and anticancer agents in lung cancer
5. HPV and the genetics of cervical cancer
6. Molecular and biological factors in the pathogenesis of ovarian cancer
7. Expression of leukocyte complement receptor 1, its modulation and significance in the pathophysiology of systemic lupus erythematosus (SLE)
8. A comparative evaluation of levels of interleukin-1-² in GCF during canine distraction and canine refraction (with Dental Surgery, AIIMS)

Ongoing
1. Elucidation of the role of the hypermethylation in cancer (HIC-1) gene in glial tumorigenesis (with Pathology, Neurosurgery)
2. Role of 1p and 19q loss of heterozygosity in human gliomas (with Pathology,
3. DNA fingerprinting methods for study of genetic alterations in gliomas (with Pathology, Neurosurgery)
4. MRI studies on murine liver and skin tumours (with NMR)
5. Histopathological investigations on murine skin and liver tumors (with Histopathology)
6. Isolation and analysis of the outer membrane proteins, beta lactamases of Acinatobacter baumanii (with Microbiology)
7. Structural investigations on the native and mutated outer membrane protein from Acinatobacter baumanii (with Bioinformatics, JNU)
8. Levels of interleukin-1-² in GCF during retention after successful orthodontic treatment (with Dental Surgery)
9. Neurological disorders Freidreich’s ataxia and spiniocerebellar ataxia associated with DNA trinucleotide repeats: Identification and development of protein biomarkers and circulating DNA for clinical diagnosis (with Neurology)
10. Utility of antigen detection from the epidermis of Indian patients in pemphigus vulgaris (with Dermatology and Venereology)
11. A prospective study of oxidative stress markers and antioxidant levels in patients with pre-eclampsia (with Obstetrics and Gynecology)
12. T-cell response in parthenium-induced contact dermatitis (with Dermatology and Venereology)
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, Cardiology)
14. A case control pilot study on LDL receptor expression and serum lipid profile in cancer patients (with Obstetrics and Gynecology, Surgery)

PUBLICATIONS

Journals
Cancer Res Treat 2006. [Epub ahead of print]


32. Verma A, Matta A, Shukla NK, Deo SV, Gupta SD, Ralhan R. Clinical significance


Abstracts


PATIENT CARE

Marker tests for pregnancy and prostate cancer:

PSA : 300 samples
bð-HCG : 325 samples

AWARDS AND HONORS

**Dr Subrata Sinha** has been elected as Fellow, Indian National Science Academy; delivered the National Science Day lecture, ‘Harnessing science to fight cancer’, University of Hyderabad, 28 February 2007.

**Dr Neeta Singh** was appointed as an Executive Committee Member, Indian Association for Cancer Research; Secretary (Delhi Chapter) of Indian Association for Cancer Research; continued to be Member, International Union Against Cancer (UICC); Member, American
Association for Cancer Research (AACR); Member, Indian Society of Cell Biologists; Member, Indian Women Scientists Association; Member, Indian Society of Lung Cancer; Member, Indian Society for Free Radicals Research in India.

**Dr Nibhriti Das** was appointed as a Member, Indian Immunology Society; Member, IUIS; Member, Indian Society of Cell Biology; Member, International Complement Society; nominated Member, Library Committee, NML Invited as an expert, ICMR INSERM Workshop, 22–24 January 2007; Guest of Honour to the National Conference on ‘Cancer Update’, Sushila Devi Tiwari Trust Forest Medical College, Haldwani, Nanital.

**Dr Ranju Ralhan** was a LeMaistre Visiting Professor, M.D. Anderson Cancer Center, Houston-2006; UICC NCI–Novartis Transitional Cancer Research Fellowship (TCRF) 2006.

**Dr Kalpana Luthra** was awarded the CMCL–FAIMER fellowship after successful completion of project on Medical Education; January 2007.

**Significant events**

**Dr Subrata Sinha** was appointed Member of following committees: Project Review Committee (PRC), Chronic Diseases, Department of Biotechnology (DBT) (2005–07); 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, JNU, 2000 till date; Member of the Institutional Biosafety Committee and Ethical Committee of the National Institute of Immunology (2000 till date); Institutional Ethics Committee, Jawaharlal Nehru University (2001 till date); Academic Committee, Centre for Cellular and Molecular Biology, JNU (2006–07); Research Council, SGPGIMS, Lucknow; Chairman, Organizing Committee, 33rd National Conference of the Indian Immunology Society, AIIMS, New Delhi, 28–31 January 2007; Co-convener, NII–AIIMS symposium on Translational Research, New Delhi, 6 October 2006.

**Dr Neeta Singh** was appointed Member, Research Advisory Committee and Programme Advisory Committee of the ICMR; Member, National Advisory Committee for World Conference on ‘Expanding paradigms: Science, consciousness and spirituality’; Member, Scientific Advisory Committee of DRDO; Co-organizer, 7th Indo–US workshop on Flow Cytometry, JNU, 10–14 February 2007.

**Dr D.N. Rao** was nominated as Organizing Secretary, 33rd Indian Immunology Society Conference, AIIMS, 28–31 January 2007; continue to be the Chairman and Member, Technical Advisory Committee of ICMR, ICMR Selection Committee for SRF; Member, Board of Studies of Biochemistry of Jamia Hamdard University; Selection Committee Member,
Rajasthan Public Service Commission; Member, Ethical Committee, Project Review Committee of DBT, DST, CSIR and ICMR; Reviewer for *Vaccine, Parasite International, Molecular Pharmaceutics, Indian Journal Medical Research, Journal of Biochemistry and Biophysics*.

**Dr Nibhriti Das** attended XXI International Complement Workshop, Beijing, China, 22–26 October 2006 and presented a paper; Organizing Committee Member, 33rd Indian Immunology Society Conference, AIIMS, 28–31 January 2007 and National Workshop on emerging trends in Medical Education, K.L. Wig CMET, AIIMS, 23–25 November 2006; chaired a session, 33rd Indian Immunology Society, 28–31 January 2007.


**Dr M.R. Rajeswari** is Local Organizing Committee Member, National Symposium on Biophysics; Member, Project Review Committee, ICMR; Reviewer, *Indian J Biochem Biophys*, Indian Council for Medical Research projects; invited as an External Examiner, PhD and MTech thesis.

**Dr Kalpana Luthra** was nominated as Joint Organizing Secretary, 33rd Indian Immunology Society National Conference, AIIMS, January 2007; Member, Project Advisory Committee of ICMR for Nephrology; Judge, Fine Arts Event and Choreography competition, Pulse 2006.

**Dr Alpana Sharma** was nominated as Organizing Committee Member, 33rd Indian Immunology Society Conference, AIIMS, January 2007; Member, Review Committee, *Int J Gynecol Cancer; Clinica Chimica Acta, Biomedical Research*.

**Dr N.C. Chandra** was selected as Treasurer, 33rd Indian Immunology Society Conference; 28–31 January 2007.
9.4 Biomedical Engineering

Professor and Head
Sneh Anand

Professors
Harpal Singh

Associate Professor
Veena Koul

Principal Scientific Officer-I
Nivedita Karmakar Gohil

Senior Design Engineer
S.M.K. Rahman

Scientist
J.C. Bhardwaj

Dinesh Mohan

EDUCATION
The department participates in the PhD and M.Tech programme.

Continuing Medical Education

Seminars

Lecture delivered

Professor Harpal Singh
• ‘Diabetes and insulin delivery system’, radio talk on All India Radio Indraprastha Channel; 19 June 2006.
• ‘Polymer in healthcare: Recent trends and advances’, Jamia Millia Islamia; March 2007.

Professor Sneh Anand
• International conclave on Traditional Medicine, New Delhi.
• Indo-US Partnership conference, Bangalore; December 2006.

Dr Ashok Sharma
• Plazma polymerzation: A technique used in designing new surfaces for biomedical applications; 19 July 2006.

Dr Sreeram Dhurjaty
• Digital radiography: Fundamental and advances; 12 December 2006.

Professor S. Homer-Vanniasinkam, Consultant of Translational Vascular Medicine, University of Bradford and Clinical Sub-Dean Leeds Medical School
• Vascular tissue engineering: A clinician’s perspective; 10 November 2006.
Dr Sadhana Sharma, University of Illinois, Chicago, USA
• Micro- and nanoengineered platforms for biology and medicine; 3 January 2007.

National and International Conferences
Professor Sneh Anand
• ‘Electromagnetics and material for biomedical applications’, International Conference on ‘Design of biomaterials (BIND-06)’, IIT, Kanpur; December 2006.
• ‘Blending EBM and traditional knowledge to develop technology for mass healthcare’, National Conference on ‘Scientific validation and technical evaluation of ancient medical systems (SVTEAMS)’, IIT, Delhi; February 2006.

Professor A.R. Ray
Presented a paper at the 5th International conference on ‘Advanced engineering design on development of monolithic reservoirs for controlled release of drugs from pH-sensitive copolymers based on acrylic acid (AA) and N-{3 (Dimethy;aminol}Methacrylamide (DMAPMA)’, Prague, Czech Republic; June 2006

Dr Veena Koul
Presented a paper at the Indo-Australin conference on ‘Biomaterails, implants, tissue engineering and regenerative’, Sree Chitra Tirunal Institute for Medical Sciences and Technology, Thiruvananthapuram, Kerala; January 2007.

RESEARCH

<table>
<thead>
<tr>
<th>Project title</th>
<th>P.I. Name</th>
<th>Funding agency</th>
<th>Duration up to</th>
<th>Total fund (in Rs lakh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development of low-cost rapid biosensor for identification of pathogenic bacteria</td>
<td>Harpal Singh</td>
<td>DBT</td>
<td>2010</td>
<td>56.00</td>
</tr>
<tr>
<td>Reversibility of injectable contraceptive for male technology development</td>
<td>J.C. Bhardwaj</td>
<td>Ministry of Health</td>
<td>2009</td>
<td>6.27</td>
</tr>
<tr>
<td>Analysis of autonomic nervous system correlates and health benefits of rhythmic breathing techniques</td>
<td>Sneh Anand</td>
<td>AYUSH, MHFW</td>
<td>2009</td>
<td>29.63</td>
</tr>
<tr>
<td>Development of nanoparticular system for macrophage targeting (Co-PI)</td>
<td>Veena Koul</td>
<td>DBT</td>
<td>2009</td>
<td>30.00</td>
</tr>
<tr>
<td>Process optimization (Co-PI)</td>
<td>Veena Koul</td>
<td>DBT</td>
<td>2008</td>
<td>17.17</td>
</tr>
</tbody>
</table>

AIIMS 2006-2007 / 156
<table>
<thead>
<tr>
<th>Project Description</th>
<th>PI/Institute</th>
<th>Funding Agency</th>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainable urban transport in less motorized countries: Research and training</td>
<td>Dinesh Mohan</td>
<td>Volvo Research</td>
<td>2008</td>
<td>6.40 crore</td>
</tr>
<tr>
<td>Development of artificial bone material (RP01721)</td>
<td>Alok Ranjan Ray</td>
<td>ICMR</td>
<td>2008</td>
<td>8.74</td>
</tr>
<tr>
<td>Pre-clinical trails of a portable electrically enhanced transdermal drug delivery system (RP01890)</td>
<td>Sneh Anand</td>
<td>DST</td>
<td>2008</td>
<td>18.18</td>
</tr>
<tr>
<td>To develop an external counter pulsation device (RP01913)</td>
<td>Sneh Anand</td>
<td>Department of Information and Technology</td>
<td>2008</td>
<td>57.60</td>
</tr>
<tr>
<td>Development of biocompatible adhesive (RP01734)</td>
<td>Alok Ranjan Ray</td>
<td>DST</td>
<td>2007</td>
<td>18.82</td>
</tr>
<tr>
<td>Development of blood compatible polymeric biomaterials for medical devices (RP01621)</td>
<td>Alok Ranjan Ray</td>
<td>MHRD</td>
<td>2007</td>
<td>12.00</td>
</tr>
<tr>
<td>Development of polymer matrices from renewable resources for enzyme-linked immunosorbent assay (RP01653)</td>
<td>Harpal Singh</td>
<td>DST</td>
<td>2007</td>
<td>26.00</td>
</tr>
<tr>
<td>Studies of the fallopian tube function with luminal implants</td>
<td>J.C. Bhardwaj</td>
<td>M/s Marksas Ltd.</td>
<td>2007</td>
<td>5.17</td>
</tr>
<tr>
<td>Design and development of technological interfaces to rehabilitate spinal injury patients</td>
<td>Sneh Anand</td>
<td>MSJ &amp; E</td>
<td>2007</td>
<td>26.33</td>
</tr>
<tr>
<td>Design and development of BCI using peripheral blood flow</td>
<td>Sneh Anand</td>
<td>MHRD</td>
<td>2007</td>
<td>12.00</td>
</tr>
<tr>
<td>Smart macromolecular therapeutics design synthesis and evaluation of tailor made anti-cancer drug conjugates and local hypothermia for selective lysis of cancer cell (RP01713)</td>
<td>Veena Koul</td>
<td>LSRB (DRDO)</td>
<td>2007</td>
<td>18.16</td>
</tr>
<tr>
<td>MEMS based micro-cantilevers for chemical and biochemical sensors</td>
<td>Nivedita K. Gohil</td>
<td>DST</td>
<td>2007</td>
<td>24</td>
</tr>
<tr>
<td>Iodine release from polymeric carriers for disinfection of drinking water (RP01610)</td>
<td>Harpal Singh</td>
<td>DST</td>
<td>2006</td>
<td>4.98</td>
</tr>
<tr>
<td>Pathophysiologic,</td>
<td>Sneh Anand</td>
<td>ICMR</td>
<td>2006</td>
<td>13.65</td>
</tr>
</tbody>
</table>
### Departmental Projects

1. Polymeric hydrogels for biomedical application
2. Development of carrier system for enzyme/drug immobilization for biomedical application
3. Development and pharmacoscintigraphic evaluation of polymer-based transdermal preparation(s) for local vasodilator action
4. Tissue engineering for biomedical applications
5. Intranasal drug delivery
6. Intelligent telemedicine system
7. Synthesis, characterization and evaluation of hydrogels for cancer targeting
8. Synthesis and Characterization of Biocompatible Biodegradable polymers
9. Physical and chemical enhancement techniques for transdermal delivery of bioactives
10. Development of biosensor
11. Optimization techniques for classification of EEG signal during five mental tasks
12. Bioreactive polyester for tissue engineering
13. Assessment of cardiovascular regulation and arterial stiffness using photoplethysmographic signal

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Principal Investigator</th>
<th>Funding Agency</th>
<th>Year</th>
<th>Amount (in crore)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biomechanical and metallurgical study of orthopaedic implants (RP01604)</td>
<td>Dinesh Mohan</td>
<td>Volvo Research and Educational Foundations (VREF)</td>
<td>2008</td>
<td>13.0</td>
</tr>
<tr>
<td>Sustainable urban transport in less motorized countries research and training</td>
<td>Dinesh Mohan</td>
<td>Government of National Capital Territory of Delhi</td>
<td>2006</td>
<td>15.00</td>
</tr>
<tr>
<td>Implementation of high capacity bus</td>
<td>Dinesh Mohan</td>
<td>Government of National Capital Territory of Delhi</td>
<td>2007</td>
<td>15.00</td>
</tr>
<tr>
<td>Implementation of high capacity bus system/electric trolley bus corridors</td>
<td>Dinesh Mohan</td>
<td>Government of National Capital Territory of Delhi</td>
<td>2007</td>
<td>15.00</td>
</tr>
<tr>
<td>Measuring impact properties of human body parts</td>
<td>Dinesh Mohan</td>
<td>DST</td>
<td>2007</td>
<td>15.00</td>
</tr>
<tr>
<td>Implementation of high capacity bus</td>
<td>Dinesh Mohan</td>
<td>Japan Automobile Research Institute</td>
<td>2007</td>
<td>15.00</td>
</tr>
<tr>
<td>Development of methodology for modelling of airbags</td>
<td>Dinesh Mohan</td>
<td>Government of National Capital Territory of Delhi</td>
<td>2007</td>
<td>18.00</td>
</tr>
<tr>
<td>Development of a training manual for road traffic injury prevention</td>
<td>Dinesh Mohan</td>
<td>WHO</td>
<td>2006</td>
<td>18.00</td>
</tr>
</tbody>
</table>

Polymeric hydrogels for biomedical application
Development of carrier system for enzyme/drug immobilization for biomedical application
Development and pharmacoscintigraphic evaluation of polymer-based transdermal preparation(s) for local vasodilator action
Tissue engineering for biomedical applications
Intranasal drug delivery
Intelligent telemedicine system
Synthesis, characterization and evaluation of hydrogels for cancer targeting
Synthesis and Characterization of Biocompatible Biodegradable polymers
Physical and chemical enhancement techniques for transdermal delivery of bioactives
Development of biosensor
Optimization techniques for classification of EEG signal during five mental tasks
Bioreactive polyester for tissue engineering
Assessment of cardiovascular regulation and arterial stiffness using photoplethysmographic signal
14. Temperature sensitive polymers for cancer targeting
15. Interaction of advanced glycation end products in diabetes
16. Molecular trafficking from polymeric particles
17. Molecular and immunological characterization of rotavirus proteins
18. Biomedical instrumentation
19. Biomedical instrumentation for mental handicaps
20. Biomedical signal processing
21. Development of polymers for biomedical application
22. Development of hydrogel-based wound dressing and its evaluation in biological systems
23. Electro magnetically controlled intelligent prosthesis components
24. Brain mapping
25. Preparation and characterization of materials for medical application
26. Iron profile in haematological disorders
27. Sol-gel based sensors for biomedical applications
28. Synthesis of bone submitted materials
29. Non-invasive diagnosis of knee osteoarthritis
30. Development of polymeric hydrogel devices for insulin delivery
31. Development of polymer for biomedical application
32. Studies on haeme proteins mimetic materials
33. Effect of biomechanical stresses on the morphological and biochemical properties of knee joint articular cartilage chondrocytes: a tissue culture study

Collaborative Projects
1. Resonant field imaging system, INMAS, New Delhi
2. The influence of different spacers in the immunogen and enzyme conjugates on the sensitivity and specificity of cortisol assay, NIHFW, New Delhi
3. Application of conducting polymers to nucleic acid, NPL, New Delhi
4. Development of 17-OH progesterone assay using different spacers in tracer and immunogens, NIHFW, New Delhi
5. Cortical reorganization after sight onset, MIT, USA
6. Intelligent upper/lower limb prosthesis, CSIO, Chandigarh

PUBLICATIONS
Journals
2. Singh D, Choudhary V, Koul V. Radiation synthesis of interpenetrating polymer networks based on N- vinyl pyrollidone–acrylic acid copolymer and gelatin I.
PATENTS APPLIED

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of the instrument/product</th>
<th>Name of person who developed</th>
<th>Patent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>A novel contact killing antimicrobial quaternary amine acrylate copolymer and their applications thereof</td>
<td>Professor Harpal Singh (Supriya Singh)</td>
<td>DEL/2525</td>
</tr>
<tr>
<td>2.</td>
<td>Bioactive ABO blood grouping card</td>
<td>Professor Harpal Singh) (Lomas Tomar, Charu</td>
<td>230DEL2005</td>
</tr>
<tr>
<td>3.</td>
<td>Modulated DC iontophoretic device</td>
<td>Professor Sneh Anand, Dr Veena Koul (Rachna Rastogi)</td>
<td>710/DEL/2006</td>
</tr>
<tr>
<td>4.</td>
<td>Nanoporous polymeric micro particles for oral insulin delivery</td>
<td>Professor Harpal Singh (Amit Tyagi)</td>
<td>Patent applied</td>
</tr>
<tr>
<td>5.</td>
<td>Electro-oculogram based multi-mode controller</td>
<td>Professor Sneh Anand, Dr Jayashree Santhosh</td>
<td>Patent applied</td>
</tr>
</tbody>
</table>

AWARDS AND HONOURS

Professor Sneh Anand
1. Best Project Award in I² Tech -2005
2. Best Project Award in EOG Based assistance device to assist severely disabled in I² Tech-2006
3. Silver Medal for Best innovation in India international Trade Fair, Pragati Maidan, New Delhi, 2006

MEMBERSHIPS

Professor Sneh Anand: Member (Life), Biomedical Engineering Society of India; Fellow, Indian National Academy of Engineers (INAE); Member, Institution of Engineers; Editor, JIETE, Institution of Electronics and Telecommunication Engineers (IETE); Fellow and Life Member, Indian Academy of Medical Physics; Member, Bureau of Indian Standards, New Delhi; Technical Committee Member, Ministry of Social Justice and Empowerment, New Delhi; Expert Committee Member, All India Council for Technical Education (AICTE); Vice President, Indian Society of Biomechanics; Member of Expert Committee, Department of Science and Technology (DST); Member, National Design and Research Foundation, Bangalore; Selection Committee Member, North Eastern Indira Gandhi Regional Institute of Health and Medical Sciences, Shilong (NEIGRIHMS); Project Evaluation Committee Member, Central Council for Research in Homoeopathy (CCRH); Committee Member, Central Research Institute for Ayurveda (CRIA); Member, National Institute of Industrial Engineering (NITIE); Expert Committee Member, Ministry of Health and Family Welfare; Expert Committee Member, Indian Council of Medical Research (ICMR); Expert Committee
Professor A.R. Ray: Chairman, Task Force on Bioengineering, Government of India, Department of Biotechnology; Expert Committee on Biomedical Engineering, All India Council for Technical Education (AICTE), Government of India; Ministry of Human Resource Development, Government of India, Committee on Education in Human Values; Department of Science and Technology (DST), Expert Committee on Biomedical Engineering; Indian Council of Medical research (ICMR), Programme Advisory Committee on Non-communicable diseases; (Chairman, Bioengineering section); Technology Information, Forecasting and Assessment Council (TIFAC), Review Committee on Home grown Technology; Board of Research Studies, Faculty of Sciences and Engineering, Delhi University; Advisory Board, National Institute of Technology, Rourkela; Board of Studies, Biju Pattanaik Technical University; Board of Research Studies, Faculty of Sciences, Jamia Hamdard; Council of Academic Affairs (Life Sciences) M.D. University; Board of Post Graduate Studies, Faculty of Sciences, Bundelkhand University; Research Advisory Committee of Shriram Institute for Industrial Research.

Professor Harpal Singh: Member, Surgical Dressings, Bureau of Indian Standards, New Delhi; Member, Standing Committee to Review the Life Saving Drugs.

Dr Veena Koul: Member, Nano-Tech Project on Drug Delivery, a collaborative participation between IITD and AIIMS.

VISITING SCIENTISTS
1. Dr Sudhir Bagga (Specialized in Allergy and Immunology), Science of Life, USA, delivered a lecture on ‘Science of Life: Integration of therapies’, Centre for Biomedical Engineering; 7 November 2006.
2. Dr Pawan Sinha, MIT, USA delivered a lecture on ‘Topographical and learning and recognition’, Centre for Biomedical Engineering; 10 October 2006.
9.5 Biophysics

Professor and Head

Administrative In-Charge
T.D. Dogra (w.e.f. 1.10.2006)

Emeritus Professor
R.K. Mishra

Distinguished Biotechnologist (DBT)
T.P. Singh (w.e.f. 28.11.2006)

Associate Professors
Krishna Dalal  A. Srinivasan  Punit Kaur

Assistant Professors
Savita Yadav  Sujata Sharma

Scientists
Sharmistha Dey  S. Baskar Singh  Asha Bhushan

Dr. T.P. Singh superannuated on 31.8.2006*, Dr. Gita Subba Rao superannuated on 30.9.2006**

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.

Continuing Medical Education
Dr Krishna Dalal
• ‘Management of common ailments through alternative therapies’, demonstration and invited lecture to the orientation course, Direct Taxes Regional Training Institute, Income Tax Department, Mahalaxmi, Mumbai; 22 September 2006.
• Invited talk on ‘Stress management’, International Conclave on Traditional Medicine, New Delhi; 16–17 November 2006.

National and International Conferences
Lectures delivered
Professor T.P. Singh
• Plenary lecture in the Drug Development Conference for the Third World, Trieste, Italy; 5–9 June 2006.

Dr K. Dalal
• ‘Role of reflexology in integrated medicine’, Proceedings of 25 years’ celebrations of Indian Research Institute for Integrated Medicine, Kolkata, West Bengal; 8–10 December 2006.
• ‘Reflexology for management of difficult to control epilepsy’, India Habitat Centre, New Delhi; 2006.

Dr A. Srinivasan
• 52nd National Conference of the Association of Physiologists and Pharmacologists of India, Surat Municipality Institute of Medical Education and Research, Surat, Gujarat; 19–23 December 2006.
• Guest lecture on ‘Disease biomarkers’, NIIT, New Delhi; 30 December 2006.
• Guest lecture on ‘Protein structure’, Department of Biotechnology; March 2006.

Dr Punit Kaur
• Presented paper in the 6th Annual Symposium on ‘Frontiers in biomedical research’; 30 November–2 December 2006.

Dr Savita Yadav
• Attended and presented paper on ‘Drug development for the Third World’, Trieste, Italy; 5–9 June 2006.
• Attended and presented papers in HUPO, 5th Annual World Congress, Long Beach, California; 28 October–1 November 2006.
• Attended and presented paper in the 6th Annual Symposium on ‘Frontiers in biomedical research’, ACBR, Delhi; 30 November–2 December 2006.

Dr Sujata Sharma
• Attended and presented paper on ‘Drug development for the Third World’, Trieste, Italy; 5–9 June 2006.

Dr Sharmishtha Dey
• Attended and presented paper in 14th IRA International Conference, Maryland, USA; 15–19 October 2006.

Ms Asha Bhushan

RESEARCH
Funded Projects
Ongoing
5. Three-dimensional structure determination of disintegrin from venom of Indian saw scale by X-ray diffraction method and structure and function relationship with its complex with integrin. Punit Kaur. Funded by CSIR for 3 years (2005–2008). Funds: Rs 7 lakh.

**Departmental Projects**
1. Structural and functional studies of lactoperoxidase
2. Structural and functional studies of phospholipase A$_2$ enzymes
3. Structure based drug design against inflammatory disorders
4. Structural studies of lactoferrin and its fragments and ligand design
5. Structural and functional studies of venom and plant allergens
6. Biochemical and structural studies of ZAG-PIP complex, PSA and other heparin binding proteins from human body fluids
7. Proteomic studies of human salivary proteins and amniotic fluid
8. Molecular modelling and ligand design
9. Effect of reflexology on patients suffering from different neurological disorders: C. palsy, supranuclear palsy and Parkinson disease
PUBLICATIONS

Journals


14. Sherawat M, Kaur P, Betzel Ch, Einspahr HM, Singh TP. Crystal structure of a complex formed between trypsin and a designed inhibitor 2-[3¢-{5¢- methoxy-2¢- (N-p-diaminomethyl phenyl)amido]-1¢-pyrido]-5-(N-2¢¢-tertiary-butylethanol)amido benzoic acid (C$_{28}$H$_{32}$N$_{5}$O$_{6}$) in the presence of benzamidine at 0.97 Å resolution *Acta Crystallogr* 2006;*D63*:500–7.


**Protein Data Bank entries**
The total number of protein coordinates sets submitted to Protein Data Bank (PDB) during the year: 75. Following are the PDB IDs of structures of proteins and their complexes
submitted to the Protein Data Bank:
2AYW, 2DO2, 2DOJ, 2DP4, 2DP5, 2DP8, 2DPE, 2DPZ, 2DQK, 2DQV, 2DS9, 2DSF, 2DSU, 2DSV, 2DSW, 2DSZ, 2DT0, 2DT1, 2DT2, 2DT3, 2DUJ, 2DV8, 2DVC, 2DWA, 2DWH, 2DWI 2DWJ, 2DXR, 2DXY, 2DYZ, 2E0S, 2E1S, 2E9E, 2EFB, 2EHA, 2FDN, 2FNM, 2G41, 2G58 2G5J, 2G5R, 2G93, 2G9M, 2GJ1, 2GJM, 2GNS, 2H4I, 2HCA, 2HD4, 2HPZ, 2ICN, 2IKC, 2IPS, 2J4U, 2NQX, 2NUV, 2NWJ, 2O1L, 2O1N, 2O51, 2O86, 2O92, 2O9O, 2OCU, 2OJV, 2OLH, 2OLI, 2OTF, 2OTH, 2OTV, 2OUB, 2OXS, 2OYF, 2P1S, 2PB8

**Gene Bank submission**
The total number of nucleotide and amino acid sequences submitted to Gene Bank 2. Following are the details of c-DNA sequences submitted to the gene bank by the department in the year 2006–07:
2. Capra hircus lactoperoxidase (LPO) mRNA, complete cds. Accession No: EF363153.

**PATIENT CARE**
The following services are provided by the department for patient care:
1. 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.
2. Protein N-terminal sequencing
3. Characterization of biomolecules using MALDI-TOF
4. Receptor-ligand binding studies-Biacore
5. Peptide synthesis
6. X-ray intensity data collection for small molecules
7. X-ray intensity data collection for macromolecules

**AWARDS, HONOURS AND SIGNIFICANT EVENTS**
**Professor T.P. Singh** has been awarded Professor G.N. Ramachandran CSIR Gold Medal for Excellence in Science and Technology 2006; Distinguished Biotechnologist Award of DBT 2006; selected as Vice-President (International Affairs) of Indian National Science Academy 2007–2009; Member, International group of Academies of G8 (USA, UK, Germany, France, Canada, Italy, Japan and Russia) and O5 (India, China, Brazil, South Africa and Mexico) countries; Member, Inter-Academy group of countries (2006–07); Member, Board of Governors, IIT Kharagpur (2007); Member, Research Council of the Central Drug Research Institute (CSIR), Lucknow (2007–09); Member, Research Council of the Institute of Genomics and Integrative Biology (CSIR), Delhi (2007–09); Member, Council of Indian National Science Academy, New Delhi (2007–09). He delivered the Foundation day Oration of the Institute of Bioinformatics and Applied Biotechnology, Bangalore (Government of
Karnataka); received G.N. Ramachandran INSA Medal lecture at Jawaharlal Nehru University, 2007; Member, Editorial Board, *Indian Journal of Biochemistry and Biophysics, Indian Journal of Physics, Physiology and Molecular Biology of Plants*.

**Dr Krishna Dalal** has been awarded corresponding membership of American Epilepsy Society, USA.

**Dr A. Srinivasan** became a reviewer for indexed international journals such as *Biotechnology Letters* and *Biotechnology Progress*. He was also included in the review committees of national bodies and institutions including Department of Science and Technology, Department of Biotechnology.

**Dr Punit Kaur** organized an ICMR-sponsored workshop on ‘Bio-medical informatics: Drug-design using GCG and discovery studio’.


**Dr S. Dey** won best poster award in the Indian Biophysical Society meeting, SINP, Kolkata; 7–9 January 2006. She is also a life member of European Peptide Society and life member of Indian Peptide Society.

**Ms Asha Bhushan** has received the outstanding scientist of the 21st century award by International Biographical Centre, Cambridge, England.

**VISITING SCIENTISTS**

Following noted scientists and eminent academicians have visited the department for presenting lectures and scientific cooperation in the last year.

Professor Ch. Betzel, Germany; Professor R.K. Arni, Brazil; Professor P. Chandra, Germany; Professor H.S. Sharat Chandra, Bangalore; Dr C.M. Gupta, Lucknow; Professor A. Varma, New Delhi; Professor K.L. Khanduja, Chandigarh; Professor Faizan Ahmad, New Delhi; Professor R. Bredehorst, Germany; Dr K.P. Mishra, Mumbai.

**CENTRAL FACILITIES**

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

<table>
<thead>
<tr>
<th>Professor and Head</th>
<th>R.M. Pandey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional Professor</td>
<td>S.N. Dwivedi</td>
</tr>
<tr>
<td>Associate Professor</td>
<td>V. Sreenivas</td>
</tr>
<tr>
<td>Scientists</td>
<td></td>
</tr>
<tr>
<td>R.K. Ahuja</td>
<td>Rajvir Singh (on leave)</td>
</tr>
<tr>
<td>Guresh Kumar</td>
<td>M. Kalaivani</td>
</tr>
<tr>
<td>Statisticians</td>
<td></td>
</tr>
<tr>
<td>Ombir Singh</td>
<td>K.S. Kapoor</td>
</tr>
<tr>
<td>Statistical Assistants</td>
<td></td>
</tr>
<tr>
<td>Ashish Datt Upadhyay</td>
<td>Bhupender Kumar</td>
</tr>
</tbody>
</table>

**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, M. Biotech, MSc Nursing and MD Community Medicine.

The department also provides short-term training (2–3 months) in practical applications of Biostatistics for fresh postgraduates in Statistics/Biostatistics. During the year 2006–07, two candidates were trained.

Two training workshops on the software STATA were conducted for the students, residents and faculty of the Institute during the year.

**Continuing Medical Education**

**Lectures delivered**

**Dr R.M. Pandey**

- Conducted a workshop on ‘Research methodology for fresh BNYS graduates’, National Institute of Naturopathy, Pune; 9 November 2006.
- Resource faculty in the workshop for young researchers in the area of nutrition, ICMR, Mahatma Gandhi Medical College, Indore; 19–22 November 2006.
- Conducted a workshop on ‘Research methodology and Biostatistics for postgraduate students’, S.N. Medical College, Agra; 27 November 2006.
Dr S.N. Dwivedi

Dr V. Sreenivas

Dr Guresh Kumar

Ms M. Kalaivani

RESEARCH
Funded Projects
Ongoing
5. Some epidemiological studies on unwanted pregnancy. S.N. Dwivedi. Funded by ICMR. Funds: SRF.

Completed

Departmental Projects
Ongoing
1. Biostatistical aspects of randomized controlled clinical trial on remnant ablation in differentiated thyroid cancer (with Nuclear Medicine)
2. Biostatistical aspects in case control studies on unintended pregnancies (with Obstetrics and Gynaecology)
3. A biostatistical study on pattern of referral and timing of treatment of cancer patients with special reference to breast cancer (with IRCH)
4. Some statistical models related to the survival of Acute Liver Failure (with Gastroenterology)

Completed
Nil

Collaborative Projects
Faculty members and the scientists are involved in large number of ongoing projects in almost all the departments of the institute.

PUBLICATIONS

Journals
3. Dwivedi SN, Singh R, Sahu D, Pandey A. Epidemiological analysis of contraceptive


17. Bhal S, Tyagi V, Kumar N, Sreenivas V, Puliyel JM. Signs of inflammation in children that can kill (SICK score): Preliminary prospective validation of a new non-invasive measure


32. Ratan SR, Rattan KN, Pandey RM, Sehgal T, Kumar A, Ratan J. Surgically treated


AWARDS, HONOURS AND SIGNIFICANT EVENTS

Dr R.M. Pandey was elected as Secretary of the Indian Clinical Epidemiology Network for a period of three years; continues to be a member of the Governing Body and the Institutional Review Board (IRB) of the Indian Clinical Epidemiology Network (IndiaCLEN); Coordinator of the Regional Statistical Support Group (RSSG) of the WHO for the STEPS based NCD risk factor surveillance studies in SEAR member countries, visited Kathmandu, Nepal, in the capacity of Temporary Advisor, WHO; Member, Research Committee, at All India Institute of Medical Sciences; continues to be a member of the Research Committee of BPKIHS, Dharan, Nepal; appointed as a statistical reviewer for *Journal of Clinical Epidemiology* and *British Journal of Public Health*; continues to be a reviewer for the scientific journals *IJMR, Indian Pediatrics, Indian Journal of Pediatrics*; and *National Medical Journal of India*.

Dr S.N. Dwivedi continued as elected Member of the International Union for Scientific Study of Population (IUSSP), France; Member, International Society for Clinical Biostatistics, Geneva; elected Member, International Statistical Institute, Netherlands; Member, International Epidemiological Association, USA; Fellow, Royal Statistical Society, UK; Member, Scientific Advisory Committee of National Institute of Medical Statistics, ICMR, New Delhi; External Expert Member, Board of Studies on Health Statistics, Institute of Medical Sciences, BHU, Varanasi; Member, Training Programme Committee, Indian Society for Medical Statistics (ISMS); Member, ISMS Award Committee; Executive Council Member, International Biometric Society (Indian Region) for the period 2006–2007; Correspondent, Indian Region, Biometric Bulletin of the International Biometric Society being published by its Editor; Member, Expert Group on Issues Related to Sample Size and Sample Design for Sero-surveillance under Yaws Eradication Programme, Ministry of Health and Family Welfare, Government of India; Member, Project Advisory Committee of a pilot study on the ‘Magnitude, carrier profile and professional achievements of the PhDs in Science Faculty from the selected Central Universities/Institutions in India’ of the Division of NDTMIS, DST; External Examiner in Biostatistics for setting question paper as well as for evaluation of answer-sheets of MSc students at Jamia Hamdard (Hamdard University), New Delhi; continued as Chairman/Member of the Screening/Selection Committee at (i) National Institute of Medical Statistics, New Delhi (ii) Indian Council of Medical Research, New Delhi (iii) All India Institute of Medical Sciences, New Delhi and (iv) DRDO, Delhi; Member, Editorial Board, *Indian Journal of Chest Diseases and Allied Sciences*; Reviewer, *Indian Journal of Medical Research, International Society for Clinical Biostatistics, Assam Statistical Review, Demography India*, member of the Editorial Advisory Committee of *International Journal of Biometrics*; Member, Editorial Advisory Board, *Demography India*; Statistical Consultant, *Indian Journal of Psychiatry (IJP)*; Reviewer, *Contribution to Applied and Mathematical Statistics* being published from Guwahati University; as Paper-setter for preparing MCQs (Multiple Choice Questions) for MSc Health Statistics at Banaras Hindu University, Varanasi; as a Member of the 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 continued to be a member of the International Epidemiological Association (IEA), Indian Clinical Epidemiology Network (IndiaCLEN), and the Indian Society for Medical Statistics; involved with ICMR as Chairman/Member of the Screening/Selection Committees, Member of Expert groups. He has been invited to co-ordinate a 7 centre ICMR randomized trial on HBV related decompensated cirrhosis; Member secretary, Data Monitoring and Safety Board for some DBT sponsored studies; Advisor, Biostatistics to the Journal of Neonatology (India) and Consultant Biostatistician to the Journal of Indian Association for Child and Adolescent Mental Health (JIACAM); Reviewer of the journals Indian Pediatrics and Indian Journal of Medical Research.
9.7 Biotechnology

Professor and Head
Y.D. Sharma

Professors

J.S. Tyagi

Additional Professor
S.N. Das

Assistant Professor
Anushree Gupta

H.K. Prasad

EDUCATION

The Bioinformatics course was expanded to a 2.5 credit course, with the introduction of pharmaco-genomics and computer-aided drug design. Experts from JNU and IGIB, Delhi, besides faculty of AIIMS from various specialties such as the Computer facility, Departments of Biophysics and NMR representing multiple disciplines were involved in conducting the expanded course. The MBiotech programme was revised and additional topics and courses were introduced during the year.

Short-term training

The Faculty of the department provided summer training to students from the Universities of Rajasthan, Meerut, and institutions such as Jaipur Engineering College and Research Centre and K.J. Research Foundation, Chennai.

Long-term training

Two DBT-post doctoral fellows (DBT-PDF) are currently undergoing training.

National and International Conferences

Lectures delivered

Dr Y.D. Sharma

• ‘Molecular epidemiology of drug-resistant malaria’, Symposium on ‘Recent advances in biotechnology and bioinformatics’, Jawaharlal Nehru Technological University, Hyderabad; July 2006.
• ‘Molecular epidemiology of drug-resistant malaria’, Regional Medical Research Centre (ICMR), Bhubaneswar; August 2006.
Dr J.S. Tyagi

Dr H.K. Prasad
- ‘DNA binding protein of \( M. \text{tuberculosis} \) is a laminin binding adhesin’, Molecular Immunology Forum 2007, Indian Institute of Science and JNCASR, Bangalore; 1–2 March 2007.
- ‘Modulation of interferon gamma receptor a by live \( M. \text{tuberculosis} \): An immune evasive mechanism’, International symposium on ‘New frontiers in tuberculosis research’, International Centre for Genetic Engineering and Biotechnology, New Delhi; 4–6 December 2006.
- ‘HupB a DNA binding protein of \( M. \text{tuberculosis} \) facilitates association of \( Mtb \) and host cells’, ‘Murine monoclonal antibody specific for histone binding protein (HupB, Rv2986c) of \( M. \text{tuberculosis} \)’, Indian Immunology Society, AIIMS, New Delhi; 28–31 January 2007.

RESEARCH
Funded Projects
Ongoing
1. Malaria vaccine related field studies in Jabalpur. Y.D. Sharma. Funded by ICMR. Funds: Rs 48 lakh.


**Completed**


**Departmental Projects**

**Ongoing**

1. Mutations and expression of COX2 gene in breast cancer patients (with Biophysics, Dr B.R. Ambedkar IRCH)

2. Mutations and expression of COX2 gene in Oral cancer patients (with Biophysics, ENT)

3. Anti-proliferative, apoptotic and anti-tumour activity of some indigenous herbal preparations

4. Studies to evaluate neo-adjuvant chemotherapy followed by postoperative chemotherapy and assess the expression of multi-drug resistance gene and cell cycle spe-
Specificity in locally advanced gastric and gastroesophageal junction adenocarcinoma
(with Dr B.R. Ambedkar IRCH)
5. Innate immunity to Mycobacterium tuberculosis
6. Humans immune response to Mycobacterium tuberculosis
7. Further characterization of the HupB protein of mycobacteria
8. Zoonotic tuberculosis

Completed
1. NF-kB signalling and TNF and TNF Receptor gene Polymorphism in Oral cancer
   (with ENT)
2. Polymorphisms in apoptosis regulating genes Fas and Fas L in patients with Oral
   cancer (with ENT)
3. Studies on anti-proliferative, apoptotic and anti-tumour activity of capsaicin
4. Development of an Integrated Data Management Platform for Biomolecular Data
   pertaining to the Human Endothelin System (with Computer Facility, AIIMS)

Collaborative Projects
Ongoing
1. High throughput PCR-assays for diagnosing tuberculosis caused by Mycobacterium
tuberculosis and M. bovis using molecular beacons (with Public Health Research
Institute, Newark, New Jersey, USA)
2. 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 Anesthesia, CTC, AIIMS)

PUBLICATIONS
Journals
   associated with higher levels of sulfadoxine-pyrimethamine resistance in plasmodium
   falciparum isolates from Car Nicobar island and Assam, India. Antimicrobial Agents
2. Alam MT, Bora H, Bharti PK, Saifi MA, Das MK, Dev V, et al. Similar trends of
   pyrimethamine resistance associated mutations in plasmodium vivax and P.
3. Alam MT, Das MK, Dev V, Ansari MA, Sharma YD. Identification of two cryptic species
   in the anopheles (Cellia) annularis complex using ribosomal DNA PCR-RFLP. Parasitol
4. Alam MT, Das MK, Dev V, Ansari MA, Sharma YD. PCR-RFLP method for the


PATIENT CARE

Patents

International Application #PCT/N03/00302 dated 9 September 2003 on ‘The characterization of HupB gene encoding histone like protein of Mycobacterium Tuberculosis’ has been filed in the name of DBT and AIIMS.

1. Indian 1274/DEL/2002
2. European 03813287.4-2402-IN0300302
3. US 10/540,086-IN0300302
4. Chinese 03825875.7-IN0300302

Patents Awarded

1. South African 2005/05007-IN0300302

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor Y.D. Sharma is a Member of Sectional Committee of National Science Academy (FNA); continues to be a Member, Rajasthan Government State Biotechnology Advisory Board; Member, DBT Task Force Sub-committee on Human Resources Development and Selection Committee for DBT Overseas Associate ship; Task Force Member, DBT’s International Project Advisory Committee (IPAC); Member, JRF examination of DBT. He was chairman of Sub-group on Medical Biotechnology Task Force of DBT, Research Advisory Committee on Parasite Biology of NIMR, Delhi; Member, Board of Research Studies of NICD-IP University; Member, Research Advisory Panel of DIPAS (DRDO), Academic Committee of Guru Nanak Dev University, Amritsar; Member, Board of Studies in Biotechnology, Jawaharlal Nehru University, New Delhi; Interdisciplinary Biotechnology Unit at Aligarh Muslim University, Aligarh; Expert Member; Board of PG Studies in Biotechnology of Kurukshetra University; Expert Member, Teaching Advisory Committee of Devi Ahilya University, Indore; Member, Editorial Board, Indian Journal of Malariology; Member, International Reviewer Panel of ‘Medical Science Monitor’; Member, Editorial Board, Biotechnology; Member, NML Book Selection Committee; Member, Research Committees of AIIMS; Member, Recombinant DNA Bio-safety Committee of AIIMS; Member, Selection Committee for Scientists for ICMR; Indian Veterinary Research Institute, Bareilly; Faculty positions at GNDU, Amritsar; Expert, Review Committee of NII.

Dr J.S. Tyagi is a Member, Special Committee, School of Life Sciences and Centre for Molecular Medicine, Jawaharlal Nehru University, New Delhi; Member, Scientific Advisory Committee, Tuberculosis Research Centre, Chennai.

Dr H.K. Prasad is a Member, Guha Research Conference (GRC); Member, Organizing Committee, 33rd Annual conference of the Indian Immunology Society, AIIMS, New Delhi;
IAEC Nominee of Committee for the purpose of control and supervision of experiments of animals (CPCSEA); Member, Expert group of the Technical Committee, Central JALMA Institute for leprosy and other mycobacterial diseases, Agra; Member, Scientific Advisory Committee, National Institute of Biologicals (NIB-SAC), Ministry of Health and Family Welfare, Government of India, Noida; Expert Member, Committee of the NII, ICMR, DBT, ICGEB.

Dr S.N. Das is a Fellow, International Academy of Biotherapy and Modern Cancer Treatment, Guangzhu, China; Active Member, American Association for Cancer Research, Elected Member, National Academy of Medical Sciences, India; Member, DKFZ Alumni Association, German Cancer Institute, Heidelberg, Germany; Member, Task Force Group on Cancer Cervix, DBT, Government of India; Member, Terry Fox Run Grant Committee on Cancer Research, AIIMS; Member, Editorial Board, International Journal of Osteoporosis and Metabolic Disorders; Reviewer, International Journal of Immunogenetics.

VISITING SCIENTISTS
1. Dr S. Pentyala, Director of Translational Research, Anesthesiology, Stony Brook, NY, USA.
2. Dr H. Friden Fil, Programme Manager, Biotechnology Department, Swedish Agency for Innovation Systems, Vinnova, Stockholm, Sweden.
3. Dr Khin-Myat-Tun, Director (Research), Department of Medical Research, Yango, Myanmar, visited the department.
4. Professor A.A. Cataldi, Head, Division of Mycobacterial and Infectious Diseases, Institute of Biotechnology, INTA, Argentina, visited the department and delivered a lecture on ‘Role of mce operons in virulence of M. tuberculosis complex’.
5. Dr Suman Laal, Associate Professor of Pathology, New York University School of Medicine, NY, USA, visited the department on May 4, 2006 and delivered a lecture on ‘TB markers: Evaluation in an endemic environment’.

OTHER ACTIVITIES
Bioinformatics Centre
The bioinformatics resource centre of the department provides database and 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 Institute as well as neighboring Institutes. A 512 kbps leased line for internet taken from VSNL is functional in the department.

Liquid Nitrogen Plant
The department’s liquid nitrogen plant supplies liquid nitrogen to users at AIIMS on request.
9.8 Centre for Community Medicine

Professor and Head
C.S. Pandav

Professors
Shashi Kant
Sanjeev K. Gupta

Additional Professor
Kiran Goswami

Associate Professor
K. Anand

Assistant Professors
Sanjay K. Rai
Nongkynrih Baridalyne
Puneet Misra
Y.S. Kusuma Kumari

EDUCATION

The education programmes for undergraduates, postgraduates, nursing and BSc Human Biology students remain unchanged.

Undergraduate

Rural posting

In rural areas, the programme remained the same. They are posted for five weeks in the VII Semester. It is a residential posting.

Urban posting

Fourth and fifth semester students are posted in urban slum areas for five weeks as part of their teaching programme.

The following events were organized:

- Eight health talks on ‘Meningitis’ were organized in different areas of Dr Ambedkar Nagar. Participants: 360 (approx.).
- Two role-plays were organized by Vth semester students under Family Health Advisory Service at Dr Ambedkar Nagar. Participants: 250 and 270.
- 64 health talks on different topics were organized and supervised at the community level.
- 50 families were identified and allotted to undergraduates for clinical psychosocial case review and supervised for various intervention purposes and follow-up.
- Four research projects were undertaken by undergraduates during their field posting.
Internship
The programme remains unchanged. Interns are posted for four weeks in either Dayalpur or Chhainsa primary health centre. It is a residential posting. Activities in both the areas were the same.

Postgraduates
The postgraduates of Community Medicine were posted in rural areas for 18 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. With the help of the computer facility, postgraduate students are encouraged to use computers for analysis of the data collected for the thesis. Besides this, they conduct different field-based exercises during the posting. The regular teaching exercises include seminars, family and case presentations, etc.

Continuing Medical Education
- The Centre organized 34th National Conference of Indian Association of Preventive and Social Medicine at AIIMS, New Delhi; 22–24 February 2007.
- A workshop on ‘Public health approaches for NCD prevention and control’, for officials from Health Departments of north Indian state governments and faculty of medical college, funded by WHO India as a part of the WHO-GOI collaborative programme, at Hotel Magpie; 4–8 December 2006.
- IAPSM Pre-Conference Workshop at Ballabgarh: CME on ‘Comprehensive rural health care—the way forward’ as part of the AIIMS Golden Jubilee Celebrations; 23–24 June 2006.
- Started a series Guest Lectures beginning from 21 July 2005:
- Five foreign undergraduate students came from USA, Germany and Canada to the department for short-term training in Community Medicine during 2006–2007.

Lectures delivered
Dr Sanjeev K. Gupta
- ‘Data collection techniques including observational visits and status of corneal services in India’, Dissemination workshop on ‘Mapping of resources for control of childhood and corneal blindness in India and services for low vision and refractive errors’, Dr R.P. Centre, AIIMS, New Delhi; 30 April 2006.
• Participated as a resource person, ‘Manpower and management development workshop’, Dr R.P. Centre, AIIMS, New Delhi; 21–26 August 2006.
• Participated as a panelist in the symposium on ‘Community initiatives in eye care’, Venu Eye Institute and Research Centre, New Delhi; 7 October 2006.

Dr K. Anand
• ‘Drug costs of epilepsy: Are we different from west?’, 6th Asia Oceania Epilepsy Congress, Kualalumpur, Malaysia; 18–19 November 2006.
• ‘Economic considerations in health policy, planning, management and evaluation of health care services’, Workshop on ‘Health economics’, NIHFW, New Delhi.

Dr Baridalyne Nongkynrih
• ‘Health issues in urban development’, Training programme, HSMI, HUDCO, Lodhi Road, New Delhi; 16 October 2006.
• ‘Use of IT in rural health care’, CME organized by CCM; June 2006.
• ‘Use of IT in rural health care’, AIIMS research presentation; October 2006.
• Lectures during the NCD workshop on 4–8 December 2006
  a. Cervical cancer screening in India
  b. Experiences with school health intervention in health promotion in relation to NCDs
  c. Setting up NCD services in secondary and primary levels
• Made a presentation during the review of extramural projects on ‘Sentinel health monitoring centers in India: Risk factors surveillance for biochemical risk factors for non-communicable diseases’, AIIMS, New Delhi; 7 March 2007.
• Lectures delivered during the IAPSM annual conference
  a. Management information system in CRHSP, Ballabgarh; 21 February 2007
RESEARCH
Funded Projects

Ongoing

Completed

Collaborative Projects
Completed
1. Epidemiological study on pterygium in a rural population (with Community Ophthalmology, Dr R.P. Centre)
2. Epidemiological study on ocular trauma in an urban slum population of Delhi
3. Determination of quality of life and awareness of retinopathy among diabetic retinopathy patients
Ongoing
1. Rapid assessment of trachoma in a previous hyperendemic area (with Community Ophthalmology, Dr RP Centre)
2. Development of an integrated predictive model for evidence-based eye care (with Community Ophthalmology, Dr RP Centre)

Departmental Projects
Completed
Nil
Ongoing
1. School-based healthy lifestyle programme in Ballabgarh town
2. Quality of life in patients with breast cancer reporting to a tertiary care hospital

PUBLICATIONS
Journals
10. Gupte MD, Mehendale SM, Pandav CS, Paranjape RS, Kumar MS. HIV-1 prevalence
in young adults in south India. *Lancet* 2006;368:114; author reply 115–16.


**Abstracts**


1) Shukla A, Pandav CS, Sankar R, Karmarkar MG, Chakrabarty A. ‘Status and progress towards elimination of iodine deficiency disorders in India’, ICCIDD, New Delhi; All India Institute of Medical Sciences, New Delhi; No. P-313, p. 254.

2) Pandav CS, Sankar R, Moorthy D, Anand K, Karmarkar MG. ‘Policy environment and national health programmes: A case study of the national iodine deficiency disorders control programme (NIDDCP) In India’, Centre for Community Medicine,
AIIMS, New Delhi; The Micronutrient Initiative, Delhi; ICCIDD, India; No. P-314, p. 255.


8) Pandav CS, Moorthy D, Leelamoni K, Rajamohanan, Vijayakumar K, Sankar R, Karmarkar MG, Kabir SR. ‘The Kerala model: Key issues in sustainability of the progress towards elimination of Iodine deficiency disorders in Kerala’, All India Institute of Medical Sciences, New Delhi; Medical College, Thiruvananthapuram; The Micronutrient Initiative, New Delhi; ICCIDD, New Delhi; No. P-320, p. 258.

9) Moorthy D, Pandav CS, Sankar R, Karmarkar MG, Kabir SR. ‘Problem based learning: Iodine deficiency disorders’, Centre for Community Medicine, All India Institute of Medical Sciences, New Delhi; The Micronutrient Initiative, New Delhi; ICCIDD, New Delhi; No. P-321, p. 258.

10) Peter P, Moorthy D, Pandav CS, Karmarkar MG, Kabir SR. ‘Partnership: Key to sustainability in elimination of iodine deficiency—Experience of ICCIDD with Bharat Scouts and Guides’, ICCIDD, New Delhi; Centre for Community Medicine, All India Institute of Medical Sciences, New Delhi; No. P-322, p. 259.
**Chapters in Books**


**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

**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 and Gynecology (daily)
- Rehabilitation (two days a week)
- Psychiatry (once a week)
- ANC Clinic (thrice a week)
- Paediatric Surgery OPD-cum-surgery (once a week)
- NCD Clinic (once a week)
**OPD Load**

New patients: 81,946  
ANC Registration: 5,186  
Immunization: 7,520  
Total OPD Patients: 1,57,851  

**Inpatients**

The number of beds has remained unchanged at 50.  
- Total number of admissions including hospital births: 6,967  
- Number of hospital births: 1,452  
- Bed occupancy rate:  
  (including newborns) 71.4%  
  (excluding newborns) 58.5%  
- Average duration of stay: 1.9 days  
- Admissions  
  —via emergency: 4,222  
  —via OPD: 1,293  
  —newborn: 1,452  

**Distribution of inpatients by specialty**

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicine</td>
<td>1,890</td>
<td>27.1</td>
</tr>
<tr>
<td>Surgery</td>
<td>358</td>
<td>5.1</td>
</tr>
<tr>
<td>Obstetrics and Gynaecology</td>
<td>1,972</td>
<td>28.3</td>
</tr>
<tr>
<td>Paediatrics</td>
<td>1,220</td>
<td>17.5</td>
</tr>
<tr>
<td>Ophthalmology</td>
<td>75</td>
<td>1.1</td>
</tr>
<tr>
<td>Newborn</td>
<td>1,452</td>
<td>20.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>6,967</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**Casualty**

- Number of patients registered: 18,259  
- Number of medicolegal cases: 3,323  

**Diagnostic tests performed**

- Lab investigations (including malaria slides): 98,344  
- X-ray (total): 6,801  
- Malaria slides: 6,822  
  - Malaria cases: 54  
  - *P. vivax*: 53  
  - *P. falciparum*: 1
Total number of surgical procedures performed (by specialty)

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Number of cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Surgery/Paediatric Surgery</td>
<td>997</td>
<td>60.6</td>
</tr>
<tr>
<td>Obstetrics and Gynaecology</td>
<td>555</td>
<td>33.8</td>
</tr>
<tr>
<td>Ophthalmology</td>
<td>92</td>
<td>5.6</td>
</tr>
<tr>
<td>Total</td>
<td>1,644</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Total number of surgical procedures (sex-wise)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Adults</th>
<th>Children</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>Male</td>
<td>498</td>
<td>36.8</td>
<td>221</td>
</tr>
<tr>
<td>Female</td>
<td>855</td>
<td>63.2</td>
<td>70</td>
</tr>
<tr>
<td>Total</td>
<td>1,353</td>
<td>100.0</td>
<td>291</td>
</tr>
</tbody>
</table>

Revised National Tuberculosis Control Programme (RNTCP)
Ballabgarh hospital is a treatment unit under the RNTCP and has 4 microscopy centres under it. The total number of cases treated at Ballabgarh Treatment Unit was 1,195 in 2006. Of these, 453 were diagnosed at the microscopy centre of Ballabgarh.

Break-up of cases treated at Ballabgarh Microscopy Centre

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category I</td>
<td>205</td>
<td>45.3</td>
</tr>
<tr>
<td>Category II</td>
<td>95</td>
<td>21.0</td>
</tr>
<tr>
<td>Category III</td>
<td>153</td>
<td>33.8</td>
</tr>
<tr>
<td>Total</td>
<td>453</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Sputum examination of new cases 2,367
Sputum Positive among these 397 16.8

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. Indices

- Population 82,740
- Birth rate per 1000 population 22.94
- Death rate per 1000 population 6.62
- Neonatal mortality rate per 1000 live-births 25.80
- Infant mortality rate per 1000 live-births 49.5
- Maternal mortality rate per 100,000 live-births 158
2. Load of OPD patients at various centres in IFPA

<table>
<thead>
<tr>
<th>Name of PHC</th>
<th>New cases</th>
<th>Repeat Visits</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dayalpur</td>
<td>13,852</td>
<td>12,019</td>
<td>25,871</td>
</tr>
<tr>
<td>Chhainsa</td>
<td>10,617</td>
<td>12,746</td>
<td>23,363</td>
</tr>
</tbody>
</table>

Family Welfare and 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): 2,292
- Total antenatal cases carried over last year: 760
- Pregnant women receiving AN care: 100%
- Complete TT coverage of registered cases: 91%
- Deliveries conducted by staff or hospital: 596
- Eligible couple protection rate: 59.5%
- Total number of persons who accepted family planning methods in the year 2006: 1,760
  - Tubectomy: 268
  - Vasectomy: 25
  - CC users: 960
  - IUD: 249
  - Oral pills: 256

Expanded Programme on Immunization

Coverage of 12–23 months of age

- BCG: 98.3%
- OPV (3 doses): 97.7%
- DPT (3 doses): 97.7%
- Measles: 97.2%
- Complete primary immunization: 97.1%

Beside this, oral polio vaccine was also given under the Intensified Pulse Polio programme on 15.01.06, 26.02.06, 09.04.06, 21.05.06, 10.09.06, and 12.11.06. The coverage was 99.9%. Each polio programme lasted for 6 days.

National Programmes

1. Malaria

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

- Total number of slides collected: 9,497
- Total number of positive cases: Nil

Indices

- Annual blood examination rate: 11.5%
- Annual parasite incidence rate: Nil
- Slide positivity rate: Nil
2. Tuberculosis
The 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:

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category 1</td>
<td>46</td>
<td>35.1</td>
</tr>
<tr>
<td>Category 2</td>
<td>45</td>
<td>34.4</td>
</tr>
<tr>
<td>Category 3</td>
<td>40</td>
<td>30.5</td>
</tr>
<tr>
<td>Total</td>
<td>131</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Urban Health Programme
Total number of patients seen at Dr Ambedkar Nagar 25,901
Total number of referrals 1,124

Immunizations

<table>
<thead>
<tr>
<th>Immunizations</th>
<th>Doses given</th>
</tr>
</thead>
<tbody>
<tr>
<td>O dose OPV</td>
<td>129</td>
</tr>
<tr>
<td>BCG</td>
<td>343</td>
</tr>
<tr>
<td>DPT I</td>
<td>391</td>
</tr>
<tr>
<td>DPT II</td>
<td>444</td>
</tr>
<tr>
<td>DPT III</td>
<td>431</td>
</tr>
<tr>
<td>DPT B</td>
<td>398</td>
</tr>
<tr>
<td>OPV I</td>
<td>391</td>
</tr>
<tr>
<td>OPV II</td>
<td>444</td>
</tr>
<tr>
<td>OPV III</td>
<td>431</td>
</tr>
<tr>
<td>OPV B</td>
<td>398</td>
</tr>
<tr>
<td>DT I + OPV</td>
<td>74</td>
</tr>
<tr>
<td>DT II + OPV</td>
<td>12</td>
</tr>
<tr>
<td>DT (Booster) + OPV</td>
<td>111</td>
</tr>
<tr>
<td>Measles</td>
<td>413</td>
</tr>
<tr>
<td>MMR</td>
<td>454</td>
</tr>
<tr>
<td>TT I (ANC)</td>
<td>191</td>
</tr>
<tr>
<td>TT II (ANC)</td>
<td>138</td>
</tr>
<tr>
<td>TT (Booster)</td>
<td>56</td>
</tr>
<tr>
<td>TT (Others)— above 6 years</td>
<td>72</td>
</tr>
</tbody>
</table>

Hepatitis B

<table>
<thead>
<tr>
<th>Hepatitis B</th>
<th>Doses given</th>
</tr>
</thead>
<tbody>
<tr>
<td>O dose</td>
<td>01</td>
</tr>
<tr>
<td>I dose</td>
<td>415</td>
</tr>
<tr>
<td>II dose</td>
<td>386</td>
</tr>
<tr>
<td>III dose</td>
<td>372</td>
</tr>
<tr>
<td>Typhoid</td>
<td>364</td>
</tr>
</tbody>
</table>

Vitamin A
I dose–II dose 53
Folifer (Adult) 852 x 30
Folifer (Paediatric) 358 x 30

**Family planning acceptors**
Nirodh 4,560
Oral contraceptive pills 82 Cycles

**Laboratory Services**
Blood smear for malarial parasite 136
Haemoglobin 466
Urine routine/microscopic examination 171
Urine pregnancy test 100

**Report of SMCC (1 April 2006 to 31 March 2007)**
New patients 2,294
Old patients 2,601
Total patients 4,895

**Investigations**
Hormone analysis 807
Blood sugar 304
Semen analysis 575
C/S, VDRL, HIV 102
Urine (R/M) 107
Hb% 015
FNAC 177
USG Doppler/X-Ray 174

**SPECIAL ACTIVITIES**

**Health education activities**

**Organizing events/exhibitions**
- Cancer posters displayed at CCM, AIIMS; 1 April 2006.
- TB poster displayed at CCM, AIIMS; 4 April 2006.
- Exhibition on ‘Tuberculosis’, Dr Ambedkar Nagar; 6 April 2006.
- ‘International day against drug abuse’, Dr Ambedkar Nagar; 26 June 2006. Participants: 120.
- Lecture on ‘Importance of breastfeeding’, during ‘Breastfeeding week’, Dr Ambedkar

• Conducted an intervention programme on current local health problems (role play) at Dr Ambedkar Nagar under FHAS programme Batch I; 28 August 2006. Participants: 250.

• Conducted an intervention programme on current local health problems (role play) at Dr Ambedkar Nagar under FHAS programme Batch II; 4 September 2006. Participants: 230

• Distribution of 20,000 Dengue Booklet to various places, i.e. Casualties, Wards, OPDs, Residential Colony, Departments, Reception counters, Public utility places e.g. Mother Diary Booth, Railway Reservation Centre, State Bank of India, Post Office, Hostels, Cafeteria etc.; 5–10 September 2006.


• Setup a Dengue health education and Dengue information counter at Dengue screening OPD, and distributed 300 Hindi and English booklets and answered approximately 250 patients quarries daily; 17–23 September 2006.

• Exhibition on ‘Worlds AIDS Day’, Dr Ambedkar Nagar, our field practice area; 7 December 2006. Participants: 150.

• Exhibition on ‘World Obesity Day’, Dr Ambedkar Nagar a resettlement colony, New Delhi; 13 December 2006. Participants: 56.


• ‘Pulse Polio Ravivar campaign’, Dr Ambedkar Nagar; 11 February 2007.

• Guest lecture on ‘Stress management’ for CCM staff, Residents and Faculty; 1 March 2007.

IEC materials development

* Four posters were modified on ‘Dengue’ and displayed at three places, i.e. Dengue screening OPD, AIIMS and at CCM and CRHSP, Ballabgarh, Faridabad, Haryana.

* Seven film shows were conducted under various teaching and training programmes.

* Two role plays were performed in the community on Alcoholism, Drug-addiction, Family Planning, Polio, Mother and Child Health and Gender Bias.

Social Services
(Dr Anil Goswami and Mrs Neena Chawla)

Patients identified for social services 3,657
Financial help arranged
Medicine 12
Education 02
Occupation 02
Charges exempted 25
Counselling
Individual 3,000
Family 305
Group 200
Referral services to various social welfare organization 58

Rehabilitation services
Jobs 2
Cancer patients 2
Handicapped 20
School dropout 06
Widows/deserted women 05
Nutritional supplement 08
Arranged cataract surgery 10

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 Kiran Goswami, Dr Anil Goswami and Ms 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. The following are the highlights of its achievements in the year under review:
• Organized a role-play on ‘Diarrhoea’ at Dr Ambedkar Nagar; 24 April 2006.
• Organized an exhibition on ‘World No Tobacco Day’ at Dr Ambedkar Nagar; 12 June 2006. Participants: 140.
• Participated in ‘Walkathon’ on the eve of International Day for older person at India Gate; 1 September 2006.
• Delivered a public lecture on ‘HIV/AIDS’ at Jamia Hamdard University, New Delhi; 12 September 2006.
• Organized an exhibition on ‘Lifestyle diseases’ and health check-up camp at Kamla Nehru College, University of Delhi, New Delhi; 6 December 2006.

AIDS Education and Training Cell
Professor C.S. Pandav is the Chairperson and Professor Bir Singh is the coordinator of this Cell. The following activities were organized by the Cell in 2006–07.
• The telephone helpline on HIV/AIDS and contraception ‘Shubhchintak’ continued to be operated with usual popularity, attracting good number of calls daily.
• 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 2006–2007 also.
• About seventy new patients were given counselling personally on HIV/AIDS apart from repeat patients.
• Delivered a lecture on HIV/AIDS for NSS student leaders at Acharya Narendra Dev College, University of Delhi; 23 September 2006.
• Delivered a lecture on HIV/AIDS for students and teachers of Jamia Hamdard University, New Delhi; 12 September 2006.
• Organized a health talk cum exhibition on ‘HIV/AIDS Awareness’ in the Community on World AIDS Day; 1 December 2006.

AWARDS AND HONOURS

Dr C.S. Pandav was conferred Certificate of Appreciation and JT Dunn Distinguished Achievement Award by the International Council for Control of Iodine Deficiency Disorders during Annual board meeting of ICCIDD at Manila, Philippines, February 2007; elected President, Indian Association of Preventive and Social Medicine (IAPSM) for the year 2007–08 during the 34th National Conference at AIIMS, New Delhi, 22–24 February 2007; elected Vice-President (North), Indian Public Health Association (IPHA) for the year 2007–2008 during the 51st All India Annual Conference at Kolkata; 19–21 January 2007; Awarded ‘The Pillars of Hindustani Society’ 2007 for contribution in the field of Public Health by the Trans Asian Chamber of Commerce and Industry, Mumbai, 24 February 2007.

Dr Sanjeev Kumar Gupta was conferred the Fellowship of the Indian Public Health Association in January 2007.

Dr K. Anand has been awarded Fellowship of Indian Public Health Association (FIPHA); Awarded Fellowship of Indian Association of Preventive and Social Medicine (FIAPSM).

SIGNIFICANT EVENTS

Professor C.S. Pandav attended planning meeting on ‘Tracking progress towards sustainable elimination of iodine deficiency disorders’ at Ranchi, Jharkhand, 10 April 2006; attended the curriculum development workshop on ‘Public Health’ for ICMR School at NIE, Chennai, 12–13 July 2006; attended seminar on ‘sensitization about NRHM’ by the Family Welfare Training and Research Centre, Government of India, at IMA Hall, Haji Ali, Mumbai, 2 August 2006; attended the Scientific Advisory Committee of National AIDS Research Institute, Pune, 11 August 2006; attended the workshop on ‘Rheumatic musculoskeletal disorders in India—burden and profile’, at Pune, 14–15 October 2006; attended tracking progress towards sustainable elimination of iodine deficiency disorders, Jharkhand, 17 November 2006; visited Kasturba Medical College, Mangalore to carry out inspection of the physical and the other teaching facilities organized by the MCI, 20–21 November 2006;
attended the expert committee meeting of ‘Impact study of comprehensive rural health project’, at Jamkhed, Maharashtra, 29–30 November 2006; attended ‘World Marathi Academy programme’, World Peace Centre, MIT, Pune, 6 January 2007; attended the 51st Annual Conference of Indian Public Health Association at Kolkata, 19–21 January 2007; attended the review meeting of the Maharashtra Academy of Engineering and Educational Research, Pune, 5 March 2007; attended the curriculum development for PG Public Health at PGI, Chandigarh, 6–7 March 2007; attended the workshop on ‘Micronutrients in Maternal and Child Health Development in South Asia’ organized by UNICEF at Jaipur, 26–28 March 2007; Conducted MD Exams in PGI, Chandigarh, Kolkata and University of Pune, for the year 2006–07.

Dr Pandav continues to be Secretary, Thyroid Association (India); Secretary, Indian Coalition for Control of Iodine Deficiency Disorders (ICCIDD); President, Cine-Club, AIIMS; Regional Council Member, Federation of Film Societies of India; Member, Foundation for Prevention of Head Injury, Bangalore; Member, National Advisory Committee, The Micronutrient Initiative, South Asia Regional Office, New Delhi; Technical Adviser and Member, Governing Body Nutrition Syndicate; Executive Committee Member and Regional Coordinator, South East Asia and Pacific Region, International Council for Control of Iodine Deficiency Disorder; Member, SEA-IDDEA Group Steering Committee (Joint participation of WHO / UNICEF / MI / ICCIDD).

Dr Pandav participated in the 59th Session of the WHO Regional Committee for South-East Asia, Dhaka, Bangladesh, 22–25 August 2006; attended the consultative meeting to review and develop new strategies of the salt iodisation programme, Sri Lanka, 5 September 2006; attended the 1st World Congress of Public Health Nutrition/VII Congress of the Spanish Community Nutrition Society, Barcelona, Spain, 28–30 September 2006; attended the ICCIDD Board meeting and Asian Thyroid Association meeting at Manila, Philippines, 3–7 February 2007.

**Dr Bir Singh** was invited by ICMR’s National AIDS Research Institute (NARI) as an expert on a brainstorming meeting on ‘HIV/AIDS—social and behavioural research’, Pune; delivered an invited lecture on ‘Safe Sex and Condom Promotion’ in a training programme organized by Delhi State AIDS Control Society, AIIMS and UCLA medical school (USA) at New Delhi; continued to be a member, National Technical Advisory Committee on Science and Technology Communication for Water Resources, Department of Science and Technology, Government of India; continued to be a member, Editorial Board, *Indian Journal of Pediatrics* and reviewer, *Indian Journal of Community Medicine*; Resource person for Consultative workshop on ‘Vector-borne diseases’ organized by Government of India; was a Resource Person and delivered a talk on ‘Educational Objectives’ in the National workshop on ‘Emerging Trends in Medical Education’ at AIIMS; Chaired a session in symposium on ‘lifestyle diseases in young population’ organized by IPHA at MAMC, New Delhi; Adviser
to UPSC for various Interview Boards for selecting medical officers, public health specialists and Assistant professors of Community Medicine (CHS); was a key person in managing outbreak of Dengue Fever in AIIMS Campus (September–November 2006); was a Resource Person for reviewing PPTCT–HIV/AIDS programme in the state of UP, organized by UP State AIDS Control Society and UNICEF (March 2007); was nominated as Convener and Medical Spokesperson for the Disease Outbreak Response Cell (DORC) at AIIMS; Organizing Secretary, 34th National conference of Indian Association of PSM, at AIIMS, February 2007; invited as an expert to interviewing candidates for scholarship offered by the Government of Norway organized by Department of Higher Education, Ministry of Human Resource Development, Shastri Bhawan, New Delhi; invited as a moderator for the session ‘Wastewater and its health impacts’, in the Youth conference on ‘Water management, wastewater recycling’, organized by The Energy Research Institute (TERI), New Delhi; elected as the Secretary General of Indian Association of Preventive and Social Medicine (IAPSM) for the years 2007–2010.

**TV programmes conducted:** 11
1. HIV/AIDS (11 April 2006)
3. HIV/AIDS (December 2006)
4. Eight TV programmes on Dengue Fever and Chikungunya Fever on different TV channels in October–November 2006.

**Radio programmes conducted: Live phone-in programmes on**
1. Bronchial asthma (3 May 2006)
2. Water sanitation (29 May 2006)
3. Tobacco and health (31 May 2006)
4. Epilepsy and its treatment (7 June 2006)
7. Diseases of urinary system (12 July 2006)
8. Health of heart and best lifestyle (7 August 2006)
11. Question of safety of women and children infected with HIV (25 September 2007)
13. Health of old people in winter season (11 December 2006)
14. Fractures and their treatment (25 December 2006)
15. Fever in cold weather and its treatment (8 January 2007)
16. Leprosy and its treatment (29 January 2007)
Professor Sanjeev Gupta
Dr Sanjeev Kumar Gupta is a member of the Staff Council of the AIIMS; Member, Research Committee, AIIMS (2006–07); Member, Doctoral Committee in respect of a PhD Thesis in the Department of Community Ophthalmology, Dr R.P. Centre, AIIMS; External examiner, six-month diploma course in ‘Community eye health’, LV Prasad Eye Institute, Hyderabad, 27 June 2006.

Dr Kiran Goswami
I. Participated as Central Coordinating Team (CCT) member, IPEN, IndiaCLEN—
   2. Field supervision of Model Injection Centre programme at two of the twenty-five centres in India, i.e. Gwalior and Agra.
   3. ‘Rapid assessment of essential newborn care services and needs in NRHM priority status of India’, study by PATH and IPEN
      a. Resource person for regional workshop at 2 out of 11 districts in one of seven selected states.
      b. Quality assurance visits to supervise fieldwork in one of the 11 selected districts in country.
   4. Resource person for regional training workshop for ‘IMNCI: Baseline assessment of childhood morbidity and mortality in selected districts in India’ in one of the 16 selected districts in India.

II. Quality assurance visits to supervise field work in two of the six states under ‘HIV Sentinel Surveillance’ (Central Region), NACO, i.e. Uttarakhand and Delhi.

III. Participated as resource person under ‘MICs: A programme to improve injection practices in country’, AIIMS.


V. Visited Uttranchal for over seeing the monitoring survey and conducting FGDs for the ‘Evaluation of safe water system project’.

Dr K. Anand attended ICMR workshop on ‘Stroke surveillance in India’, at New Delhi, 13–15 November 2006; attended the 51st Annual conference of Indian Association of Public Health, 18–20 January 2007; coordinated the session on public Health approaches to NCDs and mental health and IT in primary health care in the 34th National conference of IAPSM, at AIIMS, New Delhi, 22–24 February 2007; was a temporary advisor to WHO for the following workshops/meetings—WHO SEA Regional meeting on ‘Global strategy on diet and physical activity’, 16–20 October 2006; WHO SEA Regional meeting on ‘Data analysis and management of NCD RF surveys’, Kathmandu, 13–18 July 2006; Joined WHO/SEARO as a short-term Professional to support Regional NCD surveillance and prevention activities, 1–26 March 2007; was a member of the project review committee of ICMR for Cardiovascular
diseases and urban Mental Health Programme, Media Lab Asia projects on IT in health; the Ministry of Health working Group on Development of NCD Surveillance protocol under IDSP; Working Group on National Workshop on Developing protocols for Morbidity field Surveys organized by Institute for Research in Medical Statistics; was a reviewer for *Indian Pediatrics, National Medical Journal of India, Indian Journal of Community Medicine, Journal of Epidemiology and Community Health*.

**Dr Sanjay K. Rai**

- Conducted oral and practical examination of final professional MB,BS examination (community medicine) of Delhi University at Maulana Azad Medical College, New Delhi; 17 April 2006.
- Nominated by Calcutta University as a member of the Board of Examiners in community medicine for 2006–2007 and was external examiner for 3rd professional MB,BS part 1 examination (community medicine), Kolkata University, Kolkata; 25 April 2006.
- Was external examiner for MD Community Medicine examination for Patna Medical College and Hospital, Patna; 13 May 2006.
- Participated in supervisory field visit to Model Injection Centre, Dharbhanga Medical College, Darbhanga; 14–15 May 2006.
- Participated in the meeting of IPHS for Sub-divisional and District hospital at Nirman Bhawan, New Delhi; 14 September 2006.
- Reviewed manuscript for publication in various journals, e.g. *Health and Population Perspective and Issues, Indian Journal of Public Health*, etc.
- Participated in International meeting on Dengue jointly organized by National Institute of Virology, ICMR, National Vector Borne Disease Control Programme, Ministry of Health and Family Welfare and International Vaccine Institute, Korea at Pune; 10 November 2006.
- Attended annual sentinel surveillance for HIV infection 2006 meeting to review
supervision and monitoring plans by central team and regional institute, at National institute of Health and family welfare, New Delhi; 13 September 2006.

- Attended meeting of the task force on IPHS for Sub-District/sub-divisional Hospitals at Nirman Bhawan; 14 September 2006.
- Participated as a recourse person on workshop on ‘Public health approach for prevention and control of NCDs’, Faridabad; 4–8 December 2006.
- Participated as a recourse person in task force project on ‘Musculoskeleton disorders—training workshop for investigators and co-investigators’, ICMR, New Delhi; 14–15 December 2006.
- Participated and chaired a session during 51st Annual Conference of IPHA at Kolkata; 18–21 January 2006.
- Unanimously elected ‘Central Council Member’ (north zone) of Indian Public Health Association for the year 2007–2009.
- Member organizing committee 34th National conference of IAPSM, CCM, AIIMS, New Delhi; 22–24 February 2006.
- Attended core committee meeting and sensitization programme of DOTS therapy on tuberculosis, AIIMS; 21 March 2007.

**Presentation in Conferences**

In the Joint National Conference of Indian Public Health Association and Indian Association of Preventive and Social Medicine, Tirupati, Andhra Pradesh, 21–24 January 2006, the following presentations were made.

**Oral presentation**

- Sumit M, Goswami K, Sreenivas V, Singh B, Sagar R. Knowledge and sources of sexual health information of school going adolescents in southwest district of Delhi.
• Undergraduate students, Roopa S, Sahariah SA, Baridalyne Nongkynrih, Pandav CS, Kapoor SK. Comparison of 4-day food diary method with 24 hours recall method among schoolchildren in Rural Haryana.

Poster presentation
• Star Pala, Pandav CS, Anand K, Pandey RM. Family healthcare expenditure in an urban resettlement colony of South Delhi.
• Undergraduate students, Roopa S, Sahariah SA, Baridalyne Nongkynrih, Pandav CS, Kapoor SK. Study of nutritional status in schoolchildren in rural Haryana.

VISITING SCIENTISTS
Nil
EDUCATION

Short- and long-term training
The department has provided short-term training (1 month) to 1 doctor from USA and 3 months training to 4 doctors from North Korea.

CME/National/International Conferences

Dr V.K. Sharma
1. ‘Recent advances in sexually transmitted diseases’, 24th Annual Conference of IADVL (CUTICON), Agra; 27 October 2006.
4. Interpretation and relevance of Patch test, CODFICON, Mumbai; 4 November 2006.

Dr K.K. Verma
1. ‘Syndromic management of STI/RTI’, Department of Medicine, AIIMS and Delhi State AIDS Control Society, CMET, AIIMS, New Delhi; 20 April 2006.
3. ‘Lasers in Dermatology in Dermat Update 2006’, Manipal College of Medical Sciences, Dhanwantan Auditorium, Manipal Teaching Hospital, Phulbari, Pokhara, Nepal; 22 July 2006.

Dr M. Ramam

Dr Sujay Khandpur

Dr Somesh Gupta
3. ‘Surgical management of vitiligo’, World Congress of International Academy of Dermatology (IACD), Melbourne, Australia; December 2006.

**RESEARCH**

**Funded Projects**

**Completed**


**Ongoing**


**Departmental Projects**

**Completed**

- Role of sclerotherapy in vascular malformations
- Clinical profile of portwine stains and other vascular malformations
- Sepsis in Dermatology ward

**Ongoing**

- Comparison of cyclophosphamide-dexamethasone pulse versus cyclophosphamide pulse alone in pemphigus vulgaris
- Clinical efficacy and cost-effectiveness of PUVA vs PUVASol therapy in psoriasis
- Comparison of coal tar vs coal tar and topical steroid in palmoplantar psoriasis
- Role of ELISA testing in pemphigus
- Mucocutaneous manifestations of HIV-infection and correlation with CD4 count and HIV RNA levels
• Evaluation of mucocutaneous disorders in HIV infected patients and their correlation with CD4 lymphocytes
• CO2 laser as a therapeutic modality for the treatment of epidermal and sebaceous nevi
• Evaluation of CO2 laserbrasion as a therapeutic modality in extensive facial angiofibromas in tuberous sclerosis and acne scars
• Azathioprine as a corticosteroid-sparing agent in the treatment of air-borne contact dermatitis
• To evaluate the role of immunosuppressive drugs for the treatment of chronic urticaria
• Long-term safety and toxicity of azathioprine in patients of air-borne contact dermatitis
• Imiquimod cream for the treatment of basal cell carcinoma
• Imiquimod cream for the treatment of Bowen’s disease
• Weekly azathioprine pulse (WAP) therapy for the treatment of extensive plaque psoriasis
• Challenge testing in drug reactions

Collaborative Projects
1. Dermatological complications in renal transplant recipient patients: A follow up study (with Nephrology)
2. Role of electron beam radiation therapy for the treatment of mycosis fungoides (with Radiation Oncology)
3. Evaluation of topical cyclosporine in ocular involvement in Stevens-Johnson syndrome (with Ophthalmology, Dr R.P. Centre) (Funded by ICMR)
4. A cross-sectional study of infectious disease prevalence among prison inmates in the Tihar Jail complex Delhi (with Medicine, Microbiology)
5. A study of the psychosocial effects of vitiligo (with Psychiatry)
6. Evaluation of m-RNA PCR for the diagnosis of cutaneus tuberculosis (with Biotechnology, Pathology)

PUBLICATIONS
Journals

**Chapters in Books**
AWARDS, HONOURS AND SIGNIFICANT EVENTS

Dr Vinod K Sharma was appointed on the Editorial Board, *Journal of European Society of Contact Dermatitis* and *Journal of American Society of Contact Dermatitis*; Appointed Chairman, Technical Resource Group for Sexually Transmitted Infection for National AIDS Control Programme Phase III; appointed Editor-in-Chief, 2nd Edition of IASSTD and AIDS, *Textbook and Atlas of STD and AIDS*; Awarded Dr J C Patel and Dr B C Mehta Award for 2nd Best Correspondence entitled *Greater Auricular Nerve Abscess in Borderline Tuberculoid Leprosy Masquerading as Jugular Vein Thromboisis* in *Journal of the Association of Physicians of India*; Member, National Academic Committee, MCI-Issue Committee and Chairman, Therapeutic Guidelines Committee of the Indian Association of Dermatologists, Venereologists and Leprologists.

Dr Kaushal K. Verma was awarded Dr Bishnupriya Debi Award for the Best Research Paper published in 2006.

Dr M. Ramam was awarded the Ambady Oration Award 2007 of the Indian Association of Dermatologists, Venereologists and Leprologists; Editorial Board Member, IADVL textbook; Editorial Board Member, IJDVL.

Dr Sujay Khandpur elected Member, Therapeutic Guidelines Committee of the Indian Association of Dermatologists, Venereologists and Leprologists.

Dr Somesh Gupta invited as a Midlands Travelling Fellow in Genitourinary Medicine (GUM) to deliver two lectures for GUM physicians in Birmingham, UK.
9.10 Endocrinology and Metabolism

Professor and Head
A.C. Ammini
Professor
Nikhil Tandon
Additional Professor
N. Gupta
Associate Professor
R. Goswami
Assistant Professors
V.P. Jyotsna
R. Khadgawat

EDUCATION
Undergraduate, postgraduate and paramedical training
The department was actively involved in regular training programmes of undergraduates and nursing students. Postgraduate students from MD Internal Medicine came for one-month posting in the department.

Long- and short-term training
- Four candidates completed their DM and four new candidates joined the department for the DM course
- Two student joined PhD (Endocrinology)
- Two students joined the department for short-term training of three months and eight students joined for six months training

Continuing Medical Education
Lecture delivered
The faculty and residents of the department participated in and delivered lectures/presented papers in the continuing medical education programmes, workshops, seminars, several national and international meetings on endocrinology and diabetes mellitus.

Dr Nikhil Tandon
- ‘Endocrine hypertension’, Endocrine CME programme, RNT Medical College, Udaipur; 2 September 2006.
• ‘Childhood obesity: An Indian perspective’, symposium organized by Global Alliance for prevention of obesity, Delhi; 18 September 2006.
• ‘Challenges in diabetes management in today’s clinical practice’, for physicians in Delhi; 18 October 2006.
• ‘Epidemiology, medical and economic burden of diabetes mellitus in India’, Conference on ‘Fetal origins of health and disease’, Delhi; 8 November 2006.
• ‘Medical and economic burden of diabetes mellitus’, CME on ‘Fetal origins of health and disease’, Delhi; 9 November 2006.
• ‘Calcium and bone disease in thalassemia’, Annual Conference of Thalassemia Societies; 11 November 2006.
• ‘Childhood obesity’, Annual Ranbaxy Science Foundation Symposium, Delhi; 20 March 2007.

Dr R. Goswami

Dr R. Khadgawat
• ‘Hypothyroidism and thyroiditis’, Annual CME, API Delhi, State Chapter, New Delhi; 28–29 October 2006.
• ‘Fetal origin of adult diseases’, Annual meeting of Sister Doctor’s Forum of India (SDFI), New Delhi; 28 February 2007.

National and International Conferences
Conferences
Nil
Lecture delivered
Dr A.C. Ammini

Dr Nikhil Tandon
• ‘Trouble shooting glycemic control in intensive group patients’, Annual Investigators meeting of ADVANCE, Hong Kong; 1 June 2006.
• ‘Thyroid status in the post salt-iodization scenario’, Annual Conference of the Pakistan Endocrine Society, Karachi; 5 September 2006.
• ‘Vitamin D status in Indian children’, Annual Conference of the Pakistan Endocrine Society, Karachi; 5 September 2006.
• ‘Genetics of type 2 diabetes in North India’, Annual Conference of the Research Society for the Study of Diabetes in India (RSSDI), Delhi; 5 November 2006.
• ‘What is normal Vitamin D?’, Annual Conference of the Endocrine Society of India, Jaipur; 17 November 2006.
• ‘Childhood obesity in India’, Seminar, George Institute, Sydney; 22 November 2006.
• ‘Glucose control: Problems and solutions in Indian centres’, Investigators meeting of ADVANCE, Melbourne; 24 November 2006.

Dr R. Goswami

Dr R. Khadgawat

RESEARCH
Funded Projects
Completed
• Assessment of prevalence of osteoporosis in adult population in India. A.C. Ammini. Funded by ICMR as a task force project.
• A multicentre, randomized, double-blind, active controlled study to compare the effect of 24 weeks treatment with combination therapy of LAF237 and pioglitazone to LAF237 monotherapy or pioglitazone monotherapy in drug naïve patients with type 2 diabetes. Nikhil Tandon. Funded by Novartis Pharma for 1 year (2005–2006). Funds: Rs 5 lakh.

Ongoing
• Postmenopausal evaluation and risk reduction and lasorfoxifene: A multicentric trial. A.C. Ammini. Funded by Pfizer India for 5 years. Funds: Rs 50 lakh.
• Demographic and clinical profile of young diabetics in a tertiary care hospital in North India. A.C. Ammini. Funded by ICMR for 3 years. Funds: Rs 14 lakh.
• Comparison of efficacy of management of metformin and spironolactone in the management of polycystic ovarian disease. A.C. Ammini. Funded by ICMR for 3 years. Funds: Rs 32 lakh.
• A one-year multicentre, international, randomized, double-blind study with comparison of benfluorex versus pioglitazone in combination with sulfonylurea administration orally for treatment of type 2 diabetes. A.C. Ammini. Funded by Cheltern International for 1 year. Funds: Rs 10 lakh.
• 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 for 6 months. Funds: Rs 4 lakh.
• 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 for 6 months. Funds: Rs 2 lakh.
• Role of oral vitamin D as an adjunct therapy in category I pulmonary tuberculosis along with assessment of immunological parameters. R. Goswami. Funded by DBT for 3 years (2006–2009). Funds: Rs 90.9 lakh.
• 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. R. Goswami. Funded by DRDO for 3 years (2006–2009). Funds: Rs 9.75 lakh.
• Bone health in patients of hyperthyroid graves disease in relation to duration of thyrotoxicosis and improvement after patient becomes euthyroid. V.P. Jyotsna. Funded by AIIMS. Funds: Rs 45,000.
• 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 sustained daily therapy with genotropin in treatment naïve children with growth failure due to insufficient secretion of endogenous growth


**PUBLICATIONS**

**Journals**


**Chapters in books**


**PATIENT CARE**

**OPD activity**
The department has OPD on all six working days with two specialty clinics, Paediatric and Adolescent Endocrinology clinic (PAEC) (every Monday, 2–5 pm), and Diabetes of Young clinic (DOY) (every Saturday 9–1 pm).

**General Endocrine OPD**
- Total number of new cases: 8,820
- Total number of old cases: 21,168
- Diabetes of Young clinic (DOY): 1,536

**Pediatric and Adolescent Endocrinology clinic (PAEC)**
- New cases: 311
- Old cases: 552

**Laboratory Investigations**
- Total number of DXA scan done: 1,705

The total number of endocrine investigations done during this period was 31,642, while Metabolic laboratory of the department carried out 20,737 investigations. The break-up of these investigations is given below.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Hormone</th>
<th>Number of samples assayed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>T4</td>
<td>6,400</td>
</tr>
<tr>
<td>2.</td>
<td>TSH</td>
<td>8,630</td>
</tr>
<tr>
<td>3.</td>
<td>TPO</td>
<td>1,201</td>
</tr>
<tr>
<td>4.</td>
<td>LH</td>
<td>1,285</td>
</tr>
<tr>
<td>5.</td>
<td>FSH</td>
<td>1,388</td>
</tr>
<tr>
<td>6.</td>
<td>PRL</td>
<td>1,235</td>
</tr>
<tr>
<td>7.</td>
<td>Testosterone</td>
<td>1,106</td>
</tr>
<tr>
<td>8.</td>
<td>Cortisol</td>
<td>2,902</td>
</tr>
<tr>
<td>9.</td>
<td>17-OH progesterone</td>
<td>334</td>
</tr>
<tr>
<td>10.</td>
<td>DHEAS</td>
<td>287</td>
</tr>
</tbody>
</table>
11. ACTH 530
12. 25-OH vitamin D 1,313
13. PTH 1,095
14. Insulin 2,248
15. C-peptide 1,061
16. GAD antibody 307
17. Growth hormone 320
Total 31,642

Investigations done in the Metabolic Laboratory

<table>
<thead>
<tr>
<th>Investigation</th>
<th>Number of Samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Blood sugar</td>
<td>12,000</td>
</tr>
<tr>
<td>2. Glycosylated haemoglobin</td>
<td>4,536</td>
</tr>
<tr>
<td>3. Urinary creatinine</td>
<td>1,400</td>
</tr>
<tr>
<td>4. Urinary albumin</td>
<td>1,400</td>
</tr>
<tr>
<td>5. Urine pH</td>
<td>201</td>
</tr>
<tr>
<td>6. Osmolality</td>
<td>300</td>
</tr>
<tr>
<td>7. Calcium</td>
<td>300</td>
</tr>
<tr>
<td>8. Phosphorus</td>
<td>300</td>
</tr>
<tr>
<td>9. Alkaline phosphatase</td>
<td>300</td>
</tr>
</tbody>
</table>
Total 20,737

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Dr A.C. Ammini was President, Endocrine Society of India; Vice President, Indian Thyroid Association; Member, Executive Committee, International Society for hypospadius and intersex disorders.

Dr Nikhil Tandon has been elected Fellow of the National Academy of Sciences, India; appointed on the Editorial Advisory Board of Prevention, a publication from the India Today Group; Member, Editorial Board, DMA Journal.

Dr R. Goswami was reviewer of the following journals; Clinical endocrinology, Diabetes Care, International Journal of Immunogenetics, Diabetes Research and Clinical Practice (Asia Pacific), Southern Medical journal, Journal of Bioscience, Journal of Post graduate Medicine, National Medical Journal of India, Indian Journal of Medical and Pediatric Oncology, Journal of the college of Physicians and Surgeons Pakistan, Experimental Review of Clinical Immunology and Mycoses.

Dr Rajesh Khadgawat participated as representative of India Society of Bone and Mineral Research (ISBMR) in International Osteoporosis Federation meeting, Toronto, Canada; 2–6 June 2006.
**9.11 Forensic Medicine**

<table>
<thead>
<tr>
<th>Professor and Head</th>
<th>T.D. Dogra</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional Professors</td>
<td>R.K. Sharma O.P. Murty D.N. Bhardwaj</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>Scientist II</td>
<td>Anupuma Raina</td>
</tr>
<tr>
<td>Chemist</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 PhD student. The department is also imparting training in DNA fingerprinting and Toxicology to BSc/MSc students from other Indian universities. Twenty-eight such students got training in department.

**Continuing Medical Education**

**Conferences/Symposium/Workshop**

1. South Asian and Seventh Annual National Conference of Indian Congress of Forensic Medicine and Toxicology (ICFMT) was organized at JLN Medical College, Aligarh in which department was an active collaborator. About 250 delegates from various countries participated in the conference.

2. Symposium on ‘Emerging trends in medical toxicology’ was organized at AIIMS as part of the Golden Jubilee Celebration of Institute. It was attended by about 150 participants.

3. Workshop on ‘Training course on DNA techniques’ was organized in collaboration with National Institute of Criminology and Forensic Science (NICFS), Rohini. It was attended by scientists of CFSL and FSLs from all over country.

**Lectures**

The departmental faculty/staff participated in training programmes organized by the Academy of CBI, NICFS, Academy of IAS trainees, Haryana Institute of Rural Development Nilokhari, Karnal (HR) Amity Institute. Lectures and demonstrations were held for CBI officials, police officers, judicial officers, medical officers and forensic science experts from all over country.
Departmental Projects

Completed
1. Auditing of medicolegal work
2. Comprehensive study of fire-arm related deaths
3. Comprehensive study of unnatural deaths among the elderly in South Delhi.

Ongoing
1. A comprehensive autopsy study of sudden natural deaths in South Delhi
2. Inferring genetic diversity and molecular relatedness among the Indian Saraswat community at various STR loci.

PUBLICATIONS

Journals
13. Raina A, Yadav BK, Lalwani S, Dogra TD. Effect of different preservatives on the human soft tissues stored at different temperatures and intervals of time for isolation


Chapter in Books

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 attending all the calls pertaining to medical examination in police and judicial custody.

Medicolegal postmortem performed 1763
The department provided consultation services to the CBI, crime branch and other central and state investigating agencies from various states in complicated medicolegal postmortem conducted at other centres of the country and also participated in board postmortem cases.

Court attendance by the members of the department 2038
Doctors of the department also attended court on behalf of the Medical Superintendent, other doctors who have left AIIMS as directed by the court. About 1200 such summons were attended by the department.

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. Sixty-two such cases were dealt in 2006–07.

DNA fingerprinting
The department is providing training in DNA fingerprinting to the candidates sponsored by
various universities. It is performing DNA fingerprinting test in selected medicolegal cases. 101 samples were processed for DNA fingerprinting in 2006–07. The 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 the toxicology laboratory. One hundred-seventeen such tests were performed during this period. An exercise on ‘Comparison of Breath Analyzer (Alcometer) reading from different companies with that of GLC’ was done in collaboration with Delhi Traffic Police so that most sensitive and reliable breath analyser can be purchased by traffic police for alcohol estimation in drunken drivers.

Community services
The department participated in training programmes 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.

AWARDS AND HONOURS
Dr Anupuma Raina, Scientist II was awarded the fellowship of Indian Congress of Forensic Medicine and Toxicology (ICFMT).
9.12 Gastroenterology

Professor and Head
S.K. Acharya

Professors
Y.K. Joshi  
Umesh Kapil  
Rakesh Aggarwal
(on foreign assignment)

Anoop Saraya

Associate Professors
Pramod Garg  
Vineet Ahuja  
Govind K. Makharia

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

Short- and long-term training
Six candidates underwent training during 2006–2007; they were trained for a period of 3 months to 6 months. Twelve DM candidates and 8 PhD candidates underwent long-term training.

Continuing Medical Education
1. ‘Current perspectives in liver disease (CPLD)’, CME programme on liver disease, jointly organized by PGIMER, Chandigarh and AIIMS; 2–3 August 2006.
3. One-day workshop on ‘Research methodology and scientific writing’, Annual Conference of Indian Orthodontics Society, Organized by Dr Rakesh Aggarwal (Gastroenterology) along with Dr Peush Sahni (Gastrointestinal Surgery), AIIMS, New Delhi; 24 February 2007.
4. Two workshops on ‘Scientific writing’ organized for CMET by Dr Rakesh Aggarwal (Gastroenterology) along with Dr Peush Sahni (Gastrointestinal Surgery), AIIMS.

National and International Conferences
The department faculty delivered 54 guest lectures in national and international conferences.

RESEARCH
Funded Projects
Completed
1. Epidemiological studies on hepatitis E. Rakesh Aggarwal. Funded by the Department of Biotechnology, Government of India for 3.5 years. Funds: Rs 9 lakh.


6. Comparison of diagnostic efficacy of immuno-histochemistry with histology (Warthin Starry stain) and urease based tests (rapid urease test, C14 urea breath test) before and after eradication of helicobacter pylori in peptic ulcer disease. Vineet Ahuja. Funded by ICMR for 3 years (2003–2006). Funds: Rs 4.10 lakh.

7. Standardization and validation of non-invasive tests of intestinal permeability and Standardization and validation of faecal calprotectin test as a noninvasive marker of intestinal inflammation. Vineet Ahuja. Funded by AIIMS intramural grant for 2 years (2005–2007). Funds: Rs 1 lakh.

**Ongoing**

1. Randomized trial of pegylated interferon vs. lamivudine followed by PEG-1 for 1 year among patients with CH-B. S.K. Acharya. Funded by Fulford India for 4 years. Funds: Rs 24 lakh.


5. Effect of glutamine on intestinal structure and function in patients with inflammatory bowel diseases. Y.K. Joshi. Funded by ICMR for 3 years. Funds: Rs 12 lakh.


8. Prevalence of obesity and associated diseases amongst children in 5–18 years of age in the National Capital Territory of Delhi. Umesh Kapil. Funded by ICMR for 2 years and 6 months. Funds: Rs 12,00,000.
10. Assessment of magnitude of zinc deficiency amongst children in 6 months to 60 months of age in different regions of India. Umesh Kapil. Funded by Department of Biotechnology for 2 years and 3 months. Funds: Rs 36,72,618.

Departmental Projects
Completed
1. Non-alcoholic fatty liver disease is not severe in India
2. Vitamin E based therapy ameliorates transaminitis in NAFLD
3. Randomized trial of IV somatostatin and nitroglycerine vs IV somatostatin among cirrhotic patients with acute variceal bleeding
4. Coagulation abnormality and results of angioplasty among patients with HVOTO
5. Randomized controlled trial of MARS in patients with acute liver failure
6. Ammonia kinetics in acute liver failure
7. Dynamics of sepsis in acute liver failure
8. Seizures in acute liver failure
9. Randomized controlled trial of radiofrequency ablation and percutaneous acetic acid in patients with primary hepatocellular cancer
10. Effect of transdermal glyceryl trinitrite or pericoxib (valdecoxib) in the prevention of post ERCP pancreatitis

AIIMS 2006-2007 / 229
11. Role of anti-oxidants for pain relief in patients with chronic pancreatitis
12. Study of the characteristics and outcome of early severe acute pancreatitis
13. Incidence and spectrum of bacterial, viral, fungal and protozoal infection in inflammatory bowel disease
14. Prevalence of GERD in a rural community in Ladakh
15. Prevalence of secondary bacterial infection in untreated amebic liver abscess
16. Variations of presentation of celiac disease in India
17. Spectrum of microscopic colitis at a tertiary care center in India
18. Clinical features, endoscopic features, and histological features of intestinal lymphangiectasia

**Ongoing**
1. Assessment of quality of life in persons with chronic inactive hepatitis B virus infection
2. Meta-analysis of role of adefovir dipivoxil for adults with chronic hepatitis B
3. Randomized study of biliary drainage versus conservative therapy for hilar malignant biliary obstruction due to cancer of the gallbladder
4. The role of endosonography in the evaluation of obscure biliary obstruction
5. Prevalence of bactobilia in patients with malignant biliary obstruction and its influence on endoscopic biliary drainage
6. A study of the risk factors for cancer of the pancreas
7. A study of the risk factors for cancer of the gallbladder
8. A comparison of diagnostic efficacy of double balloon enteroscopy versus magnetic resonance enteroclysis in evaluating patients with abdominal tuberculosis and Crohn’s disease
9. Genomic diversity of E. histolytica isolates and identification of genotype—clinical phenotype correlations
10. A randomized controlled factorial trial evaluating long term therapy for *H. pylori* eradication in peptic ulcer disease
11. A study of assessment of dietary fiber intake in patients with irritable bowel syndrome and healthy individuals
12. Relationship between intestinal permeability in anti-saccharomyces cerevisiae antibody in patients with Crohn’s disease

**Collaborative Projects**

**Completed**
1. Analysis of surface promoter mutants detected in occult HBV infection (with Pathology)
2. Cost effectiveness of screening strategy to detect HCC among patients with cirrhosis (with Radiology)
3. Development of mouse and chiminic monoclonal antibody against HBsAg (with Biochemistry)
4. Study on hepatitis markers, transactivating proteins, proliferation markers, oncogenes in patients with primary liver cell cancers (with Pathology)
5. Randomized trial of endoscopic drainage versus percutaneous drainage in obstructive jaundice due to cancer of the gallbladder (with GI Surgery)
7. Structure and functions of lungs in patients with achalasia cardia (with Medicine, Radiodiagnosis)
9. A study of emerging parasitic agents intestinal coccidia and microsporidia in etiology of malabsorption syndrome

**Ongoing**

1. Nonalcoholic fatty liver disease in India (with Pathology)
2. Viral kinetics in chronic HBV infection (with Pathology)
3. HbeAg-ve chronic hepatitis B: Magnitude, natural course and therapeutic response (with Pathology)
4. Study on hepatitis markers, transactivating proteins, proliferation markers, oncogenes in patients with primary liver cell cancers (with Pathology)
5. 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)
6. Cellular immune responses to hepatitis E virus (HEV) infection. (with Department of Immunology, SGPGI, Lucknow)
7. Role of endotherapy and ESWL in the treatment of chronic pancreatitis (with Urology)
8. Randomized trial of endoscopic stenting versus cholecystojejunostomy in patients with peri-ampullary cancer with obstructive jaundice (with GI Surgery)
9. Functional magnetic resonance imaging and magnetic resonance imaging in patients with achalasia cardia (with Nuclear Magnetic Resonance)
10. PET-CT-enteroclysis: A new technique for evaluation of small intestinal inflammatory diseases (with Nuclear Medicine)
11. Autonomic and immune functions in inflammatory bowel disease: Effect of yogic intervention (with Physiology)
12. Prevalence of osteoporosis and osteopenia in patients with inflammatory bowel disease (with Endocrinology and Metabolism)
14. A study of Mycobacterium paratuberculosis in patients with Crohn’s disease (with Microbiology, Biotechnology)
15. Detection, identification and molecular characterization of intestinal coccidia and microsporidia in patients with chronic diarrhoea and malabsorption syndrome (with Microbiology)

**PUBLICATION**

**Journals**


45. Jain TP, Gulati MS, Makharia GK, Bandhu S, Garg PK. Computerized tomography


**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>550</td>
<td>6,906</td>
</tr>
<tr>
<td>Gallstone and pancreas</td>
<td>314</td>
<td>558</td>
</tr>
<tr>
<td>Ulcer clinic</td>
<td>66</td>
<td>303</td>
</tr>
<tr>
<td>IBD clinic</td>
<td>177</td>
<td>900</td>
</tr>
<tr>
<td>Interventional clinic</td>
<td>314</td>
<td>558</td>
</tr>
</tbody>
</table>

**Routine clinic**

- **New cases**: 17,216
- **Old cases**: 27,289

**Procedures**

- **Endoscopy**: 5,000
- **Colonoscopy**: 700
- **EST and EVL**: 1,650
- **Sigmoidoscopy**: 170
- **Sideview**: 90
- **ERCP**: 540
- **EUS**: 130
- **Ultrasound**: 3,420
### Tests undertaken in the department

<table>
<thead>
<tr>
<th>Test</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serum ceruloplasmin</td>
<td>310</td>
</tr>
<tr>
<td>1. Serum copper</td>
<td>328</td>
</tr>
<tr>
<td>2. 24-hour urinary copper</td>
<td>312</td>
</tr>
<tr>
<td>3. TNF</td>
<td>180</td>
</tr>
<tr>
<td>4. IL-6</td>
<td>180</td>
</tr>
<tr>
<td>5. IL-1</td>
<td>180</td>
</tr>
<tr>
<td>6. Adeponectin</td>
<td>180</td>
</tr>
<tr>
<td>7. Leptin</td>
<td>180</td>
</tr>
<tr>
<td>8. Insulin</td>
<td>180</td>
</tr>
<tr>
<td>9. Lipid peroxidation</td>
<td>100</td>
</tr>
<tr>
<td>10. Total antioxidant capacity</td>
<td>100</td>
</tr>
<tr>
<td>11. Vitamin C</td>
<td>100</td>
</tr>
<tr>
<td>12. Vitamin A</td>
<td>100</td>
</tr>
<tr>
<td>13. Super oxide dismutase</td>
<td>100</td>
</tr>
<tr>
<td>14. Human anti-transglutaminase IgA autoantibodies</td>
<td>150</td>
</tr>
<tr>
<td>15. Catalase activity</td>
<td>100</td>
</tr>
<tr>
<td>16. Nitric oxide</td>
<td>100</td>
</tr>
<tr>
<td>17. Alpha fetoprotein</td>
<td>100</td>
</tr>
<tr>
<td>18. Neutrophil function test</td>
<td>100</td>
</tr>
<tr>
<td>19. Dxylose</td>
<td>608</td>
</tr>
<tr>
<td>20. Fecal chymotrypsin</td>
<td>105</td>
</tr>
<tr>
<td>21. Fecal fat</td>
<td>140</td>
</tr>
<tr>
<td>22. Hydrogen breath test</td>
<td>60</td>
</tr>
<tr>
<td>23. Fecal elastase</td>
<td>80</td>
</tr>
<tr>
<td>24. Anti-sacchromyces cerevical antibody A</td>
<td>80</td>
</tr>
<tr>
<td>25. Anti Sacchromyces cerevical antibody G</td>
<td>80</td>
</tr>
</tbody>
</table>

**AWARDS, HONOURS AND SIGNIFICANT EVENTS**

**Dr Rakesh Aggarwal** elected as Fellow of Indian Academy of Sciences, Bangalore (2007); Awarded a Commonwealth Scholarship for pursuing MSc (Epidemiology) course of the London School of Hygiene and Tropical Medicine and University of London by distance education; elected as an Associate Editor, *Indian Journal of Gastroenterology*;

**Dr Pramod Garg** was elected Governing Council Member of the Society of Gastrointestinal Endoscopy of India; nominated as a Member of the International editorial board of *Journal of Gastroenterology and Hepatology*.

**Dr Vineet Ahuja** was appointed as Editor of *Tropical Gastroenterology*.
Dr Govind Makharia was nominated as Coordinator, Indian Society of Gastroenterology Task Force on Inflammatory Bowel Disease; nominated as Member, Indian Society of Gastroenterology Task Force on Irritable Bowel Syndrome; Member, Asia Colorectal Polyp STUDY Group.

VISITING SCIENTISTS
1. Dr K.K. Madhavan from Scotland, UK, visited the department on 31 July 2006.
2. Dr Robert Finberg, Chairman, Department of Medicine, University of Massachusetts, USA, visited the department on 29 September 2006.
3. Dr Sushil K. Sarna from the University of Texas Medical Branch, Galveston, USA, visited the department on 25 October 2006.
4. Dr Scott L. Friedman, Professor of Medicine, Chief Division of Liver Diseases, New York, USA, visited the department on 4 December 2006.
5. Dr Satish K. Singh, Professor of Medicine from Boston Medical Centre, USA, visited the department on 24 February 2007.
6. Dr Anupam Pal from IIT, Kanpur visited the department on 8 March 2007.
7. Professor Michael Kew, Chief of Hepatology, University of Johnsbergh, South Africa, visited the department on 19 March 2007.
9.13 Gastrointestinal Surgery

Professor and Head
Tushar K. Chattopadhyay

Additional Professor
Peush Sahni

Assistant Professors
Sujoy Pal Nihar Ranjan Dash

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

Long-term training
One trainee sponsored by the World Health Organization and the Government of Nepal has joined the department for one-year training period. One trainee sponsored by the State Medical Services of Orissa continued his second year training.

Continuing Medical Education
Conferences, Seminars and Workshops
Dr Peush Sahni in collaboration with K.L. CMET, AIIMS conducted a workshop on ‘How to write a scientific paper’ on 9–10 March 2007. He also conducted a workshop on ‘Research methodology and scientific writing’ during the 11th Postgraduate Convention of the Indian Orthodontic Society, New Delhi on 24 February 2007.

National and International Conferences
Professor T.K. Chattopadhyay
1. ‘Current concepts in the management of oesophageal cancer’, Surgical education programme, Delhi chapter of Association of Surgeons of India, Apollo Hospital, Delhi; May 2006.
3. ‘Surgical treatment of Budd–Chiari syndrome’, CME programme, Department of Gastroenterology, Postgraduate Institute of Medical Education and Research, Chandigarh; February 2007.

AIIMS 2006-2007 / 238
4. ‘Tertiary peritonitis’, Conference on intra-abdominal sepsis, Postgraduate Institute of Medical Education and Research, Chandigarh; March 2007.

Dr Peush Sahni
7. ‘Has surgical therapy been neglected in ulcerative colitis’, Mid-Term meeting, Indian Society of Gastroenterology and Indo-US Symposium on Inflammatory Bowel Disease: Quo Vadis?, New Delhi; 24 March 2007

Dr Sujoy Pal
1. ‘Surgery for chronic pancreatitis’, XVI National Conference of Indian Association of Surgical Gastroenterology, Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow; October 2006.

RESEARCH
Funded Projects
Ongoing
1. Design development and commercialization of an indigenous syringe pump. Peush Sahni. Funded by Department of Information Technology, Government of India for 30 months Funds: Rs 28 lakh.

AIIMS 2006-2007/239
**Departmental Projects**

**Completed**
1. A prospective study of the quality of life following endoscopic oesophageal stenting for inoperable patients with oesophageal carcinoma
2. Onco-gene assessment in younger age oesophageal cancer patients
3. An analysis of outcome following bilio-enteric bypass for post-cholecystectomy biliary stricture
4. Differentiation between benign and malignant hilar obstruction using laboratory and radiological investigations: A prospective study
5. A prospective randomized study comparing substernal and posterior mediastinal routes of gastric transposition following oesophagectomy
6. Study of gastric emptying following classical Whipple pancreaticoduodenectomy and pylorus-preserving pancreaticoduodenectomy using scintigraphic techniques
7. A study on quality of life following lateral pancreaticojejunostomy for patients with chronic pancreatitis

**Ongoing**
1. Randomized controlled study of comparison of outcome following ante-colic versus retro-colic reconstruction following pancreaticoduodenectomy
2. Randomized controlled trial of oesophageal resection versus bypass procedure following corrosive stricture of oesophagus
3. Prospective study of incidental carcinoma of gallbladder
4. A prospective randomized trial comparing preoperative radiotherapy and transhiatal oesophagectomy versus transhiatal oesophagectomy alone for squamous cell cancer of the lower third of oesophagus
5. A prospective randomized study to compare hand-sewn and stapled oesophagogastrectomy anastomosis following transhiatal oesophagectomy
6. Prospective evaluation of choledochoscopy for various biliary tract disorders
7. Prospective evaluation of the role of intraoperative enteroscopy in the management of obscure gastrointestinal bleeding

**Collaborative Projects**

**Ongoing**
1. Role of neoadjuvant chemoradiotherapy in locally advanced carcinoma of gall bladder (with Radiation Oncology, Medical Oncology and IRCH)
2. A randomized controlled trial on proximal lienorenal shunt versus endoscopic variceal ligation/endoscopic sclerotherapy for patients with extrahepatic portal venous obstruction (with Gastroenterology)
3. Role of neoadjuvant chemoradiotherapy in adenocarcinoma of the gastro-oesophageal junction (with Radiotherapy)
4. Prospective study on the effect of lienorenal shunt on pericholedochal collaterals causing portal hypertensive biliopathy (with Gastroenterology)
5. A randomized controlled clinical trial of preoperative cholecystojejunostomy versus endoscopic stenting in surgical obstructive jaundice due to periampullary carcinoma (with Gastroenterology)
6. Endoscopic ultrasound for the evaluation of obstruction to the lower end of the biliary tree (with Gastroenterology)
7. The role of neoadjuvant chemotherapy in patients with locally advanced adenocarcinoma of the stomach (with Medical Oncology, IRCH)

PUBLICATIONS

Journals

Abstracts

AIIMS 2006-2007 / 241
Books

Chapters in Books

PATIENT CARE
OPD and specialty clinics
Please see Chapter 6 (hospital), Appendix VI
Total number of new patients seen 1,724
Total number of old patients seen 4,195

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 2006–December 2006): 613

Surgical procedures
Please see Chapter 6, Appendix V
Total number of operations performed 490
Elective operations 382
Emergency operations 108

Number of operations performed (Special interest areas)
Surgical jaundice 97
Portal hypertension 41
Oesophageal cancer 56
Carcinoma gallbladder 35
Ulcerative colitis 19
Upper GI haemorrhage 17
Lower GI haemorrhage 14
Acute pancreatitis 13
Chronic pancreatitis 17
Liver resections 21
AWARDS, HONOURS AND SIGNIFICANT EVENTS


VISITING SCIENTISTS

1. Mr K.K. Mahadevan, Consultant, Liver Transplant and Hepatobiliary Surgery, Royal Infirmary, Edinburgh, Scotland, UK.
2. Dr S. Hwang, Consultant Surgeon, Hepatobiliary Surgery and Liver Transplantation, Asian Medical Centre, Seoul, Korea.
EDUCATION

The department is running a DM course in Clinical Haematology and Haematopathology. Presently, nine residents are undergoing training in Clinical Haematology and five in haematopathology. During this period, one candidate each passed, DM Clinical Haematology and DM Haematopathology. Currently, five students are registered for PhD, which is ongoing. The faculty continued to take undergraduate classes in Haematology and trained the MD Pathology students in Haematology.

Short- and long-term training

The department has provided training in the field of clinical and laboratory haematology to eleven doctors from other institutions for period of 1 to 6 months. Seventeen MSc students undertook short-term training in molecular haematology varying from 1 to 6 months during the year.

Continuing Medical Education

Conferences, seminars, workshops

- Second hands-on training programme for young science postgraduates/undergraduates/technologists on Diagnosis of genetic disorders using cytogenetics and molecular genetics methods’, sponsored by Department of Biotechnology, Government of India, organized by the Departments of Anatomy, Paediatrics and Haematology, AIIMS, New Delhi; August 2006.
- Course on scientific writing at AIIMS, New Delhi; August 2006.
- Wet workshop on ‘Quality control’ ISHTM annual meet, Guwahati; November 2006.
- Wet workshop on ‘Quality control’ organized at AIIMS, New Delhi; March 2007.
- Wet workshop on ‘Leukaemia’, organized at AIIMS, New Delhi; March 2007.
- National Haematology Update VI, organized at AIIMS, New Delhi; 1–2 March 2007.
Lectures delivered

Dr V.P. Choudhry

• ‘Platelet transfusion’, XIIIth National CME in Haematology, Bombay Hospital, Mumbai; January 2007.
• ‘When newborn has less blood’, XIIth National CME in Haematology and Haematopo-oncology, Bombay Hospital Institute of Medical Sciences, Mumbai; April 2006.
• ‘Management of thalassemia and thalassemia future prospects’, CME on Thalassemia, Rohtak; December 2006.

Dr R. Saxena

• ‘Haemophilia’, CME at SN Medical College, Agra; 17 April 2006.
• ‘Haemoglobinopathies—Diagnosis including HPLC’, XIIt National CME in Haematology and Haematopo-oncology, Bombay Hospital Institute of Medical Sciences, Mumbai; April 2006.
• ‘When the boys bleed—Factor VIII and IX deficiency’, XIIt National CME in Haematology and Haematopo-oncology, Bombay Hospital Institute of Medical Sciences, Mumbai; April 2006.
• ‘vWD—A disease with multiple shades’, XIIt National CME in Haematology and Haematopo-oncology, Bombay Hospital Institute of Medical Sciences, Mumbai; April 2006.
• ‘Interpretation of electronic haemogram parameters’, XIIt National CME in Haematology and Haematopo-oncology, Bombay Hospital Institute of Medical Sciences, Mumbai; April 2006.
• ‘Carrier detection and prenatal diagnosis in Haemophilia’, First National Consensus Meeting for guidelines on ‘Management of Haemophilia’, India Habitat Centre, Lodhi Road, New Delhi; 3 June 2006.
• ‘Carrier Detection in Haemophilia’, at AFMC, Pune; July 2006.
• ‘ISHTM—AIIMS proficiency testing programme for haemogram’, ACBI Delhi Chapter meet, India habitat Centre, November 2006.
• ‘Heparin induced thrombocytopenia in India: Diagnosis and management’, XIIIth National CME in Haematology, Bombay Hospital, Mumbai; January 2007.
Dr H.P. Pati

- ‘Hemoglobin E disorders and clinical relevance’, CME, Guwahati Medical College, Guwahati; April 2006.
- ‘Mild bleeding disorders and approach to diagnosis’, CME, Guwahati Medical College, Guwahati; April 2006.
- ‘Handicapped red cells (without enzymes)’, XIIth National CME in Haematolgoy and Haemato-oncology; 20–23 April 2006.
- ‘Leukaemic stem cell and normal stem cells’, National Conference on Stem Cell Transplant-2006, Army Hospital, New Delhi; 30 September–1 October 2006.
- ‘Wrong clinical information leads to wrong laboratory diagnosis’, XIIIth National CME in Haematology and Haemato-oncology, Bombay Hospital Institute of Medical Sciences, Mumbai; 4–7 January 2007.

Dr Rajat Kumar

- ‘Radiation injury, the haematologist and stem cells’, CME on Stem Cells, Armed Forces Medical College, Pune; 23–24 December 2006.
- ‘Stem cell plasticity—is it all hype?’, CME on Stem Cells, Armed Forces Medical College, Pune; 23–24 December 2006.


‘Take care: The tumour is being destroyed (tumour lysis syndrome)’, XIth National CME in Haematology and Haemato-oncology, Mumbai; 20–23 April 2006.


Dr Seema Tyagi

Dr M. Mahapatra

Dr Tulika Seth

Dr Pravas Mishra

National and International Conferences
Lectures delivered
Dr R. Saxena
• ‘Thrombosis and stroke in young: Indian scenario’, SASAAT Conference, Bangalore; October 2006.
• ‘Hypercoagulability and stroke in India’, 47th Annual Conference of Indian Society of Haematology and Transfusion Medicine, Guwahati; November 2006.
• ‘An approach to thrombophilia in Indian patients’, 47th Annual Conference of Indian Society of Haematology and Transfusion Medicine, Guwahati; November 2006.
• ‘Hypercoagulability in thalassemia’, 5th National Thalassemia Conference, National Thalassemia Welfare Society, at LHMC and KSC Hospital, New Delhi; November 2006.
• ‘Laboratory control of anticoagulants’, Annual Conference of Indian Academy of Pathologist and Microbiologist, Bangalore; December 2006.

Dr H.P. Pati
• ‘Interpretation of peripheral blood smear’, 47th Annual Conference of Indian Society of Haematology and Transfusion Medicine, Guwahati; 25 November 2006.

Dr Rajat Kumar
• ‘Erythropoietin in anemia’, 47th Annual Conference of Indian Society of Haematology and Transfusion Medicine, Guwahati, Assam; November 2006.
• ‘Setting up a bone marrow transplant unit in a medical college’, 47th Annual Conference of Indian Society of Haematology and Transfusion Medicine, Guwahati, Assam; November 2006.

Dr Manoranjan Mahapatra
• ‘Splenomegaly: A diagnostic dilemma’, 47th Annual Conference of Indian Society of Haematology and Transfusion Medicine, Guwahati, Assam; November 2006.

RESEARCH
Funded Projects
Ongoing
• Elucidation of molecular genetics of acute leukaemia. R. Saxena. Funded by ICMR 2005-2008. Funds: Rs 5.5 lakh.
• Angiogenesis in myelodysplastic syndrome in bone marrow biopsy and its correlation with thalidomide therapy. M. Mahapatra. Funded by AIIMS for 2 years. Funds: Rs 64,500.
• Molecular cytogenetic study in acute leukaemia and myelodysplastic syndromes: Diagnosis and prognostic implications. Seema Tyagi. Funded by AIIMS for 2 years (2005–2007). Funds: Rs 53,000.

Completed
• A multicentric study to test the efficacy and the feasibility of using the Hb color scale for Hb estimation in the Indian setting. R. Saxena. Funded by WHO for 1 year (2005–2006). Funds: Rs. 9 lakh.

Departmental Projects
Ongoing
1. Role of molecular studies in pathogenesis of MDS in Indian patients
2. Genotypic and phenotypic characterization of Indian patients with glanzmann thrombasthenia
3. Role of hemostatic and molecular factors in the development of acute thrombotic stroke in young Indians
4. Molecular genetics of acute myeloid leukaemia
5. Homocysteine in DVT
6. HLA DR2 expression and its association with response to immunosuppression in aplastic anemia patients
7. Utility of combined modified DCIP and modified osmotic fragility as a cost effective screening tool in HbE disorders and thalassemias
8. Evaluation of response to thalidomide and cyclosporine in patients with De Novo Myelodysplastic syndrome
9. Evaluation of late effects of thalassemia in adults
10. JAK2 abnormalities in myeloproliferative and myelodysplastic disorders

AIIMS 2006-2007 / 249
11. Etiopathogenesis and natural course of DVT
12. To study the etiology of splenomegaly, massive splenomegaly and hypersplenism and correlate etiology with various clinical and laboratory variables
13. To compare the response to chlorambucil and fludarabine-cyclophosphamide and correlate with various prognostic markers including ZAP70 in patients with chronic lymphocytic leukaemia
14. To study the genotype phenotypetype correlation in patients with HbE² thalassemia
15. The evaluation of zoledronic acid for the treatment of osteoporosis in ² thalassemia patients
16. An open label study for the evaluation of anti-D for the treatment of Immuno Thombocytopenic Purpura
17. Evaluation for eosin–5–maleimide flow cytometric test in diagnosis of hereditary spherocytosis
18. To determine the prevalence of clopidogrel resistance in CAD and to evaluate the role of P2Y12 gene polymorphism in its pathogenesis
19. Efficacy of immunization against hepatitis B virus infection in acute leukaemia
20. Predictor of response to antithymocyte globulin (ATG) therapy in aplastic anaemia with special reference to absolute lymphocyte count and CD4, CD8 lymphocyte subsets
21. Lymphoid infiltrates in the bone marrow, morphology and immunohistochemistry
22. Stem cells in acute myeloid leukaemia standardization of a method for minimal residual disease detection
23. Oral antifungal prophylaxis in neutropenic patients with haematological malignancies: Randomized controlled trial of oral itraconazole versus fluconazole
24. Platelet dysfunction in myeloproliferative disorder excluding CML
25. Immunophenotypic analysis of blasts in MDS

**Collaborative Projects**

**Ongoing**
1. Development of new fluorescent bio sensor for evaluation of iron profiles in haematological disorders (with Biomedical Engineering, IIT)
2. GPIIb/IIa and platelet neutrophil conjugates: NO+ Iloprost (with CTVS)
3. Profile and prevalence of aspirin and clopidogril resistance in Indian patients with CAD undergoing PCI (with Cardiology)
4. Role of homocysteine in primary infertility (with Urology surgery)
5. Role of ART in HIV positive patients (with Medicine)
6. Prevalence of DVT/pulmonary embolism in critically ill medical patients (with Medicine)
7. Evaluation of anemia in patients with solid tumours (with Oncology)
8. India Health Study. Multicentric project funded by NIH

**Completed**
1. Efficacy of intramuscular vitamin K1 versus intramuscular vitamin K3 in prevention of subclinical classic Vitamin K deficiency (with Paediatrics)

AIIMS 2006-2007 / 250
2. To study subset of antiphospholipid syndrome defined by anti b2 GP1 antibody (with Medicine)
3. Haematological changes in HIV (with Medicine)

PUBLICATIONS

Journals
peripheral blood stem cell transplantation performed in non-HEPA filter rooms for multiple transfused patients with severe aplastic anaemia. Bone Marrow Transplant 2006;37:745–9.


**Abstracts**


**Chapters in Books**


**Book/monograms/manuals edited**

**PATIENT CARE**

**Laboratory Investigations**

**Departmental Tests**

**Hemostasis**
1. Screening coagulation test 4,590
2. Factor assay 560
3. Factor inhibitor screening 280
4. Factor inhibitor assay 8
5. INR 3,700
6. Lupus anticoagulant 1,900
7. Platelet function test 1,200
8. D-Dimer 900
9. Fibrinogen 800
10. Proglobal C 425
11. Protein C 68
12. Protein S 69
13. APCR 65
14. Beta 2 glycoprotein 178
15. Serum homocysteine 283
16. Carrier detection haemophilia 42
17. Prenatal diagnosis 11
18. Mutation detection FV Leidin 49
19. Mutation detection MTHFR 14
20. Mutation detection P20210 7
21. VWD workup 201
22. Molecular test for thalassaemia alpha and beta 25

**Leukaemia**
1. RT-PCR leukaemia CML AML ALL 424
2. Cytochemistry 422
3. LAP 169
4. Iron (Fe) stain 200
**Anaemia**

1. HPLC 1,167
2. Sickling 55
3. Hb electrophoresis 08
4. G6PD 471
5. Serum iron studies 1,197
6. Coombs by gel card 424
7. PNH gel card CD55/59 286
8. Ham’s acid serum 82
9. Sucrose lysis test 82
10. Plasma Hb 94
11. Urine hemosiderin 116
12. OF/Inc. Of 304
13. Methemoglobin 05
14. Heinz bodies 23
15. Cold agglutinins 08
16. Cryoglobulins 08
17. Autohemolysis 02

**Haemogram and Bone Marrow Biopsy**

1. Haemogram 26,500
2. Reticulocyte count 1,728
3. Bone marrow aspirate 2,020
4. Biopsy 1,386
5. Reticulin 117

**External Haematology Proficiency Testing Programme**

External Haematology Proficiency Testing programme has become an integral part of departmental activities. Under this programme, specimens for Hb, HCT, and RBC count, WBC count, Platelet count, MCV, MCH and MCHC retic count and peripheral smear are sent to the participants for analysis with frequency of about 11 weeks. The programme has got endorsement from National Accreditation Board for Testing and Calibration Laboratories (NABL) and Indian Society for Haematology and Transfusion Medicine. The programme is conducted as per norms laid down by NABL based on ISO Guide 43–1. There is overwhelming response and appreciation from all parts the country for the programme. There are more than 500 participating laboratories in this programme. Evaluation of the results of the participating laboratories help them to gauge their standard of performance. The outliers find an opportunity to improve their performance on the basis of evaluation reports.

**Census of Haematology OPD—April 2006 to March 2007**

<table>
<thead>
<tr>
<th>Old cases</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
<th>H</th>
<th>H0</th>
<th>HC</th>
<th>HS</th>
<th>HT</th>
<th>HL</th>
</tr>
</thead>
<tbody>
<tr>
<td>15,085</td>
<td>8,085</td>
<td>23,170</td>
<td>7,200</td>
<td>5,160</td>
<td>4,490</td>
<td>4,220</td>
<td>1,010</td>
<td>1,099</td>
<td></td>
</tr>
</tbody>
</table>

AIIMS 2006-2007 / 257
<table>
<thead>
<tr>
<th>New Cases</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
<th>HS</th>
<th>HA</th>
<th>HT</th>
<th>HL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2,613</td>
<td>897</td>
<td>3,510</td>
<td>175</td>
<td>71</td>
<td>30</td>
<td>90</td>
</tr>
</tbody>
</table>

H-Haematology; HO-Haematology; HC-Haematology coagulopathy; HS-Hemostasis; HT-Haematology transplantation, HL-Leukaemia follow up

### Census of Haematology Day Care Centre: April 2006 to March 2007

<table>
<thead>
<tr>
<th>Month</th>
<th>Total admission</th>
<th>Total blood transfusions</th>
<th>Total procedures</th>
<th>Bone biopsy/ Bone marrow aspirates</th>
<th>Chemotherapy (intrathecal + others)</th>
</tr>
</thead>
<tbody>
<tr>
<td>April</td>
<td>514</td>
<td>343</td>
<td>173</td>
<td>100</td>
<td>73</td>
</tr>
<tr>
<td>May</td>
<td>536</td>
<td>346</td>
<td>190</td>
<td>110</td>
<td>80</td>
</tr>
<tr>
<td>June</td>
<td>376</td>
<td>181</td>
<td>195</td>
<td>95</td>
<td>100</td>
</tr>
<tr>
<td>July</td>
<td>669</td>
<td>460</td>
<td>209</td>
<td>121</td>
<td>88</td>
</tr>
<tr>
<td>August</td>
<td>729</td>
<td>477</td>
<td>252</td>
<td>110</td>
<td>142</td>
</tr>
<tr>
<td>September</td>
<td>592</td>
<td>374</td>
<td>218</td>
<td>148</td>
<td>70</td>
</tr>
<tr>
<td>October</td>
<td>507</td>
<td>344</td>
<td>163</td>
<td>85</td>
<td>78</td>
</tr>
<tr>
<td>November</td>
<td>592</td>
<td>360</td>
<td>232</td>
<td>105</td>
<td>127</td>
</tr>
<tr>
<td>December</td>
<td>585</td>
<td>333</td>
<td>252</td>
<td>146</td>
<td>106</td>
</tr>
<tr>
<td>January</td>
<td>494</td>
<td>306</td>
<td>188</td>
<td>72</td>
<td>116</td>
</tr>
<tr>
<td>February</td>
<td>482</td>
<td>288</td>
<td>194</td>
<td>102</td>
<td>92</td>
</tr>
<tr>
<td>March</td>
<td>564</td>
<td>394</td>
<td>170</td>
<td>82</td>
<td>88</td>
</tr>
<tr>
<td>TOTAL</td>
<td>6,654</td>
<td>4,218</td>
<td>2,436</td>
<td>1,276</td>
<td>1,160</td>
</tr>
</tbody>
</table>

### Inpatient treatment

In the past year, 13 allogeneic transplants (BMT) were performed successfully and all of them are doing well. An increasing number of patients of leukaemia, aplastic anaemia, idiopathic thrombocytopenic purpura, hemophilia and multiple myeloma have been treated by the haematology department as indoor patients.

The department of haematology provided consultative services to patients of thalassemia, in coordination with National Thalassemia Welfare Society. Care to haemophilia was provided in coordination with Hemophilics Federation of Indian.

### AWARDS, HONOURS AND SIGNIFICANT EVENTS

**Dr V.P. Choudhry** was awarded the Professor S.K. Sood Oration by Delhi Society of Haematology in 2006.

**Dr Renu Saxena** was awarded Malti Sathe oration by Indian Society of Haematology and Transfusion Medicine 2006; Awarded Fellowship of National Academy of Medical Sciences (FNAMS) 2006; elected as Executive Member, Indian society of Haematology and Transfusion Medicine 2006–2008; elected as President, Delhi Society of Haematology 2005–2007; Member,
Medical Advisory Board, HFI, 2005; Member, ICMR Project Review Committee for Genetics, Haematology, Anatomy 2005; Coordinator ISHTM-AIIMS EQAP Since 2003; continued as a Member, Subject Expert Committee for technical evaluation of proposals under women scientist scheme, Department of Science and Technology, Government of India. June 2005.

**Dr H.P. Pati** was elected as the Honorary Secretary, Indian Society of Haematology and Transfusion Medicine (2005–2008); Technical Assessor for NABL (National Accreditation Board Laboratories), New Delhi (for accreditation evaluation for medical laboratories).

**Rajat Kumar** was elected as Vice President, Indian Society of Haematology and Transfusion Medicine; Nominated as Joint Secretary (Dean’s) Indian College of Physician, Association of Physicians of India (2006–2008); Member, Governing Body of Delhi Chapter, Association of Physicians of India.

**Dr M. Mahapatra** was awarded Young Investigator award (JN Berry award) from Associations of Physicians of India (API) during the 62nd APICON-2007; was awarded Fellowship of Indian Academy of Clinical Medicine (FIACM); was elected as an Executive Member, Indian Society of Haematology and Transfusion Medicine of Haematology (DSH).

**Dr P. Mishra** was awarded Young Investigator Award, Asian Pacific Congress of Thrombosis Hemostasis, September 2006.
9.15 Hospital Administration

Professor and Head
P.C. Chaubey (till 28.2.2007)
Shakti Kumar Gupta (w.e.f. 1.3.2007)
(Medical Superintendent, Dr R.P. Centre for Ophthalmic Sciences, AIIMS)

Professors
R.K. Sarma
(On deputation as Director, North-East Indira Gandhi Regional Institute of Health and Medical Sciences [NEIGRIHMS], Shillong)
D.K. Sharma
(Medical Superintendent, AIIMS, Main Hospital)

Additional Professor
Sidhartha Satpathy (IRCH)

Associate Professors
I.B. Singh Sanjay Arya Aarti Vij
(Main Hospital) (Main Hospital) (ORBO, CT and NS Centre)
and JPNA Trauma Centre)

EDUCATION
The Department of Hospital Administration is running a 2-year postgraduate programme for Medical Graduates in Hospital Administration. The present MHA (Master in Hospital Administration) course entered its 42nd 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 started by the department has shown excellent results. Resident Administrators man the control room of hospital, round the clock as Duty Officers, and coordinate all the hospital activities.

The control room played an important role in solving the problem and the functioning of AIIMS. The residents also assist the hospital activities and in turn gain experience of hospital management.

Faculty members conducted training programmes for the doctors working in various organizations including Central, State Governments, Paramilitary Forces and in various PSUs such as NTPC, IICM, Ranchi, etc. in Hospital Administration and Management and its various aspects.

Training to students from different institutes has also been carried out throughout the year 2006–07:

- Eleven students of MD (Community Health Administration)/Diploma in Health Administration from National Institute of Health and Family Welfare, New Delhi for one month.
- One student of MHM (Master’s in Hospital Management) from Nizam’s Institute of Medical Sciences, Hyderabad is on training for six months w.e.f. December 2006.
Two batches of Senior Medical Officers from Indo-Tibetan Border Police (ITBP) were given intense training in Hospital Administration for a period of two weeks.

**Continuing Medical Education**
The department is actively involved in ongoing ‘in-service programmes’ in Hospital housekeeping, Hospital Support Services, Hospital Infection Control and Biomedical Waste Management to various categories of staff including Resident doctors, nursing, paramedical and sanitation personnel. Regular training and CMEs are being organized for staff of Medical Records department, Medical Social Services department and Nursing personnel. During the year 2007, department has included newer topics e.g. training in behavioural sciences and communication in hospitals to all categories of staff in hospital for which expert faculty from outside is also being invited.

**Lecture delivered**
**Dr Shakti Kumar Gupta**
- ‘Chemical and Industrial Disaster Management’, India Habitat Centre, New Delhi; 25 April 2006.
- Participated in panel discussion on ‘Challenges before hospital administrators vis-a-vis changing role hospitals’, Department of Hospital Management, Deccan School of Management, Hyderabad; 18 March 2007.

**Dr Sidhartha Satpathy**
- ‘Biomedical Waste Management in Hospital Infection Control’, Inservice Training Programme for Resident Doctors, Nurses and Technical Staff, AIIMS.
- ‘Hospital Infection Control and Waste Management’, Training course on Hospital Administration for Medical Officers of Himachal Pradesh, NIHFW, Munirka; 8 November 2006.

• Delivered lectures on various Hospital Administration topics and conducted Organizational behaviour Lab during special training programme on ‘Hospital Management and Administration’ for Medical Superintendents, GDMO’s and non-specialists of Coal India, IICM, Ranchi; 8–11 January 2007.

• ‘Hospital Infection Control and Waste Management’, Training course on ‘Hospital Administration’ for Medical Officers of Himachal Pradesh, NIHFW, Munirka; 17 January 2007.

• ‘Medical Audit, Hospital Accreditation, Consumer Protection Act, etc.’, Special training programme on ‘Hospital Management and Administration’ for Medical Superintendents, GDMO’s and non-specialists of Coal India, IICM, Ranchi; 22–24 January 2007.

Dr Aarti Vij

• ‘Changing medical futility to medical utility—need of the hour’, 8th Annual Conference of Indian Society of Neuro-anaesthesiology and Critical Care, India Habitat Centre, New Delhi; 11 February 2007.


• ‘Establishing a cadaver organ programme’, International Pediatric Transplant Symposium, jointly organized by Apollo Hospital, Delhi Chapter of Gastroenterology and IMA, New Delhi; 29 October 2006.

• Critical Care Nursing Update, College of Nursing, AIIMS; 30 November 2006.

Dr Aarti Vij
• Short-term Cryopreservation of Stem Cells: Search for Cost Effective Optimum Cryo Protectant Cocktail in the International Conference of Asia Pacific Association of Surgical Tissue Banks at Mumbai; 25 November 2006.

• Management of extensor mechanism deficient total knee arthroplasty: A Novel Method in the International Conference of Asia Pacific Association of Surgical Tissue Banks at Mumbai; 25 November 2006.

Conferences, Seminars, Workshops
Dr Shakti Kumar Gupta

• Organized a public lecture on ‘RTI Act—implications on issues related to patient care and
Hospital Administration’, delivered by Hon’ble Sri Wajahat Habibullah, Chief Information Commissioner, India at AIIMS; 24 March 2007.

Dr Aarti Vij


RESEARCH

Departmental Projects

Completed

1. Study the ambulance services with reference to type of vehicles, equipment fitted, its utilization pattern, so as to suggest an optimal model with its equipment and accessories
2. Evaluate the hospital planning with particular reference to allocation of space for different hospital facilities and identify the prime considerations which should be the determining factor for requirement of space for various service areas of a hospital
3. A study of morbidity pattern in geriatric age group and identify resource inputs for a geriatric centre at AIIMS
4. A study to the manpower deployment and its utilization in a hospital so as to identify the factors responsible for calculating the need-based manpower planning
5. Study of the role and scope of telemedicine services at AIIMS for post discharge follow-up of patient referred to AIIMS
6. 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
7. Study the operation theatre services of Dr Rajindra Prasad Centre for Ophthalmic Sciences in relation to the current technological advances in the field, so as to develop optimal modules for different levels of ophthalmic centres in India
8. Study of profile of the patients referred to AIIMS and their ailments, identify the referring institutions, rationale for referral and assess the fulfillment of the expectation of the patient during the process

Ongoing

1. To study and evaluate universal precautions practices being followed in high-risk areas of main hospitals of AIIMS
2. To study the awareness of doctors and nurses on pharmacovigilance/ADR reporting and to study the impact of various interventions to find out a suitable method
3. Level of satisfaction amongst AIIMS employees
4. Cost analysis of urological robotic procedures in AIIMS
5. Cost of training of undergraduate medical student (MBBS) at AIIMS
6. Cost analysis of minimal invasive surgical procedures in the department of surgery at AIIMS
7. A study of cost analysis of inpatient care services at AIIMS hospital

PUBLICATIONS

Journals
2. Singh IB, Chaubey PC. Developing and organizing of trauma services with special reference to India. *Hosp Adm (Official Journal of Indian Hospital Association)* 2006;XXXX :20–34.

Books

PATIENT CARE

The department of Hospital Administration is 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.

The department of Hospital Administration has been actively involved in improving the patient care services by revamping the support services to aid in provision of a quality clinical service. Extensive renovations and upgradation of support services has been done. An advanced, new laundry is being also installed.

The department is involved in Planning, establishing and commissioning of facilities and services in superspeciality centres of AIIMS e.g. Jai Prakash Narain Apex Trauma Centre (JPNTC); National Drug De-addiction Treatment Centre (NDDTC).

During the year, extensive renovation of patient care facilities was done in Dr R.P. Centre of Ophthalmic Sciences which included installation of television sets for public education in waiting.
areas, outsourcing of housekeeping services, streamlining of traffic, appointment of part time social guides in patient care areas. Proposal for additional nursing manpower is also submitted to SFA.

During the February 2007, C.N. Tower Private Ward with 63 rooms was made operational along with re-organization of manpower in the C.N. Tower.

ORBO (Organ Retrieval Banking Organization) increased its activities for National Networking including correspondence with Secretary, health and Director, health of all states regarding information on registered transplant centres of the states. 2385 persons pledged for organ donation on motivation of ORBO which is substantially higher than the previous years. Awareness programmes with various NGOs, Schools, Religious bodies, Academic institutions were conducted. A documentary film on Organ Donation was developed.

AWARDS AND HONOURS

Dr Sidhartha Satpathy was selected as Editor, *Journal of Academy of Hospital Administration* (JAHA).

Dr Shakti Kumar Gupta was Member of the Project Management Committee constituted by Ministry of External Affairs, Government of India, for establishing 200 bedded Trauma Centre at Kathmandu Nepal; Member, Expert Committee for upgradation of National Referral Hospital at Thimpu and Regional Referral Hospital at Monger, Bhutan; Member, Expert Committee constituted by Ministry of Health and Family Welfare, Government of India regarding establishing Six AIIMS like Institutions and upgradation of 13 Medical colleges under Pradhan Mantri Swasthya Suraksha Yojna; Member, Working group on Clinical establishments Professionals services Regulations and Accreditation of Health Care Infrastructure by Planning Commission for the eleventh Five-Year Plan (2007–2012).

Dr D.K. Sharma participated as Subject Expert in the selection committee for selection of Medical Superintendent and Faculty of Hospital Administration in Pt BDS Postgraduate Institute of Medical Sciences, Rohtak; participated as External Expert, Selection Committee for selection of Medical Officers at IIT, Delhi; nominated as Member, Advisory Council for the Post Graduate Diploma in Hospital Management (PGDHM) of Institute of Health Management Research (IHMR), Jaipur; invited as MCI expert for Inspection of facilities at KMC, Manipal for permitting intake in MD (Hospital Administration) course granted by MAHE. Manipal; nominated as Chairman, Hospital Equipment and Surgical Dressing Sectional Committee, MHR-12 of Bureau of Indian Standard (BIS), India; invited as Subject Expert, Selection Committee for selection of Deputy Medical Superintendent in Health and Medical Department at J&K Public Service Commission; invited as Subject Expert, Educational Consultants India Limited (Ed.Cil) to assist the committee for establishing Chhattisgarh Ayurvedic University at Raipur.
SIGNIFICANT EVENTS

**Dr Sidhartha Satpathy** was selected as Member, Technical Committee, National Accreditation Board for Hospitals and Healthcare providers (NABH), under aegis of Quality Council of India (QCI); Member, Bureau of Indian Standards (MHR-14) involved in preparation/review of Indian Standards on Healthcare Facilities; Expert Member, National Accreditation Board for Certification Bodies (NABCB) under aegis of QCI.

**Dr I.B. Singh** enrolled as alumnus of Administrative Staff College of India, Hyderabad in February 2007.

**Dr Aarti Vij** trained 15 grief counsellors in organ donation and transplant coordination; coordinated an orientation training programme of nurses of 150 participants on ‘organ donation and transplant coordination’.
9.16 Laboratory Medicine

Professor and Head
A.K. Mukhopadhyay

Professor
M. Irshad

Additional Professor
Sarman Singh

Associate Professor
Subhadra Sharma

Assistant Professors (Trauma Centre)
Purva Mathur S. Arulselvi

Scientists
A.K. Srivastava (S-IV) Vandita Vasudev (S-III)

EDUCATION

Short-term training
The department participates in undergraduate (MB, BS) teaching programmes. It runs a 3-year residency programme leading to MD degree. The department also offers PhD programme.

The department offers short-term training to postgraduates from the Department of Pathology and Biochemistry.

The department also offers short-term training to postgraduate MSc students, 26 trainees, 1 from University of Massachusetts Medical Schools, USA; 7 from University of Kashmir, Srinagar, 6 from CCS University, Meerut; 2 from Barkatullah University, Bhopal; 1 from Bundelkhand University, Jhansi; 1 from Madhav Institute of Technology and Science, Gwalior; 1 from Allahabad Agricultural University; 1 from Jiwaji University, Gwalior; 1 from Guru Jambheshwar University, Hisar; 1 from Garhwal University, Srinagar; 2 from Rajasthan and 2 from Delhi, underwent short-term training in Clinical Microbiology and Molecular Biology, Clinical Haematology and Clinical Chemistry during the reporting period.

Continuing Medical Education

Workshops
Nil

Lectures delivered
The faculty and scientists delivered 18 lectures on various aspects of the discipline.

National and International Conferences

International conference
Dr Sarman Singh
• ‘Emergence of XDR tuberculosis in India’, International Conference of Infectious Diseases,

National conference
Dr A.K. Mukhopadhyay
- ‘Laboratory Medicine—Indian scenario’, Workshop on ‘Evidence-based laboratory medicine’, Lady Harding Medical College, New Delhi; 9 November 2006.
- ‘States, levels, planes and development lines of consciousness’, Pre-conference lecture at National Conference on ‘Yoga and science’, Department of Yogic Science, Dr Harisingh Gour University, Sagar (MP); 16 February 2007.
- ‘Three Yoga correspond to three developmental lines of brain function’, Keynote lecture at National Conference on ‘Yoga and Science’, Department of Yogic Science, Dr Harisingh Gour University, Sagar (MP); 17 February 2007.
- ‘The story of information, science or spirituality?’, Symposium on ‘Information as Science and Spirituality’, India Habitat Centre, New Delhi; 18–19 March 2007.

Dr Sarman Singh
- Provided hands-on training and delivered a lecture on ‘Recent advances in the diagnosis of leishmaniasis’, Andhra Pradesh Chapter of IAMM, Hyderabad; 9 February 2007.

Dr A.K. Srivastava
RESEARCH
Funded projects
Completed

Ongoing
1. 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, ICMR for 3 years (2005-08). Funds: Rs 24 lakh.
5. Isolation and purification of herbal compound(s) having anti-leishmanial activity. Sarman Singh. Funded by ICMR (Fellowship) for 3 years (2004–2007). Funds: Rs 4 lakh.

**Departmental projects**
2. Transmission rate of HBV and HCV in family members of dually infected patients (with Gastroenterology)
3. Hepatitis B viral load monitoring in patients undergoing anti-HBV therapy using quantitative real-time PCR (with Gastroenterology)
4. Comparative evaluation of various PCR primers for the rapid and sensitive diagnosis of tuberculosis
5. Standardization and evaluation of multiplex PCR for the species-specific diagnosis of various mycobacterial infections
6. Prevalence and treatment response of coccidian parasitic infections in HIV-positive patients at AIIMS (with Medicine)
7. To study reintroduction of anti-tuberculosis drugs and risk factors for anti-tuberculosis treatment induced hepatotoxicity (with Medicine)
8. Study of mycobacteremia in patients with miliary and extrapulmonary tuberculosis (with Medicine)
9. To study the prevalence of ESBL of urinary pathogens using disk diffusion method and e-test
10. To study the immune response in acute toxoplasmosis using western blot method
11. Comparative evaluation of smear, LJ culture, MGIT-960 bactec culture and bacteriophage tests for the diagnosis of tuberculosis
12. Comparative evaluation of various TORCH test kits
13. Blood borne infections after needle prick injury in health care workers of AIIMS
14. *Toxoplasma gondii* IgG avidity assays in pregnant women attending AIIMS
15. To assess the impact of viral hepatitis on steatosis of liver.
16. Role of HCV core protein in the diagnosis of HCV infection.
17. TTV and HCV infection in renal failure patients.
18. Epidemiological studies on CRF in Indian Communities
21. Effect of core expression on oxidative status.
22. Correlation between first trimester glucose screening & serum insulin levels with development of gestational diabetes mellitus in pregnancy.

**PUBLICATIONS**

**Journals**
1. Mukhopadhyay AK. Some reflections on *Quo Vadis Quantum Mechanics?* Extending
science further! Let us see where. *Frontier Perspectives* 2006;15:12–21.


8. Bashir S, Sharma Y, Irshad M, Gupta SD, Dogra TD. Arsenic induced apoptosis in rat liver following repeated exposure for 60 days. *Toxicology* 2006;217:63–70.


18. Gopinath K, Manisankar M, Kumar S, Singh S. Controlling multidrug resistant tuberculosis

**Chapters in Books**

**PATIENT CARE**

**Total tests performed** 63,22,976

**Centralized collection centres**

**Blood collection**

<table>
<thead>
<tr>
<th>For department</th>
<th>No. of specimen</th>
<th>Specimen</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laboratory medicine</td>
<td>1,49,737</td>
<td>Urine</td>
<td>65,800</td>
</tr>
<tr>
<td>Blood bank</td>
<td>2,454</td>
<td>Fecal samples</td>
<td>12,400</td>
</tr>
<tr>
<td>Microbiology</td>
<td>10,822</td>
<td>Sputum</td>
<td>12,176</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>20,829</td>
<td>Semen</td>
<td>12,500</td>
</tr>
<tr>
<td>(Samples collected from other clinics)</td>
<td></td>
<td>Other fluids</td>
<td>140</td>
</tr>
<tr>
<td>Marker/HIV investigation</td>
<td></td>
<td>Blood for viral</td>
<td>16,541</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,83,842</strong></td>
<td><strong>Total</strong></td>
<td><strong>1,19,557</strong></td>
</tr>
<tr>
<td><strong>GRAND TOTAL</strong></td>
<td><strong>3,03,399</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

AIIMS 2006-2007/272
### Emergency Laboratory Services (Round-the-clock)

#### Clinical Biochemistry

<table>
<thead>
<tr>
<th>Test</th>
<th>Blood Number</th>
<th>Test</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood Sugar</td>
<td>54,386</td>
<td>Hb</td>
<td>1,05,030</td>
</tr>
<tr>
<td>Blood Urea</td>
<td>87,679</td>
<td>TLC</td>
<td>1,05,030</td>
</tr>
<tr>
<td>Bilirubin</td>
<td>24,773</td>
<td>Platelets</td>
<td>1,05,030</td>
</tr>
<tr>
<td>Sodium</td>
<td>94,436</td>
<td>Prothrombin time</td>
<td>18,033</td>
</tr>
<tr>
<td>Potassium</td>
<td>94,436</td>
<td>Malarial parasite</td>
<td>6,157</td>
</tr>
<tr>
<td>Amylase</td>
<td>7,963</td>
<td>CSF</td>
<td>8,122</td>
</tr>
<tr>
<td>CSF Sugar</td>
<td>8,094</td>
<td>Urine</td>
<td>1,361</td>
</tr>
<tr>
<td>CSF protein</td>
<td>8,094</td>
<td>Microbiology blood culture</td>
<td>6,788</td>
</tr>
<tr>
<td>SGOT</td>
<td>615</td>
<td>Microbiology CSF</td>
<td>3,055</td>
</tr>
<tr>
<td>SGPT</td>
<td>615</td>
<td>Gram stain</td>
<td>1,750</td>
</tr>
<tr>
<td>Total protein</td>
<td>615</td>
<td>Slide stain giemsa</td>
<td>9,810</td>
</tr>
<tr>
<td>Albumin</td>
<td>615</td>
<td>Stool hanging drop</td>
<td>1,132</td>
</tr>
<tr>
<td>Creatinine</td>
<td>302</td>
<td>MCV</td>
<td>1,05,030</td>
</tr>
<tr>
<td>Arterial blood gas</td>
<td>9,189</td>
<td>MCH</td>
<td>1,05,030</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MCHC</td>
<td>1,05,030</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PCV</td>
<td>1,05,030</td>
</tr>
<tr>
<td></td>
<td></td>
<td>RBC</td>
<td>1,05,030</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Others</td>
<td>12,070</td>
</tr>
</tbody>
</table>

#### Haemogram and Body Fluids

<table>
<thead>
<tr>
<th>Test</th>
<th>Haemogram Number</th>
<th>Test</th>
<th>Body Fluid Number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Notes:
- Arterial blood gas includes pH, pCO₂, pO₂, BE, BEecf, BB, HCO₃⁻, st.HCO₃⁻, TCO₂⁻, st.pH, CH⁺, O₂ cont, 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.

#### GRAND TOTAL

**13,00,150**

### Clinical Biochemistry

<table>
<thead>
<tr>
<th>Test</th>
<th>Blood Number</th>
<th>Urine Number</th>
<th>Fluid Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sugar</td>
<td>1,23,441</td>
<td>1,304</td>
<td>2,940</td>
</tr>
<tr>
<td>Urea</td>
<td>1,71,843</td>
<td>513</td>
<td>—</td>
</tr>
<tr>
<td>Total protein</td>
<td>1,67,386</td>
<td>—</td>
<td>2,940</td>
</tr>
<tr>
<td>Albumin</td>
<td>1,67,386</td>
<td>—</td>
<td>2,940</td>
</tr>
<tr>
<td>24-hour albumin</td>
<td>—</td>
<td>5,472</td>
<td>—</td>
</tr>
<tr>
<td>Bilirubin</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>—Total</td>
<td>1,71,508</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>—Conjugated</td>
<td>1,71,508</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Test</td>
<td>Number</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------------</td>
<td>--------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alkaline phosphatase</td>
<td>1,75,402</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cholesterol</td>
<td>42,791</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Na</td>
<td>1,45,496</td>
<td></td>
<td></td>
</tr>
<tr>
<td>K</td>
<td>1,45,496</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calcium</td>
<td>1,12,644</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phosphate</td>
<td>1,12,250</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uric acid</td>
<td>1,09,875</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amylase</td>
<td>19,295</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creatinine</td>
<td>1,72,962</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SGOT</td>
<td>1,73,536</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SGPT</td>
<td>1,73,536</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ABG pCO₂</td>
<td>7,391</td>
<td></td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>7,391</td>
<td></td>
<td></td>
</tr>
<tr>
<td>pO₂</td>
<td>7,391</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HCO₃</td>
<td>7,391</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CO₂</td>
<td>7,391</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A-aDO₂</td>
<td>7,391</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O₂ saturation</td>
<td>7,391</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BE</td>
<td>7,391</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>24,15,483</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Arterial blood gas includes, pCO₂, pH, pO₂, HCO₃, CO₂, A-aDO₂, O₂ saturation, BE measured as a single test within the same time frame.

**Miscellaneous Investigations (on request, not as routine service)**

<table>
<thead>
<tr>
<th>Test</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Superoxide dismutase</td>
<td>200</td>
</tr>
<tr>
<td>Total antioxidant</td>
<td>200</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>100</td>
</tr>
<tr>
<td>LDH</td>
<td>100</td>
</tr>
<tr>
<td>GGT</td>
<td>100</td>
</tr>
<tr>
<td>TG</td>
<td>200</td>
</tr>
<tr>
<td>LDLC</td>
<td>200</td>
</tr>
<tr>
<td>HDLC</td>
<td>200</td>
</tr>
<tr>
<td>HBsAg</td>
<td>600</td>
</tr>
<tr>
<td>Anti HBs</td>
<td>200</td>
</tr>
<tr>
<td>HBeAg</td>
<td>50</td>
</tr>
<tr>
<td>IgM anti HBc</td>
<td>200</td>
</tr>
<tr>
<td>Anti HCV</td>
<td>400</td>
</tr>
<tr>
<td>Anti HEV</td>
<td>300</td>
</tr>
<tr>
<td>IgM Anti HAV</td>
<td>100</td>
</tr>
</tbody>
</table>
HCV- RNA 100
TTV-DNA 300
Total 4,150
GRAND TOTAL 24,67,546
Service from room no 18
Adenosine deaminase assay 424
ELISA IgG-Ab neurocysticercosis 208
TOTAL 632

Hematology Section

<table>
<thead>
<tr>
<th>Test</th>
<th>OPD</th>
<th>Ward</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hb</td>
<td>77,855</td>
<td>63,013</td>
</tr>
<tr>
<td>TLC</td>
<td>77,855</td>
<td>63,013</td>
</tr>
<tr>
<td>PCV</td>
<td>77,855</td>
<td>63,013</td>
</tr>
<tr>
<td>DLC</td>
<td>75,246</td>
<td>63,013</td>
</tr>
<tr>
<td>ESR</td>
<td>73,346</td>
<td>31,656</td>
</tr>
<tr>
<td>D/Morphology</td>
<td>72,253</td>
<td>16,006</td>
</tr>
<tr>
<td>Platelet</td>
<td>77,855</td>
<td>63,013</td>
</tr>
<tr>
<td>Reticulocyte count</td>
<td>11,261</td>
<td>8,690</td>
</tr>
<tr>
<td>Absolute eosinophil count</td>
<td>25,406</td>
<td>4,689</td>
</tr>
<tr>
<td>Malaria parasite</td>
<td>50,166</td>
<td>6,646</td>
</tr>
<tr>
<td>Thick smear</td>
<td>—</td>
<td>1,133</td>
</tr>
<tr>
<td>MCV</td>
<td>77,855</td>
<td>63,013</td>
</tr>
<tr>
<td>MCH</td>
<td>77,855</td>
<td>63,013</td>
</tr>
<tr>
<td>MCHC</td>
<td>77,855</td>
<td>63,013</td>
</tr>
<tr>
<td>RBC</td>
<td>77,855</td>
<td>63,013</td>
</tr>
<tr>
<td>BT</td>
<td>927</td>
<td>—</td>
</tr>
<tr>
<td>CT</td>
<td>927</td>
<td>—</td>
</tr>
<tr>
<td>PT</td>
<td>5,289</td>
<td>10,476</td>
</tr>
<tr>
<td>Blood clotted</td>
<td>1,337</td>
<td>1,040</td>
</tr>
<tr>
<td>Other</td>
<td>11,695</td>
<td>8,389</td>
</tr>
<tr>
<td>Total</td>
<td>9,50,693</td>
<td>6,55,842</td>
</tr>
</tbody>
</table>

Grand Total 16,06,535

Note: Hb, TLC, PCV, DLC, Platelet, MCV, MCHC, RBC are measured by single reagent, within the same time frame

Microbiology Section

Patient care
Pre- and post-test counselling (total) 280
TORCH patients 70
HIV/AIDS 210

AIIMS 2006-2007 / 275
The clinical microbiology section caters to two types of patient care services (A) Routine investigations and (B) Specialized investigations which are mostly on payment basis.

### A. Routine investigations

#### 1. Urine investigation

<table>
<thead>
<tr>
<th>Name of the tests</th>
<th>OPD</th>
<th>Ward</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical board</td>
<td>11,680</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Routine</td>
<td>90,598</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Microscopic</td>
<td>1,35,297</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PH</td>
<td>45,199</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific gravity</td>
<td>45,199</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acetone</td>
<td>45,199</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bile pigment/salt</td>
<td>45,199</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urobilinogen</td>
<td>45,199</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blood</td>
<td>45,199</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bence-Jones protein</td>
<td>467</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chyluria</td>
<td>292</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Porphobilinogen</td>
<td>70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Myoglobinuria</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hemosiderin</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Microalbumin</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urine cultures</td>
<td>11,800</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strain identifications tests</td>
<td>9,835</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Antibiotic sensitivity</td>
<td>2,068</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E-test for ESBL testing</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>5,33,420</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: pH, Specific gravity, Acetone, Bile pigment, salt, Urobilinogen, blood are done by single reagent strip, in the same time frame

#### 2. Stool investigations

<table>
<thead>
<tr>
<th>Name of the tests</th>
<th>OPD</th>
<th>Ward</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wet mount—saline</td>
<td>8,771</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wet iodine stain</td>
<td>8,771</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occult blood in stool</td>
<td>3,022</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fat globules</td>
<td>733</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special stains for HIV-positive</td>
<td>1,436</td>
<td></td>
<td></td>
</tr>
<tr>
<td>patients</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>22,733</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 3. Semen analysis

<table>
<thead>
<tr>
<th>Name of the tests</th>
<th>OPD</th>
<th>Ward</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Routine</td>
<td>11,295</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Morphology</td>
<td>3,326</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fructose</td>
<td>394</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>15,015</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

AIIMS 2006-2007/276
4. Sputum analysis

<table>
<thead>
<tr>
<th>Test</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z-N Staining for AFB</td>
<td>12,224</td>
</tr>
<tr>
<td>Concentration/decontamination</td>
<td>–</td>
</tr>
<tr>
<td>AR staining</td>
<td>–</td>
</tr>
<tr>
<td>LJ culture</td>
<td>–</td>
</tr>
<tr>
<td>BECTEC culture</td>
<td>–</td>
</tr>
<tr>
<td>BECTEC drug sensitivity</td>
<td>–</td>
</tr>
<tr>
<td>Mycobacterial strains maintained</td>
<td>–</td>
</tr>
<tr>
<td>LJ proportional method</td>
<td>–</td>
</tr>
<tr>
<td>1st Line</td>
<td>–</td>
</tr>
<tr>
<td>2nd Line</td>
<td>–</td>
</tr>
<tr>
<td>Non tubercular mycobacterium isolate maintained</td>
<td>–</td>
</tr>
<tr>
<td>Bactec MGIT 960</td>
<td>–</td>
</tr>
<tr>
<td>Biochemical tests for culture identification</td>
<td>–</td>
</tr>
<tr>
<td>Blood culture for TB</td>
<td>–</td>
</tr>
<tr>
<td>Clinical samples stored at °C/LN</td>
<td>–</td>
</tr>
<tr>
<td>Subtotal</td>
<td>20,122</td>
</tr>
</tbody>
</table>

5. Miscellaneous investigations

- Bone Marrow examination,
  - CSF latex agglutination for cryptococcosis,
  - CSF latex agglutination for pyogenic meningitis,
  - Blood for malaria parasite
  - Blood for microfilaria,
  - Malaria antigen detection,
  - Urine microalbumin,
  - Pus culture and sensitivity,
  - Water sample testing

- Total no. of mice, rabbit and hamster used: 523
- Leishmania strains maintained: 1,350
- Bacterial strains maintained: 3,600

Subtotal: 5,631

Total of A: 5,96,921

B. Specialized investigations

Serology and Molecular Biology

<table>
<thead>
<tr>
<th>Name of the tests</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>TORCH</td>
<td></td>
</tr>
<tr>
<td><em>Toxoplasma gondii IgG</em></td>
<td>850</td>
</tr>
<tr>
<td>Test</td>
<td>Value</td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>Toxoplasma gondii IgM</td>
<td>850</td>
</tr>
<tr>
<td>Rubella IgG</td>
<td>745</td>
</tr>
<tr>
<td>Rubella IgM</td>
<td>745</td>
</tr>
<tr>
<td>Cytomegalovirus IgG</td>
<td>1,352</td>
</tr>
<tr>
<td>Cytomegalovirus IgM</td>
<td>1,352</td>
</tr>
<tr>
<td>Herpes simplex virus IgG</td>
<td>682</td>
</tr>
<tr>
<td>Herpes simplex virus 2 IgG</td>
<td>682</td>
</tr>
<tr>
<td>Herpes simplex virus (1+2) IgM</td>
<td>682</td>
</tr>
<tr>
<td>Toxoplasma gondii IgG avidity</td>
<td>88</td>
</tr>
<tr>
<td>Rubella IgG avidity</td>
<td>185</td>
</tr>
<tr>
<td>Cytomegalovirus IgG avidity</td>
<td>192</td>
</tr>
<tr>
<td>Parvovirus B19 IgG</td>
<td>125</td>
</tr>
<tr>
<td>Parvovirus B19 IgM</td>
<td>125</td>
</tr>
</tbody>
</table>

**Viral Marker and HIV**

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anti HAV IgM</td>
<td>1,145</td>
</tr>
<tr>
<td>HBsAg</td>
<td>13,056</td>
</tr>
<tr>
<td>Anti-HBeIgM</td>
<td>505</td>
</tr>
<tr>
<td>Anti-HBe total</td>
<td>192</td>
</tr>
<tr>
<td>HBeAg</td>
<td>1,395</td>
</tr>
<tr>
<td>Anti-HBe</td>
<td>300</td>
</tr>
<tr>
<td>Anti-HBs</td>
<td>1,305</td>
</tr>
<tr>
<td>Anti-HCV antibody</td>
<td>7,809</td>
</tr>
<tr>
<td>HEV IgM</td>
<td>1,644</td>
</tr>
<tr>
<td>HIV (1+2) ELISA</td>
<td>8,815</td>
</tr>
<tr>
<td>HIV Spot</td>
<td>445</td>
</tr>
<tr>
<td>HIV Westernblot</td>
<td>8</td>
</tr>
</tbody>
</table>

**Others serology**

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>TB IgG</td>
<td>200+208*</td>
</tr>
</tbody>
</table>

*(R.No.18)*

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>TB IgA</td>
<td>200</td>
</tr>
<tr>
<td>TB IgM</td>
<td>1,013</td>
</tr>
<tr>
<td>Dengue IgG ELISA</td>
<td>700</td>
</tr>
<tr>
<td>Dengue IgM ELISA</td>
<td>700</td>
</tr>
<tr>
<td>Dengue rapid test (IgG /IgM)</td>
<td>600</td>
</tr>
<tr>
<td>Anti-leishmania antibodies</td>
<td>190</td>
</tr>
</tbody>
</table>

**PCR tests**

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxoplasma gondii PCR</td>
<td>37</td>
</tr>
<tr>
<td>Cytomegalovirus PCR</td>
<td>78</td>
</tr>
<tr>
<td>Leishmania PCR</td>
<td>144</td>
</tr>
</tbody>
</table>
AWARDS AND HONOURS

Dr A.K. Mukhopadhyay was awarded a Scroll and a Certificate of Honor by the Vice-Chancellor of Dr Hari Singh Gour University, Sagar (MP) at National Conference on Yoga and Science for outstanding performance and contribution to Yoga and Science; appointed as Member, Upanishad Society; Member, Project, Indian Perspectives on Science and Spirituality sponsored by John Templeton Foundation, USA.

Dr. M. Irshad was selected for the Board of Reviewers for Journal of Virological Methods (JVM), British Medical Journal (BMJ), International Medical Journal (IMJ), Journal of Viral Hepatitis (JVH), for the year of 2006-2007. Blackwell Scientific Publisher exclusively selected Prof. Irshad as a Reviewer for its publications.

Dr Sarman Singh has been conferred the Fellowship of the National Academy of Medical Sciences (FAMS) this year; was also awarded with the prestigious ‘Biotech Product and Process Development and Commercialization Award-2006’ by DBT for his work on developing the rapid diagnostic methods for Leishmaniasis and Professor B.P. Pande Memorial Oration Award for best teacher in Parasitology by Indian Society of Parasitology; continues to be Member, Task Force of the DST for young scientist and high power committee member on Kala-Azar elimination constitute by DGHS, Government of India; also continues to be the CPCSEA, Government of India nominee for the Institutional Animal Ethics Committee of JNU, New Delhi; Member, Technical Committee of Central Jalma Institute for Leprosy and Other Mycobacterial Diseases, Agra; Editor-in-Chief of Journal of Laboratory Medicine and President of the Association for Better Health and Society (Abhas); nominated Member, Joint Monitoring Mission formed by WHO and Government of India for framing the preventive strategies for Vector Borne Diseases; selected as a Scientific Abstract Reviewer, XVI World AIDS Conference, Vancouver, Canada and the third International AIDS Society Conference, Sydney, Australia, 2007; nominated Member, Board of Life Sciences, CSIM University, Kanpur and Member of the Expert Committee for QA/QC implementation, NIB, Ministry of Health Government of India.

SIGNIFICANT EVENTS

During Dengue outbreak, Dr A.K. Mukhopadhyay was appointed as Member, (i) Steering Committee, (ii) Clinical Care Committee, and (iii) Media Briefing Committee. The department
managed the Dengue outbreak successfully in the month of September–October 2006 on war footing. It drew applause from AIIMS administrative and also from media (various news channels) and the public.

**VISITING SCIENTIST**

Nil
EDUCATION

Short- and long-term training
The department imparted training to 28 postgraduate and undergraduate students from Europe, USA, Canada, Australia, New Zealand and South Africa during the year 2006–07. Eleven senior as well as junior physicians from different parts of India were trained in the Respiratory Laboratory, Sleep Laboratory, Bronchoscopy Laboratory, and Clinical Immunology and Rheumatology.

Continuing Medical Education
Professor S.K. Sharma organized the following CMEs:
- Training programme for prevention, control and management of HIV/AIDS for Nurses, with University of California Los Angeles (UCLA), USA and Delhi State AIDS Control Society, AIIMS, New Delhi; 8–9 October 2006.

Dr Rita Sood was organizing Chairperson/Course Faculty of the following:
- National DCI–AIIMS workshop on Postgraduate Dental Curriculum; April 2006
- Emerging trends in medical education; November 2006
- Regional GSMC–FAIMER Institute fellowship programme, Mumbai; June 2006
- International Medical Educator fellowship programme, CMCL–FAIMER Regional Institute, Ludhiana; January 2007.
Dr A. Biswas organized the following:

Dr Uma Kumar organized monthly Delhi Rheumatology Association meeting in December 2006.

Dr Rajiva Gupta organized the second workshop on ‘Clinical methods in medicine for postgraduates’, AIIMS; March 2006.

Dr S. Sinha organized the following:

National and International Conferences
Lectures delivered
Professor S.K. Sharma
- ‘Tuberculosis and lung health’, jointly organized by International Union Against Tuberculosis and Lung Disease (The Union) and World Lung Foundation, South Asia; 29 April 2006.
- 21st Annual Update on Pulmonary and Critical Care Medicine Interstitial and Diffuse Parenchymal Lung Diseases, PGIMER, Chandigarh; 8 October 2006.
- ‘Sarcoidosis’, 21st Annual Update on Pulmonary and Critical Care Medicine Interstitial and Diffuse Parenchymal Lung Diseases, PGIMER, Chandigarh; 8 October 2006
Professor Rita Sood

• ‘Fever with haemorrhagic rash’, CME of API, Delhi State chapter; August 2006.
• Panel discussion on ‘Pre-pregnancy and periconceptional care’, National CME in Obstetrics and Gynecology; August 2006.
• Chaired a session on ‘Alcoholism: A growing international health issue’, by Professor Ian Gilmore President, Royal College of Physicians, UK, APICON 2007, Goa.
• Moderated a panel discussion on ‘Avenues for higher education in UK’, by President and Assistant Vice President, Royal College of Physicians, UK, APICON, Goa; February 2007.

Professor Randeep Guleria

• ‘Management of fungal infections’, Amby Valley City, Mumbai; 2 September 2006.
• Visited flood devastated areas of Surat, Gujarat on the request of the Ministry of Health, Government of Gujarat to offer AIIMS expertise for patients of leptospirosis and viral haemorrhagic fever; 30–31 August 2006.
• Attended the 72nd Annual International Scientific Assembly of the American College of Chest Physicians (ACCP), Salt Lake City, Utah, USA; 21–26 October 2006.
• ‘Methylxanthines’ place in asthma and COPD redefined’, NAPCON 2006, Nagpur; 1–4 November 2006.
• ‘Newer concepts in management of COPD’, GPCON, MAMC, New Delhi; 19 November 2006.
• ‘Recent advances in the management of bronchial asthma’, VIII National Conference (SIMON), Nepal; 10–11 November 2006.
• ‘Sarcoidosis: Indian perspective’, Pulmonary Update 2006, Department of Pulmonary Medicine, Army Hospital Research and Referral, Delhi Cantt; 3 December 2006.
• ‘Management of respiratory emergencies and bronchial asthma’, Visiting doctors from Coal India Limited; 31 January 2007.

Professor Rohini Handa
• ‘Lupus in pregnancy’, Bone and Joint Decade India, Indian Rheumatology Association, Coimbatore Chapter and Federation of Obstetrical and Gynecological Societies of India, Coimbatore Chapter, Coimbatore CME; 3 June 2006.
• ‘Bedside diagnosis of arthritis’, National Rheumatology Update, Army Hospital (Research and Referral), New Delhi; 19–20 August 2006.
• ‘Current trends in management of rheumatoid arthritis’, XVII Annual Conference of
• ‘Laboratory investigations in rheumatology: What to order and how to interpret?’, Annual Conference of Maharashtra Chapter of the Association of Physicians of India, MAPICON 2006, Aurangabad; 6–8 October 2006.
• ‘Rheumatoid arthritis: Why should internists look beyond joints?’, XIV Annual Conference of the Indian Association of Clinical Medicine, IACMCON-2006, Dehradun; 7–8 October 2006.
• ‘How to manage pain in rheumatic diseases?’, 17th Annual Conference of the Association of Physicians of India, Delhi State Chapter, New Delhi; 28–29 October 2006.
• ‘How to initiate and monitor therapy in a case of newly diagnosed RA?’, Rheumatology Update, Delhi Rheumatology Association, Delhi; 11 February 2007.

Professor G.C. Khilnani
• ‘Graphics in mechanical ventilation’, Conference on Critical Care Medicine, Indian Society of Critical Care Medicine, Jaipur; 6–9 April 2006.
• ‘Nosocomial pneumonia: Diagnosis and treatment’, NCCP (I) German Remedies Oration, National Conference on Pulmonary Diseases, NAPCON 2006, Nagpur; 1–5 November 2006.
• ‘Regulatory development and health effects from air pollution’, Asian Vehicle Emission Control Conference, jointly organized by Association for Emission Control, Catalyst Brussels Belgium, Emission Control Manufacturers Association, India and Manufactures
• ‘Invasive methods for diagnosis of Ventilator Associated Pneumonia (VAP)’, 2nd National
  Conference on Pulmonary and Critical Care and Sleep Medicine, Chest Summit 2006, Delhi; 12–15 October 2006.
• ‘Non-invasive positive pressure ventilation’, Guest faculty lecture for DNB course, LRS Institute for Tuberculosis and Chest Diseases, 15 December 2006.
• ‘How do I treat VAP’, First International Conference and 10th Annual workshop on ‘Mechanical ventilation’, Indian Society of Critical Care Medicine (Pune branch); 2–4 November 2006.
• ‘RDS Net. What is new?’, Conference on ‘Critical care medicine’, Indian Society of Critical Care Medicine, Jaipur; 6–9 April 2006.

Dr Naveet Wig
• ‘Operational and health services research needs in India’, University of California, Los Angeles; 1 March 2007.
Dr Uma Kumar
- ‘Systemic sclerosis’, National Rheumatology Update, Army Hospital (Research and Referral), New Delhi; 19–20 August 2006.

Dr Rajiva Gupta
- ‘Soft tissue rheumatism’, National Rheumatology CME, Army Hospital (Research and Referral), Delhi; 19–20 August 2006.
- ‘Recent advances in management of RA’, MAMC Medicine Update; December 2007.

Dr Sanjiv Sinha
- ‘Study of prevalence and types of baseline HIV drug resistance in the antiretroviral treatment-naive and previously treated HIV-infected Northern Indian population’, UCLA School of Medicine, Los Angeles, USA; June 2006.
- ‘Study of the prevalence and risk factors for multi-drug resistant tuberculosis (MDR-TB) in HIV/AIDS patients with tuberculosis (TB) in North India’, UCLA School of Medicine, Los Angeles, USA; June 2006.
• ‘Voluntary counselling and testing centre (VCTC) in HIV patients at tertiary case hospital in north India’, APICON, Goa; February 2007.

Dr Naval K. Vikram

Dr Anant Mohan

RESEARCH
Funded Projects
Completed
**Ongoing**

1. 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 2,19,96,000.


5. Efficacy and safety of immunomodulator $M_w$ 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). S.K. Sharma. Funded by Department of Biotechnology, Ministry of Science and Technology, Government of India for 3 years (2006–2009). Funds: Rs 76,81,000.


14. Genomic and molecular studies in patients of bronchial asthma. Collaborative project, Department of Medicine, AIIMS and Institute of Genomics and Integrated Biology, New Delhi. S.K. Sharma. Funded by Department of Biotechnology, Ministry of Science and Technology, Government of India, for 3 years (2004–2007). Funds: Rs 41.74 lakh.


22. 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 for 3 years (A collaborative UCLA, USA and AIIMS project). Funds: Rs 27 lakh.

23. 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 for 3 years (A collaborative UCLA, USA and AIIMS project). Funds: Rs 36 lakh.


**Departmental Projects**

**Completed**

1. Reintroduction of antituberculosis drugs in anti-TB drugs induced hepatitis
2. Bronchial hyperactivity, respiratory muscle strength and dyspnea in patient with mitral stenosis before after balloon valvulotomy
3. Colonization of upper and lower respiratory tract with pathogenic bacteria in patients receiving mechanical ventilation and risk of ventilator associated pneumonia
4. Carotid intimo-medial thickness in rheumatoid arthritis
5. Expression of major histocompatibility complex (MHC-I and II) and cell adhesion molecules in idiopathic inflammatory myopathies
6. Treatment outcome and drug resistance among category II pulmonary tuberculosis patients under RNTCP
7. Antimicrobial sensitivity pattern of common isolates in AIIMS Medicine wards and factors associated with the relative rates of antimicrobial resistance
8. To study the prevalence of osteoporosis in patients with ankylosing spondylitis: A hospital-based study
9. To study the occurrence of pulmonary arterial hypertension in scleroderma patients
10. To study the effect of oral pilocarpine in patients with sjogren syndrome
11. To study the subset of antiphospholipid syndrome defined by anti beta glycoprotein 1 antibodies
12. Screening for primary antiphospholipid syndrome at AIIMS
13. Clinical implication of anti CCP antibodies in JIA
14. Prevalence and clinical significance of antiphospholipid antibodies in systemic sclerosis

Ongoing
1. Prevalence of sleep disordered breathing in middle aged Indian adults: A population-based study
2. Treatment outcome and drug resistance among category II pulmonary tuberculosis patients under RNTCP
3. Neurocognitive impairment and atherogenesis in obstructive sleep apnea
4. Clinical and laboratory characteristics of HIV/AIDS patients and their outcome with antiretroviral treatment at ART clinic
5. Estimation of serum rifampicin levels in patients with anti tuberculosis drug induced hepatotoxicity and comparison of safety of different reintroduction regimens
6. Study of T cells subsets and dynamics of cytokines production in human tuberculosis
7. Comparison of various methods for detection of TB infection and diseases in HIV/AIDS
8. Study of prevalence and types of baseline HIV drug resistance in the antiretroviral treatment-naive and previously treated HIV-infected Northern India population
9. Evaluation of 18-FDG PET-CT and comparison with CT findings in patients with mediastinal lymphadenopathy due to tuberculosis and sarcoidosis
10. Dynamics of commensal flora and development of nosocomial infections in the critically ill
11. Microbial patterns in severe exacerbations of COPD requiring mechanical ventilation
12. Neurocognitive functions in AIDS patients and response to antiretroviral therapy
13. Evaluation of efficacy and adverse effects of antiretroviral drugs in treatment naïve HIV patients at AIIMS
14. To study the prevalence of Clostridium difficile in nosocomial diarrhoea in patients admitted in Medicine ICU
15. Lactate dehydrogenase and alkaline phosphates levels in bronchoalveolar lavage fluid of patients with sarcoidosis
16. Assessment of quality of life in asthma patients
17. Smoking habits in urban slums of Delhi. Prevalence of smoking and impact of awareness programme in urban slums of Delhi
18. Hospitalization for systemic rheumatic diseases
19. Endothelial dysfunction in rheumatoid arthritis
20. Evaluation of side-effects of antiretroviral therapy in patients with HIV/AIDS
21. Efficacy of oral sildenafil in pulmonary artery hypertension in scleroderma: A hospital-based study
22. To study the therapeutic window in rheumatoid arthritis
23. Screening for catastrophic antiphospholipid antibody syndrome
24. Clinical profile of frail elderly patients in hospital setting
25. To study the pregnancy outcome in systemic lupus erythematosus with special reference to cyclophosphamide therapy
26. Role of 18-FDG CT-PET in diagnosis and assessment of systemic necrotizing vasculitis
27. Study the effect of DMARD on lipid profile in rheumatoid arthritis with special reference to lipoprotein A and oxidized LDL
28. Pregnancy outcome in Indian systemic sclerosis

**Collaborative Projects**

**Completed**

1. Critical appraisal of assessment in key clinical disciplines in undergraduate course at AIIMS (with CMET)
2. A comparative study of bone marrow histopathology, aspirate smear, culture and polymerase chain reaction (PCR) for the diagnosis of disseminated tuberculosis (with Microbiology)
3. Evaluation of various parameters in early detection of ethambutol-induced optic neuropathy (with Ophthalmology)
4. Clinicopathological study of sepsis in dermatology ward (with Dermatology)
5. Pulmonary tuberculosis: CT evaluation in active and post-treatment phases with limited MR correlation (with Radiodiagnosis)
6. Autonomic function in Indian fibromyalgia patients (with Physiology)
7. To study the role of synovectomy of wrist in case of inflammatory arthritis of wrist (with Orthopaedics)
8. A multicentric, open comparative, randomized study to optimize dose, duration, safety and efficacy and cost of two treatment regimens with liposomal amphotericin (Fungisome TM) in the treatment of systemic fungal infections in India. S.K.Sharma. (with GSMC and KEM Hospital, Mumbai).
9. Air pollution and mortality in Delhi. (with The Energy and Resource Institute, New Delhi).

**Ongoing**

1. Toll-like receptor polymorphisms in *M. tuberculosis* infection
2. Immunology of regulatory T-cells subsets in human tuberculosis
3. Clinical and molecular evaluation of drug resistant patterns in North Indian mycobacterial isolates obtained from various HIV-positive and HIV-negative patients
4. Studies on T-cell mediated immunosuppression in visceral leishmaniasis patient
5. Influence of genetic variations in HLA, chemokines, cytokines and their receptors in HIV-1 infection
6. Immunoregulatory role of co-stimulatory molecules in tuberculosis
7. DNA amplification study by polymerase chain Reaction (PCR) to detect subclinical *pneumocystis carinii* pneumonia [PCP infection and colonization in ‘at risk’ patients with or without respiratory symptoms] (with Microbiology).
8. A comparative study between pre and postoperative pulmonary functions and diaphragmatic movements in congenital craniovertebral junction anomalies (with Neurosurgery)
9. Effect of yoga on pulmonary function, mast cell activation and quality of life in bronchial asthma: A randomized controlled trial (with Physiology)
10. Primary drug resistance studies by genotypic and phenotypic analysis in HIV Indian subtype C infected individual (with Microbiology)
11. Brachial plexus neurotization with phrenic and or intercostals nerves and its effect on pulmonary function (with Neurosurgery)
12. Effect of IFN-α and immune complex on neutrophil-CR1 transcript and its relationship with CR1 density polymorphism (with Biochemistry)
13. Phenotypic and genotypic characterization of clinical isolates of Candida species (with Microbiology)
14. Herbal treatment of osteoarthritis and rheumatoid arthritis. Interdisciplinary School of Health Sciences, Pune, NBRI; Lucknow, CRD Pune; IRSHA Pune; KEM Hospital Mumbai; NIMS Hyderabad; IICT Hyderabad. Funding agency: CSIR.
15. Prevalence and treatment response of coccidian parasite infection in HIV-positive patients at AIIMS (with Laboratory Medicine)
16. A study of haematological abnormalities in HIV/AIDS (with Haematology)
17. Study of mycobacteremia in disseminated tuberculosis (with Laboratory Medicine)
18. To study the immunogenic effect of kinesin motor domain gene against visceral leishmaniasis (with Laboratory Medicine)
19. Role of 18-FDG PET scan in the diagnosis and evaluation of pulmonary nodules (with Surgery)
20. Evaluation of the role of MDCT, CT angiography and bronchial artery embolization in the management of haemoptysis (with Radiodiagnosis)
21. Cutaneous vasculitis—etiological and clinico-pathological correlation (with Dermatology)

**PUBLICATIONS**

**Journals**
1. Aggarwal P, Sharad S, Handa R, Dwivedi SN, Irshad M. Comparison of nebulised magnesium sulphate and salbutamol combined with salbutamol alone in the treatment of


4. Asher MI, Montefort S, Bjorksten B, Lai CKW, Strachan D, Weiland SK, Williams H and the ISAAC Phase Three Study Group. Worldwide time trends in the prevalence of symptoms of asthma, allergic rhinoconjunctivitis and eczema in childhood-ISAAC Phase Three. Lancet 2006;368:733–43. [Professor SK Sharma was the Principal Investigator for the study from India (name listed in the Appendix in online supplement)].


52. Sharma SK, Mohan A. Multidrug-resistant tuberculosis (MDR-TB), a menace that threatens to destabilize tuberculosis control. Chest 2006;130:261–72.


**Chapters in Books**


**PATIENT CARE**

**Special clinics**

**Chest Clinic (Friday 2:00 pm)**

| New cases | 1,885 |
| Old cases | 4,101 |
| **Total** | **5,986** |

**Medicine Intensive Care Unit**

Number of arterial blood gas analyses done | 1,000

**Rheumatology Clinic (Wednesday 2:00 pm)**

| New cases registered | 351 |
| Number of follow up visits | 6,733 |
| **Total** | **7,084** |

Intravenous pulses of steroids and cyclophosphamide | 412
Joint and soft tissue injections | 1,852
Adult Haematology Clinic (Thursday 2:00 pm)
New cases  57
Old cases  505

Geriatric Clinic (Thursday 2:00 pm)
New cases  141
Old cases  530

Laboratories

Respiratory laboratory
Spirometry procedures  2,750
Diffusion capacity estimation  563

Bronchoscopy Laboratory
Fibreoptic bronchoscopy performed  564

Sleep Laboratory
Sleep studies  231

ADA/ACE Laboratory
Adenosine deaminase tests  940
ACE tests  101

Clinical Immunology Laboratory
Number of blood samples received  8,844

Test
RF  4,615
ANA  5,658
Anti-dsDNA  1,245
C3  1,027
Serum IgG, IgA and IgM  1,133
Cryoglobulins  146
ANCA  1,615
aCL  3,195
Anti-LKM-1  904
Nailfold capillary microscopy  25
Synovial fluid examination  75
(including polarizing light microscopy)
CD4/CD8 counts (Flowcytometry)  88
AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor S.K. Sharma received the prestigious Ranbaxy Award Clinical Research 2005 for his research work on Tuberculosis, HIV, Sarcoidosis and Interstitial lung disease; continues to be editor of Indian Journal of Chest Diseases and Allied Sciences and Section Editor of Pulmonology, Section of the API Textbook of Medicine, 8th edition; continues to be Associate Editor, Indian Journal of Tuberculosis; Member, International Advisory Board, Davidson’s Principles and Practice of Medicine, 20th edition; Textbook and Kumar and Clark Textbook of Clinical Medicine, 6th edition; continues to be an Editorial Board Member, Chest (American College of Chest Physicians), Lung India, Journal of the Association of Physicians of India (JAPI), Journal of Indian Academy of Clinical Medicine and Indian Journal of Sleep Medicine. He continues to the reviewer for the following reputed International and National journals: The Lancet, American Journal of Respiratory and Critical Care Medicine (Blue Journal), Journal of Applied Physiology, Chest, The Lancet Infectious Disease, Respiratory Medicine, Respirology, Journal of Molecular and Cellular Proteomics, World Journal of Surgical Oncology, Clinical Chimica Acta, Infection, Genetics and Evolution, Pharmacological Research, Indian Journal of Medical Research, Journal of Laboratory and Clinical Medicine, Cytokine and Journal of Pharmacy Practice and Research.

He continues to be the Chairperson and member of several international and national committees; Member, Public Health Advisory Committee of Foundation for Innovative New Diagnostics (FIND) (Bill and Melinda Gates Foundation, Geneva, Switzerland); Chief Scientific Advisor, International Multicountry project sponsored by International Atomic Energy Agency (IAEA), Vienna, Austria on Evaluation of management strategy for acute pulmonary embolism; Member, World Lung Health (initiative of International Union Against Tuberculosis and Lung Diseases (IUATLD); Member, Joint Monitoring Mission 2006 of the Revised National TB Control Programme (RNTCP) of India, WHO-Geneva, WHO-SEARO, IUATLD, Ministry of Health and Family Welfare, Government of India; Member, Scientific Advisory Committee (SAC), Infectious Diseases, Indian Council of Medical Research; Member, Technical advisory committee to review the progress of project ‘Socio-economic impact of TB on patient and their families’ organized by Tata Energy Research Institute (TERI), Delhi; Member, special task force to review the programme of Ghatampur Unit at Central JALMA Institute for Leprosy and other Mycobacterial Diseases; Member, Special Task Force of the Department of Biotechnology, Ministry of Science and Technology; Government of India, on Tuberculosis; Member, Scientific Committee of 62nd Annual Conference of the Association of Physicians of India (APICON) 2007; Chairperson, National Task Force on the involvement of medical colleges in TB Control Programme (RNTCP) of India; Member, Central Standing Committee for Operational Research on RNTCP related project, Ministry of Health and Family Welfare, Government of India; Member, Selection Committee, Governing Body of LRS Institute of TB and Respiratory Diseases for the post of Director at Lala Ram Swarup Hospital; Selection Committee Member for Professor of Medicine at PGI Rohtak and Professor at PGIMER, Chandigarh.
Professor Rita Sood is a Member of Association for the Study of Medical Education in Europe and Member of Credential Committee of Indian College of Physicians; Member, Editorial Board, *Journal of Indian Academy of Clinical Medicine*; Member of the Review Board, *International Journal of Medical Education*; invited Expert by Ministry of Health, Government of India for Revision of MB,BS Curriculum and invited as Advisor by UPSC.

Professor Randeep Guleria has been the External Examiner for MD (Pulmonary Medicine) for Vallabhbhai Patel Chest Institute, Delhi, MD (Medicine) PGIMER, Chandigarh and BP Koirala Institute of Health Sciences, Dharan, Nepal; Adviser in the Board for the interview of candidates, who have qualified in the Combined Medical Services, Examination 2006 by the UPSC; Adviser in the Board for the interview candidates for Assistant Professor (TB and Chest Disease), UPSC; Member, Project Review Committee on ‘Leprosy, Tuberculosis and Other Chest Diseases’ and ‘Project advisory Committee on Nutritional profile of Assam, Manipur and Meghalaya’ of the ICMR; delivered the Dr Mahendra Narain Foundation Oration on 30 April 2006 in Patna, Bihar; Member, Indian Association of Sarcoidosis and other Granulomatous Disorders, New Delhi; Member of the preliminary working group for preparing a training manual for General Practitioners to manage COPD and asthma based on standard guidelines; Member of the Institute Postgraduate Thesis Committee, i.e. MD/MS/MHA/MSc/MBiotechnology/DM/MCh and PhD to examine the protocols from ethical angle.

Professor G.C. Khilnani received ‘NCCP (I) German Remedies Chest Oration’ for the year 2006; delivered the oration at the National Conference on Pulmonary Diseases (NAPCON 2006) under the aegis of National College of Chest Physicians and Indian Chest Society, Nagpur, 1–5 November 2006; nominated Course Director for workshop on Mechanical ventilation, National Conference on Pulmonary Diseases (NAPCON-2006), Nagpur, 1–5 November 2007; invited as Member, Research Council at Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow and attended the two days meeting, Lucknow, 9–10 May 2006. The council reviewed the progress of academic and research activities and suggested appropriate measures to enhance its academic and research standards. He also served as advisor to Union Public Service Commission for selection of doctors for the post of Assistant Professor of Medicine and Assistant Medical Officers; served as examiner for Diplomate for National Board (Medicine) twice during the year; Appraiser for the course of DNB course in Respiratory Medicine as nominated by National Board of Examinations; Member of Expert-cum-Monitoring Group of a research project: On Efficacy of Mycobacterium W. vaccine in treatment of tuberculosis; Member, Data and Safety Monitoring Board 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’; Member, selection committee for Norwegian government scholarship; Member of committee for framing Guidelines for use of non-invasive ventilation (Indian Society of Critical Care Medicine); Chairman, Expert group for Multicentric Task Force Project on Epidemiology of Asthma and Atopy in Adults, funded by ICMR.
Dr Rohini Handa was elected Member, Governing Body of the Association of Physicians of India; Secretary General, Asia Pacific League of Associations for Rheumatology; adjudged Outstanding Referee for the Year 2005 by Journal of Association of Physicians of India; and delivered the Dr Sukumar Mukherjee Honor Lecture 2006 at Dehradun, India.

Dr Ashutosh Biswas was awarded fellowship for master training in ‘Clinical Research’ at Albert Einstein College of Medicine, New York, USA; Member of New York Academy of Sciences, International AIDS Society (IAS) and National Committee for Quality Assurance of anti TB drugs. He is reviewer of an international journal *Chest*.

Dr Uma Kumar was awarded Japanese college of Rheumatology 2006 International scholarship to participate in 50th Annual General Assembly and scientific meeting of Japan college of Rheumatology held in Nagasaki, Japan, and is Associate Editor of the *Indian Journal of Rheumatology* for 2007–2009.

Dr Rajiva Gupta is member of International Advisory Board of *Davidson’s - Principles and Practice of Medicine*, 20th Edition, Member of International Advisory Board of *Kumar and Clark–Clinical Medicine*, 6th Edition, and Adjunct member, CMET, from department of Medicine.

Dr Anant Mohan is a member, American College of Chest Physicians, European Respiratory Society, and Influenza Foundation of India. His research abstract submitted to the CHEST conference at Seattle, USA in October 2006 received the Alfred Soffer Research Award for best abstract.

VISITING SCIENTISTS

Following international faculty members visited the department during the current year. They delivered lectures, interacted with faculty members, residents and undergraduates (posted) of the department.

1. Dr KK Guntupalli, Professor and Acting Chief, Pulmonary Critical Care Section, Baylor College of Medicine, Houston, Texas and Jayarama Guntupalli, Associate Professor of Medicine, UT- Houston Medical School, Texas (USA) delivered lectures and participated in clinical discussion in the general wards and intensive care unit of the department.

2. Dr Peter M. Small, Senior Programme Officer, Global Health Programme, Bill and Melinda Gates Foundation, Seattle, WA (USA) delivered a lecture and joined the ward round for discussion of clinical cases.

3. Dr Madhukar Pai, Assistant Professor, Department of Epidemiology, Biostatistics and Occupational Health, McGill University Canada

4. Dr Kenneth H. Mayer, Professor of Medicine School, Rhode Island, USA and Visiting Professor Clinton Foundation, New Delhi visited the department thrice and delivered lecture each time.
5. Dr Naimish R Patel, MD, Division of Pulmonary Medicine, Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, USA

6. The editorial team of Davidson’s Principles and Practice of Textbook of Medicine (Professors Nicholas A. Boon, Nicki R. Colledge, Brain R. Walker, John A. A. Hunter; Edinburgh, Scotland) visited the department and a CME was held in the department.

7. Dr Nicholas A. Boon and Dr John A. A. Hunter delivered lectures in the department, interacted with faculty and residents and undergraduates.

8. The editorial team of Kumar and Clark Textbook of Clinical Medicine also visited the department in January 2007 and interacted with the faculty members and undergraduates posted in the department.

ACADEMIC, ADMINISTRATION, FINANCE, ENGINEERING, LIBRARY, CENTRAL FACILITIES, ETC.

Professor S.K. Sharma is the Chairperson of the 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 is also Member of the Drug Selection Committee of National AIDS Control Organization and of the Governing Body, LRS Hospital, New Delhi.
EDUCATION

Short- and long-term training
BSc (Nursing) curriculum was revised in July 2006. A 36-hour teaching schedule was expanded to 60-hour schedule to provide a more extensive coverage of Microbiology with special emphasis on Infection Control.

Short-term summer training was provided to 22 and long-term training was provided to 10 students (MSc) from various institutes/universities.

Postgraduate students from the Department of microbiology of all three medical colleges of the University of Delhi (MAMC, LHMC, UCMS) underwent short-term training in newer microbiological techniques and postgraduate students of the Centre of Community Medicine, AIIMS, were provided short-term training in Entomology.

Continuing Medical Education
The department organized a CME in collaboration with Department of Medicine, AIIMS and CTD on “National Task Force for the Involvement of Medical Colleges in RNTCP”; 3–5 November 2006.

National and International Conferences
The Department of Microbiology (Virology section) organized the 7th Asia Pacific Congress of Medical Virologists (APCMV) at the India Habitat Centre, New Delhi on 13–15 November 2006. The department of Microbiology (Virology section) organized an Indo-US symposium on Viral Diagnostics, Epidemiology and Pathogenesis at the Indian Council of Social Sciences Research, New Delhi on 11–12 November 2006.
Lectures delivered

Dr. J.C. Samantaray

3. Chemical Society of India. State chapter meeting, ‘Recent advances in Microbiological Diagnosis’, Orissa, October 2006.

Dr. S. Broor


Dr. Rama Chaudhry


Dr. B.R. Mirdha

1. 3rd UP Chapter of IAMM. ‘Emerging parasitic infections.’ Aligarh Muslim University (AMU), Aligarh, Uttar Pradesh. 24 February 2007.
Dr. Urvashi B. Singh
1. Delhi Chapter Meeting of Indian Association of Medical Microbiologists. ‘Tuberculosis Diagnostic Challenges’. LRS TB Hospital, New Delhi. 9 December 2006.

RESEARCH
Funded Projects
Completed

Ongoing
4. Multisite monitoring of human influenza in India—phase I. S. Broor. Funded by the Department of Health Human Services USA (DHHS) and Indian Council of Medical Research for 3 years (2004–2007). Funds: Rs 87.30 lakh.


11. DNA amplification study by polymerase chain reaction (PCR) to detect sub-clinical Pneumocystis carinii infections and colonisation in ‘at risk’ patients with or without respiratory symptom. B.R. Mirdha. Funded by DST for 3 years (2004–2007). Funds: Rs 18 lakh.


15. HIV national reference laboratory (NRL) and EQAS programme. L. Dar (since November 2006). Funded by NACO 1993—continuous renewal. Funds: Rs 5 lakh per year.


17. CD4/CD3 in HIV infected individuals/ART Programme. L. Dar (since November 2006). Funded by NACO 2006—continuous renewal. Funds: Rs 0.70 lakh per year + reagent support.


Departmental Projects

Completed
1. Variability in G protein of respiratory syncytial virus (RSV) strains isolated from a rural community near Delhi
2. Evaluation of cell-mediated immune response in HIV-1 infected individuals in North India.
3. Characterization of T helper cell immune response to HIV-1 subtype C in infected individuals from India
4. Primary drug resistance studies by genotypic analysis in HIV-1 Indian subtype C in infected individuals
5. Human tat gene of HIV-1 Indian Subtype C as a vaccine candidate for immunogenicity testing in BALB/C mice
6. Nef gene of Indian Subtype C as a vaccine construct: Immunogenicity testing in BALB/C mice
7. Development of real time PCR for qualitative and quantitative determination of HIV type 1 RNA in blood samples

Ongoing
1. Antigenic and molecular characterization of human influenza virus from the patients of acute respiratory infection
2. Cloning and expression of G gene of RSV in baculovirus and mammalian expression vectors
3. Detection and genotyping of human cytomegalovirus from neonates and renal transplant recipients
4. Detection, genotyping and immune response study to human metapneumovirus
5. Quantification of viral load and genotyping of human cytomegalovirus in renal transplant recipients
6. Characterization of T cell immune responses to HIV-1 subtypes B and C gag and nef proteins in HIV-1 infected individuals
7. Blood myeloid and plasmacytoid dendritic cells in HIV infected Indian individuals
8. Multiplex RT-PCR for detection of viruses causing lower respiratory tract infections viz. human respiratory syncytial viruses (RSV), human parainfluenza viruses, influenza viruses (FLU), and human metapneumovirus (hMPV) and real time RT-PCR for detection of RSV and hMPV
9. Genetic variability of human calciviruses from sporadic cases of acute gastroenteritis
10. Sequencing and phylogenetic analysis of dengue virus strains from Delhi
11. Study of inhibition of respiratory syncytial virus and human metapneumovirus multiplication by RNA interference in tissue culture and animal model

Collaborative Projects

Completed
1. Molecular, biological and serological detection of parameters of association of
Campylobacter jejuni infection in children with Guillain–Barre syndrome (with Paediatrics)

2. Diagnosis of visceral leishmaniasis by use of the polymerase chain reaction (PCR) on patient blood (with Medicine and Institute of Pathology)

Ongoing
1. Analysis of expression and regulation of classical HLA-A, B, C, non-classical HLA-G and transforming growth factor beta-2 in glioblastoma and their relevance in immunotherapy (with Neurology)
2. Assessment of intestinal permeability in chronic liver disease and its complications (with Gastroenterology)
3. Diagnostic and prognostic evaluation of leishmaniasis by PCR and a newly developed buffy coat assay using patient’s blood (with Paediatrics)
4. Drug resistance surveillance under Revised National Tuberculosis Control Programme (with Medicine)
5. Efficacy and safety of immunomodulator mycobacterium W, Mw as an adjunct therapy in pulmonary tuberculosis (with Medicine)
6. Genetic diversity of Entamoeba histolytica isolates and identification of genotype and clinical phenotype correlations (with Gastroenterology)
7. In vitro expression and establishment of human fetal liver haematopoietic stem cell line (with Rotary Cancer Hospital)
8. Microscopy center for directly observed therapy, short-course (DOTS) (with Medicine)
9. Prevalence of antiretroviral drug resistance in HIV patients in Northern India (with Medicine)
10. Spectrum of pulmonary infections in HIV-infected patients (with Medicine)
11. Study of prevalence and types of base line HIV drug resistance in the antiretroviral treatment-naïve and previously treated HIV-infected Northern Indian population (with Paediatrics)
12. Study of the prevalence of respiratory virus infections in hospitalized patients with acute exacerbation of chronic obstructive pulmonary disease and their impact on mortality and morbidity (with Medicine)
13. Treatment outcome and drug resistance among Category II pulmonary tuberculosis patients under RNTCP (with Medicine)

PUBLICATIONS
Journals
3. Behera B, Mirdha BR, Makharia GK, Bhatnagar S, Dattagupta S, Samantaray JC. A
study of intestinal coccidia and microsporidia and other parasitic infections with malabsorption syndrome. *Indian J Gastroenterol* 2006;25:A34–A35.


18. Gupta E, Dar L, Singh S, Behari M, Broor S. Role of CSF serology in follow-up of


Books

PATIENT CARE

**Bacteriology**

**Bacteriology laboratory**

<table>
<thead>
<tr>
<th>Clinical samples</th>
<th>97,731</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antimicrobial susceptibility tests</td>
<td>27,187</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,24,918</td>
</tr>
</tbody>
</table>

**Sexually transmitted diseases**

<table>
<thead>
<tr>
<th>Clinical samples</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>High vaginal swabs (HVS)</td>
<td>259</td>
</tr>
<tr>
<td>Semen</td>
<td>114</td>
</tr>
<tr>
<td>Expressed prostatic secretions (EPS)</td>
<td>108</td>
</tr>
<tr>
<td>Urethral discharge</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>484</td>
</tr>
</tbody>
</table>
Antimicrobial susceptibility testing
HVS 67
Semen 14
EPS 15
Urethral discharge 03
Total 99

External Quality Assessment
Participated in external quality assurance (EQA) programme of WHO GASP (Gonococcal Antimicrobial Susceptibility Programme)

Hospital Infection Control
Samples processed as a part of surveillance, disinfectant in-use test and autoclave control 14,695
Water bacteriology 2,013
Total 16,708

Serology Laboratory
VDRL 8581
WIDAL 6943
Total 15,524

Quality Control
Internal quality control
Sterility testing of media and ability to support growth 2,420
Biochemical tests 450
Antibiotic discs 8,252
Total 11,122

Anaerobic bacteriology
Anaerobic culture 323
Antimicrobial sensitivity 32
Stool culture for *C. difficile* 156
ELISA for *C. difficile* toxin 150
Referred Anaerobic culture (for identification) 04
Anaerobic strains supplied to other hospitals 12
Leptospira 108
Leptospira culture 108
Leptospira serology for IgM antibodies
—By ELISA 108
—By Lepto dri-dot 108
Mycoplasma

*Mycoplasma pneumoniae* IgM antibodies by ELISA/GPA 148
*Mycoplasma pneumoniae* culture 84
*Mycoplasma hominis* culture 221
*Ureaplasma urealyticum* culture 237
*Legionella pneumophilla* culture 24

Antibiotic susceptibility
— for *Mycoplasma hominis* 19
— for *Ureaplasma urealyticum* 43

*Campylobacter jejuni*

Culture 135
Serology 92

*Chlamydia pneumoniae*
— By ELISA 39

*Legionella pneumophilla*
— By ELISA 39

Polymerase chain reaction
— for *Salmonella typhi* 64
— for *Mycoplasma pneumoniae* 84
— for *Leptospira* 117
— for *Legionella pneumophilla* 64
— for *Mycoplasma hominis* 42
— for *Ureaplasma urealyticum* 63

Total 2, 516

Parasitology

Serological Investigations
*Toxoplasma gondii* serology (for IgG antibodies by ELISA) 77
Hydatid disease serology by indirect haemagglutination test 124
Amoebic serology (for IgG antibodies by ELISA) 131

Investigation for malaria
Fluorescent staining (Acridine Orange) 2914
Giemsa staining 2914
Quantitative Buffy Coat (QBC) Assay 742
HRP-II antigen detection 154

Investigation for kala-azar
Fluorescent staining (Acridine Orange) 464
Giemsa staining 464
Quantitative Buffy Coat (QBC) Assay 29
Kala-azar serology 247
Aldehyde test 247

**Examination of faecal samples for intestinal parasitosis**
Direct and concentration 1,259
Modified acid-fast and special staining for intestinal coccidian 1,259
Culture (for entamoeba histolytica) 23
Tissue specimens (homogenates) 22

**Examination of aspirates**
Sputum, pus and others 41

**Investigation for filariasis**
Direct and concentration 32
Acridine Orange 32
Quantitative buffy coat assa 32
Hetrazan provocative test 17

**Infections for pneumocystis jiroveci infection**
(Broncho-alveolar lavage (BAL), induced sputum, tracheal aspirate, nasopharyngeal aspirates ) 170

**Cerebrospinal fluid examination for**
*Free Living Amoebae (FLA)*

**Total** 11,421

**Tuberculosis laboratory**
Smear microscopy and LJ culture 12,662
PCR 2,242
Drug susceptibility testing (Bactec 460) 150
Rapid culture (Bactec 460) 1,660
**Total** 16,714

**Virology Laboratory including HIV Laboratory**
Viral culture and identification (HSV, dengue, etc.) 42
Viral serology
HIV (through VCCTC) 4,832
Rubella 42
CMV IgM 75
HSV (serum and CSF) 160
Measles (serum and CSF) 182
Dengue 1,230
Chikungunya 30

AIIIMS 2006-2007/317
PCR
HIV 48
CMV 185
HSV 90
Dengue 60

CMV antigen detection (pp65) 37
HIV viral load 42
Miscellaneous 49
Total 7,104

Immunology laboratory
CD4 count 3,329
Total 3,329

Mycology and ICP Laboratory
Total number of samples processed for direct 5,785
Demonstration and isolation of pathogenic fungi Bactec 1

Fungal serology
Cryptococcus 250
Aspergillus 27
Histoplasma 6
Total 6,069

AWARDS, HONOURS AND SIGNIFICANT EVENTS
Dr Shobha Broor was the organizing chairperson of the 7th Asia pacific Congress of Medical Virology and Indo-US symposium on ‘Viral Diagnostics, Epidemiology and Pathogenesis’; member of the following national committees: Scientific Advisory Committee, ICMR, project review committees of ICMR, Member, Task force on infectious diseases and Avian Influenza of DBT, Avian influenza monitoring committee of Government of India, Project advisory committees of DST, Selection committee of ICMR, executive council of Indian Association of Medical Microbiology, Scientific Advisory Committee of National Institute of Virology, Task force on Influenza of Indian Council of Medical Research, National task force on Polio Containment, Associate Editor, Indian Journal of Medical Microbiology, Advisor to National AIDS Control Organization (NACO) on procurement of kits and equipment, Technical advisor Influenza foundation of India, Subject expert committee on Life Sciences of Department of Science and technology in FIST Programme, Women Scientist Programme and BOYSCAST Programme, selection committee of Union Public Service Commission of Government of India, Selection committee of Punjab University, Selection committee of Delhi University, Subject expert of Indian Medical Council, Fellow International Medical Sciences Academy (IMSA).
Professor Rama Chaudhry received the Speaker Award to present ‘Paucity of protective flora in Indian breastfed neonates’, International Conference on ‘Women and Infectious Diseases (ICWID)’, The Atlanta Marriott Marquis, USA, 16–18 March 2006; Best Poster Award for the paper ‘Infection potpourri are we watching’ at International Conference on ‘Leptospirosis: A diagnostic enigma’ and 6th Scientific Meeting of The Indian Leptospirosis Society; University of Hyderabad, 20–22 June 2006; received International Indo-US-Professorship Award by American Society for Microbiology, USA to teach a short course on ‘Atypical pneumonia in elderly with special reference to Mycoplasma pneumoniae’, University of Maryland, USA, September–October 2006; President, Indian Association of Mycoplasmologists (IAM), 2006; selected as a Member, International Research Programme on Comparative Mycoplasmology Committee (IRPCM) on clinical infection at IOM Conference, Cambridge, UK, 2006.

Dr B.R. Mirdha received Meghna Krishna Baweja Award 2006, for the best paper in paediatric infectious diseases for ‘Emerging Parasitic Agents, coccidia and microsporidia, in childhood malabsorption syndrome’, in Indian Association of Medical Microbiologist, Delhi Chapter.

Dr Lalit Dar was elected the Joint Secretary of the Indian Association of Medical Microbiologists in 2006 for a period of 3 years. He is the Secretary General of the Influenza Foundation of India; and was Scientific Secretary for the 7th Asia Pacific Congress of Medical Virologists (APCMV); Joint Organizing Secretary, National Workshop on ‘Emerging Trends in Medical Education’, CMET, AIIMS, New Delhi.

VISITING SCIENTISTS
1. Dr Catharina Boehme, Medical Officer, Foundation for New Innovative Diagnostics and Department of Infectious Diseases and Tropical Medicine, University of Munich
2. Dr C.N. Paramasivan, Project Manager, TB Laboratory Aspects, Foundation for New Innovative Diagnostics and Head of the Bacteriology Division of the Tuberculosis Research Centre, ICMR, Chennai, India
3. Dr John Wain from Wellcome Trust, Sanger Institute, UK
4. Dr Madhukar Pai, Assistant Professor of Epidemiology, Department of Epidemiology, Biostatistics, and Occupational Health, McGill University.
5. Dr Nancy Cox from CDC, USA
6. Dr Peter Small, Senior programme Officer, Institute for Systems Biology, Bill and Melinda Gates Foundation
7. Dr Salvatore Rubino from University of Sassari, Italy
8. Dr Suresh Boppana (UAB, USA)
9. Dr Uma Malhotra (UW, Seattle, USA)
10. Dr Wayne Sullender (UAB, USA)
9.19 Nephrology

Professor and Head
S.C. Tiwari
Additional Professor
S.K. Agarwal
Associate Professors
S. Gupta, D. Bhowmik, S. Mahajan

EDUCATION

Long-term training
The department mainly runs a 3-year DM Nephrology course for post-MD (Medicine) candidates, who get selected by AIIMS on the basis of merit. Three candidates were admitted to DM course and 3 passed out. Postgraduates in Internal Medicine are posted on rotational basis for a short period of 1–2 months. At present the department has 11 DM students.

Short-term training
Two doctors from SAARC countries received training in nephrology, besides doctors from hospitals within the country. The department also provided training to nurses and technicians from Bhutan and other hospitals in Delhi.

Continuing Medical Education

Conferences, Seminars, Workshops
- Second Annual Conference of Indian Academy of Nephrology and Delhi Nephrology Society Update; 16–18 March 2007.
- Symposium on ‘Yesterday’s wisdom for tomorrow’s health’, AIIMS in collaboration with the Integral \(^1\) Health Centre, Sri Aurobindo Ashram, Delhi Branch; 16 October 2006.

Lectures delivered

Professor S.C. Tiwari
- Guest speaker, Bombay Hospital, Indore on the eve of World Kidney Day; 6 March 2007.
- Guest speaker, Daily Haemodialysis at North Zone, Jaipur.
- Invited as Guest Speaker Winnipeg, Canada on ‘Cardiovascular complications in chronic kidney disease, Health, Heart and Disease’.

Dr S.K. Agarwal
• Controversy in rheumatology, ‘Whether all patients with lupus nephritis should be biopsied’, 22nd Annual Conference of Indian Rheumatological Association, Lucknow; 23–26 November 2006.
• ‘Glomerular filtration rate estimations in chronic kidney disease’, Department of Medicine, BJ Medical College, Pune; June 2006.
• ‘Clinical relevance of stem cell research’, Integral Health Centre, Sri Aurobindo Ashram, Delhi; November 2006.

Dr S. Mahajan
• ‘Recent advances in Hepatorenal Syndrome’, Annual Hepatology Update Apollo Hospital, Delhi; January 2007.
• Clinical Pathological Conference (CPC), Annual conference of Delhi Chapter of API; November 2006.

RESEARCH
Funded projects
Completed
1. Impact of isolation on incidence of Hepatitis C virus infection in patients on maintenance haemodialysis. SK Agarwal. Funded by ICMR for 3 years. Funds: Rs 12 lakh.
2. An open label prospective multicentric trial to evaluate the efficacy and safety of Lanthanum Carbonate in patients of Hyperphosphatemia of CKD. SK Agarwal. Funded by Panacea Biotec for one and half years. Funds: Rs 2 lakh.
3. An open label prospective multicentric study for efficacy and safety of Pangraf (FK506) in patients for renal transplantation. SK Agarwal. Funded by Panacea Biotec for 2 years. Funds: Rs 3 lakh

Ongoing
1. Linezolid vs vancomycin/cefazolin in treatment of haemodialysis patients with catheter related gram-positive blood borne infection. SK Agarwal. Funded by Pfizer for 1 year. Funds: Rs 5 lakh
2. A randomized double-blind placebo-controlled four arm parallel group multicentric multinational trial comparing weekly intravenous administration of Abetimus to weekly intravenous administration of placebo in patients with a history of SLE related renal disease. SK Agawal. Funded by Lajolla Pharma Company, California, USA for 3 years. Funds: Rs 11 lakh

3. Validation and development of predicting formula for estimation of glomerular filtration rate in Indian adults with various degree of renal function. SK Agarwal. Funded by ICMR for 3 years. Funds: Rs 15 lakh.

4. Detection of HCV core antigen (HCVc-Ag) for diagnostic screening of HCV infection in patients on maintenance haemodialysis. SK Agarwal. Funded by ICMR, New Delhi for 3 years. Funds: Rs 28 lakh

**Departmental Projects**

**Completed**

1. Study of hepatitis B and hepatitis C infection in primary glomerular diseases
2. Impact of isolation of HCV-positive patients on incidence of HCV-infection during haemodialysis
3. Post renal transplant tuberculosis: Comparison between double and triple immunosuppression
4. Estimation of anti-oxidant in blood in renal and liver diseases
5. Effect of n-acetyl cysteine on serum creatinine and glomerular filtration rate in healthy subjects with normal renal function with or without contrast exposure
6. To study the clinicopathological correlations and assess the clinical, laboratory and renal histology predictors for long-term outcome in lupus nephritis
7. Tacrolimus therapy in steroid resistant/dependent nephrotic syndrome
8. Spectrum and outcome of acute renal failure in the elderly
9. Therapeutic drug monitoring of anti-tubercular drugs in normal renal function and chronic renal failure
10. Spectrum and outcome predictors of acute renal failure in the intensive care unit

**Ongoing**

1. Tuberculosis prophylaxis in patients on maintenance haemodialysis
2. Open label study of effect of lamivudine in hepatitis B renal transplant recipient
3. Clinicopathological correlation of HBV and HCV-infection in patients on renal replacement therapy
4. Open label study of Peg-interferon monotherapy for treatment of HCV-infection in patients on maintenance haemodialysis
5. Oxidative stress in progressive renal failure and dialysis therapy
Collaborative Projects
1. Clinicopathological correlation of HBV and HCV-infection in patients on renal replacement therapy (with Pathology)
2. Estimation of anti-oxidant in blood in renal and liver diseases (with Lab Medicine)
3. A study of psychiatric morbidity and quality of life in patients before and after renal transplantation (with Psychiatry)
4. Diagnosis of cytomegalovirus pneumonitis in immunocompromised patients at AIIMS (with Microbiology)
5. Detection and genotyping of human cytomegalovirus from neonates and renal transplant recipients (with Microbiology)
6. Prevalence of CKD in high-risk population (with Lab Medicine)
7. 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)
8. To study the pregnancy outcomes in systemic lupus erythromatosus with special reference to cyclophosphamide therapy (with Medicine)
9. Evaluation of protective effect of garlic extract on cyclosporin induced nephrotoxicity in rats (with Pharmacology)
10. Role of urinary cytology and immunocytochemistry in diagnosis and management of acute renal allograft dysfunction (with Pathology)
11. Quality of life of live related renal donors (with Surgery)
12. Studies on cytokines profile of alloeffector T-cells in renal biopsy and their selective recruitment in acute rejection (with HLA)

PUBLICATIONS

Journals


Chapter in books


PATIENT CARE

Facilities available in the department

1. Haemodialysis
2. Acute peritoneal dialysis
3. Continuous ambulatory peritoneal dialysis
4. Vascular access (minor surgery)
5. Plasmapheresis/plasma exchange
6. CRRT (C II ICU, AB8 and CTVS)
7. Renal transplants
8. Renal laboratory tests

Specialized treatment procedures

The department provides specialty care for seriously ill acute and chronic kidney failure patients. It conducts the following specialized treatment methods:

- Haemodialysis 5,110
- Intermittent peritoneal dialysis 490
- Continuous ambulatory peritoneal dialysis 96
- Plasmapheresis/plasma exchange 15
- Continuous renal replacement therapy 12
  (venovenous/arteriovenous haemofiltration and haemodialysis)
- Femoral vein catheterization 639
- Preparation for kidney transplantation
  Patients of end stage kidney failure are treated, 305
dialyzed and selected for kidney transplantation on the basis of suitable tests. Similarly patients and their donor work-up are done by a variety of tests for selection or rejection.

**Other therapeutic methods (Day-care treatment)**

- Intravenous pulse therapy for immunosuppressants and iron therapy
- Jugular and subclavian catheter insertion
- AV fistula
- AV shunt
- Kidney biopsy
- Laboratory facilities for early and late diagnosis of renal diseases
  - Number of patients: 11,574
  - Number of investigations: 1,14,346

**Clinics**

- Renal clinic (6 days per week)
- Renal transplant counselling clinic (3 days per week)
- Renal transplant clinic
- Indoor admissions (long and short)
- Nephrology consultations

**Community services**

**Doordarshan**

- ‘Kidney disease and diagnostics’, May 2006
- All India Radio, ‘Gurde ko Bachaiye’, June 2006

The faculty members participated in telemedicine and public lectures to spread the message of Chronic Kidney Disease in the lay public.

*World Kidney Day*: Public lecture by Dr S.K. Agarwal, Additional Professor, chaired by Professor S.C. Tiwari and all the faculty members participated in the question and answer session at JN Auditorium, AIIMS, New Delhi on 7 March 2007.

**AWARDS AND HONOURS**

**Dr S.C. Tiwari** was elected as Chairman, Transplant Inspection at Fortis Hospital Noida, April 2006; Transplant inspector at Noida Medical Centre, April, 2006; Transplant Inspection at Sai Hospital, Bombay; Chairman, Scientific Committee, Haemodialysis Society of India; Chairman,
Antarctica Expedition programme; Adviser, UPSC for selection of faculty; Honorary Medical Advisor, Ramakrishna Mission; Adviser Member, American Society of Nephrology; Vice President, Haemodialysis Society of India; Executive member, Credential Committee of Indian Society of Nephrology; Governing Body Member, RIMS, Jharkhand; Member, State Health Society, Bihar; Chairman, Organizing Committee, 2nd IAN and Delhi Nephrology Update; Member, Rajbhasha Vibhag, Ministry of Home; Editor, The Journal of Renal Sciences (2006–2007); selected Expert Member, Selection committee, KGMC, Lucknow; appointed on Board of Directors of Mahavir International Centre Delhi Branch; Setting of paper for Sri Venkateswara Institute of Medical Sciences, Tirupati, Andhra Pradesh (2007); Awarded Fellowship of Indian Society of Nephrology; Fellowship National Academy of Medical Sciences; appointed Referee of Clinical Nephrology, Nephron, Nephrology Dialysis Transplantation journals.

Dr S.K. Agarwal was appointed member, editorial board, Journal of Delhi Medical Association, to be MCI inspector for inspection regarding DM Nephrology course in India in various university and medical colleges; selected to attended workshop as Subject expert as well as CDSCO Inspector, organized by The Drug Controller General (India), Directorate General of Health Services, Nirman Bhawan, New Delhi, India; to represent India during KDIGO (Kidney Disease: Improving Global Outcome) controversy conference on ‘Chronic kidney disease as global health problem: Approaches and initiative’, Amsterdam, 12–14 October 2006; as speaker for a workshop on ‘Identifying strategies for data collection in diabetes’, Indian Council of Medical Research, New Delhi with an aim to ascertain methods of data registration in different part of country at India International Centre, New Delhi, on 28–29 November 2006; Convener for starting Delhi Renal Transplant Registry; awarded Khullar Oration 2006, by Indian Society of Nephrology on the contribution on Tuberculosis in renal replacement therapy; organized multidisciplinary symposium on therapeutic drug monitoring conference, New Delhi; 2–3 February 2007 as co-chairman.

Dr S. Mahajan was selected member of the Guidelines Committee, Peritoneal Dialysis Society of India, first meeting held in Chennai, August 2006; awarded best paper at the Post World-Congress Satellite Meeting, Singapore, July 2005; Young Investigator Travel Grant award for the Congress of the International Society of Peritoneal Dialysis, Hong Kong, August 2006.

VISITING SCIENTISTS
Dr S.C. Tyagi, Professor of Biophysics, University of Louisville, Dr Sanjiv Sethi, Mayo Clinic, USA, Dr Sohail Ahmed, University of Washington DC, USA; Dr Jinmin Goan, Seoul, South Korea and Dr Min Park, Singapore visited the Department of Nephrology.
9.20 Nuclear Medicine

Professor and Head
A. Malhotra

Professors
G.P. Bandopadhyaya
G.S. Pant
C.S. Bal

Associate Professor
Rakesh Kumar

Assistant Professor (CNC)
Chetan D. Patel

Scientist IV
Snehlata

EDUCATION
The faculty participated in and delivered 25 lectures in various continuing medical education programmes, workshops, symposia and annual conferences during the year.

Participation
Dr Snehlata, participated as a faculty in international symposium on ‘Advances in diagnostic medical physics’ and workshop on ‘Cyclotron-PET/CT’, AIIMS, New Delhi; 13–16 July 2006.

RESEARCH
Completed
1. Irradiation induced chromosome aberrations and their use in biodosimetry. Dr. GS Pant. Funded by AERB, Mumbai for 3 years. Funds: Rs 10 lakh.
2. $^{188}$Rhenium-tin colloid synovectomy in refractory arthritic knee joints. Dr.Rakesh Kumar funded by AIIMS for 1 year. Funds: Rs 50,000.

Ongoing
1. To evaluate radiolabelling and efficacy of radiolabelled $^2$-cyclodextrin for infection imaging. Dr G.P. Bandopadhyaya. Funded by ICMR, New Delhi for 3 years. Funds: 45 lakh.
2. Synthesis and chemical characterization of different formulations of alginate-tamoxifen beads. Dr G.P. Bandopadhyaya. Funded by DST, New Delhi for 3 years. Funds: Rs 60 lakh.
3. Detection of silent ischemia in asymptomatic diabetes using myocardial perfusion imaging. Dr.Rakesh Kumar. Funded by IAEA, Vienna, Austria for 3 years. Funds Rs 4.05 lakh.

Departmental
Completed
1. Evaluation of cardiac function in patients receiving anthracycline therapy by 1st passes study and equilibrium radionuclide ventriculography

AIIMS 2006-2007 / 327
2. Usefulness of $^{99m}$Tc MAA lung perfusion imaging in patients post-BD Glenn and TCPC
3. Standardization of the preparation and quality control of $^{188}$Re-Tin-colloid for radiosynovectomy
4. Studies on development and analytical pharmacokinetics of polymeric radiopharmaceuticals under varied experimental conditions

**Ongoing**
1. Comparative analysis of $^{99m}$Tc MDP vs $^{18}$FDG and $^{18}$Fluoride PET-CT for detection of bone metastasis in Ca-breast/Ca-lung/Ca-prostate
2. Role of F-18 FDG in acute rheumatic heart disease
3. Correlation between cardiovascular autonomic function and indicators of myocardial ischemia in patients presenting anginal symptoms
4. Prevalence of symptomatic and asymptomatic coronary artery disease in stroke patients
5. Role of PET-CT in initial staging and post therapy assessment in patients of carcinoma ovary
6. Evaluation of $^{68}$Ga labelled peptides in evaluation of neuro-endocrine tumours

**PUBLICATIONS**

**Journals**


Books/proceedings


Chapters in Books


AIIMS 2006-2007 / 330
PATIENT CARE

Radionuclide investigations

Number

1. Radioactive Iodine Uptake (RAIU) 1,288
2. Perchlorate discharge test 15
3. $^{131}$I- Whole body scans 7,013
4. Dimercaptosuccinic Acid Scans (DMSA) 750
5. $^{32}$P-treatment 12
6. Ca-thyroid $^{131}$I- whole body scan 100
7. Thyrotoxicosis 320
8. DTPA/LLEC $^{99m}$Tc renal dynamic scan 3,850
9. Direct Radionuclide Cystourethrography (DRCG) 336
10. GER 750
11. GFR 1,470
12. Bone 3,000
13. $^{99m}$Tc HIDA 500
14. Thyroid scan 600
15. Liver scan 48
16. Meckel’s study 90
17. GI bleed 80
18. RBC mass survival 11
19. Lymphoscintigraphy 120
20. Pleuro peritoneal shunt scintigraphy 4
21. MIBG (diagnostic and therapeutic) 500
22. Venography 10
23. $^{153}$Samarium bone palliation 20
24. $^{89}$Yttrium synovectomy 20
25. $^{67}$Gallium 40
26. $^{99m}$TcDMSA-V 750
27. Radionuclide ventriculography (RNV) 1,272
28. Thallium scan 979
29. Tetrofosmin myocardial perfusion 141
30. Misc. (V/Q Ca Lung, PTH) 10
31. Brain SPECT 800
32. PET whole body 2,848
33. Brain glucoheptonate (GHA) 700

AWARDS AND HONOURS

1. Professor A. Malhotra was invited by the South African Medical Research Council for participation in CME and delivered lectures at University of Pretoria, Medunsa and University of Witwatersrand South Africa.

2. Professor G.P. Bandopadhayya has been nominated as member of Jury for Young Scientist Award by Madhya Pradesh Council of Science and Technology.

AIIMS 2006-2007 / 331
3. Prof. G.P. Bandopadhyaya has been nominated as Govt. of India’s representative on the committee for appointment of Vice-Chancellor of Manipal Academy of Higher Education.

4. Professor G.S. Pant has been awarded with Professor Cyril Jayachandran Oration by AMPI (TN-Pondicherry Chapter); September 2006.

5. Dr Rakesh Kumar ‘Alavi-Mandell Award’ by Society of Nuclear Medicine for best publication in *Journal of Nuclear Medicine*, USA, November 2006.

6. Dr Snehlata was invited by IAEA as an Expert for ‘Consultants’ meeting on ‘Establishing Safe Clinical Practice Using Long-Lived Generators’, IAEA HQtrs, Vienna, Austria; 4–7 September 2006,

**VISITING SCIENTISTS**
Professor Dr Roesch Frank, Institute of Nuclear Chemistry, Johannes Gutenberg-Universitat, Fritz Strassmann, Mainz, Germany October 2006 for 2 weeks.
9.21 Nuclear Magnetic Resonance

Professor and Head  
N.R. Jagannathan  
Associate Professor  
Rama Jayasundar (on leave)  
Assistant Professor  
S. Senthil Kumaran  
Scientist II  
Uma Sharma  
Scientist I  
Sujit Kumar Mewar

EDUCATION

Postgraduate
The faculty of the department participated in and delivered lectures for the course entitled ‘Structural biology and NMR technology’ of M.Biotech programme of the Department of Biotechnology.

Short- and long-term training
Eleven persons from medical and science disciplines from various institutes and universities from all over India and abroad underwent training in MRI and MRS techniques.

Continuing Medical Education
The faculty of the department participated in and delivered several lectures in CME programmes, symposia and conferences during the year.

Lectures delivered
Professor N.R. Jagannathan

- ‘Understanding the physiology and metabolism of living systems by magnetic
resonance imaging (MRI) and in vivo MR spectroscopy (MRS)’, National symposium on ‘21st Century research in biochemistry and biophysics’ University of Kalyani, Kalyani; 1–3 February 2007.


Dr S. Senthil Kumaran


Dr Uma Sharma


RESEARCH

Funded Projects

Ongoing


Departmental Projects

Ongoing

1. Development of novel pulse sequences for in vivo MR spectroscopy
Collaborative Projects

**Ongoing**
1. *In-vivo* MRI/MRS study of prostate cancer (with Urology and Pathology)
2. *In-vivo* and *in-vitro* study of breast cancer (with Surgery, Radiology and Pathology)
3. High-resolution 'H MR Spectroscopy of lymph nodes (with Surgery and Urology)
4. *In-vitro* MR spectroscopy studies of tissue extracts of breast cancer and prostate tumors (with Urology)
5. *In-vivo* and *in-vitro* NMR spectroscopy of soft tissue sarcoma (with IRCH)
6. *In-vitro* MR spectroscopy of colon tissue in patients of Crohn’s disease (with Gastroenterology)
7. Neuro-cognitive changes associated with perception, spatial orientation and coordinates in visually handicapped subjects, using functional magnetic resonance imaging (with RPC unit)
8. Functional MRI study in achalasia cardia patients (with Gastroenterology)
9. Neural mapping during stoop task of familiar faces (with Physiology)

**Completed**
1. High-resolution NMR spectroscopy of blood plasma in patients with cardiovascular disease (with Cardiology)
2. MRI/MRS studies to evaluate brain metabolism in sleep apnea patients (with Medicine)
3. *In-vivo* MRS of muscle in NIDDM patients (with Medicine)
4. MRI/MRS studies of brain metabolism in malnutrition (with Paediatrics)
5. $^{31}$P MRS study of skeletal muscle in patients of Duchenne muscular dystrophy (with Paediatrics)
6. Evaluation of neuroprotective agents in animal model of stroke using diffusion MRI (with Pharmacology)

**PUBLICATIONS**

**Review Articles**

**Journals**


Abstracts (Proceedings of International and National Conferences)


Chapters in Books


**PATIENT CARE**

The department has two 1.5 Tesla whole body MR scanners for patient care and research. The department provides twelve hours per day of patient care MRI services. The details of the number of patients scanned during this period.

Clinical diagnostic MRI scan : 4,630 patients
Research : 248 patients
AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor N.R. Jagannathan is the Deputy Editor of *Neuroscience Imaging*; Member Editorial Board *NMR Biomedicine*; elected President of the Indian Biophysical Society (IBS); Member, Swarnajayanthi Fellowship Award Committee, Department of Science and Technology (DST), Government of India; Member, Steering Committee of the Sophisticated Instruments Facilities (SAIFs) of Department of Science and Technology (DST), Government of India; Council Member, International Conference on Magnetic Resonance in Biological Systems (ICMRBS); Coordinator, Expert panel on ‘Biomedical devices and Bioengineering’, Life Sciences Research Board (LSRB), DRDO; Member, INSA combined committee for International Union of Pure and Applied Biophysics (IUPAB) and International Union of Crystallography (IUCr); Member, Facility Management Committee (FMC), Sophisticated Instruments Facility, Indian Institute of Science (IISc), Bangalore; Member, Program Advisory Committee (PAC), National Facility for High Field NMR, Tata Institute of Fundamental Research (TIFR), Bombay; Expert member for MRI of Government Medical Colleges, Assam; Expert member for MRI for Sher-i-Kashmir Institute, Srinagar, J&K.

The department organized the following events:


• A symposium on ‘Recent advances in MRI’ conducted on the occasion of the inauguration day of the department; 22 March 2007.
### 9.22 Obstetrics and Gynaecology

<table>
<thead>
<tr>
<th>Professor and Head</th>
<th>Suneeta Mittal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professors</td>
<td></td>
</tr>
<tr>
<td>Alka Kriplani</td>
<td>Sunesh Kumar</td>
</tr>
<tr>
<td>Additional Professors</td>
<td></td>
</tr>
<tr>
<td>Neerja Bhatla</td>
<td>Deepika Deka</td>
</tr>
<tr>
<td>Associate Professors</td>
<td></td>
</tr>
<tr>
<td>Neena Malhotra</td>
<td>Vatsla Dadhwal</td>
</tr>
<tr>
<td>Assistant Professors</td>
<td></td>
</tr>
<tr>
<td>J.B. Sharma</td>
<td>Neeta Singh</td>
</tr>
<tr>
<td></td>
<td>Pradeep Garg (ad hoc)</td>
</tr>
<tr>
<td>Scientist I</td>
<td>Rohini Sehgal</td>
</tr>
</tbody>
</table>

**EDUCATION**

*Undergraduate, Postgraduate, Paramedical (only innovations, changes, new courses)*

The Delhi Postgraduate Medical Education Forum (Department of Obstetrics and Gynaecology) is organizing monthly meetings for postgraduate training since 2001. These are 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- and long-term training**

The department offers short- and long-term training in various subspecialty subjects such as Gynaecology Endoscopy Surgery, High Risk Pregnancy, Gynaecology Oncology, and Gynaecology and Obstetrics Ultrasonography and Infertility.

**TRAIINERS AND FELLOWS**

*Long and Short term Fellowship and Elective training*

The department provided long term (6 months) fellowship training to 10 candidates and short term (10 days) training to 52 candidates from various states of India. The department also provided elective (1-5 weeks) training to 8 candidates from abroad (Germany-1, Canada-1, United Kingdom-6).

**Continuing Medical Education**

The department organizes a National Continuing Medical Education (CME) in Obstetrics and Gynaecology in collaboration with National Board of Examination and National Academy of Medical...
Sciences every 6 months. It is a unique, innovative modular teaching programme in which the MD syllabus is covered in 6 modules over 3 years. Series 2, Module 2 was held on 12–13 August 2006. The CME modules are attended by more than 200 students as well as senior gynecologists and is accredited by the Delhi Medical Council.

**Conferences, Seminars, Workshops**
- National CME in Obstetrics and Gynaecology (Module 2, Series 2), AIIMS; 12–13 August 2006.

**Lectures delivered**

**Dr Suneeta Mittal**
- ‘Practice on evidence-based medicine and interpretation of research evidence’ (12 August 2006), during the AIIMS Golden Jubilee Symposium cum Workshop on ‘Cutting edge technology in reproductive health’, National CME in Obstetrics and Gynaecology, AIIMS (Module 2); 10–13 August 2006.

**Dr Alka Kriplani**
- ‘Dysfunctional uterine bleeding’, Case presentation, 9th practical course and CME, Department of Obstetrics and Gynaecology, MAMC, Delhi; 4 August 2006.
• ‘Challenges in managing hirsutism’, CME, AICC-RCOG, North Zone and Apollo Hospitals, Delhi; 3 September 2006.
• ‘Endoscopy and hysterectomy’, CME XVI, Sant Parmanand Hospital, Delhi; 10 September 2006.
• ‘Hirsutism—cosmetic concerns’, CME, Federation of Obstetrics and Gynaecological Societies of India Youth Express, Obstetrics and Gynaecology Society of Northern India, Chandigarh; 24 September 2006.
• ‘Perimenopause—the roller coaster’ (Panel Moderator), CME, Indian Menopause Society and Fortis La Femme, Delhi; 15 October 2006.

Dr Sunesh Kumar

Dr D. Deka
• ‘Quality of semen—declining’, AIIMS Golden Jubilee Symposium cum Workshop on ‘Cutting edge technology in reproductive health’, National CME in Obstetrics and Gynaecology, AIIMS (Module 2); 10–13 August 2006.
Dr Neerja Bhatla

Dr K.K. Roy

Dr Neena Malhotra
- ‘Endoscopic tubal sterilization procedure’, Women’s Health Initiative training course in


Dr Vatsla Dadhwal


Dr Nutan Agarwal


Dr Neeta Singh


Dr J.B. Sharma


Dr Pradeep Garg

National and International Conferences
Organized by the department
4. Delhi Postgraduate Medical Forum meetings (every month), AIIMS.
7. ‘Cutting edge technology in reproductive health’, AIIMS; 10 August 2006.

Lectures delivered
Dr Suneeta Mittal
• ‘Post-MMA contraception’, Medical Methods of Abortion Experts Meet, Mumbai; 9 December 2006.
• ‘Subspeciality training—When and how?’, 50th All India Congress of Obstetrics and Gynaecology, Kolkata; 5–9 January 2007.
• ‘Medical abortion: Global and Indian experience’, Workshop on ‘Integrating medication abortion in public sector for increasing access to safe abortion care’, Ranchi; 9 January 2007.
• ‘Evolving concepts in pathogenesis of pre-eclampsia’, 2nd Annual Congress of Indian Academy of Nephrology and Delhi Nephrology Society Annual Update, AIIMS; 17 March 2007.

Dr Alka Kriplani
• ‘Diagnosis and management of intrauterine infections’, Clinical genetics course organized by the Departments of Genetics and Anatomy, AIIMS; 20 April 2006.
• ‘Operative endoscopy in infertility’, FOGSI certified Advanced training programme on ‘Gynaec endoscopy and endosuturing’, Jeevan Mala Hospital, Delhi; 11 May 2006.
• ‘Management of Rh-negative pregnancy’, PG Forum for DNB training—Holy Family Hospital, Delhi; 3 February 2007.
• ‘Controversies in management of endometriosis’, Recent advances in OBGYN, FOGSI Infertility Committee and Mother and Child Hospital, Delhi; 18–20 August 2006.
• ‘Complications of endoscopic procedures’, Panelist, Recent advances in OBGYN, FOGSI Infertility Committee and Mother and Child Hospital, Delhi; 18–20 August 2006.
• ‘Recent advances in managing Poly cystic ovarian syndrome (PCOS)’, North Zone—Yuva FOGSI, Meerut Obstetrics and Gynaecology Society, Meerut; 14 August 2006.
• ‘What is new in PCOS’, VIII World Congress and XVI Indian Conference on Reproductive and Child Health, NARCHI, Lucknow, 29 September 2006.
• ‘Laparoscopic sacrocolpopexy’ (video lecture), Association of Gynaecologist of Delhi (AOGD), Delhi; 18–19 November 2006.
• ‘Role of endoscopy in Gynaecology malignancies—current evidence’, 15 Annual Conference of Gynaecological Oncologists of India, Association of Gynaecology of India Conference
• ‘Fertility enhancing endoscopic surgeries’ Federation of Obstetrics and Gynaecological Societies of India (FOGSI) certified advanced training programme in Gynae Endoscopy and Endosuturing, Jeevan Mala Hospital, Delhi; 14 December 2006.
• ‘Gynae endocrine problems in Adolescents’; 17 Annual conference MOGS, Madurai Obstetrics and Gynaecology Society, Madurai, Tamil Nadu; 17 December 2006.
• ‘Endometriosis—the eternal enigma’, Panelist, 50th All India Congress of Obstetrics and Gynaecology (AICOG) 2007, Federation of Obstetrics and Gynaecological Societies of India (FOGSI), Kolkata; 6 January 2007.
• ‘Role of endoscopy in hysterectomy’, Nodus 2007, USV Pharma, Gurgaon; 24 February 2006.
• ‘Recent trends in management of Post Partum Haemorrhage (PPH)’, Sri Aurobindo Institute of Medical Sciences (SAIMS) and Indore Obstetrics and Gynaecology Society, Indore; 10 March 2007.

Dr Sunesh Kumar
• ‘Vulval Disorders’, MRCOG Part II course, AIIMS; 23 June 2006.

Dr D. Deka
• ‘Advances in fetal medicine’ and ‘Sudden intrauterine foetal demise’, Recent Advances in OBGYN, New Delhi; 18–19 August 2006.
• ‘Cervicovaginoplasty for vaginal agenesis while uterus is present’, First Conference of Association of Female Genital Reconstructive, Aesthetic and Microsurgeons of India, New Delhi; 10 September 2006.
• ‘Viral infection in pregnancy’, 4th World Congress of Perinatal Medicine for Developing Countries, Agra; 29 September–1 October 2006.
• ‘Peri-conceptional care’, monthly meeting of Noida Obstetrics and Gynaecological Society, Kailash Hospital, Noida; 28 October 2006.
• ‘Fertility and thalasaemia’, 5th National Thalassaemia Conference, Lady Harding Medical College (LHMC), New Delhi; 11 November 2006.
• ‘Workshop on prenatal diagnostic procedures’, Maulana Azad Medical College (MAMC), New Delhi; 20 November 2006.
• ‘First trimester screening chromosomal anomalies’, Societies of Obstetricians and Gynaecologists of Gujarat (SOGOG) 2006, Bharuch; 3 December 2006.
• ‘Cordocentesis’ and ‘Fetal endoscopy’, Precongress Workshop on USG and Foetal Medicine, AICOG, Kolkata; 5 January 2007.
• ‘Place of routine growth scan around 32 weeks’, 50th All India Congress of Obstetrics and Gynaecology (Golden Jubilee) (AICOG) 2007, Federation of Obstetrics and Gynaecological Societies of India (FOGSI), Kolkata; 8 January 2007.
• ‘Relationship of fetal nuchal cord at various periods of gestation to perinatal outcome: A prospective study’, 50th All India Congress of Obstetrics and Gynaecology (Golden Jubilee) (AICOG) 2007, Federation of Obstetrics and Gynaecological Societies of India (FOGSI), Kolkata; 8 January 2007.

Dr Neerja Bhatla
• ‘Phone-in karyakaram—Mahilaon mein Banjhpan’, All India Radio, New Delhi; 24 August 2006.

Dr K.K. Roy
• ‘Stress-induced abortion and its management’, Sunder Lal Jain Charitable Hospital, New Delhi; 13 April 2006.
• ‘Record keeping in obstetrics and gynaecology’, AICOG conference, Kolkata; 6–8 January 2007.

Dr Vatsla Dadhwal
• ‘Prevention of parent to child transmission of HIV infection: Recent developments’, Recent advances in the management of HIV/AIDS, AIIMS UCLA collaborative project, AIIMS; 7 October 2006.
• ‘Impact of reproductive tract infections, sexually transmitted infection and HIV on maternal and child health’, Masters training course for nurse supervisors on safe motherhood, Delhi, The Trained Nurses Association of India; 4 April 2006.

Dr Nutan Agarwal
• ‘Spontaneous vesicovaginal fistula due to genitourinary aspergillosis : extremely rare case’, Clinical Scientific Meeting of Association of Obstetrician and Gynaecologist of Delhi; 25 August 2006.
• ‘Interpretation of TORCH tires and management of TORCH infection during pregnancy’, Clinical scientific meeting of Obstetrician and Gynaecologists of Jhansi, Jhansi; 4 September 2006.
• ‘Recent advances in management of ectopic gestation’, VIth Yuva Federation of Obstetrics and Gynaecological Societies of India (FOGSI) North Zone, Meerut; 14 October 2006.

AIIMS 2006-2007 / 350
Dr J.B. Sharma
- ‘Role of Tension-free Vaginal Tape (TVT) in SUI’, Female Genital Reconstructive Aesthetic and Microsurgery Workshop, New Delhi; 10 September 2006.
- ‘Genital prolapse’, 50th All India Congress of Obstetrics and Gynaecology (AICOG), Kolkata; 6–9 January 2007.

Dr Neeta Singh

RESEARCH
Funded Projects
Completed

6. Levels of interleukin (IL-8) and leptin in peritoneal fluid of Indian women with endometriosis. Neena Malhotra. Funded by AIIMS Research Grant for one year. Funds: Rs 40,000.

**Ongoing**

1. Prevention of parents to child transmission of HIV. Suneeta Mittal. Funded by Delhi State AIDS Control Society (ongoing long project). Funds: Rs 50,000.

2. Phase I Clinical trial of once weekly administration of 50 mg mifepristone as oral contraceptive. Suneeta Mittal. Funded by Indian Council of Medical Research (ICMR) (long project). Funds: HRRC funds.


Departmental Projects

Completed
1. Evaluation of single session management of cervical intraepithelial neoplasia in VIA VILI- positive colposcopically abnormal patients by LEEP
2. A RCT of prophylactic sublingual misoprostol, I/M methergin and I/M PGF₂α for active management of 3rd stage of labour
3. Perinatal outcome in fetuses with sonographic diagnosis of nuchal cord
4. Comparison of single vs. double IUI in unexplained and mild male factor infertility
5. A comparative evaluation of sperm morphology in epididymial and testicular aspirates in men with obstructive azoospermia
6. Doppler velocitometry in middle cerebral artery, thoracic aorta, umbilical artery and ductus venosus in IUGR patients and fetal estimation of birth weight using two dimensional in comparison to three dimensional ultrasonography
7. Evaluation of laparoscopic occlusion of uterine artery with uterine artery embolisation in management of symptomatic fibroids

Ongoing
1. Detection and quantification of fetomaternal hemorrhage (FMH) following deliveries in Rh-ve non immunized pregnancy by KBT, flow cytometry
2. Comparison of harmonic scalpel with bipolar cautery in laparoscopic assisted vaginal hysterectomy
3. A comparative study of VIA, cyto diagnosis, HPC testing and colposcopy as tools for cervical cancer screening
4. Screening with cytology, visual inspection, acetic acid and Lugol’s iodine for early detection of cervical neoplasia and comparative evaluation of single- versus double-freeze cryotherapy technique in the treatment of cervical intraepithelial neoplasia
5. Conscious pain mapping: A new technique of laparoscopy for evaluation of chronic pelvic pain
6. The effect of warmed and humified carbon dioxide pneumoinsufflation on intraoperative and postoperative pain in laparoscopic surgery
7. Doppler assessment in various fetal vessels and fetal weight estimation using antenatal soft tissue thickness in intra uterine growth restriction with normal pregnancies
8. Prevention of uterine atony during cesarean section: Randomized comparison of sublingual misoprostol versus syntocinon
9. To study the efficacy of uterine biophysical profile, antral follicle count and ovarian diameter in predicting outcome in infertile women on ovulation induction
10. Value of routine antenatal screening ultrasonography at 24–28 weeks of gestation
11. Effect of intraperitoneal bupivacaine in reducing postoperative pain after laparoscopic gynaecological surgery

AIIMS 2006-2007 / 353
12. Endometrial changes and ovarian function in women with early breast cancer
13. Evaluation of MRI in diagnosis of fetal congenital anomalies
14. A randomized study to compare two surgical technique of laparoscopic stripping of ovarian endometrioma
15. Feasibility of virtopsy: minimally invasive autopsy using ultrasonographic imaging and percutaneous organ biopsies as an alterantive to open body autopsy in fetal abnormality
16. Role of middle cerebral artery—Peak systolic velocity in predicting fetal anemia in Rh isoimmunisation after previous intrauterine transfusions
17. Use of letrozole versus climphene citrate combined with gonadotrophin in superovulation and IUI cycles.
18. Hyperhomocystenemia: In unexplained recurrent pregnancy loss and therapeutic response to vitamin $B_6$, $B_{12}$ and folic acid
19. Prophylactic administration of micronized progesterone in prevention 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. Evaluation of benefit of FDG-PET in staging and management of ovarian malignancies
22. Correlation of stage and imaging of endometriosis with fertility outcome
23. Role of messenger RNA PCR in the diagnosis of genital tuberculosis in infertile women
24. Comparison of uterine and radial artery flow changes detected by pulse doppler in women undergoing stimulated intrauterine insemination for unexplained infertility
25. To compare 3 different time regimen of vaginal misoprostol after oral mifepristone for medical abortion

### Collaborative Research

#### Ongoing

1. Development of human papillomavirus vaccine prototype/s—molecular epidemiology of HPV types prevalent in India and Identification of HPV-16 L1 and E6 variants (with Biochemistry)
2. Apoptosis in placental membranes in pre-eclampsia: An immunohistochemical study (with Anatomy)
3. PEARL study (post menopausal evaluation and risk reduction with lasofoxifene) (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 fetal liver hematopoietic stem cell line. (with Medical Oncology, IRCH)
8. To study the subset of antiphospholipid syndrome defined by anti-beta-2 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)
13. Evaluation of ovarian function in female patients with multi-bacillary leprosy (with Dermatology and Venereology)
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)
17. Diabetes mellitus and vulvo vaginal candidiasis: Prevalence and its rational management (with Endocrinology)
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-secretary endometrial cells grown on rat-tail collagen matrix (with Physiology)
20. Effect of progesterone on hsp 27 expression in human, mid-secretary stage endometrial cells grown on collagen matrix in vitro (with Physiology)

PUBLICATIONS


53. Sharma JB. Role of calcium supplementation is very limited in improving bone mineral density in all age groups. BMJ; 13th Oct 2006.


**Chapters in books**


**PATIENT CARE**

Hospital care: Facilities available with department includes special clinic and special laboratory facilities besides the regular Gynaecology OPD which is held every day. The following special clinics are held.

<table>
<thead>
<tr>
<th>Clinics</th>
<th>Number of patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. General OPD</td>
<td>6/week</td>
</tr>
<tr>
<td>2. High-risk pregnancy clinic</td>
<td>3/week</td>
</tr>
<tr>
<td>3. Gynaecological endocrine clinic</td>
<td>3/week</td>
</tr>
<tr>
<td>4. Gynaecological cancer clinic</td>
<td>2/week</td>
</tr>
<tr>
<td>5. Post-natal clinic</td>
<td>3/week</td>
</tr>
<tr>
<td>6. Medical termination of pregnancy clinic</td>
<td>6/week</td>
</tr>
<tr>
<td>7. Family welfare clinic</td>
<td>6/week</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Clinics</th>
<th>Number of patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. General OPD</td>
<td>6/week New: 26,511 Old: 36,831</td>
</tr>
<tr>
<td>7. Family welfare clinic</td>
<td>6/week New: 2,400 Old: 3,500</td>
</tr>
</tbody>
</table>
### Operations performed

#### Gynaecological

**Major**
- Surgery for benign diseases: 1,227
- Oncology surgery: 198
- Infertility: 580
- Endoscopic surgeries: Laparoscopy: 1,519
- Hysteroscopy: 106
- Plastic surgery: 65

**Minor**
- Dand C/EA: 2,080
- Colposcopy/cryo/LEEP: 265
- Diagnostic hysteroscopy: 980
- MTP: 1,003
- Pap smear: 3,092
- Cervical biopsies: 392

#### Obstetrics

**Major**
- LSCS: 707
- Emergency laparotomies: 58

**Minor**
- Operative vaginal deliveries: 138
- Vaginal deliveries: 1,786

#### Fetal medicine

- Cordocentesis: 90
- Chorionic villus sampling: 102
- Amniocentesis: 121
- Intra utero infusion: 60
- High-risk obstetrics
  - Obstetric ultrasound: –
  - NST: 3,800
  - BPP: 2,500
- Gynae ultrasound: 3,500
- Ovarian cyst aspirations: 55

#### Laboratory investigations

- Urine pregnancy test: 2,500
- Haemoglobin: 3,480
- Blood groups: 3,200
- Urine albumin/sugar: 47,000
POST PARTUM PROGRAMME
The Post-partum programme (PPP) is a maternity-centred, hospital-based approach to family welfare programme by providing a package of RCH and family welfare services within 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 Anaesthesiology.

Achievement of different family planning methods, Postpartum Programme (2006–2007)

<table>
<thead>
<tr>
<th>Methods</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper T</td>
<td>622</td>
</tr>
<tr>
<td>Oral pills (13 cycles=1 user)</td>
<td>287</td>
</tr>
<tr>
<td>Conventional contraceptives (72 pieces=1 user)</td>
<td>65,414</td>
</tr>
<tr>
<td>Sterilisation</td>
<td></td>
</tr>
<tr>
<td>(a) Tubectomy</td>
<td>697</td>
</tr>
<tr>
<td>(b) Vasectomy</td>
<td>31</td>
</tr>
</tbody>
</table>

Note: Family Planning Methods are free of target.

Maternal and Child Health (MCH) Performances (2006–2007), Postpartum Programme

<table>
<thead>
<tr>
<th>Services</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pregnant Women</td>
<td></td>
</tr>
<tr>
<td>TT (Mothers) (2nd or booster) (1,181)</td>
<td>1,387</td>
</tr>
<tr>
<td>Children (0–1) year</td>
<td></td>
</tr>
<tr>
<td>DPT (3rd dose)</td>
<td>1,169</td>
</tr>
<tr>
<td>Polio (3rd dose)</td>
<td>1,190</td>
</tr>
<tr>
<td>BCG</td>
<td>2,265</td>
</tr>
<tr>
<td>Measles</td>
<td>1,289</td>
</tr>
<tr>
<td>Children (under 5 years)</td>
<td></td>
</tr>
<tr>
<td>DT</td>
<td>650</td>
</tr>
</tbody>
</table>

COMMUNITY SERVICES/CAMPS
The faculty of the department participated in community awareness programmes through public education talks in radio, phone-in programmes and panel discussions on AIR and allied TV channels.
Cancer detection camp at Janak Puri, New Delhi, in collaboration with Rotary Club; 3 December 2006.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

**Dr Suneeta Mittal** is the Editor, *Reproductive Health Library*, WHO; Chairperson, North Zone, ISOPARB; Fellow of Royal College of Obstetrics and Gynaecology, London; Vice-President, Federation of Obstetricians and Gynaecologists of India; Vice-President, Indian Society for Study of Reproduction and Fertility; Short-term Consultant for Technical assistance to WHO on Safe abortion in DPR Korea.

**Dr Alka Kriplani** is the Editor, *Asian Journal Obs and Gynae Practice*; Vice President, North Zone, IMAGES (Indian Society of Minimal Access and Gynaecological Endoscopic Surgery) 2003–continuing; Member, Governing Council, ICOG (2006–2008).

**Dr Sunesh Kumar** is the Member of the Project Advisory Committee on Screening for common cancers in three districts of Himachal Pradesh being conducted by Indian Council of Medical Research (ICMR).

**Dr Deepika Deka** is elected Chairman of Genetic and Foetal Medicine Committee, FOGSI, September 2006 for 2007–2010; Joint Secretary, Indian Society for Prenatal Diagnosis and Therapy (ISPAT) since February 2006; Honorary Secretary, Delhi Society for Prenatal Diagnosis and Therapy (DESPAT).

**Dr Neerja Bhatla** is elected Member, Advisory Group, Strategic Assessment of Cervical Cancer Prevention and Treatment programme in 3 districts in U.P.

**Dr Nutan Agarwal**

- First prize in poster presentation on ‘Clinical significance of TORCH titres in high risk pregnancies’, Annual Conference of National Association of Reproduction and Child Health of India (NARCHI); September 2006 (as coauthor).
- Second prize in poster presentation on ‘Role of doppler indices in foetal-vessels umbilical artery, middle cerebral artery, thoracic aorta and ductus venosus in IUGR’. 28 Annual Conference of Association of Obstetrics and Gynaecologists of Delhi, New Delhi; 18–19 November 2006 (as chief author).
- First prize in paper presentation on ‘Single visit approach using VIA/VILI and LEEP at 15 Annual Conference of AGOICON, New Delhi; 25–26 November 2006 (as co-author).
- Awarded ‘Rhogam Research Grant’ for year 2006 from FOGSI for best project on Rh isoimmunized pregnancies: Intra-amniotic immunoglobulin therapy in Rh isoimmunized pregnancies.
- Awarded Dr Jagadiswari Misra first prize for poster on Official theme ‘Treatment of proximal tubal block by laparoscopy guided hysteroscopic tubal cannulation’ as chief author at 50th AIIMS 2006-2007 / 363
All India Congress on Obstetricians and Gynaecologists, Kolkata; 5–9 January 2007.

• Awarded Fellowship of Geriatric Society of India (FGSI); October 2006.
• Awarded Academic Fellowship for Indian College of Obstetrics and Gynaecology–FICOOG; January 2007.

Dr J.B. Sharma won Overseas Fund of RCOG, London of 1000 Pounds to visit the Department of Gynaecology and Urogynaecology at Mayday University Hospital, Croydon, UK (18–23 September 2006); Fellowship of Royal College of Obstetricians and Gynaecologists, London, UK (29 September 2006); Editor, Obstetrics and Gynaecological Today, A speciality national journal, published from Delhi; Associate Editor, International Journal of Gynaecology and Obstetrics, India, New Delhi; Associate Editor, Indian Journal of Gynaecological Endoscopy, New Delhi; Associate Editor, Asian Journal of Obstetrics and Gynaecology; Associate Editor, Indian Medical Journal.

The department has
1. established Endoscopy Centre for Training Course on Minimally Invasive Gynaecology under Women’s Health Initiative
2. constructed Assisted Reproductive Technology (ART) Centre at the Department of Obstetrics and Gynaecology.

VISITING SCIENTISTS
1. Dr T.C. Cameron, The Princess Anne Hospital, Southampton, SO16 5YA
2. Mr Anthony Hollingworth, Whipps Cross University Hospital, UK.
3. Dr Stephen Kennedy, University of Oxford, UK
4. Dr Katherine Ba-Thike, Department of Reproductive Health and Research (RHR), WHO, Switzerland
5. Dr Rohit Sharma, Ipswich Hospital, UK.
**9.23 Orthopaedics**

<table>
<thead>
<tr>
<th>Professor and Head</th>
<th>Surya Bhan</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Professors</strong></td>
<td></td>
</tr>
<tr>
<td>Prakash P. Kotwal</td>
<td>Shishir Rastogi</td>
</tr>
<tr>
<td></td>
<td>Arvind Jayaswal</td>
</tr>
<tr>
<td>Rajesh Malhotra</td>
<td></td>
</tr>
<tr>
<td><strong>Additional Professor</strong></td>
<td></td>
</tr>
<tr>
<td>Hira Lal Nag</td>
<td></td>
</tr>
<tr>
<td><strong>Associate Professors</strong></td>
<td></td>
</tr>
<tr>
<td>Ravi Mittal</td>
<td>Chandrashekhar Yadav</td>
</tr>
<tr>
<td><strong>Assistant Professors</strong></td>
<td></td>
</tr>
<tr>
<td>Shah Alam Khan</td>
<td>Vijay Kumar</td>
</tr>
</tbody>
</table>

**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.

The department holds regular undergraduate and postgraduate teaching in the form of lectures, bedside teaching, assessment and clinicopathology seminars.

**Continuing Medical Education**

**Lectures delivered**

**Dr P.P. Kotwal**

- ‘Proximal humerus fractures and shoulder replacement’, Knee and Shoulder Symposium, G.M. Modi Hospital, New Delhi; April 2006.
- ‘Carpal tunnel syndrome’, Instructional Course in Hand Surgery, Mahabaleshwar, Maharashtra; April 2006.
- ‘Tendon reconstruction in the no man’s land’, Instructional Course in Hand Surgery, Mahabaleshwar, Maharashtra; April 2006.
- ‘Radial club hand’, Instructional Course in Hand Surgery, Mahabaleshwar, Maharashtra; April 2006.
- ‘Fracture of the scaphoid’, Instructional Course in Hand Surgery, Mahabaleshwar, Maharashtra; April 2006.
- ‘Fractures of the scaphoid—when to fix’, Trauma up-date, Amritsar; October 2006.
‘Basic principles in the management of flexor tendon injuries’, National Postgraduate Instructional Course, Bhopal; December 2006.

‘Principles in the management of paralysed hand, including leprosy’, National Postgraduate Instructional Course, Bhopal, December 2006.


‘Carpal tunnel syndrome’; National Hand Course, CMC Vellore; February 2007.

‘Role of research section in the implementation of research projects’, AIIMS, Workshop on ‘Fundamentals of clinical research methodology’; February 2007.


‘Management of the paralytic hand (including leprosy)’, Pune Orthopaedic Instructional Course, Pune; March 2007.

Dr A. Jayaswal


‘Rigid scoliosis—How I manage it’, Association of Spine Surgeons of India (ASSI) and European Spine Society (ESS), Combined Instructional Course in Spine, Hyderabad; 4–6 August 2006.

‘Failed back syndrome—surgeons failure?’, Association of Spine Surgeons of India (ASSI) and European Spine Society (ESS), Combined Instructional Course in Spine, Hyderabad; 4–6 August 2006.


‘MAST—lumbar instrumentation and interbody fixation’, Workshop on ‘Minimally invasive surgery’, Association of Spine Surgeons of India (ASSI) and European Spine Society (ESS), Combined Instructional Course in Spine, Hyderabad; 5 August 2006.


AIIMS 2006-2007 / 366
· ‘Microendodiscectomy (MED)’, AO Spine Course, Guwahati; 22 September 2006.
· ‘Minimally invasive interbody fusion’, Faculty at Elevating Best Practice in Spine, Ahmedabad; 8 October 2006.
· ‘Micro endoscopic discectomy’, Operative Spine Course of Asia Pacific Orthopaedic Association (APOA), Coimbatore; 8–11 March 2007.

Dr R. Malhotra
· ‘Medical management of osteoarthritis—the way ahead’, New Delhi; 5 August 2006.
· ‘Templating’, Delhi Arthroplasty Course (Basic), Ethicon Institute of Surgical Education New Delhi; 19 August 2006.
· ‘Valgus knee—tips for correction’, Delhi Arthroplasty Course (Basic), Ethicon Institute of Surgical Education New Delhi; 19 August 2006.
· ‘Advances in the management of degenerative joint disorder’, New Delhi; 12 August 2006.
· ‘Physeal injuries’, North East Region Orthopedic Surgeons Association (NEROSA), 10th CME of NEROSA (National Science Association), Guwahati; 3 September 2006.
· ‘Nonunion and malunion of paediatric fractures’, North East Region Orthopedic Surgeons Association (NEROSA), 10th CME of NEROSA (National Science Association), Guwahati; 3 September 2006.
· ‘Osteoporosis’, Indian Medical Association, College for General Practitioners, Silver Jubilee Refresher Course, Kanpur; 5 November 2006.
NATIONAL AND INTERNATIONAL CONFERENCES
Organized by the department

Lectures delivered
Dr P.P. Kotwal

- ‘Fracture of the scaphoid’, South Delhi Orthopaedic Forum; April 2006.

Dr A. Jayaswal


Dr R. Malhotra
· ‘Charcot foot’, International Federation of Foot and Ankle Society, Agra; 13 October 2006.
· ‘Brittle bones (Osteoporosis)’, AIIMS, New Delhi; 21 April 2006.

Dr Ravi Mittal
· ‘Imaging of knee’, Delhi Orthopaedic Association (DOA) meeting, AIIMS, New Delhi; 1 April 2006.
· ‘Open Bankart repair’, Live demonstration and workshop on ‘Arthroscopy of knee and shoulder’ Base Hospital, Delhi Cantt; 13–14 May 2006.
· ‘Postero-lateral corner injuries’, Knee Symposium 2006, Sant Parmanand Hospital, Delhi; 6 August 2006.

Dr Shah Alam Khan
· ‘Attended the MRCS examiners course’, organized by the Royal College of Physicians and Surgeons of Glasgow, New Delhi, India; 20–21 May 2006.

Dr C.S. Yadav
· ‘Aggressive management of infected THR (Total Hip Replacement)’, Asia Pacific Orthopaedic Association Conference; 25–27 August 2006.
· ‘Management of infected TKR’, Workshop on Primary TKR, Hospital 51st Annual Conference of Indian Orthopaedic Association (IOACON 2006), 13 November 2006.

Dr Vijay Kumar
· ‘Total hip replacement in acetabular fractures’, 51st Annual Conference of Indian Orthopaedic Association (IOACON), New Delhi; 9-15 November 2006.

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’. A. Jayaswal. Funded by Indian Council of Medical Research (ICMR) for 3 years (23 December 2004 to 22 December 2007). Funds: Rs 9.47 lakh
2. Clinical and electrophysiological recovery following endoscopic versus open carpal tunnel release for carpal tunnel syndrome. R. Malhotra. Funded by Indian Council of Medical Research (ICMR) for 3 years (June 2003 onwards). Funds: Rs 21 lakh.
5. Biodegradable polymer composite bone scaffolds by microcellular injection mould technique. Shah Alam Khan. Funded by Department of Science and Technology, Government of India (with IIT, Delhi) for 5 years (2006-2011) Funds: Rs 25 lakh per year.

**Departmental Projects**

**Completed**
1. Giant cell tumors of bone—A clinicopathological study
2. Outcome of results in minimally invasive spinal fusion in various disorders of thoracic and lumbar spine
3. Evaluation of results of cementless and hybrid tibial hip arthroplasty in young adults
4. Fixed bearing vs. mobile bearing total knee arthroplasty. A comparative analysis of PFC rotating platform and PFC sigma (fixed bearing) at minimum follow up of one year
5. Arthroscopic and MRI correlation of meniscus lesions occurring in ACL deficient?

**Ongoing**
2. Short and midterm results following total knee arthroplasty with posterior stabilized mobile bearing prosthesis: A retrospective and prospective study
3. Femoral head vascularity after surface arthroplasty of the hip
4. Effects of intra-articular pressure, posterior communication and Gardens’ alignment index on the management of intracapsular femoral neck fracture
5. Assessment of functional outcome after arthroscopically assisted mini open rotator cuff repair
6. Comparative study between Interlock nailing and MIPPO using locking compression plate in fracture shaft of tibia

**PUBLICATIONS**

**Journals**


17. Khan SA. The way I see it: New visa regulations for IMGs are a blessing in disguise. *BMJ (Career focus)* 2006;333.


AWARDS, HONOURS AND SIGNIFICANT EVENTS

Dr P.P. Kotwal Member, Technical Specification Committee for procurement of equipment for JDWNR Hospital, Thimpu and Regional Referral Hospital, Mongar, Bhutan; 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; He delivered Medical Briefings to the members of the Indian Expedition Team to Antarctica; delivered a talk on ‘Medical problems in Antarctica’, National Scientific Hindi Symposium organized by the Ministry of Earth Sciences, India, on completion of 25 years of Indian Antarctica Expedition, New Delhi (November 2006); felicitated at the Silver Jubilee Conference of the MP Chapter of Indian Orthopaedic Association held at Gwalior for contribution to the field of Orthopaedics (October 2006); He was nomination as Faculty Expert for Freezing of Equipment Specifications for setting up of 6 new AIIMS like Institutions and upgradation of 13 existing Government Medical Institutions under PMSSY (February 2007); Presided over the Inaugural function of the Indo-US Emergency Medicine Summit 2006, with Smt. Shiela Dikshit, Chief Minister of Delhi as Chief Guest (September 2006); Chaired a session ‘Meet the Medical Superintendent of Delhi Hospitals’ during the Indo-US Emergency Medicine Summit 2006, at New Delhi (September 2006); nominated by the Principal Scientific Advisor to the Govt. of India as Chairman of a Project Review and Monitoring Committee for a Project on the setting up of an ‘ORTHO-CAD Network Centre for Endo-prosthetic Skeletal Reconstruction System’ for three years (from February 2007); nominated as Faculty member for the 1st Regional A.O. Advanced Course, organized by the A.O. International, held at Chiang Mei, Thailand (25–30 April 2006); President, Delhi Orthopaedic Association November 2005–December 2006; nominated as an Expert by the Federation of Indian Chambers of Commerce and Industry (FICCI) to evaluate FICCI Awards in the field of ‘empowerment of the physically handicapped’ (2005-2006); Member, Selection Committee at UCMS and GTB Hospital, Delhi to select Senior Resident in Orthopaedics (June 2006); Member, Selection Committee of Union Public Service Commission to select Orthopedic Surgery Specialists Grade II (June 2006); Member, Selection Committee of the North Eastern Indira Gandhi Regional Institute of Health and Medical Sciences, Shillong to select Professor, Associate Professor and Assistant Professors in Orthopaedics; Chairman, Critical Care Committee for prevention and management of Dengue, AIIMS (October 2006); Chairman, Death Review Committee (Casualty) at AIIMS, New Delhi (November 2006); Member, Committee to streamline the research work in HIV positive patients undergoing treatment at the ART clinic at AIIMS (May 2006); Member, Committee for evaluation of Expression of Interest in developing new Heart Valve design (July 2006); Member, Patent Committee (July 2006–07); Member, Committee to discuss the issue of Patent at AIIMS, New Delhi, (September 2006); Appointed an Inspector by the Medical Council of India to inspect the Department of Orthopaedics at Shri Guru Ram Das Institute of Medical Sciences, Amritsar (July 2006); Professor-in-Charge, Research Section (continued). He was elected Chairman—Selection Committee for Technical Staff (Research)—continued; Selection Committee to select Junior Physiotherapist/Occupational Therapists (May 2005); Departmental Promotion Committee
(DPC) to consider the candidates to the posts of Technical Officer (Laboratory), January 2006; Vice-Chairman, Research Committee (continued); Member—Dean’s Committee (continued), Staff Council (continued), Institutional Ethics Committee (continued), Institutional Ethics Committee for Experimental Research (continued), special Invitee to the Academic Committee; Officiating Dean (18 January 2007). Nominated as a Resource Person by the Department of Social Welfare and Health, Govt. of Sikkim, to participate in a Corrective Surgery Camp for the Orthopaedically disabled persons; held at Gangtok, Sikkim, (April 2006); Chairman, Workshop Committee, during the 51st Annual Conference of the Indian Orthopaedic Association held, New Delhi (November 2006).

Dr A. Jayaswal selected Member of Board of Directors of World Spine Society (WSS); Executive Committee Member, Pacific Asia Society for Minimally Invasive Spine Surgery (PASMISS); Asian Academy of Minimally Invasive Spine Surgery (AAMISS); Spine Section of Asia Pacific Orthopaedic Association (APOA); World Society for Endoscopic, Navigated and Minimally Invasive Surgery (WENMISS); President of Association of Spine Surgeons of India (ASSI); President of Delhi Spine Society; Vice President Spinal Cord Society; International Spinal Cord Society (ISCOS), Elected President of Association of Spine Surgeons of India (ASSI); Invited Faculty to ‘Spine Trauma Laboratory 2006’, Leipzig, Germany (7–9 December 2006); International Spine Conference, India–Asia Pacific Orthopaedic Association (APOA), Khajuraho and Coimbatore; nominated Course Coordinator for Conducting 6 Spine Courses and Spine CMEs in India by Musculoskeletal Education and Research Centre, USA, Chennai, Bangalore, Mumbai and Chandigarh; nominated Course Coordinator for Conducting Spine CMEs and Workshops under aegis of the ‘Elevating best practice in spine’, at Ahmedabad, Delhi, Pune; Examinership, Nagpur University, Punjab University, Karachi University (Pakistan); Editorial Article reviewer—*Current Orthopaedics and Related Research* (CORR), *Indian Journal of Orthopaedics*.

Dr R. Malhotra was Internal Examiner for MS (Orthopaedics) in All India Institute of Medical Sciences, New Delhi (9–15 December 2006); Member of working group for ‘ICMR–WHO Workshop on Development of a feasibility Modules on Road Traffic Injury Surveillance’, New Delhi (11–12 July 2006); Member of ‘Advisory Group for Research in Accidents and Injuries (AGRAI) by ICMR’, New Delhi (2007); Member of ‘Staff Council’, All India Institute of Medical Sciences, New Delhi (9 January 2007); Member of Constitution of the Committee on Tele Medicine, AIIMS for the year 2006–07; Member of Reconstitution Hospital Infection Control Committee for year 2005–2006 (2006–07); Moderator for Change paradigms in the management of osteoporosis Conference (IOACON) symposium on ‘Type of bone grafts’, New Delhi (12 November 2006); Chairman Scientific Session for the ‘Total knee replacement’, during IOACON 2006, Safdarjung Hospital, New Delhi (13 November 2006); Convener Orthopaedic Initiative for the Executive Body of ISBMR (Indian Society of Bone Mineral Research) New Delhi (26 February 2007); Chairman Scientific Session on the ‘Metabolic bone diseases’ in India International Centre, Max Muller Marg, New Delhi (26 February 2007); Chairman Scientific Session on the
Arthroplasty ‘A millennium challenge’, Mumbai (10–11 March 2007); Chairman Scientific Session on the ‘Different approaches and exposures, acetabular fractures’, AO Alumni Association India Symposium, 9th Annual Meeting, Kolkata (4–5 January 2006); Adjunct Faculty CMET, AIIMS; Editor, Orthopaedics Today; Review referee for the Indian Journal of Orthopedics; Review referee for the Indian Journal of Pediatrics; Review referee for the National Medical Journal of India.

**Ravi Mittal** Live demonstration and workshop on ‘Arthroscopy of knee and shoulder’, Base Hospital, Delhi Cantt (13–14 May 2006); Faculty at Shoulder and Advanced Arthroscopy workshop IOACON 2006, New Delhi (14 November 2006); Examiner at Final MBBS, Patiala Medical College (December 2006); Organization of IOACON 2006, New Delhi; Reviewer for the Indian Journal of Orthopaedics.

**Dr Shah Alam Khan** awarded the Honorary Fellowship of the Royal College of Surgeons and Physicians of Glasgow; selected provisionally to the elite panel of examiners for the Intercollegiate Membership Examination of the Royal Colleges of Surgeons of UK.

**Dr C.S. Yadav** elected Executive Member of Indian Orthopaedic Association; Joint Replacement fellowship at Brisbane and Sydney, Australia; 20 September to 3 November 2006; Project Review Committee, ICMR (12 December 2006).
9.24 Otorhinolaryngology (ENT)

Professor and Head
Ramesh C. Deka

Professors
Sudhir Bahadur
Suresh C. Sharma

Associate Professors
Kumud K. Handa
Alok Thakar

Assistant Professors
Rakesh Kumar
Venkatakarthikeyan C.

EDUCATION
The departmental faculty has actively participated in the academic activities of undergraduate, postgraduate and paramedical teaching.

The department has developed an undergraduate (MB,BS) teaching manual. It provides short and long term training to national and international doctors and audiologists every year.

Continuing Medical Education
Organized by the department

- The department organized and hosted the monthly meeting of the Delhi Chapter of Associations of Otolaryngologists of India, AIIMS; July 2006.
- The department in collaboration with Ministry of Social Welfare, organized a ‘Surgical workshop on ear diseases’, Sir Thadop Namgyol Memorial Hospital (STNM) Hospital, Gangtok (Sikkim); 28–30 November 2006. Dr Rakesh Kumar participated in the CME and conducted 19 otologic surgeries.

Lectures delivered
Professor R.C. Deka


Professor Sudhir Bahadur
· ‘Surgical treatment of carcinoma of tongue’, Postgraduate teaching workshop, Cochin; March 2007.

Dr K.K. Handa
· ‘Medical and surgical indications of Phonosurgery’, Phonosurgery and laser course, Lucknow; 8–9 April 2006.
· ‘Videostroboscopy; principles and application’; Phonosurgery workshop, Latur Maharhastra; 1–2 July 2006.

Dr Alok Thakar
· ‘Management of vertigo—moving beyond labyrinthine suppressants’, Medical College, Kota; 23 April 2006.
· ‘Advanced laryngeal cancers’, Head and Neck Oncosurgery 2007, KEM Hospital, Mumbai; March 2007.
· ‘Basic stapedotomy’, Recent Advances in Otology (Theme-stapes surgery), Guru Tegh Bahadur Hospital, New Delhi; March 2007.

Dr Rakesh Kumar

Dr C. Venkatakarthikeyan
· ‘Radicular cyst of right maxilla—residual cyst arising from infection of temporary right upper lateral incisor in childhood’, Association of Otolaryngologists of India, Delhi Chapter, AIIMS; July 2006.
· ‘Cochlear implantation—an overview’, Guwahati Medical College, Guwahati, Assam; 17 March 2007.

NATIONAL AND INTERNATIONAL CONFERENCES

Lectures delivered
Professor R.C. Deka
· ‘A study to evaluate the effect of prednisolone and acyclovir compared with prednisolone alone in the treatment of Bell’s palsy’ in the Advanced Temporal Bone/Live surgery meeting/workshop, Department of Otorhinolaryngology and Temporal Bone Laboratory, King Faisal Specialist Hospital and Research Centre, Riyadh, Saudi Arabia; 21–26 April 2006.
· ‘Role of intratympanic dexamethasone and acyclovir in sudden sensorineural hearing loss’, Advanced Temporal Bone/Live surgery meeting/workshop, Department of Otorhinolaryngology and Temporal Bone Laboratory, King Faisal Specialist Hospital and Research Centre, Riyadh, Saudi Arabia; 21–26 April 2006.
· ‘Cochlear implantation in India’, Advanced Temporal Bone/Live surgery meeting/workshop, Department of Otorhinolaryngology and Temporal Bone Laboratory at King Faisal Specialist Hospital and Research Centre Riyadh, Saudi Arabia; 21–26 April 2006.
· ‘Management of mastoid cavity problem’, Advanced Temporal Bone/Live surgery meeting/workshop, Department of Otorhinolaryngology and Temporal Bone Laboratory, King Faisal Specialist Hospital and Research Centre, Riyadh, Saudi Arabia; 21–26 April 2006.
· ‘Basic concepts of pathogenesis of cholesteatoma’, Advanced Temporal Bone/Live surgery meeting/workshop, Department of Otorhinolaryngology and Temporal Bone Laboratory, King Faisal Specialist Hospital and Research Centre, Riyadh, Saudi Arabia; 21–26 April 2006.
‘Surgical management of large juvenile nasopharyngeal angiofibroma’, 11th Asian Research Symposium in Rhinology (ARSR), Seoul, Korea; 30 November–2 December 2006.


**Professor S. Bahadur**

‘Craniofacial resection for carcinoma of nose and paranasal sinuses’, 8th Annual Conference of Skull Base Surgery Society of India, Chandigarh; October 2006.

‘Laryngeal preservation in advanced carcinoma of larynx’ Annual meeting of Foundation for Head and Neck Oncology, Udaipur; October 2006.


‘Surgical management of carcinoma of gingivobuccal sulcus’, 7th Gulf Countries ENT Surgeons meeting, Muscat, Oman; January 2007.

**Dr K.K. Handa**


**Dr Alok Thakar**


‘The particle repositioning maneuver for Benign Paroxysmal Positional Vertigo (BPPV)’, UP State Conference, Gorakhpur; October 2006.


Dr C.V. Karthikeyan

RESEARCH
Funded Projects
Completed

Ongoing
5. Phase II/III randomized placebo controlled clinical trial of curcumin in resectable stage III and IV squamous head and neck cancers. S. Bahadur. Funded by Indian Council of Medical Research for 3 years. Funds: Rs 35.75 lakh.

**Departmental Projects**

**Completed**
1. Comparative study of results of cochlear implantation in children (age groups <5 years and >5 years)
2. Prevalence of mitochondrial DNA mutations among non-syndromic sensorineural hearing impaired population in India
3. Significance of tumor thickness and molecular margins in cancer of tongue

**Ongoing**
1. Clinical profile of patients with laryngotracheal stenosis
2. To determine the efficacy of flutamide as a tumour volume reducing agent in nasopharyngeal angiofibroma
3. Role of proton pump inhibitors in laryngopharyngeal reflux
4. Otolaryngologic and head and neck manifestations in HIV/AIDS patients
5. Ki-67 expression in retraction pocket of tympanic membrane and to evaluate its effect on healing of tympanic membrane
6. Study of indications, outcome and limitations of endoscopic management of cerebrospinal fluid rhinorrhea

**Collaborative Research**

**Ongoing**
1. Prenatal development and maturation of human inferior colliculus (with Anatomy)
2. Neuro-developmental disabilities in children - an International Clinical Epidemiology Network Study (with Pediatrics)

**PUBLICATIONS**

**Journals**

AIIMS 2006-2007 / 382


**Chapters in Books**


**PATIENT CARE**

**Facilities available in the department**
The department provides a state-of-the-art ENT service and is equipped with the entire range of diagnostic and therapeutic facilities including a cochlear implant laboratory, audiological facilities, electronystagmographic facilities, electro diagnostic audiometry, hearing aid analyzer, ear mould laboratory, speech therapy facilities, stroboscopy and computer aided speech analysis. The rehabilitation unit of Audiology and Speech Therapy provides supportive, diagnostic and rehabilitative services. The department runs its in the the Head and Neck cancer clinic of B.R. Ambedkar Institute Rotary Cancer Hospital. The department has provided support in starting cochlear implant surgery programme in R.R. Hospital, Central Railway Hospital and also Postgraduate Institute of Medical Education and Research, Chandigarh.

**OPD and specialty clinics**

**ENT OPD**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>New cases</td>
<td>37,819</td>
</tr>
<tr>
<td>Old cases</td>
<td>33,775</td>
</tr>
</tbody>
</table>

**Specialty clinics**

<table>
<thead>
<tr>
<th>Specialty</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Head and neck</td>
<td>5,281</td>
</tr>
<tr>
<td>Voice</td>
<td>1,389</td>
</tr>
<tr>
<td>Speech</td>
<td>2,355</td>
</tr>
<tr>
<td>Hearing</td>
<td>1,656</td>
</tr>
<tr>
<td>Vertigo</td>
<td>192</td>
</tr>
<tr>
<td>Audiology</td>
<td>148</td>
</tr>
<tr>
<td>Skull base</td>
<td>110</td>
</tr>
<tr>
<td>Rhinology</td>
<td>148</td>
</tr>
</tbody>
</table>

**In-patients**

<table>
<thead>
<tr>
<th>In-patients</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Long admission</td>
<td>1,061</td>
</tr>
<tr>
<td>Short admission</td>
<td>291</td>
</tr>
</tbody>
</table>

**Surgical procedures**

<table>
<thead>
<tr>
<th>Procedure</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
<td>1,977</td>
</tr>
<tr>
<td>Minor</td>
<td>1,449</td>
</tr>
<tr>
<td>Minor OT</td>
<td>22,981</td>
</tr>
</tbody>
</table>

**Community Services/Camps**
The department provides comprehensive ENT services at Primary Health Centre at Ballabghar, Haryana. In addition, Dr Rakesh Kumar runs once a week OPD services at Deaf Centre Gurgaon, under Government of Haryana.
AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor R.C. Deka was appointed as the Dean of AIIMS, 4 May 2006; Professor He is the Founder Chairman of Indian Academy of Otolaryngology—Head Neck Surgery. He is an Inspector for Medical Council of India (MCI) and National Board of Examinations (NBE); Chairman of the Technical Advisory Group for the speech and hearing handicapped to the Ministry of Social Welfare. Chairman of 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; He is Editorial Chief of the Indian Journal of Otology, Vertigo Viewpoint. He was an invited international distinguished faculty at the Advanced Temporal Bone/Live surgery meeting/workshop 22–26 April, 2006 in the Department of Otolaryngology and Temporal Bone Laboratory at King Faisal specialist Hospital and Research Centre, Riyadh, Saudi Arabia. He was one of the chief instructors supervising the delegates in Advanced Temporal Bone workshop along with Prof. Khalid Taibah of King Faisal Hospital and a faculty from Iran. He also chaired a scientific session. He was an invited distinguished international guest faculty at the 11th Asian Research Symposium in Rhinology (ARSR) on 30 November to 2 December 2006 at Seoul, Korea. He also chaired a scientific session. He has been an International Advisory/Governing Council Member of the ARSR since 2002 and was elected again for next one year at Seoul Council Meeting. He was an invited international guest faculty at the 26th International Symposium on Infection and Allergy of the Nose (ISIAN) organized by the MSO-HNS (Malaysian Society of Otolaryngologists—Head and Neck Surgeons) and ISIAN office at Kuala Lumpur Malaysia (1–4 February 2007). He chaired a scientific sessions. He was an invited national faculty in the SAARC ENT conference, New Delhi, 20–22 September 2006, and he moderated a panel discussion on cochlear implant. He was an invited national faculty for the CME and temporal bone workshop in Shankar Madhab hospital and Medical College, Guwahati, 4–5 November 2006. He was an invited guest faculty for the CME on Cochlear implant and sudden sensorineural hearing loss organized by the Department of ENT, Guahati Medical College, Guwahati, Assam, 17 March 2007. He was an invited guest faculty in ENT Update conference at Armed force Medical College, Pune, 24–25 March 2007. He was an invited guest faculty at the International conference on medical electronics: Advancement in products and embedded solutions organized by Federation of Indian Chambers of Commerce and industry (FICCI) and New Delhi, 8–9 December 2006. He was an invited guest faculty at the Global Healthcare conference organized by Federation of Indian Chambers of Commerce and industry (FICCI), New Delhi, 15 January 2007.

Professor S. Bahadur was elected President of Skull Base Surgery Society of India (2006-07). He was invited as national faculty and moderated a panel discussion on ‘Carcinoma of nose and paranasal sinuses’ in the 3rd SAARC conference of otolaryngologists, New Delhi, September 2006.

Professor S.C. Sharma was awarded Dr K.K. Agarwal Oration at Annual Association of
Otolaryngologists (Rajasthan) Conference, Jaipur, November 2006.

**Dr KK Handa** was awarded RD Kumar Oration in the 30th Annual conference of Association of Otorhinolaryngologists of India (Bihar Branch) on 2–3 December 2006; was awarded the Jaiswal Gold Medal for best video presentation ‘Type 1 Thyroplasty and arytenoids adduction’ in 3rd Annual Conference of the Association of Phonosurgeons held in Bhuwaneshwar on 3 January 2007. He is the Vice President of Association of Phonosurgeons of India from January 2006; Treasurer of Neuro-otological and Equilibriometric Society of India from October 2005. Reviewer of journals, *Indian Journal of Pediatrics* and *Indian Journal of Otorhinolaryngology*. He was a speaker in Cross fire on ‘Management of Bell’s palsy’ in the XVIII Annual Conference of NES held in Jaipur, 13–15 November 2006; Chairperson in the ‘Symposium on Phonosurgery’ held on 21 September 2006 in SAARC–ENT conference held at New Delhi, 20–22 September 2006 and also for Joe V. Desa oration XVIII annual conference of NES held in Jaipur, 13 October 2006; Guest faculty in the Phonosurgery course in Pune (24–26 November 2006) and participated in Video session, Live surgery, Cadaveric dissection; Panelist for the panel discussion on ‘Management of professional voice’ in 3rd Annual Conference of the Association of Phonosurgeons held in Bhuwaneshwar, 3 January 2007. He was the moderator for panel discussion ‘Frontal recess and its challenges’ in Endorhine 2007 held in Sir Ganga Ram Hospital New Delhi, 3–4 February 2007.

**Dr Alok Thakar** was awarded UICC International Cancer Technology Transfer Fellowship by the UICC (International Union against Cancer) for training to be undertaken at Kiel, Germany; was awarded AOI Guest Oration—Endonasal Endoscopic Skull Base Surgery in the AOI Annual Conference, Rajasthan Branch November 2006; was an invited Guest Faculty 4th Annual Conference of the Society of Otolaryngologists of Nepal, Katmandu, December 2006. He is the Member, ICMR Task Force on Review of Cancer Management Guidelines; Working Committee Member, Foundation of Head and Neck Oncology 2003 to date; Editorial Board Member, *Otology India* and *Indian Journal of Otology*. He was the Panelist in panel discussion on

- ‘Selection of hearing Aids’, XXVIII Annual Conference of the Association of Otolaryngologists of India, Delhi Branch; May 2006
- ‘Endoscopic approach to the frontal sinus’ 5th Endoscopic Sinus and Skull Base Surgery Course, Sir Ganga Ram Hospital, Delhi; February 2007.
Open House Discussion, Micro Ear Surgery Course, Sir Ganga Ram Hospital, Delhi; March–April 2007

He also presented surgical videos of glomus jugular tumour, subtotal temporal bone resection, and stapedotomy in the Micro Ear Surgery Course, Sir Ganga Ram Hospital, Delhi, March–April 2007.

**Dr Rakesh Kumar** is a co-member of Sectional Committee of ENT surgical instruments (MHR04) of Bureau of Indian Standards. He was invited guest faculty for Live Workshop on ‘Endoscopic nasal and sinus surgery’, Dr Susheela Tiwari Memorial Forest Hospital, Haldwani (Uttaranchal) (25–26 November 2006); and Surgical Workshop on ‘Ear diseases’ organized by Ministry of Social Welfare and ENT department, Sir Thudop Namgyal Memorial Hospital Gangtok (Sikkim), 28–30 November 2006.

**Dr C. Venkata Karthikeyan** was the invited guest faculty for the CME on Cochlear implant and sudden sensorineural hearing loss organized by the Department of ENT, Guhath Medical College, Guwahati, Assam, 17 March 2007; was an invited guest faculty for National Seminar on ‘Ageing’ sponsored by UGC and organized by Bhartidasan University which was held at Tiruchirappalli, Tamil Nadu, 29–30 March 2007. He is the Assistant Editor of *Indian Journal of Otology*.

The following Residents and Research Associates won awards at national conferences

**Dr Harpreet Kocher**
- ‘Diced fat in endoscopic repair CSF rhinorrhea’, 8th Annual Conference of Skull Base Surgery Society of India, PGI Chandigarh; October 2006. (awarded 1st prize)

**Dr Parul**
- ‘Significance of tumor thickness and molecular margins in cancer of the tongue’, 6th National Conference of Head and Neck Oncology, Udaipur, Rajasthan; 27–29 October 2006. (awarded 1st prize)

**Dr Tapaswini**

**VISITING SCIENTISTS**
6 scientists visited the department for observerships and short-term training.
9.25 Paediatrics

Veena Kalra

M.K. Bhan (on deputation) V.K. Paul N.K Arora (on leave)
A.K. Deorari Arvind Bagga

S.K. Kabra Madhulika Kabra

Pankaj Hari Sheffali Gulati

Rakesh Lodha Rachna Seth Vandana Jain
Ramesh Aggarwal

Shinjini Bhatnagar Pratima Ray Manju Ghosh
Madhumita Roy Choudhary Suman Vashisht

The department organized the College round of Undergraduate Paediatric Quiz under the aegis of Indian Academy of Pediatrics. The departmental faculty regularly participated in organization of Hospital Infection Control Training Programme for resident doctors, nurses and technicians during 2006–07. The DM programmes in Child Neurology and Neonatology and MSc Paediatric Nursing are ongoing.

A team of faculty, residents and nurses of the Division of Neonatology has developed a high quality training tool on Essential Newborn Nursing based on participatory learning methods for nurses working in district hospital. State of Gujarat is undertaking systematic scaling of this programme with introduction of ENBC in pre-service education. Division of Neonatology has launched a website www.newbornwhoc.org. The website highlights the activities of this Division and provides free access to learning resource materials developed by the Division. Division of Neonatology continues to update and service a website on Kangaroo Mother Care (www.kmcindia.org) for dissemination of technical materials for the health professionals, as also a portal for education of parents and lay public.
Total PhD students: Paediatric Gastroenterology 3, Genetics 4, Pediatric Oncology 1

A total of 58 short-term trainees were trained in different superspecialities in the department: Paediatric Neurology: 20; Neonatology: 28; Nephrology: 5; Paediatric Pulmonology: 2; Genetics: 3.

- ‘Cystic fibrosis’, as part of RESPICON 2006; November 2006 (S.K. Kabra).
- Workshop on procedures in Paediatric Pulmonology, as part of RESPICON 2006; November 2006 (S.K. Kabra).
· DBT Clinical genetics Course; 17–26 April 2006 (M. Kabra, K. Kucheria, R. Saxena).
· National Consultation Meeting to develop strategy to ‘Initiate newborn screening programme in India; 6–7 September 2006 (M. Kabra, V. Kalra).

Faculty members delivered 180 lectures in various national and international conferences.

10. A double-blind, randomized, multicentric study followed by 12 months open-label treatment to evaluate the dose-response and safety of valsartan in paediatric hypertensive patients 1–5 years of age. Arvind Bagga. Funded by Novartis from 2005 to 2006. Funds: Rs 7 lakh.


1. 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 Department of Science and Technology for three years (2006–2009). Funds: Rs 4,08,000.


3. An international phase 3 study on ‘Randomized, open-label, multicentre study with open-label extension of the pharmacokinetics and safety of topiramate administered as the oral liquid and sprinkle formulations as an adjunct to concurrent anticonvulsant therapy in infants (aged 1–23 months, inclusive) with refractory partial-onset seizures’ (Protocol TOPMAT-PEP-1002 Phase I). Veena Kalra. Funded by PPD Pharmaceutical Development India (PPD) for two years (2006–2007). Funds: Rs 3,47,635.


15. 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 from 2007 to 2009. Funds: Rs 40.34 lakh.


17. Antibiotic prophylaxis in the management of vesicoureteric reflux: A randomized double


20. High dose and low dose azithromycin in cystic fibrosis and interventional study to evaluate effect on disease parameter. S.K. Kabra. Funded by ICMR from 1-7-2005 to 30-6-2007. Funds: Rs 6,72,461.


33. 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. Madhulika Kabra. Funded by SAFE for 18 months (2006 onwards). Funds: Euro 9,000.


35. Vitamin D status of exclusively breastfed term healthy infants at a median age of 3 months during winter season and its correlation with maternal vitamin D status. Vandana Jain. Funded by AIIMS from 2006 to 2007. Funds: Rs 1 lakh.

36. KIGS multinational growth survey. Vandana Jain. Funded by Pfizer Research Division from 2006 ongoing. Funds: Rs 90,000 per year.

1. A double blind placebo controlled trial to study the efficacy of Baclofen in reducing tone in children with spastic cerebral palsy 2–5 years of age

2. A randomized control trial of i.v. valproate versus i.v. phenytoin in status epilepticus after initial midazolam bolus

3. A randomized controlled trial of mosapride versus metoclopramide for treatment of gastroesophageal reflux in developmentally delayed children

4. A randomized open-label placebo-controlled study of the effect of creatine supplementation on muscle P31 MRS spectra in Duchenne muscular dystrophy

5. Blood ammonia levels in epileptic children on two dose ranges of valproic acid monotherapy

6. Clinical profile of autistic children in India

7. Comparison of efficacy and safety of divalproex extended release preparation with effect of short term phenytoin monotherapy on bone mineral density in ambulatory epileptic children

8. Evaluation of ketogenic diet in infants and young children with refractory epilepsy

9. Prevalence of spina bifida occulta in patients with enuresis and its relation to urodynamic and neurophysiological measurements
10. Prospective randomized double blind controlled trial of dexamethasone versus albendazole on calcification as an outcome in 1–2 ring enhancing lesions in neurocysticercosis in children
11. Randomized trial of 28 days albendazole v. 1 day praziquantel in children with neurocysticercosis
12. Study of antinuclear antibody and antiphospholipid antibody in intractable epilepsy
13. Study of aetiological risk factor profile in paediatric strokes
14. To study the cognitive and behavioral profile of children with celiac disease before and after the introduction of a gluten free diet and the various neuropsychiatric manifestations of celiac disease
15. To study the role of creatine in Duchenne muscular dystrophy using magnetic resonance spectroscopy
16. Role of olanzapine in modifying some of the core features of autism

17. Periventricular leucomalacia among the very low birth weight neonates
18. A randomized controlled trial of efficacy of joint immobilization using splint versus no immobilization on functional life span of peripheral intravenous cannula in neonates
20. Correlation of cord serum retinol levels in preterm VLBW infants with maternal serum retinol levels at delivery
21. Effect of coconut oil application on transepidermal insensible water loss in preterm very low birth weight babies: A randomized trial
22. Effect of early versus late iron on iron stores at 2 months of age in preterm very low birth weight babies
23. Effect of Kangaroo Mother Case (KMC) on pain perception among preterm neonates
24. Efficacy of a ‘relaxation programme’ during early postpartum period on volume of expressed breast milk in mothers of very preterm babies: A randomized controlled trial
25. Efficacy of sling application in reducing duration of phototherapy
26. Efficacy of two regimens of intravenous immunoglobulins (IVIG) in reducing duration of phototherapy in Rh haemolytic disease of neonates
27. Efficacy of zinc supplementation in preventing hyperbilirubinemia among high-risk neonates
28. Impact of routine transcutaneous bilirubinometry by multi-wave length reflectance method (Bilicheck) compared to routine visual inspection for assessment of jaundice analgesic effects of breastfeeding prior to venepuncture in term neonates: A double-blind randomized controlled trial—placental pathology in intrauterine growth restrictions in term neonates
29. Renal function and their maturation, and renal volume in normal and growth restricted babies
30. Safety study of chlorhexidine application in preterm Very Low Birth Weight (VLBW) babies
31. Vascular endothelial growth factor (VEGF) gene in retinopathy of prematurity (ROP)

33. Celiac disease in Down syndrome
34. Characterization of non-typeable rotavirus strains associated with acute diarrhoea in children in New Delhi
35. Cytogenetics and molecular studies in chromosomal breakage syndromes
36. Diagnosis and counselling of genetic disorders testing cytogenetics and molecular methods
37. Evaluation of genetic polymorphism in MTHFR gene (C677t) as a risk factor for neural tube defects in offsprings
38. IVS8-5T allele polymorphism in asthma
40. Molecular genetic studies in Indian children with steroid-resistant nephrotic syndrome
41. Molecular genetic studies in leukodystrophy
42. Molecular genetic studies in osteogenesis imperfecta
43. Molecular genetic studies in patients with leukodystrophy
44. Molecular genetic studies in Rett syndrome
45. Molecular genetic studies in steroid resistant nephrotic syndrome
46. Molecular studies for Wilsons’ disease
47. Molecular studies in Indian patients with Wilson’s disease

48. Sensitivity and specificity of the biocard celiac disease kit in identifying patients of celiac disease
49. Mutant hepatitis B virus infection in pediatric patients with chronic liver disease.

50. Clinicopathological study on lupus nephritis
51. Comparison of antiproteinuric effect of enalapril and a combination of enalapril with irbesartan in patients with steroid-resistant nephrotic syndrome
52. Effect of vitamin D3 supplementation on bone disorder in children with chronic kidney disease
53. Efficacy of rituximab in inducing remission in subjects with steroid-resistant nephrotic syndrome
54. Efficacy of sevelamer versus calcium acetate in patients with chronic kidney disease stage 3 and 4: An open label, randomized study (medication provided free)
55. Glomerular filtration rate estimation in children using prediction equation from plasma creatinine and height
56. Randomized controlled crossover trial to compare the diuretic and natriuretic effects of intravenous frusemide infusion with co-administration of furosemide and human albumin infusions in children with nephrotic syndrome and refractory edema
57. Randomized controlled trial of effect of enalapril on glomerular filtration rate in children with chronic renal failure
58. Randomized controlled trial on efficacy and safety of cyclosporine versus tacrolimus in children with steroid-resistant nephrotic syndrome
59. Double-blind placebo-controlled randomized trial of montelukast as monotherapy v. low dose inhaled steroids for management of mild persistent asthma
60. Determination of the factors affecting the outcome of children under 5 years of age hospitalized with severe community-acquired pneumonia
61. Gastrointestinal manifestations of cystic fibrosis
62. Montelukast in acute asthma: A randomized double-blind controlled trial
63. Optimal maintenance intravenous fluids in hospitalized children
64. Myocardial dysfunction in childhood cancers and survivors of acute leukaemia
65. Neurocognitive and psychosocial issues in children with acute leukemia and survivors of acute leukaemia
66. Role of paclitaxel in the management of retinoblastoma
67. Study of factors associated with precipitation of diabetic ketoacidosis in previously diagnosed patients with type 1 diabetes mellitus

1. Cardiac dysfunction in Duchenne muscular dystrophy carriers (with Paediatric Cardiology)
2. Autistic spectrum disorders network established—screening tests, autism rating scales and drug trials with risperidone, olanzepine under Indo–US Science and Technology Collaboration, training resource material developed, awareness generation, networking with NGOs and parents, Registry for Autism initiated in Delhi
3. Analysis of muscle response to flexible and rigid fixed functional appliance—an electromyography (EMG) study of masseter and anterior temporalis muscle (with Dental Surgery)
4. Evaluation of the adaptive changes associated with twin block therapy on the masseter and temporalis muscle with and without prior muscle deprogramming: An electromyography (EMG) study (with Dental Surgery)
5. Real time PCR for enteroviruses in cerebrospinal fluid of aseptic meningitis patients (with Microbiology)
6. To evaluate the feasibility and efficacy of stem cell transplantation in various acquired disorders: Cerebral palsy and stroke (with ORBO, Cardiac Radiology)
7. Molecular detection of *Campylobacter jejuni* by PCR and its subtyping using PCR-RFLP and PFGE (with Microbiology)
8. Development and validation of high throughput assays for the rapid diagnosis of tuberculosis
9. Comparative evaluation of expression of dystrophin, utrophin and n-NOS in muscle and skin biopsy of patients with dystrophinopathies (with Pathology)
10. Molecular basis of adrenoleukodystrophy: A peroxisomal severe neurodegenerative disorder (with Department of Biochemistry, V.P. Chest Institute, Delhi University)
11. Screening for CMV infection by PCR (with Microbiology)
12. Low cost and rapid molecular assay for community diagnosis of diagnosis of neonatal sepsis by LAMP (with Microbiology)
13. Role of human metapneumovirus in acute respiratory infection, funded by NIH, USA (with Microbiology)
14. Multiplex–RT PCR for detection of viruses causing lower respiratory tract infections viz. human respiratory syncitial viruses (hRSV), human para-influenza viruses (hPIV), influenza virus (FLU) and human metapneumovirus (hMPV) and real-time RT-PCR for the detection and quantification of hRSV (with Microbiology)
15. Prospective evaluation of 99mTc ciprofloxacin in pyrexia of unknown origin (with Nuclear Medicine)
16. Antigenic and molecular characterization of influenza virus strains from acute respiratory infection (with Microbiology)
17. Noninvasive prenatal diagnosis of foetal Rh status and beta-thalassemia using cell-free foetal DNA in maternal circulation (with Anatomy and Haematology)
18. An integrated approach for mutation analysis and identification of new gene(s) for X-linked mental retardation (with Department of Genetics, Delhi University)
19. Role of genetic factors in chronic pancreatitis (with Gastroenterology)
20. Prevalence of mitochondrial DNA mutations among non-syndromic sensorineural hearing impaired population in India (with ENT)
21. Mapping genes for non-syndromic hereditary hearing impairment (with the National Institute of Deafness and Other Communication Disorders (NIDCD), NIH, Rockville, Maryland, USA)
22. Body fat and its relationship with metabolic syndrome indicators in overweight preadolescents and adolescents (with Clinical Pharmacology Division, Department of Medicine)
23. Efficacy of flutamide in reducing tumor size and vascularity in nasopharyngeal carcinoma. (with ENT)
24. A study of chronic pancreatitis and other risk factors for the development of cancer of the pancreas (with Gastroenterology)


75 Tinker A, Paul VK, Ruben JD. The right to a healthy newborn. *Int J Gynaecol Obstet* 2006;94:269–76.


Department of Paediatrics provides general OPD services daily from 9 a.m. in Pediatrics 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>28,219</td>
<td>34,837</td>
<td>63,056</td>
</tr>
<tr>
<td>Paediatric Neurology</td>
<td>1,849</td>
<td>3,845</td>
<td>5,694</td>
</tr>
<tr>
<td>Myopathy Clinic</td>
<td>312</td>
<td>506</td>
<td>818</td>
</tr>
<tr>
<td>Pediatric Gastroenterology Hepatology and Nutrition</td>
<td>1,006</td>
<td>4,059</td>
<td>5,065</td>
</tr>
<tr>
<td>Well Baby Clinic</td>
<td>439</td>
<td>145</td>
<td>584</td>
</tr>
<tr>
<td>High Risk Neonatology Clinic</td>
<td>269</td>
<td>817</td>
<td>1,086</td>
</tr>
<tr>
<td>Paediatric Nephrology</td>
<td>491</td>
<td>3,563</td>
<td>4,054</td>
</tr>
<tr>
<td>Paediatric Chest</td>
<td>518</td>
<td>3,435</td>
<td>3,953</td>
</tr>
<tr>
<td>Paediatric Tuberculosis</td>
<td>212</td>
<td>1,654</td>
<td>1,866</td>
</tr>
<tr>
<td>Paediatric Rheumatology</td>
<td>112</td>
<td>988</td>
<td>1,100</td>
</tr>
<tr>
<td>Genetics and birth defects</td>
<td>1,296</td>
<td>1,067</td>
<td>2,363</td>
</tr>
<tr>
<td>Paediatric Oncology Clinic</td>
<td>123</td>
<td>2,677</td>
<td>2,800</td>
</tr>
<tr>
<td>Paediatric Cancer Survivor Clinic</td>
<td>72</td>
<td>200</td>
<td>272</td>
</tr>
<tr>
<td>Paediatric Endocrine and metabolism Clinic</td>
<td>750</td>
<td>1,250</td>
<td>2,000</td>
</tr>
<tr>
<td>Development Clinic</td>
<td>1,274</td>
<td>–</td>
<td>1,274</td>
</tr>
<tr>
<td><strong>Grand total</strong></td>
<td></td>
<td></td>
<td><strong>95,981</strong></td>
</tr>
</tbody>
</table>

In addition, Cystic fibrosis and Paediatric HIV services were provided in Paediatric Chest clinic.

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.

<table>
<thead>
<tr>
<th>Patients admitted in ORU</th>
<th>2,500</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pediatric wards (long admissions)</td>
<td>1,626</td>
</tr>
</tbody>
</table>

Admitted in day care facility (short admission) 2,161
Patients admitted in Paediatric Intensive Care Unit (PICU) 282

Electroencephalography 1,426
Electrophysiological studies—EMG, NCV, BERA, VER 225
Blood lead estimations 320
Arterial lactate 300
CSF lactate 125
Muscle biopsies 245
Nerve biopsies 10
Skin biopsies 20

Upper gastrointestinal endoscopy 536
Endoscopic sclerotherapy (EST) 246
Colonoscopy 72
Intestinal biopsies 129
Polypectomy 19
Stricture dilation 73

HBsAg 825
HBeAg 644
antiHBe 639
HBV DNA 277
Tyrosinemia 333
D-Xylose 48
24-hours faecal fat estimation 48
Immunofluorescence assay (IFA) to detect anti-endomysial antibodies (AEA) and tissue transglutaminase ELISA for diagnosis of celiac disease 300
**C-reactive protein**

- Semi-quantitative: 5,000
- Quantitative: 900

Pro-calcitonin (only standardized no sample process): 900

Nitro-blue tetrazolium test for CGD: 50

Serum Zn estimation: 2,000

Serum Cu estimation: 3,000

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Haemodialysis</td>
<td>422</td>
</tr>
<tr>
<td>Peritoneal dialysis</td>
<td>66</td>
</tr>
<tr>
<td>CAPD</td>
<td>6</td>
</tr>
<tr>
<td>Automated PD</td>
<td>15</td>
</tr>
<tr>
<td>Renal biopsy</td>
<td>108</td>
</tr>
<tr>
<td>Renal transplantation</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sweat chloride estimation</td>
<td>800</td>
</tr>
<tr>
<td>Fibre-optic bronchoscopy</td>
<td>150</td>
</tr>
<tr>
<td>Spirometry</td>
<td>500</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mechanical ventilation</td>
<td>200</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arterial blood gas analysis</td>
<td>10,000</td>
</tr>
<tr>
<td>Electrolyte estimation</td>
<td>7,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developmental assessment</td>
<td>1,274</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peripheral blood cultures</td>
<td>500</td>
</tr>
<tr>
<td>Cord cultures for karyotyping</td>
<td>39</td>
</tr>
<tr>
<td>Chromosomal breakage studies</td>
<td>28</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urine and plasma for disorders</td>
<td>426</td>
</tr>
<tr>
<td>Disorders of mucopolysaccharidosis</td>
<td>50</td>
</tr>
<tr>
<td>Galactosemia enzyme assay</td>
<td>11</td>
</tr>
</tbody>
</table>

AIIMS 2006-2007 / 407
Prenatal diagnosis for high-risk pregnancies by triple test 1,300
Homocystenuria test 50
MPS spot test 50
Plasma ammonia 358
Enzyme assays for lipid storage diseases 138

<table>
<thead>
<tr>
<th>Test</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thalassaemia family studies</td>
<td>109</td>
</tr>
<tr>
<td>Thalassaemia prenatal diagnosis</td>
<td>60</td>
</tr>
<tr>
<td>Duchenne muscular dystrophy family studies</td>
<td>56</td>
</tr>
<tr>
<td>Duchenne muscular dystrophy prenatal diagnosis</td>
<td>15</td>
</tr>
<tr>
<td>Cystic fibrosis family studies</td>
<td>45</td>
</tr>
<tr>
<td>Cystic fibrosis prenatal diagnosis</td>
<td>1</td>
</tr>
<tr>
<td>Spinal muscular atrophy family studies</td>
<td>64</td>
</tr>
<tr>
<td>Spinal muscular atrophy prenatal diagnosis</td>
<td>11</td>
</tr>
<tr>
<td>Haemophilia A family studies</td>
<td>6</td>
</tr>
<tr>
<td>Haemophilia A prenatal diagnosis</td>
<td>6</td>
</tr>
<tr>
<td>Haemophilia B family studies</td>
<td>1</td>
</tr>
<tr>
<td>Haemophilia B prenatal diagnosis</td>
<td>2</td>
</tr>
<tr>
<td>Fragile X screening</td>
<td>98</td>
</tr>
<tr>
<td>Fragile X prenatal diagnosis</td>
<td>4</td>
</tr>
<tr>
<td>Xmn polymorphism studies</td>
<td>10</td>
</tr>
<tr>
<td>Amniotic fluid Rh genotyping</td>
<td>20</td>
</tr>
<tr>
<td>Intersex cases for genotyping</td>
<td>44</td>
</tr>
<tr>
<td>Skeletal dysplasia mutations</td>
<td>16</td>
</tr>
<tr>
<td>Skeletal dysplasia prenatal</td>
<td>1</td>
</tr>
<tr>
<td>Bone marrow aspiration/biopsy</td>
<td>2,000</td>
</tr>
<tr>
<td>CSF for CNS involvement</td>
<td>1,750</td>
</tr>
<tr>
<td>IQ and behavioural assessment of cancer survivals</td>
<td>72</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Test</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water deprivation test</td>
<td>10</td>
</tr>
<tr>
<td>Vasopressin challenge test</td>
<td>10</td>
</tr>
<tr>
<td>ACTH stimulation test</td>
<td>20</td>
</tr>
<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>
</tbody>
</table>

- Professional services through Pulse Polio Initiative, Spastic Society of North India, Inner Wheel (Rotary), Prayas and other NGOs (Veena Kalra).
Communicator on All India Radio; Doordarshan and other TV channels on ‘Diseases of children including neurological ailments.’ Some of the programmes include ‘Common childhood illnesses’; ‘Seizures in children’; ‘Uthiye ache swasthya ke saath’; ‘Bachaon mein pet sambandi bimariyan’; ‘Bachaon mein kuposhan se hone wali swasthya samasyaen’; Epilepsy; Cerebral palsy, Neurocysticercosis, Obesity, Pulse polio programme, etc. (Veena Kalra).

Public education media on lead poisoning, convulsions and learning disabilities through workshops, school visits and in health Melas. Information brochures produced and circulated (Veena Kalra).

Renovation of recreation room in Pediatric ward and celebration of Diwali and Christmas with support from Cancer Patients Aid Association and Inner Wheel Club.

Arrangement of poor patients help (drug, disposable) in collaboration with Inner Wheel Club.

All India Radio (AIR) Overseas Services: Interview, ‘Opportunities for medical tourism in India’; 6 April 2006 (N.K. Arora).


AIR: Uthiye achhe swasthya ke saath: Bachaon mein kuposhan se hone wali swasthya samasyaen; 20 November 2006; (N.K. Arora).


‘Childhood cancers’ in Delhi Doordarshan (Prasar Bharti Doordarshan News) in the programme entitled ‘Total health’; 10 February 2007 (Rachna Seth).

Professor Veena Kalra served as Executive Member of Education Committee of International Child Neurology Association (Belgium); was nominated long-term Adviser for Asian Child Neurology Association (Japan); WHO Panel Expert for the Acute flaccid paralysed surveillance programme; served as expert for Science and Society Division of DST for review of health projects; was nominated as non-official member of the Armed Forces Medical Research Committee (AFMRC) for three years w.e.f. 04 Jan 2007 under the Defence Research and Development Organization, Ministry of Defence; served as expert Committee Member for Selection of Senior Research Associates (Pool Scientists) in Medical Sciences; External Examiner for FCPS Part-II Examination (Pediatrics) at Bangladesh College of Physicians and Surgeons, Dhaka, Bangladesh; External Expert for Standing Selection Committee of Postgraduate Institute of Medical Education and Research, Chandigarh; Member of the Project Evaluation Committee (PEC), Technology Development Board, Department of Science and Technology, Ministry of Science and Technology, New Delhi. PEC, 2006.

Professor V.K. Paul delivered the M.N. Rao Oration instituted by the AP Chapter of the National Neonatology Forum and the First KGMU Oration at the King George Medical University, Lucknow.
Dr N.K. Arora served as Member Coordinator, National Certification Committee for Polio Eradication (1998—till certification process is completed); Represent NCCPE on the India Expert Group on Polio Eradication, WHO-GOI, New Delhi (2000—till date); Team Leader, IndiaCLEN Program Evaluation Network: since 1997; was nominated Member for Micronutrient Malnutrition Control Constitution of Inter Ministerial Coordination Committee in the Ministry of Women and Child Development since 18/04/06, Government of India Ministry of Women and Child Development New Delhi, 29 April 2006; Member of the Polio Communication Technical Advisory Group (26 March 2007); Fellow of The National Academy of Medical Sciences (India) (since 30 April 2005); Executive Director International Clinical Epidemiology Network (since 25 May 2005); Editor, Indian Journal of Pediatrics; Referee—Indian Pediatrics, Indian Journal of Pediatrics.


Dr Arora was elected Member of WHO–ICMR–GOI Tribal Health Project Scientific Advisory Group Meeting Collaborative Project on ‘Development of capacity building for health care among primitive tribes’, 2000—till date; Member, National Advisory Group on Immunization (NTAGI), Ministry of Health and Family Welfare, Government of India; 2003—till date; Core Group Member, India Injection Safety Coalition; 2002—till date; Member, working group for Review of National Nutrition Policy and National Plan of Action on Nutrition, Department of Women and Child Development, Food and Nutrition Board, Ministry of Human Resource Development, Government of India; January 2004—till date; Member, Planning Group for ‘Centre for Public Health and Biotechnology’, DBT, New Delhi, December 2004—till date; Attended the RACHNA care Evaluation—Technical Advisory Group Meeting, New Delhi, 6 April 2006; Organized BOT—INCLEN Meeting, Manesar, Gurgaon, 7–8 April 2006; Member, Core Committee ICMR—School of Public Health to develop MPA Course, organized by National Institute of Epidemiology, Chennai, 15 April 2006; attended NTAGI meeting ICMR regarding, ‘Introduction of new vaccines’, New Delhi, 27 April 2006; Attended 4th USAID Health Partners Meeting, New Delhi, 3 May 2006; Meeting with Mrs S. Jalaja (Additional Secretary, Ministry of Health and Family Welfare, Government of India) regarding, ‘Evaluation of training for new born care undertaken by National Neonatology Forum’, Nirman Bhawan, New Delhi, 3 May 2006; attended 15th IEAG Meeting,
New Delhi, 4–5 May 2006; attended Apollo Research Task Force Meeting, New Delhi, 4 May 2006; expert consultation on Vitamin A, Government of India, Ministry of Human Resources and Development, Woman and Child Development, Nirman Bhawan, New Delhi, 10 May 2006; Attended Annual INCLEN Africa meeting and delivered lecture regarding INCLEN: Future and past in plenary session on 14 May 2006, Johannesburg, 14–17 May 2006; presented a key note address, ‘INCLEN collaborative research’ Johannesburg, 14 May 2006; presentation, ‘INCLEN: A network with and for opportunities’, Philadelphia, 20 May 2006; attended PEPFAR—New Partners Initiative Meeting, Pennsylvania, Washington, 23 May 2006; attended meeting with ‘Childhood obesity group of McMaster’, Salim Yusuf/Arya Sharma/Janice Merchant/Katharine Morrison/Shofique Islam/Anwar Merchant/Sumathy Rangrajan/Sania Nawaz, Toronto, 29 May 2006; meeting with Arya Sharma on ‘Canadian obesity and alox’, Toronto, 29 May 2006; meeting with Dr Dipti Chirmulay PATH, regarding Evaluation of Essential Newborn Care Program, New Delhi, 10 June 2006; meeting with Mr P. Hota (Ministry of Health and Family Welfare/Government of India) ‘Safe injection policy for clinical services’ How to proceed? New Delhi, 10 June 2006; attended the Meeting with AIIMS: SEAR—Health Minister and Secretaries facilitated by WHO, New Delhi, 13 June 2006; Chairperson during the debate regarding, ‘Modernization of Chinese tradition medicine’, Shanghai, 17 June 2006; meeting with Additional Secretary Mrs Jalaja (Ministry of Health and Family Welfare and Government of India) regarding—evaluation of essential new born care; provision of legal framework for ANW/AWW to give Injection gentamycin antibiotics, New Delhi, 26 June 2006; attended the Selection Committee Meeting (National Institute of Health and Family Welfare), New Delhi, 27 June 2006; attended the Research Council Meeting in Sir Ganga Ram Hospital, New Delhi, 29 June 2006; meeting with Dipti Churmali (PATH) on ‘Evaluation of essential new born care/need assessment for new born services, New Delhi, 30 June 2006; meeting with Dr Salhan to discuss the possibility of allowing ANMs/AWW/ASHA to give injection and antibiotics, New Delhi, 3 July 2006; attended the 1st Meeting of Nutrition, Food for Special Dietary uses and Infant Foods, Nirman Bhawan, New Delhi, 14 July 2006; meeting with Dr V. K. Shrivastava regarding the ‘Essential newborn care’, New Delhi, 4 August 2006; attended the meeting with IMNCI—National Program Managers at Nirman Bhawan, Ministry of Health and Family Welfare, New Delhi, 7 August 2006; discussed with Professor Kenneth Brown regarding Zinc for Child Health, Department of Nutrition, UCLA Davis, USA, 17 August 2006; meeting with USAID regarding response to IEE, New Delhi, 28 August 2006; attended the Expert Group Meeting to examine the standards for Baby Foods prescribed under PFA rules 1995, Shastri Bhawan, New Delhi, 6 September 2006; attended IndiaCLEN IPHIDE Discussion Meeting, IndiaCLEN and USAID, New Delhi, 8 September 2006; attended Global Alliance Meeting for the Prevention of obesity and related chronic disease, New Delhi, 18 September 2006; attended meeting regarding empowering AWW and ANMW, Safdarjung Hospital, New Delhi, 27 September 2006; attended IAP—Polio Eradication Committee Meeting, New Delhi, 1 October 2006; attended IJP—KC Chaudhary Foundation XIV Annual Meeting, New Delhi, 7 October 2006; attended Advisory Board Meeting for Pneumovax, New Delhi, 8 October 2006; attended Expert Group Meeting in Childhood Obesity at ICMR, New Delhi, 9 October 2006; attended Brainstorming
Meeting on Childhood Obesity organized by Division of Non-communicable Disease at ICMR, New Delhi, 9 October 2006; attended Brainstorming on Polio Eradication Program WHO—SEARO office, New Delhi, 19 October 2006; attended TDR Stakeholder Consultation Meeting—WHO, Geneva, 24 October 2006; attended meeting for IMNCI project, New Delhi, 3–4 November 2006; attended International Meeting on Dengue, NIV, Pune, 10 November 2006; attended Global Youth Meeting, Agra, 11 November 2006; attended inauguration of IndiaCLEN Annual Meeting 2006, followed by keynote address ‘Collaborative research opportunities and challenges’, BPKIHS Dharan, Nepal, 15 November 2006; attended Global Youth Meeting and served as—Facilitator: How can we reduce the threat of nutritional deficiencies? Small group session, Participated in: Skill Building Workshop ‘How to promote healthy nutrition in school settings’, Panelist: Discussed on ‘Nutrition and health: A life course approach’, Agra, 16 November 2006; attended 24 Annual Meeting of Indian Society of Medical Statistics, Coimbatore; 1–3 December 2006; attended meeting with Ministry of Health and Family Welfare—National Polio Surveillance Project and VAPP regarding case classification data from Uttar Pradesh, Lucknow, 6 December 2006; attended ICMR—Steering Committee Meeting regarding Hib initiative (meningitis and pneumonia), New Delhi; 8 December 2006; organized IEAG—Polio Meeting, New Delhi, 11–12 December 2006; attended 6th Professional Development Course for District Level Medical Officer SIHFW and participate in talk, ‘Health Research and Policy making: challenges and options, Bhubaneshwar, 21 December 2006; attended meeting on ‘Recommendations of IEAG polio strategy’ under Chairmanship of Union Secretary Ministry of Health and Family Welfare, New Delhi, 6 January 2007.

He organized XIIIth National Coordination Committee for Polio Eradication Meeting, New Delhi, 12–13 January 2007; attended 51st Annual Meeting of Indian Public Health Association (IPHA) and present IMNCI: Relevance for Evidence, Kolkata, 20–21 January 2007; attended meeting regarding Finalization of Revision for Ethical Guidelines 2006, ICMR HQR, New Delhi, 24 January 2007; attended meeting for Traditional Medicine, New Delhi, 27 January 2007; attended the meeting with Ministry of Health and Family Welfare and National Polio Surveillance Project regarding Modelities to Introduce IPV pilot in two endemic block in 2nd Quarter of 2007, New Delhi, 6 February 2007; attended ICMR—Ethics meeting, New Delhi, 8 February 2007; attended Western Perinatal Society Canadian Neonatal Networks and International Collaboration of Neonatal Networks, Banff, Canada, 18–19 February 2007; attended ENC—PATH Meeting (Ministry of Health and Family Welfares), Presented IPEN—PATH study results, Nirman Bhawan, New Delhi, 28 February 2007; attended 13th Pakistan Pediatric Association Annual Meeting, Karachi, Pakistan, 2nd March 2007; organized INCLEN Trust BOT Meeting, Manesar Gurgaon, 18–19 March 2007; attended NIHFW Selection Committee for Carer Advancement of Reader as Professor, Nirman Bhawan, New Delhi, 20 March 2007; attended PHFI—Polio re-emergence study research expert group meet, New Delhi, 21 March 2007; attended Polio—Communication, Technical Advisory Group Meeting Patna, 26–27 March 2007 and New Delhi, 28–29 March 2007.

AIIMS 2006-2007 / 412
· Division of Neonatology was re-designated as the WHO Collaborating Centre for Training and Research in Newborn Care for another four years w.e.f. 2006. This is third time this honour is bestowed as the sole collaborating center of WHO on newborn health in the SE Asia Region.
· Neonatal Division continues to be the nodal center for South East Asia Neonatal–Perinatal database for six countries namely Nepal, Bangladesh, Sri Lanka, Thailand, Indonesia and India.

Dr Vinod Paul and Dr Ramesh Agarwal were resource persons for introducing Kangaroo Mother Care, a low-cost care modality for LBW babies in Nepal. Dr Agarwal participated as a faculty in Pediatric Advanced Life Support at Critical Care Society State Chapter Meeting Jaipur in March 2007.

Dr Vinod Paul was a member of the following expert groups/committees of the Ministry of Health and Family Welfare: (i) IMNCI Pre-service education, (ii) Training and enabling ASHAs for home-based newborn and child care, (iii) Permitting ANMs and ASHAs to administer gentamicin, (iv) XI Plan approach for women and child health, (v) Essential newborn care, (vi) Norway India Partnership Initiative for MDG4. He was member of the committees on Girl Child, and on Integrating Health, and Nutrition for the XI Plan formed by the Department of Women and Child Development. He was invited to develop a paper on Child Health in XI Plan by the Planning Commission. He is a member of the Indo-US Joint Working Group on research in maternal and child health (ICMR). He is Co-Chair of the Technical Advisory Panel of the Sure Start project of PATH India funded by the Bill and Melinda Gates Foundation; a member of the Technical Advisory Committee of the ‘Community-led initiatives for child health’ project of MGIMS Wardha; a member of the Steering Committee of the Society for Nutrition, Education and Health Activity (SNEHA), Mumbai; and a member of the Academic Council of the International Institute of Population Sciences, Mumbai. He continued to be a member of the Technical Advisory Group of Saving Newborn Lives initiative of Save the Children, a member of the Technical advisory Group of maternal-neonatal health project PAIMAN; and a member of the interim Steering Committee of the global Partnership for maternal, newborn and child health (PMNCH). He was invited as the temporary advisor by the WHO on building capacity for strengthening newborn health in MCH programs in South East Asia. He is a resource person for WHO on developing research priorities in neonatal health and for BASICS on e-training in newborn health. He continued as a member of the international editorial board of the Journal of Neonatology.

Professor Arvind Bagga served as Councillor, International Paediatric Nephrology Association; Member, Expert Group on Classification of Childhood Vasculitides; Member Expert Group, Acute Kidney Injury Network; Associate Editor, Indian Pediatrics; Editor, Bulletin Indian Pediatric Nephrology Group; represented the International Pediatric Nephrology Association at the Second Consensus Conference of Acute Kidney Injury Network, Vancouver (Canada), 14–16 September
2006; Council Meeting of the International Pediatric Nephrology Association, Palermo (Italy), 4–6 October 2006; selected to attend (representing ISN Renal Sister Center Program) Annual Conference of the American Society of Nephrology, San Diego (USA), November 2006.

**Dr Pankaj Hari** was elected Secretary, Indian Pediatric Nephrology Group, Indian Academy of Pediatrics; Member, Disease Outbreak Response Cell (DORC); Reviewer for *Pediatrics*. The Division of Pediatric Nephrology, AIIMS has established Sister-Center relationship with Cedars Sinai Medical Center, UCLA, Los Angeles (USA), for promoting collaboration in clinical care, education and research, under the aegis of the International Society of Nephrology.

**Dr Sheffali Gulati** served as Expert for Neurology projects for Indian Council of Medical Research and National Trust; Editorial Consultant of *Indian Journal of Paediatrics* and Executive board member of Editorial Board of *Indian Pediatrics*.

**Dr Vandana Jain** selected as fellow of Asia Pacific Pediatric Endocrine Society (2007–10); was inducted as adjunct faculty to the Center for Medical Education and Technology (CMET), AIIMS.

**Dr A.K. Deorari** delivered NNF Oration during ‘Newborn 2007’ Kerala State Chapter meeting at Trivandrum on 18 February 2007 on ‘Newborn nursing – Need for national movement’.

Dr Deorari served as WHO consultant to DPR Korea for promoting Essential Newborn Care, November–December 2006; served as WHO-SEARO short-term consultant to Timor Leste for promoting Essential Newborn Care at small hospitals in the country.

**Dr Rachna Seth** was initiated by the division of Pediatric Oncology on ‘Parent support group—doctor meet’, which aided by an NGO ‘CANKIDS’.

**Dr Rakesh Lodha** attended WHO meeting Technical Experts Meeting to peer review Regional paediatric ART guidelines, WHO, SEARO, 3–5 May 2006, New Delhi; chaired Focus Group Meeting—Pediatric ARV Dosing Guide. WHO India, 19 June 2006; attended WHO meeting on IMAI, Geneva, 17–19 October 2006; appointed member of the Technical Reference Group on Pediatric HIV by the Government of India–NACO.

**Dr Madhulika Kabra** Genetic subdivision was re-designated as a WHO collaborating center.

**Dr Shinjini Bhatnagar** nominated National Convener and Co-convener respectively by IAP for developing consensus guidelines for management of diarrhoea and severe malnutrition, 2006; nominated National Convener for implementation of pre-service IMNCI, 2007; awarded fellowship for ‘Intermediate epidemiology course’ at Johns Hopkins Graduate Summer Institute held in June, 2006; Scientific Convener for Indo-British Conference on Pediatric Gastroenterology, Hepatology and Nutrition held in October, 2006; Developed the manual on ‘Management of severe malnutrition for WHO’.
VISITING SCIENTISTS

ACADEMIC, ADMINISTRATION, FINANCE, ENGINEERING, LIBRARY, CENTRAL FACILITIES, ETC.
Professor Veena Kalra
· Curriculum Committee—Chairperson
· AIIMS Research Grant—Chairperson for Clinical Research

Professor N.K. Arora
· Nominated for AIIMS Staff Council Member (2006–07).
· Member of Medical Teaching Board (F/Academy/Pathyakram/2006/325), 2006.
9.26 Paediatric 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 includes seminars, journal clubs, case discussions, thesis presentations
- Trainees on rotation—MCh trainee in Neurosurgery, DM trainees in Neonatology, MS trainees in General Surgery
- Training in the ward of BSc and MSc Nursing students

**Short- and long-term training**

Seven trainees from various countries (Austria-2, Bangladesh-2, Romania-2, United Kingdom-1) underwent short-term training/observership at the department.

**Continuing Medical Education**

**Organized by the department**

Professor D.K. Gupta organized the

- Pediatric Intensive Care Workshop, AIIMS, New Delhi; 12 November 2006.
- Live Operative Workshop on ‘Paediatric Urology’ (VUR, Hypospadias and Intersex) under the auspices of International Society of Intersex and Hypospadias, AIIMS, New Delhi; 16–18 November 2006.

**Lectures delivered**

Professor D.K. Gupta

· ‘Current management of Wilms’ tumour’, 2nd Master Class Update in Urology, India Habitat Centre, New Delhi; 23–24 December 2006.

Professor M. Bajpai
· Delivered a talk during the International training course conducted by the Indian Society for Paediatric Nephrology under the aegis of COMGAN of the International Society for Nephrology, AIIMS; 9 March 2007.

National and International Conferences
Organized by the Department
Professor D.K. Gupta

Lectures delivered
Professor D.K. Gupta
· International Congress of Paediatric Surgery, Cairo, Egypt; April 2006. Delivered the following guest lectures:
  – Gastric pull-up for emergency indications
  – Post urethral valves: Management strategies including diversion
  – Intersexuality—dilemma of sex assignment: An Indian perspective
  – Vesico ureteric reflux—from surgery to STING
  – Biliary ureteric reflux in absence of liver transplantation : Newer insights, (including stem cell therapy)

Dr V. Bhatnagar


‘Antenatal diagnosis and post-natal management of hydronephrosis’, Training Course in Pediatric Nephrology, Paediatric Nephrology Chapter of Indian Academy of Paediatrics and Division of Paediatrics, AIIMS; 9–11 March 2007.

Dr Sandeep Agarwala


RESEARCH

Funded projects


2. 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 for 3 years. Funds: Rs 20 lakh.

3. 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 for 3 years. Funds: Rs 23 lakh.

Departmental projects

Completed

1. Assessment of results of surgery in anorectal malformations by anorectal manometry
2. Assessment of results of surgery in Hirschsprung’s disease by anorectal manometry
3. Assessment of postoperative bladder dysfunction in anorectal malformations by cystometry
4. Assessment of postoperative bladder dysfunction in Hirschsprung’s disease by cystometry
5. Prognostic correlation of molecular markers in urine with severity of vesico-ureteric reflux

Ongoing

1. Effect of intralesional injection sclerotherapy using sodium tetradecyl sulphate in vascular malformations
2. Mucous production in the neobladder after augmentation colocystoplasty
3. 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
4. Results with the use of platinum based regimes in the treatment of pediatric malignant germ cell tumors
5. Prospective study of treatment of children with Wilms’ tumour on treatment with National Wilms Tumor Study Group-5 regimen
6. Prospective study of treatment of children with rhabdomyosarcoma on treatment with International Rhabdomyosarcoma Study Group-5 regimen
7. Prospective study of treatment of children with hepatoblastoma on treatment with Cisplatin and Doxorubicin regimen
8. Outcome of patients with antenatally diagnosed unilateral pelviureteric junction obstruction managed conservatively and surgically
9. Prospective study on five drug regimen for the management of clear cell sarcoma of the kidney
10. Clinical and urodynamic changes after ablation of posterior urethral valves and correlation with radiological anatomy before and after pharmacotherapy
11. Long term systemic and metabolic consequences of gastrocystoplasty
12. Urodynamic observations after repair in bladder exstrophy with and without osteotomy and their correlation with pelvic anatomy on MRI

**Collaborative research**

**Completed**

1. Renal function reserve in hydronephrotic children (with Nuclear Medicine)
2. Assessment of latent manganese toxicity in follow-up cases of biliary atresia (with Radiology)
3. Development of intrapulmonary arteriovenous shunting in follow-up cases of biliary atresia (with Paediatric Cardiology)
4. Hepatoblastoma: Role of DNA ploidy, cell proliferation and cytokeratin-19 expression in subtyping and prognosis (with Pathology)
5. Wilms’ tumor: Relation of apoptotic gene expression with subtype, chemoresponse and prognosis (with Pathology)
6. Role of PET scan in paediatric tumours (with Nuclear Medicine)

**Ongoing**

1. Antibiotic prophylaxis in the management of vesicoureteric reflux: A multicentric randomized double-blind placebo-controlled trial (with Paediatrics)
2. Long term follow-up of patients after augmentation cystoplasty (with Endocrinology and Metabolism)
3. Comparison of imaging modalities in the evaluation of neonatal cholestasis (with Radiodiagnosis)
4. Comparison of imaging modalities in the evaluation of portal hypertension (with Radiodiagnosis)
5. Volumetric analysis of the spleen in portal hypertension (with Radiology)
6. Conservation of circulating blood volume in portal hypertension (with Nuclear Medicine)
7. The role of nitric oxide in portal hypertension (with Biochemistry)
8. Long-term results of esophageal replacement by reverse gastric tube (with Radiology & Nuclear Medicine)
9. An evaluation of cardiotoxicity related to adriamycin in children with solid tumours (with Nuclear Medicine)
10. Evaluation of hearing deficiencies in children who have received cis-platinum for treatment of solid tumours (with ENT)
11. 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)
12. Gain of chromosome 17q and its effect on outcome in patients with neuroblastoma (with Anatomy)
13. Whole body MR imaging for detection of skeletal metastases in pediatric patients of small cell neoplasms: Comparison with skeletal scintigraphy and FDG-PET CT scan (with Medical Oncology, Radiodiagnosis and Nuclear Medicine)
14. Comparison of efficacy and safety of oral antibiotics (amoxyccillin-clavulanic acid and ofloxacin) with intravenous combination (ceftriaxone and amikacin) in outpatient setting in pediatric patients of low risk febrile neutropenia (with Medical Oncology)
15. Telomerase estimation in patients with Wilms’ tumour and hepatoblastoma as a marker for prognosis (with Pathology)
16. Evaluation of lymphocytic infiltration in Wilms’ tumour and adjoining normal renal parenchyma and its relation to recurrence and outcome (with Pathology)
17. Evaluation of role of adjunctive therapy with 131 I MIBG therapy for advanced non-responsive, relapsed and metastatic neuroblastoma (with Nuclear Medicine)
18. 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**


Books

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>6,316</td>
<td>11,386</td>
<td>17,702</td>
</tr>
<tr>
<td>Hydrocephalus</td>
<td>22</td>
<td>198</td>
<td>220</td>
</tr>
<tr>
<td>Intersex</td>
<td>22</td>
<td>130</td>
<td>152</td>
</tr>
<tr>
<td>Craniosynostosis</td>
<td>2</td>
<td>20</td>
<td>22</td>
</tr>
<tr>
<td>Pediatric urology</td>
<td>315</td>
<td>2,695</td>
<td>3,010</td>
</tr>
<tr>
<td>Pediatric solid tumor</td>
<td>96</td>
<td>2,540</td>
<td>2,634</td>
</tr>
<tr>
<td>CRHSP, Ballabgarh</td>
<td>544</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Minor procedures</td>
<td>2,974</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Admissions</th>
<th>New cases</th>
<th>Old cases</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB-5 ward</td>
<td>1,217</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>AB5-ICU</td>
<td>102</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Surgical procedures</th>
<th>New cases</th>
<th>Old cases</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
<td>981</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Minor</td>
<td>680</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>At CRHS, Ballabgarh</td>
<td>98</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Special investigations</th>
<th>New cases</th>
<th>Old cases</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urodynamic evaluation</td>
<td>357</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Uroflometry</td>
<td>624</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Ano-rectal manometry</td>
<td>64</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Oesophageal manometry</td>
<td>18</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>24-hour pH monitoring</td>
<td>25</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

AIIMS 2006-2007 / 424
AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor D.K. Gupta was elected as the President of the Asian Association of Pediatric Surgeons; led the International delegation to meet the Hon’ble Prime Minister of India, 13 November 2006 during the 20th congress of the Asian Congress of Paediatric Surgeons to promote Pediatric Surgery in India, Asia and globally; organized the Round Table Meet on Global Child Health, 14 November 2006 during the 20th Congress of the Indian Association of Paediatric Surgeons, New Delhi, nominated for the MS Ramakrishnan Oration of the Indian Association of Pediatric Surgeons; re-elected as the President, Federation of SAARC Association of Pediatric Surgeons; continues to be the Editor in Chief, Journal of Indian Association of Pediatric Surgeons; Executive Member, World Federation of Association of Pediatric Surgeons; Hony Secretary cum treasurer of the International society of the Intersex and hypospadias; nominated as a International Scientific Committee Member of the World Congress, Buenos Aires, September 2007 and International Scientific Committee Member of the 8th Congress of the European Association of Pediatric surgeons, Torino, May 2007; invited as an International Guest Speaker to the Live Operative Workshop and as a visiting Professor at the Cincinnati Children Hospital, USA, 7–9 June 2006; nominated for the prestigious Imre Pilaszanovich visiting Professorship to University of PECS, Hungary; International Congress of Paediatric Surgery, Egypt, to chair the scientific session on ‘Abnormal genital development’, April 2006; invited to the International Congress of Pediatric Surgery, Egypt, April 2006, to serve as a Panelist during the Panel Discussion on ‘Intersex’, April 2006; 3rd European Congress of Paediatric Surgery (EUPSA), Maastricht, Netherlands, 10–13 May 2006 and chaired the scientific session; invited as Guest faculty to the India Conclave on MICE, New Delhi, 2–3 August 2006 and as the International guest and panelist during the international symposium on ‘Intersx-ethics and management’, Jeddah, 6–8 March 2007; hosted the Executive Council Meeting of the World Congress of Pediatric Surgery in New Delhi, 13 November 2006; participated as the Council Member of the World Federation of Association of Pediatric Surgeons, Executive Council Meet, New Delhi, November 2006; delivered the Presidential Address of SAARC Countries during the 3rd International conference of the FAPSS (SAARC Association of Paediatric Surgeons), Lahore, 23–25 March 2007; invited as Chief Guest for the Inaugural function of the International Conference of Plastic Surgeons (with the Symposium and Live Operative Workshop on cleft lip and palate), Mayo Medical College and Hospital, Lahore, Pakistan, 26 March 2007; invited as an expert for the Council for Scientific and Industrial Research (CSIR) selection of pool officers, August 2006 and as an M.Ch examiner at the University of Rajasthan, 30–31 December 2006; invited as Inspector for the MCI Inspection, Gandhi Medical College, Bhopal, 14 February 2007; invited as Inspector for the MCI Inspection, KGMU, Lucknow, 15 February 2007 and as Visiting Professor to the University of Annamalai University September 2006; invited as the guest faculty to the first National Conference of the Pediatric Endoscopic Surgery of India and chaired the scientific session, Agra, 4–5 August 2006; organized Teleconference with the Royal Children Hospital, University of Glasgow, Scotland, April and May 2006 and Multi Centre Teleconference with the Department of Paediatric Surgery at AIIMS and the University of Basel, Switzerland, on 16 January 2007. This was attended by experts and postgraduates from Pediatric Surgery
Departments from Cairo, Doha, Abu Dhabi, Switzerland and India; participated as Panelist during the Panel discussion on Comprehensive Neonatal Services in Pakistan—Possibilities, Policies and Provisions during the 3rd FAPSS Congress of pediatric Surgeons from SAARC countries. Lahore, Pakistan, 23–24 March 2007; invited to chair the scientific session during the 3rd FAPSS Congress of Pediatric Surgeons from SAARC countries. Lahore, Pakistan, 23–24 March 2007.


**VISITING SCIENTISTS**

Professor Klass Bax, (Netherlands); Gordon Mackinlay, (United Kingdom); Anette Jacobsen (Singapore); Takeshi Miyano (Japan); Soottiporn Chittmittrapap (Thailand); Richard Azizkhan, (USA); Juan Tovar, (Spain); J. Boix-Ochoa, (Spain); Arnold Coran, (USA); J. Grosfeld, (USA); Michael Hollwarth, (Austria); John Hutson, Australia; Alberto Pena, (USA); Andrew Pinter, (Hungary); Prem Puri, (Dublin); Agostino Pierro, (UK); Heinz Rode, (South Africa); Alistair Millar, (UK); Vincenzo Jasonni, (Italy); Bhaskar Rao, (USA); Zhang Jinzhe, (China); Seref Etker, (Turkey); W. Snodgrass, (USA); JL Pippe Salle, (Canada); A. Bracke, (UK); Faruk Hadziselimovich; Gi Marrocco, (Italy); Amin Gohari, Abu Dhabi; Talal Al-Malki, (Saudi Arabia); Antonio Dessanti, (Italy); Nabil Dessouky, (Egypt); Saleh Al-Nasaar, (Saudi Arabia); Mahmood Shaukat, (Pakistan); Iftikhar Jan, (Pakistan); Tahmina Banu, (Bangladesh); Staffan Meurling, (Sweden); Ranjan Dias, (Sri Lanka); Sameh Abdel Hay, (Egypt); Giamba Parigi, (Italy); Fabio Bartoli, (Italy).
9.27 PATHOLOGY

Professor and Head
Subrat K. Panda

Professors
Chitra Sarkar
S. Datta Gupta
V.K. Arora
M. Vijayaraghavan
Rajni Safaya
A.K. Karak
Manoj K. Singh
Ruma Ray

Additional Professor
A.K. Dinda

Associate
Professors
M.C. Sharma
K. Venkateswar Iyer
Manju Aron
(on deputation)

Assistant Professors
Sandeep Mathur
Vaishali Suri
Kabita Chatterjee
(Blood Bank)

EDUCATION

Undergraduate
No change from previous year.

Postgraduate

<table>
<thead>
<tr>
<th>MD students:</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD students:</td>
<td>6</td>
</tr>
<tr>
<td>Senior Residents:</td>
<td>11</td>
</tr>
<tr>
<td>Pool Officers:</td>
<td>2</td>
</tr>
</tbody>
</table>

Short- and long-term training
Eight trainees including 2 each from Nepal and Myanmar underwent short-term training (2-3 weeks).

Two trainees from India underwent long-term training (9 months – 2 years).

Continuing Medical Education

Organized by the department
· Indian Association of Pathologists and Microbiologists—Delhi Chapter Meeting; April 2006.
Lectures delivered

DR. A.K. Dinda

- CME and Clinical Immunology Workshop for Physicians, Department of Paediatrics, AIIMS; 3–6 February 2007.
  - Immunofluorescence technique revisited
  - Collection, transport and storage of clinical specimen

National and International Conferences

Lectures delivered

Professor S.K. Panda

- ‘Positive strand RNA replications: Methods to analyze’, Annual Conference of Indian Association of Pathologists and Microbiologists, Bangalore; December 2006.
- Invited as a Guest Faculty in International Pathology Update, Indraprastha Apollo Hospital, New Delhi; 3 February 2007.

Professor C. Sarkar

- ‘Glioneuronal tumours of the CNS’, invited lecture at Sri Ramchandra Medical College and Research Institute, Chennai; 19 December 2006.
- Guest faculty in CME on ‘Update on pathology of CNS and neuromuscular diseases’, Faculty of Laboratory Medicine, Ministry of Health, Kuwait. Delivered the following lectures, February 2007:
  - Embryonal tumours: Recent perspectives
Muscular dystrophies: Classification and approach to diagnosis
Meningeal tumours: Approach to diagnosis
Pathology of viral encephalitis
Case presentations/slide seminars on CNS and muscle pathology

Professor S. Gupta Datta

- ‘Steatosis does not correlate with the degree of insulin resistance in nonalcoholic fatty liver disease’, paper presented at the 21st Annual Conference of the Delhi Chapter of Indian Association of Pathologists and Microbiologists, Delhi; April 2006.
**Professor V.K. Arora**  
Invited as faculty for scientific programme at the 62nd Annual Conference of Association of Physicians, Goa; 16–19 February 2007.

**Dr A.K. Dinda**  

‘Urine examination of cellular elements’, invited talk in postgraduate lecture series at the 55th Annual Conference of Indian Association of Pathologists and Microbiologists, Bangalore; 4–9 December 2006.


**Dr S. Mathur**  
‘Scope and limitations of fine needle aspiration cytology of thyroid tumours’, National Symposium on ‘Thyroid cancer’, Department of Nuclear Medicine, AIIMS, New Delhi; October 2006.

**RESEARCH**  
**Funded Projects**  
**Completed**

1. Utility of immunocytochemistry using antibodies to calretinin and Ber-EP4 in distinguishing reactive mesothelial cell proliferation from metastatic adenocarcinoma. Sandeep Mathur. Funded by AIIMS, Institute research grant scheme for 2 years. Funds: Rs 1.16 lakh.
2. Evaluation of VEGF and p53 expression as prognostic markers in giant cell tumour of bone. R. Safaya. Funded by ICMR for 2 years. Funds: Rs 89,000.

Ongoing
1. Study the site of replication of hepatitis-E virus (HEV) by localizing the viral replicase (RdRp) into the subcellular compartments by transfection studies using HepG2/Huh7 cells and a fusion reporter construct. S.K. Panda. Funded by DST for 3 years (1 September 2004 to 31 August 2007). Funds: Rs 21.47 lakh.
3. Development of small interfering RNAs (siRNAs) for inhibition of hepatitis-E virus (HEV) replication and transcription. SK Panda. Funded by DBT for 3 years (31 December 2004 to 30 December 2007). Funds: Rs 42.05 lakh.
4. Fund for improvement of Science and Technology infrastructure in universities and higher educational institutions (FIST). Funded by DST for 5 years (2004-2009). Funds: Rs 2.7 crore.

Departmental Projects
Completed
1. Paediatric astrocytic tumours—study of cyclin dependent kinases and their inhibitors
2. Comparative study of diagnostic efficacy of stereotactic, ultrasound-guided and image guided biopsies in lesions of CNS
3. Protein aggregating myopathy—a clinicopathological and immunohistochemical study
4. Mitochondrial myopathy—a clinicopathological and ultrastructural study
5. Congenital myopathies—clinicopathological and ultrastructural evaluation
6. Expression of major histocompatibility complex (MHC-I and II) and cell adhesion molecules in idiopathic inflammatory myopathies
7. Role of urine sediment examination in early diagnosis of recurrence of lupus nephritis
8. Fine-needle aspiration cytology of hepatoblastoma
9. Fine-needle aspiration cytology of clear cell sarcoma of the kidney
10. Role of cytologic scoring and image morphometry in fine needle aspiration cytology of proliferative breast disease
11. Wilms’ tumor: Relation of apoptotic gene expression with subtype, chemoresponse and prognosis
12. Hepatoblastoma: Role of DNA ploidy, cell proliferation and cytokeratin 19 expression in subtyping and prognosis
— Hormone receptors in breast cancer
— Human papillomavirus in anal cancer
— Photosensitive lichenoid eruption; a clinicopathological study

Ongoing
1. Primary and secondary glioblastomas: A study of epidermal growth factor receptor (EGFR) amplification, EGFR VIII mutants and p53 expression
2. GBMs with long-term survival—role of cell cycle regulatory genes. study of gliomagenesis: Possible involvement of central nervous system (CNS) developmental pathway
3. Comparative evaluation of expression of dystrophin, utrophin and n-NOS in muscle and skin biopsy of patients with dystrophinopathies
4. p53, EGFR and HER2 receptor in osteogenic sarcomas
5. Study of alteration of microvasculature in renal biopsy in chronic renal transplant rejection
6. Study of C4d deposition in peritubular capillaries of renal transplant biopsy and its correlation with morphological features of severity of rejection
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 functions with nanoparticle
11. Transplant glomerulopathy: An ultrastructural, immunohistochemical and morphometric study
12. A correlative study of morphological subtype of focal segmental glomerulosclerosis (FSGS) and tubulo-interstitial changes in renal biopsy
13. Cytologic diagnosis of carcinomatous meningitis on cerebrospinal fluid samples
14. CT guided fine needle aspiration cytology of mediastinal masses: analysis of cases at AIIMS
15. Cytomorphologic evaluation of germ cell tumours on fine-needle aspiration cytology
16. Morphological and morphometric evaluation of follicular lesions of the thyroid on fine-needle aspiration cytology
17. Role of fine-needle aspiration in the evaluation of pseudosarcamatosus lesions of the soft tissue
18. Role of urinary cytology and immunocytochemistry in the diagnosis and management of acute renal allograft dysfunction

**Collaborative Projects**

*Completed*

1. Expression of tumour suppressor gene HIC-1 in human glial tumors and cell lines (with Biochemistry)
2. Mismatch repair genes (Hmlh1 and Hmlh2) in glial tumors (with Biochemistry)
3. Clinicopathological study of Bcl-2 and Bcl-6 expression in non-Hodgkin lymphoma (with Institute Rotary Cancer Hospital)
4. Histopathology of the right ventricular outflow tract in patient with tetralogy of Fallot (with Cardiothoracic Surgery)
5. Histological study of remnant long saphenous veins before aorto coronary bypass grafting (with Cardiothoracic Surgery)
6. Expression and modulation of complement regulatory proteins in immune complex and autoimmune diseases and their diagnostic significance (with Biochemistry)
7. Study of potassium channel binding protein in carcinoma prostate (with Urology)
8. Genetic polymorphism of complement receptor 1 and its correlation with the pathophysiology of glomerulopathies (with Biochemistry)
9. Prospective randomized study of radical cystectomy and post-operative adjuvant chemotherapy versus concurrent chemoradiotherapy in muscle invasive cancer of urinary bladder -(with Institute Rotary Cancer Hospital)
10. Keratocyte apoptosis following corneal trauma: Implications on corneal wound healing (with Rajendra Prasad Centre)
11. Prevalence of *Helicobacter pylori* infection in gastric malignancies at IRCH, AIIMS (with Medical Oncology, Surgical Oncology, Microbiology)
12. Significance of tumour thickness and molecular margins in carcinoma tongue (with ENT, Biochemistry)
13. Evaluation of neoadjuvant chemotherapy in locally advanced breast cancer (with Surgery, Radiation Oncology)
14. Study of emerging parasitic agents (intestinal coccidian and microsporidia) in aetiologies of malabsorption syndrome (with Microbiology, Gastroenterology, Paediatrics)
15. Evaluation of the comparative efficacy of single- and double-freeze technique of cryotherapy in controlling CIN lesions: Multi-centre randomized clinical trial (with Obstetrics and Gynaecology)
**Ongoing**

1. Advanced centre for liver diseases - ICMR Project [I-441] comprising of five projects (with Gastroenterology)
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 tumour type (with Biochemistry)
5. Characterization of the properties of an amplified region of DNA in primary meningeal tumours (with Biochemistry)
6. Prevalence of alteration at microsatellite loci in 1p and 19q in primary human gliomas (with Biochemistry)
7. Invasive versus non-invasive meningiomas: Comparative study of proliferation index, and expression of vascular endothelial growth factor (VEGF), p53 and cathepsin (with Neurosurgery)
8. Ligand based selection from combinatorial libraries for generating recombinant antibodies to the placental (oncofoetal) isoenzymes of alkaline phosphatase: Characterization and validation in clinical cancer (with Biochemistry)
9. Clinical correlation of quantitative analysis and immunohistochemical localization of VEGF and HCG in the serum and placenta at different gestational ages in normal and pregnancy induced hypertension (PIH) cases (with Anatomy, Vardhman Medical College, New Delhi)
10. Acute thalamic involvement in severe head injury—An autopsy study with histopathological correlation (with Neurosurgery)
11. Histopathological study of aorta and pulmonary artery in congenital heart disease (with Cardiothoracic Surgery)
12. Pharmacological and molecular studies on cardioprotective potential of cox-2 inhibitor and indigenous antioxidant drugs in experimentally induced myocardial infarction (with Pharmacology)
13. A study of T cell homing pattern and cytokine profile in tubercular pleural effusion (with HLA and Immunogenetics)
14. A correlative study of Th1 and Th2 upregulation with lepromin challenge in clinically ‘anergic’ cases of leprosy (with JALMA, Agra)
15. Development of tumour targeting with nanogel system (with Centre for Biomedical Engineering, Indian Institute of Technology, Delhi)
16. Role of macrophage and oxidative stress in airway remodelling (with IGIB, Delhi)
17. Effect of blocking of HIF1± gene expression on macrophage endocytosis and generation of reactive oxygen species (ROS) (with Jawaharlal Nehru University, Delhi)
18. Parallel performance trail of fast human papilloma vilus (HPV) versus hybrid capture 2 (HC2) for cervical screening (with Obstetrics and Gynecology)
19. Advanced sentinel lymph node evaluation in carcinoma breast (with Department of Surgery, Nuclear Medicine and Microbiology)
20. Multicentric study of interferon-glycyrrhizin combination therapy and interferon–ribavirin combination therapy in management of chronic hepatitis-C (with Gastroenterology and Human Nutrition)
21. Etiological significance of microscopic colitis in chronic diarrhea in children and its pathogenesis (with Paediatrics)
22. Multicenter phase III randomized trial comparing doxorubicin and cyclophosphamide followed by docetaxel with doxorubicin and cyclophosphamide followed by docetaxel and trastuzumab (Herceptin ®) and with docetaxel, carboplatin and trastuzumab in the adjuvant treatment of node positive and high-risk node negative patients with operable breast cancer containing the Her2 alteration (with Radiation Oncology)
23. Relationship between genetic polymorphism in drug metabolizing enzymes, CYPIAI and GSTMI, and risk of developing oral precancer and cancer among consumers of tobacco and chewing products (with Biochemistry, Surgery, Radiation Oncology and Surgical Oncology)
24. Histological diagnosis of celiac disease and its correlation with other markers (with Pediatrics)
25. Clinicopathological study of reflux oesophagitis (with Gastroenterology)
26. Distinction between Crohn’s disease and tuberculosis in Indian patients (with Gastroenterology, Biotechnology)
27. Histopathology of acute and subacute liver failure (with Gastroenterology)
29. A comparison of urease-based tests and conventional histology with immunohistochemistry for detection of H. pylori in gastric biopsies (with Gastroenterology, Microbiology and Nuclear Medicine)
30. A study of molecular markers in oral cancers (with Biochemistry, Surgery, Surgical Oncology)
31. A study of molecular markers in cervical cancers (with Biochemistry, Obstetrics and Gynaecology)
32. Evaluation of efficacy of radiofrequency ablation of primary tumour in early breast cancer (with Surgery, Radiation Oncology, Nuclear Medicine and Radio Diagnosis)
33. Role of FDG PET-CT in evaluation of axillary lymph node involvement in T1T2N0 Breast Cancer in comparison with sentinel lymph node biopsy (with Surgery and Nuclear Medicine)
34. Evaluation of neoadjuvant chemotherapy followed by postoperative chemoradiotherapy and assessment of expression of multidrug resistance gene and cell cycle specificity in locally advanced gastric and gastroesophageal junction adenocarcinoma (with Radiation Oncology, Surgical Oncology, Medical Oncology, Biotechnology and Radiodiagnosis)
35. Pilot study comparing p53, p16, k-ras and c-erb-2 expression in non-neoplastic gall bladder epithelium and gall bladder cancer (with Medical Oncology, Surgical Oncology, Surgery and GI Surgery)
36. Role of Centchroman in regression of mastalgia and regression of fibroadenoma and its correlation to histopathology and estrogen and progesterone receptor (with Surgery, Anatomy, Obstetrics and Gynecology and Radiodiagnosis)
37. Effect of glutamine supplementation on structure and function of the intestines in patients with Crohn’s disease (with Gastroenterology)
38. Clinicopathological features of microscopic colitis (Gastroenterology and Paediatrics)
39. Evaluation of curcumin in advanced cervical cancer (with Biochemistry, Obstetrics and Gynecology and Radiation Oncology)
40. Histopathological study of aorta and pulmonary artery in congenital heart disease (with Cardiothoracic Surgery)
41. Immunogenetic analysis and human papilloma virus (HPV) typing of cervical cancer in Indian women; in collaboration (with Obstetrics and Gynecology)
42. Development of HPV candidate vaccines: Preparation of a clinical trial site/cohort for vaccine testing (with Obstetrics and Gynecology)
43. Mutation in OXPHOS pathway and spermatogenic arrest in infertile males (with Anatomy)
44. Molecular analysis of gene markers in urinary cytology and tissue histology specimens of Indian patients with superficial and muscle invasive transitional cell carcinoma of urinary bladder (with Urology and Biochemistry)
45. A comparative study of visual inspection with acetic acid (VIA), cytodiagnosis, HPV testing and colposcopy as tools for cervical cancer screening (with Obstetrics and Gynaecology)
46. Evaluation of MRI in diagnosis of fetal anomalies in comparison with ultrasound (with Obstetrics and Gynaecology)
47. Detection and molecular characterization of Pneumocystis jiroveci from patients with clinical diagnosis of interstitial pneumonia (with Microbiology)
48. Study of genetic polymorphism of dihydropteroate synthase DHPS gene in Pneumocystis jiroveci isolates: Correlation with clinical outcome in patients with PCP (with Microbiology)

PUBLICATIONS
Journals


74. Malik A, Deb P, Sharma MC, Sarkar C. Neuropathological spectrum of pilocytic


Chapters in books


## PATIENT CARE

### Laboratory services

#### Surgical pathology laboratory

<table>
<thead>
<tr>
<th>Specimens processed</th>
<th>32,752</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special stains</td>
<td>27,423</td>
</tr>
<tr>
<td>Frozen sections</td>
<td>564</td>
</tr>
</tbody>
</table>

#### Cytopathology laboratory

<table>
<thead>
<tr>
<th>Specimens processed</th>
<th>17,521</th>
</tr>
</thead>
<tbody>
<tr>
<td>FNAC</td>
<td>8,564</td>
</tr>
<tr>
<td>Exfoliative</td>
<td>8,957</td>
</tr>
<tr>
<td>Immunocytoology</td>
<td>391</td>
</tr>
</tbody>
</table>

#### Autopsies performed

<table>
<thead>
<tr>
<th>Electron microscopy</th>
<th>31</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specimens processed</td>
<td>938</td>
</tr>
</tbody>
</table>

#### Immunohistochemistry laboratory

| Specimens processed | 11,099 |

AIIMS 2006-2007 / 443
Neuropathology services
- Neuropathology surgical specimens 2,280
- Immunohistochemistry 2,457
- Muscle enzyme histochemistry 1,698
- Muscle immunohistochemistry 2,457

Renal pathology services
- Immunofluorescence on renal biopsies 525
- Urinary sediment analysis 850

Cardiac Pathology Services
- Immunohistochemistry 243

Hepatic pathology services
Markers for hepatitis viruses
- HBs Ag 1,245
- HBe Ag 878
- HBe-IgM 250
- HAV IgM 198
- Anti-HCV IgG 1,080
- Anti-HEV IgM 776

Molecular diagnostic tests
- HBV DNA 800
- HBV DNA (quantitative) 30
- HCV RNA (qualitative and quantitative) 500

AWARDS, HONOURS AND SIGNIFICANT EVENTS
Professor S.K. Panda received JC Bose National Fellowship of Department of Science and Technology in March 2007. He was honoured by Samanta Chandrasekhara Award of Orissa Bigyan Academy (Government of Orissa) Bhubaneswar, Orissa; Member of the ‘Task force on infectious disease—biology’, Department of Biotechnology, Ministry of Science and Technology, Government of India; Member, Advisory Committee on Biotechnology, Government of Orissa; Member, ‘Medical Sciences Research Committee’, Council for Scientific and Industrial Research for selection of Pool Officers; Adviser for selection of Senior Demonstrator Pathology by Rajasthan Public Service Commission on 12–13 March, 2007; Chairman, Research Advisory Committee of Indian Council of Agriculture and Research, New Delhi; Expert, Scientific Advisory Committee of Regional Medical Research Centre, Indian Council of Medical Research, Bhubaneswar, Orissa on 23 August 2007; Expert, Standing Selection Committee for selection of Assistant Professor at Indira Gandhi Medical College, Patna on 24 June 2006; Visited Venezuela as an Indian delegate, Department of Biotechnology; 10–14 July 2006; Member, consultative committee of Indo-US Meetings on Indian Health Science and Technology Initiative, New Delhi; 17–18 August 2006,
New Delhi; Chairman, Project Directorate on Animal Disease Monitoring and Surveillance (PD-ADMAS), Bangalore; Member, Technical Committee of Bureau of Indian Standards, Manak Bhawan, New Delhi.

**Professor Chitra Sarkar** was nominated as Member of the National Brain Research Centre, Research Advisory Committee; Member, Management Advisory Committee, Department of Science and Technology for Young Scientists for selection for BOYCAST Fellowship; Member, Research Review Committee, Tata Memorial Hospital, Mumbai; Expert in Himachal Public Service Commission; Executive Member, Neurological Society of India. Participated in the 9th Summer School of Myology at Institut de Myologie, Hopital de la Salpetriere, Paris, France; 14–23 June 2006; Invited to contribute to a chapter entitled ‘CNS primitive neuroectodermal tumours’ in the revised edition of the *WHO textbook of pathology and genetics of CNS tumours*.

**Professor S. Datta Gupta** was nominated as Member Advisory Committee for the International Pathology Update from 2–4 February 2007, New Delhi. He was elected the Honorary Secretary of the Indian Association of Pathologists and Microbiologists in 2006

**Professor M.K. Singh** was appointed Professor in charge of the Telemedicine Facility, AIIMS

**Professor R. Safaya** was Organizing Secretary of the International CME on Bone Pathology organized in collaboration with the faculty from Harvard Medical School and Mount Sinai School of Medicine; February 2007.

**Dr A.K. Dinda** appointed as Sub-Dean (Examination Section); Member, National-level Advisory Committee for developing a Nanoscience and Nanotechnology Center at Calcutta University, Calcutta; Member, Advisory Committee for development of nano-biotechnology center at JNU, Delhi; Founder Member, Society for Tissue Engineering and Regenerative Medicine India; Member, Research Advisory Committee of AIIMS; Co-coordinator for development of curriculum for e-education in the Telemedicine Project of AIIMS.

**Dr M.C. Sharma** was invited to contribute to a chapter entitled ‘Subependymal giant cell astrocytomas’ in the revised edition of the *WHO textbook on pathology and genetics of CNS tumours*.

**Dr Ayushi Jain**, Junior Resident, was awarded the Second Prize for her paper entitled ‘Role of major histocompatibility complex (MHC-I and II), cell adhesion molecules and membrane attack complex in pathogenesis of inflammatory muscle diseases’ at the 9th annual meeting of the Delhi Neurological Association; 3–4 February 2007; was awarded the Ramalingaswami Best Paper Award for her paper entitled ‘MHC class-I and II detection as a diagnostic tool in inflammatory myopathies’ at the Annual Conference of the Delhi Chapter of Indian Association of Pathologists and Microbiologists; April 2006.
VISITING SCIENTISTS

1. Dr Aswini Panigrahi, Associate Scientist, Seattle Biomedical Research Institute, Seattle, WA, USA visited the Department of Pathology and delivered a lecture on ‘Trypanosoma brucei mitochondrial proteome: Characterization of multi-protein complexes’, 18 September 2006.

2. Professor K.T. Wong, Professor of Pathology University of Malaya, Kuala Lumpur, Malaysia visited the Department of Pathology and delivered a lecture on ‘Pathogenesis of henipavirus encephalitis’, 16 November 2006.

3. Dr Rachel Oommen, Consultant Pathologist, William Harvey Hospital, Ashford, Kent, UK, delivered a talk on ‘Liquid-based cytology’; 29 January 2007.

9.28 Pharmacology

Professor and Head
Y.K. Gupta

Professors
V.L. Kumar K. Kishore N.R. Biswas

Additional Professor
S.K. Maulik

Associate Professor
D.S. Arya

Assistant Professors
Jagriti Bhatia J.P.K. Katyal K.H. Reeta
N.S. Raj Surender Singh

Scientists
Uma Singh Sujata Joshi Sharda S. Peshin
Nabanita Halder Thomas Kaleekal (ad hoc) Amita Srivastava (ad hoc)

EDUCATION
The department is engaged in the teaching programme of MB, BS (3rd, 4th and 5th Semesters), BSc Nursing (Hons), MSc, MD, PhD and DM (Clinical Pharmacology) courses.

Clinical Pharmacology has been introduced and conventional pharmacy and animal experiments are being reduced and replaced. Postgraduates are being trained to meet the current needs of industry, regulatory bodies, academic and research institutions and in scientific writing.

Short- and long-term training
Short-term research training was provided to one MSc Biotechnology student.

Continuing Medical Education
Organized by the department
· Workshop on ‘Good laboratory practices (GLP) for academia’, AIIMS, New Delhi; 24–25 November 2006.
· ‘National Annual Stocktaking Meeting’ for National Pharmacovigilance Programme (NPVP), AIIMS, at SMS Medical College, Jaipur. 20 December 2006
· ‘Biomedical communication’, Preconference day of the Annual Meeting of the Indian Pharmacological Society; Jaipur, 20 December 2006.
· ‘Clinical research inspections workshop’, organized under the aegis of Central Drugs Standards Control Organization (CDSCO), New Delhi; 24–25 August 2006.
· Workshop on ‘Use of large animals in biomedical research’, Indian National Science Academy (INSA), New Delhi; 26 June 2006. Organized in collaboration with Indian Pharmacological Society (IPS), Association of Physiologists and Pharmacologists of India (APPI) and Nutrition Society of India, and sponsored by INSA.

National and International Conferences
Lectures delivered
Professor Y.K. Gupta
· ‘Safety aspect of herbal drugs’, Institute of Nuclear Medicine and Allied Sciences (INMAS), Delhi; 3 November 2006.
· Keynote address in the International Conference on ‘Toxicology, toxicogenomics and occupational health’, 26th Annual Meeting of Society of Toxicology, Jiwaji University, Gwalior; 9–11 October 2006.
· ‘Ethical considerations in carrying out bio-medical research’, Mahatma Gandhi Memorial College, Indore; 19 November 2006.

AIIMS 2006-2007 / 448

‘Why, how, what and where to publish your research’, Central Council for Research in Unani Medicine, Department of Ayush, New Delhi; 4 December 2006.


‘International update on basic and clinical neuroscience advances’, XXIV Annual Conference of Indian Academy of Neurosciences, Industrial Toxicology Research Centre, Lucknow; 17–20 December 2006.


‘Presidential address’, Annual Meeting of Indian Pharmacological Society, Jaipur; 21–23 December 2006.


**Professor Jatinder Katyal**

‘Pharmacogenomics and neurological disorders in pharmacogenomics’, symposium organized by AIIMS, New Delhi in collaboration with Ranbaxy Research Laboratory, Gurgaon; 20 May 2006,

**Professor V.L. Kumar**


‘Estrogen receptor alpha and its e-domain variants in breast cancer’, XXXIX Annual Conference of Indian Pharmacological Society, Jaipur; 22 December 2006.

**Dr N.R. Biswas**

‘Ethical aspects of clinical trial’, Sri Aurobindo Medical College, Indore; 20 April 2006.

‘Nanoparticulated drug delivery’, XXXIX Annual Conference of Indian Pharmacological Society, Jaipur; 22 December 2006.

RESEARCH

Funded Projects

Completed

1. Diagnostic approaches for rapid and specific diagnosis of Mycoplasma pneumoniae infections in asthmatics. N.R. Biswas. Funded by Department of Science and Technology (DST) for three years (2004–2006). Funds: Rs 16.8 lakh.


Ongoing


Departmental projects

Completed and ongoing
1. Add-on *Acorus calamus* in the experimental model of stroke (middle cerebral artery occlusion) and seizures in rats
2. Evaluation of heavy metals content in herbal medicinal products marketed in and around Delhi
3. Effect of curcumin on cognitive impairment induced by antiepileptic drugs in rats
4. Plasma level monitoring of mycophenolic acid and clinical outcome in renal transplant patients
5. Detection of BCR–ABL mutation and plasma imatinib mesylate level in chronic myeloid leukemia (CML) patients: Correlation with response rate and toxicity
6. Model for drug-resistant seizures and the effect of curcumin on resistant animals
7. Effect of atorvastatin and pioglitazone on endothelial dysfunction in non-diabetic normolipidemic stable angina patients
8. Studies on the antihyperglycemic effect of *Calotropis procera*
9. Studies on the hepatoprotective effect of *Calotropis procera*
10. Inflammation related studies on the latex of *Calotropis procera*
11. Quantification of plasma level of imatinib mesilate (STI-571) in chronic myeloid leukemia (CML) patients and to correlate this with its safety and efficacy profile
12. Neurobehavioral evaluation of hydroalcoholic extract of *Emblica officinalis* with special reference to its antiepileptic activity

Collaborative projects

Completed
2. Evaluation of the role of retinal P-gp drug transporters in the ocular disposition of drugs (2004–2006). Funds: Rs 82,000 (with Ocular Pharmacology, Dr Rajendra Prasad Centre).
3. Amniotic membrane transplantation in acute ocular burns: A randomized controlled clinical trial (with Dr Rajendra Prasad Centre).

Ongoing
1. Evaluation of the biodisposition of xanthophylls in Indian donors eyes and detection of their content in commonly available fruits and vegetables (with Ocular Pharmacology, Dr Rajendra Prasad Centre)
3. Screening of herbal drugs. Y.K. Gupta. Funded by Dabur Research Foundation for 2 years. Funds: Rs 5.5 lakh.

**PUBLICATIONS**

**Journals**


**Abstracts**


**Chapters in Books and Monographs**


**Book**

**PATIENT CARE**

**Clinical pharmacology facility**
A newly constructed wing in new private ward building was taken up as ‘Clinical Pharmacology Wing’ by the Department of Pharmacology in collaboration with Forensic Medicine to upscale patient care facilities and in-patient wards for various clinical pharmacology activities.

**Therapeutic drug monitoring facility**
Therapeutic drug monitoring has become important for dose titration of many drugs of narrow therapeutic margin. The Department of Pharmacology in collaboration with the Department of Nephrology at AIIMS has started therapeutic drug-monitoring facility of several drugs for patient care and research. Monitoring of antiepileptic drugs, immunosuppressants such as cyclosporine, and methotrexate have been started for patient care free of cost.

**National poison information centre**
The Department of Pharmacology has a National Poison Information Centre, which is functioning 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 department for various poisons.

**National pharmacovigilance programme**
Central Drugs Standard Control Organization (CDSCO), Ministry of Health, Government of India has initiated the National Pharmacovigilance Programme with 32 centres including five regional and two zonal centres. AIIMS is the designated zonal centre for the North East region of the
country and receives data from peripheral and regional centres of this region. The data are then collated and analysed for causality assessment of the adverse drug reactions for submission CDSCO, which is the national centre.

**Urinary catecholamine test**

24-hour urine catecholamine estimation has been done on 200 samples obtained from various clinics of AIIMS and other hospitals of NCT of Delhi for the diagnosis of phaeochromocytoma.

**AWARDS HONOURS AND SIGNIFICANT EVENTS**

Dr Y.K. Gupta was elected President, Indian Pharmacological Society (2005–2006); Member, Review Committee of Central Council for Research in Ayurveda, Siddha and Homeopathy; Member, Review Committee of Central Council for Research in Unani Medicine (CCRUM); Chairman, National Technical Committee on Good Laboratory Practices (GLP); Member, Expert Group to review applications for waiver of toxicity data for Directorate of Plant Protection, Quarantine and Storage; 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, Central Council for Research in Ayurveda and Siddha, Department of Ayush; Member, Working Group on Development of Antifertility Agent Indian System of Medicine (ISM) Drug Pippalyadi Yoga; Member, Task Force on ‘Quality Standards of Indian Medicinal Plants’ by ICMR; Member, Task Force for Science and Society Division of Department of Science and Technology; Member, Review Group of Programme ‘Charak’ by Defence Research and Development Organization, 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, Directorate of Plant Protection and Quarantine and Storage, Faridabad; Member, Task Force on Biotechnology for Medicinal and Aromatic Plants of Department of Biotechnology; Member, Task Force of Indian National Science Academy (INSA); Member, Ethics Committee, AIIMS; Member, National Disaster Management Authority, Government of India; Member, Navodaya Vidyalaya Samiti; Member, High Powered Committee on ‘Global Environment Change and Health’ of Indian Council of Medical Research (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 on Food and Water Safety, International Life Sciences Institute, India; Member, Expert Group for Pesticides, Directorate of Plant Protection, Quarantine and Storage, Faridabad; Editor, *Indian Journal of Pharmacology and Physiology (IJPP) (Pharmacology)*; Coordinator, Zonal Centre of National Pharmacovigilance Programme under the aegis of the CDSCO; Member, Research Council, Central Drugs Research Institute, Lucknow and Centre for Cellular and Molecular Biology, Hyderabad; Member, Institutional Review Board for National Institute of Health and Family Welfare, Delhi; Member, International Union of Nutritional Sciences (IUNS)–International Union of Physiological Sciences (IUPS)–International

**Dr V.L. Kumar** was awarded A.V. Tilak Parvathy Devi Prize for the best research paper in the area of endocrinology by the Association of Physiologists and Pharmacologists of India; 2006.

**Dr S.K. Maulik** was included as Member, Fellowship Expert Group (Pharmacology), Fellowship Expert Group (Traditional Medicine), Technical Expert Group on Medicinal Plant Monograph, Indian Council of Medical Research (ICMR), New Delhi; Member, Editorial Board, *Indian Journal of Pharmacology*, Member, Executive Committee, Heart Failure Society, India.

**Dr K.H. Reeta** was awarded C.L. Malhotra Prize for the best paper in Pharmacology by the Association of Physiologists and Pharmacologists of India; 2006.
**9.29 Physical Medicine and Rehabilitation**

**Professor and Head**  
U. Singh

**Additional Professor**  
Sanjay Wadhwa (on lien from 1 March 2006)

**Associate Professors**  
S.L. Yadav

**Gita Handa**

**EDUCATION**  
The department is involved in teaching of undergraduate medical students during MB,BS course through lectures, integrated seminars and practical demonstration/visit to department including prosthetic–orthotic workshop.

The department is providing MD in Physical Medicine and Rehabilitation (PMR) training to postgraduate students, besides orientation training of MHA, MD (Community Medicine, Pharmacology, Medicine, Rheumatology, Paediatrics), MS (Orthopaedics), DM (Neurology and Paediatric 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.

**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**

- Was a panelist during a discussion on ‘Surgical versus conservative management of spinal cord injury’, VII Annual Conference of Indian Association of Physical Medicine and Rehabilitation (IAPMR) (Delhi Chapter), New Delhi; 15–16 April 2006.
- ‘Strategies of physical medicine and rehabilitation in rheumatological conditions’, National Rheumatology Update 2006, Army Hospital (Research and Referral), Delhi Cantt; 19–20 August 2006.

AIIMS 2006-2007 / 458


**Dr Gita Handa**

· ‘Rehabilitation in multiple sclerosis’, Indo-UK workshop on Multiple Sclerosis, Multiple Sclerosis Society of India; 14 February 2007.
· Guest lectures at the Institute of Physically Handicapped for students of Bachelors in Orthotics and Prosthetics.

**Lectures delivered in mass media**

**Dr U. Singh**

· Expert guest, ‘Naya Savera’ programme on Doordarshan to talk on issues related to spondylitis; 13 April 2006.
· Expert guest, Total Health programme on Doordarshan to talk on issues related to disabilities and their rehabilitation on the World Disabled Day; 3 December 2006.

**Dr Gita Handa**

· Expert guest, Total Health programme on Doordarshan to talk on issues related to postures and pain; 23 July 2006.
· Expert guest, Total Health programme on Doordarshan to talk on issues related to disability on the World Disabled Day; 5 December 2006

**Camps**

Faculty and residents participated in different camps
Camp at Srikrishna Janamabumi Mandir at Mathura
Camp organized by the Handicap Welfare Foundation

**RESEARCH**

**Collaborative Projects**

**Dr U. Singh**

**International Classification of Functioning (ICF) Delphi studies on:**

1. Stroke
2. Ank Spond [Anklyosing spondylitis]
3. SCI [Spinal cord injuries]

**Dr Gita Handa**

Participated in ICF Delphi Studies on ‘Spinal cord injuries management’.
PUBLICATIONS

Journals

PATIENT CARE

Facilities Available in the Department
The department provides outpatient, inpatient and outreach services to people with disabilities. The department has 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

New cases

<table>
<thead>
<tr>
<th>Facility</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPD</td>
<td>11,265</td>
</tr>
<tr>
<td>Ballabgarh</td>
<td>3,638</td>
</tr>
<tr>
<td>Camps</td>
<td>250</td>
</tr>
<tr>
<td>Prosthetic and orthotic</td>
<td>2,069</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17,222</strong></td>
</tr>
</tbody>
</table>

Old cases

<table>
<thead>
<tr>
<th>Facility</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPD</td>
<td>7,557</td>
</tr>
<tr>
<td>OPD visits: PT section</td>
<td>17,818</td>
</tr>
<tr>
<td>OPD visits: OT section</td>
<td>14,264</td>
</tr>
<tr>
<td>OPD visits: MSW</td>
<td>2,148</td>
</tr>
<tr>
<td>OPD visits: Vocational counsellor</td>
<td>2,236</td>
</tr>
<tr>
<td>Disability evaluation clinic</td>
<td>191</td>
</tr>
<tr>
<td>Railway concession certificates</td>
<td>882</td>
</tr>
<tr>
<td>Prosthetic and orthotic</td>
<td>9,046</td>
</tr>
<tr>
<td>Minor OT procedures</td>
<td>2,355</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>56,497</strong></td>
</tr>
</tbody>
</table>
AWARDS AND HONOURS

Dr U. Singh, Member of the Sub-Committee on Locomotor Disability and Leprosy (Cured), of the Rehabilitation Council of India, Ministry of Social Justice and Empowerment; Chairman, Specialty Advisory Board in PMR, National Board of Examinations; Chairman, Technical Advisory Group, District Rehabilitation Centre Scheme, Ministry of Social Justice and Empowerment; Member, Executive Council, National Institute for the Orthopaedically Handicapped, Kolkata; Inspector, Guru Govind Singh Indraprastha University, Government of National Capital Territory, Delhi; Inspector, Rehabilitation Council of India; Member Bureau of Indian Standards, 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*; Chairman of the Scientific Committee, 7th Annual Conference of the Delhi Chapter of Indian Association of Physical Medicine and Rehabilitation (IAPMR), New Delhi; 15–16 April 2006; Chairman of the Scientific Session I, Annual Conference of the Kerala Chapter of IAPMR, Calicut; 24–25 February 2007.

Dr Gita Handa, Assistant Editor, *Indian Journal of Physical Medicine and Rehabilitation*; Examiner for Bachelor of Orthotics and Prosthetics, Delhi University; Examiner for Post Graduate Programme in Sports Physiotherapy for Guru Nanak Dev University, Amritsar.

VISITING SCIENTISTS

1. Dr Maya Therattil, MD, Department of Rehabilitation Medicine, Spinal Cord Injury Medicine, Montefiore Medical Center, Jack D Weiler Hospital of the Albert Einstein College of Medicine, New York USA, delivered a talk on ‘Spinal cord injury’; 29 November 2006.

2. Dr Amarjit S. Arneja, Director, Peripheral Arterial Disease and Amputee Programme, Department of Medicine, University of Manitoba, Winnipeg, Canada delivered a talk on ‘Effects of anesthesia on pain after lower limb amputation’; 21 February 2007.
9.30 Physiology

<table>
<thead>
<tr>
<th>Professor and Head</th>
</tr>
</thead>
</table>
| V. Mohan Kumar      | J. Sengupta        
| (till 30 September 2006) | (from 1 October 2006)  

<table>
<thead>
<tr>
<th>Professors</th>
</tr>
</thead>
</table>
| R. Mathur  | K.K. Deepak        
|            | H.N. Mallick        
| D. Ghosh   |  

<table>
<thead>
<tr>
<th>Emeritus Professor</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.K. Anand</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Additional Professors</th>
</tr>
</thead>
</table>
| S.C. Bhatia*          | S.C. Mahapatra        
| (on deputation to BPKIHS, Nepal till 12 January 2007) | K.P. Kochhar  
| Ratna Sharma          | Nalin Mehta          

<table>
<thead>
<tr>
<th>Associate Professors</th>
</tr>
</thead>
</table>
| Suman Jain          | Ashok Kumar Jaryal   
| Raj Kumar Yadav     |  

<table>
<thead>
<tr>
<th>Assistant Professors</th>
</tr>
</thead>
</table>
| Sanjay S. Sood      | Anjana Talwar        

*Professor S.C. Bhatia passed away on 13 January 2007

**EDUCATION**

**Undergraduate, Postgraduate and Paramedical**

The department provided about 400 hours of teaching to the first year MBBS 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. A module on Bioethics has been included in the departmental postgraduate programme.

**Short- and long-term training**

The department provided short-term training for 3 months (1 September–12 November 2006) to a student from Department of Physiology, Maharaja Agrasen Medical College, Agroha, Hisar, Haryana; to a student for two weeks (25 December 2006–6 January 2007) to a student from Department of Physiology, Centre for Basic Sciences, Kasturba Medical College Bejai, Mangalore and to a student for 6 months (6 January–5 June 2006), Bundelkhand University, Jhansi.
Continuing Medical Education
Organized by the department
- 1st National Sleep Medicine School, AIIMS, New Delhi; 14–15 October 2006.
- Pre-conference workshop on ‘Autonomic function testing: Principles and methods’ during the 52nd National Conference of Association of Physiologists and Pharmacologists of India, Surat; 19 December 2006.

Lectures delivered
Dr R. Mathur

Dr N. Mehta
- ‘Relevance of yoga in modern medicine’, Pre-conference workshop on Yoga, during the 52nd Annual Conference of the Association of Physiologists and Pharmacologists of India, Surat; 19–23 December 2006.

Dr S. Jain
National and International Conference
Organized by the department

· Professor Baldev Singh Symposium on Consciousness, AIIMS, New Delhi; 2 April 2006.
· National Symposium on ‘Neural plasticity and repair’, AIIMS, New Delhi; 18 October 2006.
· Updates in Pain Physiology during the 52nd National Conference of Association of Physiologists and Pharmacologists of India, Surat; 21 December 2006.

Lectures delivered
Dr J. Sengupta


Dr R. Mathur

· ‘Effectiveness of lifestyle management course including Yoga in management of headache’, 9th International Congress of Behavioural Medicine, Bangkok, Thailand; 29 November–2 December 2006.
· ‘Physiological basis of pain management’, Rajasthan University, Jaipur; 12 December 2006.
· ‘Assessment techniques for pain status’, Symposium on Updates in Pain Physiology, during the 52nd National Conference of Association of Physiologists and Pharmacologists of India, Surat; 21 December 2006.
· ‘Pattern of social behaviour in rats exposed to chronic extremely low frequency-magnetic field’, Workshop cum Symposium on Electromagnetic Fields in Environment: Implications and Solutions, Jawaharlal Nehru University, New Delhi; 23–24 March 2007.

Dr K.K. Deepak

· ‘Indigenous software for quantification of autonomic tone under the theme Information and Communication Technology/Electronics Applications in Core Sectors, Electronics and Information Technology Exposition (ELITEX 2007), Department of Information Technology, Ministry of Communications and Information Technology, New Delhi; 10–11 January 2007.
· ‘Assessing autonomic nervous system non-invasively’, International Conference on ‘Cardio-
· ‘Correlation between baroreflex sensitivity and respiratory sinus arrhythmia in myocardial infarction patients’, Annual meeting of British Society for Cardiovascular Research Spring Meeting, Reading, UK; 29 March 2007.

**Dr H.N. Mallick**
· ‘An insight into waking brain’, Professor Baldev Singh Symposium on Consciousness, AIIMS, New Delhi; 2 April 2006.
· ‘Neural correlates of Rapid Eye Movement (REM) sleep’, Max Hospital, New Delhi; 15 October 2006.
· ‘Looking into the waking brain’, Annual Conference of Association of Physiologists of Orissa, Bhubneshwar; 19 November 2006.
· ‘Medial septum and sleep’, Symposium on Neurophysiology of Sleep, during the 52nd National Conference of Association of Physiologists and Pharmacologists of India, Surat; 21 December 2006.

**Dr N. Mehta**
· ‘Informed consent: Content and process’, Fogarty International Centre, National Institute of Health, USA sponsored Workshop on Ethical Review for Protection of Human Participants involved in Research, Indian Council of Medical Research, New Delhi; 29 April 2006.
· ‘Identifying outliers, processing missing data, and data transformation’, Workshop on
Scientific Writing and Grant Writing. Chandigarh Chapter of the Association of Physiologists and Pharmacologists of India, Chandigarh; 15 September 2006.


Dr R.K. Yadav

Dr A. Jaryal
· ‘Cardiac autonomic tone in paediatric hereditary sensory and autonomic neuropathy’, 52nd National Conference of Association of Physiologists and Pharmacologists of India, Surat; 19–23 December, 2006
· ‘Thallium-201 positive patients of coronary artery disease show high heart rate variability’, Annual Meeting of British Society for Cardiovascular Research Spring Meeting; Reading, UK; 29 March 2007.

Dr S. Sood

RESEARCH
Funded Projects
Completed

Ongoing

13. Histochemical investigations into the possible neural substrates responsible for sucrose induced pain modulation. S. Jain. Funded by the AIIMS Research Grant from 2005 to 2006. Funds: Rs 1 lakh.


**Departmental Projects**

**Completed**

Comparative study of cold presser responses by using two different temperatures

**Ongoing**

1. Effect of varying stimulus onset asynchronies on multisensory prepulse modulation of startle response
2. Modulation of startle reflex by attention in humans

**Collaborative Projects**

**Ongoing**

1. Purglautation of human adult retinal pigment epithelial (GRPE) cells in the 6-hydroxydopamine and lesioned rat model of Parkinson’s disease (PD) (with Neurology)
2. Assessment of endogenous opioid system and muscle spam in headache patients (with Neurology, Psychiatry, Endocrinology)
3. Modified neuroendocrine method to estimate endogenous opioid levels in healthy volunteers (with Endocrinology)
4. Role of dhydroepiandosterone sulphate (DHEAS) as a neuroprotective agent in Parkinson’s disease (PD) (with Neurology)
5. Bioeffects of magnetic field: Role of protein kinase C and cytochrome oxidase in adult rats (with School of Environment Sciences, JNU; Biosciences, Jamia Islamia)
6. A comparison of autonomic function before and after surgical intervention in patients with temporal lobe epilepsy (with Neurology, Neurosurgery)
7. Correlation between cardiovascular autonomic function and myocardial ischemia (with Cardiology)
8. Cardiovascular autonomic functions after myocardial infarction: Effect of short-term exercise training (with Cardiology)
9. Autonomic functions and selected immune markers in inflammatory bowel disease: Role of yogic intervention (with Gastroenterology)
10. Autonomic dysfunction in newly detected Type-II diabetes mellitus patients (with Endocrinology)
11. Electro-encephalographic and sympathetic responses to visual-cues with emotional and rational contents (with Atal Bihari Vajpayee Indian Institute of Information Technology and Management, Gwalior)
12. Assessment of autonomic response and arterial stiffness using photo-plethysmographic signal (with Centre for Biomedical Engineering, IIT Delhi)
13. Efficacy of a relaxation programme during early postpartum period on volume of expressed breast milk in mothers of very preterm babies: A randomized controlled trial (with Paediatrics)
14. Correlation between cardiovascular autonomic function and myocardial ischemia (with Cardiology)
15. Cardiovascular autonomic functions after myocardial infarction: effect of short-term exercise training (with Cardiology)

PUBLICATIONS

Journals


**Abstracts**


**Chapter in Book**


**PATIENT CARE**

Autonomic function laboratory and vascular function laboratory provide diagnostic facilities for referred patients. The laboratory provided routine test of autonomic reactivity along with autonomic tone quantification and non-invasive recording of gastric motility (electrogastrography, EGG). A total of 1,131 persons were tested for autonomic function test this year, which included 979 patients.
Integral Health Clinic is a patient care facility that offers a lifestyle modification course for the treatment of lifestyle disorders, e.g. ischemic heart diseases, hypertension, peptic ulcer syndrome, bronchial asthma, diabetes mellitus and obesity. 9 courses, attended by 76 patients were completed during the year.

**The Department also provides central facilities for:**
- Confocal Imaging Laboratory; and
- Molecular Biology Laboratory.

The department faculty and staff contributed towards the management of dengue out-break in Delhi; October 2006.

**AWARDS, HONOURS AND SIGNIFICANT EVENTS**

The department faculty has chaired several sessions in national and international conferences/symposia. The faculty has been assisting various universities in India and abroad in various capacities as experts and examiners.

**Dr R. Mathur** was appointed Member Board of Studies, Department of Physiology, Jawaharlal Nehru Medical College, Aligarh Muslim University, Aligarh; and Department of Physiology and Anatomy, Jamia Hamdard (Deemed University), Delhi; was appointed Member of PhD Sub Committee in the department of Physiology, Delhi University, Delhi.


**Dr K.K. Deepak** was awarded Professor A.K. Mukherjee Memorial Oration Award 2006 by Physiological Society of India, for the year 2006; He continues to be Chairperson of ‘Scientific Commission’ for Indian Federation of Sports Medicine; He is also a member of Education Commission, International Union of Physiological Sciences (IUPS); Ethics Committee, All India Institute of Medical Sciences, New Delhi; Selection Committee for research staff for extramurally funded projects; Sub Committee (Instrumentation Development) to prepare the white paper on ‘Biomedical Engineering Research Status in India’, DST, Government of India; Advisory Committee to discuss proposals of MCI for amendment of MCI regulation on minimum standard for opening of Medical College with 100 seats capacity; Advisory Board for popular physiology textbook ‘Medical Physiology’ by Guyton and Hall; Project Advisory committee (DST) for Biomedical ‘International Collaborative Projects’; Project Evaluation Committee, Basic Medical Sciences, ICMR; Project Evaluation Committee for evaluation of extramurally funded projects scheme of Morarji Desai National Institute of Yoga; Expert Committee for re-examination of quality requirements of bullet proof jackets, Bureau of Police R&D, Ministry of Home Affairs, Government of India; Research Committee, AIIMS; Specification Committee for purchase of exercise physiology equipment.
equipments in Defense Institute of Physiology and Allied Sciences, Defence Research and Development Organization (DRDO); Advisory Committee, Central Board of Secondary Education (CBSE); Editorial Board, International Journal of Yoga; he was appointed as sub-editor for Indian Medical Journal; was appointed as nominee of Director, AIIMS in the Advisory Committee constituted by the Hon’ble Supreme Court of India, to look into the various aspects of Bhopal Gas Victims (ICMR Headquarter), New Delhi; He is also a member of Postgraduate Thesis Committee i.e. MD/MS/MHA/MSc/MCh and PhD, AIIMS; Committee for research review presentation for extramurally funded projects, AIIMS; National Advisory Committee for organizing ‘National Yoga Week’ and ‘Re-orientation Training programme’ in yoga by Morarji Desai National Institute of Yoga, Department of Ayush, Ministry of Health and Family Welfare, Government of India; selection board for recruitment of scientist(G) in DRDO, Government of India; was appointed as member Task Force committee regarding 27% reservation for OBC in higher education, AIIMS; He continues as Chairman, Counseling Committee for AIIMS Postgraduate Junior Resident/Senior Resident selection; was appointed as Central Public Information Officer for examination-related matters, AIIMS.

Dr H.N. Mallick we awarded Baldev Singh oration, for outstanding contribution in neurophysiology by Association of Physiologists and Pharmacologists of India, for the year 2006; was appointed Chairman, Scientific Committee: Asian Sleep Research Society (2006–2009); was appointed General Secretary for Indian Society for Sleep Research; was reappointed as Finance Secretary for Associations of Physiologists and Pharmacologists of India.

Dr D. Kumar was awarded the Young Investigator Award during 5th Asian Sleep Research Society Congress at Seoul, South Korea.

Dr D. Ghosh continues as Executive Editor of the Indian Journal of Physiology and Pharmacology.

Dr N. Mehta was appointed Associate Editor of the Indian Journal of Physiology and Pharmacology; awarded PSG-FAIMER Fellowship for the year 2007–2009 at the PSG-FAIMER Regional Institute, sponsored by the Foundation for Advancement of International Medical Education and Research (FAIMER), a non-profit Foundation of the Educational Commission for Foreign Medical Graduates (ECFMG) Philadelphia, USA; was appointed Member, Committee for Tele Medicine, AIIMS; was appointed Member, Telemedicine Core Group, AIIMS; was appointed Chairman, Institutional Ethics Committee for Research involving Human Subjects, Noida College of Physical Education; Noida; was appointed Member, Institutional Ethics Committee for Research on Human Subjects, Dr Ram Manohar Lohia Hospital, New Delhi.

Dr S. Jain was appointed as Editor, Indian Society for Pain Research and Therapy Newsletter.
**Dr R.K. Yadav** was awarded a ‘Best Presentation’ award for his research presentation in the International Conference on Controversies in Reproductive Medicine, Mumbai; 15–17 September 2006.

**Dr S. Sood** continues as Associate Editor, *Indian Journal of Physiology and Pharmacology*.

**VISITING SCIENTISTS**

1. Professor V.D. Avelev from I.P. Pavlov Institute of Physiology, St. Petersburg, Russian Academy of Science, Russia visited the department for one month (November–December 2006).
2. Dr Makaravich T.F. from I.P. Pavlov Institute of Physiology, St. Petersburg, Russian Academy of Science, Russia visited the department for one month (November–December 2006).
3. A.H. McGregor, Professor, Biodynamics, Human Performance Group, Biosurgery and Surgical Technology Division of Surgery, Oncology, Reproductive Biology and Anaesthetics Faculty of Medicine Imperial College London visited the department and delivered the lecture on ‘Understanding Spinal Function’; 9 January 2007.
4. Anna, Human Performance Group, Biosurgery and Surgical Technology Division of Surgery, Oncology, Reproductive Biology and Anaesthetics Faculty of Medicine Imperial College London visited the department and delivered the lecture on ‘The Use of Transcranial Magnetic Stimulation in Understanding Spinal Cord Injury’; 9 January 2007.
5. Professor S.K. Sarna, Internal Medicine Neuro Sciences, University of Toxous Galveston visited the department and delivered the lecture on VIP-induced gene expression in gut smooth muscle cells; 31 October 2006.
6. Bhanu P. Jena, Director, Nano Bio Science Institute, Department. Physiology, Wayne State University School of Medicine, Detroit, USA visited the department and delivered the lecture on Molecular Machinery and Mechanisms of Cell Secretion; 29 June 2006.
7. Deepak Shrivastav, University of California, USA visited the department and delivered the lecture on Basic Science and Understanding Sleep; 5 October 2006.
9.31 Psychiatry

Professor and Head
Rajat Ray

Professors
Manju Mehta
S.K. Khandelwal
R.K. Chadda
Pratap Sharan

Associate Professors
Rajesh Sagar

Assistant Professors
Nand Kumar
Mamta Sood

EDUCATION
A) Under Graduate

Teaching
24 hrs: 3rd Semester
14 hrs: 6th Semester
6 hrs: 8th Semester

Clinical Posting
20 days: 4-5th Semester
40 days 6-8th Semester

B) BSC Nursing:
38 hrs in 2 semesters

C) Ph. D & Postgraduate teaching
Journal discussion once every week
Seminar once every week
Case Conference once every week
Faculty/Staff presentation once every week besides CCR & CGR in every semester
Psychotherapy supervision for postgraduate psychiatry and doctoral level clinical psychology students

Continuing Medical Education
Conferences, workshops, seminars, training course, symposium

- “Awareness programme on ‘road rage’ for traffic police personnel” at AIIMS, New Delhi, May, 2006.
Lectures delivered
Dr. Manju Mehta
- ‘Stress and time management’ National Judicial Academy, Bhopal, September, 2006.

Dr. R.K. Chadda
- ‘Somatoform disorders’ Training programme for Medical Officers under District Mental Health Programme, Post Graduate Institute of Medical Sciences, Rohtak, April 2006.
- ‘Anxiety Disorders’ in Training programme for Medical Officers under District Mental Health Programme, Post Graduate Institute of Medical Sciences, Rohtak, April 2006.
- One lecture per month on various topics, Training programme in Psychiatry for Medical Officers, Govind Ballabh Pant Hospital, New Delhi, 2006.

Dr. Pratap Sharan
- ‘Situation analysis and needs assessment,’ Workshop on Development of Mental Health Services in Madhya Pradesh, Bhopal, May 2006.
- ‘Training initiatives and activities,’ Workshop on Development of Mental Health Services in Madhya Pradesh, Bhopal, May 2006.
- ‘Handling of psychiatric emergencies by caregivers,’ National Workshop on Community Psychiatry Services in India – Today and Tomorrow, Indian Psychiatric Society & Indian Psychiatric Society (North Zone), Chandigarh, September 2006.

National and International Conferences
National conferences
Dr. Manju Mehta
- ‘Achievement Motivation in Indian Expedition Members to Antarctica,’ National Association of Psychologist (NAOP), Mumbai, December, 2006.
- ‘Depression in chronic pain,’ Annual Conference of Association of Pharmacologists and Physiologists – India (APPI), Surat, December, 2006

Dr. S.K. Khandelwal
Dr. R.K. Chadda
· ‘Essential psychotherapy skills,” 59th Annual Conference of the Indian Psychiatry Society, Chennai, 4-7 January 2007.

Dr. Pratap Sharan
· ‘Medico-legal aspects of violence,’ Symposium on Violence and Mentally Ill: Myths and Reality, 31st Annual Conference of Indian Psychiatric Society (North Zone), Shimla, 14-15 October 2006.

Dr. Rajesh Sagar

International Conferences
Dr. S.K. Khandelwal
· ‘Prioritizing mental health research in the developing countries,’ World Psychiatric Association Symposium on Psychiatry in the Developing Countries, Lahore, Pakistan, 15-18 December, 2006.

Dr. R.K. Chadda

Dr. Rajesh Sagar
· ‘Characteristics of major depressive disorders in adolescents versus adults,’ 17th World Congress of International Association of Child and Adolescent Psychiatry and Allied Professions (IACAPAP), Melbourne, Australia, September, 2006.
RESEARCH

Research Projects

Ongoing
2. Risk factors of substance use and abuse in offspring of substance abuse patients. Manju Mehta. Funded by Indian Council of Medical Research for two and half years (October 2004 to April 2007). Funds: Rs 6 lakh.

Completed
2. Review of feasibility of community based project on depression/anxiety for implementation in eleven member countries. Pratap Sharan & Rajesh Sagar (both were Principal Investigators of independent arms in the review). Funded by World Health Organization: South East Asia Region for 1 year (2006-2007). Funds: Rs 2.3 Lakh.
3. A multi-center, double blind, randomized, placebo controlled, parallel group, flexible dose titration, and add-on study of mecamylamine in the treatment of major depressive disorder with subjects who are partial responders to citalopram therapy. Rajesh Sagar. Funded by Targacept (USA) for 2 years (2005 and 2006). Funds: Rs. 4 lakh.

PUBLICATIONS

Journals


AIIMS 2006-2007 / 479

**Chapter in Books**

**PATIENT CARE**

<table>
<thead>
<tr>
<th></th>
<th>NEW</th>
<th>OLD</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General OPD</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walk in Clinic</td>
<td>12360</td>
<td>21459</td>
<td>33189</td>
</tr>
<tr>
<td>Detailed assessment:</td>
<td>1742</td>
<td>___</td>
<td>1742</td>
</tr>
<tr>
<td><strong>Specialty Clinic</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child Guidance:</td>
<td>417</td>
<td>331</td>
<td>748</td>
</tr>
<tr>
<td>De-Addiction Clinic:</td>
<td>180</td>
<td>1318</td>
<td>1498</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td>14699</td>
<td>23108</td>
<td>37807</td>
</tr>
<tr>
<td><strong>GRAND TOTAL</strong></td>
<td>18372</td>
<td>88901</td>
<td>107273</td>
</tr>
</tbody>
</table>

**Inpatient Care**
- Admissions: 399
- Discharges: 391

**Laboratory Investigations for Patient Care:**
- Serum Lithium level: 800

**AWARDS AND HONOURS AND SIGNIFICANT EVENTS**
Dr. Manju Mehta was invited for development of Curriculum on M.Phil in Clinical Psychology at BP Koirala Institute of Medicine, Dharan, Nepal in May, 2006. She was nominated as a member
of Academic Committee of IHBAS in January, 2007, as a member of Executive Committee of the workshop on road rage organized for Police Officers in May, 2006. She chaired a session at Annual Conference of Indian Association of Clinical Psychologists at Salem.

Dr. S.K. Khandelwal was honoured by the Psychiatrists Association of Nepal for contributions to the mental health development in Nepal on the occasion of 2nd International Conference of SAARC Psychiatric Federation, Kathmandu, Nepal, 17-19 November, 2006. He was also the Chairperson of the scientific programme of 2nd International Conference of SAARC Psychiatric Federation, Kathmandu, Nepal, 17-19 November, 2006.

Dr. R.K. Chadda was selected as a Member, Scientific Committee, 2nd International Conference of SAARC Psychiatric Federation, Kathmandu, Nepal, and Nov 17-19, 2006; Member, Scientific Committee, First France India Meet on Psychiatry, Psychotherapy and Psychoanalysis, New Delhi, Feb 28- March 2, 2007. He chaired sessions on ‘Stem Cell Research’ in International Workshop on Ethical Issues and Genetic Counselling in Mental Illness, New Delhi, 17 December 2006, ‘Community and Social Psychiatry’ in 2nd International Conference of SAARC Psychiatric Federation, Katmandu, Nepal, 17-19 November, 2006; and a Symposium ‘Bipolar disorders: new horizons of development’ in 59th Annual Conference of the Indian Psychiatry Society, Chennai, 4-7 January 2007.

Dr. Pratap Sharan is serving as the Editor, Journal of Indian Association of Child and Adolescent Mental Health, Editorial board member, Indian Journal of Psychiatry, and Editorial board member, Journal of Mental Health and Human Behavior. He also served as a Resource Person for the following: WHO’s Research for Change Initiative: Enhancing the quality of mental health publications from low- and middle-income countries, WHO/APIRE Conference on Public Health Aspects of Diagnosis and Classification, Director of Civil Aviation’s Committee on prevention of and negotiating with hijackers, WHO SEARO’s Video module on training in psychiatry for general practitioners, and Government of Madhya Pradesh Expert Group on Improvement of Mental health Services in the State.

Dr. Rajesh Sagar was awarded DJ Cohen Fellowship of the International Association of Child and Adolescent Psychiatry and Allied Professions (IACAPAP) at the 17th World Congress of IACAPAP held in Melbourne, Australia, September, 2006. He received the Membership of American Academy of Child and Adolescent Psychiatry, December, 2006. He was also nominated as a Technical Advisory Group (TAG) member of the multi-centric research project on Neuro-developmental disability in children by International Clinical Epidemiology Network (INCLEN). He delivered a guest lecture on District Mental Health Program (DMHP), Rohtak, Haryana, April, 2006. He was invited member for National Advisory meeting on modification of National Mental Health Program (NMHP), Ministry of Health & Family Welfare, New Delhi, April 2006. He was nominated as a speaker and resource person in “Workshop on Development of Mental Health
Services in Madhya Pradesh organized by Department of Medical Education, Public Health & Family Welfare, Government of Madhya Pradesh, May 2006. He was invited to attend as India coordinator of the World Mental Health Survey Consortium Annual Meeting in Providence, Rhode Island, USA, June 2006. He is a member of Scientific Advisory Committee (SAC) of the National Brain Research Centre (NBRC) and attended the 9th meeting of SAC at NBRC, Manesar, Haryana, August, 2006. He was invited as the speaker and resource person in National Consultative meeting on District Mental Health Program (DMHP) for Ministry of Health & Family Welfare organized in Bangalore, October, 2006. He was invited as an External Expert for evaluation of research projects of the Department of Science and Technology, New Delhi, Oct, 2006. He was invited as a chairperson and resource person for the National Consultation of Mental Health Policy for Jan Sawathya Abhiyan (JSA), Bapu Trust in Pune, December, 2006. He was invited to attend and give talks in the Inter-country meeting on Developing Community Mental Health Services, in Bangkok, Thailand as a Temporary Advisor to WHO-SEARO, December, 2006. He participated as an Expert in Development of Training Video for general practitioners on Mental Health. He was invited as a Chairperson in the First France India Meet on Psychiatry, Psychotherapy and Psychoanalysis, New Delhi, Feb 28- March 2, 2007.
9.32 Radiodiagnosis

<table>
<thead>
<tr>
<th>Professor and Head</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sushma Vashisht</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Professors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arun Kumar Gupta</td>
</tr>
<tr>
<td>Deep Narayan Srivastava</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Additional Professor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raju Sharma</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Associate Professors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sanjay Thulkar (IRCH)</td>
</tr>
<tr>
<td>Sanjay Sharma (RPC)</td>
</tr>
<tr>
<td>Suman Bandhu</td>
</tr>
<tr>
<td>(resigned on 17 October 2006)</td>
</tr>
<tr>
<td>Ashu Seith</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assistant Professors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smriti Hari (Trauma Centre)</td>
</tr>
<tr>
<td>Shivanand Gamanagatti</td>
</tr>
<tr>
<td>Atin Kumar</td>
</tr>
<tr>
<td>(Trauma Centre)</td>
</tr>
</tbody>
</table>

**EDUCATION**

**Undergraduate and Postgraduate**

BSc (Hons) Medical Technology in Radiography: A batch of 7 students was admitted to the course in 2006–07. This course is of 3 years’ duration. A total of 18 students were enrolled in this course.

MD: There were 19 junior residents out of whom three were sponsored candidates.

**Short- and long-term training**

- Short-term training in CT/MRI was imparted to 1 Radiologist from Sri Lanka for 6 months.
- Short-term training in CT/MRI was imparted to 1 Radiologist each from Afghanistan and Meghalya for 2 months.
- Short-term training in CT was imparted to 1 Radiologist from Manipur for 15 days.
- Short-term training in CT was imparted to 4 Radiographers from Afghanistan for 2 months.
- Short-term training in Digital X-ray/CT/MRI was imparted to 3 Radiographers from Bhutan for 6 months.
Continuing Medical Education
Organized by the department

Lectures delivered
Dr Sushma Vashisht
· ‘Recent advances in bowel imaging’, Annual conference of IRIA Delhi Branch on ‘Body imaging: Recent advances and interventions’, AIIMS; 11 March 2007.

Dr Arun Kumar Gupta

Dr Deep Narayan Srivastava
· ‘Radiological interventions in HCC’, Ist North-East CME on Diagnostic and Interventional Radiology, North–Eastern Indira Gandhi Regional Institute of Health and Medical Sciences (NEIGRIHMS), Shillong; 14–15 October 2006.
· ‘Vertebroplasty in pain management’, Ist North-East CME on Diagnostic and Interventional Radiology, North–Eastern Indira Gandhi Regional Institute of Health and Medical Sciences (NEIGRIHMS), Shillong; 14–15 October 2006.

Dr Raju Sharma
· ‘Introduction to CT and MRI’, JDW National Referral Hospital, Bhutan; 5 July 2006.
· ‘Imaging of benign bone lesions’, Annual Conference of Indian Radiology and Imaging Association, North Zone Chapter, IGMC, Shimla; 1-2 October 2006.
· ‘Film reading session’, Annual conference of IRIA Delhi Branch on ‘Body imaging: Recent advances and interventions’, AIIMS; 11 March 2007.
Dr Sanjay Thulkar

Dr Sanjay Sharma
- ‘Radiology of fungal chest infections’ in the Delhi chapter of Associations of Physicians of India, AIIMS; 12 August 2006.

Dr Ashu Seith
- ‘CT in the diagnosis and management of ILD’, Symposium of Thoracic Imaging, Vallabhai Patel Chest Institute, New Delhi; 5 April 2006.

Dr Smriti Hari

Dr Shivanand Gamanagatti

Dr Atin Kumar

Other Departmental Staff
- ‘Cost effectiveness of and impact on survival of screening patients of cirrhosis to detect hepatocellular carcinoma’, CME on Current Perspectives of Liver Diseases, Delhi; August 2006.
National and International Conferences
National Conferences
Lectures delivered

Dr Sushma Vashisht

Dr Arun Kumar Gupta

Dr Ashu Seith
· ‘CT and MRI in paediatric chest diseases’, 18th National Conference of Indian Academy of Pediatrics and Indo-European Regional Seminar on Pediatric Respiratory Diseases, Lady Hardinge Medical College, New Delhi; 24–29 November 2006.
· ‘Film reading session’, 18th National Conference of Indian Academy of Pediatrics and Indo-European Regional Seminar on Pediatric Respiratory Diseases, New Delhi; 24–29 November 2006.

Dr Smriti Hari

Other Departmental Staff
· ‘Multislice CT physics and applications’, 8th National Conference of IART (Indian Association of Radiological Technologists), Pune; 11–12 November 2006.
· ‘India/WHO the domestic and international scene’, Quality Assurance Workshop, Tata Memorial Hospital, Mumbai; 13–17 November 2006.
· ‘Role of computers in radiology imaging’, 12th National Conference of Society of Indian Radiographers, NIMS, Hyderabad; 15–16 December 2006.
· ‘Introduction to quality assurance workbook’, Quality Assurance Workshop, Tata Memorial
Hospital, Mumbai; 13–17 November 2006.

·  ‘Planning for future’, Quality Assurance Workshop, Tata Memorial Hospital, Mumbai; 13–17 November 2006.
·  ‘Making of simple test tools’ – demonstration, Quality Assurance Workshop, Tata Memorial Hospital, Mumbai; 13–17 November 2006.

International Conferences

**Dr Sushma Vashisht**


**Dr Raju Sharma**


**Dr Smriti Hari**

·  ‘Lobar holoprosencephaly presenting as adipsic hypernatremia in a 5-year-old girl’. The 4th biennial scientific meeting of Asia Pacific Pediatric Endocrine Society, Pattaya, Thailand; 1–4 November 2006.

**Other Departmental Staff**

·  ‘Effectiveness and safety of MRI-guided abdominal biopsy at 1.5T close MR system’ Radiological Society of North America (RSNA) Conference, Chicago, USA; 26 November–1 December 2006.
·  ‘Use of rotational angiography in vertebroplasty’. 32nd Annual Meeting of Society of Interventional Radiology, Seattle, USA; March 2007.
·  ‘Cost effectiveness of hepatocellular carcinoma screening in India’, Asia Pacific Association for Study of Liver (APASL), Kyoto, Japan; 27-30 March 2007.
·  ‘Clinical profile and therapy in hepatocellular carcinoma: Experience from a tertiary care center in India’, Asia Pacific Association for Study of Liver (APASL), Kyoto, Japan; 27-30 March 2007.
RESEARCH
Funded Projects
Completed
1. Management of liver cancer using radionuclide methods with special emphasis on early
diagnosis, loco regional therapy (intra-arterial) and internal dosimetry. Deep N. Srivastava.
Funding by IAEA from 2001 to 2006). Funds: US$ 40,000.
2. Evaluation of extended venous thromboembolism prophylaxis with enoxaparin. (EXCLAIM
project). S.K. Sharma (Medicine), Atin Kumar. Funded by Aventis Pharmaceuticals from
2005 to 2006. Funds: Rs 1 lakh.
3. Role of radio-frequency ablation in early breast cancers. Sanjay Sharma. Funded by the
Intramural Institute Research Grant of the AIIMS, New Delhi from 2005 to 2006. Funds:
Rs 1 lakh.

Ongoing
1. Effects of arzoxifene on vertebral fracture incidence and on invasive breast cancer incidence
in postmenopausal women with osteoporosis or with low bone density. A.C. Ammini,
2. Postmenopausal evaluation and risk reduction with Lasoxifene. A.C. Ammini, Pfizer, Ashu
Seith. PEARL project for trial of lasoxifene in senile osteoporosis for 5 years. Funds: 50
lakh.
3. Antibiotic prophylaxis in the management of VUR: A randomized double blind placebo controlled
trial. Pankaj (Department of Pediatrics). Smriti Hari. Funded by ICMR for 3 years (2006-
2009). Funds: Rs 12 lakh.
4. Incidence of deep venous thrombosis in high-risk patients admitted in medical wards and
ICU in a tertiary care hospital. S.K. Sharma (Department of Medicine). Atin Kumar, Ashu
Seith. Funded by Pfizer from 2006 to 2007. Funds: Rs 5 lakh.

Departmental Projects
Completed
1. Chest tuberculosis in children: CT findings in active and post treatment cases
2. Evaluation of the role of MDCT, CT angiography and bronchial artery embolization in the
management of hemoptysis
3. Pulmonary Tuberculosis: CT evaluation in active and inactive disease with limited MR
correlation
4. Role of percutaneous vertebroplasty in management painful vertebral lesions
5. Role of MRCP in the diagnosis work-up of portal biliopathy
6. Characterization of bone tumors with in vivo proton MR spectroscopy aided by dynamic contrast-
enhanced MRI
7. Preoperative evaluation of carcinoma of ovary with multidetector CT and its correlation
with surgical findings
8. Whole body MR imaging for detection of skeletal metastases in pediatric patients of small cell neoplasms: Comparison with skeletal scintigraphy and FDG PET CT

Ongoing
2. Role of directional vacuum assisted breast biopsies in patients with previously equivocal biopsy results.
3. Imaging evaluation of intra-orbital masses causing proptosis.
5. Evaluation of tracheobronchial lesions by multidetector row CT.
6. Role of MR arthrography in the assessment of glenohumeral instability.
7. Role of magnetic resonance imaging and magnetic resonance sialography in salivary gland diseases.
8. Comparison of conventional and gadobenate dimeglumine enhanced magnetic resonance cholangiopancreatography in the evaluation of biliary enteric anastomosis.
9. To evaluate the role of CT-guided radiofrequency ablation in the management of inoperable primary lung cancer.
10. Whole body MRI for detection of skeletal metastases in pediatric patients of small cell neoplasms: Comparison with skeletal scintigraphy and FDG PET-CT.
11. Role of MRI in planning of breast conserving surgery for carcinoma breast.
12. MRI and PET-CT evaluation of soft tissue sarcomas.

Collaborative Projects
Completed
1. Evaluation of uterine artery embolization in the management of uterine fibroid in comparison with medical and surgical treatment (with Obstetric and Gynaecology).
2. Dosimetric and therapeutic evaluation of transarterial Rhenium-188 in cases of inoperable liver cancer (with Nuclear Medicine).
3. Impact of pre-operative vascular evaluation by doppler ultrasound on early failure rate of AV fistula in haemodialysis patients (with Surgical Disciplines).
4. Abdominal infections in immunocompromised hosts: Clinical, radiological and microbiological correlation with special reference to bowel wall thickness (with Haematology).
5. CT Guided celiac plexus block for the management of benign pain due to chronic pancreatitis: A comparative study using steroid and alcohol neurolysis (with Anaesthesia).
6. Relationship of serum TSH with thyroid vascularity assessed at operation (with Surgery).
7. MRI study to compare changes in TM Joint following mandible advancement using Twin Block and Bionator Appliances (with Dental Surgery).
8. Assessment of latent manganese toxicity and development of intrapulmonary arterio-venous shunting as prognostic factors following surgery for biliary atresia (with Pediatric Surgery).

AIIMS 2006-2007 / 489
10. Clinical, endocrine and radiological profile of patients with possible lymphocytic hypophysitis (with Endocrinology)
11. High biliary obstruction: Indicators to diagnose benign versus malignant etiology (with GI Surgery)
12. Study of the effect of resistance muscle exercise on insulin sensitivity in non-obese Type-II diabetic Asian Indians (with Medicine)
13. Role of growth hormone- insulin like growth factor-1 axis in abnormal body composition and insulin resistance in Asian Indians (with Medicine)
14. Profile of micronutrient deficiency and hepatobiliary dysfunction in cystic fibrosis (with Pediatrics)
15. Prospective randomized double blind control trial of dexamethasone vs. albendazole on calcification as an outcome in 1–2 ring enhancing lesions in neurocysticercosis of children (with Pediatrics)
16. 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 Hospital Administration)
17. MR Spectroscopy and endorectal MR imaging in the diagnosis of early prostate cancers and its correlation with histopathological results of TRUS guide prostate biopsies and surgical specimens (with NMR)
18. Evaluation of efficacy of Radio-frequency Ablation of primary tumour in early breast cancer (with Surgery)
19. Clinical and radiological evaluation of chest infections in patients with hematological malignancies presenting with febrile neutropenia (with Haematology)
20. To assess the utility of resistive index on doppler ultrasound in predicting chronic allograft nephropathy (with Nephrology)

Ongoing
1. Randomized controlled trial of radio frequency ablation (RFA) versus percutaneous acetic acid injection (PAI) therapy for the treatment of small hepatocellular carcinoma (with Gastroenterology)
2. Surveillance of patients of cirrhosis for detection of hepatocellular carcinoma: A cohort study (with Gastroenterology)
3. Validation of the symptomatology as a predictor of hepatocellular carcinoma in patients of cirrhosis of liver (with Gastroenterology)
4. Randomized controlled trial of transarterial chemoembolization (TACE) versus TACE plus oral chemotherapy in the treatment of unresectable hepatocellular carcinoma (with Gastroenterology)
5. Randomized controlled trial of transarterial chemotherapy (TAC) versus Oral chemotherapy in the treatment of unresectable Hepatocellular carcinoma (with Gastroenterology)
6. Randomized controlled trial of N-Acetylcysteine in prevention of renal failure in hepatocellular carcinoma patients undergoing Transarterial Chemotherapy (TAC) and Transarterial Chemoembolisation (TACE) (with Gastroenterology)

7. Randomized controlled trial of oral chemotherapy versus supportive therapy in the treatment of unresectable hepatocellular carcinoma (with Gastroenterology)

8. Evaluation of image based treatment planning in radiotherapy (with Radiotherapy).

9. Role of neoadjuvant chemotherapy in management of patients with advanced ovarian cancer (with Medical Oncology)

10. Study of physical parameters and quality assurance in the gamma knife based stereotactic radiosurgery with non-coplanar beam in the phantom (with Medical Physics)

11. Study of effectiveness of virtual simulation in external beam radiotherapy planning of carcinoma cervix (with Radiotherapy)

12. Metabolic characterization of soft tissue tumours and pathologic and radiological correlation with in vivo Magnetic Resonance Spectroscopy (MRS) (with Surgical Oncology and NMR)

13. Randomised comparison of ABVD with EVAP in newly diagnosed cases of Hodgkin’s lymphoma (with Medical Oncology)

14. Role of three dimensional computed tomographic scanning in assessment of mandibular invasion and its utility in planning mandibular resection and reconstruction in oral cancer patients (with Surgical Oncology)

15. Study of structure and function of lung in patients with achalasia cardia (with gastroenterology)

16. Effect of vitamin D3 supplementation on bone disorders in children with chronic kidney disease (with Paediatrics)

17. Evaluation of high-resolution ultrasound for screening of premature atherosclerosis in children with nephrotic syndrome (with Paediatrics)

18. Prevalence of osteoporosis in patients with ankylosing spondylitis (with Medicine)

19. Role of $^{18}$F-FDG PET/CT in the evaluation of nodular pulmonary lesions and its comparison with CT scan findings (with Surgery)

20. Evaluation of $^{18}$F- FDG PET/CT and comparison with CT findings in patients with mediastinal lymphadenopathy due to tuberculosis and sarcoidosis (with Medicine)


22. Study of etiological risk factor profile in pediatric strokes (with Pediatrics)

23. Efficiency of zinc supplement as an adjunct with ATT in children below 15 years age with pulmonary TB in reducing time to sputum conversion, a randomized blind control trial (with Paediatrics)

24. Renal functions and their maturation and renal volume in normal and growth restricted neonates (with Paediatrics)

25. Endothelial dysfunction in rheumatoid arthritis (with Medicine)

26. A Survey on the prevalence of pulmonary tuberculosis (with Medicine)
27. Role of centchroman in regression of mastalgia and regression of fibroadenoma and its correlation to histopathology and estrogen and progesterone receptors. (with Surgery)

28. Evaluation of the efficacy of thrice weekly DOTS regimen in TB pleural effusion at six months (with Medicine)

29. Quantitative imaging study of breast cancer and its correlation with oxidative stress (with Medical Physics)

30. To determine the efficacy of flutamide as a tumour volume reducing agent in nasopharyngeal angiofibroma (with ENT)

31. Comparative evaluation of ultrasonography and MRI in prenatal diagnosis of fetal anomalies (with Gynecology and Obstetrics)

32. Comparative evaluation of MRI and arthroscopy in the diagnosis of meniscal tears in anterior cruciate ligament deficient knees (with Orthopaedics)

33. Role of PET-CT in differentiating benign and malignant pancreatic mass lesions in patients with or without chronic pancreatitis (with Nuclear Medicine)

34. Comparative study of MR enteroclysis and double balloon enteroscopy in ulcerocutaneous lesions of small bowel (with Gastroenterology)

35. MRI as a tool for staging Carcinoma Rectum before and after radiotherapy (with Gastrointestinal Surgery)

36. To document the effect of the time of institution of DMARDs on the radiological outcome in patients with rheumatoid arthritis (with Medicine)

37. To study the role of core decompression with and without fibular grafting in patients with avascular necrosis of femoral head; and its effects on the disease progression (with Orthopaedics)

38. Role of stem cell therapy in peripheral vascular disease (with Surgery)

39. Role of FDG-PET and MRI in assessment of osteosarcoma: Prechemotherapy and post-chemotherapy (with Medical Oncology)

40. Regulation of coagulation in orthopedic surgery to prevent DVT and pulmonary embolism (with Orthopaedics)

41. Comparison of FDG-PET and dynamic MRI in correlation of VEGF expression on tumour cells in patients with osteosarcoma (with Medical Oncology)

**Publications**

**Journals**


Abstracts


5. Das CJ, Srivastava DN, Vashisht S. Effectiveness and safety of MRI guided abdominal biopsy at 1.5T close MR system. RSNA program 2006;485.


Chapters in Books


PATIENT CARE

Radiological procedures

Details of investigations for the period April 2006–March 2007
### Routine studies

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>OPD</td>
<td>1,05,288</td>
</tr>
<tr>
<td>Indoor</td>
<td>25,145</td>
</tr>
<tr>
<td>Casualty</td>
<td>93,518</td>
</tr>
<tr>
<td>Portable</td>
<td>22,200</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,46,151</strong></td>
</tr>
</tbody>
</table>

### Special investigations

#### Contrast studies

- Barium studies: 2,770
- Intravenous pyelography: 1,724
- Miturating cystourethrography: 1,524
- Hysterosalpingography (HSG): 200
- Operation theater (OT) studies: 63
- Endoscopic retrograde cholangio-pancreatography (ERCP): –
- Other contrast studies: Sinogram, fistulogram, T-tube choalangiogram, etc.: 768
- **Total**: 7,049

#### Mammography

- 1,441

#### Ultrasound:

- Routine: 19,144
- Emergency: 21,527
- Doppler: 2,828
- **Total**: 43,499

#### CT

- Body: 7,541
- Head: 3,202
- **Total**: 10,743

#### Vascular studies

- Digital subtraction arteriography (DSA): 257
- Venography: 72
- **Total**: 329

#### MRI

- 2,327

#### Interventional procedures

- Ultrasound-guided: 1,168
- CT-guided: 307
- Vascular: 541
- **Total**: 2,016

#### Total investigations

- 3,13,555
New equipment

· 1 Multislice CT scanner (Somatom Sensation 40) for the main department
· 1 Mobile X-ray unit for the main department
· 1 heavy duty automatic film processor

The departmental faculty assisted in purchase of following equipments for the Trauma Centre:

· 1 Multislice CT scanner (Somatom sensation 40)
· 2 Mobile X-ray units
· 2 heavy duty automatic processors for radiography
· 1 MRI (Avanto)
· 1 C–arm X-ray unit for OT

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Dr Sushma Vashisht attended selection committee meeting of Delhi Government as an external expert for selection of the faculty (Radiology), Delhi, 18 May 2006; attended technical committee meeting for procurement of MRI, CT scanner and digital X-ray for Sher-i-Kashmir, Jammu and Kashmir, Srinagar, Delhi, 5 June 2006; was an expert for Senior Resident selection for UCMS, GTB Hospital for University College of Medical Sciences; was an external examiner for Postgraduate Final Examination in MD (Radiodiagnosis) BPKIHS, Dharan, Nepal; attended ‘Scrutinizing and counting of votes committee meeting’ for election of council members of NAMS for the year, 2006 at National Academy of Medical Sciences, 7 August 2006; attended technical specification committee meeting, Srinagar to finalize the purchase of CT Simulator, US and Mammography equipments for Regional Cancer Research Centre at Sher-i-Kashmir, Institute of Medical Sciences, Srinagar, Jammu and Kashmir, 21 August 2006.


Dr Raju Sharma elected as President of the Delhi Branch of Indian Radiology and Imaging Association, 2006–2007.

Dr Sanjay Sharma continues to be External Expert at the University Grants Commission, New Delhi, for the Committee for Approval of Travel Grant for attending Scientific Conferences in India and Abroad.

**Dr Shivanand** awarded Editor’s Recognition Award for reviewing *(European Journal of Radiology)*.

**Dr Shashi Paul** won the third prize for poster presentation, ‘Percutaneous acetic acid injection for treatment of small and medium hepatocellular carcinoma’, 47 Annual conference of the Indian Society of Gastroenterology, Mumbai, November 2006. She is a reviewer for the *Journal of Gastroenterology and Hepatology*.

**Mr R.K. Goyal**, Chief Technical Officer, elected as President of Indian Association of Radiological Technologists.

**Mr R.S. Kapoor**, Senior Technical Officer, elected as Zonal secretary of Indian Association of Radiological Technologists.

**Mr Pawan Kumar Popli**, Technical Officer, elected as Zonal Secretary of Society of Indian Radiographers.
EDUCATION

Undergraduate/Postgraduate Training
Two WHO trainee and five postgraduate students for short-term training.

**PhD**  Four
Undergraduate  -
Postgraduate  :  MD Laboratory Medicine Students on RIA

**Short- and long-term training**

**Long-term**
One as Research Associate (Post-doctoral).
Two WHO-In Country Fellows.

**Short-term**
Short-term training was provided to 7 students.

**Continuing Medical Education**
Department organized First National Workshop on Microdeletion Fluorescent in situ Hybridization; 7–12 August 2006.
·  ‘FISH in clinical genetics’, SGPGIMS, 7th ICMR course in Medical Genetics and Genetic Counselling Lucknow; 18 July 2006.
·  Dr A. Halder delivered invited lecture and faculty for AIIMS, Genetic Course; 19 April 2006 (DBT sponsored).
·  Brain storming discussion on ‘Tackling India’s polluted places’, Asian Development Bank and Janhit NGO, New Delhi; 22 January 2007

**National and International Conferences**

**Lectures delivered**

**Dr A. Kumar**
·  ‘Testicular steroidogenesis and the regulation of gonadotropin secretion in the hypothyroid
· ‘Reproductive and endocrinological changes in thyroid disorders in males’, XII Annual Congress of the Society of Andrology, Meerut, India; 8–10 April 2006.

Dr A. Halder
· ‘Teratogenesis’, All India Congress of Obstetrics and Gynaecology in assistance with Bengal Obstetric and Gynecological Society, Kolkata; 6–9 January 2007.

RESEARCH
Funded Projects
Ongoing

Completed

Departmental Projects
Ongoing
1. Role of hypoxia on progesterone and vascular endothelial growth factor secretions in MA-10 cells
2. Role of cobalt chloride induced hypoxia on MA-10 cells
3. Regulation of proliferation of prostatic cancer cell line LNCaP
4. Gonadal functions in endocrine disorders
5. Regulation of granulosa cell steroidogenesis

AIIMS 2006-2007 / 501
6. Genetic and endocrine factors in primary testicular failure
7. Chromosome aneuploidy and mosaicism in preimplantation embryo
8. Evaluation of sexually transmitted diseases among adolescents and young adults in India

Completed
1. Evaluation of intracytoplasmic sperm injection: An assisted reproductive technique and its outcome to overcome infertility of a couple (Review of literature)
2. Evaluation of Nuva ring: A potential combined contraceptive vaginal device (Review of literature)

Collaborative Projects
Ongoing
1. Characterization of chromosomal anomalies in multiple myeloma patients using cytogenetics and FISH (with Medical Oncology and IRCH)
2. Genetics of Acute Lymphoblastic Leukemia (with Medical Oncology and IRCH).
3. FISH in glioma (with Pathology)
4. Use of letrozole versus clomiphene citrate combined with gonadotropins in superovulation and IUI cycles (with Obstetrics and Gynaecology)
5. Effect of oral contraceptive containing ethinyl estradiol combined with drospirenone vs. desogestrel on clinical and biochemical parameters in patients of polycystic ovarian syndrome (with Obstetrics and Gynaecology)

PUBLICATIONS
Journals
8. Sarkar NN. Emergency contraception: A contraceptive intervention-approaching target


**PATIENT CARE**

- **Andrological examinations:**
  - Semen examination 330
  - Seminal Fructose 125
- 60 Male infertility (primary hypogonadism), reproductive genetic counselling-cum-management planning/expert opinion was provided to cases of male infertility, female infertility, RSA, fetal malformation and hematologic malignancy, microdeletion syndrome, etc.
- 7 International consultation cum counselling through e-mail.

<table>
<thead>
<tr>
<th>Name of Assays</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSH</td>
<td>1,783</td>
</tr>
<tr>
<td>LH</td>
<td>1,447</td>
</tr>
<tr>
<td>Prolactin</td>
<td>1,308</td>
</tr>
<tr>
<td>T3</td>
<td>3,216</td>
</tr>
<tr>
<td>T4</td>
<td>4,056</td>
</tr>
<tr>
<td>TSH</td>
<td>7,828</td>
</tr>
<tr>
<td>Testosterone</td>
<td>746</td>
</tr>
<tr>
<td>Estradiol</td>
<td>408</td>
</tr>
<tr>
<td>Progesterone</td>
<td>107</td>
</tr>
<tr>
<td>AFP</td>
<td>1,362</td>
</tr>
<tr>
<td>PSA</td>
<td>1,299</td>
</tr>
<tr>
<td>Beta hCG</td>
<td>479</td>
</tr>
<tr>
<td>CA-125</td>
<td>783</td>
</tr>
<tr>
<td>Cortisol</td>
<td>113</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>24,935</strong></td>
</tr>
</tbody>
</table>

**Diagnostic Services**

35 Microdeletion FISH for microdeletion syndromes (DiGeorge, Wolf-Hirschhorn syndrome, retinoblastoma, William, Cri-du-Chat, Prader Willi syndrome, etc.).

**AWARDS, HONOURS AND SIGNIFICANT EVENTS**

**Dr A. Halder** received ICMR international fellowship for senior bio-medical scientist, 2006–2007 for two weeks training on molecular cytogenetic techniques, Uniba Biologia, University of Bari, Bari, Italy; 28 January–9 February 2007.
VISITING SCIENTISTS

1. Professor C.V. Rao, PhD, Director, Division of Research, Department of Obstetrics and Gynecology and Women’s Health, University of Louisville Health Science Center, Louisville KY, USA on 21.02.2007.

2. Dr Nafis Rahman, MD, PhD, Associate Professor, Specialist in Gynecology and Obstetrics, Department of Physiology, University of Turku, Turku, Finland on 20.01.2007.
9.34 Surgical Disciplines

**Professor and Head**
M.C. Misra

**Professors**
- Anurag Srivastava
- Arvind Kumar

**Additional Professors**
- Sunil Chumber
- Sandeep Guleria
- Rajinder Parshad

**Associate Professors**
- V. Seenu
- Sandeep Aggarwal

**Assistant Professors**
- V.K. Bansal
- Anita Dhar
- Biplab Mishra (Trauma Centre)
- Maneesh Singhal (Trauma Centre)
- Sushma (Trauma Centre)
- Amit Gupta (Trauma Centre)
- Subodh Kumar (Trauma Centre)

**EDUCATION**

**Postgraduate training**
The Department of Surgery established minimally invasive surgery training centre at the Department of Surgical Disciplines, AIIMS in collaboration with University of Tuebingen, Germany. The centre was inaugurated on 26 March 2007. The first training course in ‘Operative laparoscopy—basic and advanced’ was organized in the department from 26–30 March 2007.

**Short-term training**
12 undergraduate students from foreign countries viz., USA, Germany and UK came for elective training in surgery.

**Continuing Medical Education**
**Organized by the department**
**Professor M.C. Misra**
- Course Director, Organizing Chairman, First AIIMS Surgical Week, International Conference, CME and Live Workshop, AIIMS, New Delhi; 26–31 March 2007. The
Surgical Week consisted of a week long CME with a day each devoted to breast surgery, endocrine surgery and two days to minimal access surgery. There was Live Tele-video conferencing from Bordeaux, France and Paris with Live demonstration of Left colectomy for diverticular disease (J.L. Dulucq) and subtotal colectomy for cancer (Pr. Brice Gayet) and total extraperitoneal repair (TEP) of groin hernia. Live surgery for morbid obesity was also telecast from Westchester Medical center, New York.

· Organized joint meeting between Department of Surgical Disciplines and the Surgical Section of Royal Society of Medicine, UK. V. Ramalingaswami Board Room, AIIMS, New Delhi; 3 March 2007.
· Organizing Chairman of CME under ASICON Foundation of Delhi State Chapter of Association of Surgeons of India; 25 February 2007.
· Organized monthly meeting, Delhi State Chapter, Association of Surgeons of India, AIIMS; 17 February 2007.
· Conference President: Mid-term conference of Indian Hernia Society and live workshop, Hernia Update 2007, Hotel Centre Point, Nagpur; 20–21 January 2007.
· IMRCS Examiners’ training course, AIIMS; 20–21 May 2006.

Professor Anurag Srivastava
· ‘First AIIMS Surgical Week’ organized at AIIMS; 26–31 March 2007.

Professor Arvind Kumar
· Organized the 3rd Amasi Skills Course, Department of GI Surgery, AIIMS; 29 November to 2 December 2006.

Dr Sandeep Guleria
· Co-convenor of joint meeting between Department of Surgical Disciplines and the Surgical Section of Royal Society of Medicine, UK; 3 March 2007.

Dr Rajinder Parshad
· ‘Gastrointestinal malignancies’, ASICON Surgical Education and Research Foundation and Department of Surgical Disciplines, AIIMS; 25 February 2007.

Dr V.K. Bansal
· Course co-coordinator for first training course in ‘Operative laparoscopy—Basic and advanced’, Minimally Invasive Surgery Training Centre, Department of Surgical Disciplines, AIIMS; 26–31 March 2007.
Lectures delivered

Professor M.C. Misra


· ‘Laparoscopic vs. Open colorectal surgery for cancer’, ASICON Foundation of Delhi State Chapter of Association of Surgeons of India; 25 February 2007

· ‘Professor B.B. Ohri Memorial Oration’, M.P. Chapter of Association of Surgeons of India at its 25th Annual Conference, the Sri Aurobindo Institute of Medical Sciences, Indore; 16–18 February 2007.


· Laparoscopy Update 2007, SMS Medical College and Hospital, Jaipur in association with Rajasthan Chapter of Association of Surgeons of India and Surgical Society of Jaipur; 12–13 January 2007. Delivered a Guest lecture on:
  — Laparoscopic repair of ventral hernia;
  — Live demonstration of laparoscopic repair of ventral hernia; and
  — Chairman, scientific session during live demonstration of ‘Thoracoscopic removal of a mediastinal tumour and laparoscopic pyeloplasty’

· ‘Breast conservation surgery—Indian perspective’, 2nd SGPGI Breast Course, Department of Endocrine and Breast Surgery, Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow, India; 25–26 November 2006.

· ‘Newer developments in minimal access surgery’, 32nd Annual Conference of Association of Surgeons of India (UPASICON 2006), Live Workshop, the MLN Medical College and SRN Hospital, Allahabad; 3–5 November 2006.

· ‘Role of MAS in Colo-rectal cancer’, SURGICON 2006, Symposium on ‘Colorectal surgery’, Delhi State Chapter, Association of Surgeons of India, Dr RML Hospital, New Delhi; 27–29 October 2006.

· ‘Laparoscopic vs. open repair of incisional and primary ventral hernia: Results of a prospective randomized study’, the Faculty research presentation meeting; 17 October 2006 at AIIMS, New Delhi.

· ‘Dr H. Lalmohan Singh Memorial Oration’, 11th annual conference on ‘Newer horizons in minimally invasive surgery’, Association of Surgeons of India, Manipur, Regional Institute of Medical Sciences, Imphal; 7–8 October 2006.

· ‘Management of pancreatic stump following pancreatico-duodenal resection: Pancreatico-gastrostomy (PG)’, International integrated meeting of Indian Association of Surgical Oncology (IASO) with World Federation of Surgical Oncologic Societies (WFSOS), IMS, BHU, Varanasi; 21–24 September 2006.
· ‘Laparoscopic management of adrenal diseases’, CME and live workshop on Minimal Access Surgery, UP Chapter of Association of Surgeons of India, MLB Medical College and Hospital, Jhansi; 20–21 August 2006.
· ‘Newer strategies in the management of soft tissue sarcoma’, CME under ASICON surgical foundation, Jaipur Golden Hospital, Delhi; 28 May 2006.
· ‘Advanced laparoscopic procedures’, Surgery update 2006, Dr STM Forest Hospital, Haldwani, Nainital; 9 April 2006.

Dr Sunil Chumber
· ‘Pancreatic endocrine tumours’, Annual CME of Department of Surgery, Maulana Azad Medical College, New Delhi; 25 August to 1 September 2006.

Dr Sandeep Guleria
· ‘Experience in pediatric transplantation in developing countries’, The Indian Paediatric Nephrology Group, New Delhi; 9 March 2007.
· ‘Abdominal compartment syndrome’, Apollo Hospitals, Delhi; 5 December 2006.
· ‘Planning and designing facilities for organ transplantation’, Department of Hospital
· ‘Renal transplantation’, Consultants Club, GM Modi Hospital, Delhi; 26 August 2006.
· ‘Newer immunosuppressants have they improved outcome or added to the cost’, Annual Conference of the Delhi Nephrology Society, Sir Ganga Ram Hospital, New Delhi; 22 January 2006.
· ‘Renal transplantation’, Max Hospitals, Patparganj, Delhi; 6 May 2006.
· ‘Ventral hernia’, AMASICON 2006, Kolkatta; 1 April 2006.

Dr Rajinder Parshad

Dr Sandeep Aggarwal

Dr V.K. Bansal
· ‘Laparoscopic or open repair of inguinal hernia—is the controversy over? For laparoscopic repair’, Mid-term CME of Indian Hernia Society, Nagpur; 17–18 January 2007.

Dr Amit Gupta
· ‘National trauma management course’, Department of Medical Health Services and State Disaster Management Authority, Government of Uttar Pradesh, Ghaziabad; 30 November–3 December 2006.
· ‘Trauma shock’, TREAT–India, Central Railway Hospital, Byculla, Mumbai; 4–5 October 2006.
· ‘Emergency management of head injuries’, National Trauma Management Course, Department of Medical Health Services and State Disaster Management Authority, Government of Uttar Pradesh, Lucknow; 13–14 September 2006.
· ‘Recent trends in trauma management’, Surgery Update 2006, Department of Surgery, Dr STM Forest Hospital, Haldwani, Uttarmchal, India; 9 April 2006.
Dr Maneesh Singhal

- ‘Gyan Vani’, National Board of Examination.

Dr Subodh Kumar

- ‘Colo-rectal cancer—Role of minimally access surgery’, CME on colo-rectal cancer, Max Devki Devi Hospital, New Delhi; 18 November 2006.

Dr Sushma

- ‘Newer strategies in the management of soft tissue tumor’, SURGICON 2006, RML Hospital, New Delhi; 26 October 2006.

RESEARCH

Ongoing Projects
1. Feasibility study on injury and road traffic injury surveillance. Misra MC, Gupta A. Funded by MoHFW-WHO-ICMR.
2. Prospective case control study to evaluate role of Glutathione S transferase (GSTT1 and GSTM 1) gene deletion in breast carcinoma and its prognostic significance, Institute Research Grant, in collaboration with Department of Anatomy, AIIMS.
3. ‘Prospective study to evaluate the role of helicobactor pylori in benign and malignant hepato-biliary disease’ Institute Research Grant. Funded by AIIMS. Funds: Rs. 20,000.

Funded Projects
2. ‘Save the Kidney’. Sandeep Guleria. Funded by Rajiv Gandhi Foundation. (2007 Funds: Rs. 10 lakh)


Departmental Projects

Completed
1. Accuracy of sentinel node biopsy in predicting axillary nodal status following neo adjuvant chemotherapy in locally advanced breast cancer

2. Role of in vitro MR spectroscopy in evaluation of lymph nodes in patients with lymphadenopathy

3. Effect of bisphosphonates on bone mineral density after renal transplantation as assessed by bone mineral densitometry

4. Evaluation of feasibility and performance of minimally invasive radioguided parathyroidectomy in established cases of primary hyperparathyroidism

5. Evaluation of the role of pneumatic compression pump in the management of post-mastectomy lymphedema

6. Factors affecting incidence of early postoperative complications

7. Three port vs. four ports laparoscopic cholecystectomy: A prospective randomized controlled study

8. Focused abdominal sonography in trauma (FAST) in patients with blunt trauma abdomen: A prospective study

9. Post cholecystectomy symptoms following laparoscopic cholecystectomy

10. Ambulatory laparoscopic hernia repair: A feasibility study

11. Evaluation of early outcomes and quality of life after day care conventional inguinal hernia repair

12. Role of centchroman in management of mastalgia and fibroadenoma—a randomized study

13. Relationship of serum TSH with thyroid vascularity assessed at operation
14. Advanced sentinel lymph node evaluation in breast and head and neck cancers
15. To study the burden of post-operative surgical site infections in clean and clean contaminated operations
16. To evaluate the role of intra-abdominal pressure as a predictor of abdominal wound dehiscence

**Ongoing**

1. Dyslipidaemia and cardiovascular risk factors in renal transplant recipients
2. Total extraperitoneal hernia repair comparison of space creation by direct telescope vs. balloon dissection: A randomized controlled study
3. Standardized mesh repair for inguinal hernia: A pilot study
4. To study the feasibility of fast track thyroidectomy
5. Post-operative surgical site infection in clean and clean contaminated operations.
6. BhCG expression inpatients with benign and malignant breast diseases
7. Prospective study to evaluate the role of *Helicobacter pylori* in benign and malignant hepatobiliary disease
8. Mammotome guided biopsy for indeterminate breast lesions following fine needle aspiration cytology
9. Radical duct excision for nipple discharge (benign breast disease)—its long-term follow up
10. Role of Centchroman in regression of mastalgia and regression of fibroadenoma and its correlation to histopathology and estrogen and progesterone receptor
11. Safety and efficacy of autologous stem cells in prevention of amputation in patients with chronic critical limb: a randomized multi-centric study
12. Standardized open mesh repair for primary inguinal hernia: A pilot study
13. 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

**Collaborative Projects**

**Completed**

1. Evaluation of neo-adjuvant chemotherapy in locally advanced breast cancer (with Radiotherapy, Radiology and Pathology)
2. Sentinel lymph node biopsy for locally advanced breast carcinoma after neoadjuvant chemotherapy (with Nuclear Medicine, Pathology and Radiotherapy)
3. Characterization of thymoma using F18 fluorodeoxyglucose positron emission tomography (FDG PET–CT) and its correlation with histopathology (with Nuclear Medicine and Pathology)
4. Evaluation of patients with primary mediastinal lymphadenopathy using FDG-PET-CT scan and its correlation with histopathology: A prospective study (with Medicine, Nuclear Medicine and Pathology)
5. Clinical co-relation of ER, PR, HER2 neu expression and BRCA1 gene mutations in Indian breast cancer patients. (with Pathology)
6. CMV disease in transplantation (with Microbiology)

Ongoing
1. Quality of life of live related donors (with Nephrology)
2. Molecular typing and detection of mupirocin and methicillin resistant Staph aureus (with Microbiology)
3. Cytokine Gene Polymorphismin Renal Transplant Patients (with Transplant Immunology and Immunogenetics)
4. Outcome after laparoscopic cardiomyotomy—early and late (with Gastroenterology)
5. Efficacy and feasibility of regional anaesthesia compared to general anaesthesia for totally extraperitoneal laparoscopic inguinal hernia repair (with Anaesthesiology)
6. ‘Breast cancer: Local tumour staging by MRI and its impact on therapeutic approach’ (with Radiodiagnosis and Pathology)
7. ‘Evaluation of sentinel lymph nodes in patients with early breast cancer using PET scan’ (with Endocrinology, Pathology and Nuclear Medicine)
8. Characterization of thymoma using F18 fluorodeoxyglucose positron emission tomography (FDG PET–CT) and its correlation with histopathology (with Nuclear Medicine and Pathology)
9. Evaluation of patients with primary mediastinal lymphadenopathy using FDG-PET-CT scan and its correlation with histopathology: A prospective study (with Medicine, Nuclear Medicine and Pathology)

Publications

Journals

**Abstracts**


**Chapters in Books**


**Patient Care**
The department runs a general surgical OPD every day, a follow up clinic 4 days a week, breast cancer clinic twice a week and renal transplant clinic once a week. The department is providing regular services in multiple fields including minimally invasive surgery, renal transplantation, hepatobiliary and pancreatic surgery, thoracic and thoracoscopic surgery, plastic and reconstructive surgery, endocrine surgery, vascular surgery and cancer surgery.

The department provides emergency care for traumatic and non-traumatic emergencies round the clock.

The department provides for consultation and care of patients suffering from chronic wounds and patients with chronic venous insufficiency, patients with benign and malignant diseases of the breast. The patients with critical limb ischemia are offered stem cell therapy as part of a DBT funded multi-centre randomized trial.

**AWARDS, HONOURS AND SIGNIFICANT EVENTS**
*Professor M.C. Misra*, Visited Thimpu technical expert group to help set-up National Referral Hospital at Thimpu, Bhutan on the invitation of Ministry of Health, Royal Government of Bhutan, Bhutan; 22–25 February 2007; Nominated as Chairman, Committee on Education and Training (CET) of the Association for Trauma Care of India (ATCI), with the responsibility to promulgate ATLS in to India; February 2007; Invited to deliver ‘Professor B.B. Ohri Memorial Oration’ on ‘Newer Developments in Minimal Access Surgery—a Myth or Reality’, 25th Annual Conference of MP Chapter of Association of Surgeons of India, the Sri Aurobindo Institute of medical Sciences.
Medical College, Indore; 16–18 February 2007; Invited to deliver ‘Dr H. Lalmohan Singh Memorial Oration’ on ‘Newer Horizons in Minimally Invasive Surgery’, 11th Annual Conference of the Association of Surgeons of India, Manipur State Chapter, Regional Institute of Medical Sciences, Imphal; 7 October 2006; The Founder President, Indian Hernia Society; Appointed Examiner by the Royal College of Physicians and Surgeons, Glasgow for MRCS Examination, New Delhi; 11–15 September 2006; Visiting Professor to Division of Minimally Invasive Abdominal and Bariatric Surgery, Department of Surgery, Mount Sinai Medical Center, New York, USA; Department of Surgery and Emergency Medicine, Harlem Hospital Center (Level I Trauma Center) and Department of Physical Medicine and Rehabilitation, Harlem Hospital Center, New York, USA; Level I Trauma Center, Westchester Medical Center, New York Medical College, New York, USA, Department of Emergency Medicine, Bellevue Hospital Center (Level I Trauma Center), New York University School of Medicine, New York, USA, 17 June–7 July 2006. (To study Center for Minimal Access Surgery set up and Trauma Systems); Visiting Professor to Department for General and Visceral Surgery, Marien Hospital, Stuttgart, Germany; Klinik für Allgemein-, Viszeral- und Transplantationschirurgie, Universitätsklinikum Tübingen, Germany; Section for Minimally Invasive Surgery, Eberhard–Karls–Universitat, Tübingen, Germany; University Women Hospital Tübingen, Germany, 10–13 July 2006. (to explore collaboration to set up Training Center for Minimal Access Surgery at AIIMS, New Delhi).

**Professor Arvind Kumar** visited Liverpool Hospital at Sydney on a ‘WHO’ training in the field of Trauma. Liverpool Hospital is the tertiary care trauma center serving the South West Sydney Area with a separate trauma unit. He observed the pre hospital as well as hospital care of trauma patients in detail from 1-30 October 2006.

**Dr Sandeep Guleria** was awarded the Luminary award by the IMA South Delhi Branch. He continues to be a member of the Government of India Authorization Committee for Liver and Renal Transplantation in the union territory of Delhi. He was appointed as a Examiner for the Royal College of Surgeons of Glasgow for the MRCS examination.

**Dr V. Seenu** was designated as Trainer for No scalpel Vasectomy (NSV) by the Ministry of Health and Family Welfare. He was Invited faculty at SGPGI Breast Course 2006–2007 and invited faculty at MAMC Delhi Surgery Update.

**Dr Sandeep Aggarwal** a 1-year fellowship from Mount Sinai School of Medicine during which he visited Division of Minimally Invasive Surgery and Center for Bariatric Surgery at Mount Sinai School of Medicine, New York City, USA, December 2005–December 2006.

**Dr V.K. Bansal** received a Short-term Fellowship to Visit Training Centre for Minimally Invasive Surgery at Eberhard-Karls University, University Hospital, Tuebingen, Germany, 18 September 2006–30 November 2006. He attended the following Training Courses in Laparoscopic Surgery
as a Tutor during the above fellowship:
1. Basic and Advanced course for laparoscopic surgery.
2. Intensive course for Trans Anal Endoscopic Microsurgery.
3. Laparoscopic colorectal surgery.
4. Laparoscopic upper abdominal surgery.

VISITING SCIENTISTS
1. Dr Thomas M. Scalea, MD, FACS, Physician in Chief, Shock Trauma Centre.
2. Francis X. Kelly/MBNA, Professor of Trauma Surgery, Director, Programme in Trauma, R Adams Cowley Shock Trauma Center, University of Maryland School of Medicine.
3. Mr John H. Spearman, MBA, Vice President, Manjari Joshi MD, Associate Professor of Medicine, Senior attending in Infectious Diseases.
4. Dr James Cushman, Trauma surgeon, R Adams Cowley Shock Trauma Center, University of Maryland School of Medicine.
5. Professor Gerhard F. Buess, MD FRCS Ed, Professor of Surgery and Director, Section for MIS, University of Tuebingen, Germany. 26-31 March 2007 (During Endo Surg 2007)
6. Mrs Lilo Milander, Course Director, Section for MIS, University of Tuebingen, Germany. 26-31 March 2007
7. Dr Ravi Kumar Chittoria, Plastic, Cosmetic and Reconstructive Surgeon, Associate Professor and Head, Department of Plastic Surgery, Sri Venkateswara Institute of Medical Sciences (SVIMS) and University, Tirupati, Andhra Pradesh. 26-31 March 2007
8. Professor Robert E. Mansel Chairman of Hospital based disciplines, Cardiff University, UK. 26-31 March 2007
10. Mr Amit Goyal, Lecturer, Cardiff University, UK. 26-31 March 2007.
EDUCATION

Short-term training
The department provided short-term training to junior residents of Pathology and Laboratory Medicine and senior residents (DM students) of the Department of Haematology. During the year, 30 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 Jasmeet Kaur (Lt. Col) from the Armed Forces Medical Services (AFMC) joined for long-term training and was also registered for a PhD degree.

Training to overseas doctors: One trainee from USA attended the 8-week training programme in the department.

Continuing Medical Education
The faculty of the department participated in and delivered several lectures in national and international conferences during the year. 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.

Lectures delivered
Professor N.K. Mehra
· ‘Asian Indian Donor Marrow Registry (AIDMR)’, National Meeting, Gujarat State Biotechnology Mission, Ahmedabad; 16 May 2006.
· ‘A journey into the world of HLA and medicine’, DBT sponsored Workshop on ‘HLA techniques’, SGPGI, Lucknow; 27 May 2006.
· ‘A journey into the world of HLD during HLA and Medicine’ at Hungarian Acad. Of Sciences, Budapest; 13 June 2006.
· ‘MHC as an efficient biomarker of disease’, 3rd Winter School on Immunology, Goa; 4-10 August 2006.
· ‘Unrelated donor marrow registries and their role in HSCT’, 1st International Conference on Treatment in Paediatrics, New Delhi; 19 August 2006.
· ‘Genetics of HIV-1 infection’, Boston University Health Centre, Boston, USA; 10 October 2006.
· ‘Host genetics of HIV infection’, Montreal general hospital, Montreal; 11 October 2006.
· A journey into the World of HLA and Medicine. 10th Anniversary of the International Academy of Cardiovascular Sciences, Global Conference on Heart Healthy and Disease, Winnipeg, Canada; 12-15 October 2006.
· ‘Genetics of autoimmune diseases’, Joint Scientific Meeting of ICMR and University of Minnesota, New Delhi; 18-19 October 2006.
· ‘From serology to sequencing: A journey into HLA’, Workshop cum Training on ‘Molecular biology concepts and techniques’, Institute of Life Sciences, Bhubaneswar; 14 December 2006.
· As a Chairperson in the 1st Meeting of Stem Cell Research Foundation of India, Bangalore; 29 January 2007.
· Session chair and lead discussant at Haematology update, AIIMS; 2 March 2007.
· ‘New developments in medicine and biology’, University Teachers, Guru Nanak Dev University, Amritsar; 7 March 2007.


Chaired a session at 2nd Annual Conference of Indian Academy of Nephrology and Delhi Nephrological Society Update, New Delhi; 18 March 2007.

‘Immunological aspects of renal treatment’, Rockland Hospital, New Delhi; 29 March 2007.

RESEARCH

Funded Projects

Ongoing


3. ICMR-INSERM Project on Type 1 Diabetes. N.K. Mehra. Funded by Indian Council of Medical Research for 5 years (2004-2009). Funds: Rs 120.20 lakh.


Publications


**Chapters in Books**


Books

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>290</td>
<td>540</td>
</tr>
<tr>
<td>Bone marrow transplant patients</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leukemia</td>
<td>100</td>
<td>350</td>
<td>450</td>
</tr>
<tr>
<td>Aplastic anemia</td>
<td>50</td>
<td>100</td>
<td>150</td>
</tr>
<tr>
<td>Thalassaemia</td>
<td>50</td>
<td>120</td>
<td>170</td>
</tr>
<tr>
<td>Others</td>
<td>50</td>
<td>100</td>
<td>150</td>
</tr>
<tr>
<td>Total</td>
<td>500</td>
<td>960</td>
<td>1,460</td>
</tr>
</tbody>
</table>

HLA-DNA matching

| Cadaver donor organ transplantation | 200        | 225    | 425   |
| Cadaver donor                       | 4          |        |       |
| Kidney recipients                   |            |        |       |
| Heart recipients                    |            |        |       |

Cross-match test

| Serology                            | 625        |        |       |
| Flowcytometry                       | 78         |        |       |
| Panel reactive antibody (PRA) screening | 500    |        |       |
| Flow PRA                            | 40         |        |       |
| ELISA PRA                           | 200        |        |       |

Diagnostics

| Spondyloarthopathies                | 600        |        |       |

Other diseases

| Chimerism studies in BMT            | 225        |        |       |
| Immunophenotyping of leukemia patients | 300     |        |       |
| Unrelated donor search for BMT      | 400        |        |       |
During the year, 400 requests for search of unrelated HLA-matched donor for bone marrow transplantation (BMT) were received from the ‘Asian Indian Donor Marrow Registry’. These include 200 from USA, 75 from Europe, 60 from various Asian countries and 65 from India.

AWARDS, HONOURS AND SIGNIFICANT EVENTS
Professor N.K. Mehra received his ‘Diploma’ as Honorary Member of the Hungarian Academy of Sciences at a function, the Academy office in Budapest, June 2006. He was invited as a ‘Guest Speaker’ at the Global Conference on Heart Health and Disease at Winnipeg, Canada, October 2006; delivered lectures at Boston University Health Science Centre, USA and at Montreal General Hospital, Montreal, Canada; was invited to the National Instituted of Health, USA, October 2006 and attended a meeting of the Type 1 Diabetes Genetics Consortium, Bethesda, USA, November 2006; Member of the ICMR Expert Group for formulating National Guidelines on Stem cell Research; Member of the INSERM-ICMR joint working group to promote Indo-French collaboration; ICMR Special Review Committee on North-East Projects, ICMR Expert Group on Human Resource Development; ICMR Technical Committee, Immunology Task Force of ICMR; ICMR Expert Group on Studies on Camel Milk; ICMR Advisory Group on CVD and Diabetes; ICMR Expert Group on Stem Cell Research; Biomedical Research Board of ICMR; He was a member of the S.S. Bhatnagar Award Selection Committee; Member of the jury for Ranbaxy Science Foundation awards; member of the DST Technology Development Board Project Monitoring Committee and Member, Scientific Advisory Committee of Talwar Research Foundation; served as a member of the DBT Task Force on Stem Cell Research and Regenerative Medicine; Expert-cum-monitoring Group on Mw Research; Inter Disciplinary Research Committee of the DBT, and Expert Group on Research on Tuberculosis; continues to be the ‘Council Member of the International Union of Immunological Societies (IUIS)’, Vice President of the Federation of Immunological Societies of Asia-Oceania (FIMSA). ‘Councillor’ for the International Histocompatibility Advisory Council and of the Australasian and South East Asian tissue typing Association (ASEATTA). He is a member of the joint Scientific Advisory Committee of the JALMA Institute for Leprosy and other Mycobacterial Diseases, Agra and Tuberculosis Research Center, Chennai; and National Institute of Research in Reproductive Health (NIRRH), Mumbai. He is a member of the Research Council of the Indian Institute of Chemical Biology, (IICB), Kolkata and Member of the Indo-French technical association; member of the ICMR Task Force on Immunology, Diabetes, molecular cardiology; member of the several project review committees of ICMR projects; the Editorial Board of several prestigious international journals: Tissue Antigens (Australia), Modern Rheumatology (Japan), International Journal of Human Genetics (India) and Journal of Clinical Immunology (USA). He is a member of the ethical, legal and social implications (ELSI) Committee of the Type 1 Diabetes Genetics consortium (T1DGC) of the NIH, Washington, USA, He was invited Guest Speaker in several national and International meetings.

Dr Uma Kanga (Scientist-II) continues to serve as the ‘Councillor’ for the Australasian and South East Asian Tissue Typing Association (ASEATTA).
**Dr Arundhati Panigrahi** (Scientist I) received the ‘Best Poster Presentation Award’ at the Annual Conference of the Indian Society of Organ Transplantation, Ahmedabad, 2006.

**Mr Ankit Saxena,** PhD student was awarded ‘Best Poster Presentation’ during the Indian Immunology Society Conference; 2007.

**Visiting Scientists**
Dr Amanda Loth (Australia); Dr Nina Bhardwaj (USA); Professor Malcolm Simons (Australia); French Scientists-Professor F. Tourraine; Professor Blin; led by Bernarde Montferra; Professor John Davies; Professor Jeff Turner, University of Toronto (Canada); Professor Bhagirath Singh (Canada); Dr Ami Shah (USA); delegations led by Professor Frank B. Cerra and comprising several eminent Physicians, Surgeons and Basic Scientists from University of Minnesota; Professor Juergen Mlynek; President of the German Helmholtz Association, Germany; Professor Erwin Schurr (Germany); Professor Harpal S. Buttar (Canada); and Professor G.S. Chhatwal (Germany).
EDUCATION
The faculty of the department participated in and delivered lectures in continuing medical education programmes, symposia, national and international conferences during the year.

The department imparted lectures for the undergraduates and nursing students. The postgraduate education is continuing and 11 postgraduates are under training.

The department had postgraduate students in Urology from CMC, Vellore; PGI, Chandigarh and SGPGI, Lucknow to observe and learn Endourology, Laparoscopy and Microsurgery in Urology.

The faculty of the department continues 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.

Continuing Medical Education
The faculty of the department participated in and delivered lectures in continuing medical education programmes, symposia, national and international conferences during the year.

Organized by the department
National and International Conferences
Lectures delivered
Professor N.P. Gupta

- 'Vapour resection of prostate', New York Section AUA, New Delhi; 2 November 2006.
- Annual Conference of North Zone Chapter-USI, Jaipur; 3–5 November 2006.
- ‘Surgical management of BPH and management of male infertility’, Sri Lanka Urology Assoc of Surgeons Conference, Colombo; 1–2 December 2006.

Professor A.K. Hemal

- ‘Robotic urologic surgery’, Live demonstration of Robotic Radical Prostatectomy, Taichung Veterans General Hospital, Taichung, Taiwan; 1 October 2006.
- ‘Robotic radical prostatectomy’, Live demonstration of Robotic Radical Prostatectomy, Tri-Service General Hospital, Taipei, Taiwan; 30 September 2006.
- Delivered lecture and performed live demonstration of ‘Robotic urologic surgery’, International Robotic Urologic Symposium, New Delhi, India; 31 July–1 August 2006.
Professor P.N. Dogra

Dr Rajeev Kumar
· ‘Microsurgical VEA’, 2nd APSSM and 1st AGASSI annual meeting, Mumbai; 1-3 December 2006.
· ‘Varicocelelectomy’, 2nd APSSM and 1st AGASSI annual meeting, Mumbai; 1-3 December 2006.
· ‘Genetics and ROS’, 2nd APSSM and 1st AGASSI annual meeting, Mumbai; 1-3 December 2006.
· ‘Medical therapy future in male infertility’, 2nd APSSM and 1st AGASSI annual meeting, Mumbai; 1-3 December 2006.
· ‘Genetic tests in male infertility’, Annual meeting of the ISAR, Chandigarh; 8-11 February 2007.
· Convenor: Symposium on male infertility: Annual conference, North Zone USI, Jaipur; 3-5 November 2006.
· Chairperson: Male infertility panel: Annual Conference, Indian Fertility Society, New Delhi; 9-10 December 2006.
· Chairperson: Male infertility Annual meeting of the ISAR, Chandigarh; 8-11 February 2007.

RESEARCH
Funded Projects
Ongoing
Homocysteine as a marker for male infertility. Principal Investigator: Dr. Rajeev Kumar. Funded by Research Grant, AIIMS for 1 year (2006–2007). Funds: Rs 1 lakh

Departmental Projects
Completed
1. Her2/neu over expression and gene amplification in transitional cell carcinoma of urinary bladder
2. Evaluation of laparoscopic radical cystectomy for carcinoma of bladder
3. Comparison of laparoscopic and open radical cystectomy for carcinoma of bladder
4. Evaluation of laparoscopic radical prostatectomy
5. Comparison of laparoscopic and open radical prostatectomy for carcinoma of prostate
6. Comparison of laparoscopic and open radical nephrectomy for renal cancer
**Ongoing**

1. Prevalence of androgen deficiency and sexual function status in the ageing Indian male
2. Sexual function status of patients before and after treatment of BPH
3. Evaluation of laparoscopy in the management of carcinoma bladder
4. Effect of stone and pelvicalyceal system configuration on the morbidity and relook rates with PCNL and its impact on training
5. Development and validation of a stratification System to grade the degree of difficulty of PCNL
6. Robotic surgery
7. Laparoscopic surgery in urology
8. Genitourinary cancer (Renal, Bladder and Prostate Cancer)
9. Minimal invasive surgery in urology

**Collaborative Projects**

**Ongoing**

1. Mitochondrial genes and Y chromosome deletions in male infertility (with Anatomy)
2. 3 dimensional chemical shift imaging and diffusion weighted imaging using proton MRS in the diagnosis of carcinoma prostate (with NMR)
3. Stone analysis using X-ray diffraction studies (with Biophysics)
4. Prospective randomized study of radical cystectomy versus concurrent chemo-radio-therapy in muscle invasive cancer of urinary bladder (with Radiotherapy)
5. Molecular epidemiology of prostate cancer: Polymorphosis in hormone-related and prostatic cancer candidate (with Punjab University Chandigarh and PGI, Chandigarh)
6. Characterization of testing specific sperm associated antigen 9 (SPAG9) gene expression and humoral immune response in various human cancers (with National Institute of Immunology, New Delhi and Safdarjung Hospital, New Delhi)
7. 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 (with Biochemistry and Pathology)
8. Multicentre open-label, randomized, phase III trial comparing adjuvant hormonal therapy (Eligard-Leuprolide acetate) in combination with taxotere (docetaxel) versus hormonal therapy alone versus deferred therapy in patients with prostate cancer at high-risk of relapse after radical prostatectomy (with Medical Oncology)

**PUBLICATIONS**

**Journals**


three-dimensional (1)H MR spectroscopic imaging in patients with abnormal digital rectal examination or raised prostate specific antigen level of 4-10 ng/ml. NMR Biomed 2007;20:11–20.


Abstracts


3. Kumar R, Nayyar R, Kumar V, Gupta NP, Jagannathan NR, Hemal AK. Magnetic resonance spectroscopic imaging can improve prostate cancer detection rates of transrectal ultrasound guided biopsy in men with serum prostate specific antigen less than 10ng/mL. J Urol 2006;175 (Suppl.):A1500, 484.


COMMUNITY SERVICE
The faculty of department of Urology participated in the following community service:
Programmes on Urological diseases in Doordarshan and All India Radio.

PATIENT CARE
OPD and specialty clinics
New cases (Please Chapter No.6 Hospital)
Old cases

Surgical procedures
Open 369
Endourology
  Lower tract 728
  Upper tract 238
Percutaneous renal surgery 162
Ureterorenoscopy 90
Microsurgery 31
Laparoscopic surgery 48
Robotic surgery 133
  Radical prostatectomy: 56
  Pyeloplasty 43
  Others 34
Minor OT
  Cystoscopy 1,816
  Minor cases 3,463

Extracorporeal Shock Wave Lithotripsy (ESWL)
New cases 320
Re-do cases 828

Urodynamic procedures
Uroflowmetry 2,706
Cystometrogram 316

Ultrasound procedures
Diagnostic 53
Interventional 183

Laboratory investigations
X-ray diffraction of urinary calculi.
AWARDS AND HONOURS

Professor N.P. Gupta was recipient of Padma Shree for the year 2007 by the President of India Republic Day 2007 in recognition of his contribution to the growth of Urology in India and 32 years of dedicated services. Installed as President of Urological Society of India. President-Elect of Urological Association of Asia for 2006–2008 during 8th ACU, Bali. Board Member of Society International d’Urologie for 2004–2006; received Dr B.N. Oration by the Society of Surgeons of Nepal, 23 November 2006; Invited as an External Examiner by Kingdom of Saudi Arabia for Urology Board examination.

Professor A.K. Hemal awarded Padma Shri by President of India, 5 March 2007; Visiting professor and performed live demonstration of laparoscopic partial nephrectomy in National University Hospital, Singapore, 3 April 2006.

Professor P.N. Dogra IAEA/RCA Regional training course on Radiation protection for doctors (Non-Radiologists and Non-Cardiologists) using Fluoroscopy, Auckland, New Zealand, 4–5 September 2006.

Dr Rajeev Kumar Agra Urological Association Best Video Prize (Bilateral robotic pyeloplasty); Annual Conference, NZ-Urological Society of India, Jaipur, 2006; MIUC Fellowship, Urology Society of India, 2007; Chakroborty Fellowship, IAUA, 2007; Elected: Council Member: North Zone, Urological Society of India; Appointed Associate Editor, Indian Journal of Urology.
# 10.1 Cardiothoracic Sciences Centre

**Chief**  
P. Venugopal

**CARDIOThorACIC AND VASCULAR SURGERY**  
**Professor and Head**  
P. Venugopal

**Professors**  
A. Sampath Kumar  
Balram Airan

**Additional Professors**  
U.K. Chowdhury  
S.K. Choudhary  
A.K. Bisoi

**Assistant Professors**  
Milind Hote  
Sachin Talwar  
V. Devagourou

**CARDIOLOGY**  
**Professor and Head**  
V.K. Bahl

**Professors**  
K.K. Talwar  
(On lien)  
K.S. Reddy  
(On lien)

Anita Saxena  
S.S. Kothari  
Balram Bhargava

K.C. Goswami

**Additional Professors**  
R. Juneja  
D. Prabhakaran  
R. Narang

S. Ramamurthy

**Associate Professors**  
S. Mishra  
S. Seth  
Rakesh Yadav

N. Naik

**Assistant Professors**  
G. Karthikeyan  
Gautam Sharma  
S. Singh

S. Anandraja  
Ambuj Roy  
S. Ramakrishnan

AIIMS 2006-2007 / 536
CARDIAC ANAESTHESIA
Professor and Head
Usha Kiran

Professor
Sandeep Chauhan

Associate Professors
Neeti Makhija
Poonam Malhotra
Minati Choudhary

Assistant Professors
Shmbhu Nath Das
Parag Gharde
Vishwas Mallik

CARDIAC RADIOLOGY
Professor and Head
Sanjiv Sharma

Assistant Professors
Gurpreet Singh Gulati
Priya Jagia

BLOOD TRANSFUSION SERVICES (CARDIAC NEURO CENTRE)
Senior Chief Medical Officer
Rama Bhasin

Chief Medical Officer
Anjali Hazarika

Senior Technical Officer
Kalpana Misra

CARDIAC BIOCHEMISTRY
Associate Professor
R. Lakshmy

CARDIAC PATHOLOGY
Professor
Ruma Ray

CARDIAC NUCLEAR MEDICINE
Assistant Professor
Chetan D. Patel
EDUCATION

Cardiothoracic and vascular surgery
· Produced computer-based e-learning module for CABG

Video on CTS NET
· Repair of ruptured sinus of Valsalva aneurysm
· Reconstructive surgery for tricuspid incompetence
· Repair of TAPVC, cardiac type
· Resection of subaortic membrane
· Trans Atrial Repair of TOF
· Trans Aortic Repair of TOF
· Isolated AML cleft repair
· Repair of rheumatic tricuspid valve disease
· Repair of rheumatic mitral and aortic valves

Training
· Following Cardiac Surgeons have undergone short-term training at the department of CTVS:
  — Majid Ahmed Talikoti from Al Ameen Medical College and Hospital, Karnataka
  — Sisir Ranjan Das from Guwahati Medical College, Guwahati
  — Amarjyoti Rai Baruah from Guwahati Medical College, Guwahati
  — Dhiman Choudhary from Guwahati Medical College, Guwahati
  — Assad Zahid from University of New South Wala, Australia
  — Anuradha Tarafdar from Amity Institute of Biotechnology
  — Shahki P. MCh Student from Thiruvananthapuram Medical College
· Trained two perfusionists from Bageshree, 28, Pandurang Wadi, Mumbai
· Trained one perfusionist from Sher-I-Kashmir Institute of Medical Sciences
· Trained two physiotherapists from Jamia Hamdard University, New Delhi
· Trained one blood Bank Technician from KEM Hospital, Parel, Mumbai

Cardiac Anaesthesia
DM Cardiac Anaesthesia
In DM Cardiac Anaesthesia Programme: Four new candidates were selected for postdoctoral training including one sponsored candidate. Three DM candidates passed the examination successfully in July 2006 and one in December 2006. 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
This year 5 postgraduate students from the department of General Anaesthesia, AIIMS were posted for a period of 2 months each for training in cardiac anaesthesia; 14 June–31 March 2007.
Short-term superspeciality training
Five faculty members from various medical colleges underwent short training in cardiac anaesthesia. MSc perfusion technology and classes coordinated by faculty.

Cardiac Biochemistry
Two PhD students are working in the department.

Cardiac Nuclear Medicine
Number of postgraduate students 3
(training of postgraduates on rotational basis in Nuclear Cardiology)
Number of thesis/research papers completed 2
Number of lectures for postgraduate students 10
Moderator in Journal Club/Seminars 10
Number of lectures for undergraduate/paramedical students 0
Number of new theses started 2

Continuing Medical Education
Cardiothoracic and Vascular Surgery
- Professor A. Sampath Kumar conducted Cardiac Surgery Workshop, Indore; 21–23 April 2006.
- Professor A. Sampath Kumar attended CT CME 2006, Madras Medical College, Chennai; 2–3 September 2006.
- Professor A. Sampath Kumar attended Workshop on Valvular Heart Disease, Deenanath Mangeshkar Hospital, Pune; 30 September–1 October 2006.
- Professor A. Sampath Kumar conducted Cardiac Surgery Workshop, LPS Institute of Cardiology, Kanpur; 12–15 October 2006.

Cardiology
Organized by the department
- AIIMS Arrhythmia update 2006 was attended by nearly 250 delegates.

Lectures delivered
Professor Anita Saxena
- ‘Pitfalls in clinical diagnosis of CHD’, ‘How to analyse hemodynamic data set?’ and ‘When to intervene in a child with CHD-current practice’. CME on ‘DM/DNB teaching
programme in congenital heart disease’, Escorts Heart Institute, New Delhi; 5–6 August 2006.

· ‘Role of echocardiography in the neonatal ICU for congenital heart disease’ in NEOHEART, Apollo Hospital, New Delhi; 7 October 2006.

· ‘Hot topics in neonatology’, Department of Paediatrics, AIIMS; 2–3 September 2006.

· ‘Neonatal cardiac interventions’, 5th National CME Programme in Neonatology, Department of Pediatrics, AIIMS; 11 February 2007.

**Professor Balram Bhargava**

· ‘Are all drug eluting stents the same?’, American College of Chest Physicians Mumbai, India; 2006.


· ‘Future of DES technology’, Fudan University, *Shanghai* and Zhejiang University, Hangzhou, Peoples Republic of China; 2006.

· ‘Early invasive vs. conservative strategy in NSTE ACS’, International Symposium on Cardiology, Diabetes and Stroke, New Delhi; 2006.

· ‘Pulmonary embolism’, Respiratory and Critical Care Update, Lucknow, India; 2006.

· ‘Cor pulmonale’, Respiratory and Critical Care Update, Lucknow, India; 2006.

· ‘Management of acute MI’, CME for the HS Mittal Memorial Foundation at the LLRM Medical College, Meerut; 2006.

· ‘Newer antiplatelet and antithrombotic drugs’, Ninth Complex Angioplasty Course, Mount Sinai Hospital, New York, USA; 2006.


· ‘Antiplatelets and antithrombotics for ACS and PCI’, CME of the Delhi Medical Association, the Maulana Azad Medical College, New Delhi; 2006.

· ‘Newer DES: Indian perspective’, Seventh Pan African Course in Interventional Cardiology, Monastir, Tunisia; 2006

· ‘Mitral stenosis: Balloon mightier than the knife’, Endoluminal Therapy: Twenty Years of Stenting, Geneva, Switzerland; 2006.


· ‘Management of tortuous and calcific lesions: Optimal strategy’, Live Intervention Cardiology Workshop at the Army Hospital (Research and Referral Hospital), New Delhi; July 2006.

· ‘Stanford India biodesign: Role of AIIMS’, Department of Biotechnology, Stanford India Biodesign Programme, Joint meeting. New Delhi; January 2007.
· ‘Enoxaparin vs. other LMWH vs. unfractionated heparin? Where are we in 2007?’ 3C-Con-2007, Ahmedabad; January 2007.
· ‘My approach to CAD patient’, Debate-I. Stable angina with SVD normal LV function: Medical treatment is equally good. 13th Annual Conference of the Cardiological Society of India (UP Chapter), Lucknow; February 2007.

Cardiac Anaesthesia
Dr Usha Kiran
· Cath lab and anaesthesia
· ASD, VSD, PDA
· Echocardiography of coronary artery disease
· Advanced cardio respiratory life support
· Renal failure—anaesthetic implication

Dr Sandeep Chauhan
· Myocardial preservation
· Extracorporeal membrane oxygenation
· Robotic cardiac surgery and the anaesthetic
· Coronary anatomy and physiology

Dr Neeti Makhija
· Neurological dysfunction after CPB
· Pathophysiology of congenital heart disease
· Cardiopulmonary bypass and anaesthetist
· Regional anaesthesia in cardiac surgery
· EKG in health and disease

Dr Poonam Malhotra Kapoor
· Newer anaesthetic agent
· Emergencies in cardiac anaesthesia
· Echocardiography of aortic valve
· Investigating coronary artery disease

Dr Minati Choudhary
· Tetralogy of fallot
· Aortic aneurysm: Descending aortic and abdominal
Dr Shambhu N. Das
· Fontan procedure—anaesthetic concerns
· The pregnant patient for cardiac surgery

Dr Parag Gharde
· Transposition of great arteries
· Cardiopulmonary bypass emergencies
· Diabetes and anaesthetic implication
· Off pump CABG and variants

Dr Vishwas Malik
· Cardiopulmonary bypass equipment
· Echocardiography of mitral valve
· X-ray chest in cardiac disease
· Risk assessment in patients with CAD

Cardiac Radiology
Dr Sanjiv Sharma
· Mid-term CME of Indian Society of Vascular and Interventional Radiology, MHRC, Madurai; 22 July 2006. Guest lectures on:
  — Role of stem cell therapy in interventional radiology
  — Interventional radiology ‘What, when and where’
  — Chaired a panel discussion on Peripheral Vascular Disease
· Annual meeting of Cardiovascular and Interventional Radiological Society of Europe, Rome; 9–13 September 2006:
  — Chaired a session on CIRSE meets India
· ‘Intervention in musculoskeletal system’, Conference-cum-CME 2nd Chapter IRIA HP State Branch and North Zone Meeting, IG Medical College, Shimla; 1–2 October 2006.
· ‘World vision in interventional radiology: Asia pacific countries’ and ‘Endovascular repair for AAA’, 7th Asia-Pacific Congress of Cardiovascular and Interventional Radiology, Thailand; 8–11 October 2006. Presided over the Congress as the President of the Asia-Pacific Society.
· Panna Lal Oration on ‘Imaging diagnosis of peripheral vascular diseases’. Annual meeting of the UP State Chapter of Indian Radiology and Imaging association, Bareilly; 5 November 2006
· ‘Interventions: Past, present and future in India’ and ‘Next generation vascular devices’, 9th Annual Congress of Indian Society of Vascular and Interventional Radiology, Chennai;

National and International Conferences
Conferences, Seminars
Cardiothoracic and Vascular Surgery
Professor A. Sampath Kumar
· Invited to attended the 14th Annual Meeting, of Osaka, Japan; 1 June–3 2006.

V. Devagourou

Cardiology
· 58th Annual conference of Cardiac Society of India (CSI) 2006 was successfully organized by the Department of Cardiology with Professor V.K. Bahl as the organizing secretary.
· PCSI 2006 (Pediatric Cardiac Society of India) conference was successfully organized at AIIMS

Cardiac Radiology
Dr Sanjiv Sharma
· External examiner for practical examination of DMRD and MD (Radiodiagnosis) and BSc (Medical Technology), Indira Gandhi Medical College, Shimla; 19–21 June 2006. Visit as external expert for evaluation and training of the staff for CT and MRI Facility, JDW National Referral Hospital, Thimpu, Bhutan; 10–21 July 2006. External examiner for practical examination of MD in Radio-diagnosis, University of Delhi; May–October 2006. External examiner for practical examination of MSc in Radio-diagnosis, PGIMER, Chandigarh; May 2006. External Expert, Core Technical Committee ‘A’, PGIMER, Chandigarh; 27 September 2006.
Dr Gurpreet Singh Gulati
- Annual conference of the Cardiological Society of India, New Delhi, India; 7–10 December 2006.
- Annual meeting of the Pediatric Cardiology Society of India, New Delhi; 14–15 October 2006. Presented 2 posters.

Dr Priya Jagia
- Attended Annual meeting of the Pediatric Cardiology Society of India, New Delhi; 14–15 October 2006.
- Attended Seminar in MRI, Department of NMR, AIIMS; 22 March 2007.

Lectures delivered
Cardiothoracic and Vascular Surgery
Professor Balram Airan
- ‘Robotic cardiac surgery and application of stem cell technology for CAD’, AIIMS at Integrated Coronary Revascularization Workshop 2006, Innsbruck, Austria; 6–8 December 2006.
- ‘Carotid atherosclerosis—art and science’, Joint Meeting of AIIMS and Section of Surgery—Royal Society of Medicine, AIIMS; 3 March 2007.

S.K. Choudhary
- ‘Glenn without cardiopulmonary bypass-how to do it?’, Annual conference of the Pediatric Cardiac Society of India, New Delhi; September–October 2006.
Sachin Talwar

- ‘Glenn without cardiopulmonary bypass—How to do it?’, Annual conference of the Paediatric Cardiac Society of India, New Delhi, September–October 2006.

Ujjwal Chowdhury

- ‘Anaesthesia management for robotic myocardial revascularization’ (As a co-author. This poster won the Best Poster Award), Annual Indian Society of Anaesthesia, Delhi 2006.
- ‘Efficacy of lactate concentration gradient from right atrium to pulmonary artery in goal-direct management of cardiac surgical patients’ (This poster was selected in the Award session as one of the six best posters for free paper presentation), Xth IACTA Conference 2007.

Cardiology

Professor Anita Saxena


Professor Balram Bhargava

- ‘Drug eluting stents in India’, SAARC Congress of Cardiology organized by the Liaquat National Hospital, Karachi, Pakistan; 2006.
- ‘First in man ABCD trial’, (Autologous Bone Marrow Cells in Dilated Cardiomyopathy) Asia Pacific Interventional Advances. Sydney, Australia; 2006 (Late-Breaking Trials from Asia Pacific Region).
· ‘Safety issues with drug eluting stents: These issues are of great concern!’ 58th Annual Conference of the Cardiology Society of India, New Delhi, India; 2006.
· ‘Indian stents tested in India’, I2 (Innovation in Intervention) Summit of the American College of Cardiology, New Orleans, USA; 2007.
· ‘Mitral stenosis: Balloon mightier than the knife’, Department of Cardiology, Stanford University, Palo Alto, Ca, USA; 2007.

Dr G. Kathikeyan
· ‘When should we initiate statins for primary prevention’, AIIMS International Symposium, New Delhi; February 2006.
· ‘ACS-pathophysiology and diagnosis’, Indo-US Summit on Emergency Medicine, October 2006.

Dr S. Ramakrishnan
· Cardiac Involvement in Rheumatological Diseases, IRACON 2006, Lucknow.

Cardiac Anaesthesia
Usha Kiran
· ‘Critical concerns’ in Annual Conference Indian Society of Anaesthesiologist, New Delhi; April 2006.
· ‘Cyanotic congenital heart disease the anaesthesiologist concern’, PGI Chandigarh during Annual Conference of Indian Association of Cardiac Anaesthesiologists.
· ‘Multi speciality health mela’ at Beri organized by Chief Minister of Haryana and R.B.S. Jhakhar and local Medical Association; 3 December 2006.
· ‘Role of meditation and relaxation of patient of parkinson’s disease and their care givers’, World Parkinson’s day celebration, AIIMS; 2 April.
· Meditation and Relaxation Therapy Camp for Parkinson’s disease patients and their caregivers, Maneser, Om Shanti Retreat Center, Delhi–Jaipur Highway; 1–2 September.

Sandeep Chauhan
· ‘ECMO’, International Conference of Paediatric Cardiological Society of India, October 2006.
· ‘Anaesthesia management of carotid endarterectomy’, Chandigarh; February 2007. During Annual Conference of IACTA.
Poonam Malhotra Kapoor
· Efficacy of lactate concentration gradient from right atrium to pulmonary artery in good directed management of cardiac surgical patients, IACTA Annual Conference, Chandigarh; 23-25 February 2007.

Cardiac Radiology
Dr Gurpreet Singh Gulati
· Cardiac CT and MR Course organized by the Radiology Education Foundation, Mumbai, India; 5–6 August 2006. Lectures on:
  — Cardiac MRI in thrombus imaging
  — Cardiac MRI in the evaluation of cardiomyopathies
  — Cardiac MRI in the evaluation of cardiac tumours

Dr Priya Jagia
1. ‘Endovascular interventions: AIIMS experience’, Joint meeting of Department of Surgical Disciplines, with the section of Surgery, Royal Society of Medicine, AIIMS, New Delhi; 3 March 2007.

RESEARCH
Cardiothoracic and Vascular Surgery
Funded Projects
Ongoing
Departmental projects
Research as part of MCh Thoracic and Cardiovascular Surgery
1. Histopathology and morphometry of pulmonary arteries in patients undergoing systemic to pulmonary arterial shunting procedures
2. 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?

Research as part of DM Cardiac Anaesthesia Thesis
Ongoing
1. Efficacy of early goal direct therapy in moderate to high-risk cardiac surgical patients. This has been presented at National Conference IACTA.
2. Comparative study of lactate, pyruvate and lactate pyruvate ratio as markers of myocardial ischemia in adult patients undergoing open heart surgery
3. Myocardial preconditioning against infarction in patients undergoing cardiac surgery isoflurane and sevoflurane
4. Intraoperative central venous oxygen saturation as a surrogate for mixed venous oxygen saturation in patients undergoing cardiac surgery
5. The role of transthoracic as a monitoring tool during induction of anaesthesia in cardiac surgical patients

Collaborative Projects
Through a global tender preliminary work for producing a valve for the heart valve project have begin with M/s Romsons Scientific

Cardiology
Funded Projects
Ongoing
3. Serum fatty acid levels and their correlation with other CVD risk factors in Industrial population from Delhi and Trivandrum. D. Prabhakaran. Funded by ICMR. Funds: Rs 8,80,441.


Completed


Departmental Projects
Completed
1. The hemodynamic effect of sildenafil on hemodynamics in dilated cardiomyopathy
2. Safety and efficacy of percutaneous stem cell injection in dilated cardiomyopathy

Ongoing
1. Multicentric Clinical Evaluation of an Indigenous Paclitaxel-eluting Stent in De-novo Coronary Artery Stenosis

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.

2. FREEDOM trial: Future revascularization evaluation in patients with Diabetes mellitus: Optimal management of Multivessel disease (FREEDOM) Trial. Clinical trial comparing multivessel DES versus CABG in diabetics. Funded by the NIH, Bethesda, MD, USA National Coordinator (India)

3. Multicentric Clinical Evaluation of an Indigenous Nanoporous carbon coated Paclitaxel-eluting cobalt chromium stent in De-novo Coronary Artery Stenosis

4. The ADVANCE study (with Endocrinology)

5. Surgical Treatment of Ischemic Heart Failure (STICH) trial

6. The hyperglycemia and its effect after acute myocardial infarction on cardiovascular outcomes in patients with type 2 diabetes (HEART2D study) (with Endocrinology)
Cardiac Anaesthesia
Funded Projects
Completed

Ongoing

Departmental Projects
Completed
1. Role of caudal epidural for glycaemic control in children undergoing cardiac surgery. Dr. Minati Choudhary.
2. Stress attenuation by caudal epidural injection of combined sufentanil and bupivacaine in paediatric cardiac surgical patients. Dr. Minati Choudhary.
3. Efficacy of combined conventional ultrafiltration and a simplified modified ultrafiltration in adult cardiac surgery. Dr. Usha Kiran.
4. Intraoperative Central Venous Oxygen Saturation as a surrogate for Mixed Venous Oxygen Saturation in Patients Undergoing Cardiac Surgery. Dr. Poonam Malhotra.
5. Efficacy of Early Goal Directed Therapy in moderate to high-risk cardiac surgical patients. Dr. Poonam Malhotra.
6. Comparison of analgesic efficacy of fentanyl and sufentanil during chest tube removal in cardiac patients

Ongoing
1. Comparative study of lactate, pyruvate and lactate pyruvate ratio as markers of myocardial Ischemia in adult patients undergoing open heart surgery. Dr. Poonam Malhotra.
2. Role of nitroglycerin inhalation in adult valvular surgery. Does it reduce pulmonary hypertension? Dr. Poonam Malhotra.


4. The role of transthoracic echocardiography as a monitoring tool during induction of anaesthesia in cardiac surgical patients. Dr. Poonam Malhotra.

5. Nosocomial infections in children under two years undergoing cardiac surgery

6. A comparison of fentanyl and sufentanil in patients undergoing off pump coronary artery bypass surgery

7. Effects of two different rewarming strategies on neuropsychological function in patients undergoing CABG with CPB

8. Effects of two different rewarming strategies on neuropsychological function in patients undergoing TOF correction with CPB

9. Role of transthoracic echocardiography during induction of anaesthesia in cardiac surgical patients

10. Role of intravenous amiodarone in patients undergoing mitral valve replacement

**Cardiac Radiology**

**Completed**

1. Assessment of ventricular function and pulmonary regurgitation by MRI, in patients operated with total correction procedure in Tetralogy of Fallot’.

2. Comparison of efficacy of somatostatin and nitroglycerin infusion with somatostatin monotherapy in control of acute variceal bleeding and prevention of early rebleeding among patients with cirrhosis of liver.

**Ongoing**

1. ‘Induction of therapeutic angiogenesis in critical limb ischemia by intra-arterial delivery of autologous bone-marrow derived stem cells’. Funded by Department of Biotechnology. Funds: Rs 20.09 lakh.

2. Avoiding unnecessary radiation dose to the patient during interventional radiological procedures. A multicentre study funded by the International Atomic Energy Agency

3. Percutaneous intracoronary cellular cardiomyoplasty for non-ischemic cardiomyopathy: Clinical and histopathological result: The First in Man ABCD trial. Funded through the Institute Research Funds of AIIMS, as part of the Stem Cell Research Program. Part of the results published in the *Journal of American College of Cardiology*

4. To assess the role of 18-FDG CT-PET scan in diagnosis, monitoring disease activity and response to therapy of primary systemic necrotising vasculitis

5. Ultrasound evaluation of carotid intimo-medial thickness in patients with rheumatoid arthritis
Blood Transfusion Services (Cardiothoracic and Neurosciences Centre)
Collaboration Project
Ongoing

Cardiac Biochemistry
Funded Projects
Completed

Ongoing

Collaborative Projects
1. Role of homocysteine in coronary artery disease: Genetic and epigenetic studies (with Cardiology and Institute of Genomics and Integrated Biology)
2. ADVANCE-A factorial randomized trial of blood pressure lowering with fixed low dose perindopril-indapamide combination and intensive glucose control with a modified release glitazide based regimen for the prevention of vascular disease among high risk individuals with type 2 diabetes (with Endocrinology and Cardiology)
3. Rural-urban migration: Effects on obesity and diabetes in Indians (with Cardiology and University of Bristol)
4. 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)
5. Serum trans fatty acid levels and their correlation with other CVD risk factors in Industrial populations from Delhi and Trivandrum (with Cardiology)
6. Auditing of early goal direct therapy in patients undergoing cardiac surgery (with Cardiac Anesthesia)
7. Non-invasive detection of sub clinical disease in patients with established rheumatic valvular heart disease (with Cardiology)
8. Paraoxonase and its gene variants in relation to coronary artery disease (with Biochemistry)

**Cardiac Pathology**

**Collaborative Projects**

**Completed**
1. Histopathology of the right ventricular outflow tract in patient with tetralogy of Fallot (with Cardiothoracic Surgery)
2. Histological study of remnant long saphenous veins before aorto coronary bypass grafting (with Cardiothoracic Surgery)

**Ongoing**
1. Histopathological study of aorta and pulmonary artery in congenital heart disease (with Cardiothoracic Surgery)

**Cardiac Nuclear Medicine**

**Funded Projects**

**Ongoing**
3. Use of autologous bone marrow stem cells for myocardium regeneration. Funding by Department of Biotechnology sponsored project (2006–ongoing).

**Collaborative Projects**

**Completed**
1. Evaluation of cardiac function in patients receiving anthracycline therapy by 1st pass study and equilibrium radionuclide ventriculography. Nuclear Medicine MD thesis of B. Vijay Babu (with Medical Oncology and Nuclear Medicine)
2. Usefulness of Tc99m–MAA lung perfusion imaging in patients post BD Glenn and TCPC. MCh research paper of Buddhaditya (with Nuclear Medicine and CTVS)
Ongoing
1. Role of F-18 FDG in acute Rheumatic heart disease. DM research paper of Dr. Nagesh (with Nuclear Medicine and Cardiology)
2. Correlation between cardiovascular autonomic function and indicators of myocardial ischemia in patients presenting anginal symptoms. PhD thesis of Rita Khadka in physiology (with Physiology, Nuclear Medicine and Cardiology)
3. F-18 FDG in detecting ‘Metabolic signature of ischemia’. Comparison with perfusion SPECT (with Nuclear Medicine and Cardiology)
4. F-18 FDG in detecting ischemia at rest in patients with known coronary artery disease (with Nuclear Medicine and Cardiology)
5. Prevalence of symptomatic and asymptomatic coronary artery disease in stroke patients. Kapil Agarwal, DM thesis (with Neurology, Cardiology and Nuclear Medicine)

Guide for Thesis
Completed
1. Evaluation of cardiac function in patients receiving anthracycline therapy by 1st pass study and equilibrium radionuclide ventriculography. Co-guide in MD thesis of B. Vijay Babu (with Nuclear Medicine MD student)
2. Usefulness of Tc99m–MAA lung perfusion imaging in patients post BD Glenn and TCPC. MCh research paper of Buddhaditya (with Nuclear Medicine and CTVS)
4. Role of PET-CT in initial staging and post therapy assessment in patients of carcinoma ovary–Chief Guide in MD thesis of G. Ramamohan Reddy (with Nuclear Medicine MD student)

PUBLICATIONS
Cardiothoracic and Vascular Surgery
Journals


21. Seth A, Chowdhury UK, Gupta NP, Dogra PN. Intrahepatic inferior vena cava. An alternative approach for venous thrombectomy in renal cell carcinoma with level III IVC


Cardiology Journals


45. Singh S, Bhargava B. Stent thrombosis: To Lyse or to Pulversise is the Question. *Indian Heart J* 2006;**58**:201–03.


**Chapters in Books**


4. Prabhakaran D. Role of risk factors: For SEAR capacity strengthening programme. WHO (SEARO); 2006


**Cardiac Anaesthesia**

**Journals**


**Cardiac Radiology Journals**


**Abstracts**


4. Sharma S, Punamiya S, Gulati GS, Gulati M. Current concepts in the management of IVC and hepatic vein occlusion. Presented as a paper and abstract published (no. 20.2) in the abstract


Cardiac Biochemistry Journals


Cardiac Pathology Journals


### Cardiac Nuclear Medicine

**Journals**


Abstracts
**Chapter in Book**

**Nil**

**Patient Care**

**Cardiothoracic and Vascular Surgery**

Total operation performed in the year 2006–2007 (w.e.f. April 2006–March 2007).

<table>
<thead>
<tr>
<th>Type</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open heart surgery</td>
<td>2,356</td>
</tr>
<tr>
<td>Close heart surgery</td>
<td>0,795</td>
</tr>
<tr>
<td>Total operation</td>
<td>3,151</td>
</tr>
</tbody>
</table>

28,097 patients have attended and were seen in the Cardiothoracic and Vascular Surgery outpatient department.

**Cardiology**

Total numbers

<table>
<thead>
<tr>
<th>Type</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>New OPD cases</td>
<td>24,497</td>
</tr>
<tr>
<td>Old cases</td>
<td>68,424</td>
</tr>
</tbody>
</table>

**Patient services**

<table>
<thead>
<tr>
<th>Type</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>TMT</td>
<td>2,178</td>
</tr>
<tr>
<td>Holter</td>
<td>1,691</td>
</tr>
<tr>
<td>Echocardiography</td>
<td>22,000</td>
</tr>
<tr>
<td>Fetal Echocardiography</td>
<td>230</td>
</tr>
</tbody>
</table>

**Cath lab services**

Diagnostic

<table>
<thead>
<tr>
<th>Type</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coronary angiograms</td>
<td>2,658</td>
</tr>
<tr>
<td>Catheterization studies</td>
<td>1,469</td>
</tr>
</tbody>
</table>

**Interventions**

<table>
<thead>
<tr>
<th>Type</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coronary Interventions</td>
<td>939</td>
</tr>
<tr>
<td>Mitral Valve Dilatations</td>
<td>270</td>
</tr>
<tr>
<td>Device Closures</td>
<td>45</td>
</tr>
<tr>
<td>Other Interventions</td>
<td>159</td>
</tr>
</tbody>
</table>

**Cardiac Anaesthesia**

1. **Operation theatre:** 7-operation theatres work from 8 a.m.–5 p.m. from Monday–Friday and till 2 p.m. on Saturday.
2. **CT.Angio:** CT Angiography of children in Multi Slice CT Scanner Room under monitored anaesthesia care/general anaesthesia/sedation in 64 slices multi scanner room.
3. **Pre-anaesthesia round:** Pre-anaesthesia round from 6.30–8.30 p.m. for all the patients planned for operation.
4. **Cath lab:** General anaesthesia/LA/MAC for children undergoing ASD/VSD/PSD closure.
   a. In adults GA/LA monitored anaesthesia care for adult automated cardiovertor device implantation (AICD) and dual chamber pace maker implantation.
   b. Aortic Stent placement in cath lab, for patient of Aortic aneurysm under general anaesthesia.

5. **MRI angio:** In MRI angiography room under general anaesthesia and/or monitored anaesthesia care. All MRI compatible equipment is kept inside.


7. Emergency Services by the residents and faculty for emergency surgery.

8. Resuscitative and ventilatory management in CCU, CTVS, ICU A and ICU B and CT5 recovery room.

### Cardiac Radiology

Total number of cine-angiography done for the period from 1 April 2006–31 March 2007:

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cine fluoroscopy</td>
<td>6,123</td>
</tr>
<tr>
<td>Vascular catheter procedures</td>
<td>5,641</td>
</tr>
<tr>
<td>Ultrasound</td>
<td>1,835</td>
</tr>
<tr>
<td>CT</td>
<td>1,150</td>
</tr>
<tr>
<td>MRI</td>
<td>455</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OPD Data: Routine X-ray for CTVS and cardiology</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portable</td>
<td>22,507</td>
</tr>
<tr>
<td>Ward</td>
<td>33,204</td>
</tr>
</tbody>
</table>

Blood Transfusion Services (Cardiothoracic and Neurosciences Centre) Workload 1 January 2006–December 2006.

**Blood units collected**

<table>
<thead>
<tr>
<th>Type</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Replacement donors</td>
<td>16,057</td>
</tr>
<tr>
<td>Voluntary donors in the department</td>
<td>180</td>
</tr>
<tr>
<td>Voluntary donors through blood mobiles</td>
<td>1,385</td>
</tr>
<tr>
<td>Blood received from IRCS</td>
<td>5</td>
</tr>
<tr>
<td>Blood received from blood bank, AIIMS</td>
<td>1,060</td>
</tr>
<tr>
<td>Blood received from other hospitals</td>
<td>167</td>
</tr>
</tbody>
</table>

**Total number of blood units collected** 18,854

**Blood units issued**

<table>
<thead>
<tr>
<th>Type</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood units issued to CTVS/NS</td>
<td>1,6194</td>
</tr>
<tr>
<td>Blood units issued blood bank, AIIMS</td>
<td>1,650</td>
</tr>
<tr>
<td>Blood units issued to IRCS</td>
<td>95</td>
</tr>
<tr>
<td>Blood units issued to other hospitals</td>
<td>597</td>
</tr>
</tbody>
</table>
Blood units issued to the Trauma Centre 87
HIV/HB2Ag/HCV/VDRL reaction units discarded 597

**Total number of blood units issued** 19,220

**Laboratory procedures**
Total number of blood grouping (ABO) 75,372
Number of Rh-grouping 47,091

**Total number of cross matching done** 73,921

**Infection markers**
HIV testing 23,505
HBV testing 23,829

HCV testing 23,408
VDRL testing 21,420
CMV testing 16
HBV confirmatory testing 682

**Total** 2,42,153

**Total number of blood components**
Fresh frozen plasma (FFP) 14,083
Platelet rich plasma (PRP) 710
Platelet concentrate 14,569
Recovered plasma 2,598
Cryoprecipitate 502
Packed red blood cells 16,618

**Total** 49,080

**Special procedures**
Single donor plateletpheresis 49

**Cardiac Biochemistry**
The cardiac biochemistry lab is externally validated by Birmingham, UK through quality control programmes for clinical chemistry.

Investigations being carried out in the department for inpatients and outpatients are:
### Clinical Chemistry

<table>
<thead>
<tr>
<th>Name of the investigation</th>
<th>Number of samples/year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Routine chemistry analysis</td>
<td>68,128</td>
</tr>
</tbody>
</table>

### Haemogram

<table>
<thead>
<tr>
<th>Name of the investigation</th>
<th>Number of samples/year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Routine hematology</td>
<td>31,250</td>
</tr>
</tbody>
</table>

### Coagulation

<table>
<thead>
<tr>
<th>Name of the investigation</th>
<th>Number of samples/year</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT</td>
<td>30,400</td>
</tr>
<tr>
<td>APTT</td>
<td>13,000</td>
</tr>
<tr>
<td>FDP</td>
<td>20</td>
</tr>
<tr>
<td>Protein C</td>
<td>5</td>
</tr>
<tr>
<td>Protein S</td>
<td>5</td>
</tr>
<tr>
<td>Fibrinogen</td>
<td>500</td>
</tr>
</tbody>
</table>

### Cardiac enzymes

<table>
<thead>
<tr>
<th>Name of the investigation</th>
<th>Number of samples/year</th>
</tr>
</thead>
<tbody>
<tr>
<td>CK</td>
<td>7,500</td>
</tr>
<tr>
<td>CK-MB</td>
<td>3,200</td>
</tr>
<tr>
<td>LDH</td>
<td>7,500</td>
</tr>
</tbody>
</table>

### Lipid profile

<table>
<thead>
<tr>
<th>Name of the investigation</th>
<th>Number of samples/year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cholesterol-total</td>
<td>34,300</td>
</tr>
<tr>
<td>Cholesterol-HDL</td>
<td>21,000</td>
</tr>
<tr>
<td>Cholesterol-LDL</td>
<td>21,000</td>
</tr>
<tr>
<td>Cholesterol-VLDL</td>
<td>21,000</td>
</tr>
<tr>
<td>Triglycerides</td>
<td>26,450</td>
</tr>
</tbody>
</table>

### Specialized investigations

<table>
<thead>
<tr>
<th>Name of the investigation</th>
<th>Number of samples/year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digoxin</td>
<td>2,230</td>
</tr>
<tr>
<td>Cyclosporine</td>
<td>50</td>
</tr>
<tr>
<td>Thyroid hormones-T&lt;sub&gt;3&lt;/sub&gt;, T&lt;sub&gt;4&lt;/sub&gt;, TSH</td>
<td>7,300</td>
</tr>
<tr>
<td>ASLO</td>
<td>5,400</td>
</tr>
<tr>
<td>CRP</td>
<td>5,400</td>
</tr>
<tr>
<td>Homocystiene</td>
<td>1,400</td>
</tr>
<tr>
<td>Lipoprotein(a)</td>
<td>125</td>
</tr>
<tr>
<td>Apo(a)</td>
<td>125</td>
</tr>
<tr>
<td>Apo(b)</td>
<td>125</td>
</tr>
<tr>
<td>RA factor</td>
<td>752</td>
</tr>
</tbody>
</table>
Name of the investigation                                  Number of samples/year
Catecholamines (plasma and urine)                        121
VMA (urine)                                               170
Glycosylated haemoglobin                                 53
HLA-A, B, C, DR, DQ                                        50

Cardiac Pathology
Cardiac Path Laboratory
Total number of specimens/slides Routine cases           243
Research cases                                            293
Poly-L-lysine coated slides slides                       11,425

Others works
HE slides                                                  398
Unstained slides                                          150
Special stains slides                                     295
IHC slides                                                 10
Thioflavin-T slides                                       3

Cardiac Nuclear Medicine
The department is equipped with a dual head SPECT Gamma camera catering to patients referred for cardiac studies from CN center 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 center and from IRCH for cardiac evaluation in patients receiving chemotherapy.

Total number of patients investigated in Nuclear Cardiology from 1 April 2006–31 March 2007
Stress thallium                                            979
Stress tetro/MIBI                                          141
MUGA study                                                 1,272
Lung perfusion study                                       54
Total number of studies performed                          2,446
AWARDS, HONOURS AND SIGNIFICANT EVENTS

Cardiothoracic and Vascular Surgery

Dr V. Devagourou underwent training in Mitral Valve Repair for six months (August 2006–January 2007), Heart Institute (Alain Carpentier Heart Foundation) in the HO CHI MINH City, Vietnam.

Cardiac Anaesthesia

‘Free Paper Award’ in IACTA–2007 to Minati Choudhary for the paper titled as ‘Relationship between Endothelin-1, Arterial to end-tidal carbon dioxide tension difference and clinical outcome in children undergoing fontan operation’ (authors: Minati Choudhary, Usha Kiran, Neeti Makhija, Balram Airan).

Dr Alok Mehra, Senior Resident: Best paper award at Delhi Branch ISA Conference for the poster entitled Robotic assisted Cardiac Surgery AIIMS experience (authors: Alok Mehra, Poonam Malhotra, Sandeep Chauhan, Ujjwal Choudhary, Usha Kiran).

Cardiac Radiology

Dr Sanjiv Sharma Member: Cardiovascular and Interventional Radiology Society of Europe; Member: Society of Interventional Radiology of North America; President: Asia-Pacific Society of Cardiovascular and Interventional Radiology; President: Indian Society of Vascular and Interventional Radiology; National Coordinator: Indian National Registry of Vascular and Interventional Procedures; Associate Editor: Indian Journal of Radiology and Imaging, Indian Heart Journal; International referee for: (a) Cardiovascular and Interventional Radiology, and (b) Biomedical Imaging and intervention Journal; Referee for: (a) Indian Heart Journal, (b) Indian Journal of Thoracic and Cardiovascular Surgery, and (c) Indian Journal of Radiology and Imaging.

Dr Gurpreet Singh Gulati Cardiovascular fellow: Under Andrew Powell and Tal Geva at the Division of Cardiac MRI, Pediatric Cardiology, Children’s Hospital, Boston, MA, USA; 3–30 April 2006; Appointed member: Editorial Board for Cardiovascular Imaging Section of Indian Journal of Radiology and Imaging; Invited to conduct a guest symposium on ‘Cardiac MRI’ for the Indian Journal of Radiology and Imaging; Name included in the Marquis Who’s Who Collection (24th Edition) for the year 2007; Annual membership of Society of Cardiovascular Magnetic Resonance 2006–2007; Annual membership of the American Roentgen Ray Society 2006; Referee for: (a) Heart (b) Indian Heart Journal, and (c) Indian Journal of Thoracic and Cardiovascular Surgery.

Blood Transfusion Services (Cardiothoracic and Neurosciences Centre)

The following members attended the ‘Re-orientation training’ at Conference hall Delhi State AIDS Control Society+ 12 December 2006. Anjali Hazarika, Gulshan Mehta, Rahul Gautam.

The following members attended Trans-Q-2006, Ahmedabad; 10–12 November 2006. Kalpana Misra, G.S. Chauhan, Jeevan Bisht.

**Cardiac Nuclear Medicine**
Awarded one month UICC fellowship in Positron Emission Tomography at Department of Nuclear Medicine, University of Pennsylvania, Philadelphia, USA: August–September 2006.

**VISITING SCIENTISTS**
**Cardiac Anaesthesia**
Visitors from various other hospitals/national/international faculties for training and as observers:

2. Kanta Meena MD student from Lady Harding Medical College, New Delhi attended a short-term training in Cardiac Anaesthesia; 1–17 August 2006.
3. Neha Baduni MD student from Lady Harding Medical College, New Delhi attended a short-term training in Cardiac Anaesthesia; 1–17 August 2006.
4. Rajesh Kumar DA student from Lady Harding Medical College, New Delhi attended a short-term training in Cardiac Anaesthesia; 1–17 August 2006.
10.2 National Drug Dependence Treatment Centre

Professor and Chief
Rajat Ray

Professors
B.M. Tripathi
Raka Jain
Rakesh Lal

Additional Professor
Meera Vaswani

Associate Professors
Anju Dhawan

Assistant Professors
N. Kaw
Sonali Jhanjee
Atul Ambekar

Scientists
H.K. Sharma
Anita Chopra
Hem Sethi

EDUCATION
A) **Undergraduate**-During their posting in the Department of Psychiatry, students are posted for a day in the Centre.

B) **Postgraduate**-Residents doing MD (Psychiatry) are posted for 6 months during their entire course duration.

C) **Ph. D & Postgraduate teaching**
   Journal discussion once every week
   Seminar once every week
   Case conference once every week
   Tutorials faculty/staff presentation once every week besides CCR & CGR in every semester

Note: These are conjoint activity of the department of Psychiatry and the Centre

Continuing Medical Education
Conferences, Workshops, Seminars, Training Courses and Symposia
- Seminar on Workplace Intervention for Substance Abuse, NDDTC, AIIMS, Ghaziabad, 12 April 2006.
- Tobacco Awareness Programme, NDDTC, AIIMS, Ghaziabad, 5 May 2006.
- The National Workshop on Control of Drug Abuse and HIV Risk Reduction, NDDTC, AIIMS, Ghaziabad, 10-11 August 2006.
Training of Trainers Programme on Substance Use Disorder for Doctors from Central Reserve Police Force, NDDTC, AIIMS, Ghaziabad, 8-13 May, 2006; 14-28 September, 2006; and 14-18 November 2006.

Training of Staff on Substance Use Disorder from APON, Bangladesh, NDDTC, AIIMS, Ghaziabad, 6-11 November 2006.

**Lectures**

Faculty, Senior Residents, Research Officers and Scientists delivered lectures in the aforesaid training courses

**Dr. B.M. Tripathi**

- ‘Intravenous Drug Use (IDU) size estimation at 300 peer-led intervention (PLI) sites,’ Regional Resource & Training Centre (RRTC – North), Society for Promotion of Youth and Masses (SPYM), New Delhi

**Dr. Rakesh Lal**


**National and International Conferences**

**National Workshops/Conferences/Symposium/Seminars**

**Dr. Rajat Ray**

- Participated as a resource person in the workshop on Development of Mental Health and De-addiction Services for Govt. of Madhya Pradesh, Bhopal on 6th May 2006.
- ‘Prevention of amphetamine type stimulants (ATS) abuse among young people,’ United Nations Office on Drugs and Crime (UNODC), New Delhi, 6-7 July 2006.
- ‘Concept of Agonist Maintenance,’ seminar hosted by United Nations Office on Drugs and Crime (UNODC), New Delhi, 27-29 November 2006.

**Dr. B.M. Tripathi**

- Resource Person for the ‘Training Programme for Management of HIV/AIDS,’ Department of Medicine, AIIMS, New Delhi, 19-20 April, 2006.
- Resource Person for the ‘Workshop on Role of alcohol in spread of the AIDS epidemic in

**Dr. Rakesh Lal**
- ‘Substance Abuse,’ Radio Phone-in programme on All India Radio, 23 June, 2006.
- Resource Person in the ‘Meeting on strengthening drug de-addiction services in Nagaland,’ Kohima, 4-7 October, 2006.

**Dr. Meera Vaswani**

**Dr. Anju Dhawan**

**Dr. Sonali Jhanjee**
- ‘One year profile of patients attending tobacco cessation clinic in a national level de-addiction centre,’ 59th Annual National Conference of Indian Psychiatric Society (ANCIPS), Chennai, 4-7 January, 2007.

**Dr. Atul Amkekar**
- ‘Promoting safer practices,’ Training Programme on International Training of Trainers, United Nations Office on Drugs and Crime (UNODC) – Regional Office of South Asia (ROSA), New Delhi, 28 April, 2006.
• ‘Stages of addiction,’ Training Programme for NGOs, Regional Resource Training Centre, North Zone, Ministry of Social Justice & Empowerment, 29 April, 2006.
• “Attitude, behaviour and personality tests,” Basic training course on “Drug Abuse Prevention,” Society for Promotion of Youth and Masses (SPYM), Regional Resource Training Centre (RRTC) and Ministry of Social Justice & Empowerment, 9 October, 2006.
• ‘Drug addiction process,’ Basic training course on “Drug Abuse Prevention,” Society for Promotion of Youth and Masses (SPYM), Regional Resource Training Centre (RRTC) and Ministry of Social Justice & Empowerment, 9 October, 2006.
• ‘Components of effective treatment,’ Training course on “Relapse Prevention”, Society for Promotion of Youth and Masses (SPYM), Regional Resource Training Centre (RRTC) and Ministry of Social Justice & Empowerment, 9 October, 2006.
• ‘Phases of recovery,’ Society for Promotion of Youth and Masses (SPYM), Regional Resource Training Centre (RRTC) and Ministry of Social Justice & Empowerment, 16 December 2006.

International Conferences

Dr. Rajat Ray

Dr. B.M. Tripathi

Dr. Raka Jain

Dr. Anju Dhawan
• ‘Database on drug abuse and HIV/AIDS’ United Nations Office on Drugs and Crime (UNODC), New Delhi, Pakistan, 5-8 June 2006.
• ‘Experience with morphine maintenance,’ Workshop on Practical Approaches to the Use of Opioid Substitution Treatment with Antiretroviral Medication for the Effective Treatment of Both HIV and Heroin Addiction, Adelaide University, Kuala Lumpur, 28–30 August 2006.

Dr. Atul Ambekar
• Resource Person for the seminar on “Harm reduction forum: injecting drug use size estimation,’ Seminar organized by DFID, United Kingdom, 17-18 November, 2006.

Ms. Anil Chopra
• ‘Prevalence of environmental tobacco smoke (ETS) exposure in households with children in Jodhpur district, India.’ 13th World Congress on Tobacco or Health, Washington DC, 8-15 July 2006

RESEARCH
Research Projects
A. Ongoing funded
Post marketing surveillance of addnok-n (combination of buprenorphine and naloxone). Dr. Rajat Ray, Dr. Meera Vaswani. Funded by Rusan Pharma. From June 2006 Rs. 10 lakh.
Oral substitution treatment with buprenorphine. Dr. Anju Dhawan, Dr. Raka Jain, Ms. Anita Chopra, Dr. Sonali Jhanjee. Funded by United Nations Office on Drugs and Crime, Regional Office for South Asia, New Delhi. from Nov. 2005 Rs. 9 lakh

B. Departmental Ongoing
Effect of nitric oxide synthase inhibitor 7-NI on sensitization to the operant decrement produced by naloxone in morphine treated rats. Dr. Raka Jain.
Workplace intervention for management of alcohol abuse. Dr. Rakesh Lal, Dr. Atul Ambekar, Mr. HK Sharma, Mr. Deepak Yadav, Ms. Hem Sethi.

C. Collaborative Ongoing
Genetic basis of alcohol induced pancreatic disorders. Dr. Meera Vaswani. With Department of Gastroentrology. Funded by ICMR.

Database on drug abuse and HIV/AIDS. Dr. Anju Dhawan. Funded by United Nations Office of Drugs and Crime, Regional Office for South Asia, New Delhi. With Department of Biophysics

Phase–2 clinical study to evaluate the safety and efficacy of ESD-27 in patients of chronic primary insomnia. Dr. Rakesh Lal, Dr. Mamta Bhushan Singh. With Department of Neurology
(Neurophysiology Section). Funded by Himalaya Drug Company. From 2005. Rs. 3 lakh.

**Completed**
Size estimation of IDU at 300 sites in India. Dr. BM Tripathi, Dr. Atul Ambekar. Funded by Society for Promotion of Youth and Masses (SPYM), Regional Resource & Training Centre (RRTC – North), Ministry of Social Justice & Empowerment.

**Collaborative completed projects**
Distribution of alleles at the human ALDH2 and ADH2 loci in North Indian subjects. Dr. Meera Vaswani.

**PUBLICATIONS**

**Journals**

**Books/Chapters in Books/Reports**

**PATIENT CARE**

**General Information**
1. Total No. of beds : 50
2. General Ward beds : 50

AIIMS 2006-2007 / 577
3. Private Ward beds : Nil
4. OPD Attendance (NDDTC & Trilokpuri Community) 32885
   : 36581
5. Admission : 1066
6. Discharges : 1073
7. Average % of Bed Occupancy 56%

<table>
<thead>
<tr>
<th>OPD &amp; Specialty Clinics Attendance</th>
<th>New Cases</th>
<th>Old Cases</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>General OPD:</td>
<td>3322</td>
<td>28610</td>
<td>31932</td>
</tr>
<tr>
<td>Specialty Clinic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Tobacco Use Cessation Clinics</td>
<td>108</td>
<td>610</td>
<td>718</td>
</tr>
<tr>
<td>b) Adolescent Clinic:</td>
<td>16</td>
<td>23</td>
<td>39</td>
</tr>
<tr>
<td>c) Dual Diagnosis Clinic:</td>
<td>48</td>
<td>148</td>
<td>196</td>
</tr>
<tr>
<td>Total:</td>
<td>3494</td>
<td>29391</td>
<td>32885</td>
</tr>
</tbody>
</table>

| Trilokpuri Community Clinic:       | 179       | 36402     | 36581 |

**Laboratory Investigations for Patient Care**

a) Total Number of Drugs of Abuse Screened in urine Samples : 20969

<table>
<thead>
<tr>
<th>Drugs</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morphine</td>
<td>2590</td>
</tr>
<tr>
<td>Codeine</td>
<td>2590</td>
</tr>
<tr>
<td>Buprenorphine</td>
<td>2590</td>
</tr>
<tr>
<td>Detropropoxyphene</td>
<td>2590</td>
</tr>
<tr>
<td>Pentazocine</td>
<td>57</td>
</tr>
<tr>
<td>Naltrexone</td>
<td>42</td>
</tr>
<tr>
<td>Naloxone</td>
<td>84</td>
</tr>
<tr>
<td>Pheniramine (Avil):</td>
<td>2590</td>
</tr>
<tr>
<td>Nitrazepam</td>
<td>2590</td>
</tr>
<tr>
<td>Diazepam</td>
<td>2590</td>
</tr>
<tr>
<td>Chlordiazepoxide</td>
<td>2590</td>
</tr>
<tr>
<td>Canabinoids</td>
<td>66</td>
</tr>
</tbody>
</table>

b) Biochemical investigations: 12,000

c) Hematological investigations: 6,000
d) HIV screening: 600

**AWARDS, HONOURS AND SIGNIFICANT EVENTS**

**Dr. Rajat Ray** assisted the UPSC, Govt. of Uttar Pradesh in selection of Assistant Professors and Specialists (Psychiatry) in 2006. He is an honorary member of the WHO Expert Advisory Panel on Drug Dependence and Alcohol Problems, WHO, Geneva. With his team, he assisted in planning and refining the national Drug Abuse Control Programme being carried out by the Ministry.
of Health and Family Welfare, Government of India. He is a member of the Inter-ministerial group
to review of schedules of National Drugs and Psychosocial Substance Rules 1985, Govt. of India.
He attended the technical guideline development group (a joint project of the United Nations
Office on Drugs and Crime and World health Organization) in Vienna from 28th-31st August 2006.

**Dr. B.M. Tripathi** received BHU Alumni Association-NCR-Certificate of honour on 20th May
2006. He is a member of Technical Resource Group on Injecting Drug Use, National AIDS
Control Organisation, Ministry of Health and Family Welfare, Government of India and a member
of the Task Force for Research in Ayurveda and Siddha, Dept. of AYUSH, Ministry of Health and
Family Welfare, Government of India. He is also a consultant for the Society for Promotion of
Youth and Masses (SPYM) study on intravenous drug use size estimation at 300 PLI sites funded
by DFID, UK

**Dr. Raka Jain** received the Distinguished International Scientific Collaboration Award (DISCA)
by the National Institute of Drug Abuse, NIH, USA. She is a member of selection committee for
convening of Departmental Promotion Committee meeting for the post of Assistant Director
(Biochemistry), CCRAS, Department of AYUSH, Ministry of Health and Family Welfare,
Government of India, 2006. She also received the National Institute of Drug Abuse INVEST
Travel Award for presenting papers in the 6th National Institute of Drug Abuse International Meeting
on ‘International Trends and Needs in Drug Abuse Research’ at Scottsdale, Arizona, USA (16-19
June, 2006) and in ‘College on Problems of Drug Dependence,’ 67th Annual Scientific Meeting,
Scottsdale, Arizona, USA (18-22 June, 2006).

**Dr. Rakesh Lal** was an examiner for Diploma in Psychological Medicine in Cental Institute of
Psychiatry, Ranchi (14-16 July, 2006). He is a member of the Selection Committee for Postgraduate
courses in the Central Institute of Psychiatry, Ranchi

**Dr. Meera Vaswani** was awarded a travel grant from Japanese Society of Biological Research
on Alcoholism (JSBRA) to deliver a symposium lecture in International Society of Biological
Research in Alcoholism in Sydney, Australia in September 2006.

**Dr. Anju Dhawan** is a member of Expert Advisory Panel on Drug Dependence (Abuse Liability
Evaluation), was the Organizing Secretary for National Workshop on control of Drug Abuse and
HIV Risk reduction (10-11 August 2006), is the departmental co-ordinator for WHO biennium
activities in substance use disorder for year 2006-2007, is a coordinator for ‘Training for Trainers’
programme for substance use disorders funded by Ministry of Health and Family Welfare and
World Health Organization (2 programmes of 2 weeks duration were held at AIIMS, New Delhi
and 2 programmes of 6 days duration were held at Bangalore and Imphal). She is also the coordinator
for ‘Training Programmes for Central Reserve Police Force doctors’ (Six programmes in year
2006-2007) and ‘Training Programme on Long Term Treatment of Opiate Dependence’ for APON,
a NGO from Bangladesh (6-10 November 2006).

**Dr. Atul Ambekar** joined the Multiple Expert Consultation on Drug and HIV in South Asia, United Nations Office on Drugs and Crime (UNODC) – Regional Office of South Asia (ROSA), New Delhi (10 April, 2006).

*The NDDTC is coordinating the various programmes as part of WHO Biennium Activities (2006-07) and as part of National Drug Abuse Control Programme:*

- Development of Resource Materials-Pharmacotherapy for Alcohol and Opiate Dependence (ongoing)
- Manual for Nurses on Substance Use Disorders (ongoing)
- Training by Trainers Programme at Nagaland (4-7 October, 2006)
- Drug Abuse Monitoring System
- Assessment of functioning of various government de-addiction centres including site visits (e.g. field visit to Nagaland and Himachal Pradesh was conducted by Dr. Rakesh Lal on 7th October 2006 & 25th November 2006).
- Publication of Newsletter, Drug Abuse News & Views (Editors: Tripathi BM, Ambekar A) – the theme of the inaugural issue (November 2006) was ‘Abuse of Psychotropic Drugs.’
### 10.3 Centre for Dental Education and Research

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chief</td>
<td>Naseem Shah</td>
</tr>
<tr>
<td>Professor</td>
<td>Om Prakash Kharbanda</td>
</tr>
<tr>
<td>Additional Professor</td>
<td>Ritu Duggal</td>
</tr>
<tr>
<td>Associate Professors</td>
<td>Ajoy Roychoudhury, Veena Jain</td>
</tr>
<tr>
<td>Assistant Professors</td>
<td>Ongkila Bhutia, Vijay Prakash Mathur, Ajay Logani</td>
</tr>
</tbody>
</table>

**EDUCATION**

**Undergraduate**
The Centre conducted the teaching programme of MBBS undergraduate students during their clinical posting in VIIth Semester.

**Postgraduate**
At present, the Centre is conducting postgraduate programmes in Orthodontics, Prosthodontics and Conservative Dentistry and Endodontics. A new postgraduate degree course (MDS) has been started in the specialty of Oral and Maxillofacial Surgery from January 2007 session.

**Short-term training**
Training of dentists and technicians from India and abroad in various aspects of dental surgery is continuing. Six candidates have undergone short-term training varying from 3 to 6 months at the Centre during 2006–07. The Centre also provided training to 3 WHO fellows from Bhutan for 3 weeks and 1 Trauma Fellow from the Indian Army in advanced craniofacial trauma for 1 year.

**Continuing Medical Education**

**Conferences, seminars, workshops**
- A national workshop on ‘Postgraduate dental education’ with the objectives to revise and update curriculum in the 9 specialties of Dentistry was successfully organized in collaboration with Dental Council of India. The revised updated curriculum has been submitted to DCI.
and is under active consideration by the Ministry of Health, Government of India.

- Training and re-orientation workshop for master trainers of government hospitals of Haryana, Rohtak and Chandigarh; 16 and 19 March 2007, respectively, under the aegis of the National Oral Health Care Programme.

Lectures delivered

**Professor Naseem Shah**


**Ritu Duggal**

- ‘Oral health module for prevention of dental problems in schoolchildren’, Workshop for Global Child Dental Health Task Force (India Section); July 2006.
- ‘Dental professionals and stakeholders’ perception of dental primary health care’, National Consensus Workshop for Effective Utilization of available Manpower in Dental Institutions for Primary Prevention, Murad Nagar, Ghaziabad; November 2006.

**Vijay Prakash Mathur**

- ‘Integration of child dental health into existing child development schemes of Government of India’, Workshop for Global Child Dental Health Task Force (India Section); July 2006.
- ‘Reorientation of medical education as an example to dental fraternity’, National Consensus Workshop for Effective Utilization of available Manpower in Dental Institutions for Primary Prevention, Murad Nagar, Ghaziabad; November 2006.
· ’Etiology and prevention of periodontal diseases’, Training and re-orientation workshop for master trainers of government hospitals of Haryana, Chandigarh; March 2007.

National and International Conferences

Lectures delivered
Professor Kharbanda
· Guest lecture at the 20th Australian Orthodontic Society Conference, Melbourne, Australia and Faculty of Dentistry University of Honk Kong; March 2006.
· Guest lecture at 13th National Conference of the Indian College of Cardiology Khajuraho; September 2006.
· Guest lecture at 41st Indian Orthodontic Conference, Chennai, Craniofacial Distraction workshop, Chennai; November 2006.
· Invited lecture at the World Health Updates, Agha Khan University, Karachi, Pakistan; January 2007.
· Guest lecture at the Asian Pacific Conference on Dental Education, Chennai, India.

Ritu Duggal

Vijay Prakash Mathur

Ajay Logani
· ’Apically extruded debris with three cotemporary Ni-Ti rotary instrumentation system’, the National conference of FODI-IES, Mumbai; 22–25 December 2006.

Papers presented by the residents under faculty’s guidance
Abhinav Singh
Vivek Aggarwal

Sarita Bhushan

Uday Bhasker
• ‘Evaluation of sealing ability of Ni-Ti obturator with glass ionomer sealer compared with lateral condensation and thermoplasticised gutta percha and zinc oxide sealer obturation: A confocal microscopic study’, Annual Postgraduate Convention of FODI-IES, Mumbai; 22–25 December 2006.

Ashwani Kar

Agnihotri Hema

Shahriq Rehan
• ‘Methods of hollow bulb fabrication in maxillary obturator prosthesis’, PG Convention, Pondicherry; June 2006.

Kabra Krishna

Neeraj Wadhawan

Hari P.

Anupama
• ‘Evaluation of the adaptive charges associated with masseter and temporalis after twin

Research

**Funded Projects**

**Completed**


**Ongoing**

3. Dentofacial development of cleft lip and palate patients has been initiated in collaboration with the University of Manchester, UK. O.P. Kharbanda. No funds.

**Departmental Projects**

1. A comparative evaluation of screw implants over traditional anchorage saver for en mass retraction of anterior teeth
2. An in vitro study to evaluate the effect of different impression techniques on dimensional accuracy and surface detail reproduction using addition silicone impression materials
3. 3D finite element study of stress distribution and displacement of various craniofacial structures following application of transverse force in cleft lip and palate patients
4. A clinical study to evaluate and compare centric relation and condylar guidance by the conventional and the gothic arch methods
5. Effect of different design preparation on flexural and fracture strength of fibre-reinforced
composite-fixed partial dentures: An *in vitro* study
6. Effectiveness of home bleaching agents on the colour change and surface characteristics of direct composite veneering materials and discoloration: A gonioreflectometer and SEM study
7. An *in vitro* evaluation of the effect of cyclic loading on the marginal adaptation and bond strength in direct vs indirect Class II MO composite restoration
8. Effects of prepolymerized composite magafiller on the marginal adaptation of composite restorations in cavities with different configuration factors: An *ex vivo* SEM study
9. Influence of variable instrument taper on cleaning efficacy and resultant effect on strength of root canal system: An ex-vivo comparative evaluation
10. An *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

**Collaborative Projects**

1. Ocular surface reconstruction with alternative autografts of non ocular surface origin (with Science and Technology Project, collaborating with RP Centre)

**Publications**

**Journals**


**Chapter in Book**


**PATIENT CARE**

The centre provides state of art dental treatment to the general public. The centre is well equipped with latest machinery and diagnostic equipments.

The centre provides following advanced treatment procedures.

**Conservative Dentistry and Endodontics**

**Advanced restorative procedures**
- Cast metal, inlays/onlays and crowns
- Composite inlay/only/veneers
- Ceramic inlay/onlay/veneers
- Esthetic restoration and bleaching of teeth
- Root canal treatment in anterior and posterior teeth
- Surgical endodontics

**Orthodontics**
- Dento-facial orthopaedics and cleft palate orthodontics
- Removal and fixed orthodontics
- Myofunctional therapy
- Orthodontic implants assisted treatment

**Prosthodontics**
- Complete dentures, partial dentures, fixed prosthodontics
- Total mouth rehabilitation
- Maxillofacial prosthesis
- Implant supported prosthesis
**Oral and Maxillofacial Surgery**  
Craniofacial trauma management  
Facial esthetic surgery  
Maxillofacial pathology treatment  
Cleft lip and palate repair  
Distraction osteogenesis and obstructive sleep apnea management  
Temporomandibular joint surgery  
Simple and complicated exodontias  
Trigeminal neuralgia management  
Dental implants

**Paediatric Dentistry**  
Prevention and management of dental problems in children  
Preventive orthodontics  
  Serial extractions  
  Space maintainers and regainers  
Pediatric dentistry for children with special needs

**Periodontics**  
Oral prophylaxis  
Advanced bone grafting and flap surgery procedures

**Special Laboratory Facilities**  
Orthodontic laboratory  
Prosthodontic laboratory  
Conservative dentistry laboratory

**Community Services/Camps**  
The faculty of the centre is continuing to work on the ‘National Oral Health Care Programme’. The centre conducted an oral health camp, AIIMS Rotary Midtown Hospital, Trilokpuri and National Drug De-addiction Centre, Ghaziabad. A school oral health education programme was also conducted in Delhi Public School, Vasant Kunj.

**AWARDS AND HONOURS**  
**Professor Naseem Shah** was invited to participate in a Panel Discussion on AIR on ‘Geriatric health’, 22 June 2006. She gave a teleconferencing for PG Diploma course in Geriatric Medicine, 8 October 2006.

**Professor Kharbanda** has been made a member of the Editorial Board of the *Australian Orthodontic Journal*; He has been nominated a Fellow of National Academy of Medical Sciences
(FAMS); He continues to be on the International Editorial Board of the *American Journal of Orthodontics and Dentofacial Orthopaedics* and *British Journal of Orthodontics*; has been inducted on the Advisory Board of the *Journal of Indian Orthodontic Society*; He has been nominated Vice-President of the Asian Pacific Cleft Congress, 2007 and Scientific Chairman of the International Orthodontic and 44th Indian Orthodontic Conference, Delhi, 2009.

**SIGNIFICANT EVENTS**

**Professor Naseem Shah** was appointed by the Hon. Supreme Court of India to re-evaluate the PG entrance examination conducted by K.M. Shah Dental College, Baroda. She was an invited participant at a workshop organized by IGNOU and DCI to start PG Diploma in Endodontics, Chennai, 19–20 August 2006. She participated in a 3-day National Workshop organized by CHEB to review the course content of Diploma in Health Education. She was appointed as an UGC inspector for permission to start an off-shore campus at Mauritius by Sri Ramachandra Medical College and Research Institute, Chennai, 18–19 July 2006. She was an expert member at DGHS to grant permission to start new Medical/Dental Colleges, 8–10 September 2006; and at Army Dental Centre (R&R) for selection of the Implant System. Professor Shah is on the Governing Council of Maulana Azad Institute of Dental Sciences, New Delhi. She has been nominated as an Expert member on Bureau of Indian Standards, and on Selection Committee for the post of Professor at the Mahatma Gandhi PG Institute of Dental Sciences, Pondicherry, 6 November 2006. Professor Naseem Shah was one of the technical experts to finalize machinery and equipment, JDW National and Regional Referral Hospitals, Thimpu and Manger, Bhutan. She also visited Bhutan during 22–24 February 2007.

**Dr Kharbanda** successfully completed ‘Masters in medical education’ (M.MEd, Dundee) from the Dundee University, Dundee, Scotland, UK. He has been nominated as Member, Board of Studies, Banaras Hindu University, Varanasi; nominated to the Bureau of Indian Standards as representative member of the Indian Orthodontic Society. He served as an expert to the Faculty selection Committee Punjab University, Chandigarh and DAV College management committee for the University of Kurushestra; He was invited by ICMR as a subject expert to review research projects in the field of Oral Health and as member of the Advisory Committee to approve research grants to postgraduates and as an Inspector and was a special invitee to the 112th session of DCI and later to the Executive committee to make presentation on the revised postgraduate curriculum; also advised Dental Council of India on issues of equalization of foreign Master’s degrees earned from New York, Sydney and Thailand.

**Dr Ritu Duggal** was appointed as Dental Council Inspector for approval of MDS and BDS courses, Dental Colleges, India.

**Dr Ajoy Roychoudhury** was nominated to the Bureau of Indian Standards as the AIIMS representative; He was appointed Dental Council Inspector for approval of BDS courses, Dental Colleges, India.
**Dr Veena Jain** was appointed as Dental Council Inspector for approval of MDS and BDS courses, Dental Colleges, India.

**Dr Vijay Prakash Mathur** was elected as executive member of Delhi State Branch of Indian Dental Association and Representative to Council on Dental Health for South Delhi Branch of Indian Dental Association.

**VISITING SCIENTISTS**

1. Dr Varun Kalra, Associate Professor, University of Pittsburgh Connecticut, USA.
2. A delegation from Kyushu University, Japan visited the Centre for Dental Education and Research.
### 10.4 Dr B.R. Ambedkar Institute
**Rotary Cancer Hospital**

<table>
<thead>
<tr>
<th>Professor and Chief</th>
<th>G.K. Rath</th>
</tr>
</thead>
<tbody>
<tr>
<td>(till 28.02.2007)</td>
<td>(wef 1 March 2007)</td>
</tr>
<tr>
<td>(Medical Oncology)</td>
<td>(Radiation Oncology)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Professors</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.K. Julka</td>
</tr>
<tr>
<td>(Radiation Oncology)</td>
</tr>
<tr>
<td>N.K. Shukla</td>
</tr>
<tr>
<td>(Surgical Oncology)</td>
</tr>
<tr>
<td>Subhash Chander</td>
</tr>
<tr>
<td>(Radiation Oncology)</td>
</tr>
<tr>
<td>Rajive Kumar</td>
</tr>
<tr>
<td>(Laboratory Oncology)</td>
</tr>
<tr>
<td>Lovleen Bijlani</td>
</tr>
<tr>
<td>(Medical Oncology)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Additional Professor</th>
</tr>
</thead>
<tbody>
<tr>
<td>S. Satpathy</td>
</tr>
<tr>
<td>(Hospital Administration)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Associate Professors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sanjay Thulkar</td>
</tr>
<tr>
<td>(Radio-diagnosis)</td>
</tr>
<tr>
<td>S.V.S. Deo</td>
</tr>
<tr>
<td>(Surgical Oncology)</td>
</tr>
<tr>
<td>Atul Sharma</td>
</tr>
<tr>
<td>(Medical Oncology)</td>
</tr>
<tr>
<td>S. Bhatnagar</td>
</tr>
<tr>
<td>(Anaesthesiology)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assistant Professors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pratik Kumar</td>
</tr>
<tr>
<td>(Medical Physics)</td>
</tr>
<tr>
<td>Seema Mishra</td>
</tr>
<tr>
<td>(Anaesthesiology)</td>
</tr>
<tr>
<td>Suman Bhaskar</td>
</tr>
<tr>
<td>(Radiation Oncology)</td>
</tr>
<tr>
<td>Sushmita Pathy</td>
</tr>
<tr>
<td>(Radiation Oncology)</td>
</tr>
<tr>
<td>Ritu Gupta</td>
</tr>
<tr>
<td>(Laboratory Oncology)</td>
</tr>
</tbody>
</table>

### EDUCATION

**Anesthesiology**

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**
- The Department provides training to students of MD Pathology and Paediatrics
- Combined clinicopathological discussions are held with the Department of Paediatrics

**Medical Oncology**

**Undergraduate**
Participation in undergraduate teaching programme as per Dean’s circular.

**Postgraduate**
Medical oncology is running a DM programme under which there are 8 regular and 3 sponsored students.

**PhD training**
Five students are undergoing PhD training.

**Short- and long-term training**
Lt. Col. Amul Kapoor from the Ministry of Defence, New Delhi joined the Department of Medical Oncology on 30 December 2005 as a long-term trainee for a period of 2 years.

**Medical Physics**

**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, MB,BS, BSc (Hons) Nursing and BSc (Hons) Radiography. In addition, the unit has 2 PhD students

The faculty and staff participated in the seminars conducted by the Unit and BRA IRCH.

**Short-term training**
The Unit imparted short-term training to 2 students of MSc Medical/Radiation Physics from Bhartiyar University for 15 days in radiation safety and quality in Diagnostic Medical Physics course. The training included practical demonstrations, smaller projects and theoretical seminars on the topics of diagnostic imaging (physics).

**RADIOThERAPY**

**Undergraduate and Postgraduate training**
The department is involved in undergraduate, postgraduate, BSc Nursing and PhD teaching programmes
Short-term training was given to:
- Tarun Verma and Prantar, DM (Haematology) student, AIIMS.
- Sarat Chandra and Amit Attam, senior residents in Surgical Oncology, AIIMS.
- Bidya Pati Jha and Ram N. Yadav, medical physicists, Bhaktapur Cancer Hospital, Nepal.
- Rajesh Jakibanja, Rajeev Karn, Viswa Raj Gautam and Shiva Ram Dhukhwa, therapy radiographers, Bhaktapur Cancer Hospital, Nepal.
- Puneet Seth, 3rd year PG Student (MD Radiotherapy), Government Cancer Hospital, MGM Medical College, Indore (MP).
- Rakesh Rawat and Neha Gupta, residents of SGPGI, Lucknow.
- J. Arun and K. Ananda Krishnan, trainee physicists, Bharatiyar University.
- Ranjit George and Silambarasan, trainee physicists, Anna University.

Surgical Oncology

Undergraduate
The faculty were involved in undergraduate teaching by giving didactic lectures and participating/moderating seminars on oncological topics.

Postgraduate
The faculty were involved in teaching and training of 6 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. Both Shukla and Deo acted as co-guide and co-supervisors for 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 BSc Nursing students.

Short- and long-term training
- Gaurav Jain, Senior Lecturer, Subhartti Dental College, Meerut joined on 1 July 2006 as a short-term trainee for head and neck cancer training in the Department of Surgical Oncology for a period of 6 months.

Continuing Medical Education

Anesthesiology
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.

Radiotherapy

Organized a workshop (AGOICON 2006) on ‘Interstitial implant and brachytherapy’ in collaboration with the Department of Gynaecology, AIIMS; 24–26 November 2006.

Surgical oncology

N.K. Shukla

- ‘Management of ostomies’, Annual general body meeting of Indian Ostomy Society; 8 October 2006.
- ‘Breast cancer’, Joint conference of AIIMS and Royal Society of Medicine, UK.

National and International Conferences

Anesthesiology

Lectures delivered

Dr Sushma Bhatnagar

- ‘Pain survey’, Asia Pacific Region meeting, Singapore; 28 October 2006.
Dr Seema Mishra

The faculty and residents of the department presented paper/poster
· Best paper award on ‘An audit of routine clinical practice of blind insertion of peripherally inserted central catheters in surgical oncology patients’, 46th Annual Conference of Indian Society of Anaesthesiologists (Delhi Chapter), Delhi; 7–8 April.

Laboratory Oncology
Lectures delivered
Dr Rajive Kumar
· ‘Serum-free light chains in multiple myeloma’, National Haematology Update, Department of Hematology, AIIMS; February 2007.

Medical Oncology
Lectures delivered
Professor V. Raina
· Attended investigators meeting with GSK, London; 3 March 2006.
· Attended Steering Committee Meeting of Early Breast Cancer Trialists Cooperative Group (EBCTCG), Oxford University; 26–30 June 2006.
· Attended investigators meeting in Hyderabad on ‘Safety and efficacy of rituximab and CHOP chemotherapy’; 30 July 2006.
· Attended main meeting of EBCTCG, Oxford University and ATLAS (Ongoing Breast Cancer Project with Oxford University); 11–14 September 2006.
· Attended Investigators meeting on targeted therapies in renal cancer by GSK, Hong Kong; 1 November 2006.
· Attended the Annual Review Meeting of National Cancer Registry Programme, GCRI, Ahmedabad; 17–18 November 2006.
· Attended investigators (PAPRIKA) meeting, Pancreatic Cancer, Mumbai; 24 February 2007
· ‘The role of chemotherapy in breast cancer’ and ‘Stem cell transplant’, Bihar Society of Oncology; 12 August 2006.
· Chaired a session and was a panelist on an International Workshop on Molecular Basis of Haematological Malignancies, Mumbai; 7–8 October 2006.
· Chaired a CME session on ‘Breast cancer’, Lonavala; 14 October 2006.

Dr Lalit Kumar
· ‘Chemotherapy in testicular tumours’, during the Biennial Conference of the Indian Society of Medical and Paediatric Oncology and Indian Society of Oncology, Patna; 11 November 2006.
· ‘Management of multiple myeloma’, Nizam’s Institute of Medical Sciences, Hyderabad; 9 September 2006.
· ‘Bone marrow/stem cell transplantation’, First National Medical Students Research Conference, Pune; 7 October 2006.
· ‘Molecular basis of haematological malignancies: Pathogenesis, treatment and monitoring’, Department of Medical Oncology, Jaslok Hospital, Mumbai; 8 October 2006.
· ‘Childhood haematological malignant disorders’, Golden Jubilee, Department of Paediatrics, AIIMS; 3 September 2006.
· ‘Stem cell therapy’, Clinical Genetic Course, AIIMS; 25 April 2006.
· ‘Pharmacogenomics symposium’, R&D Centre, Ranbaxy Research Laboratory, Gurgaon; 20 May 2006.
· ‘Cancer is curable’, JLN Auditorium, AIIMS; 9 May 2006.
· ‘Diagnostic approach to pulmonary complications’, SCT during the meeting on ‘Stem cell transplantation’, Army Hospital (R&R), New Delhi; 1 October 2006.


· Chaired a session during the 33rd Indian Immunology Society Conference, AIIMS; 30 January 2007.

· Chairperson during the symposium on ‘Therapeutic drug monitoring’, Department of Pharmacology, AIIMS; 3 February 2007.


Dr Sameer Bakhshi


· ‘GLIVEC in CML/GIST patients’, GIPAP/Max Foundation, AIIMS; 2 November 2006.


· ‘Therapy of bone lymphomas’, International CME on ‘Bone pathology’, Department of Pathology, AIIMS in collaboration with Harvard Medical School and Mount Sinai School of Medicine, USA at India Habitat Center, New Delhi; 23–34 February 2007.


Medical Physics
Dr Pratik Kumar


Radio Diagnosis

Lectures delivered
· ‘Breast imaging—What’s new?’, CME on ‘Breast cancer awareness’, PGIMER, Chandigarh; 29 October 2006.

Radiotherapy
Lecture delivered
Dr G.K. Rath
Keynote address at the National Review Meeting, NCCP, Government of India, GCRI, Ahmedabad; 24 July 2006.
Moderated the live demonstration of ‘Interstitial implant and brachytherapy at pre-congress operative gynaecology and radiation therapy workshop, AGOICON 2006, AIIMS; 24 November 2006.
Chaired a session in National Hematology Update VI; 1 March 2007.
Chaired Professor Solomon Singh Oration of AROI, AROICON, BHU, Varanasi; 1 December 2006.
Chaired Professor P.K. Haldar Oration of AROI, AROICON, BHU, Varanasi; 1 December 2006.

Dr P.K. Julka
 CME on Breast Cancer, Delhi; 30 April 2006.
 Clinical Trial Meeting, Delhi; 4 May 2006.
 Clinical Trial Meeting, Breast Cancer, Delhi; 20–21 May 2006.
 Chaired a session for GI Malignancy, Delhi; 9 July 2006.
 CME on Breast Cancer, Delhi; 13 July 2006.
 Symposium on Brain tumour, Kolkata; 16 July 2006.
- Symposium on Prostate Cancer, Delhi; 10 August 2006.
- ‘Recent advances in breast cancer’, Delhi; 11 August 2006.
- Chairperson for CME on brain mets, Delhi; 5 September 2006.
- ‘Role of erythropoetin in oncology’; 9 September 2006.
- ESMO Conference, Istanbul, Turkey; 29 September–2 October 2006.
- ‘New drugs in solid tumours’; 15 October 2006.
- Chairperson for AGOICON; 26 November 2006.
- Panel discussion on carcinoma of breast; 3 December 2006.

Dr B. K. Mohanti
- ‘Conventional simulator (2D) is obsolete’, AMPI debate, AMPICON-2006, Bhubaneswar; 9–12 November 2006.

Dr D.N. Sharma
- Floor coordinator for live demonstration of ‘Interstitial template brachytherapy in cervical cancer’ at the Annual Conference of Indian Brachytherapy Society, Madurai; January 2007.
- ‘Pulse dose rate brachytherapy in cervical cancer: Our institutional experience’, Annual
conference of AROI, Varanasi; December 2006.

Dr T. Ganesh (Medical Physicist)
· ‘Plan evaluation in 3-D CRT’, Annual Conference of the Association of Radiation Oncologists of India (AROICON-2006), Varanasi; 1–3 December 2006.
· ‘Planning aspects of IMRT’, Annual Conference of the UP Chapter of the Association of Radiation of Radiation Oncologists of India (AROI-UPCON), Allahabad; November 2006.
· Panelist in the panel discussion on ‘Equipment for RT setup’, Annual Conference of the North Zone AROI, Jalandhar; 1–2 October 2006.
· ‘Medical physics as a career’, University of Calicut; 17–18 August 2006 to the students of MSc Medical Physics.

Dr V. Subramani (Medical Physicist)

Dr R. Prabhakar (Medical Physicist)
· ‘Impact of different breathing conditions on the dose to surrounding normal structures in tangential field breast radiotherapy’, AMPICON-2006, Bhubaneswar; 7 November 2006.

Surgical Oncology
Dr N.K. Shukla
· Surgical management of oral cancers’ and ‘Surgical management of esophageal cancers’, NEIGRIMS, Shilong; 13-14 July 2006.

Dr S.V.S. Deo
· ‘Recent advances in the surgical management of breast cancer’, Oncomeet conference organized by the Department of Surgery and Radiotherapy, King George’s Medical College, Visakhapatnam; 25 June 2006.
· ‘Rectal cancer—Indian scenario’, Joint meeting of Royal Society of Medicine, Section of Surgery and AIIMS; 3 March 2007.

Papers presented in Conferences

· **Sunil** (Senior Research Officer) presented a paper on ‘Neo adjuvant chemotherapy followed by surgical cytoreduction in advanced ovarian cancer patients’ during the Annual ISO conference, Patna; 20–22 October 2006.
· **Gaurav Jain** (Short-term trainee) presented a paper on ‘Epidemiology and patterns of care of 485 oral cancer patients treated at a tertiary cancer centre’, Annual Conference of the Association of Oral and Maxillofacial Surgeons of India, Kolkata; 18–20 December 2006.

RESEARCH

Funded Projects

**Delhi Cancer Registry**

**Ongoing**


**Laboratory Oncology**

**Completed**

**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. Funds: Rs 8.7 lakh.


**Medical Oncology**

**Completed**


**Ongoing**

1. ATLAS in Breast cancer sponsored by Oxford University. Vinod Raina. Funded by Oxford University for 7 years. Funds: Rs 25 lakh.

2. 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 1 year. Funds: Rs 7 lakh.

3. A su011248 expanded access protocol for systemic therapy of patients with metastatic renal cell carcinoma who are ineligible for participation in other SU011248 protocols but may derive benefit from the treatment with SU011248. Vinod Raina. Funded by Pfizer for 1 year. Funds: Rs 7 lakh.

4. An ascending dose, sequential group, placebo-controlled multicentre, phase I study of RWJ-800088 in subjects with cancer receiving platinum-based chemotherapy regimens protocol 800088-NAP-1002; Phase I. Vinod Raina. Funded by Johnson & Johnson for 1 year. Funds: Rs 7 lakh.

5. An open-label study to evaluate efficacy and safety of human recombinant granulocyte colony stimulating factor developed by Biocon Limited in patients with chemotherapy induced neutropenia. Vinod Raina. Funded by Clinigene, Biocon for 1 year. Funds: Rs 5 lakh.

7. An open-label randomized phase II study of two different dosing regimens of capecitabine in combination with intravenous docetaxel (Q3W) in patients with locally advanced and/or metastatic breast cancer and Roche Sample Repository Research Project NO16853RG for use in conjunction with protocol No16853D. Vinod Raina. Funded by Roche, Quintiles. Funds: Rs 12 lakh.

8. Indox cancer trials network centre. Vinod Raina. Funded by Oxford University, UK. Funds: Rs 20 lakh.


11. 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. Funds: Rs 7,31,300.


13. Elucidation of molecular mechanisms causing or favouring resistance to STI-571 in Philadelphia chromosome-positive Indian leukemia patients. Lalit Kumar. Funded by Terry Fox Foundation. Funds: Rs 6 lakh.

Radiotherapy
Completed


**Ongoing**

1. A multicentric phase III randomized trial comparing doxorubicin and cyclophosphamide followed by docetaxel (AC–T) with doxorubicin and cyclophosphamide followed by docetaxel and trastuzumab (Herceptin) (AC–TH) 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—BCIRG Trial. P.K. Julka, G.K. Rath, O. Nair, Gursimran. Funded by Aventis. Funds: Rs 1,62,313.

2. 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 oestrogen receptor positive advanced breast cancer progressing or relapsing after previous endocrine therapy. P.K. Julka, G.K. Rath, R. Parshad, O. Nair. Funded by Quintiles. Funds: Rs 2,45,700.


5. Patterns of care and survival studies in cancers of head and neck, breast and cervix at Dr BRA IRCH, AIIMS). B.K. Mohanti. Funded by a grant from National Cancer Registry Programme, ICMR. Funds: Rs 3.6 per year.

6. A study to assess economic costs of cancer care in Indian patients receiving radiotherapy with or without chemotherapy/surgery at a Regional Cancer Centre at Dr. BRA IRCH, AIIMS. Sanghamitra Das, B.K. Mohanti. Funded by a grant from Indian Statistical Institute, Delhi. Funds: Rs 2.2 lakh per year.


8. A study of acute radiation toxicity in patients of curable head and neck cancers undergoing radical vs. postoperative radiotherapy. S. Bhasker, B.K. Mohanti, S. Bahadur. Funded by AIIMS.

9. A phase two study of sequential neoadjuvant gemcitabine plus doxorubicin and gemcitabine plus cisplatin in large T2 (>3 cm) and locally advanced (T3, T4, or N2) operable breast cancer. P.K. Julka, G.K. Rath, O. Nair, R. Parshad. Funded by Eli-Lilly. Funds: Rs 4,72,000.
10. A randomized, controlled, open-label study to evaluate the efficacy and safety of Herceptin® (trastuzumab) in combination with the oral aromatase inhibitor Arimidex® (anastrozole) compared with Arimidex® alone as first and second line treatment administered to postmenopausal, hormone receptor positive (ER+ve and/or PR+ve) patients with HER2 over expressing metastatic breast cancer. P.K. Julka, G.K. Rath, O. Nair, R. Parshad, R. Bhamrah. Funded by Quintiles. [??funds]


Surgical Oncology
Completed
1. Bone marrow micrometastases detection in breast cancer patients using monoclonal antibodies against pan cytokeratin: Incidence and clinical correlation. S.V.S. Deo. Funded by Terry Fox, Canada for 2 years. Funds: Rs 1 lakh.

Departmental Projects
Anesthesiology
Completed
1. Incidence and management of phantom limb pain according to WHO analgesic ladder in amputees of malignant origin. Seema Mishra, Sushma Bhatnagar, Deepak Gupta.

Ongoing
3. Effect of pre-emptive oral gabapentin for post-operative pain at rest and on movement after modified radical mastectomies. Himanshu, Sushma Bhatnagar, Seema Mishra.


Medical Oncology

Ongoing

1. Docetaxel and non-docetaxel-based neo-adjuvant chemotherapy in locally advanced breast cancer. Vinod Raina. [??funding agency, funds]

2. Retrospective analysis of multiple myeloma for last 7 years. Vinod Raina. [??funding agency, funds]

3. Thalidomide+Melphalan and Dexamethasone in myeloma. Vinod Raina. [??funding agency, funds]

4. Randomized comparison of ABVD with EVAP in newly diagnosed cases of Hodgkin’s lymphoma- protocol p-0402. Atul Sharma.

5. Role of arsenic trioxide with ascorbic acid in treatment of multiple myeloma: A pilot study. Atul Sharma, Funded by DST only for drug support.


Medical Physics

Departmental Projects

1. Development of protocol for quality control of ultrasonography and US Doppler

2. Development of document scanner-based dosimetry methods for gafchromic films

3. Doppler ultrasonography-based tumour vascularity index and its use

4. Contrast enhancement techniques for mammograms

5. Reducing radiation dose in digital radiography

6. Dose reduction approaches in head CT examination

Radio-diagnosis

Completed

1. Preoperative evaluation of carcinoma of ovary with multidetector CT and its correlation with surgical findings (MD Thesis: Department of Radio-diagnosis)
**Ongoing**
1. Role of directional vacuum assisted large core breast biopsy in patients with previously equivocal biopsies for breast masses suspicious for malignancy (MD thesis: Radio-diagnosis)
2. MRI and PET CT evaluation of soft tissue sarcomas (MD thesis: Radio-diagnosis)

**Radiotherapy**

**Completed**

**Ongoing**

**Surgical Oncology**

**Departmental Ongoing**
2. Sentinel lymph node biopsy in locally advanced breast cancer patients. Dr. S.V.S. Deo.
4. Oncoplastic breast surgery: Prospective evaluation of patient profile and outcome. Dr. S.V.S. Deo.
5. Assessment of skin involvement in breast cancer patients with T4b lesions. Dr. S.V.S. Deo.
Collaborative Projects
Completed/Ongoing
1. Role of minimally invasive guided therapy in treatment of focal liver neoplasms (with Anesthesiology and Radio-diagnosis)
2. Role of minimally invasive guided therapy in treatment of lung metastasis (with Anesthesiology and General Surgery)
3. Role of minimally invasive guided therapy in treatment of focal bone neoplasms (with Anesthesiology and Orthopaedics)
4. Characterization of testis-specific sperm associated antigen 9 (SPAG9) gene expression and humoral immune response in various human cancers (with Lab Oncology and National Institute of Immunology)
5. Molecular characterization of Indian patients with Glanzmann thrombosthenia (with Lab Oncology and Haematology)
6. Expansion of adult human bone marrow and cord blood stem cells for reconstituting marrow and for programming into hepatocytes (with ICMR)
7. Use of autologous bone marrow stem cells for myocardium regeneration (with DBT, Government of India)
8. Serial skin biopsy in chronic myeloid leukemia (CML) patients on Imatinib mesylate-protocol p-0404. Atul Sharma. Funded by Nil (with Medical Oncology and Pathology)
9. Study of her2-neu and p-53 expression in osteosarcoma by immunohistochemical methods (with Medical Oncology and Pathology)
10. Whole body MRI for detection of skeletal metastases in pediatric patients on small cell neoplasms: Comparison with skeletal scintigraphy and FDG PET CT (with Medical Oncology, Radiology and Nuclear Medicine)
11. Role of imaging in diagnosis of orbital tumours (with Medical Oncology and Radiology and Ophthalmology)
12. Treatment and characterization of acute lymphoblastic leukemia in children, adolescents and young adults. Sameer Bakhshi. Funded by International Network of Cancer Treatment and Research and Sir Ratan Tata Trust, for 3 years. Funds: Rs 12 lakh/year (ongoing)
13. 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 and Orthopaedics)
14. 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 and Orthopaedics)
15. Expansion of adult human bone marrow and cord blood stem cells for reconstituting marrow and for programming into hepatocytes (with ICMR)
16. Use of autologous bone marrow stem cells for myocardium regeneration. Funded by DBT, Government of India.
17. Characterization of chromosomal anomalies in multiple myeloma patients using cytogenetics and florescence in situ hybridization technique (FISH) (with Medical Oncology and Reproductive Biology)

18. Randomized trial to assess role of chemotherapy vs. best supportive care in unresectable gallbladder cancer (with Medical Oncology, Surgical Oncology, Radiation Oncology, and Gastroenterology)

19. Role of neoadjuvant chemo-radiotherapy in gallbladder cancer (with Medical Oncology, GI Surgery and Radiation Oncology)

20. Role of neoadjuvant chemotherapy in gastric cancer (with Medical Oncology and GI Surgery)

21. Avoiding unnecessary radiation doses to the patient during interventional radiological procedures (with Medical Physics Unit, Radio-diagnosis, Cardio-radiology)

22. Dose reduction in CT while, maintaining diagnostic confidence (with Medical Physics Unit and Radiology)

23. Quantitative imaging study of breast cancer and its correlation with oxidative stress (with Medical Physics Unit, Radio-diagnosis and Pharmacology)

24. Estimation of patients’ satisfaction availing imaging services (with Medical Physics Unit, Radio-diagnosis and BRA IRCH)

25. Comparison of image quality of bedside chest radiography with fixed unit radiography (with Medical Physics, Radio-diagnosis and BRA IRCH)

26. Verification of CT displayed dosimetric parameter (CTDI) for various scanning protocol (with Medical Physics, Radio-diagnosis, BRA IRCH)

27. Quality control of PET/CT (with Medical Physics and Nuclear Medicine)

28. Collaborative research completed: Evaluation of efficacy of radio-frequency ablation of primary tumour in early breast cancer (with Radio-diagnosis and Surgery)

29. MR spectroscopy and endorectal MR imaging in the diagnosis of early prostate cancers and its correlation with histopathological results of TRUS guide prostate biopsies and surgical specimens (with Radio-diagnosis and NMR)

30. Evaluation of image based treatment planning in radiotherapy (with Radio-diagnosis and Radiotherapy)

31. Role of neoadjuvent chemotherapy in management of patients with advanced ovarian cancer (with Radio-diagnosis and Medical Oncology)

32. Study of physical parameters and quality assurance in the gamma knife-based stereotactic radiosurgery with non-coplanar beam in the phantom (with Radio-diagnosis and Medical Physics)

33. Randomized comparison of ABVD with EVAP in newly diagnosed cases of Hodgkin’s lymphoma (with Radio-diagnosis and Medical Oncology)

34. Role of three dimensional computed tomographic scanning in assessment of mandibular invasion and its utility in planning mandibular resection and reconstruction in oral cancer patients (with Radio-diagnosis and Surgical Oncology)
35. Radiofrequency ablation in metastatic liver tumours (with Radio-diagnosis and Radiation Oncology)
36. HDR intraluminal radiotherapy in advanced carcinoma of oesophagus (with Radiation Oncology and Surgical Oncology)
37. Radiofrequency ablation in early breast cancer (with General Surgery, Radiation Oncology and Radio-diagnosis)
38. Evaluation of neo-adjuvant chemotherapy in locally advanced breast cancer (with Surgery and Radiation Oncology)
39. The role of percutaneous vertebroplasty in the management of painful vertebral lesions (with Radio-diagnosis and Radiation Oncology)
40. Biological dosimetry in therapeutic irradiation by cytogenetic analysis (with Nuclear Medicine and Radiation Oncology)
41. Pre-operative short course RT (25 Gy/5 Fr) followed by surgery for rectal cancer (with Surgical Oncology and Radiation Oncology)
42. Radiation-induced chromosomal aberration analysis and their use as biodosimetry (with Nuclear Medicine and Radiation Oncology) Funded by AERB
43. Concomitant chemoradiation in advanced/unresectable head and neck cancer (with Medical Oncology, Radiation Oncology and ENT)
44. Adjuvant tamoxifen long against short (ATLAS): Multicentre international trial, Oxford, UK (with Surgical Oncology, Medical Oncology and Radiation Oncology) Funded by ATLAS
45. 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 (with Radiation Oncology and ENT) Funded by Quintiles.
46. LF-0202-an open-label phase 2 study of oral recombinant human lactoferrin (rhLF) monotherapy in patients with advanced or metastatic renal cell carcinoma (RCC) (with Radiation Oncology and Urology) Funded by Reliance
47. Study to evaluate the feasibility of neoadjuvant chemotherapy followed by postoperative chemoradiation in the management of locally advanced gastric and gastroesophageal junction tumors and to assess the expression of multidrug resistance gene (with Radiation Oncology, Surgical Oncology, Medical oncology and Pathology)
48. 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, Medical oncology, Surgical Oncology, Pathology, Gastroenterology, GI Surgery)
49. A multinational, multicentre open-label active controlled randomized parallel group dose finding study to evaluate the efficacy and safety of two doses of AP 12009 in adult patients with recurrent high-grade glioma, administered intratumorally as continuous high-flow
50. Randomized study of concomitant chemoradiation versus radiotherapy alone for advanced and/or unresectable squamous cell carcinoma of oropharynx and nasopharynx (with Medical Oncology, Radiation Oncology and ENT)

51. Adjuvant tamoxifen long against short (ATLAS): Multicentre International trial, Oxford, UK (with surgical and Medical oncology)

52. Cell cycle regulatory proteins WAF-e and p16 in human esophageal cancer (with Surgical Oncology, Biochemistry and Pathology)

53. Multicentric national programme on evaluation and validation of molecular markers in oral cancer: A cross-sectional study (with Surgical Oncology and Biochemistry)

54. To evaluated microsatellite instabilities in different chromosomes in Indian female breast cancer patients (with Surgical Oncology and Biosciences, Jamia Milia Islamia, New Delhi)

55. Role of CT scan and MRI in the evaluation of locally advanced oral cancer

56. Molecular evaluation of p21 WAF-1 gene in Indian female breast cancer patients (with Surgical Oncology and Bio Sciences, Jamia Milia Islamia)

57. Molecular basis of tobacco-associated oral carcinogenesis (with Biochemistry and Surgical Oncology)

58. Methylation and expression of FHT gene in Indian female breast cancer patients (with Surgical Oncology and Bio Sciences, Jamia Milia Islamia)

PUBLICATIONS

Journal


24. Gupta M, Mishra S, Gupta D, Gujjar M, Bhatnagar S. Prevention of pain on propofol...


45. Kumar V, Jagannathan NR, Kumar R, Thulkar S, Gupta SD, Hemal AK, et al. Transrectal ultrasound guided biopsy of prostate voxels identified a suspicious of malignancy on three dimensional 1H MR spectroscopic imaging in patients with abnormal digital rectal examination or raised prostate specific antigen level of 4–10 ng/ml. NMR Biomed 2006. [Epub ahead of print]
55. Mishra S, Bhatnagar S, Singhal AK. High-dose morphine for intractable phantom limb


70. Puri T, Malik M, Julka PK, Sharma DN, Rath GK. Evolving role of chemotherapy in non


**Abstract**


Chapters in Books/Monographs


**Reports**


**PATIENT CARE**

**Total bed strength** 127 (January–March 2007)

- General 112
- Private 15

**General beds**

- Medical oncology 23
- Radiation oncology 32
- Surgical oncology 20
- Palliative care unit 6
- Day care 22
- Minor OT 6
- ICU 3

AIIMS 2006-2007 / 620
**Private beds**
- Medical oncology: 5
- Radiation oncology: 5
- Surgical oncology: 5

**Total bed strength**: 106
(April–December 2006)

**General beds**
- Medical oncology: 23
- Radiation oncology: 32
- Surgical oncology: 20
- Day care: 22
- Minor OT: 6
- ICU: 3

**Total OPD attendance**: 74,273
- New cases: 14,209
- Old cases: 60,064

**Description of various OPD/clinics at IRCH year 2006–2007**

<table>
<thead>
<tr>
<th>No.</th>
<th>Name of the OPD/clinic</th>
<th>New case</th>
<th>Old cases</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Bone and soft (tissue)</td>
<td>237</td>
<td>807</td>
<td>1,044</td>
</tr>
<tr>
<td>2.</td>
<td>Breast cancer clinic</td>
<td>507</td>
<td>3902</td>
<td>4,409</td>
</tr>
<tr>
<td>3.</td>
<td>Chemotherapy evaluation</td>
<td>3,082</td>
<td>23,011</td>
<td>26,093</td>
</tr>
<tr>
<td>4.</td>
<td>Gastro-intestinal clinic</td>
<td>563</td>
<td>1,130</td>
<td>1,693</td>
</tr>
<tr>
<td>5.</td>
<td>Gynecology ‘A’</td>
<td>269</td>
<td>799</td>
<td>1,068</td>
</tr>
<tr>
<td>6.</td>
<td>Gynecology ‘B’</td>
<td>566</td>
<td>1,586</td>
<td>2,152</td>
</tr>
<tr>
<td>7.</td>
<td>Head and neck oncology-A</td>
<td>182</td>
<td>960</td>
<td>1,142</td>
</tr>
<tr>
<td>8.</td>
<td>Head and neck oncology-B</td>
<td>1,474</td>
<td>3,807</td>
<td>5,281</td>
</tr>
<tr>
<td>9.</td>
<td>Lymphoma leukaemia</td>
<td>1,126</td>
<td>12,336</td>
<td>13,462</td>
</tr>
<tr>
<td>10.</td>
<td>Ophthalmic tumour clinic</td>
<td>91</td>
<td>164</td>
<td>255</td>
</tr>
<tr>
<td>11.</td>
<td>Pain clinic</td>
<td>1,534</td>
<td>2,711</td>
<td>4,245</td>
</tr>
<tr>
<td>12.</td>
<td>Paediatric surgery clinic</td>
<td>136</td>
<td>1,624</td>
<td>1,760</td>
</tr>
<tr>
<td>13.</td>
<td>Radiotherapy evaluation</td>
<td>3,813</td>
<td>4,081</td>
<td>7,894</td>
</tr>
<tr>
<td>14.</td>
<td>Urology malignant clinic</td>
<td>318</td>
<td>2,057</td>
<td>2,375</td>
</tr>
<tr>
<td>15.</td>
<td>Surgical oncology OPD</td>
<td>311</td>
<td>1,089</td>
<td>1,400</td>
</tr>
<tr>
<td>16.</td>
<td><strong>Total</strong></td>
<td><strong>14,209</strong></td>
<td><strong>60,064</strong></td>
<td><strong>74,273</strong></td>
</tr>
</tbody>
</table>
Total admissions 20,826
  Regular 2,501
  Short (day care) 18,325
Total discharges 20,758
  Regular 2,433
  Short (day care) 18,325
Average length of stay 2.0
Total no. of patients cared in hospital 25,834 
(7,499+18,335)
Bed occupancy rate
  (January–March 2007) 84.2%
  (April–December 2006) 85.5%
Total deaths at IRCH 156
Gross death rate 0.7%

Anesthesiology
Facilities available in the department:
1. ICU facilities for postoperative patients.
2. Pain and palliative care clinic is run four times a week in addition to the anesthesiology 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 radiotherapy, medical oncology, and surgical oncology.
5. Facility for pediatric radiotherapy.
6. Anesthesia for minor pediatric oncology procedures like bone marrow biopsy, central line insertion, bone marrow harvesting and others
7. Facility for pediatric radiological procedures under anaesthesia, radiofrequency ablation for liver, lung, and breast carcinoma.

Newer Facility
1. Pain and Palliative Care ward started in Jan 2007
2. Increase in clinic days from two in number to four in number (Monday and Thursday from 9 a.m.–1 p.m.; Wednesday and Friday from 2 p.m.–5 p.m.
3. Interventional pain management techniques: SCS (Spinal Cord Stimulator) in phantom limb patient—1st time in India
4. USG guided nerve blocks

Delhi Cancer Registry
Cancer registry is the institution which is responsible for the collection, storage, analysis and interpretation of data on persons with cancer.
Cancer registration is a process of continuing, systematic collection of data on the occurrence, characteristics and outcome of reportable neoplasms with the purpose of helping to assess and control the impact of malignant disease in the community. Broadly there are two types of Population-Based Cancer Registries (PBCR) and Hospital-Based Cancer Registries (HBCR).

The HBCR records all cases of cancer treated in a given hospital irrespective of the population from which the cases has come. The main interest is clinical care in hospital setting.

The primary concern of PBCR is cancer in the community. The PBCR collects information on all new cancer in a defined population and provide information on cancer incidence, mortality and trends over time in the defined population/geographic area covered by the registry.

Collect Delhi Cancer Registry is a PBCR established in January 1986 with the aim of obtaining reliable morbidity and mortality data on cancer among the Delhi urban residents.

The Delhi PBCR covers an urban area of 891.09 square kilometres of Delhi Municipal Corporation, New Delhi Municipal Committee and Delhi Cantonment and 29 census towns with an estimated population of 1,30,88,133 (males: 7186306, females: 5901827) as per 2001 census.

The sources of cancer data are more than 160 major Government hospital centres, 250 private hospitals and nursing homes and Department of Vital Statistics of New Delhi Municipal Committee and Delhi Municipal Corporation. The Medical Social Service Officers (MSSO) of our registry visits all these hospitals and nursing homes and interviews the patients who are either undergoing cancer treatment or being investigated for cancer at radiotherapy department. They also examine the case records maintained by various departments of these hospitals viz. Pathology, Hematology, Radiology, etc. All the information collected is cross-checked for completeness of data.

MSSOs also personally visit the offices of New Delhi Municipal Committee and Municipal Corporation of Delhi and collect information about deaths where the death certificates states the cause of death as cancer or tumours. These death records are then matched with the morbidity records. Cases not matching with the records are registered as Death certificates only cases (DCOs) in that corresponding year.

The scientists of the registry regularly taught the MSSOs about the interviewing techniques and abstraction of data on cancer patients from hospital in patients and out patient records, radiotherapy and pathology files, medical record and death records. Data abstractors were also trained in topographical and morphological terminology and impart training on coding of cancer cases using the International Classification of Diseases for Oncology.
**Laboratory Oncology**

Haemogram (Hb, TLC, Platelets) 36,933
Peripheral blood smear 5,160

- Bone marrow aspiration and touch preparation 2,580
- Cytochemistry 972
- Serum electropheresis 1,358
- Urine electrophoresis 28
- Immunofixation 35
- APAAP 47
- Cytocentrifuge 4
- FNAC/lymph node 27
- Cytospin 2
- ESR 4

**Medical Oncology**

Medical oncology clinical services
New cases (CTE+ LL) 4,208
Old cases (CTE+LL) 35,347
Total 39,555

Admission (ward and day care) 18,197 (452+17,745)
Chemotherapy cases (day care and OPD)
Total chemotherapy in day care 17,745
(Including blood transfusion and others)

Cases of OPD chemotherapy 8,198
OPD procedures 3,195

**Diagnostic and Therapeutic Procedures (Total: 3195)**

- Bone marrow biopsy 1,116
- Bone marrow aspiration 712
- Peripherally inserted central line catheter 26
- Pleural tapping 138
- Abdominal tapping (including ascitic tapping) 261
- Intra thecal methoxerate 840
- Trucut biopsy 1
- Skin biopsy 4
- Cerebral spinal fluid for cytology 53
- Catherization 37
- Ryles tube insertion/removal 6
- Incisional drainage 1
Dressings 314
Suture removal 54

**Laboratory services**

Haemogram 13,771
Single donor platelets 1,228
PBSC harvesting 94
Cytogenetics reports 428
Cryopreservation of PBSC 47
MNC of stem cells 97
Infusion of stem cells 86
Viability of stem cells 86
CD34 count of stem cells 89
Polymerase chain reaction 89
Storage of PBSC at 4 ºC 35
Allogenic bone marrow/stem cell transplantation 7
granulocyte harvest
Storage of peripheral blood stem cells (PBSC) at 4 ºC 35
Patient care: Stem cell transplants 70

**Medical Physics**

Medical Physics Unit looks after patient care activities in IRCH and AIIMS in terms of medical imaging related activities. MPU carries out the blood-bag irradiation before blood transfusion to patients undergoing bone marrow transplantation. This unit also performs the irradiator’s periodic calibration and maintenance. MPU carries out quality assurance tests of imaging machines, which include X-ray units, mammography, ultrasonography, spiral CT and film processors. Other important contributions are radiation protection survey for benefit of staff and general public and patient’s radiation dose measurement in medical imaging for optimization.

Number of blood bags irradiated 1,625
Quality assurance (QA) tests done on X-ray machines 1,591
QA test done on film processor at room no. 10 (X-ray) 302
QA test done on film processor at room no. 46 (US, Mammo) 235
Radiation output measurements in X-ray units 190
Phantom experiments for clinical CT protocol optimization 35
Patient dose measurement Gafchromic films 13
Patient satisfaction survey in imaging 101
Experiments for dose reduction in imaging 20
Radiation protection survey measurements 8
Experiments for quality in mammogram 10
Experiments for exposure factor optimization in chest X-ray 7
QA tests done in Doppler ultrasound 3
Advice in inadvertent exposure in pregnancy 4
Radio Diagnosis
X-ray 9,060
Ultrasound 3,100
CT scan 4,090
Mammogram 400
Intervention 607

Radiotherapy
Total cases on radiotherapy 64,199
Total fields on radiotherapy 1,51,248
Cases on brachytherapy 697
Treatment planning and simulations 4,300
2D and 3D distribution 676
Compensators 456
Shielding blocks, immobilization devices, moulds 1,017
Radiation review clinic 6,192
Number of cases on chemotherapy 7,211
Number of injections 32,588
Intra-operative high-dose rate brachytherapy 1
Radiofrequency ablation (RFA) 21

Surgical Oncology
Facilities available
Minor operation theatre
Diagnostic and minor therapeutic procedures including lymph node biopsy, punch/trucut biopsy, excision of skin/oral tumours, soft tissue tumours, 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: Fibreoptic upper GI endoscopy, side-viewing duodenoscopy, colonoscopy, sigmoidoscopy, bronchoscopy, cystoscopy, nasopharyngolaryngoscopy and laparoscopy.
· Therapeutic endoscopy: Stricture dilatation, intraluminal 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 facilities are also available.
· Advanced state of the art technologies like LASERS, CUSA, harmonic scalpel and intraoperative radiotherapy are also available.
Total number of minor operations and endoscopic procedures performed 3,889
Endoscopy procedures 1,552
Other procedures 1,871
Total number of major cancer operations performed 466

Community Service
Professor G.K. Rath published an article on cancer in the Hindustan Times; published an article on cancer in the Times of India.

Professor P.K. Julka seminar on Cancer Awareness, FICCI Auditorium; 15–16 July 2006; Cancer awareness programme; 25 November 2006; Gynae malignancies on DD News; 26 November 2006.

Professor N. K. Shukla participated as a panelist in the public lecture on ‘Cancer is curable’ on 12 May 2006, as a part of Golden Jubilee celebrations of AIIMS; was involved in care and advice to the ostomates (patients of colostomy, ileostomy and urostomy).

Dr S.V.S. Deo contributed an article in the Hindustan Times on Cancer awareness programme; contributed for formulating WHO treatment guidelines for breast cancer patients in developing countries.

Dr D.N. Sharma participated in a live show on Delhi Doordarshan (DD News) on breast cancer; December 2006.

AWARDS AND HONOURS
Dr G.K. Rath took over as the chief of BRA IRCH; president of the Association of Radiation Oncologists of India (AROI); chairman of the subgroup of the Ministry of Information Technology, Government of India to review the progress of the Jai Vignya Project, Science and Technology on ‘Development and deployment of 6 MV medical linear accelerator”; ICMR Monitoring Committee of the project on screening for cancers in Himachal Pradesh, Shimla; Committee constituted by Atomic Energy Regulatory Board, Government of India on neutron component of medical accelerators; ICMR task force on cancer management guidelines; member, technical assessment committee for purchase of advanced radiotherapy equipment for the Uttarakhal Forest Hospital Trust, Haldwani, Nainital, Uttarakhal; The project review group of the project of the Ministry of Information Technology, Government of India, ‘Design and development of electronic portal imaging device for radiation therapy’ being carried out by CSIO and TSG integration; member, Advisory Committee to plan for the Indo-German Workshop; member, Governing Bodies of two Regional Cancer Centres (Bikner, Allahabad); Governing Body of Delhi State Cancer Institute, New Delhi; Standing Committee on Radiotherapy Development Programme, Ministry of Health and Family Welfare, Government of India; Advisory Committee BRA IRCH; Member of the Core Committee.
projects under the North East Initiative of ICMR, Aizwal; Project Review Committee on Working Group of Medical Electronics, Ministry of Communication and Information Technology, Government of India; Project Review Committee, Oncology-ICMR, New Delhi; Safety Review Committee for Application of Radiation (SARCAR) of the Atomic Energy Regulatory Board, Government of India; Scientific Advisory Committee of three Institutes (a) Gujarat Cancer and Research Institute Ahmedabad, (b) Institute of Pathology and (c) Institute of Cytology and Preventive Oncology, ICMR; Expert Group on Indo German Project on Oncology of ICMR; Technical expert for the core technical committee of PGIMER, Chandigarh for the purchase of High dose rate brachytherapy unit; Executive Committee, Indian Society of Oncology; Selection committee of medical physicists, senior residents and junior residents, of Department of radiotherapy, Delhi state cancer Institute; The Scientific Advisory Group for the division of Non-communicable diseases, ICMR, New Delhi; advisory editor, Journal Academy of Hospital Administration; member of Editorial Board, Indian Journal of Chest Disease and Allied Sciences; Indian Journal of Cancer; consulting editor, Journal of Cancer Research and Therapeutics.

Professor P.K. Julka is member/awardee, Chairperson of Store Purchase Committee, IRCH, 3 April 2006; member, Purchase Committee, SGPGI, 28–29 April 2006; member, Purchase Committee of Mould Room and patient support/alignment accessories at PGIMER, Chandigarh, 20 May 2006; member, Standing Selection Committee meeting for Additional Professor, PGIMER Chandigarh, 24 May 2006; member, Doctoral Committee for PhD, Delhi, 31 July 2006; member, DPC of Technical Staff, AIIMS; 1 August 2006; member, ICMR Task Force Meeting, AIIMS, 4 August 2006; member, National Medical Library for selection of books, Delhi, 11 August 2006; expert, Central Council for Research in Homeopathy, Delhi, 30 August 2006; external examiner for MD Radiotherapy, Bir Hospital, Kathmandu, 14–15 September 2006; awarded G.D. Pandey Oration, Haldwani on Breast Cancer, 12 October 2006; Apraiser by National Board for DNB for Batra Hospital, 21 December 2006; appointed Apraiser by National Board for DNB for Dharmashila Cancer Hospital, New Delhi; vice-president, Indian College of Radiation Oncology; awarded Leading Scientist of the World in the field of clinical oncology by International Biographical Society, Cambridge, England; DNB specialty Board for Curriculum for Radiotherapy and Oncology; Project Review Committee, ICMR, New Delhi; member, expert committee, Commonwealth Fellowship Selection; Advisory Committee on Breast Cancer Investigator Meeting; member, expert committee of Linear Accelerator, Ministry of Health and Family Welfare; coordinator, BCIRG trial on breast cancer video conference; Inspector, MCI for MD and DNB (RT); member, Advisory Board Meeting on Breast Cancer; member, expert committee senior research associate selection of CSIR; member, executive committee, New Delhi branch, IMA; expert for Procurement of TLD for Department of Radiotherapy, PGIMER; expert for Commonwealth Scholarship; expert, University Grants Commission for Travel Grants; member of editorial board, Journal of Cancer Research and Therapeutics.

Professor N.K. Shukla reviewed research papers published in Indian Journal of Medical and Pediatric Oncology; appointed by MCI as inspector of MCI.
Dr Vinod Raina was made Associate Editor of *Annual of Oncology*, December 2006.

Dr Lalit Kumar Mathur–Mehrotra Oration (SN Medical College, Agra) for the year 2006; 24 January 2007 on ‘Stem cell transplantation’; Editor, *Indian Journal of Medical and Paediatric Oncology*; research guide for 2 PhD students, guide and co-guide for DM (Medical Oncology) and MD students in the Departments of Pathology, Pharmacology, and Ophthalmology and Nuclear Medicine, AIIMS; Examiner for DM Medical Oncology for the Gujarat University, Ahmedabad (Gujarat Cancer and Research Institute, Ahmedabad 2006); UICC Scholarship to attend UICC World Cancer Congress, Washington, DC; 8–12 July 2006; examiner for evaluation of PhD thesis (2006), University of Madras, Chennai; appraiser for DNB in Medical Oncology, 2006; member, Research Advisory Committee of Cancer Institute, Adyar, Chennai, 2006; reviewer for cancer-related research projects submitted to the DBT, ICMR and other agencies; member, Expert Committee, DBT, Government of India to monitor/review the projects entitled ‘Curcumin and clinical trials in cancer and Mw related projects’, 2007–2008; Reviewer for the *Postgraduate Medical Journal*, *National Medical Journal of India*, *Paediatric Haematology Oncology*, *Indian Journal of Biochemistry*; member, advisory board of the e-journal *Stem cell Transplantation and Regenerative Medicine*; invited expert member for the management committee of the Indian Cancer Society, New Delhi.

Dr S.V. S Deo’s name was included in Marquis (USA) WHO’s WHO in Medicine and Healthcare, 2006; member, International Society of Surgery, Switzerland; member, Breast Surgery International; was appointed as a scientific reviewer for the Health Information Research Unit, McMaster university, UK; was nominated to the Research Board of Advisors–American Biographical Institute, USA; member, WHO Expert Committee on ‘Development of treatment guidelines for breast cancer in developing countries’.

Dr Pratik Kumar continued to be the member of the editorial board of the *Journal of Medical Physics*; member of Electro-medical Equipment Sectional Committee, BIS, New Delhi; Secretary, UP–Delhi Chapter of the Association of Medical Physicists of India (AMPI) and referee for the *Journal of Medical Physics*. He also organized the first ever All India Medical Physics Essay Competition in May 2006 on the topic ‘Medical physics: A road map for the next century’ under the aegis of UP–Delhi Chapter of AMPI.

Dr D.N. Sharma was awarded one-month UICC (ICRETT) fellowship for PET-CT based IMRT in cervical carcinoma at Mallinckrodt Institute of Radiology, St. Louis, MO, USA; member, Review Committee for UICC (ICRETT) fellowships; member, editorial committee, *AROI Newsletter*; member, Review Committee, *Postgraduate Medical Journal*; expert member for the review of DNB thesis.

Dr T. Ganesh is a member of the Governing Body for the Uttarakhand Forest Hospital Trust and as an Advisor for their radiotherapy project; member of Staff Selection Committee for Government
of NCT, New Delhi and also Delhi State Cancer Institute, Delhi; Technical Expert/Member in the Specification Committee/Purchase Committee for the purchase of advanced RT equipments in SKIMS, Srinagar, Government of Jammu and Kashmir; Uttaranchal Forest Hospital Trust, Haldwani, PGIMER, Chandigarh and Delhi State Cancer Institute, Delhi; peer-reviewer for the *Clinical Oncology*; member of editorial board for the *Journal of Medical Physics* and the *Journal of Cancer Research and Therapeutics*; news editor for the *Journal of Medical Physics*.

**SIGNIFICANT EVENTS**

**Anaesthesiology**
2. Organized 6th Foundation Course on Palliative Care; 16–17 February 2007 for medical practitioners and nursing staff treating cancer patients in and around Delhi.

**Radiotherapy**
1. Started the innovative technique of interstitial brachytherapy in CA lung.

**Surgical Oncology**
*Dr N.K. Shukla* participated as an expert in the selection of Senior Research Associates conducted by CSIR, New Delhi; was an external expert for the selection of the post of Assistant Professor of Surgical Oncology for PGIMS Rohtak; acted as a paper setter, thesis appraiser and external examiner for the MCh Course of Gujarat Cancer Research Institute, Ahmedabad; acted as a paper setter, thesis evaluator and external expert for MS Surgery examination of Pt. Ravishankar University Raipur (CG); acted as an external examiner for the MS Surgery of PGI Chandigarh; participated in a course on phase I trial organized by INDOX (India Oxford group) for clinical trials at Oxford; 11–18 September 2006; participated in the Annual Review Meeting of ATLAS Project, Oxford, 14 September 2006.

**VISITING SCIENTISTS**
1. Dr Michael Minton, Director at Sir Michal Sobell House, Churchill Hospital UK visited IRCH and delivered a lecture on ‘Neuropathic management of cancer pain’.
2. Dr Allan, Pediatric Pain Specialist, UK.
3. Dr Moira Long, Palliative Care Specialist, Scotland.
4. Dr Sunil, Radiation Oncologist, MD Anderson Cancer Center; December 2006.
5. Dr Ashwatha Narayan, Radiation Oncologist, MSKCC, USA; December 2006.
6. Dr Alan Nuhan, Medical Physicist, UK; February 2007.
**ADMINISTRATION**

Administrative Chief  
Professor G.K. Rath  
Assistant Administrative Officer  
Shri R. Simon

**Total staff of Dr BRA IRC**

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty</td>
<td>21</td>
</tr>
<tr>
<td>Group A and B</td>
<td>40</td>
</tr>
<tr>
<td>Technical Staff</td>
<td>67</td>
</tr>
<tr>
<td>Nursing Staff</td>
<td>157</td>
</tr>
<tr>
<td>Resident Staff (SR, JR, RO, etc.)</td>
<td>50</td>
</tr>
<tr>
<td>Stores Staff</td>
<td>03</td>
</tr>
<tr>
<td>Ministerial Staff</td>
<td>26</td>
</tr>
<tr>
<td>Group D Staff</td>
<td>86</td>
</tr>
<tr>
<td>Outsourced Sanitation Staff</td>
<td>112</td>
</tr>
<tr>
<td>Outsourced Data Entry Operators</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>570</strong></td>
</tr>
</tbody>
</table>

**FINANCE**

Accounts Officer  
Shri C.L. Raina

**STORES**

Assistant Stores Officer  
Shri Narender Kumar
# 10.5 Neurosciences Centre

**Chief**  
Hari Hara Dash

**Neurosurgery**  
**Professor and Head**  
Ashok Kumar Mahapatra  
(1 April 2006 till 29 September 2006)  
(on deputation to SGPGIMS, Lucknow as Director)  
Bhawani Shankar Sharma  
(Since 30 September 2006)

**Emeritus Professors**  
Prakash Narayan Tandon  
Ajit Kumar Banerji

**Associate Professors**  
Shashank Sharad Kale  
Poodipedi Sharad Chandra  
Ashish Suri

**Assistant Professors**  
Mannmohan Singh  
Rajinder Kumar  
Manish Singh Sharma  
(Gamma Knife)

Deepak Gupta  
Deepak Agrawal  
Sumit Sinha  
(Trauma Centre)  
(Trauma Centre)  
(Trauma Centre, resigned on 15 April 2007)

Gurudutta Satyarthee  
Srinivas Dwarakanath

**Neurology**  
**Professor and Head**  
Madhuri Behari

**Professors**  
Kameshwar Prasad  
(M.V. Padma  
(Director, Clinical Epidemiology Unit)

**Associate Professors**  
M. Tripathi  
Sumit Singh  
Achal Srivastava

Vinay Goyal

**Assistant Professors**  
Garima Shukla  
Rohit Bhatia  
Mamta Bhushan Singh

**Neuroanaesthesiology**  
**Professor and Head**  
Hari Hara Dash
<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professor</td>
<td>Parmod K. Bithal</td>
</tr>
<tr>
<td>Additional Professor</td>
<td>Arvind Chaturvedi</td>
</tr>
<tr>
<td>(on deputation to Dharan, Nepal)</td>
<td></td>
</tr>
<tr>
<td>Associate Professor</td>
<td>Rajendra Singh Chouhan</td>
</tr>
<tr>
<td>Assistant Professors</td>
<td>Mihir Prakash Pandia</td>
</tr>
<tr>
<td></td>
<td>Girija Prasad Rath</td>
</tr>
<tr>
<td></td>
<td>Hemanshu Prabhakar</td>
</tr>
</tbody>
</table>

**NEURORADIOLOGY**

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professor and Head</td>
<td>N.K. Mishra</td>
</tr>
<tr>
<td>Additional Professor</td>
<td>Shailesh B. Gaikwad</td>
</tr>
<tr>
<td>Assistant Professor</td>
<td>Ajay Garg</td>
</tr>
</tbody>
</table>

**NEUROPATHOLOGY LABORATORY**

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professor</td>
<td>Chitra Sarkar</td>
</tr>
<tr>
<td>Associate Professor</td>
<td>M.C. Sharma</td>
</tr>
<tr>
<td>(on assignment from December 2006 to Oman)</td>
<td></td>
</tr>
<tr>
<td>Assistant Professor</td>
<td>Vaishali Suri</td>
</tr>
</tbody>
</table>

**NEUROBIOCHEMISTRY**

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate Professor</td>
<td>S. Vivekanandhan</td>
</tr>
</tbody>
</table>

**CLINICAL PSYCHOLOGY (NEUROSCIENCES CENTRE)**

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assistant Professor</td>
<td>Ashima Nehra</td>
</tr>
</tbody>
</table>
EDUCATION

Neurosurgery

Undergraduate/postgraduate teaching
The departmental faculty participated in undergraduate teaching in the form of scheduled lectures and seminars. There is continuous postgraduate teaching of MCh junior and senior residents. The academic programme consists of weekly journal club meetings, seminars, morbidity/mortality meetings, neurological case discussions, neuroradiology and neuropathology meetings.

Short-term training
The department offered short-term training (2–8 weeks) to 6 neurosurgical trainees from various parts of India. The training included clinical observership and training in the Experimental Microneurosurgery Laboratory.

Long-term training
The department has postdoctoral teaching course of MCh Neurosurgery. MCh course includes three years (after MS General Surgery) and five years (after MB,BS) stream.

Neuroanaesthesia

Postgraduate Teaching

• Seven MD Anaesthesiology students from Anaesthesiology department, AIIMS and two MD Anaesthesiology students and one DA student from Lady Hardinge Medical College, came to the department for Neuroanaesthesiology training.
• A total of eleven DM Neuroanaesthesiology students and 19 Non-academic Senior Residents were part of the department at various times during the year. Three DM students and 2 Non-academic Senior Residents left the department after completion of their term during the year.
• Nine senior residents (6 from Department of Anaesthesiology, AIIMS and 3 from BRAIRCH) received training in Neuroanaesthesiology for 3 months each, as a part of interdepartmental rotation on mutual exchange basis.
• Thrice a week seminars, journal club and case presentations organized as a part of departmental teaching programme.
• Three lectures (in national conferences) delivered by faculty members and 13 (1 international + 12 national) research papers presented by faculty members and senior residents in conferences. One symposium attended by the faculty members and Senior Residents.

Short-term training
Six national and international doctors have undergone short term training in the department.
Neuroradiology

Undergraduate teaching
- The faculty of the department took 10 didactic lectures as part of undergraduate teaching.
- The DM Neuroradiology course started in July 2001. Two candidates are registered for this course at present.

Short-term training
Three doctors including two foreign nationals attended short-term training in the department during the year. 6 postgraduate students registered for MD (Radiology) received training in Neuroradiology for two months each on rotation basis. Three BSc (Radiography) students received training in Neuroradiology for one month each on rotation basis.

Neuropathology Laboratory
Short- and long-term training
- Deepali Jain worked as Pool Officer in Neuropathology Laboratory, Department of Pathology, 6 October 2005–21 June 2006.
- Ms Prerana joined Neuropathology Laboratory as a PhD student, August 2006.

Clinical Psychology
Teaching
Includes classes, lectures, clinical assignments, group discussions and OPD sessions.

Neurobiochemistry Laboratory
PhD students: Five

Continuing Medical Education
Neurology
Conferences, workshops, seminars organized by the department
- Professor K. Prasad organized ‘Cochrane review protocol development and research methodology workshop’, CEU, AIIMS; 15–18 February 2007 for undergraduates and postgraduates.
- Sumit Singh was a faculty in the Annual Clinical methods workshop, AIIMS; 18 March 2007 for the training of neurological clinical methods for medicine postgraduates from all over Delhi.

Lectures delivered
• ‘Impaired balance and freezing’, Symposium on ‘Medical management of advanced Parkinson’s disease’, Indian Academy of Neurology Annual Congress, Bangalore; October 2006.
• ‘Multiple sclerosis in India’, Indo–UK seminar on ‘Research and management of MS’, Delhi; February 2007.
• ‘Stem cell’, Neuro CME-2006, Neuroscience Association of Kanpur, GSVM Medical College, Kanpur; 15 October 2006.
• ‘Evidence-based medicine’, MS Ramaiah Medical College, Bangalore; 3 January 2007.
• ‘Evidence-based medicine’, Kasturba Medical College, Manipal; 24 January 2007.
• ‘Evidence-based medicine: An introduction’, Workshops on ‘Evidence-based medicine’ at College of Medicine, University of Sharjah; 27–28 January 2007.
• ‘Critical appraisal of meta-analysis paper’, Workshops on ‘Evidence-based medicine’ at College of Medicine, University of Sharjah; 27–28 January 2007.
• ‘Evidence-based medicine: Past, present and future’, Workshops on ‘Evidence-based medicine’ at College of Medicine and Health Sciences, Sultan Qaboos University, Oman; 29 January–1 February 2007.
• ‘Meta-analysis: An Introduction’, Workshops on ‘Evidence-based medicine’ at College
of Medicine and Health Sciences, Sultan Qaboos University, Oman; 29 January–1 February 2007.

- ‘Concept of ischaemic penumbra and management’, DMA Chapter of IMA, Delhi; February 2006.
- ‘Interventional therapies and current treatment strategies in acute ischaemic stroke’, Invited speaker in the International Update on Diabetes, Stroke, and Cardiovascular Disorders, Delhi; February 2006.

Beyond


Workshop on developing guidelines for thrombolysis programme for AIS in the Indian context, held under the aegis of Indian Stroke Association, June 2006. Invited to be in the ‘Core-Group’ of strokologists involved with thrombolytic programme in India.
• synthesizing the programme in the ICMR Stroke Surveillance Workshop, ICMR, Delhi; November 2006
• ‘Management of haemorrhagic stroke’, First Indo–Pak Colloquium on Neurosciences, PGIMER, Chandigarh; February 2007.
• ‘Management issues in acute stroke’, Physicians Forum of Kanpur under the aegis of Kanpur Medical College; February 2007.
• ‘Stem cell therapy in stroke: Hope or hype’, National Conference of Haematology and Satellite CME on Stem Cell Therapy, AIIMS; March 2007.
• ‘Presurgical evaluation in epilepsy’, The Annual Delhi Neurological Association meeting, Delhi; February 2007.
• ‘Patients undergoing evaluation for intractable epilepsy’, First Indo–Pak Colloquium on Neurosciences, PGIMER, Chandigarh; February 2007.
• ‘Progressive myoclonic epilepsies’, EEG basics to advanced training course, Hyderabad; March 2007.
• ‘Extra-temporal epilepsies’, EEG Basics to advanced training course, Hyderabad; March 2007.
• EEG teaching on ‘Ictal VEEG in patients with intractable epilepsies’, EEG basics to advanced training course, Hyderabad; March 2007.
• EEG teaching CME to technicians on the role of CEEG in epilepsy. EEG basics to advanced training course, Hyderabad; March 2007.
• EEG teaching CME to technicians on the role of VEEG in epilepsy. EEG basics to advanced training course, Hyderabad; March 2007.
• CME teaching on special epilepsy syndromes and EEG findings, Hyderabad; March 2007.
• ‘Disabling epilepsy workshop for delineation of guidelines for establishing a disability status in epilepsy’, Chennai; December 2006.
• ‘Role of electrocorticography’, International Symposium of Epilepsy, Delhi; November 2006.
• ‘Management of headache using botulinum toxin’, update organized by Neurology, Kanpur Medical College; April 2006.
• ‘Acute ischaemic stroke: How to manage’, East Delhi Medical association, Delhi; April 2006.
• ‘Recent advances in management of epilepsy’, update organized by the API UP Chapter, Aligarh; April 2006.
• ‘Recent advances in the management of refractory epilepsy’, Association of Pediatricians of India; April 2006.
• ‘Approach to a patient with cognitive disorders’, MLB Medical College, Jhansi; June 2006.
• ‘Approach to a patient with movement disorders’, MLB Medical College, Jhansi; June 2006.
• ‘Newer antiepileptic drugs in management of epilepsy’, MLB Medical College, Jhansi; June 2006.
• ‘Recent advances in the management of headache’, Neurology update, GSVM Medical College, Kanpur; September 2007.
• ‘Management of acute ischaemic stroke: Role of thrombolysis’, API UP Chapter Annual Conference, Orcha, Madhya Pradesh; October 2006.
• ‘Antiepileptic drugs in migraine prophylaxis’, CME on headache at NIMHANS, Bangalore; January 2007.
• ‘Management of neuropathic pain’, Delhi Neurological Association Annual meeting, New Delhi; February 2007.
• ‘Management of neuropathic pain—recent trends’, Dehradun; October 2006. Annual Conference of Medical Practitioners.
• ‘Laboratory-based approach to the diagnosis of peripheral neuropathy’, International Congress on Neurology and Rehabilitation; March 2007.
• ‘Sleep disorders: Recognition and management’, CME organized by the Delhi Medical Association, Central Pahargunj Branch; September 2006.
• ‘Sleep disorders: Early recognition’, CME organized for the Delhi Medical Association, South Delhi Chapter; March 2007.

Neuroanaesthesiology
• 2nd International Symposium and 8th Annual conference of Indian Society of Neuroanaesthesiology and Critical Care—ISNACC 2007 was organized by the Department, India Habitat Centre, New Delhi; 9–11 February 2007.

Neuropathology laboratory

Lectures delivered
Professor Chitra Sarkar
• ‘Genetic prognostication in gliomas’, Annual Conference of the Neurological Society of India, Madurai; 18–20 December 2006.
• ‘Genomic analysis and immunohistochemistry in clinical decision-making of CNS tumours’, Workshop on IMRT in Brain Tumours, Kolkata; 15–16 July 2006.
• ‘Glioneuronal tumours of the CNS’, Sri Ramchandra Medical College and Research Institute, Chennai; 19 December 2006.
• ‘Slide seminar: Some interesting cases of myopathy’, 9th Summer School of Myology, Institute de Myologie, Hospital de la Salpêtrière, Paris, France; 14–23 June 2006.
• ‘Update on pathology of CNS and neuromuscular diseases’, Faculty of Laboratory Medicine, Ministry of Health, Kuwait; 5–7 February 2007. Delivered the following lectures:
  (i) Embryonal tumours: Recent perspectives
  (ii) Muscular dystrophies: Classification and approach to diagnosis
  (iii) Meningeal tumours: Approach to diagnosis
  (iv) Pathology of viral encephalitis
  (v) Case presentations/slide seminars on CNS and muscle pathology

Clinical Psychology

Conferences, Seminars, Workshops
• 5th International Congress on Geriatric Care, New Delhi; 14–15 October 2006.
• ‘Current trends in epilepsy’, Department of Neurology, AIIMS; 3–5 November 2006.
• 59th Annual Conference of Indian Psychiatric Society (ANCIPS), Saveetha Institute of Medical and Technical Sciences, Chennai, India; 4–7 January 2007.
• XXXIII National Annual Conference, Indian Association of Clinical Psychologists, NACIACP, Sona School of Management, Salem, Tamil Nadu; 7–9 January 2007.
• ‘Improving mental health care in developing countries’, WPA Section on Psychiatry in Developing Countries, 1st International Conference, Lahore, Pakistan; 15–19 February, 2007).

National and International Conferences

Neurosurgery

Organized by the department
• 17th Sarveshwari Memorial Oration, Professor Arnold Menezes, Iowa City, Iowa, USA was the Orator; 14 February 2006.

Lectures delivered

Professor B.S. Sharma
• "Management of giant pituitary Adenema" South Asian Neurosurgery
Professor A.K. Mahapatra
• Attended two international and four national conferences, presented 8 guest lectures and chaired six sessions.

Dr S.S. Kale
• Lumbar PVD controversies, TB of Spine Indian Experience - AO Spine Comprehensive course in Guadalajara, Mexico; October 2006.
• Rheumatoid AA Dislocation, Posterior from Stroke in CVJ Anomaly - AO Spine Interactive and Masters Course in Davos, Switzerland; December 2006.
• Craniocervical joint Anomalies : Surgical Strategies - ASSI-European Spine Society Joint Instructional course, Hyderabad; August 2006.
• Faculty in AO Spine Stratplan meeting, Breckenridge Colorado, USA; March 2007.

Dr A. Suri
• ‘Infantile hydrocephalus: ETV v/s shunt’, CME Neurocon 2006 (NSI), Madurai; December 2006.
• ‘Neuroendoscopy in intraventricular tumours’, NEUROCON 2006 (NSI), Madurai; December 2006.

Dr Aditya Gupta
• ‘Gamma knife radiosurgery for secreting and non-secreting pituitary adenomas’, International Leksell Gamma Knife Society meeting in Seoul, South Korea; May 2006.
• ‘How to treat pituitary adenomas using gamma knife’, Annual meeting of Indian Society for Stereotactic and Functional Neurosurgery; Hyderabad August 2006.
• ‘Emerging therapies in neurological disorders: Gamma knife radiosurgery and deep brain stimulation for Parkinson’s disease’. Indian Medical Association, Dehradun, Uttarakhand, India; November 2006.

Dr Manmohan Singh
Dr Sumit Sinha

• ‘Prognostic variables in head injury-associated deaths: A 2-year retrospective study at AIIMS’, 15th Annual Conference of Neurotrauma Society of India, New Delhi; August 2006.
• ‘Giant pituitary adenomas—A series of 177 cases’, 56th Annual Conference of Neurosurgical society of India, Madurai; December 2006.

Dr Deepak Kumar Gupta


Dr Srinivas Dwarakanath


Neuroanaesthesiology

Professor H.H. Dash

• Brain protection: Recent advances and modern strategies. Annual Conference of Indian Society of Anaesthesiologists; Delhi, 15-16 April 2006.
• Sevoflurance and neuroanaesthesia. Symposium on Sevoflurane; New Delhi, 8 July 2006.
• Newer trends in monitoring in patients with head trauma. Annual Conference of Neurotrauma Society of India; New Delhi, 18-20 August 2006.
• Trigeminal neuralgia: An anaesthesiologisty view point. Neuro Sciences Update, R.R. Hospital; Delhi, 8 October 2006.
• Neuronal protection. Annual Conference of Research Society of Anaesthesiologists and Clinical Pharmacologists; Pune, 10-12 November 2006.
• Brain death and donor rules. 54th Annual Conference of Indian Society of Anaesthetists; Mysore, 26-29 December 2006.
• Neuroanaesthesiology as a super speciality: An Indian perspective. 2nd International Symposium and 8th National Conference of ISNACC.
• Recent trends in the management of intracerebral vasospasm. Annual Conference of South Asian Neurosurgeons; New Delhi, 15-18 February 2007.
• Trigeminal Neuralgia. 8th Indonesian Conference Society of Neuroanaesthesia Joint Symposium; Singapore, 9-10 March 2007.
Dr. P.K. Bithal
Newer monitoring techniques in Neuroanaesthesia. Annual Conference of Indian Society of Anaesthesiologists; Mysore, 26–29 December 2006.

Neuroradiology
Professor N.K. Mishra
- ‘Musings of the master—gazing into the crystal ball’, 60th annual congress of the Indian Radiological and Imaging Association (IR&IA), Renaissance Hotel and Convention Centre, Powai, Mumbai; 4–7 January 2007.

Dr S.B. Gaikwad
- ‘Current trends in imaging of adult epilepsy’, during Epilepsy symposium, India Habitat Centre, Delhi; 3–5 November 2006.
- ‘Imaging of neurological disorders’, NMR foundation day, NMR Department seminar room, AIIMS; 22 March 2007.
- ‘MRA of intracranial vessels’, 4th Asia Pacific Congress against Stroke (APCAS), India Habitat Centre, Delhi; 29 March 2007.


Neuropathology Laboratory

Lectures delivered

National conferences

- Sharma MC. Mitochondrial myopathies. Annual conference of Indian association of pathologists and microbiologists, Bangalore; December 2006.
- Sharma MC, Sarkar C. Slide seminar on Paediatric Tumours. Annual conference of Indian association of pathologists and microbiologists, Bangalore; December 2006.

International conferences
• Sarkar C. Impact of molecular genetics on management of gliomas. South Asian Neurosciences Conference, Delhi; February 2007.

Clinical Psychology
Organized by the department
• Workshop on ‘Pain management’, Department of Psychiatry, AIIMS; 21 January 2006.
• Lectures delivered

RESEARCH
Neurosurgery
Funded Projects
1. A phase II multi-national, multi-centre, open-label, active-controlled, randomized parallel-group dose-finding study to evaluate the efficacy and safety of two doses of AP 12009 in adult patients with recurrent high-grade glioma, administered intra-tumorally as continuous high-flow micro-perfusion over a 7-day period every other week. A.K. Mahapatra, A. Suri, P.K. Julka, S.S. Kale, Mannohaman Singh. Funded by Antisense Pharma GmbH Josef-Engert-StraBe9D-93053 Regensburg Germany for 2 years. Funds: Rs 100 lakh.
3. The International Infant Hydrocephalus Study (IIHS) is an international multi-centre, prospective, controlled, randomized study of the treatment of newly diagnosed obstructive hydrocephalus in infants below 2 years of age. Data will be centrally collected prospectively and contemporaneously over the course of at least 5 years of follow-up. A.K. Mahapatra, A. Suri, D. Gupta. Funded by International Society of Pediatric Neurosurgery (ISPN) and International Study Group on Neuro-endooscopy (ISGNE). Funds: Rs 70,000.
4. Randomized double blind placebo controlled, multicentric, dose estimation study to evaluate the safety and preliminary efficiency of recombinant factor VIIa (Novo-Seven/Nia Stase) in subjects with brain contusion (Trial ID: F7CBI-1600). V.S. Mehta, Rajender Kumar,

5. International Multicentric Multinational Trial: CRASH-2 (A large randomized placebo controlled trial among trauma patients with or at risk of significant hemorrhage, of the effect of antifibrinolytic treatment on death and transfusion requirement). A.K. Mahapatra, Mannmohan Singh, Ashish Suri, S.S. Kale, Deepak Gupta. Funded by London School of Hygiene and Tropical Medicine, London, UK.


**Funded Infrastructure Project**

Experimental Microneurosurgery Laboratory: Cadaver Microneurosurgery/ Neuroendoscopy Training Facility. Funded by DST-FIST 2006 grant. Funds: Rs 85 lakh.

**Departmental Projects**

1. Retrospective analysis of diffuse axonal injury and evaluation of factors influencing outcome in DAI
2. Acute thalamic involvement in severe head injury: An autopsy study with histopathological correlation
3. Efficacy of Amikacin Sulphate bladder washes in preventing UTI in patients with prolonged catheterization
4. Efficacy of early high protein feeds in severe head injury
5. VHL gene analysis in aneurysm domes
6. PET scan integration into gamma knife radiosurgery for pituitary adenomas
7. Neurotization for brachial plexus injuries
8. Endoscopic third ventriculostomy in hydrocephalus
9. Moya Moya disease
10. Bone marrow pluripotent cells in nerve injury
11. Intracranial cysts/tumours: Endoscopic treatment
12. Animal ethics committee permission: Training of residents and visiting neurosurgeons: Microvascular and microneural anastomosis
13. Analysis of C2 fracture
14. Prognostic factors of neurological recovery in cauda equina syndrome due to PIVD
15. Decompressive craniectomy in head injury
16. Craniotomy v/s craniectomy in posterior fossa lesions
17. CSF fistula
18. Hypertonic saline in head injury
19. MR perfusion in AVM for GK therapy
20. MR perfusion in brain tumors for GK therapy
21. ICP monitoring, IJV sampling and cerebral oximetry in severe head injury
22. Vertebral body tumour
23. GK in cavernous angioma
24. GK therapy in AVM
25. Quality of life after lumbar disc surgery

Collaborative Projects

Neurology
Funded Projects
Completed

Ongoing
4. A phase III, double-blind placebo controlled study to determine the efficacy and safety of a low (50–100 mg/day) and high (150–200 mg/day) dose range of safinamide as add-on therapy, in patients with idiopathic Parkinson’s disease with motor fluctuations, treated with a stable dose of levodopa. M. Behari. Funded by Clinirx for 1 year. Funds: Rs 8.0 lakh.
5. A Phase III, double-blind placebo controlled, 12-month extension study to investigate the long term efficacy and safety of a low (50–100 mg/day) and high (150–200 mg/day) dose range of Safinamide, as add-on therapy, in patients with idiopathic parkinson’s disease
with motor fluctuations, treated with a stable dose of Levodopa. M. Behari. Funded by Clinirx for 1½ years. Funds: Rs 8.0 lakh.


8. Intravenous autologous bone marrow stromal cells (MSC) or mononuclear cells (MMC) for patients with acute ischemic stroke. K. Prasad. Funded by Department of Biotechnology, Government of India for 1 year. Funds: Rs 20 lakh.


10. Autologous intra-arterial infusion of bone marrow mononuclear cells for static encephalopathy with special reference to cerebral palsy. M.V. Padma. Funded by DST.


12. Psychosocial issues in women with epilepsy and outcome of pregnancies in WWE. M. Tripathi. Funded by WHO for 2 ½ years.


Departmental Projects
1. Functional MRI of speech disturbance in parkinsonism
2. Sleep disturbance in TBM
3. Treatment of acute ischaemic stroke with transcranial Doppler
4. Parkinson’s disease in women
5. Psychological profile in intractable epilepsy patients undergoing surgery
6. Perception of stroke in public, knowledge of risk factors and treatment
7. Risk factor analysis of stroke: A case–control study
8. Knowledge of stroke and risk factors and impact on outcome
9. Awareness of stroke and risk factors in stroke patients
10. Non-epileptic seizures in villagers
11. Evoked responses in hereditary ataxias
12. Nerve conduction in ADCAs
13. Autonomic functions in genetically confirmed ataxias
14. Sleep disorders in tubercular meningitis—an actigraphic study
15. Abnormal sympathetic hyper-reactivity in patients of myasthenia gravis
16. Quantitative thermal sensory testing and sympathetic skin response in restless legs syndrome—a study with 57 Indian patients
17. Ictal speech in intractable complex partial seizures: The most reliable lateralizing sign on clinical description
18. Clinical spectrum and clinicopathological correlation of dysferlinopathies from AIIMS
19. MR spectroscopy in adult myopathies with clinicopathological and electrophysiological correlation
20. Randomized double-blinded placebo-controlled trial of low-dose topirame and lamotrigine in patients with severe migraine

Collaborative Projects

**Funded projects**

**Departmental Projects**

**Neuroanaesthesiology Departmental Projects**

**Completed**
1. ICU management of Gullain–Barre syndrome: A retrospective study
2. Transcranial doppler ultrasonographic study of cerebral haemodynamics, autoregulation and carbon dioxide reactivity in patients with supratentorial tumours
3. Respiratory care of myasthenic crisis in neurointensive care unit: Evaluation of outcome and adverse events
4. Evaluation of propofol as a risk factor for pancreatitis in patients with Cushing’s disease

**Ongoing**
1. Stellate ganglion block as a treatment option for refractory cerebral vasospasm following aneurysmal subarachnoid haemorrhage
2. A comparison of three anaesthetic techniques used for trans-sphenoidal pituitary surgery
3. Evaluation of invasive versus non-invasive haemodynamic monitoring in supratentorial tumour surgery: A cost-effective analysis
5. A comparative study of propofol and thiopentone for cerebral protection during temporary clipping in intracranial anaeurysm surgery

**Neuroradiology**

**Funded Projects**

**Departmental Projects**
1. Changes in cerebral hemodynamics measured by MRI Perfusion: Pre- and post-carotid stenting:
2. Clinical and radiological profile of patients undergoing carotid artery stenting: A retrospective analysis:

**Neuropathology Laboratory**

**Funded Projects**

**Ongoing**
4. Phase II Multi-Center, Open-Label, Active-Controlled, Randomized Parallel-Group Dose Finding Trial to evaluate the efficacy and safety of two doses of an antisense oligonucleotide in adult patients with recurrent high-grade glioma, administered intratumorally as a continuous high-flow microperfusion over a 7-day period every other week. Chitra Sarkar. Funded by SIRO Clinpharma, Mumbai for 2 years (2006–2008). Funds: Rs 10 lakh.


Departmental Projects

**Completed**

1. Paediatric astrocytic tumours: Study of cyclin dependent kinases and their inhibitors
2. Comparative study of diagnostic efficacy of Stereotactic, ultrasound guided and image guided biopsies in lesions of CNS
3. Protein aggregating myopathy: A clinicopathological and immunohistochemical study
4. Mitochondrial myopathy: A clinicopathological and ultrastructural study
5. Congenital myopathies: Clinicopathological and ultrastructural evaluation
6. Expression of major histocompatibility complex (MHC-I and II) and cell adhesion molecules in idiopathic inflammatory myopathies

**Ongoing**

1. Primary and secondary glioblastomas: A study of EGFR amplification, EGFR vIII mutants and p53 expression
2. GBMs with long term survival: Role of cell cycle regulatory genes.
4. Comparative evaluation of expression of dystrophin, utrophin and n-NOS in muscle and skin biopsy of patients with dystrophinopathies
5. p53, EGFR and HER2 receptor in osteogenic sarcomas

Collaborative Projects

**Completed**

1. Expression of tumour suppressor gene HIC-1 in human glial tumours and cell lines (with Biochemistry)
2. Mismatch repair genes (Hmlh1 and Hmlh2) in glial tumours (with Biochemistry)
3. Clinicopathological study of Bcl-2 and Bcl-6 expression in non-Hodgkin lymphoma (with IRCH)
Ongoing
1. Study of HIC-1 in tumorigenesis and cell response (with Biochemistry)
2. Effects of administration of human umbilical cord blood cells (HUCBG) in combination with melatonin versus HUCBG alone in rat with stroke (with Neurology)
3. Altered DNA sequences in gliomas: Characterization of changes and context sequences with reference to tumor type (with Biochemistry)
4. Characterization of the properties of an amplified region of DNA in primary meningeal tumors (with Biochemistry)
5. Prevalence of alteration at microsatellite loci in 1p and 19q in primary human gliomas (with Biochemistry)
6. Invasive versus non-invasive meningiomas: Comparative study of proliferation index, and expression of VEGF, p53 and cathepsin (with Neurosurgery)

Neurobiochemistry
Ongoing

Departmental projects
1. Pharmacogenetics of drug metabolizing enzymes in patients developing drug toxicity to specific antiepileptic drugs (Phenytoin, carbamazepine, valproic acid and lamotrigine) of epileptic patients.
2. Analysis of expression and regulation of classical HLA-A,B,C, nonclassical HLA-G and transforming growth factor-2 in glioblastoma and their relevance in immunotherapy.
4. Validation of gel dosimetry as 3D verification tool for highly conformal radiotherapy techniques.

Clinical Psychology
Collaborative Projects
Ongoing
- A study of psychosocial developments in children and adolescents undergoing congenital heart surgery. (with CTVS)
- A phase IIb/III randomized, placebo-controlled clinical trial to study the safety and efficacy
of MK-0364 in overweight and obese patients with type 2 diabetes mellitus (T2DM). (with Endocrinology)

• Cognitive activation studies of language and memory as pre-operative evaluation in patients with intractable epilepsy—A novel noninvasive method of investigation. (with Neurology)

• ‘To assess the effects of antiretroviral therapy on neurocognitive functions in AIDS patients’, (with Medicine)

PUBLICATIONS

Neurosurgery Journals


30. Dwarakanath S, Suri A, Sharma BS, Mahapatra AK, Mehta VS. Intracranial


46. Gupta SK, Mohendra S, Sharma BS, et al. Tuberculosis of the craniovertebral junction:


Chapters in Books or Proceedings


Neurology Journals


AIIMS 2006-2007 / 657


**Chapters in Books**


Aires, Birgota, caracas, mednid, Mexico, Sao Panco; 2006:547–59.

Abstracts

**Neuroanaesthesia**

**Journals**


Neuroradiology

**Journals**


**Neuropathology Journals**


**Neurobiochemistry Journals**


Clinical Psychology

Journal


PATIENT CARE

Neurosurgery

Clinical workload

<table>
<thead>
<tr>
<th></th>
<th>Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total no. of admissions</td>
<td>4,248</td>
</tr>
<tr>
<td>Total no. of operations</td>
<td>3,314</td>
</tr>
<tr>
<td>Major</td>
<td>2,812</td>
</tr>
<tr>
<td>Minor</td>
<td>502</td>
</tr>
</tbody>
</table>

Total number of neurosurgery OPD patients

<table>
<thead>
<tr>
<th></th>
<th>Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>New cases</td>
<td>10,060</td>
</tr>
<tr>
<td>Old cases</td>
<td>21,781</td>
</tr>
</tbody>
</table>

Total number of Gamma Knife OPD patients

<table>
<thead>
<tr>
<th></th>
<th>Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>New cases</td>
<td>238</td>
</tr>
<tr>
<td>Old cases</td>
<td>526</td>
</tr>
</tbody>
</table>

Neurology

Indoor

<table>
<thead>
<tr>
<th></th>
<th>Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outdoor</td>
<td>2,865</td>
</tr>
</tbody>
</table>

Data provided by the record section till March 2007

Total old and new patients

<table>
<thead>
<tr>
<th></th>
<th>Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total old and new patients</td>
<td>57,752</td>
</tr>
</tbody>
</table>

Procedures done in EMG/EPS/EEG Labs

Electrophysiology Lab:

<table>
<thead>
<tr>
<th></th>
<th>Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>EEG</td>
<td>2,359</td>
</tr>
<tr>
<td>Long and short term VEEG</td>
<td>180</td>
</tr>
<tr>
<td>Evoked Potentials</td>
<td>74</td>
</tr>
<tr>
<td>NCV-EMG</td>
<td>1,979</td>
</tr>
<tr>
<td>QST</td>
<td>20</td>
</tr>
</tbody>
</table>

All faculty participated in patient awareness camps and commemorative days organized by the department in the field of Parkinson’s disease, Epilepsy, Stroke, Dementia, etc.

All participated in AIR and TV shows on public awareness programmes on Brain diseases.

Academic, Administration, Finance, Engineering, Library, Central facilities, etc.

1. Professor K. Prasad is appointed as Director, Clinical Epidemiology Unit, AIIMS.
2. Professor K. Prasad is appointed as Chairman of Neurosciences OPD Committee of Neurosciences Centre, AIIMS.
Neuroanaesthesiology

**Perioperative Anaesthetic Care**
1. Anaesthetic management of a total of 2,967 operations (2,006 routine and 961 emergency) was performed.
2. Anaesthetic management for 350 neuroradiological procedures (270 diagnostic and 80 therapeutic) was performed.

**Neurointensive Care Unit**
Intensive care of more than 2,520 patients (including neurosurgical, trauma victims and critically ill neurological patients) was performed.

**Pain Clinic**
A total of 722 patients (113 New and 609 Old) were seen in the OPD; 148 of them were treated with various 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>616</td>
</tr>
<tr>
<td>Gamma knife angiogram</td>
<td>60</td>
</tr>
<tr>
<td>Myelo/ventric</td>
<td>5</td>
</tr>
<tr>
<td>CT Head</td>
<td>8,973</td>
</tr>
<tr>
<td>Chest</td>
<td>297</td>
</tr>
<tr>
<td>Abdomen</td>
<td>221</td>
</tr>
<tr>
<td>Spine</td>
<td>593</td>
</tr>
<tr>
<td>Angio</td>
<td>56</td>
</tr>
<tr>
<td>Image guided/CT guided study</td>
<td>49</td>
</tr>
<tr>
<td>Routine CT</td>
<td>7,138</td>
</tr>
<tr>
<td>Emergency CT</td>
<td>10,113</td>
</tr>
<tr>
<td>Ultrasound</td>
<td>1,427</td>
</tr>
<tr>
<td>MRI/MR angiography</td>
<td>1,771</td>
</tr>
<tr>
<td>MR (Gamma Knife and X-Knife)</td>
<td>250</td>
</tr>
<tr>
<td>Plain X-rays OPD/indoor</td>
<td>16,800</td>
</tr>
<tr>
<td>Private case reporting</td>
<td>3,938</td>
</tr>
<tr>
<td>Interventional procedures</td>
<td>116</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>52,539</strong></td>
</tr>
</tbody>
</table>

**Neuropathology Laboratory**

Neuropathology surgical specimens 2,280
Frozen sections 220
Diagnostic immunohistochemistry for tumours 2,457
**Muscle Biopsies**

Total number received 403
Muscle enzyme histochemistry 1,698
Muscle immunohistochemistry 1,937

**Electron Microscopy**

Total specimens received 1,203
Specimens processed for EM 650
Nerve biopsies—Myelin stain 123

**Neurobiochemistry**

The number of laboratory investigations carried out for the neurology patients in the year ending, 1 April 2006–31 March 2007 in the various disciplines in as follows:

**Clinical chemistry**

<table>
<thead>
<tr>
<th>Name of the investigations</th>
<th>Number of samples/year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glucose (fasting, postprandial/random)</td>
<td>36,400</td>
</tr>
<tr>
<td>Urea</td>
<td>36,400</td>
</tr>
<tr>
<td>Creatinine</td>
<td>36,400</td>
</tr>
<tr>
<td>Calcium</td>
<td>23,150</td>
</tr>
<tr>
<td>Phosphorus</td>
<td>23,150</td>
</tr>
<tr>
<td>Total/direct/indirect bilirubin</td>
<td>23,150</td>
</tr>
<tr>
<td>Total protein</td>
<td>23,150</td>
</tr>
<tr>
<td>Albumin</td>
<td>23,150</td>
</tr>
<tr>
<td>AST</td>
<td>23,150</td>
</tr>
<tr>
<td>ALT</td>
<td>23,150</td>
</tr>
<tr>
<td>Alkaline phosphatase</td>
<td>23,150</td>
</tr>
</tbody>
</table>

**Haemogram**

<table>
<thead>
<tr>
<th>Name of the investigation</th>
<th>Number of samples/year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Haemoglobin</td>
<td>28,225</td>
</tr>
<tr>
<td>PCV</td>
<td>15,120</td>
</tr>
<tr>
<td>RBC</td>
<td>15,120</td>
</tr>
<tr>
<td>Retics</td>
<td>15,120</td>
</tr>
<tr>
<td>Platelets</td>
<td>28,746</td>
</tr>
<tr>
<td>WBC</td>
<td>28,746</td>
</tr>
<tr>
<td>WBC-differential</td>
<td>28,746</td>
</tr>
<tr>
<td>ESR</td>
<td>18,123</td>
</tr>
</tbody>
</table>
### Coagulation profile

<table>
<thead>
<tr>
<th>Name of the investigation</th>
<th>Number of samples/ year</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT</td>
<td>3,127</td>
</tr>
<tr>
<td>APTT</td>
<td>3,127</td>
</tr>
<tr>
<td>Fibrinogen</td>
<td>728</td>
</tr>
</tbody>
</table>

### Other enzymes

<table>
<thead>
<tr>
<th>Name of the investigation</th>
<th>Number of samples/ year</th>
</tr>
</thead>
<tbody>
<tr>
<td>CK</td>
<td>1,798</td>
</tr>
<tr>
<td>CK-MB</td>
<td>1,798</td>
</tr>
<tr>
<td>LDH</td>
<td>1,798</td>
</tr>
</tbody>
</table>

### Lipid profile

<table>
<thead>
<tr>
<th>Name of the investigation</th>
<th>Number of samples/ year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cholesterol-total</td>
<td>3,275</td>
</tr>
<tr>
<td>Cholesterol-HDL</td>
<td>3,275</td>
</tr>
<tr>
<td>Cholesterol-LDL</td>
<td>3,275</td>
</tr>
<tr>
<td>Cholesterol-VLDL</td>
<td>3,275</td>
</tr>
<tr>
<td>Triglycerides</td>
<td>3,275</td>
</tr>
</tbody>
</table>

### Antiepileptic drugs

<table>
<thead>
<tr>
<th>Name of the investigation</th>
<th>Number of samples/ year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phenytoin</td>
<td>2,134</td>
</tr>
<tr>
<td>Carbamezapine</td>
<td>1,812</td>
</tr>
<tr>
<td>Valproic acid</td>
<td>2,123</td>
</tr>
<tr>
<td>Barbiturates</td>
<td>287</td>
</tr>
</tbody>
</table>

### Hormone profile

<table>
<thead>
<tr>
<th>Name of the investigation</th>
<th>Number of samples/ year</th>
</tr>
</thead>
<tbody>
<tr>
<td>T3</td>
<td>5,400</td>
</tr>
<tr>
<td>T4</td>
<td>5,400</td>
</tr>
<tr>
<td>TSH</td>
<td>5,700</td>
</tr>
<tr>
<td>GH</td>
<td>1,860</td>
</tr>
<tr>
<td>Cortisol</td>
<td>1,500</td>
</tr>
<tr>
<td>Prolactin</td>
<td>2,500</td>
</tr>
<tr>
<td>LH</td>
<td>540</td>
</tr>
<tr>
<td>FSH</td>
<td>540</td>
</tr>
<tr>
<td>Beta-endorphin</td>
<td>400</td>
</tr>
<tr>
<td>Name of the investigation</td>
<td>Number of samples/ year</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>Neurocysticercosis</td>
<td>220</td>
</tr>
<tr>
<td><em>M. Tuberculosis</em> IgA</td>
<td>15</td>
</tr>
<tr>
<td><em>M. Tuberculosis</em> IgG</td>
<td>15</td>
</tr>
<tr>
<td><em>M. Tuberculosis</em> IgM</td>
<td>15</td>
</tr>
<tr>
<td>Myelin basic protein</td>
<td>124</td>
</tr>
<tr>
<td>Oligoclonal bands of CSF IgG</td>
<td>124</td>
</tr>
<tr>
<td>ANA</td>
<td>450</td>
</tr>
<tr>
<td>ANCA</td>
<td>450</td>
</tr>
<tr>
<td>RA Factor</td>
<td>550</td>
</tr>
<tr>
<td>Vitamin B12</td>
<td>636</td>
</tr>
<tr>
<td>Folic Acid</td>
<td>128</td>
</tr>
<tr>
<td>Homocysteine</td>
<td>720</td>
</tr>
<tr>
<td>Ferritin</td>
<td>324</td>
</tr>
<tr>
<td>Co-enzyme Q</td>
<td>220</td>
</tr>
</tbody>
</table>

**Catecholamines**

<table>
<thead>
<tr>
<th>Name of the investigation</th>
<th>Number of samples/ year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adrenaline</td>
<td>272</td>
</tr>
<tr>
<td>Nor adrenaline</td>
<td>272</td>
</tr>
<tr>
<td>VMA</td>
<td>48</td>
</tr>
<tr>
<td>ADA</td>
<td>248</td>
</tr>
<tr>
<td>Total iron</td>
<td>158</td>
</tr>
<tr>
<td>TIBC</td>
<td>158</td>
</tr>
<tr>
<td>Orexin</td>
<td>96</td>
</tr>
<tr>
<td>Protein electrophoresis</td>
<td>48</td>
</tr>
<tr>
<td>Magnesium</td>
<td>142</td>
</tr>
</tbody>
</table>

**Copper metabolism**

<table>
<thead>
<tr>
<th>Name of the investigation</th>
<th>Number of samples/ year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serum copper</td>
<td>256</td>
</tr>
<tr>
<td>Urinary copper</td>
<td>185</td>
</tr>
<tr>
<td>Ceruloplasmin</td>
<td>546</td>
</tr>
</tbody>
</table>
Myasthenia gravis
Name of the investigation Number of samples/year
Acetylcholine receptor antibody 129
Musk antibody 56

Clinical Psychology
April 2006–March 2007

Patients seen Total no. of patient Time taken/
No. of consultations 320 –
Ward patients 141 45 minutes to 3 hours
OPD patients 140 45 minutes to 3 hours
Counselling patients/relatives 278 10 minutes to 45 minutes
Therapy 5 patients (4 to 7 sessions each) 45 minutes to 1 hour
Research 40 45 minutes to 3½ hours

AWARDS, HONOURS AND SIGNIFICANT EVENTS
Neurosurgery
Professor A.K. Mahapatra
• President: Neurotrauma Society of India. 2006–2007
• Vice President:
  – Skull Base Surgery Society of India, 2006–2007
  – Indian Society for Pediatric Neurosurgery
  – Executive Member, International Society for Pediatric Neurosurgery
  – Chairman, Liaison Committee, ISPN
• Associate Editor: Child’s Nervous System

Dr P.S. Chandra Penry Minifellowship award, Wakeforest University, USA; March 2006; Tadokaro best paper award, Asiano-oceanic Congress, Kuala Lumpur, Malaysia; March 2006. He was visiting faculty and participant, Venice Summer School on Epilepsy Surgery, Venice International Neurosciences Institute, Venice, Italy [supported by Marie Curie foundation], April 2006. Virat Vaibhav: Educational article on epilepsy surgery, November 2006;

Dr Manish Singh Sharma Herbert Krause Best paper for Neuro-oncology at the 55th Neurological Society of India’s Annual Conference, Madurai, 2006.
Dr Deepak Agrawal was awarded the ISPN scholarship for presenting research titled ‘Complex split-cord malformations: The untold story’, Annual ISPN Meeting, Taipei, Taiwan; September 2006.

Dr Deepak Gupta was awarded the Best paper award on paper entitled Intratumoral immunotherapy in recurrent high grade gliomas in 4th South Asian Neurosurgery Congress, India Habitat Centre, New Delhi, February 2007; best poster award (co-author) for the poster entitled ‘Clinicoradiological analysis of traumatic basal ganglion hematomas: A study of 94 cases’, 15th Neurotrauma Conference, New Delhi, 18–20 August 2006.

Professor B.S. Sharma, Secretary, Neurological Society of India.

Dr S.S. Kale, Elected Chairman of AO Spine India Chapter. A worldwide organization of Spine surgeons with an Indian membership of 738 spine surgeons in India for a term of 3 years; Organized AO Spine Spring Seminars in Lucknow, Pune and Trivandrum; Organized 9th Micro neurosurgery workshop at AIIMS; Nominated, Course Chairman for AO Spine Davos Courses for year 2007.

Dr A. Suri, Executive Member, SBSSI, Skull Base Surgery Society of India, 2006/2007.

Neurology
Professor M. Behari is Member, Governing Council, National Institute of Mental Health and Neurological Sciences, Banglore, 2005; elected as vice-president (president-elect), Delhi Neurological Association; elected as vice-president (president-elect), Indian Academy of Neurology; is Executive member of Asian Oceanian section of Movement Disorders Society; invited to host the Asian-Oceanian Parkinson and Movement Disorders congress in 2009; nominated for General Amir Chand Oration of National Academy of Medical Sciences, 2007; Task Force member of designing of web site of Movement Disorders Society; member, Task Force on Stem Cells and Regenerative Medicine of DBT.

Professor K. Prasad, awarded the UK India Research Initiative Project Formulation Travel Grant; nominated as an Editor of the Edinburgh-based Cochrane Stroke Review Group; nominated as a Member of Editorial Board of Practical Neurology, a BMJ publication; nominated as a National Coordinator in India for International Stroke Trial-3 (IST-3) being coordinated by the Neurosciences Trial Unit, University of Edinburgh, UK; nominated as a National Coordinator in India for Efficacy of Nitric Oxide in Stroke (ENOS) Trial being coordinated by the University of Nottingham, UK.

Professor M.V. Padma, awarded the Achanta Laxmipathi Oration, NAMS, 2006; selected to be the National Co-ordinator for the SITS-MOST-NEW, INDIA Registry for ‘Thrombolysis programme in AIS’ for India.
Dr M. Tripathi, completed a UCLA fellowship in Epilepsy and Neurophysiology, UCLA, USA, 2005–2006; completed 3 months course in Introduction and principles of Clinical Research, NIH, 2006; has completed PENRY Minifellowship at Wake Forest University, North Carolina USA in Epilepsy; completed Sleep disorders training rotation during the fellowship in Epilepsy, UCLA Santa Monica Sleep Disorders centre, UCLA, USA; observed at the Veterans Affairs Dementia disorders clinic, West LA, USA; received Young Investigator awards for the Aceano oceano epilepsy congress Kuala Lumpur Malaysia; awarded Travel Fellowship awards for the World Association of Sleep Disorders, Bangkok.

Dr S. Singh, awarded International Headache Society travel fellowship to attend the Migraine trust international symposium, London, September 2007; awarded Japan Amyotrophic Lateral Sclerosis Association travel bursary and India Trust Travel fellowship for the JALSA MND meeting, Yokohama, Japan, November 2007.

Dr V. Goyal, elected as Joint Secretary of Tropical Neurology section of Indian Academy of Neurology, IAN, September 2006; awarded Boehringer-Ingelheim, Japan travel Bursary, to attend 10th Congress of Parkinson’s Disease and Movement Disorders, Kyoto, Japan, 28 October–3 November 2006.

Dr G. Shukla, awarded the prestigious President’s Research Initiative Award of the American Association of Neuromuscular and Electrodiagnostic Medicine (AANEM), Washington DC, USA; October 2006 for research work entitled ‘Abnormal sympathetic hyper-reactivity in patients of Myasthenia gravis’; has received the International Federation of Clinical Neurophysiology fellowship for papers presented at the AANEM meeting, Washington DC, USA, October 2006; has received a travel bursary award for paper entitled ‘Ictal speech in intractable complex partial seizures: The most reliable lateralizing sign on clinical description’ presented at the 6th Asia-Oceanian Epilepsy Congress, Kuala Lumpur, November 2006; received the ‘Young Investigator Award’ for research work entitled’ Quantitative thermal sensory testing and sympathetic skin response in Restless legs syndrome ‘a study with 57 Indian patients’, World Association of Sleep Medicine Congress, Bangkok, Thailand, February 2007.

Dr R. Bhatia, selected as to attend the ‘Summer School of Myology’, Institute de Myology, Paris, France, 14–23 June 2006.

Neuroanesthesia
Professor H.H. Dash was appointed chief of Neurosciences Centre; awarded Y.G. Bhojraj Award during National Conference of Indian Society of Anaesthesiologists held at Mysore for the best Review article published in Indian Journal of Anaesthesia, December 2006; delivered Professor Harivir Singh oration at the 2nd International Symposium and 8th Annual conference of Indian Society of Neuroanaesthesiology and Critical Care (ISNACC 2007, the India Habitat Centre,
New Delhi, 9–11 February 2007.


**Neuroradiology**


**Dr S.B. Gaikwad** Visiting fellowship for advanced training in neurointerventional techniques, Department of Neuroradiology, Hacettepe University, Ankara, Turkey; 15–30 May 2006.

**Neuropathology Laboratory**

**Dr Chitra Sarkar** invited to participate in the 9th Summer School of Myology, Institute de Myologie, Hospital de la Salpetriere, Paris, France, 14–23 June 2006; invited as a Guest Faculty in CME on ‘Update on pathology of CNS and neuromuscular diseases’; Faculty of Laboratory Medicine, Ministry of Health, Kuwait, 5–7 February 2007; invited to contribute to a chapter entitled ‘CNS primitive neuroectodermal tumours’ in the revised edition of the *WHO Textbook on pathology and genetics of CNS tumours*, 2007.

She was nominated as member of the NBRC Research Advisory Committee; Member of the Management Advisory Committee, Department of Science and Technology for Young Scientists for selection for BOYCAST Fellowship; member, Research Review Committee, Tata Memorial Hospital, Mumbai; expert in Himachal Public Service Commission; Executive Member, Neurological Society of India (NSI).

**Dr M.C. Sharma** invited to contribute to a chapter entitled ‘Subependymal giant cell astrocytomas’ in the revised edition of the *WHO textbook on pathology and genetics of CNS tumours*, 2007.

**Dr Ayushi Jain**, Junior Resident, awarded the Second Prize for her paper entitled ‘Role of major histocompatibility complex (MHC-I and II), cell adhesion molecules and membrane attack complex in the pathogenesis of inflammatory muscle diseases’, presented at the 9th Annual Meeting of Delhi Neurological Association, 3–4 February 2007; awarded the Ramalingaswami Best Paper Award for her paper entitled ‘MHC class-I and II detection as a diagnostic tool in inflammatory myopathies’
at the Annual Conference of the Delhi Chapter of IAPM, April 2006.

**Neurobiochemistry**

**Dr M. Murali**, PhD student, won the best poster presentation award for ‘Genetic polymorphisms of drug metabolizing enzymes CYP2C9 and CYP2C19 in patients showing toxicity to phenytoin’, Indo-Australian Conference, Manipal; 17–19 March 2007.

**Clinical Psychology**

**Dr Ashima Nehra**

- Fellow, Geriatric Society of India; since 2006
- Reviewer of articles:
  - *Journal of Child and Adolescent Mental Health*
  - Evaluator of research project of PGI, Chandigarh
- Officiating general secretary, Indian Association of Clinical Psychologists for election 2006.
- Member, Journal Committee of Indian Association of Clinical Psychology; 2006.
- Chairperson of a free paper Child and Adolescent session on 8 June 2007 at XXXIII National Annual Conference of Indian Association of Clinical Psychologists. NACIAP, Sona School of Management, Salem, Tamil Nadu; 7–9 January 2007.

**VISITING SCIENTISTS**

**Neuroanaesthesia**

1. Sulpicio G. Soriano, Consultant Anesthesiologist at the Children’s Hospital, Boston, MA, USA visited the department and delivered a lecture.
2. Dennis Roy, Consultant Anesthesiologist from Australia visited the department and delivered a lecture.

**Neuropathology**

Professor KT Wong, Professor of Pathology University of Malaya, Kuala Lumpur, Malaysia visited the Department of Pathology and delivered a lecture entitled ‘Pathogenesis of henipavirus encephalitis’, AIIMS; 16 November 2006.

**Clinical Psychology**

### 10.6 Dr Rajendra Prasad Centre for Ophthalmic Sciences

**Professor and Chief**
Supriyo Ghose

**Professors**
- Raj Vardhan Azad
- Sat Pal Garg
- Atul Kumar
- Gita Satpathy (Ocular Microbiology)
- Rasik Behari Vajpayee
- Anita Panda
- Pradeep Sharma
- Jeewan Singh Titiyal
- Sudarshan Khokhar
- Vimla Menon
- Yog Raj Sharma
- Ramanjit Sihota
- Radhika Tandon
- Mahesh Chandra

**Medical Superintendent**
Shakti Kumar Gupta

**Additional Professors**
- Dilip R. Shende (Ocular Anaesthesiology)
- G.V. Satyanarayana Murthy (Community Ophthalmology)
- Rajpal
- Mandeep Singh Bajaj
- Niranjan Nayak (Ocular Microbiology)

**Associate Professors**
- Seema Sen (Ocular Pathology)
- Namrata Sharma
- Tanuj Dada
- Sanjay Sharma (Ocular Radiology)
- Pradeep Venkatesh
- Seema Kashyap (Ocular Pathology)
- Neelam Pushker

**Assistant Professors**
- T. Velpandian (Ocular Pharmacology)
- Viney Gupta
- M. Vanathiti
- Medha R. (Ocular Biochemistry)
- Praveen Vashist (Community Ophthalmology)
- Rohit Saxena
- Rajesh Sinha
- Renu Sinha (Ocular Anaesthesiology)
- Jasbir Kaur (Ocular Biochemistry)
- Tushar Agarwal
- Bhavna Chawla
- Parijat Chandra
EDUCATION

| Undergraduates | Postgraduates | Paraclinical | Scientists/ 
| MB,BS 40 | MD (16 passed) | BSc (Hons) | Pool Officers/ 
| | PhD 11 | Ophthalmology | Sr. Research 
| | | Course 34 | Associates 
| | | (08 students passed) | Scientists/ 
| | SRs: Ophthalmology 34 | | Pool Officers 8 
| | Ocular Anaesthesia 2 | | 
| | Radiodiagnosis 1 | | 

**Short- and long-term training**
Thirty-seven ophthalmologists from various parts of the country including 3 WHO Fellows and 12 in training of trainers programme (Extra Capsular Cataract Extraction/Intraocular Lens) were trained in different fields of specialization.

**Continuing Medical Education**

**Organized by the departments**

- 1-day Dissemination workshop on mapping of resources for control of childhood and corneal blindness in India and services for low vision and refractive errors; 30 April 2006
- Advanced Galucoma workshop on ‘Exploring the glaucoma paradigm in India’; 4–5 August 2006
- 3rd manpower and management training workshop supported by the Lions Club International; 21–26 August 2006.
- Workshop and training on ‘Rapid assessment of trachoma in India’ in collaboration with Ophthalmology/Blindness Control Section, Ministry of Health and Family Welfare and supported by WHO; 24–28 August 2006
- Midterm review meeting for ORBIS-sponsored comprehensive Management Training project; 30 August 2006.
- Workshop and training on Rapid Assessment of Avoidable Blindness (RAAB) in India in collaboration with Ophthalmology/Blindness Control Section, Ministry of Health and Family Welfare; 4–5 September 2006.
- Glaucoma awareness programme for patients; 23 September 2006.
- Review workshop of sentinel surveillance units in collaboration with Ophthalmology/ Blindness Control Section, Ministry of Health and Family Welfare; 3 November 2006.
- Workshop on ‘Operational research studies’, supported by ORBIS India; 8–9 November 2006.
Workshop on ‘Strategic planning in eye care’, supported by ORBIS India; 10–11 November 2006.

Dissemination workshop for ‘Rapid assessment of trachoma in India’ in collaboration with Ophthalmology/Blindness Control Section, Ministry of Health and Family Welfare; 9 December 2006.

Workshop for district-level ophthalmologists on ‘Outreach services for childhood blindness’, supported by ORBIS India; 14–16 December 2006.

ORBIS–Dr. Rajendra Prasad Centre workshop on ‘Strategic planning on eye care’; 7–10 February 2007.

Review meeting for the project ‘Epidemiology of age-related eye disease in India (INDEYE)’, supported by London School of Hygiene and Topical Medicine; 14–15 February 2007.

Lectures delivered

The faculty of the centre participated in various scientific forums, delivered 130 lectures including keynote addresses, and chaired 76 scientific sessions.

RESEARCH

Funded Projects

Completed


Ongoing

1. Evaluation of the role of retinal P-glycoprotein drug transporters in the ocular disposition of drugs
2. Evaluation of calcium dobesilate for various ocular conditions
3. Evaluation of the bio-disposition of xanthophylls in Indian donor eyes and detection of their content in commonly available fruits and vegetables
4. Evaluation of the anti-cataract activity of herbal isolates and their topical ocular formulations
5. Expression of p53 and mdm2 in human malignant eyelid tumours
6. Culture of human adult retinal pigment epithelial cells on human amniotic membrane
7. Transplantation of human retinal pigment epithelial cells in the 6-OHDA lesioned rat model of Parkinson disease
8. Novel molecular diagnostics for eye disease and low vision enhancement devices
9. Developments and validation of sensitive high performance liquid chromatography method...
and evaluation of taxanes in various taxus species found in Himalayan region
10. Standardization of antifungal susceptibility testing for filamentous fungi and characterization of drug-sensitive and drug-resistant fungal isolates in mycotic keratitis
11. Clinical evaluation of multifocal intraocular lens ‘Technis Z900’
12. Clinical evaluation of blind and clean contact lens solution
13. Clinical evaluation of Restasis® in dry eye patients
14. Mutation analysis in congenital and developmental glaucoma in North Indian population
15. Comparative genome hybridization in primary angle closure glaucoma families: A pilot study in Indian patients
16. Evaluation of tear-fluid constituents in various ocular pathological conditions using tandem mass spectrometry

Departmental Projects
Completed
1. To evaluate demographic profile and clinical and microbiological spectrum of donor corneas
2. The role of percutaneous vertebroplasty in the management of painful vertebral lesions
3. Evaluation of the role of multi-detector computerized tomography, computerized tomography angiography and bronchial artery embolization in the management of haemoptysis
4. Whole globe retrieval versus corneo scleral button excision: A prospective comparative study for the development of strategies to increase donor cornea procurement
5. Outcome of optical penetrating keratoplasty in bilaterally blind patients
6. Epidemiological study on pterygium in a rural population
7. Comparative evaluation of oral angiography by scanning laser ophthalmoscope and digital camera
8. Optical coherence tomography hole form factor as a predictor of surgical outcome in indocyanine green stained inner limiting membrane peeling in the treatment of full thickness macular holes
9. Scleral buckling versus pars-plana vitrectomy, in patients with rhegmatogenous retinal detachment in phakic eyes, which are not complicated by proliferative vitreoretinopathy grade C or greater (polymerase chain reaction study)
10. A prospective clinical trial comparing transpupillary thermotherapy and photodynamic therapy in treatment of occult subfoveal choroidal neovascularization in age-related macular degeneration with moderate visual loss (<6/18)
11. Prospective randomized evaluation of triamcinolone, trypan blue and conventional induced posterior vitreous detachment during pars-plana vitrectomy
12. Prospective randomized evaluation of optical coherence tomography-guided laser photoagulation in diabetic macular oedema
13. Ofloxacin levels in vitreous of pars plana vitrectomy
14. Retinal detachment surgery versus pars-plana vitrectomy in feckley
15. Optical coherence tomography in the management in diabetic maculoadema

AIIMS 2006-2007 / 679
16. Indocyanine green-assisted ILM peeling in macular hole: Role of optical coherence tomography
17. Surgical outcomes: Diabetic vitrectomy haemorrhage
18. Evaluation of visual status and corneal topography in simple congenital ptosis and its changes after surgery
19. Evaluation of plasma levels of chemotherapeutic agents in responding and resistant cases of retinoblastoma
20. Comparison of full-time and part-time occlusion in moderate amblyopia
21. Comparative study of single muscle surgery versus two-muscle surgery in exotropia
22. Effect of acupuncture on waveform characteristics and visual acuity in idiopathic infantile nystagmus
23. Evaluation of stereopsis in patients with strabismus
24. Traumatic glaucoma evaluation
25. Juvenile glaucoma evaluation
26. Evaluation of optic nerve head topography in normal and glaucoma patients using optical coherence tomography
27. Assessment of retinal nerve fiber layer using scanning laser polarimeter and optical coherence tomography in primary open angle glaucoma
28. Efficacy of chemotherapy on adding cyclosporine to our four-drug regimen in the management of retinoblastoma
29. Evaluation of mitomycin-C application in conjunctival mucosal graft beds in the reconstruction of contracted socket.
30. Clinico-aetiological profile and follow up of children with optic atrophy
31. Ocular changes in patients with hydrocephalus and craniosynostosis
32. Comparison of ocular vision tests in the normal population and colour-deficient individuals
33. Intravitreous drug level assay in retinoblastoma patients undergoing chemoreduction
34. Role of paclitaxel in the management of retinoblastoma
35. Correlation of visual evoked potential with clinical features and severity of ventriculomegaly in hydrocephalus
36. Evaluation of anamnestic membrane graft and mucous membrane graft in the reconstruction of contracted socket
37. Comparison of polymerase chain reaction and standard microbiological techniques in diagnosis of bacterial corneal ulcers
38. Comparison of polymerase chain reaction and standard microbiological techniques in diagnosis of fungal corneal ulcers
39. To compare and evaluate the surgically induced astigmatism in 3.2 mm and 5.2 mm clear corneal temporal sutureless incision phacoemulsification
40. Study of effect of photochromatic lenses on colour vision using Ishihara Charts and Farnsworth–Munsell 100 Hue test
41. Polymerase chain reaction for bacterial ulcers
43. Photo therapeutic keratectomy for corneal disorders

**Ongoing**
1. Role of directional vacuum-assisted biopsy in patients with previously equivocal biopsies for breast masses suspicious for cancer
2. Imaging evaluation of intra-orbital masses causing proptosis
3. Imaging evaluation of locally advanced squamous cell carcinoma of oral cavity
4. Role of magnetic resonance imaging in management of soft tissue sarcomas
5. Evaluation of autologous bone marrow stem cell transplant in idiopathic macular hole surgery
6. Correlation of multi focal electro retino gram and optical coherence tomography in normal population and in refractive errors
7. To compare the safety and efficacy of intravitreous injections of 0.3, 0.03, 0.003 mg Pegaptanib Sodium (Macugen®), in subjects with Diabetic Macular Edema (DME) involving the centre of the macula
8. Double-masked, placebo-controlled, multi-centre, dose ranging study to assess the efficacy and safety of LX211 as therapy in subjects with active sight threatening, non-infectious uveitis (01 and 03) and clinically quiescent sight threatening, non-infectious uveitis (02)
9. Genetic polymorphisms of vascular endothelial growth factor and risk of ‘threshold’ retinopathy of prematurity
10. Vitreous levels of gatifloxacin after systemic administration in inflamed and non-inflamed eyes
11. Functional and anatomical outcomes of vitrectomy for diabetic vitreous haemorrhage with or without retinal detachment
12. Use of autologous bone marrow derived stem cells for rehabilitation of patients with dry age related macular degeneration and retinitis pigmentosa
13. Triamcinolone-assisted macular hole surgery
14. Triamcinolone versus indocyanine green assisted macular hole surgery
15. Comparative study of combination therapies using photodynamic therapy with intra-vitreal triamcinolone vis a vis PDT with intravitreal bevacizumab in treatment of neovascular age related macular degeneration
16. Prospective comparative randomized evaluation of intra-vitreal avastin, intravitreal triamcinolone, and laser treatment in persistent diffuse diabetic macular edema
17. Single nucleotide polymorphisms associated with diabetic retinopathy, PA #/RLS/MDL/DR-01
18. Multifocal electroretinogram in emmetropes, myopes and hypermetropes and its correlation with optical coherence tomography
19. Prevalence of vitamin A deficiency in children and nursing mothers correlated with corneal pathology: A hospital-based study
20. Ulcerative eyelid lesions: Role of impression cytology and a clinicopathological correlation
21. Evaluation of modified levator plication as compared to levator resection for correction of congenital ptosis
22. Evaluation of olopatadine in allergic conjunctivitis
23. Clinical and genetic analysis of the congenital eyelid anomalies in a tertiary care hospital
24. A study to evaluate various parameters for early detection of ethambutol induced optic neuropathy
25. Evaluation of waveform characteristics and visual acuity in infantile nystagmus and the changes induced by its management
26. Evaluation of convergence exercises in cases with convergence insufficiency
27. Evaluation of the role of acupuncture in idiopathic infantile nystagmus
28. Evaluation of stereopsis in cases of strabismus
29. Evaluation of peripapillary nerve fibre layer in pituitary tumours by optical coherence tomography
30. Long term evaluation of heidelberg-retinal tomogram
31. Evaluating trabeculectomy
32. Nerve fiber layer analysis in amblyopia
33. Study on the prevalence, therapeutic options and outcome measures of amblyopia
34. Evaluation of various techniques for early detection of ethambutol induced optic neuropathy and correlating them with serum levels of ethambutol
35. Prospective evaluation of trabeculectomy bleb characteristics using ultrasound biomicroscopy and anterior segment fluorescein angiography
36. Long term changes in heidelberg-retinal tomogram and visual fields in primary adult glaucoma patients
37. Clinical comparison of matrix frequency doubling technology perimetry, standard automated perimetry and scanning laser polarimetry in primary open angle glaucoma
38. Evaluation of aetiopathogenic factors in eyes with primary angle closure
39. Evaluation of combined trabeculectomy with trabeculotomy with mitomycin versus trabeculectomy with mitomycin alone in primary congenital glaucoma
40. Evaluation of ocular toxicity of festival colours during the celebration of Holi
41. Development of animal models for postmenopausal dry eye
42. Development of a poly-herbal formulation for dry eye (computer vision syndrome)
43. Development of topical estrogen or androgen receptor modulator for postmenopausal dry eye using computer-aided drug design
44. Development of microdialysis technique to study intraocular kinetics of drugs
45. Evaluation of cassette dosing technique for the transcorneal penetration of drugs
46. An integrated predictive model for evidence based eye care
47. Rapid assessment of trachoma in a previous hyper endemic rural area of North India
48. Ulcerative eyelid lesions: Role of impression cytology and clinicopathological correlation
49. Assessment of validity of vision screening of school children
50. Drug trial for dry eye patients: A randomized comparative study
51. Role of auto serum in management of dry eye
52. Role of cyclosporin in the management of dry eye
53. Temporal small incision cataract surgery
54. Endothelial evaluation after small incision cataract surgery (both phaco and manual)
55. Prognostic factors for bilateral paediatric cataracts
56. Visual outcome with secondary intra-ocular lens implantation in paediatric bilateral aphakic patients
57. Retinal nerve fibre analysis in normal individuals and optic neuritis cases
58. Tear analysis in optic neuritis cases
59. Assessment of visual acuity in toddlers by behavioural vision tests
60. Oblique muscle weakening procedures
61. Nerve fibre analysis in cases of pituitary tumours
62. Comparative evaluation of visual acuity tests in preschool children
63. Mitomycin-C in restrictive strabismus: A randomized controlled clinical trial
64. Evaluation of visual function recovery following intravenous dexamethasone pulse therapy in optic neuritis with comparative evaluation of early treatment diabetic retinopathy syndrome and Snellen visual acuity charts
65. Evaluation of torsional changes after anterior myectomy of superior oblique
66. Study of psychological aspects of strabismus
67. Medical treatment of amblyopia with levodopa and carbidopa in older children
68. Evaluation of visual outcomes in bilateral congenital cataract
69. Clinical comparison of matrix frequency doubling technology perimetry, standard automated perimetry and scanning laser polarimetry in primary open angle glaucoma
70. Comparative evaluation of Ahmed valve implants and trabeculectomy with mitomycin-C in post-penetrating keratoplasty glaucoma

Collaborative Projects

Completed
1. Validation of algorithms proposed by National AIDS Control Organization for syndromic management of urethral and vaginal discharge in a tertiary care centre in northern India (with Dermatology and Venereology)
2. Radio-frequency ablation of small breast tumours (with Surgical Disciplines)
3. Clinical and radiological evaluation of chest infections in patients with haematological malignancies presenting with febrile neutropenia (with Haematology)
4. To assess the utility of resistive index on Doppler ultrasound in predicting chronic allograft nephropathy (with Nephrology)
5. Prediction of the levels of imatinib mesylate in patients with chronic myeloid leukemia (with Dr. Bhim Rao Ambedkar Institute Rotary Cancer Hospital and Pharmacology)
6. Evaluation of the intraocular penetration of timolol in the in situ gel forming formulation (with Institute of Nuclear Medicine and Allied Sciences, Delhi)
7. Situational analysis of human resource and eye care infrastructure for childhood blindness, refractive errors and low vision in India (with ORBIS International)
8. National Program for Control of Blindness Survey on Rapid Assessment of Trachoma in Mewat and Mahendragarh districts, Haryana (with Blindness Control Division of the Ministry of Health and Family Welfare with the support of World Health Organization)
9. Eye care services in slum areas of Delhi (with Sight Savers International)
10. Reach - in programme for cataract surgeries and pediatric ocular surgeries (with Sight Savers International)
11. Project to estimate work capacities of human resources for Vision 2020 in India (with Sight Savers International)

Ongoing
1. To study the role of core decompression with and without fibular grafting in patients with avascular necrosis of femoral head; and its effects on the disease progression (with Orthopaedics)
2. Determination of plasma levels of morphine and its metabolites and correlation with its pharmacodynamics (with Anesthesia and Dr. Bhim Rao Ambedkar Institute Rotary Cancer Hospital)
3. Epidemiology of age-related eye disease in India-INDEYE (with the London School of Hygiene and Tropical Medicine, UK)
4. Sentinel Surveillance Unit at Dr Rajendra Prasad Centre, AIIMS, under the National Programme for Control of Blindness (with National Program for Control of Blindness, Government of India)
5. Manpower and management development project Lions Club International Foundation (supported by Lions Club International Foundation Sight First)
6. NPCB survey on rapid assessment of avoidable blindness (with Blindness Control Division of the Ministry of Health and Family Welfare, Government of India)
7. Eye care program management project (supported by ORBIS)
8. An open labeled, prospective study to evaluate the efficacy and safety of ReliNethra (an autologous bio-engineered composite limbal epithelial graft) (with Reliance)
9. Limbal stem cell culture: Establishment and standardization of limbal stem cells culture technique according to standard international norms (with Biochemistry)
10. Outcome of optical penetrating keratoplasty in bilaterally blind patients (with Psychiatry)
11. IndEYE study: A collaborative Indo-UK study on the epidemiology of age-related macular degeneration in Indian population (with the London School of Hygiene and Tropical Medicine, UK)
12. Ruboxistaurin mesylate study in diabetic macular edema: A multicentric study to evaluate efficacy of Protein Kinase C inhibitor in diabetic macular edema
13. Flucinolone acetonide intravitreal implant study in uveitic patients: A multicentric, international study to assess the safety and efficacy of two doses of flucinolone acetonide in patients
with posterior uveitis

14. AdREM (Advance Retinopathy Measurement) study: A sub-study of the multicentric, international advance study

15. A randomized double masked, parallel group, multicentre, dose-finding comparison of the safety and efficacy of ASI-001A 0.5 µg/day and ASI-001B 0.2 µg/day flucinolone acetonide intravitreal inserts to sham injections in subjects with diabetic macular edema (with ALIMERA Sciences)

PUBLICATIONS

Journals


43. Pushker N, Bajaj MS, Chaturvedi A, Sen S, Kashyap S. Masquerade lesions of the orbit


Abstracts

Chapters in Books and Monographs


17. Patwardhan S, Patwardhan DC, Aggarwal A, Dada T. Instrumentation for phacoemulsification.


Books and Monographs


6. Dada T, Dada VK, Sethi HS, Dhawan M. Mastering the nucleotomy techniques in phacoemulsification. New Delhi: Jaypee Brothers; 2006.

PATIENT CARE

Hospital services

<table>
<thead>
<tr>
<th></th>
<th>New case</th>
<th>Old cases</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>General OPD</td>
<td>1,04,790</td>
<td>1,18,592</td>
<td>2,23,382</td>
</tr>
<tr>
<td>Emergency</td>
<td>44,045</td>
<td>–</td>
<td>44,045</td>
</tr>
<tr>
<td>Total cases</td>
<td>1,48,835</td>
<td>1,18,592</td>
<td>2,67,427</td>
</tr>
</tbody>
</table>
### Specialty clinics

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cornea</td>
<td>5,047</td>
<td>8,143</td>
<td>13,190</td>
</tr>
<tr>
<td>Lens</td>
<td>574</td>
<td>373</td>
<td>947</td>
</tr>
<tr>
<td>Uvea</td>
<td>677</td>
<td>1,724</td>
<td></td>
</tr>
<tr>
<td>Contact lens</td>
<td>2,401</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glaucoma</td>
<td>566</td>
<td>1,127</td>
<td></td>
</tr>
<tr>
<td>Ophthalmoplasty</td>
<td>2,321</td>
<td>5,746</td>
<td>8,067</td>
</tr>
<tr>
<td>Paediatric ophthalmology</td>
<td>919</td>
<td>445</td>
<td>1,364</td>
</tr>
<tr>
<td>Trauma</td>
<td>817</td>
<td>619</td>
<td>1,436</td>
</tr>
<tr>
<td>Retina</td>
<td>2,094</td>
<td>1,891</td>
<td>3,985</td>
</tr>
<tr>
<td>Neuro-ophthalmology</td>
<td>1,333</td>
<td>866</td>
<td>2,199</td>
</tr>
<tr>
<td>Medical ophthalmology</td>
<td>1,205</td>
<td>1,657</td>
<td>2,862</td>
</tr>
<tr>
<td>Vitreo retinal</td>
<td>2,258</td>
<td>1,363</td>
<td>3,621</td>
</tr>
<tr>
<td>Ocular surface disorder</td>
<td>45</td>
<td>50</td>
<td>95</td>
</tr>
<tr>
<td>Orthoptic</td>
<td>4,980</td>
<td>31,075</td>
<td>36,055</td>
</tr>
<tr>
<td>Squint clinic</td>
<td>5,515</td>
<td>33,159</td>
<td>38,674</td>
</tr>
<tr>
<td>Refraction</td>
<td>847</td>
<td>47,706</td>
<td>47,706</td>
</tr>
<tr>
<td>Total specialty clinic cases</td>
<td>31,010</td>
<td>1,36,606</td>
<td>1,67,616</td>
</tr>
<tr>
<td><strong>Grand total of cases</strong></td>
<td><strong>1,79,845</strong></td>
<td><strong>25,51,98</strong></td>
<td><strong>4,35,043</strong></td>
</tr>
</tbody>
</table>

### Indoor admissions

<table>
<thead>
<tr>
<th>Category</th>
<th>No. of cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>General ward</td>
<td>15,181</td>
</tr>
<tr>
<td>Casualty</td>
<td>1,541</td>
</tr>
<tr>
<td>Private ward</td>
<td>993</td>
</tr>
<tr>
<td>Short admissions</td>
<td>3,196</td>
</tr>
<tr>
<td>Day care admissions</td>
<td>5,075</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>25,986</strong></td>
</tr>
</tbody>
</table>

### Operations

<table>
<thead>
<tr>
<th>Category</th>
<th>No. of cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
<td>13,724</td>
</tr>
<tr>
<td>Day care</td>
<td>4,180</td>
</tr>
<tr>
<td><strong>Total major</strong></td>
<td><strong>18,444</strong></td>
</tr>
<tr>
<td>Minor</td>
<td>5,193</td>
</tr>
<tr>
<td><strong>Grand total</strong></td>
<td><strong>23,637</strong></td>
</tr>
</tbody>
</table>

### Yearly other figures

- Average bed occupancy ratio: 81%
- Average length of stay: 4.8 days
- Average OPD attendance per working day: 1,465
- Average number of indoor admission per working day: 71
- Average number of surgeries per working day: 65
<table>
<thead>
<tr>
<th>Investigative laboratories test</th>
<th>Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluorescein angiography + ICG</td>
<td>5,540</td>
</tr>
<tr>
<td>Ultrasonography</td>
<td>15,538</td>
</tr>
<tr>
<td>EOG</td>
<td>67</td>
</tr>
<tr>
<td>ECG</td>
<td>1,556</td>
</tr>
<tr>
<td>PRP</td>
<td>3,531</td>
</tr>
<tr>
<td>Focimetry (POG)</td>
<td>8,924</td>
</tr>
<tr>
<td>Applanation tonometry</td>
<td>14,156</td>
</tr>
<tr>
<td>Goldmann perimetry</td>
<td>2,454</td>
</tr>
<tr>
<td>Low vision aid</td>
<td>2,066</td>
</tr>
<tr>
<td>Automated perimetry</td>
<td>4,573</td>
</tr>
<tr>
<td>ERG</td>
<td>680</td>
</tr>
<tr>
<td>EUA</td>
<td>80</td>
</tr>
<tr>
<td>VER</td>
<td>4,065</td>
</tr>
<tr>
<td>Keratometry</td>
<td>22,933</td>
</tr>
<tr>
<td>Colour vision</td>
<td>1,645</td>
</tr>
<tr>
<td>LI</td>
<td>6,077</td>
</tr>
<tr>
<td>Ultrasonic pachymetry</td>
<td>6,200</td>
</tr>
<tr>
<td>Non contact tonometry</td>
<td>20,846</td>
</tr>
<tr>
<td>Indirect ophthalmoscopy</td>
<td>4,738</td>
</tr>
<tr>
<td>Nd-YAG laser</td>
<td>1,256</td>
</tr>
<tr>
<td>Laser</td>
<td>1,025</td>
</tr>
<tr>
<td>PDT</td>
<td>362</td>
</tr>
<tr>
<td>TTT</td>
<td>60</td>
</tr>
<tr>
<td>Auto refraction</td>
<td>31,016</td>
</tr>
<tr>
<td>Corneal topography (Orbscan)</td>
<td>2,238</td>
</tr>
<tr>
<td>Axial length</td>
<td>15,586</td>
</tr>
<tr>
<td>Excimer workup (Lasik)</td>
<td></td>
</tr>
<tr>
<td>Lasik (operated) eyes</td>
<td>265</td>
</tr>
<tr>
<td>Lasik (unoperated) eyes</td>
<td>222</td>
</tr>
<tr>
<td>PTK (operated) eyes</td>
<td>75</td>
</tr>
<tr>
<td>PTK (unoperated) eyes</td>
<td>116</td>
</tr>
<tr>
<td>Phakic IOL (operated) eyes</td>
<td>17</td>
</tr>
<tr>
<td>Phakic IOL (unoperated) eyes</td>
<td>30</td>
</tr>
<tr>
<td>Glare</td>
<td>1,012</td>
</tr>
<tr>
<td>Contrast (FACTS)</td>
<td>1,908</td>
</tr>
<tr>
<td>Shirmer</td>
<td>4,100</td>
</tr>
<tr>
<td>BUT</td>
<td>3,225</td>
</tr>
<tr>
<td>Lasik counseling</td>
<td>3,229</td>
</tr>
<tr>
<td>Clinical photograph</td>
<td>1,760</td>
</tr>
<tr>
<td>Orthoptic work-up</td>
<td>250</td>
</tr>
<tr>
<td>Refraction</td>
<td>66,063</td>
</tr>
<tr>
<td>Contact lenses (old + new)</td>
<td>13,077</td>
</tr>
<tr>
<td>Artificial eye</td>
<td>410</td>
</tr>
</tbody>
</table>
Fundus photography 3,632
ENG 4
VNG 119
OCT 6,641
Retinal Camera (Ret. CAM) 310
Cornea service lab (total no. of investigations) 14,427
Cornea Research lab (total no. of investigations) 7,072
Glaucoma service lab (total no. of investigations) 30,822

**Ocular Radiology**
Total number of X-rays 11,863
Total number of CTs 141
(Done in the main Department of Radiodiagnosis)
Total number of special investigations (DCG) 12
Total number of MRIs 51
(Done in the Department of NMR)

**Ocular Microbiology**
Total specimens processed in 2006 12,429
Specimens processed for bacterial culture sensitivity 9,370
Specimens processed for fungal culture 1,675
Specimens processed for acanthomoeba culture 46
Specimens processed for cytology 498
Specimens processed for viral antigen detection 104
Specimens processed for Chlamydia tissue culture 222
Specimens processed for Chlamydia antigen detection by DFA 384
Samples processed for PCR (Chlamydia) 82
Samples processed for PCR (Corneal ulcer and endophthalmitis 10
Specimens processed for Chlamydia serology 8
Samples processed for PCR (HSV) 4
Samples processed for conjunctivitis 26

**Ocular Pathology**
Total number of investigations 33,679
Blood TLC, DLC, PBS, ESR, BT/CT 15,706
Urine 6,707
Histopathology, cytopathology and research 11,266
Ocular Biochemistry (Clinical Chemistry)
Total samples 9,969
Indoor 8,207
Outdoor 1,762

**Ocular Pharmacology and Pharmacy**
Eye drop vials dispensed 62541
MK media vials 80
Eye Bank
Total eyes 827
Surgery performed 422
Unsuitable for clinical 367
Transplantation
Preserved in glycerine 21
Histopathology/stem cell culture 17

Community Ophthalmology
Eye care services in slums
Number of slums covered for comprehensive eye care services 10
Number of attendees at PEC clinics in slum clusters 7,342
Number of refractions carried out in PEC clinics in slum clusters 3,045
Number of patients referred to R.P. Centre 783
Number of subsidized spectacles issued in slums 1,503

Reach-in programme
Adult screening camps organized 18
Patients examined 6,601
Patients referred at R.P. Centre 2,065
Patients operated at R.P. Centre 1,462
Follow up camps organized 1
Follow up patients examined 1,272*
Pediatric screening camps organized 1
Children examined 310
Children referred at R.P. Centre 55
Children operated at R.P. Centre 9

School eye screening programme
Schools covered 20
Teachers trained 30
Students examined 1580
Spectacles prescribed 449
Spectacles issued 449

*This figure also includes patients who have been operated in the previous year.

AWARDS AND HONORS
Professor S. Ghose invited by the DGHS to be a member of the Expert Committee at the central level to prepare guidelines for states regarding examination of children admitted to blind schools
and treatment of those who can be restored vision; Coordinated Eye Camps by Dr R.P. Centre for eye screening, cataract and other specialty eye surgeries, under the National Programme for Control of Blindness (NPCB), Ministry of Health and Family Welfare, Government of India, together with the National Rural Health Mission (NRHM), April 2006; International Reviewer for the Journal of the College of Physicians and Surgeons, Pakistan, (JCPSP); Expert Member, Selection Committee of PGIMS, Rohtak for the posts of Professors in the Department of Ophthalmology, April 2006; Resource Person, National Forum of Vision 2020: The Right to Sight—India for LRSP Workshop, Goa, April 2006; External Examiner for MD Ophthalmology Clinical and Practical Examinations, Institute of Medicine, Tribhuvan University, Kathmandu, Nepal, May 2006; Expert Member, Personality Testing Board, Union Public Service Commission (UPSC), New Delhi, July 2006; Member, Dean’s Committee constituted for review and revision of the guidelines for evaluation of thesis for PhD degree, AIIMS; Resource Person, International Conference on Planning and Designing of Healthcare Facilities Conference, Goa, September 2006; Member, Inspection Board of the Medical Council of India for Era’s Lucknow Medical College and Hospital, Lucknow, October 2006; Resource Person, XXXVII Annual Conference and Scientific Programme of the Ophthalmological Society of West Bengal, Haldia, November 2006; Chief Guest and Chairman of the Symposium on Childhood Blindness at the Regional Institute of Ophthalmology (RIO), Sitapur, UP, February 2007; Reviewer for Indian Pediatrics, Indian Journal of Pediatrics and Indian Journal of Ophthalmology; Reviewer for Projects submitted to Indian Council of Medical Research, Department of Science and Technology and Council for Scientific and Industrial Research 2005–2006; Expert Member of the Technical Advisory Group for Projects submitted to District Rehabilitation Centre Scheme, Ministry of Social Justice and Empowerment, Government of India; Expert Member to help the Sectional Committee of Ophthalmic Instruments and Appliances, MHD 5, Bureau of Indian Standards.

**Professor Rajvardhan Azad** WHO Consultant for Government of Maldives for policy making and preparing plan of action for Vision 2020 in Maldives, 2006; WHO Consultant for a workshop on Toxoplasmosis at Indira Gandhi Memorial Hospital in Maldives, organized jointly by World Health Organization and Government of Maldives; Appointed WHO short term consultant for Government of Maldives for policy making and preparing plan of action, December 2006; Expert Standing Selection Committee, Postgraduate Institute of Medical education and Research, Chandigarh, 2006; Member, Selection Committee, UPSC, New Delhi, 2006; Member Selection Committee, Rajendra Institute of Medical Sciences (RIMS), Ranchi, Jharkhand, 2006; Trainer, National Programme for Control of Blindness, Vitreo-retinal Surgery and Medical Retinal treatment, 2006; appointed Consultant to Sight Savers International to evaluate ROP Project in LV Prasad Eye Institute, Hyderabad, November 2006; Member of the Executive Council of X Asia Pacific Academy of Ophthalmology (APAO) 2006-2007; Regional Secretary of Asia Pacific Academy of Ophthalmology (APAO) 2006-2007; Secretary General, All India Ophthalmological Society, 2006-2007; Member Reviewers Committee, Indian Council of Medical Research (ICMR), August 2006-2007; Resource Person, ORBIS Dissemination workshop on mapping of human resources
and infrastructure for specialty eye care services in India, AIIMS, New Delhi, 2006; Secretary General of SAARC Ophthalmic Congress, 2006–2007; Special Guest to deliver SAARC Oration in inauguration of SAARC Ophthalmic Congress, Sri Lanka, 2006; Guest Faculty in 8th Ophthalmological SAARC Countries 15th Annual session of the College of Ophthalmologists, Sri Lanka, September 2006; Chief Guest and Faculty: Live surgical demonstration at Drishti Eye Care and Research Centre, 2006; Awarded M.M. Joshi Oration Medal at the 6th Deccan Opthalmic Association, Mahableshwar, 2006; delivered ‘NEOS-ORATION’ on Retinopathy of Prematurity during the first convention of North Eastern Ophthalmic Society, Shillong, October 2006; Guest Faculty, South East Asia Novartis Advisory group meeting in Kuala Lumpur, Malaysia, March, 2006; Guest Faculty, Inaugural meeting of APVRS and VI International Symposium of Ophthalmology, Hong Kong, August 2006; Reviewer Indian Journal of Ophthalmology, Clinical and Experimental Ophthalmology, Journal of American Academy of Pediatric Surgery (JAAPSO) and Archives of Medicine, 2006; Chairman, Ophthalmology Section, Bureau of Indian Standards (BIS) Ministry of Agriculture Food and Civil Supplies, Consumer Affairs and Public distribution, March 2007; delivered ‘De O’Campo Oration’ during the 22nd Congress of Asia Pacific Academy of Ophthalmology at Lahore, Pakistan, 24–28 February 2007; Honorary Advisor/Consultant to Armed Forces Medical Services in Ophthalmology; Member, Staff Council, AIIMS; Member, Dean’s Committee, AIIMS.

**Professor S.P. Garg** co-author of ‘S. NATARAJAN’ Award for best free paper in retina session at AIOS 2007; co-author of ‘Certificate of Merit’ Award for best free paper presentation at DOS 2007.

**Professor Anita Panda** Editorial Board Member, Journal Expert Ophthalmology; elected as Executive member EBAI; Reviewer for Cornea and Indian Journal of Ophthalmology.

**Professor Yog Raj Sharma** Member, Staff Council, AIIMS, 2006–2007; Expert- Sher-I-Kashmer Institute of Medical Sciences, Apical Selection Committee; Peer Reviewer: Ophthalmology (Journal of American Academy of Ophthalmology), 2006; Reviewer, Trauma abstracts submitted for paper/poster presentation at AIOS ’07, Hyderabad;

**Professor Atul Kumar** awarded ‘Padma Shri’, January 2007; Awarded Fellowship of National Academy of Medical Sciences, India, October 2006; Reviewer Indian Journal of Ophthalmology 2006 and Journal of Ocular Pharmacology and Therapeutics, USA, 2006; Member Selection Committee Union Public Service Commission, 2006; Member of Stem Cells Committee, AIIMS, September 2006; Member, Indo-US Joint Working Group on the Expansion of Vision Research—a joint collaboration with Department of Biotechnology, 2006.

**Professor Pradeep Sharma** awarded ORBIS faculty post at Lions NAB Eye Hospital, Miraj, Maharashtra for Pediatric Ophthalmology and Strabismus, April 2006; Awarded Dr Ishwar Chandra


Professor Radhika Tandon nominated as International Health Professional of the Year International Biographical Centre, Cambridge, England; Member of Task force in the priority areas of the Blindness Programme in All India Ophthalmological Society; Moderator in Annual Conference organized by Syntho Pharmaceuticals Pvt. Ltd., 1–3 September 2006; Co-convenor VIIIth Ophthalmological Conference SAARC countries in Colombo, Sri Lanka, 20–24 September 2006; Co-chairperson Phacoemulsification and Refractive surgery, overcoming intraoperative challenges, 19 November 2006; Panel member in workshop Cornea 2006 on focus – Paediatric Cornea and Keratorefractive Surgery, 10 December 2006; Moderator in AIIMS Golden Jubilee Celebration on 23rd July 2006; Co-instructor in ‘Keratoprosthesis: Looking Beyond Corneal Transplantation’ for AIOS 2007, 2 February 2007; continued to be: Member of the core group for introduction of OSCE-style examination by the National Board of Examination; Chairperson of North Zone of Eye Bank Association of India; Member, panel of examiners in Ophthalmology of Royal College of Surgeons, Edinburgh.

Professor S. Khokhar selected as surgeon in-charge for RIO Calcutta live surgery session under the project ORBIS for Pediatric cataract surgeries, 23 November 2006; elected as General Secretary for the SSI (Strabismological Society of India) 2006-2008.

Dr Shakti Kumar Gupta Member, Project Management Committee constituted by Ministry of
External Affairs, Government of India, for establishing 200 bedded Trauma Centre at Kathmandu Nepal; Member, expert committee for upgradation of National Referral Hospital at Thimpu and Regional Referral Hospital, Monger, Bhutan; Member of the committee for preparation of training module/curriculum for in-service training of Hospital Managers and Professionals; Resource Person for research activities conducted by Centre for Management of Health Services, Indian Institute of Management, Ahmedabad; Member, Bureau of Indian Standards for developing Indian standards for hospital equipment management and quality assurance standards for patient care services; Member of the Expert Committee constituted by Ministry of Health and Family Welfare, Government of India regarding establishing six AIIMS like Institutions and Upgradation of 13 Medical colleges under Pradhan Mantri Swasthya Suraksha Yojna; Member, Working group on Clinical establishments, Professionals services, Regulations and Accreditation of Health Care Infrastructure by Planning Commission for the XI Five-Year Plan (2007–2012).

Dr G.V.S. Murthy technical consultant for the National Nigeria Blindness and Low Vision Survey; Technical Advisor on the ORBIS POLTC Project and RIO Project; Member of the Editorial Board of the Journal of Community Eye Health (2006–2007); Reviewer for *Indian Journal of Ophthalmology, International Ophthalmology, The National Medical Journal of India, Journal of Community Eye Health, Acta Ophthalmologica International Ophthalmology and Visual Science; Member of Reviewer’s panel of British Journal of Ophthalmology; and Lancet; President, Indian Alumni Group of ICEH, London; Member, Academic Resources Advisory Committee of the National Programme for Control of Blindness; Member, Editorial Board of National Programme for Control of Blindness Bulletin; Member, Editorial Board of the *Journal of Community Eye Health* (Indian Edition) and Journal of Ophthalmology, Uttar Pradesh; Secretary, Eye Care Initiative, a forum for public health ophthalmologists in India; Member of India Clinical Epidemiology Network; Member of the Operational Research Advisory Group of Vision 2020 India; Member of the WHO Global Monitoring Committee of Implementation of Vision 2020 Initiative (2005); and invited faculty for the Community Eye Health Diploma course at the L.V. Prasad Eye Institute, Hyderabad since 2005.

Dr Rajpal co-author of ‘S. NATARAJAN’ Award for best free paper in retina session, AIOS, 2007; co-author of ‘Certificate of merit’ Award for best free paper presentation, DOS, 2007; Co-author of AC AGARWAL Trophy, DOS, 2006; Executive member of Ocular Trauma Society, North Zone; Appreciation award for Mega Blood Donation Camp during Dengue outbreak in association with Dera Saccha Sauda volunteers, AIIMS; appreciation award from DOS; Editor *Delhi Journal of Ophthalmology*; Advisor on Stem cell research in NCRM in collaboration with Japan.

Dr Namrata Sharma best of show award for scientific video entitled: Keratoplasty: The bonds strengthened by the American Academy of Ophthalmology at the Annual meeting of AAO, Las Vegas, USA, November 2006.
Dr Tanuj Dada distinguished Resource Teacher award by the Delhi Ophthalmological Society; Global Editor–Glaucoma section of *Ophthalmology World Report*; Reviewer for (i) *Journal of Cataract and Refractive Surgery*; (ii) *Acta Ophthalmologica*; (iii) *Clinical and Experimental Ophthalmology*; and (iv) *Indian Journal of Ophthalmology*.

Dr T. Velpandian selected as Secretary of Indian Pharmacological Society (Delhi Branch); nominated as Chief Editor of *Indian Journal of Hospital Pharmacy*.

Dr Praveen Vashist invited faculty for the Community Eye Health Diploma course at the L.V. Prasad Eye Institute, Hyderabad since 2005; Reviewer for the *Indian Journal of Ophthalmology*, 2006.

Dr Jasbir Kaur Expert Member, Task Force, Central Council for Research in Ayurveda and Siddha, New Delhi.


Dr Tushar Agarwal awarded Best of Show Award for scientific video entitled Keratoplasty: The bands strengthened by the American Academy of Ophthalmology at the Annual meeting of AAO, Las Vegas, USA, November 2006.

Dr Parijat Chandra Reviewer, *Indian Journal of Ophthalmology*; and *Journal of Post Graduate Medicine*.

**SIGNIFICANT EVENTS**
The Centre has taken big strides in improving the quality of services delivered to patients.

The Centre has almost completed the formalities and process of reaccreditation with the WHO to continue as their Collaborating Centre for Prevention of Blindness (PBL) for another 4 years.

World Health Organization recognizes Dr Rajendra Prasad Centre for Ophthalmic Sciences as a member of International Sun Monitoring project (INTERSUN).

DST-FIST Grant at Level I to support the Dr Rajendra Prasad Centre for Ophthalmic Sciences with major infrastructure for an advanced bioanalytical facility with LC-MS/MS to further upgrade facilities at the Ocular Pharmacology Division.

Stem cell culture/Tissue and cell culture facility has been established at Ocular Biochemistry.
Protenomics and Genomics laboratory is being established in Ocular Biochemistry,

Harvesting and culture of limbal epithelial stem cell has been started (Eye Bank).

National Eye Donation Fortnight, 25 August–8 September 2006. During this period 34 eyes were received and 15 pledges were made for eye donation.

Extended studies on *Holi*, the colours used and their toxicities to educate the public.

The World Health Organization (Head Quarters) evaluation team visited the Dr. Rajendra Prasad Centre for Ophthalmic Sciences for global evaluation of WHO’s work

**VISITING SCIENTISTS**
1. Amakelech Altaye Gebrehana, Medical Equipment Technician, Ethiopia
3. Daniel Singh, Technician, Guyana
4. Dwayne Adams, Electrical Technician, Guyana
5. Gordon Johnson, former In-charge of International Centre for Eye Health, London
6. Kiphu Gado, Bio-Medical Technician, Bhutan
7. Mutasim Khalil Md Hassan, Training Supervisor, Sudan
8. Md Yagoub Ibrahim Esmail, Engineer, Sudan
9. Sandeep Kaushal, Indian National Science Academy (INSA) Fellow
10. Tianasoa Heriniaina, Laboratory Technician (IMRA), Madagascar
11. Titya Ngeth, Medical Technician, Cambodia
10.7 Jai Prakash Narain Apex Trauma Centre

Chief
M.C. Misra

Additional Medical Superintendent
Sanjay Arya

Assistant Professors

<table>
<thead>
<tr>
<th>Babita Gupta (Anaesthesia)</th>
<th>Chhavi Shawney (Anaesthesia)</th>
<th>Sanjeev Bhoi (Emergency Medicine)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shefali K. Sharma (Emergency Medicine)</td>
<td>Vinay Gulati (Emergency Medicine)</td>
<td>Adarsh Kumar (Forensic Medicine)</td>
</tr>
<tr>
<td>Sanjeev Lalwani (Forensic Medicine)</td>
<td>Purva Mathur (Laboratory Medicine)</td>
<td>S. Arul Selvi (Laboratory Medicine)</td>
</tr>
<tr>
<td>Deepak Agrawal (Neurosurgery)</td>
<td>Deepak K. Gupta (Neurosurgery)</td>
<td>G.D. Satyarthee (Neurosurgery)</td>
</tr>
<tr>
<td>Sumit Sinha (Neurosurgery)</td>
<td>S. Dwarkanath (Neurosurgery)</td>
<td>Buddhadev Chaudhary (Orthopaedics)</td>
</tr>
<tr>
<td>John R. Bera (Orthopaedics)</td>
<td>Kamran Farooque (Orthopaedics)</td>
<td>Vijay Sharma (Orthopaedics)</td>
</tr>
<tr>
<td>Vivek Trikha (Orthopaedics)</td>
<td>Atin Kumar (Orthopaedics)</td>
<td>Shivanand G (Radiodiagnosis)</td>
</tr>
<tr>
<td>Amit Gupta (Surgery)</td>
<td>Biplab Mishra (Surgery)</td>
<td>Maneesh Singhal (Surgery)</td>
</tr>
<tr>
<td>Subodh Kumar (Surgery)</td>
<td>Sushma (Surgery)</td>
<td></td>
</tr>
</tbody>
</table>

EDUCATION
The centre started functioning on 27 November 2006. The faculty, residents, nursing and other staff members selected for the centre, have started working at the center. The faculty members have been actively involved in the teaching and training programmes of the center which started with orientation of all the residents, nursing and other staff members to work in a trauma center. The faculty has developed modules for the basic/advanced life support, and initial emergency management of trauma patients and the same is being imparted to all the clinical and paraclinical staff of the center.
The faculty is involved in undergraduate and postgraduate teaching.
Pre-Hospital Safe Transportation Workshop for Delhi Police

Continuing the tradition of community education, the faculty of the JPN Apex Trauma Center organized a one-day workshop for the Delhi Police personnel stationed in the PCR vans of Delhi. Since it was observed that in most of the roadside accident cases, the police PCR vans were the first to respond and transport the patient to hospitals, there was an urgent need to educate the police personnel in basic skills of patient transfer.

The workshop was aimed at imparting practical skills to the police personnel to safely transport trauma victims to the nearest medical facility. A total of 55 policemen were trained in the workshop. The centre has taken steps to make this workshop a regular feature and also to extend the basic life support skills to school students and general public through various agencies.

Continuing Medical Education

Lectures delivered

Professor M.C. Misra

- Professor B.B. Ohri Memorial Oration of the M.P. Chapter of Association of Surgeons of India at its 25th Annual Conference, the Sri Aurobindo Institute of Medical Sciences, Indore; 16–18 February 2007.
‘Newer developments in minimal access surgery’, 32nd Annual Conference of Association of Surgeons of India (UPASICON 2006) and Live Workshop, the MLN Medical College and S.R.N. Hospital, Allahabad; 3–5 November 2006. Performed Live demonstration of ‘Difficult laparoscopic cholecystectomy and laparoscopic incisional hernia repair’.


‘Laparoscopic vs. open repair of incisional and primary ventral hernia: Results of a prospective randomized study’, Faculty research presentation meeting on Tuesday, 17 October 2006.

‘Newer horizons in minimally invasive surgery’, Dr H. Lalmohan Singh Memorial Oration, 11th Annual Conference of the Association of Surgeons of India, Manipur State Chapter, Regional Institute of Medical Sciences, Imphal; 7–8 October 2006. Panel discussion on Laparoscopic Surgery.


Faculty at the International integrated meeting of Indian Association of Surgical Oncology (IASO) with World Federation of Surgical Oncologic Societies (WFSOS), IMS, BHU, Varanasi; 21–24 September 2006.

Paper on ‘Laparoscopic vs. open repair of incisional and primary ventral hernia: Results of a prospective randomized study’ and ‘Total extra-peritoneal (TEP) repair of groin hernia: Prospective evaluation at a tertiary centre’, 10th World Congress of Endoscopic Surgery and 14th International Congress of the European Association for Endoscopic Surgery (EAES), Hotel Estrel, Berlin, Germany; 13–16 September 2006.


‘Newer strategies in the management of soft tissue sarcoma’, CME, ASICON Surgical Foundation, Jaipur Golden Hospital, Delhi; 28 May 2006.

‘Advanced laparoscopic procedures’, Surgery Update 2006, Dr STM Forest Hospital, Haldwani, Nainital; 9 April 2006.

Dr Sheffali K. Sharma

‘Churg strauss syndrome—an unusual presentation’, Delhi Rheumatology Association meeting; December 2006.

Dr Vinay Gulati
• Viral infections in HIV”, AIIMS–UCLA Collaborative Project on ‘Recent advances in the management of HIV/AIDS’, AIIMS under the directorship of John L. Fahey from UCLA, USA; 7 October 2006.

Dr Adarsh Kumar
• Delivered guest lectures to Police Officers from India as well as abroad during Advance Course on Scientific Investigations through Central Detective Training School, Chandigarh; 10–11 January 2007.

Dr Sanjiv Lalwani

Dr Deepak Gupta

Dr Kamran Farooque
• ‘Thoraco—lumbar fractures’, Spine Symposium, A.O., Synthes, India, Maharaja Agarsen Hospital, New Delhi; June 2006.
• Scoliosis at Deformity Workshop, Johnson and Johnson and Depuy spine; 9 September 2006.

Dr Vijay Sharma
Dr Vivek Trikha
• ‘Tuberculosis of coccyx’, First musculoskeletal infection section conference of Asia Pacific Orthopaedic Association, Khajuraho, India; 25–27 August 2006.
• ‘Soft tissue tuberculosis’, First Musculoskeletal Infection Section Conference of Asia Pacific Orthopaedic Association, Khajuraho, India; 25–27 August 2006.

Dr Atin Kumar

Dr Shivanand Gamanagatti

Dr Amit Gupta
• Course faculty: National Trauma Management Course, Department of Medical Health Services and State Disaster Management Authority, Government of Uttar Pradesh, Ghaziabad; 30 November–3 December 2006.
• ‘Trauma shock’, TREAT–India, Central Railway Hospital, Byculla, Mumbai; 4–5 October 2006.
• ‘Emergency management of head injuries’, National Trauma Management Course, Department of Medical Health Services and State Disaster Management Authority, Government of Uttar Pradesh, Lucknow; 13–14 September 2006.
• ‘Recent trends in trauma management’, Surgery Update 2006, Department of Surgery, Dr S.T.M. Forest Hospital, Haldwani, Uttarnchal, India; 9 April 2006.

Dr Maneesh Singhal
• Live lectures on ‘Gyan Vani’, National Board of Examination.
Dr Subodh Kumar

- ‘Colo-rectal cancer—Role of minimally access surgery’, Colo-rectal cancer, Max Devki Devi Hospital, New Delhi; 18 November 2006.

Dr Sushma

- ‘Newer strategies in the management of soft tissue tumour’, Surgicon 2006, RML Hospital, New Delhi; 26 October 2006.

RESEARCH

Funded Projects

Ongoing

1. Feasibility study on injury and road traffic injury surveillance. M.C. Misra, Amit Gupta (Surgery). Funded by MoHFW–WHO–ICMR for 6 months. Funds: Rs 2.5 lakh
2. To study the sensitivity and specificity of parasite LDH versus conventional microscopy in evaluation of bedside diagnosis of Malaria. Sanjeev Bhoi (Emergency Medicine). Funded by AIIMS for 1 year. Funds: Rs 50,000.
3. Incidence of deep venous thrombosis (DVT) among patients admitted in medical wards and intensive care unit (ICU) of a tertiary care hospital. Vinay Gulati, Atin Kumar (Emergency Medicine) Funded by Pfizer India for 1 year. Funds: Rs 5 lakh.
8. ‘Phase II multi-centre, open-label, active-controlled, randomized parallel-group dose finding trial’ to evaluate the efficacy and safety of two doses of an antisense oligonucleotide in adult patients with recurrent high-grade glioma, administered intratumorally as a continuous high-flow microperfusion over a 7-day period every other week. Deepak Gupta. Funded by SIRO Clinpharma, Mumbai (Antisense Pharmac Gmbh, Germany) for 2 years. Funds: Rs 20 lakh.

9. 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) by Peregrine Pharmaceuticals, Texas, USA. Deepak Gupta. Funded by Siro clinpharma, Mumbai (Peregrine Pharmaceuticals, Texas, USA) for 3 years. Funds: Rs 5 lakh.


Completed

2. Three port vs. four port laparoscopic cholecystectomy: A prospective randomized controlled study. M.C. Misra.

Departmental Projects
Dr Vinay Gulati

1. Study of neurocognitive impairment and atherogenesis in Indian subjects with Obstructive Sleep Apnea
2. Study the efficacy of DMARDs on lipid profile in rheumatoid arthritis patients with special reference to Lipoprotein (a) and Oxidized LDL
3. Treatment efficacy, clinical characteristics, laboratory features and outcome in ART Clinic, AIIMS
4. Molecular and Immunological studies in patients with obstructive sleep apnea syndrome
5. Molecular studies of differentially expressed hypoxia sensitive proteins in patients with obstructive sleep apnea
6. Role of vitamin D receptor genetic variants in susceptibility to development and severity of pulmonary tuberculosis
7. Role of mitochondria in an experimental atopic asthma in mice

**Dr Amit Gupta**
1. A study of quality of life of live related renal donors
2. Protocol biopsy in live related renal transplant recipients: tacrolimus versus cyclosporine

**Dr Biplab Mishra**
Feasibility of fast track discharge in breast cancer patients undergoing definitive surgery and impact on quality of life

**Dr Maneesh Singhal**
Fast tract Thyroidectomy

**Dr Subodh Kumar**
Post-cholecystectomy symptoms following laparoscopic cholecystectomy: A prospective study

**Dr Sushma**
Expression of beta hCG in benign and malignant breast diseases.

**PUBLICATIONS**

**Journals**


24. Kumath M, Kumar A, Lalwani S, Murty OP. Legal immunity in accidents (From victims...


57. Malhotra R, Garg B, Singh S, Sharma V. Backing out of locking screw-implant failure or
76. Shivanand G, Kandpal H, Mishra V. Pancreatitis complicated by intrasplenic and intrahepatic


Abstracts

Chapter in Book

AWARDS, HONOURS AND SIGNIFICANT EVENTS
Professor M.C. Misra established Minimally Invasive Surgery training Centre at the Department of Surgical Disciplines, AIIMS in collaboration with University of Tuebingen, Germany. The centre was inaugurated, 26 March 2007; Course Director, Training Course in Operative laparoscopy–Basic and Advance, the Department of Surgical Disciplines, AIIMS, New Delhi, 26–30 March 2007; Organizing Chairman, First AIIMS Surgical Week, International Conference, CME and Live Workshop, AIIMS, 26–31 March 2007; Organized Joint Meeting between Department of Surgical Disciplines and The Surgical Section of Royal Society of Medicine, UK, Dr V. Ramalingaswami Board Room, AIIMS, 3 March 2007; Organized CME under ASICON Foundation of Delhi State Chapter of Association of Surgeons of India; 25 February 2007; Organized Monthly Meeting, Delhi State Chapter, Association of Surgeons of India, AIIMS, 17 February 2007; Conference President: Mid-Term Conference of Indian Hernia Society and Live Workshop, Hernia Update 2007, Hotel Centre Point, Nagpur, 20–21 January 2007; IMRCS Examiners’ Training Course, the AIIMS; 20–21 May 2006.


Dr Adarsh Kumar joint Secretary, Indian Congress of Forensic Medicine and Toxicology; Joint Secretary (North Zone), Indian Academy of Forensic Medicine (2006–2008); Deputy Executive Editor (Scientific), International Journal of Medical Toxicology and Legal Medicine; Associate Editor, Journal of Forensic Medicine and Toxicology; Assistant Editor, Indian Internet Journal of Forensic Medicine and Toxicology; Member, Organizing Committee for 7th International Conference of ICFMT, i.e. SAFCON-2007 which was organized, JLN Medical College, Aligarh, 24–25 March; Joint Organizing Secretary for Symposium on ‘Emerging Trends in Medical Toxicology’, AIIMS, 27–28 January 2007.

Dr Sanjiv Lalwani participated in training programmes organized by CBI Academy, Ghaziabad, LNIN National Institute of Criminology and Forensic Sciences, Haryana Institute of Rural Development, Nilokheri, Karnal (HR) and Amity Institute; Organizing Secretary, Symposium on Emerging Trends in Medical Toxicology, AIIMS, 27–28 January 2007; Executive Secretary (Liaison), South Asian and Annual Conference of ICFMT was organized at JLN Medical College, Aligarh, UP, 24–25 March 2007; Executive Member-Indian Congress of Forensic Medicine and Toxicology; Deputy Executive Editor-Journal of Forensic Medicine and Toxicology Associate Editor-International Journal of Medical Toxicology and Legal Medicine; Reviewer-Journal of Forensic Medicine and Toxicology, International Journal of Medical Toxicology and Legal Medicine.

Dr Deepak Agrawal awarded the prestigious ISPN scholarship for presenting research titled ‘Complex split-cord malformations—the untold story’ at the annual ISPN meeting, Taipei, Taiwan, 2006.
September 2006; Co-author for the study titled ‘Safety and feasibility of convention enhanced intratumoral immunotherapy in recurrent high grade gliomas: Initial experience in 17 cases’ which won the best paper award at the 4th South Asian Neurosurgical Congress (SANC), New Delhi, India, 15–18 February 2007; Co-author of the study titled ‘Role of Gamma-Knife in Glomus Jugulare Tumours’ which won the ‘Herbert Krause Gold Medal in Neuro-oncology’ at the annual conference of NSI, Madurai, India, 20–24 December 2006; was also instrumental in getting a development grant of more then a crore rupees from DST under the ‘FIST’ scheme for the department of Neurosurgery; Founder Member: Indian Society for Trauma and Acute Care.


**Dr Kamran Farooque** convener of Souvenir committee in IOACON 2006, annual conference of Indian Orthopedic Association; Convener of Poster committee in IOACON 2006, annual conference of Indian Orthopedic Association; Joint secretary of organization committee of Indo-US Emergency Medicine Summit-2006; Executive member of ‘Spine Workshop’ in IOACON 2006.

**Dr Vijay Sharma** awarded MRCSed after passing the final exam in November 2006 by The Royal College of Surgeons of Edinburgh UK; Member Organizing Committee IOACON-2006, AIIMS, New Delhi; Member Organizing Committee Indo-US Emergency Medicine Summit-2006; Successfully completed AO basic course, Pune, 2006; Successfully completed Microsurgery Course, Coimbatore, 25–30 March 2007.

**Dr Vivek Trikha** executive member of Organizing Committee IOACON 2006 (Annual conference of Indian Orthopedic Association) organized by the Department of Orthopedics, 9–15 November 2006.

**Dr Amit Gupta** nominated as Member Core Committee: National Disaster Management Guidelines–Medical Preparedness and Mass Casualties Management (NDMG-MPMC). National Disaster Management Authority, Government of India; Visiting Faculty: National Trauma Management Course. (Academy of Traumatology- IATSIC); Founder Secretary-Treasurer: Indian Society of Trauma and Acute Care; Executive Member: Indian Hernia Society; Instructor: BLS/ACLS Course of American Heart Association. Indian Node, Ahmedabad, India; Instructor: ITLS Course of the American College of Emergency Physicians. Indian Node, Pune, India; Workshop Director: Trauma Alert Assembly, Indo-US Emergency Medicine Summit 2006; Workshop

**Dr Biplab Mishra** faculty in CME for examination of DNB candidates, organized by NBE, Safdarjung Hospital; 16 February 2007; Attended Microsurgery Training Course, Ganga Medical Center and Hospital, Coimbatore, 26–30 March 2007.

**Dr Maneesh Singhal** appraiser for Diplomate of National Board, National Board of Examinations; Involved in formation of training module for general practitioners made by National board of examinations.

**Dr Subodh Kumar** founder member and Joint Secretary: Indian Society for Trauma and Acute Care; Joint Secretary: Indian Hernia Society; Joint Secretary, First AIIMS Surgical week and Endosurg-2007, International CME cum Live Workshop; 26–31 March 2007.

**Dr Sushma** founder member: Indian Society for Trauma and Acute Care; Joint Secretary: First AIIMS Surgical week and Endosurg-2007, International CME cum Live Workshop; 26–31 March 2007.

**VOLUNTARY COMMUNITY SERVICE**
Dr Babita Gupta provided voluntary medical community services, Mahavir Samaj Sangh, New Delhi for 3 days.

**CENTRAL FACILITIES**
**Emergency Room**
State of the art emergency room with eight resuscitation bays, Observation and Triage area. Facility for managing more than 20 critically injured patients at a time and many more relatively stable patients.

**Operation Rooms**
Presently 2 operating rooms are fully functional. Both major and minor cases are being performed. The remaining 3 operating rooms are nearly ready to be started.
In-patient
Two wards (each 30 bedded) are functional at present.

Imaging Centre
Multislice CT scanner (Somatom sensation 40) 1
Mobile X-ray units 2
Heavy duty automatic processors for radiography 2
MRI (1.5 Tesla) 1
C–Arm X-ray unit with 3-D facility for OT 1
Digital flat panel 1
Colour Doppler ultrasound unit 2

Laboratory Medicine
Hematology
Biochemistry
Microbiology and infection control

Blood Bank
Physiotherapy
Seven physiotherapists
Inpatient and outpatient facilities

PATIENT CARE
Total number of Patients
Attended J.P.N.A. trauma centre 1,700
Admitted in J.P.N.A. trauma centre 625
Operated in J.P.N.A. trauma centre 442

Emergency attendance
1700 Neurosurgery Admissions Operation
87 391 147 625 263 92 355

Imaging Center JPN Apex Trauma Centre
Details of investigations performed (November 2006–31 March 2006) X-rays
Digital 3,786
Portable 99
C-arm studies 146
Ultrasound 470

Computed Tomography (CT)
Trauma centre patients 461
Main hospital patients 535

**MRI**
Trauma centre patients 218
Main hospital patients 49
**Grand total** 5,764

**Blood Bank**
Total samples received 182
Total blood cross-matched 266
Total blood issued 122
Components issued 23

**Laboratory Medicine**
Tests conducted (November 2006–31 March 2006)

**Hematology**
Total tests conducted 10,190

**Biochemistry**
Total tests conducted 4,863

**Microbiology**
Culture: Total samples 263
Bacterial identification 185
Antibiotic sensitivity 185
HIV serology 33

Hepatitis B serology 33
Hepatitis C serology 31
Hospital infection surveillance cultures 105
Miscellaneous 12
Routine and microscopic examination of urine 62

**Physiotherapy**
Number of physiotherapy sessions for indoor patients:
Orthopaedics 1,907
Surgery 931
Neurosurgery 268

**Number of physiotherapy sessions for outdoor patients:**
New cases + old cases 583
11.1 B.B. Dikshit Library

Professor-in-charge
Rani Kumar

Chief Librarian
R.P. Kumar

Education
Continuing Medical Education
Timings and membership
The library is being kept open round the clock (24 hours) on all days of the week including Sundays and holidays w.e.f. 1 August 2003. It has 2,300 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 are not only modernized and updated but also further strengthened.

1. Books alert service
This is a monthly service, listing of new books, monographs and pamphlets added to the library in a particular month.

2. Periodical alert service
This is a fortnightly service, listing of new periodicals received in the library during the previous fortnight.

3. Bibliographies on demand
The staff of the library compiled bibliographies on various topics as and when demanded by the readers.

4. Interlibrary loan services
Interlibrary loan services with several local libraries are being maintained to help users to procure documents that are not available in the library.

5. Reprographic services
The library has five machines to meet the demands of the readers, viz. two Modi Xerox 1025, Two 5834 and one Duplax Digital Copier Model WCPRO-35. During the year 2,36,814 pages were xeroxed on a payment basis, as a service to the readers.
6. CD-ROM printout services
During the year 3,884 computer printout pages containing abstracts of articles were made available
to the readers on a payment basis.

Book bank
The Book Bank continues to serve the undergraduates and interns. The total membership of the
Book Bank is 67. The Book Bank has more than 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. This section also has four audio cassettes playback decks
and 109 audio cassettes.

CD-based service
The library has different databases or CD-ROM, i.e. MEDLINE, POPLINE, ONCO DISC and
LISA, etc. Different encyclopedias and dictionaries have also been acquired on CD-ROM. The
number of CD-Disc is presently 701.

CD-NET
A CD-NET workstation has been operational in the library since January 1993. Fifteen users at a
time can search different databases loaded in a CD-NET tower. 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, one
laser printer, one line printer and three local dot-matrix printers. The housekeeping operation of
the library (viz. acquisition, cataloguing, serious control and circulation) has been automated. The
library is using a commercially available software package named LIBSYS.

Computerized thesis search
About 5,059 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 have been fed into the computer.
Online journals
The library is receiving 189 online journals for the current year, made available to it through their publishers along with print versions.

OPAC (Online Public Access Catalogue)
All the records from 1985 onwards can be retrieved through computer; 5,059 theses received so far in the library can also be retrieved through Online Public Access Catalogue (OPAC). The searchable databases (through OPAC) include 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 the journals and its 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 actively participates in DELNET (Developing Library Network). An e-mail modem has been provided by DELNET for communicating with others libraries. Besides this, the library also has an e-mail connection provided by the Institute.

Internet
The internet facility is available in the library from 10:00 am to 10:00 pm from Monday to Friday and till 8:30 pm on Saturdays. Eighteen nodes are available to the users.

New addition
The library added 538 new books to its collection, and now has a total of 70,112 books. Also 846 bound volumes of journals and 157 pamphlets/reports were added to the collection. The total number of bound volumes of journals and reports/pamphlets increased to 16,496 and 16,649, respectively. The library is annually subscribing to 451 journals in various field of health sciences, 185 of them are also received online along with their printed version; 28 journals, subscribed to on behalf of the National Drug Dependence Treatment Centre, are also being received in the library.

New ventures
1. A documentation centre containing the publications of the faculty was set up.
2. A library containing Hindi Books mostly published in health sciences was set up. During the year 82 titles in Hindi were added.

Awards and Honours
Dr R.P. Kumar was awarded certificate of Honour by the Indian Association of Special Libraries and Information Centres (IASLIC) in recognition to his admirable initiative, imagination, creativity
and interest for the development and modernization of library and information services in the country. He was also awarded the Satkal’s Punjab National Librarian Award by the SATKAL TRUST (Satinder Kaur Ramdev Memorial Trust for Advancement of Librarianship) during the annual function, Panjab University, Chandigarh; 18 November 2006. He was conferred with the Fellowship of Medical Library Association of India for his contribution to Medical Librarianship during the annual convention of MLAI, Postgraduate Institute Medical Education and research, Chandigarh, 18–20 December 2006. He was elected as Vice President of the Medical Library Association of India (MLAI) for the year 2006–08. He also continued as Chief Editor of *MLAI News*, a quarterly publication of the MLAI.

**Significant Events**

**Dr R.P. Kumar** attended the convention on Digital Preservation, Management and access to information (PLANNER-2006), Aizawl, Mizoram; 9 November 2006 and chaired a Scientific session. He was invited to deliver a keynote address and to act as the Director of the annual convention of the MLAI, Postgraduate Institute of Medical Education and Research, Chandigarh; 18–20 December 2006. He attended the 4th International Conference on ‘Professional knowledge management: Experience and visions’, Potsdam, Germany; 28–30 March 2007 and coordinated a technical session.
11.2 Cafeteria

Chairman
Deputy Director (Administration)

Faculty-in-charge
O.P. Kharbanda

Accounts Officer
N.K. Bajaj

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 ad 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 AIIMS employees. Since then, the Cafeteria is being run on a no-profit, no-loss basis, without any financial assistance from the Institute.

MANAGEMENT COMMITTEE
A management committee is constituted by the Director, AIIMS for taking policy decisions pertaining to the Cafeteria. The current members of the committee are:

1. Deputy Director, Administration  
   Chairperson
2. Dr S. Rastogi  
   Member
3. Dr V.K. Paul  
   Member
4. Dr Bir Singh  
   Member
5. Smt Rashmi Jain, Sr F.A.  
   Member
   Member
7. Shri Rajesh Kumar, S.E.  
   Member
8. Shri N.K. Bajaj, Accounts Officer  
   Member
9. Smt Preeti Ahluwalia, W.O.  
   Special invitee
10. Smt Rekha Sharma, Chief Dietician  
    Member
11. Representative of RDA  
    Member
12. Representative of the Officers’ Association  
    Member
13. Representative of the Nurses’ Union  
    Member
14. Representative of the Karamchari Union  
    Member
15. Representative of FAIMS                      Member
16. Dr O. P. Kharbanda                         Member Secretary
17. Shri S.K. Kaushik, General Manager, Cafe  Member

SERVICE FACILITIES
The Cafeteria runs 6 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 situated on the 9th floor of the main hospital
3. CNC Cafeteria situated on the 2nd floor of the Centre
4. Dr R.P.C. O.T. Cafeteria situated on the 5th floor of the Centre
5. Apex JPN Trauma Centre
6. Faculty Room Cafeteria situated near the Main Cafeteria.

In addition, the Cafeteria provides services to the Director, Deputy Director, Medical Superintendent, Dean and Faculty Members for their day-to-day as well as special requirements for important meetings.

STAFF STRENGTH
Eighty-nine employees (regular/ad hoc/temporary) are on the roll in the Cafeteria Department. Catering services are provided for official meetings, conferences and symposia held at AIIMS.

ANNUAL TURNOVER
The total turnover of the Cafeteria Department is approximately Rs 1 crore 35 lakh.

DEVELOPMENT ACTIVITIES
Several changes were brought in the Cafeteria Department during the financial year.

Extended facility of LPG Tandoor at the Main Cafeteria
A latest technology LPG tandoor was made available to prepare tandoori dishes hygienically. Many improvements were made to enhance the ambience at the Cafeteria resulting in manifold increase in the number of users. Overall, the Faculty Members appreciated the facilities.

Cafeteria services started at the Apex JPN Trauma Centre
An extension counter of the Cafeteria was established at the Apex JPN Trauma Centre for the Cafeteria service to Faculty, doctors and other staff members.

Medical checkup of Cafeteria employees
All the employees of the Cafeteria were medically checked for being fit food handlers.
11.3 Central Workshop

Faculty Coordinator
T.P. Singh (up to 31 August 2006)

Officer-in-charge
S.K. Kamboj
(up to 30 March 2007)
Kalu Ram
(w.e.f. 30 March 2007)

Technical Officers
Harinder Pal
(w.e.f. 16 December 2006)
Nitin Srivastava
(w.e.f. 16 December 2006)

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:
· Electronic Section
· Electrical Section
· Refrigeration Section
· Mechanical Section
· Glass Blowing Section
· Carpentry Section
· Painting Section

Fabrication and guidance
The Central Workshop has been able to continue to help in the research activities of the institute with modifications of instruments and fabrications of useful gadgets. It has been possible in many cases to design and fabricate some of the items with locally available components, which were previously imported from abroad by the departments. A total of 133 jobs of fabrication were carried out. The Central Workshop also provides support for the repair and maintenance of various new instruments developed by the Central Workshop. Some of the very important specialized fabrication jobs successfully carried out for the various departments in the Institute include:

· The Heart Valve Ring with Handle (Cardiothoracic and Vascular Surgery)
· The Operation Table Hand Rest (Orthopaedic Operation Theatre)
· The Rat Chamber (Pharmacology)
· The Stereotoxic Needle Holder (N.M.R.)
The Central Workshop contributes continuously by fabricating very specialized glass moulds for the Department of Obstetrics and Gynaecology. These moulds, which are extensively used in the Obstetrics and Gynaecology department, are not available in the open market. In addition, glass rods of different shapes (L shape, V shape, U shape), glass capillaries, Pasteur pipettes, and measuring cylinders were fabricated by the Central Workshop for all the departments of the Institute as well as for the hospital.

**Repair and Maintenance**

The Central Workshop has been carrying out the repair and maintenance of all types of biomedical equipment, which include electrosurgical unit, ECG machine, infusion pump, multipara monitor, defibrillator, patient warmer, OT table, ice machine, cold labs, water chiller, cryostat, deep freezer, UV spectrophotometer, electronic weighing machine, audiometer, ultrasound therapy unit, OT light, tissue processor, cold centrifuge, microscope, etc.

The Central Workshop has economically and successfully repaired many electronic equipments, which were declared irreparable by the manufacturing companies. These equipments include patient monitors, defibrillators, infusion pumps, patient warmers, etc.

The Central Workshop has been undertaking repair and painting jobs of all hospital furniture such as patient beds, patient lockers, IV stand, instrument trolleys, loading trolleys, and fowler beds, etc. During 2006–07, the Central Workshop has attended to a total number of 8,107 repair jobs.

A total of 8,240 repair and fabrication jobs were done during 2006–07.
11.4 K.L. Wig Centre for Medical Education and Technology

Dean (Examination)
T.D. Dogra
(w.e.f. 12 January 2007)

Professor-in-charge
Rita Sood

Coordinator
O.P. Kharbanda

Educationist
B.V. Adkoli

Education Media Generalist
Yogesh Kumar

Adjunct Faculty
23 faculty members covering all undergraduate disciplines besides Dental, Nursing, Hospital Administration and Computer Facility

EDUCATION
Undergraduate, postgraduate and paramedical
Twenty sessions were conducted for the MSc Nursing students of College of Nursing, AIIMS on the topics related to Media and Communication. Five sessions were conducted for the residents of Masters in Hospital Administration (MHA) on Computer Applications.

CMET provided inputs to the Examination Section for objectivizing the assessment pattern at AIIMS.

Continuing Medical Education
Conferences, seminars, workshops organized
CMET organized two in-house workshops on ‘How to write a paper’ for the faculty, junior and senior residents and research scientists of AIIMS.
National and International Conferences

- ‘Postgraduate dental education’ was jointly organized by KL Wig CMET, Centre for Dental Education and Research, AIIMS and Dental Council of India; 28–29 April 2006. The postgraduate curriculum was discussed in all 9 specialties of dentistry. The recommendations made were approved by the Dental Council of India and are under active consideration by the Ministry of Health and Family Welfare for a nationwide implementation.

Lectures delivered

Dr Rita Sood

- ‘Role of question banking in standardization of assessments’ (panelist for panel discussion), International Conference in Medical Education at MS Ramaiah Medical College, Bangalore; January 2007.
- ‘Integrated teaching at AIIMS’, Consultation Workshop on Medical Education, MS Ramaiah Medical College; January 2007.

Dr O.P. Kharbanda


Dr B.V. Adkoli

- Conducted two sessions on ‘Group dynamics’ during workshops organized by College of Nursing on Organizational Behaviour and Management; April 2006 and March 2007, respectively.
- ‘Strategies for training’, Workshop organized by the Department of Medicine; October 2006.
- Moderated a panel discussion during the consultative workshop organized by MS Ramaiah Medical College, Bangalore; 26 January 2007.

Mr Yogesh Kumar

- ‘Enrich your presentation skills’ and ‘Introduction to digital photography’, Association of

· ‘Effective communication with AIDS patients’, Workshop organized by the Department of Medicine, October 2006.

· ‘Effective presentation’, 55th Annual Conference of Pathologists and Microbiologists (APCON 2006), Bangalore; 7-9 December 2006.


Research
Completed
Critical appraisal of assessment in key clinical disciplines in undergraduate course, AIIMS.

Publication
Journal

Media Production
Details of Media Production for the year 2006–2007.

<table>
<thead>
<tr>
<th>Type of media produced</th>
<th>Number of requisitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical photography</td>
<td>846</td>
</tr>
<tr>
<td>X-ray, specimen, gel, etc.</td>
<td>911</td>
</tr>
<tr>
<td>Photographic prints (black and white and colour)</td>
<td>582</td>
</tr>
<tr>
<td>Scanning of images (slides, documents)</td>
<td>595</td>
</tr>
<tr>
<td>Video recording, editing (non-linear) including</td>
<td>509</td>
</tr>
<tr>
<td>tape to CD conversion</td>
<td></td>
</tr>
<tr>
<td>Designing/printing of large format posters</td>
<td>911</td>
</tr>
<tr>
<td>Book binding, paper cutting and offset printing</td>
<td>34 (540,000 approx. prints)</td>
</tr>
</tbody>
</table>

Awards, Honours and Significant Events

**Dr Rita Sood** Member of the Association for the Study of Medical Education in Europe; Review board of the *International Journal of Medical Education*.

**Dr Rita Sood and B.V. Adkoli** were the members of the expert committee constituted by DGHS, Ministry of Health and Family Welfare on the revision of curriculum for the MBBS course; were invited as course faculty for the FAIMER Regional Institutes at CMC, Ludhiana and the Seth GS
Medical College, Mumbai, June 2006–January 2007, served as advisors to UPSC.

**Dr O.P. Kharbanda** completed Master’s Degree (M.MEd) under the Centre for Medical Education, University of Dundee, UK.

**Mr Yogesh Kumar and A. Shariff** conducted a pre-convention workshop on Digital Photography during Indian Orthodontic Society 11th Postgraduate Convention (Orthodontics 2007), AIIMS; 24–27 February 2007.

**Visiting Scientist**
Dr Are Holen, Dean of Medical Education at faculty of Medicine in Trondheim, Norway.
**11.5 Computer Facility**

**Deputy Director and Head**  
R.S. Tyagi

**Systems Analysts**  
S. Kailash  
S.N. Ragu Kumar  
Satish Prasad

**Senior Programmers**  
Sushil Kumar Meher  
Sanjay Gupta  
Vinay Pande  
V.K. Jindal  
S.P. Singh

**Programmer**  
Hari Shankar

---

**EDUCATION**

**Postgraduate**

Computer programming classes covering both theory and practical aspects were conducted for the postgraduate students of the Department of Biotechnology and Nursing at the College of Nursing. The department also conducted Bioinformatics classes for the students of the Department of Biotechnology. Training was provided to Armed Forces officers deputed to study Medical Informatics for two 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) final year nursing students of AIIMS. A computer course for BSc Nursing (Post-certificate) was also conducted during the year.

**Continuing Medical Education**

The members of the department participated in and delivered lectures in continuing medical education programmes, symposia, international and national conferences. The members of the department 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. The department organized lectures by faculty members of the Institute to medical colleges/hospitals in the country through video-conferencing.

**National and International Conferences**

Dr R.S. Tyagi was elected as the International Representative of the Indian Academy of Medical Informatics (IAMi).
He has attended/participated in the following events:

- Technology Senate Group Discussion, Mumbai; December 2006.
- National Conference of Tele Society of India, New Delhi; August 2006.
- Consultant/Member of Course Committees at:
  - Sant Baba Bhag Singh Institute of Engineering and Technology, Jalandhar, and
  - Uttaranchal Open University Haldwani, Nainital (Uttaranchal).

Mr S. Kailash attended/participated in the following events:

- Resource person at the 24th Annual National Conference of the Indian Society of Medical Statistics, PSG Institute of Medical Sciences and Research, Coimbatore; 1–3 December 2006.
- Expert to set up a Teleophthalmology Network involving RIOs and District Hospitals, Ministry of Health and Family Welfare, Government of India.

Mr S.N. Ragu Kumar attended/participated in the following events:

- ‘National Workshop on Postgraduate Dental Education’, jointly organized by the KL WIG CMET and CDER, AIIMS and Dental Council of India, AIIMS; 28–29 April 2006. Awarded certificate for the significant contribution to the development of the postgraduate curriculum.
- ‘Role of information technology in PG dental education and training’, National Workshop on Postgraduate Dental Education, jointly organized by the KL WIG CMET and CDER, AIIMS and Dental Council of India, AIIMS; 28–29 April 2006.
- Organizing committee member for the National Workshop on Emerging Trends in Medical Education, AIIMS, New Delhi; 23–25 November 2006.
Coordinated and Conducted e-learning demonstration by Tele-Education setup connecting Raipur, Chennai and Jammu, for online interactive classes for ‘IT, Media and e-learning in Medical Education’ session, National Workshop on Emerging Trends in Medical Education, KL Wig CMET, AIIMS, New Delhi; 23–25 November 2006.


Attended as technical expert various technical committees for Computers, Network and IT infrastructure and software systems at various departments and centres of AIIMS.

Indian Red Cross Society, New Delhi invited to deliver lectures on ‘DP&R 201 Informatics in Disaster Preparedness and Rehabilitation’, as part of the PG diploma course; 22–31 January 2007.


National Workshop on Knowledge Management, Computer Society of India, Chennai; 13–14 October 2006.

‘Telemedicine and E-health’, School of Telemedicine and Biomedical Informatics, SGPGI, Lucknow, New Delhi; 17–22 August 2006.

Mr S.K. Meher attended/participated in the following events:


Meditel 2006, Medical Computer Society of India in Amrita Institute of Medical Sciences, Kochi; 24–26 November 2006.


Selected for International Organizing Chair for AACC 2006 (4th International Conference on Bridging the Digital Divide), Kathmandu, Nepal.


IT in Health care invited half-day talk in the Department of Computer Science and Application in Utkal University, Bhubaneswar, Orissa; 26 January 2007.

Coordinated and conducted twice the computerized online counselling for PG MD/MS/MDS and the selection of Junior Residence (non-Academic) 2006–2007.
Sanjay Gupta represented/attended/participated in following events:

- Represented AIIMS in the Vth Project Implementation Committee (PIC) Meeting on Telemedicine Programme of the North East including Sikkim, NEC Secretariat, Nongrim Hills, Shillong; 14 February 2007.
- Attended Telemedicine System Training programme, Bangalore; 4–6 December 2006.
- Participated in Meditel 2006 organized by the Centre for Digital Health, Amrita Institute of Medical Sciences in association with the Medical Computer Society of India, AIMS, Kochi, India; 24–26 November 2006.

RESEARCH

1. ‘Study of role and scope of telemedicine services at AIIMS for post-discharge follow-up of patients’: Thesis submitted at AIIMS for the Degree of Masters in Hospital Administration (MHA). S. Kailash.

Patient Care

Successfully implemented computerized registration of OPD patients in the department of Physical Medicine and Rehabilitation running successfully for the past one year. S. Kailash (Project-in-charge), S.K. Meher and Sanjay Gupta.

Developed a modular software for workflow automation of Patient related records at BRA IRCH. Following modules have been accepted for implementation:
OPD Registration (New, Old and Backlog), inpatient registration and discharge summary, Laboratories, Delhi Cancer Registry, Cashier and billing, Pain Clinic and Anesthesiology, Medical Oncology and Surgical Oncology.

The department also developed software for the main hospital, CN, CT Centre and RP centre and Trauma Centre.

Study, design and demonstration of online reservation system for room/bed allotment for patients of AIIMS, Dharamsala, S.N. Ragu Kumar.

Academic, Administration, Finance, engineering, Library, Central Facilities, etc.

Software development of AIIMS Administration section continued and maintained various modules in them.

**Research Section is fully automated and running successfully.**

1. **Administration:**
   (a) Research project management
   (b) Recruitment management
   (c) Project employee management
   (d) Project employee EHS management
   (e) Research fellowship management

2. **Accounts:**
   (a) Payroll and tax management
   (b) Grand register
   (c) Cashbook
   (d) Ledger
   (e) TA/DA reimbursement
   (f) Balance sheet

3. **Store:**
   (a) Requisition
   (b) Supply order
   (c) Financial transaction

One integrated software on Health Care has been developed for IRCH and is in the process of implementation. The modules are: Registration (OPD/Inpatient/Day care), Cash section, Laboratory, Surgery, Anesthesia, Pain clinic, MRO.
Computer facility has prepared a proposal for automation of B.B. Dikshit Library at AIIMS.

Computer facility has prepared a Request for proposal and express of interest for the total computerization of AIIMS.

Central facilities maintained by computer facility
The internet and web applications facility has continued and maintained the following services to AIIMS:

1. The website of www.aiims.edu, www.aiims.ac.in is being maintained in-house by the department.
2. Remote access internet facility for the faculty on the campus-wide telephone network 24×7×365 days.
3. Creation and maintenance of users accounts for 564 aiims.ac.in domain email users.
4. The total number of visitors to AIIMS official website were 27,67,926 during the year 2006–2007.
6. The software modules for the website are developed in-house. Some of the modules developed are:
   (i) Design, development and hosting of the Specialty Centre’s and Departmental web pages: 566 pages for 16 departments
   (ii) Design Development and Hosting of departmental conferences and workshops web pages: 342 pages for 20 conferences
   (iii) Design development and hosting of Current Events, Exam and Result What’s New and Buttons under main page of website time to time: 545 pages for 39 activities
   (iv) Main Headings under Main page: 615 pages for 4 departments
   (v) Recruitment for posts advertisements, results and waiting list: 113 pages for 23 departments
   (vi) Data Upload on Exam Server for Various Examinations which are conducted by AIIMS: 47 MB for 11 Exams
Total number of pages created and hosted on AIIMS website:

<table>
<thead>
<tr>
<th>Headings</th>
<th>Number of pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number pages under departments</td>
<td>740</td>
</tr>
<tr>
<td>Conferences, workshops and orations</td>
<td>342</td>
</tr>
<tr>
<td>Recruitment for faculty and other posts</td>
<td>113</td>
</tr>
<tr>
<td>Admission notices and results and others under events</td>
<td>545</td>
</tr>
<tr>
<td>Members of Institute body and other bodies</td>
<td>8</td>
</tr>
<tr>
<td>Change under main page and buttons (annual report 07)</td>
<td>615</td>
</tr>
<tr>
<td>Unknown patient records</td>
<td>20</td>
</tr>
<tr>
<td>Central facilities</td>
<td>22</td>
</tr>
<tr>
<td>Publication (add and edit)</td>
<td>6</td>
</tr>
<tr>
<td>RTI information</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,414</strong></td>
</tr>
</tbody>
</table>

As coordinating centre for AIIMS the CF department has hosted various tenders online. The total number of tenders/pages hosted in Government of India Tender portal during 2006–2007 is:

Tender, notices and tender corrigendum                                      1,515

For the use of students and faculty were continued and maintained.

Total number of e-mail users at aiims.ac.in                                564
Total number student/doctors/faculty visits for accessing the medical and educational information access facility at CF AIIMS 23,642
Total number of laser printouts given                                    658
Total number of scanning documents                                       125
Total number of new internet connections provided during this year       128
Total number of computer nodes maintained for internet access            995 (approx.)
Data transfer through internet                                            5168461 MB (approx.)
**Total e-mails sent and received (aiims.ac.in)**                         **63,000** (approx.)

Others Central Facilities

1. e-mail and FTP facility
2. Medical and educational information access facility
3. Laser printing and scanning
4. Consultancy for software and hardware

Telemedicine Facility

The existing telemedicine facility was upgraded by ISRO which now supports high quality transmission simultaneously with 5 different remote locations. Three more ISDN lines were added to the existing three lines.

AIIMS 2006-2007 / 740
The following programs were organized:
1. Case consultation/patients care: 64
Most of the case consultations were from SCB Medical College Cuttack, GB Pant Portblair, SKIMS Srinagar, GMC Srinagar, District Hospital Nellore, CRHS Ballabhgarh, RIMS Ranchi, Mokokchung Hospital Nagaland, Guwahati Medical College, and GMC Jammu, and related to Obstetrics and Gynaecology, Neurology, Neurosurgery, Orthopedics, Radiology, Cardiology, Dermatology, Pediatrics, Gastroenterology and Urology.

Consultations/CME/training course/international interaction:

<table>
<thead>
<tr>
<th>Type of Activity</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient care (consultations)</td>
<td>84</td>
</tr>
<tr>
<td>Education (CME/training courses)</td>
<td>34</td>
</tr>
<tr>
<td>National and international interaction/live surgeries</td>
<td>40</td>
</tr>
</tbody>
</table>

International interaction/live surgeries
- Emergency-medicine for 3 days with USA
- Cardiology with Toronto for 2 days, and
- Surgery with Italy for 2 days, Abu Dhabi for 1 day, USA and France for 6 days.

National interaction/live surgeries for cumulative 30 days to SRMC Chennai, RIMS Ranchi, and SCB Cuttack, GMC Srinagar, Coimbatore, INC Delhi, Narayan Hridalya Bangalore and Vellore SGPGI Lucknow and Arbindo Medical College, Indore.

Continuing Medical Education

Monthly case discussions are held with
- SGPGI, Lucknow and PGI Chandigarh in Urology (case discussions by each centre)
- SCB Medical College, Cuttack in Radiotherapy, Anesthesiology, Microbiology, Medicine, Neuro-Radiology, Nursing Skills Development, Pathology
- SGPGI Lucknow in Nuclear Medicine, and
- MKCGMC Behrampur (Orissa) in Dermatology.
Eleven MBiotech students of the Department of Biotechnology, AIIMS were given two weeks’ training; 17–30 August 2006.

Continuing Medical Education

1. The 22nd National Training Programme for Scientific Investigators in Electron Microscopy, 30 October–18 November 2006. The training programme was conducted in two parts:
   a) Basic course (30 October–11 November 2006)
   Eighteen Scientific Investigators, selected from 48 applicants from various parts of the country, participated in this course, which consisted of two weeks’ hand-on training on techniques of biological sample preparation and operation of SEM and TEM for viewing self-prepared samples.

   b) Advanced course (13–18 November 2006)
   Twelve Scientific Investigators, selected from 44 applicants, from various parts of the country took part in this course. The course consisted of hands-on training-cum-demonstration of special techniques in electron microscopy, viz. Microwave technique for sample preparation, Immuno-electron microscopy, Cryo-electron microscopy, Stereology, Imaganalysis, and Digital imaging in electron microscopy.
2. The 18th National Training Programme in Electron Microscopy for Technical Personnel; 12–24 February 2007. Twelve technical personnel, selected from 96 applicants from different parts of the country, participated in this course. In all, 20 lectures were delivered by Professor Shashi Wadhwa, Taposh K. Das and T.C. Nag for the participants of the above courses.

3. Summer Training Course for Technical Personnel in Electron Microscopy; 5 May–30 June 2006. B. Sudhakar from Rotary Nagar, District Khammam, Andhra Pradesh, was trained in sample processing, microtomy, CPD, sputter coating, TEM and SEM viewing, photography and routine maintenance.

RESEARCH

Funded Research

Ongoing


Completed

1. Synaptic development in chick hippocampus and changes in synaptic density following prenatal auditory stimulation.

Ongoing

Dr Taposh K. Das

i) Effect of infused αAmyloid βBeta (Ab1-42) on hippocampus and cerebellum of rat: Ultrastructural and proteomic study.

Dr T.C. Nag

i) Müller cell changes in the ageing human retina.

Collaborative Projects

Ongoing

1. Effects of certain plant extracts on experimentally induced myocardial infarction in rat (with Pharmacology, AIIMS).
PUBLICATIONS

Journals


**PATIENT CARE**

**Special Laboratory Facilities**

During the year, special laboratory facilities provided for research and patient care are as follows:

<table>
<thead>
<tr>
<th>Facility</th>
<th>Users (n)</th>
<th>Specimens analyzed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transmission electron microscope</td>
<td>377</td>
<td>2,099</td>
</tr>
<tr>
<td>Scanning electron microscope</td>
<td>232</td>
<td>1,719</td>
</tr>
<tr>
<td>Immuno-electron microscope</td>
<td>38</td>
<td>72</td>
</tr>
</tbody>
</table>

**AWARDS, HONOURS AND SIGNIFICANT EVENTS**

Dr T.C. Nag received the Japan Neuroscience Society travel award and attended the 29th Annual Meeting of the Society, Kyoto; 18–21 July 2006. He was invited to review papers for *Indian J Ophthalmol*, and *Comp Physiol Biochem* (B).

Dr T.C. Nag participated in the 28th Annual Meeting of the Electron Microscopy Society of India, held at Trivandrum; 19–21 April 2006; He also attended the 29th Annual Meeting of the Japan Neuroscience Society, Kyoto, 18–21 July 2006; National Symposium on Pain and Neural Plasticity, held at AIIMS, New Delhi; 18–19 October 2006; 25th Annual meeting of Indian Academy of Neurosciences, Varanasi, 17–20 December 2006. One Centre Management Committee meeting was conducted. The Faculty participated in the SAIF Steering Committee meeting at the Department of Science and Technology, New Mehrauli Road, New Delhi.

Dr T.K. Das attended the workshop on ‘Virus Morphodiagnosis and Cryo Electron Microscopy: Application in infectious diseases’, at National Institute of Virology, Pune; 12–15 April 2006. He was invited as an expert for the Technical Committee for the purchase of a 200 kV TEM and Environmental SEM for IMTECH, Chandigarh.

**VISITING SCIENTISTS**

Dr W.M. Busing from the Netherlands visited the Electron Microscope Facility and delivered a talk on ‘Advanced applications of electron microscope in the life sciences’; 17 January 2007.
During the year 2006–2007, animals were maintained in this facility. The various activities of this unit are categorized as follows.

**Small Animal Facility**
The following small animals have been maintained throughout the year:

- Rats (Wistar) 1,857
- Mice (Swiss) 1,180
- Rabbits (New Zealand) 230
- Guinea Pigs (Dunkin Hartley) 68

A total of 3,666 small animals (rats, mice, rabbits and guinea pigs) were supplied to various departments of the Institute and considerable numbers of animals were also sold to other institutions in Delhi and outside; i.e. rats – 140, mice – 114, rabbits – 97, guinea pigs – 02.

**Large animal facility**
This facility housed 13 sheep for research work conducted by the Microbiology Department.

**Experimental surgery**
Seventy-nine surgical procedures and radiological investigations were performed by various departments of the Institute. These include the Departments of Surgery, Biomedical Engineering, Neurosurgery, Pediatric Surgery.

**Institutional animal ethics committee**
The Institutional Animal Ethics Committee (IAEC) cleared 49 projects of various investigators of the Institute during the year 2006–2007.

**Services provided**
A departmental wing has been operational for maintaining the animals belonging to the departments of Microbiology, Biomedical Engineering, Biochemistry, Biotechnology, Pediatrics Surgery, Reproductive Biology, Anatomy, Psychiatry, Pathology, Laboratory Medicine, Neurosurgery, and Endocrinology and Metabolism. This facility housed experimental animals, i.e. rabbits – 62, Hamsters – 31, Mice – 994 and rats – 247.
The Experimental Animal Facility provided laboratory facilities to various investigators, viz. vacuum drying of sera, microscope facility and storage of serum samples.

**Educational Programme**
- Dr P.K. Yadav, Senior Veterinary Officer, EAF and Shri Nand Lal, Technical Assistant (Laboratory), Shri R.J. Kamble, Laboratory Technician, Shri Tomar Manjeet Kumar, Laboratory Technician gave orientation lectures to the students of BSc Nursing.
- Shri Manoj Gosain, Laboratory Attendant and Shri Jasbir, Laboratory Attendant gave demonstration to the students of BSc Nursing.
## 11.8 Hostel Section

### Superintendent of Hostels
G.K. Rath

### Deputy Superintendents of Hostels
- S. Datta Gupta
- Minati Choudhary
- Bhupinder Paul
- J.S. Titiyal
- Buddhadev Chowdhury
- Rachel Andrews
- S.S. Kale

### Senior Warden
Krishna Dhaka

### Warden
Shashi Prakash Pandey

### Deputy Wardens
- Mohan Sharma
- Remani Thomas
- Seema Pruthi

### Assistant Wardens
- Satprakash Kalia
- Suchita Kumari
- Sukhpal Malik

### Junior Wardens
- Babulal Meena
- Rani Varghese
- Tripta Sharma
- Dinesh Desai
- Nirmala
- Rajesh Rawat
- Sunil Devi

### Ministerial Staff
- Neelam Rani (Assistant [NS])
- Meena Claire (Assistant [NS], relieved on 28 Sept 2006)
- Vimal Thakral (UDC, w.e.f. 8 Sept 2006)
- Sudhir Thakur (LDC)
- D. Poongothai (LDC)

### Subordinate Staff
Thirteen female office attendants and eleven male attendants are posted in the hostel section.

The AIIMS has several halls of residence with a capacity of over 1,204 single/double rooms and 175 married accommodations and 422 accommodations for Nursing Students. These are spread over different hostels and residence in the AIIMS Main Campus, Masjid Moth, A.V. Nagar, F.T.A. Hostel, JPNATC Hostel (Raj Nagar).
## GENTS HOSTELS

<table>
<thead>
<tr>
<th>S. No.</th>
<th>H. No.</th>
<th>Location</th>
<th>Single</th>
<th>Double/Three/Four/Five seater (with two beds)</th>
<th>Guest Rooms (seater)</th>
<th>Total strength</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I (Charak)</td>
<td>Main campus</td>
<td>63</td>
<td>2</td>
<td></td>
<td>67</td>
</tr>
<tr>
<td>2.</td>
<td>II (Jivak)</td>
<td>Main campus</td>
<td>57</td>
<td>1</td>
<td></td>
<td>58</td>
</tr>
<tr>
<td>3.</td>
<td>III (Sushruta)</td>
<td>Main campus</td>
<td>71</td>
<td>5</td>
<td>1</td>
<td>82</td>
</tr>
<tr>
<td>4.</td>
<td>IV (Madhava)</td>
<td>Main campus</td>
<td>53</td>
<td>7</td>
<td></td>
<td>67</td>
</tr>
<tr>
<td>5.</td>
<td>V (Nagarjuna)</td>
<td>Main campus</td>
<td>54</td>
<td>4</td>
<td></td>
<td>62</td>
</tr>
<tr>
<td>6.</td>
<td>VI (Vagbhatta)</td>
<td>Main campus</td>
<td>69</td>
<td>7</td>
<td></td>
<td>83</td>
</tr>
<tr>
<td>7.</td>
<td>VII (Ashwini)</td>
<td>Main campus</td>
<td>110</td>
<td>2</td>
<td></td>
<td>115</td>
</tr>
<tr>
<td>8.</td>
<td>VIII (Bharadwaj)</td>
<td>Main campus</td>
<td>108</td>
<td>1</td>
<td></td>
<td>111</td>
</tr>
<tr>
<td>9.</td>
<td>RPC-I (Dhanwantri)</td>
<td>Main campus</td>
<td>72</td>
<td>1</td>
<td></td>
<td>73</td>
</tr>
<tr>
<td>10.</td>
<td>MMRDH (single)</td>
<td>Masjid Moth</td>
<td>154</td>
<td>6</td>
<td></td>
<td>160</td>
</tr>
<tr>
<td>11.</td>
<td>JPNATC</td>
<td>Main campus</td>
<td>76</td>
<td>1</td>
<td></td>
<td>57</td>
</tr>
<tr>
<td>12.</td>
<td>NNH</td>
<td>Masjid Moth</td>
<td>200</td>
<td>2</td>
<td></td>
<td>422</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,347</td>
</tr>
</tbody>
</table>

## LADIES HOSTELS

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>IX (Saraswati)</td>
<td>Main campus</td>
<td>61</td>
<td>16+1+1+0</td>
<td>1</td>
</tr>
<tr>
<td>2.</td>
<td>X (Parvati)</td>
<td>Main campus</td>
<td>91</td>
<td>0+0+1+1</td>
<td>1</td>
</tr>
<tr>
<td>3.</td>
<td>RPC-II (Laxmi)</td>
<td>Main campus</td>
<td>20</td>
<td>13+0+0+0</td>
<td>1</td>
</tr>
<tr>
<td>4.</td>
<td>Ladies Hostel XI</td>
<td>Main campus</td>
<td>–</td>
<td>15+0+0+0</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## MARRIED QUARTERS

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>F-Type</td>
<td>Ansari Nagar</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>MMRDH</td>
<td>Masjid Moth (West)</td>
<td>42</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Ayurvedigyan Nagar</td>
<td>A.V. Nagar</td>
<td>80</td>
<td>–</td>
</tr>
<tr>
<td>4.</td>
<td>Faculty Transit</td>
<td>Ayurvedigyan Nagar</td>
<td>29</td>
<td>–</td>
</tr>
<tr>
<td>5.</td>
<td>JPNATC Hostel</td>
<td>Raj Nagar</td>
<td>7</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## SIGNIFICANT EVENTS

- JPNATC (Trauma Centre) Hostel started with the capacity of 60 single rooms and 7 married accommodations.
- Ladies Hostel No. XI added with the capacity of 15 double rooms.
- The following have been centralized in the Hostel Section office for all hostels:
  - Room/Seat Aallotments (all the hostels)
- Guest room booking
- Stores and Purchase
- Funds and Accounts

S.K. Mishra (from 19 January 2007–8 April 2007) was deputed as Administrative Officer to look into all the administration work of the hostels. Presently Shri Sanjay Kumar (from 9 April 2007) has been deputed for this.

Shri Rakesh Sharma (from 10 November 2007) has been deputed as Assistant Stores Officer to look into all the Stores-concerned work of the hostels.

Shri Ashok Gupta (from 31 October 2007) has been deputed as Office Superintendent for Accounts of the hostels.

Hostel Office was renovated with separate cubical and built-in cupboards.

Internal cable wiring has been started in the Gents hostel.


Car parking space with boundary walls constructed in the Masjid Moth Resident Doctor’s Hostel for the benefit of the Resident Doctors in Masjid Moth.

FUTURE PLANS

1. Construction of new hostel for resident doctors with modern amenities to accommodate 1,000 students and residents.
2. Modification in window grills for fixing desert coolers in all the hostels.
3. Renovation of shops and establishments in the Hostel Campus.
4. Construction of two big stores to keep the furniture items of the Hostel Section.
5. Provision of R.O. plant system for all the hostels.
6. Construction of boundary wall in between the newly constructed Dental College and Gents Hostel.
7. Internet connection for all the rooms in the hostels.
11.9 Primate Research Facility

Professor-in-charge
D.N. Rao

Senior Veterinary Officer
P.K. Yadav

The Primate Research Facility (PRF) maintained the non-human of primates for research purposes during the year 2006–2007. The PRF also handled all the work connected with the Institutional Animal Ethics Committee for the use of animals in research.

Census Report
Total number of monkeys 90
Number of deaths 12
(TB+ve) sacrificed after getting the permission from IAEC 04
Born 11
Total number of monkeys in March 2007 85

Indoor Runs
The Department of Primate Research Facility has increased more 3 indoor runs during the year 2006–2007. These runs are utilized for providing exercises to all the monkeys which are in the cages in this facility. The process of exercise is 24 hours for each monkey within a week.

BREEDING (in cage and open run)
Breeding of monkeys were carried out. A total of 13 females were left in the run for mating. Additional 14 female monkeys were mated by cage-breeding. Out of 27 female monkeys, 10 have conceived and the pregnancies are in progress.

Institutional Animal Ethics Committee (IAEC)
The Institutional Animal Ethics Committee has increased 2 projects on large animals for investigators of AIIMS; 2006–2007.

Rehabilitation Facility
A programme for the rehabilitation of monkeys has been started in the year 2000. All monkeys, which were used for a period of 3 years of experiment, were put on rehabilitation in an open run. In addition, the old monkeys were also put in this open run. Most of these monkeys were permanently issued to local animal welfare organizations as per the instructions form the CPCSEA.
Clinical Procedures conducted

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood sample collected</td>
<td>103</td>
</tr>
<tr>
<td>Physical examination, testing for TB and weight</td>
<td>134</td>
</tr>
<tr>
<td>Haematology</td>
<td>309</td>
</tr>
<tr>
<td>Blood chemistry (urea and sugar)</td>
<td>515</td>
</tr>
<tr>
<td>X-ray</td>
<td>134</td>
</tr>
<tr>
<td>Rectal palpation</td>
<td>25</td>
</tr>
<tr>
<td>Parasitology (stool examination)</td>
<td>309</td>
</tr>
<tr>
<td>Others procedures</td>
<td>134</td>
</tr>
</tbody>
</table>

(Management of trauma, obstetrics procedures, etc.)
12.1 Finance Division

Senior Financial Advisor
Rashmi Jain (w.e.f. 25 September 2006)

Financial Advisor
R.G. Garg (up to 30 November 2006)

Financial Advisor/F&CAO
Basanti Dalal (w.e.f. 1 December 2006)

F&CAO
S.P. Mahla

Account Officers
S.K. Gulati Kishan Gopal C.L. Raina (up to 16 January 2007)
Sunil Kumar Kedia N.K. Bajaj O.P. Saini
R.K. Juneja

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.
## GRANTS RECEIVED DURING (2006-2007)

<table>
<thead>
<tr>
<th>S.No.</th>
<th>HEAD</th>
<th>PLAN</th>
<th>NON-POLICY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>AIMS</td>
<td>160310000.00</td>
<td>296729470.00</td>
</tr>
<tr>
<td>2</td>
<td>DE-Addiction Centre</td>
<td>4000000.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>164310000.00</td>
<td>296729470.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HEAD/SUB HEAD</th>
<th>ACTUAL EXPENDITURE</th>
<th>SANCTIONED BUDGET ESTIMATES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2005-2006</td>
<td>2006-2007</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>A. (Main Inst.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pay &amp; Allow. Incl.</td>
<td>-</td>
<td>107.58</td>
</tr>
<tr>
<td>LS &amp; PC, stipend etc.</td>
<td>23.02</td>
<td>2.21</td>
</tr>
<tr>
<td>Rep. &amp; Maint. of Mach. &amp; Equip.</td>
<td>-</td>
<td>84.24</td>
</tr>
<tr>
<td>Res. &amp; Maint. of Mat. &amp; Supply</td>
<td>4.63</td>
<td>-</td>
</tr>
<tr>
<td>Maintenance of Bldg.</td>
<td>-</td>
<td>18.07</td>
</tr>
<tr>
<td>Pension &amp; other</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Recoverable Advances</td>
<td>0.09</td>
<td>-</td>
</tr>
<tr>
<td>House Building Adv.</td>
<td>0.20</td>
<td>-</td>
</tr>
<tr>
<td>Instt. Research Grant</td>
<td>0.50</td>
<td>-</td>
</tr>
<tr>
<td>Books &amp; Publication (M.&amp;S.)</td>
<td>0.50</td>
<td>1.48</td>
</tr>
<tr>
<td>Conference/Symposia</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Capital Building</td>
<td>19.56</td>
<td>-</td>
</tr>
<tr>
<td>P.E.T. Facility</td>
<td>1.75</td>
<td>-</td>
</tr>
<tr>
<td>Robotic Surgical System</td>
<td>9.00</td>
<td>-</td>
</tr>
<tr>
<td>Covering of Nallah</td>
<td>15.34</td>
<td>-</td>
</tr>
<tr>
<td>Computerisation</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TOTAL A</td>
<td>70.15</td>
<td>218.02</td>
</tr>
<tr>
<td>B. SUPER_SPECIALITIES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C.N.Centre</td>
<td>46.39</td>
<td>22.58</td>
</tr>
<tr>
<td>Dr. R.P. Centre</td>
<td>23.48</td>
<td>6.00</td>
</tr>
<tr>
<td>Dr,B.R.A. I.R.C,H.</td>
<td>12.13</td>
<td>25.30</td>
</tr>
<tr>
<td>l/c Linear Accelerator</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>J.P.N. Apex Trauma Centre</td>
<td>24.43</td>
<td>50.80</td>
</tr>
<tr>
<td>Centre for Dental Edu. &amp; Res.15.09</td>
<td>-</td>
<td>13.69</td>
</tr>
<tr>
<td>TOTAL (A &amp; B)</td>
<td>163.35</td>
<td>300.02</td>
</tr>
<tr>
<td>C. DE-Addiction Centre</td>
<td>3.44</td>
<td>-</td>
</tr>
<tr>
<td>D. N.A.C.O.</td>
<td>0.01</td>
<td>-</td>
</tr>
<tr>
<td>(Dr. Ashok Kumar)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRAND TOTAL (A to D)</td>
<td>167.00</td>
<td>300.02</td>
</tr>
</tbody>
</table>
# ALL INDIA INSTITUTE OF MEDICAL SCIENCES

**STATEMENT SHOWING REVENUE RECEIPT FROM APRIL 2006 TO MARCH 2007**

(Rs. in Lakhs)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital Receipts</td>
<td>1149.63</td>
<td>69.81</td>
<td>52.41</td>
<td>92.31</td>
<td>-</td>
<td>1364.16</td>
</tr>
<tr>
<td>Interest</td>
<td>284.71</td>
<td>38.65</td>
<td>13.17</td>
<td>14.31</td>
<td>-</td>
<td>360.33</td>
</tr>
<tr>
<td>Rent &amp; Water Charges</td>
<td>156.59</td>
<td>8.29</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>164.88</td>
</tr>
<tr>
<td>Fee</td>
<td>11.74</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>11.74</td>
</tr>
<tr>
<td>E.H.S.</td>
<td>94.40</td>
<td>14.18</td>
<td>40.94</td>
<td>-</td>
<td>-</td>
<td>149.52</td>
</tr>
<tr>
<td>Private Ward</td>
<td>-</td>
<td>136.63</td>
<td>68.91</td>
<td>-</td>
<td>-</td>
<td>205.54</td>
</tr>
<tr>
<td>X-Ray</td>
<td>-</td>
<td>7.86</td>
<td>0.53</td>
<td>-</td>
<td>-</td>
<td>8.39</td>
</tr>
<tr>
<td>Ultra Sound</td>
<td>-</td>
<td>1.17</td>
<td>149.24</td>
<td>-</td>
<td>-</td>
<td>150.41</td>
</tr>
<tr>
<td>C.T. Scan</td>
<td>-</td>
<td>11.09</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>11.09</td>
</tr>
<tr>
<td>Levy Charges</td>
<td>-</td>
<td>3.76</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3.76</td>
</tr>
<tr>
<td>Thallium Test</td>
<td>-</td>
<td>31.13</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>31.13</td>
</tr>
<tr>
<td>Blood Test/Lab. Test</td>
<td>-</td>
<td>37.85</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>37.85</td>
</tr>
<tr>
<td>Cardiac Test Collection</td>
<td>-</td>
<td>35.05</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>35.05</td>
</tr>
<tr>
<td>Recoverable Advances</td>
<td>97.44</td>
<td>23.54</td>
<td>3.95</td>
<td>0.23</td>
<td>-</td>
<td>125.16</td>
</tr>
<tr>
<td>Revolving Fund</td>
<td>527.63</td>
<td>-</td>
<td>-</td>
<td>34.58</td>
<td>-</td>
<td>562.21</td>
</tr>
<tr>
<td>Others, if any</td>
<td>-</td>
<td>-</td>
<td>461.71</td>
<td>3.75</td>
<td>2.73</td>
<td>468.19</td>
</tr>
<tr>
<td>TOTAL</td>
<td>2322.14</td>
<td>419.81</td>
<td>790.86</td>
<td>145.18</td>
<td>2.73</td>
<td>3689.41</td>
</tr>
</tbody>
</table>
## REVENUE RECEIPT


(RS. IN CRORES)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>COLLEGE/HOSTEL</td>
<td>0.12</td>
<td>0.12</td>
</tr>
<tr>
<td>2</td>
<td>RENT &amp; WATER CHARGES</td>
<td>1.65</td>
<td>1.70</td>
</tr>
<tr>
<td>3</td>
<td>HOSPITAL RECEIPT(USER CHARGES)</td>
<td>23.16</td>
<td>25.00</td>
</tr>
<tr>
<td>4</td>
<td>RECOVERABLE ADVANCES</td>
<td>1.25</td>
<td>1.30</td>
</tr>
<tr>
<td>5</td>
<td>INTEREST</td>
<td>3.60</td>
<td>3.68</td>
</tr>
<tr>
<td>6</td>
<td>EHS</td>
<td>1.49</td>
<td>1.50</td>
</tr>
<tr>
<td>7</td>
<td>REVOLVING FUND</td>
<td>5.62</td>
<td>5.70</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>36.89</strong></td>
<td><strong>39.00</strong></td>
</tr>
</tbody>
</table>
### ALL INDIA INSTITUTE OF MEDICAL SCIENCES

#### RECEIPTS & PAYMENT ACCOUNT FOR THE YEAR 2006-2007

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I</strong> OPENING BALANCES</td>
<td></td>
<td></td>
<td>1 Grants transferred to the Centres/Schemes Cell</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A Cash at bank</td>
<td>382986814</td>
<td>118822691</td>
<td>A Dr. R.P. Centre</td>
<td>67500000</td>
<td></td>
</tr>
<tr>
<td>i) AIIMS (MAIN)</td>
<td>382986814</td>
<td>118822691</td>
<td>i) PLAN</td>
<td>67500000</td>
<td></td>
</tr>
<tr>
<td>b Unspent Balance of specific grants remained with AIIMS(M)</td>
<td>-</td>
<td>112927426</td>
<td>ii) Non-Plan</td>
<td>177500000</td>
<td>245000000</td>
</tr>
<tr>
<td>ii) Scheme Cell</td>
<td>61200654</td>
<td>74902476</td>
<td>B C.N. Centre</td>
<td>356900000</td>
<td></td>
</tr>
<tr>
<td>iii) R.P. Centre</td>
<td>24422198</td>
<td>18988109</td>
<td>iii) Plan</td>
<td>356900000</td>
<td></td>
</tr>
<tr>
<td>iv) C.N. Centre</td>
<td>113473131</td>
<td>88193471</td>
<td>iv) Non-Plan</td>
<td>450000000</td>
<td>806900000</td>
</tr>
<tr>
<td>v) CT Patient A/c</td>
<td>13752622</td>
<td>6267675</td>
<td>C N.D.D.T.C.</td>
<td>400000000</td>
<td>37000000</td>
</tr>
<tr>
<td>a) Bank</td>
<td>13752622</td>
<td>6267675</td>
<td>i) Plan</td>
<td>400000000</td>
<td>37000000</td>
</tr>
<tr>
<td>b) FDR</td>
<td>235000000</td>
<td>225000000</td>
<td>b) FDR</td>
<td>235000000</td>
<td>225000000</td>
</tr>
<tr>
<td>vi) Angiography A/c</td>
<td>12788961</td>
<td>2176746</td>
<td>D Scheme Cell</td>
<td>256927932</td>
<td></td>
</tr>
<tr>
<td>a) Bank</td>
<td>12788961</td>
<td>2176746</td>
<td>i) Grants against receipts</td>
<td>256927932</td>
<td></td>
</tr>
<tr>
<td>b) FDR</td>
<td>75000000</td>
<td>75000000</td>
<td>ii) National Oral Health Care Programme</td>
<td>-</td>
<td>263409557</td>
</tr>
<tr>
<td>vii) Gamma Knife patient A/c</td>
<td>5330282</td>
<td>946909</td>
<td>E Dr.B.R.A.I.R.CH.</td>
<td>50000</td>
<td></td>
</tr>
<tr>
<td>a) Bank</td>
<td>5330282</td>
<td>946909</td>
<td>i) Plan</td>
<td>50000</td>
<td></td>
</tr>
<tr>
<td>b) FDR</td>
<td>82500000</td>
<td>67500000</td>
<td>i) Plan EFC</td>
<td>66200000</td>
<td></td>
</tr>
<tr>
<td>ii) Non-EFC</td>
<td>37400000</td>
<td></td>
<td>ii) Plan Non-EFC</td>
<td>37400000</td>
<td></td>
</tr>
<tr>
<td>viii) Neuro Surgery patient A/c</td>
<td>7577574</td>
<td>7387294</td>
<td>F J.P.N.APEXTRAUMACENTRE</td>
<td>218600000</td>
<td>386840000</td>
</tr>
<tr>
<td>a) Bank</td>
<td>7577574</td>
<td>7387294</td>
<td>i) Plan</td>
<td>533582000</td>
<td>120000000</td>
</tr>
<tr>
<td>b) FDR</td>
<td>32000000</td>
<td>22000000</td>
<td>b) Non-Plan</td>
<td>115000000</td>
<td>218600000</td>
</tr>
<tr>
<td>ix) Dr.B.R.A.I.R.CH.</td>
<td>36218452</td>
<td>8360963</td>
<td>G CENTRE FOR DENTAL EDUCATION &amp; RESEARCH</td>
<td>386840000</td>
<td></td>
</tr>
<tr>
<td>x) J.P.N.A.T. Centre</td>
<td>6966601</td>
<td></td>
<td>i) Plan</td>
<td>155000000</td>
<td></td>
</tr>
<tr>
<td>xi) a) N.D.D.T.C.</td>
<td>7389074</td>
<td>3970240</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) UNDCP</td>
<td>257664</td>
<td>980715</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hostels</td>
<td>7541</td>
<td>8038</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>------</td>
<td>------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Cash in hand</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Cash at bank</td>
<td>22138</td>
<td>106431</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) FDR’s</td>
<td>1738028</td>
<td>1341563</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**B CASH IN HAND (IMPREST)**

<table>
<thead>
<tr>
<th>AIIMS (Main)</th>
<th>172864</th>
<th>458650</th>
</tr>
</thead>
<tbody>
<tr>
<td>i) j)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AIIMS (Main)</th>
<th>500</th>
<th>980546</th>
</tr>
</thead>
<tbody>
<tr>
<td>i) AIIMS (Main)</td>
<td>172864</td>
<td>458650</td>
</tr>
<tr>
<td>ii) Scheme Cell</td>
<td>28000</td>
<td>121866</td>
</tr>
<tr>
<td>iii) C.N. Centre</td>
<td>40000</td>
<td>40000</td>
</tr>
</tbody>
</table>

**C AMOUNT LYING UNDISBURSED**

<table>
<thead>
<tr>
<th>AIIMS (Main)</th>
<th>500</th>
<th>980546</th>
</tr>
</thead>
<tbody>
<tr>
<td>i) j)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AIIMS (Main)</th>
<th>14236140</th>
<th>12404563</th>
</tr>
</thead>
<tbody>
<tr>
<td>i) j)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mat. &amp; Supply (Non-Plan)</th>
<th>514535989</th>
<th>431131905</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repair and maintenance of Mach. &amp; Equip.</td>
<td>31073733</td>
<td>22128113</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Furniture &amp; Fixture</th>
<th>26022</th>
<th>472332</th>
</tr>
</thead>
<tbody>
<tr>
<td>Books &amp; Publications</td>
<td>12377371</td>
<td>14864846</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Employees Insurance</th>
<th>2979524</th>
<th>2881271</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scheme</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GPF.</th>
<th>186224076</th>
<th>178373215</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance of buildings</td>
<td>47888085</td>
<td>46317423</td>
</tr>
</tbody>
</table>

**2 GRANTS FROM GOVT. OF INDIA**

<table>
<thead>
<tr>
<th>NON-PLAN</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>i) j)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AIIMS (Main)</th>
<th>2224744730</th>
</tr>
</thead>
<tbody>
<tr>
<td>ii) R.P.C</td>
<td>177500000</td>
</tr>
<tr>
<td>iii) C.N.C.</td>
<td>450000000</td>
</tr>
<tr>
<td>iv) Dr.B.R.A.I.R.C.H.</td>
<td>115000000</td>
</tr>
<tr>
<td>No.</td>
<td>Description</td>
</tr>
<tr>
<td>-----</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>v)</td>
<td>Scheme Cell</td>
</tr>
<tr>
<td>b)</td>
<td><strong>PLAN</strong></td>
</tr>
<tr>
<td>i)</td>
<td>AIIMS (Main)</td>
</tr>
<tr>
<td>ii)</td>
<td>RPC</td>
</tr>
<tr>
<td>iii)</td>
<td>CNC</td>
</tr>
<tr>
<td>iv)</td>
<td>Dr.B.R.A.I.R.C.H. Plan EFC</td>
</tr>
<tr>
<td></td>
<td>Plan Non-EFC</td>
</tr>
<tr>
<td>v)</td>
<td>J.P.N.A.Trauma Centre</td>
</tr>
<tr>
<td>vi)</td>
<td>C.D.E.R.</td>
</tr>
<tr>
<td>c)</td>
<td>N.D.D.T.C.</td>
</tr>
<tr>
<td>d)</td>
<td>CGHS Grant for V.V.I.P.CARE</td>
</tr>
<tr>
<td>e)</td>
<td>V.V.I.P.CARE at Parliament House Annexe.</td>
</tr>
<tr>
<td>f)</td>
<td>College of Nursing</td>
</tr>
<tr>
<td>3</td>
<td>Miscellaneous Receipts</td>
</tr>
<tr>
<td>4</td>
<td>Hospital Receipts</td>
</tr>
<tr>
<td>5</td>
<td>Interest</td>
</tr>
<tr>
<td>6</td>
<td>License Fee</td>
</tr>
<tr>
<td>7</td>
<td>Tution Fee/Exam. Fee</td>
</tr>
<tr>
<td>8</td>
<td>Employees Health Scheme (EHS)</td>
</tr>
<tr>
<td>9</td>
<td>Pot Fund</td>
</tr>
<tr>
<td>10</td>
<td>Employees Insurance Scheme</td>
</tr>
<tr>
<td>11</td>
<td>GPF</td>
</tr>
<tr>
<td>12</td>
<td>Expenditure out of grant received for specific purpose (Scheme Cell)</td>
</tr>
<tr>
<td></td>
<td>i) Appendix-A</td>
</tr>
<tr>
<td></td>
<td>ii) Add undisbursed for 2005-2006 paid now</td>
</tr>
<tr>
<td></td>
<td>iii) Less undisbursed for 2006-2007</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Post Partum Programme (Incentive money)</td>
</tr>
<tr>
<td>14</td>
<td>College of Nursing</td>
</tr>
<tr>
<td>15</td>
<td>PLAN</td>
</tr>
<tr>
<td>a)</td>
<td>Mach. &amp; Equip.</td>
</tr>
<tr>
<td>b)</td>
<td>Building Construction</td>
</tr>
<tr>
<td>c)</td>
<td>V.V.I.P. Care</td>
</tr>
<tr>
<td>d)</td>
<td>V.V.I.P.CARE at Parliament House Annexe.</td>
</tr>
<tr>
<td>16</td>
<td>Purchase of Vehicles</td>
</tr>
<tr>
<td>17</td>
<td>Advance Payments</td>
</tr>
<tr>
<td>a)</td>
<td>Mat. &amp; Supply (NP)</td>
</tr>
<tr>
<td></td>
<td>for foreign purchase</td>
</tr>
<tr>
<td>b)</td>
<td>Mach.&amp;Equip.(Plan)</td>
</tr>
<tr>
<td></td>
<td>for foreign purchase</td>
</tr>
<tr>
<td>c)</td>
<td>P. &amp; A.O. etc. for Bldg. material</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>d)</td>
<td>Ty./Contigent Advances</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>e)</td>
<td>Private firms for stores</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>f)</td>
<td>M/s. H.S.C.C. for Trauma Centre</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>No.</td>
<td>Description</td>
</tr>
<tr>
<td>-----</td>
<td>------------------------------------------------------------------</td>
</tr>
<tr>
<td>12</td>
<td>Outside recoveries</td>
</tr>
<tr>
<td>13</td>
<td>Security Deposits/Earnest Money</td>
</tr>
<tr>
<td>14</td>
<td>Caution Money</td>
</tr>
<tr>
<td>15</td>
<td>Leave Salary &amp; Pension contribution</td>
</tr>
<tr>
<td>16</td>
<td>Recoverable Advances</td>
</tr>
<tr>
<td>a)</td>
<td>Car</td>
</tr>
<tr>
<td>b)</td>
<td>Scooter/Motor Cycle</td>
</tr>
<tr>
<td>c)</td>
<td>Bicycle</td>
</tr>
<tr>
<td>d)</td>
<td>H.B.A.</td>
</tr>
<tr>
<td>e)</td>
<td>Computer</td>
</tr>
<tr>
<td>17</td>
<td>NACO Generated from test charges</td>
</tr>
<tr>
<td>18</td>
<td>Post Partum (Incentive money)</td>
</tr>
<tr>
<td>19</td>
<td>Encashment of Short Term Deposit</td>
</tr>
<tr>
<td>20</td>
<td>Grants received for specific purpose Appendix-A (Scheme Cell)</td>
</tr>
<tr>
<td>21</td>
<td>Schemes</td>
</tr>
<tr>
<td>i)</td>
<td>Grants against receipt</td>
</tr>
<tr>
<td>ii)</td>
<td>Grants transfer from AIIMS (Plan)</td>
</tr>
<tr>
<td>iii)</td>
<td>Grants transfer from A.I.I.M.S. Non-Plan</td>
</tr>
<tr>
<td>iv)</td>
<td>Direct received</td>
</tr>
<tr>
<td>g)</td>
<td>M/s. H.S.C.C. for Dental College</td>
</tr>
<tr>
<td>h)</td>
<td>P&amp;PAO for procurement of Stores</td>
</tr>
<tr>
<td>i)</td>
<td>NDMC for Covering of Nallah</td>
</tr>
<tr>
<td>j)</td>
<td>Custom Duty for Mach. &amp; Equip.</td>
</tr>
<tr>
<td>k)</td>
<td>CPWD for Surgical Ward</td>
</tr>
<tr>
<td>l)</td>
<td>CPWD for lift</td>
</tr>
<tr>
<td>m)</td>
<td>For Books &amp; Journals</td>
</tr>
<tr>
<td>n)</td>
<td>For cochlear Implant Pt. Treatment</td>
</tr>
<tr>
<td>o)</td>
<td>Caryair Equip. India Pvt. Ltd.</td>
</tr>
<tr>
<td>p)</td>
<td>Indian Oil Corporation</td>
</tr>
<tr>
<td>q)</td>
<td>NDMC</td>
</tr>
<tr>
<td>r)</td>
<td>CAD Studio for upgration</td>
</tr>
<tr>
<td>s)</td>
<td>Architectural cell of ESD AIIMS for Building Construction</td>
</tr>
<tr>
<td>t)</td>
<td>Payment made against the receipts up to the year 2005-06</td>
</tr>
<tr>
<td>u)</td>
<td>During 2006-07</td>
</tr>
<tr>
<td>19</td>
<td>Outside recoveries</td>
</tr>
<tr>
<td>20</td>
<td>Investment of short term deposit</td>
</tr>
<tr>
<td>21</td>
<td>NACO</td>
</tr>
<tr>
<td>i)</td>
<td>Salary</td>
</tr>
<tr>
<td>ii)</td>
<td>Mat. &amp; Supply</td>
</tr>
<tr>
<td>iii)</td>
<td>Transfer to Scheme Cell</td>
</tr>
<tr>
<td>------</td>
<td>------------------</td>
</tr>
<tr>
<td>22</td>
<td>Misc. Donations</td>
</tr>
<tr>
<td></td>
<td>(Appendix-D)</td>
</tr>
<tr>
<td>23</td>
<td>Revolving Funds</td>
</tr>
<tr>
<td>24</td>
<td>New Pension Scheme</td>
</tr>
<tr>
<td>25</td>
<td>Donation</td>
</tr>
<tr>
<td></td>
<td>(i) Dr.V.Ramalingaswami</td>
</tr>
<tr>
<td></td>
<td>(ii) Dr.N.G Nayak</td>
</tr>
<tr>
<td></td>
<td>(iii) Dr. H.D. Tandon</td>
</tr>
<tr>
<td></td>
<td>(iv) Prof. N. Gopinath (CTVS)</td>
</tr>
<tr>
<td></td>
<td>(v) Dr. L. K. Bhutani Oration</td>
</tr>
<tr>
<td></td>
<td>(vi) Major General Amir Chand</td>
</tr>
<tr>
<td>24</td>
<td>Pot Fund</td>
</tr>
<tr>
<td>25</td>
<td>P.M.R. ADIP Scheme</td>
</tr>
<tr>
<td>26</td>
<td>Recovery of excess which was paid by the Cashier</td>
</tr>
<tr>
<td></td>
<td>(i) Salary</td>
</tr>
<tr>
<td></td>
<td>(ii) Contingency</td>
</tr>
<tr>
<td>27</td>
<td>Cochlear Inplant Patient Treatment A/c</td>
</tr>
</tbody>
</table>

**DR. RAJENDER PRASAD CENTRE FOR OPHTHALMIC SCIENCES**

1. **GRANT-IN-AID**
   - i) Plan 67500000
   - ii) Non-Plan 177500000 245000000 220000000

2. **Pay & allowances** 149746943 146815820
   - i) Salary head 19070 306286
   - ii) Officer contingency 12845576

3. **Daily Wages** 6102052
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>ICMR</td>
<td>626838</td>
<td>220983</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>USP</td>
<td>937150</td>
<td>50886</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Savers</td>
<td>136165</td>
<td>679900</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Surgeries</td>
<td>522275</td>
<td>675000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Indeye</td>
<td>-</td>
<td>6215566</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ORBIS</td>
<td>-</td>
<td>878865</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Manage</td>
<td>870000</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CODBIL</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>NAB</td>
<td>1517545</td>
<td>1116700</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LCIF</td>
<td>540000</td>
<td>586770</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>NPCB-RAAB</td>
<td>502500</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>NPCB-SSU</td>
<td>29272</td>
<td>50000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>RIP</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>AEH</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MBDL</td>
<td>152599</td>
<td>86359</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>DOS</td>
<td>900000</td>
<td>135000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CSIR</td>
<td>1065939</td>
<td>1538353</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>NIAF</td>
<td>350000</td>
<td>430000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CRP</td>
<td>980000</td>
<td>166300</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>DSBCC</td>
<td>245000</td>
<td>1019400</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Phakie IOL</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Neema-Pilot Study</td>
<td>-</td>
<td>50027</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Workshop</td>
<td>1307091</td>
<td>72700</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>DST/DBT (Stem)</td>
<td>853300</td>
<td>1603500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ORP Vision 2020</td>
<td>50000</td>
<td>145000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Multifocal IOL</td>
<td>437323</td>
<td>100000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Evaluation Study-anti Cataract</td>
<td>230000</td>
<td>130000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>DST (Cyclo)</td>
<td>-</td>
<td>250000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reliance Clinical</td>
<td>245978</td>
<td>78000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Research</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>NPCB RIO</td>
<td>3000000</td>
<td>435000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Clinical Evaluation on B&amp;C(AMO)</td>
<td>577450</td>
<td>57000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>xxxiii)</td>
<td>National Survey on Cataract (NPCB)</td>
<td>280000</td>
<td>379375</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>xxxiv)</td>
<td>RAST</td>
<td>194000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>xxxvi)</td>
<td>who-Child blindness</td>
<td>64500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>xxxvii)</td>
<td>DBT-MA</td>
<td>1801000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>xxxviii)</td>
<td>Fame Study</td>
<td>1007800</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>xxxix)</td>
<td>Baush &amp; Lomb Akro Soft</td>
<td>319150</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>xxi)</td>
<td>DME</td>
<td>319150</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>xxi)</td>
<td>DST/Specific grant</td>
<td>14000000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>xxi)</td>
<td>CGD in primary angel Glaucoma</td>
<td>500267</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>xxi)</td>
<td>Clinical study of ketro conjectivities (Allergen India Pvt. Ltd.)</td>
<td>182496</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>xxi)</td>
<td>Clinical study of</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>xxi)</td>
<td>Neema-Pilot Study</td>
<td>14175</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>xxi)</td>
<td>DST/DBT (Stem)</td>
<td>153934</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>xxii)</td>
<td>FTG</td>
<td>118000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Hospital Receipts</td>
<td>75863819</td>
<td>75087078</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Security Deposits</td>
<td>165000</td>
<td>125000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Interest on Recoverable Advance</td>
<td>394708</td>
<td>136219</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Misc. Receipts</td>
<td>1522068</td>
<td>1810195</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>AIIMS Recovery Received</td>
<td>43010222</td>
<td>38779138</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Outside Recovery</td>
<td>7138389</td>
<td>6192170</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Interest on CLTD</td>
<td>1316721</td>
<td>1356776</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Recoverable Advance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a)</td>
<td>Car</td>
<td>26004</td>
<td>24816</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b)</td>
<td>Scooter</td>
<td></td>
<td>196352</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>xi)</td>
<td>WHO Child blindness</td>
<td>1935</td>
<td>11222</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>xii)</td>
<td>MBDL</td>
<td>141710</td>
<td>62294</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>xiii)</td>
<td>DOS TRAINING</td>
<td>675797</td>
<td>475244</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>xiv)</td>
<td>CSIR</td>
<td>1065939</td>
<td>1538353</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>xv)</td>
<td>NIAF</td>
<td>162629</td>
<td>156990</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>xvi)</td>
<td>CRP</td>
<td>153934</td>
<td>119166</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>xvii)</td>
<td>DBCS/NPCB</td>
<td>29000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>xviii)</td>
<td>ORBIS-PECP</td>
<td>86320</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>xix)</td>
<td>Allergan International</td>
<td>145600</td>
<td>165079</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>xxi)</td>
<td>Neema-Pilot Study</td>
<td>14175</td>
<td>1509</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>xxi)</td>
<td>Workshop</td>
<td>1180991</td>
<td>56375</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>xxi)</td>
<td>DST/DBT (Stem)</td>
<td>254861</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>xxii)</td>
<td>Indeye</td>
<td>1180991</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>xxiii)</td>
<td>ORP Vision 2020</td>
<td>136966</td>
<td>47567</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>xxiv)</td>
<td>Multifocal IOL</td>
<td>143000</td>
<td>11000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>xxv)</td>
<td>Evaluation of anit cataract Study anti Cataract</td>
<td>280346</td>
<td>78419</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>xxvi)</td>
<td>DST (Cyclo)</td>
<td>125705</td>
<td>38196</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>xxviii)</td>
<td>Reliance Clinical Research</td>
<td>248767</td>
<td>3120</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>xxix)</td>
<td>NPCB-RIO(M&amp;E)</td>
<td>1778240</td>
<td>435000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>xxx)</td>
<td>Clinical Evaluation on B&amp;C(AMO)</td>
<td>570060</td>
<td>54457</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>xxxi)</td>
<td>Cataract Surery (NPCB)</td>
<td>321981</td>
<td>57394</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>xxxii)</td>
<td>RAST</td>
<td>194000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>xxxiv)</td>
<td>FTG</td>
<td>118000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c)</td>
<td>Cycle</td>
<td>13616</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d)</td>
<td>HBA</td>
<td>410680</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| xxxv) | CGD in primary angle closure of glaucoma | 15008 |
| xxxvi) | DME | 49269 |
| a) | M&E | 173575 |
| b) | Pay & Conty. | 222844 |
| xxxvii) | Bausch & Lomb | 122472 |
| acro soft | |
| xxxviii) | FAME Study | 249225 |
| xxxxiv) | Clinical study of ketro conjunctivities (Allergen India Pvt. Ltd.) | 141475 |

| 12 | Cash Withdrawal Tax | 563 | 2073 |
| 13 | AIIMS Recoveries remitted | 43010222 | 38779138 |
| 14 | Outside recoveries remitted | 7138962 | 6191597 |
| 15 | Recoverable Advance | |
| a) | Scooter | - | 30000 |
| b) | H.B.A. | - | 350000 |
| 16 | Cheque Book Charges | 6000 |

### CARDIO-TORACIC & NEURO SCIENCES CENTRE

<table>
<thead>
<tr>
<th></th>
<th>GRANT-IN-AID</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a)</td>
<td>Plan</td>
<td>130000000</td>
</tr>
<tr>
<td>(i) For C.N. Tower</td>
<td>23900000</td>
<td>225000000</td>
</tr>
<tr>
<td>(ii) Intra operative MR (EFC)</td>
<td>200000000</td>
<td></td>
</tr>
<tr>
<td>(iii) For Stem Cell Facility</td>
<td>3000000</td>
<td></td>
</tr>
<tr>
<td>b)</td>
<td>Non-Plan</td>
<td>450000000</td>
</tr>
</tbody>
</table>

| 2 a) | Misc. Receipts | 6980937 | 3513364 |
| b) | Private Ward | 13663460 | 14885978 |
| c) | X-Ray | 786420 | 887165 |
| d) | C.T.Scan charges | 1108800 | 1199610 |
| e) | Ultra sound | 117000 | 137200 |

| 3 | Interest | 3864798 | 1528858 |

| 4 | Security Deposit/ | 3418000 | 4902000 |

<table>
<thead>
<tr>
<th>1</th>
<th>ADMINISTRATIVE EXPENDITURE</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>a) i) Pay &amp; Allowances (Non-Plan)</td>
<td>311075036</td>
</tr>
<tr>
<td></td>
<td>b) Payment of un-disbursed salary for 2005-2006</td>
<td>39170</td>
</tr>
<tr>
<td></td>
<td>c) Wages</td>
<td>15933501</td>
</tr>
<tr>
<td></td>
<td>d) Travelling Allowance</td>
<td>1590543</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2</th>
<th>Stores (Non-Plan)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td>Repair &amp; Maintenance of Mach. &amp; Equip.</td>
<td>5605477</td>
</tr>
<tr>
<td>b)</td>
<td>Material &amp; Supply</td>
<td>127418912</td>
</tr>
<tr>
<td>c)</td>
<td>ORBO</td>
<td>70883</td>
</tr>
<tr>
<td>No.</td>
<td>Description</td>
<td>Amount 1</td>
</tr>
<tr>
<td>-----</td>
<td>-------------------------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>5</td>
<td>Earnest Deposit</td>
<td>21500</td>
</tr>
<tr>
<td>3</td>
<td>Donations</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>Refund and Recoveries</td>
<td>897867</td>
</tr>
<tr>
<td>7</td>
<td>Receipt from NDMC against CN Tower</td>
<td>6242000</td>
</tr>
<tr>
<td>8</td>
<td>Neurology Patient A/c</td>
<td>3125800</td>
</tr>
<tr>
<td>9</td>
<td>Thallium Test</td>
<td>3112750</td>
</tr>
<tr>
<td>10</td>
<td>Levy charges</td>
<td>375760</td>
</tr>
<tr>
<td>11</td>
<td>Rent Charges</td>
<td>829261</td>
</tr>
<tr>
<td>12</td>
<td>GPF</td>
<td>52583845</td>
</tr>
<tr>
<td>13</td>
<td>New Pension Schemes</td>
<td>2732461</td>
</tr>
<tr>
<td>14</td>
<td>Recoverable Advances</td>
<td>6</td>
</tr>
<tr>
<td>14</td>
<td>i) Office Contigencies</td>
<td>1893041</td>
</tr>
<tr>
<td>14</td>
<td>ii) Payment of un-disbursed amount for 2005-2006</td>
<td>-</td>
</tr>
<tr>
<td>15</td>
<td>Recoverable Advance (Non-Plan)</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>a) Bicycle</td>
<td>2100</td>
</tr>
<tr>
<td>15</td>
<td>b) Scooter</td>
<td>373555</td>
</tr>
<tr>
<td>15</td>
<td>c) Car</td>
<td>64392</td>
</tr>
<tr>
<td>15</td>
<td>d) House Building</td>
<td>2001312</td>
</tr>
<tr>
<td>15</td>
<td>e) Computer</td>
<td>12600</td>
</tr>
<tr>
<td>16</td>
<td>Transport</td>
<td>-</td>
</tr>
<tr>
<td>16</td>
<td>Cardio Test</td>
<td>3505250</td>
</tr>
<tr>
<td>17</td>
<td>Blood Test</td>
<td>3785055</td>
</tr>
<tr>
<td>18</td>
<td>EHS</td>
<td>1418090</td>
</tr>
<tr>
<td>19</td>
<td>Outside Recovery</td>
<td>24633393</td>
</tr>
<tr>
<td>20</td>
<td>Institute Recovery</td>
<td>-</td>
</tr>
<tr>
<td>21</td>
<td>Water Charges</td>
<td>37387</td>
</tr>
<tr>
<td>22</td>
<td>Pot Fund</td>
<td>49866</td>
</tr>
<tr>
<td>23</td>
<td>P.M. Relief Fund</td>
<td>-</td>
</tr>
</tbody>
</table>
C.T. PATIENT A/C

1a) Patient’s Receipts during 2006-2007 22950682
b) Patient’s Refunds 2006-2007 -55303052
c) Poor Patient’s treatment out of interest earned during 2006-07 1818071 17606501 187617020

2 Interest during 2006-2007 2966953
Poor Patient’s treatment expenditure 06-07 -1818071 1148882 11865254

3 Cancelled Cheques 1668918

ANGIOGRAPHY PATIENT A/C

1a) Patient’s Receipts 2006-2007 19819436
b) Patients refunds -32178133
c) Poor Patient’s treatment out of interest earned during 2006-07 208000 166224303 174190474

2a) Interest during 2006-2007 2536289
b) Poor Patient’s treatment expenditure 06-07 -208000 2328289 4300646

3 Cancelled Cheques 311084 342279

GAMMA KNIFE PATIENT A/C

1 Patient Receipts 2006-2007 18723478

21 Amt. Sent to PAO 1080 900
22 Pot Fund 49866 27935
23 Water charges 37387 36806
24 P.M. Relief Fund - 429906

ANGIOGRAPHY PATIENT A/C

1 Purchase for stores 168224014 168217044
2 Bank Charges 4450 4140
3 Fresh Cheque 266586 -

GAMMA KNIFE PATIENT A/C

1 Purchase for Stores 1150477 2055168
2 MRI Charges 638000 590100
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Refund to Patients</td>
<td>-2109028</td>
<td>16614450</td>
<td>18042639</td>
</tr>
<tr>
<td>Interest</td>
<td>6598183</td>
<td>3986002</td>
<td></td>
</tr>
<tr>
<td>Cancelled Cheque</td>
<td>69900</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td><strong>NEURO SURGERY PATIENT A/C</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Patient Receipts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006-2007</td>
<td>34922847</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient Refund</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006-2007</td>
<td>-4441024</td>
<td>30481823</td>
<td>38039620</td>
</tr>
<tr>
<td>Bank Charges</td>
<td>755</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>NEURO SURGERY PATIENT A/C</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Purchase for Stores</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006-2007</td>
<td>23486986</td>
<td>27951759</td>
<td></td>
</tr>
<tr>
<td>2 Contingency</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Bank charges</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bank charges</td>
<td>219</td>
<td>213</td>
<td></td>
</tr>
<tr>
<td><strong>NATIONAL DRUG DEPENDENCE TREATMENT CENTRE (N.D.D.T.C.)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Grant-in-Aid (DAC)</td>
<td>40000000</td>
<td>37000000</td>
<td></td>
</tr>
<tr>
<td>2 Hosp. Receipt</td>
<td>387437</td>
<td>477320</td>
<td></td>
</tr>
<tr>
<td>3 Interest on FDR</td>
<td>104546</td>
<td>73973</td>
<td></td>
</tr>
<tr>
<td>4 Security Deposit</td>
<td>40000</td>
<td>55000</td>
<td></td>
</tr>
<tr>
<td>5 WHO Fund</td>
<td></td>
<td>121622</td>
<td></td>
</tr>
<tr>
<td>6 Car Adv. Recovery</td>
<td>34560</td>
<td>34560</td>
<td></td>
</tr>
<tr>
<td>7 Misc. Receipt</td>
<td>12342</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>i) Water Charges</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ii) Licence fee</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>iii) Imprest Refund</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>iv) TA/LTC Refund</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>v) Advance Refund</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>vi) Income Tax Cash Deposit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>vii) Misc. Receipt</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>viii) Adj. of totalling error</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ix) in June 2003 C/B</td>
<td></td>
<td>99074</td>
<td></td>
</tr>
<tr>
<td><strong>Institute Recovery</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GPF Sub. &amp; Adv.</td>
<td>3548330</td>
<td>3275610</td>
<td></td>
</tr>
<tr>
<td>Conveyance</td>
<td>104479</td>
<td>72051</td>
<td></td>
</tr>
<tr>
<td>HBA</td>
<td>130392</td>
<td>113725</td>
<td></td>
</tr>
<tr>
<td>Licence fee</td>
<td>325729</td>
<td>49936</td>
<td></td>
</tr>
<tr>
<td>Officer Association</td>
<td>2120</td>
<td>2020</td>
<td></td>
</tr>
<tr>
<td>EIS</td>
<td>38310</td>
<td>38840</td>
<td></td>
</tr>
<tr>
<td><strong>Institute Recovery Remitted</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GPF Sub. &amp; Adv.</td>
<td>3548330</td>
<td>3275610</td>
<td></td>
</tr>
<tr>
<td>Conveyance</td>
<td>104479</td>
<td>72051</td>
<td></td>
</tr>
<tr>
<td>HBA</td>
<td>130392</td>
<td>113725</td>
<td></td>
</tr>
<tr>
<td>Licence fee</td>
<td>325729</td>
<td>49936</td>
<td></td>
</tr>
<tr>
<td>Officer Association</td>
<td>2120</td>
<td>2020</td>
<td></td>
</tr>
<tr>
<td>EIS</td>
<td>38310</td>
<td>38840</td>
<td></td>
</tr>
<tr>
<td>Description</td>
<td>Year 1</td>
<td>Year 2</td>
<td></td>
</tr>
<tr>
<td>------------------------------</td>
<td>---------</td>
<td>---------</td>
<td></td>
</tr>
<tr>
<td>EHS</td>
<td>80730</td>
<td>80600</td>
<td></td>
</tr>
<tr>
<td>Society</td>
<td>82039</td>
<td>637660</td>
<td></td>
</tr>
<tr>
<td>Comp. Rec.</td>
<td>8004</td>
<td>8004</td>
<td></td>
</tr>
<tr>
<td>Faculty</td>
<td>800</td>
<td>700</td>
<td></td>
</tr>
<tr>
<td>New Pension Scheme</td>
<td>89182</td>
<td>27871</td>
<td></td>
</tr>
<tr>
<td>Misc. Recovery</td>
<td>500</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Outside Recovery</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GIS</td>
<td>60</td>
<td>720</td>
<td></td>
</tr>
<tr>
<td>Income Tax</td>
<td>879591</td>
<td>738243</td>
<td></td>
</tr>
<tr>
<td>GPF</td>
<td>10000</td>
<td>120000</td>
<td></td>
</tr>
<tr>
<td>LIC</td>
<td>37164</td>
<td>27035</td>
<td></td>
</tr>
<tr>
<td>Court Rec.</td>
<td>26000</td>
<td>24000</td>
<td></td>
</tr>
<tr>
<td>Earthquake Relief Fund</td>
<td></td>
<td>29753</td>
<td></td>
</tr>
</tbody>
</table>

**NATIONAL DRUG DEPENDENCE TREATMENT CENTRE (N.D.D.T.C.) (UNDCP PROJECT)**

1. Grant-in-Aid 1167928 857371

2. Misc. Receipt 26400

**Dr. B. R. A. INSTITUTE ROTARY CANCER HOSPITAL**

1. Grant in Aid
   a) Plan

**Dr. B. R. A. INSTITUTE ROTARY CANCER HOSPITAL**

1. Pay & Allowances 73005967 68383729
   2. TA/DA 1183072 1185241
<table>
<thead>
<tr>
<th>S. No.</th>
<th>Description</th>
<th>Plan</th>
<th>Non-Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>J.P.N. Apex Trauma Centre</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Grant in Aid</td>
<td>Plan</td>
<td>Other Receipts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>533582000</td>
<td>273031</td>
</tr>
<tr>
<td></td>
<td></td>
<td>120000000</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>HSCC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Non-EFC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>EFC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Contingency</td>
<td>1290753</td>
<td>802449</td>
</tr>
<tr>
<td>6</td>
<td>Custom Duty</td>
<td>2544974</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Medical Oncology</td>
<td>366077</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Revolving Fund</td>
<td>4858671</td>
<td>1731713</td>
</tr>
<tr>
<td>9</td>
<td>Sulabh Services</td>
<td>470489</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Hospital Receipts</td>
<td>9230774</td>
<td>6502311</td>
</tr>
<tr>
<td>11</td>
<td>Revolving Funds</td>
<td>2942250</td>
<td>3373500</td>
</tr>
<tr>
<td>12</td>
<td>Medical Oncology Receipts</td>
<td>516075</td>
<td>320340</td>
</tr>
<tr>
<td>13</td>
<td>ICMR (DCR)</td>
<td>375000</td>
<td>375000</td>
</tr>
<tr>
<td>14</td>
<td>Receipts on account of L/c Adjustment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>by Bank</td>
<td>4716486</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>AIIMS Recoveries Remitted</td>
<td>14048491</td>
<td>14599085</td>
</tr>
<tr>
<td>17</td>
<td>Outside Recoveries Remitted</td>
<td>6620442</td>
<td>2767412</td>
</tr>
<tr>
<td>18</td>
<td>Scooter Advance</td>
<td>4620</td>
<td>22710</td>
</tr>
<tr>
<td>19</td>
<td>Car Advance</td>
<td>18000</td>
<td>-</td>
</tr>
<tr>
<td>20</td>
<td>Computer Advance</td>
<td>200</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>J.P.N. Apex Trauma Centre</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Grant in Aid</td>
<td>Plan</td>
<td>Other Receipts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>533582000</td>
<td>273031</td>
</tr>
<tr>
<td></td>
<td></td>
<td>120000000</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Construction of Bldg.</td>
<td>29000000</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Machinery &amp; Equipment</td>
<td>333217199</td>
<td>112932400</td>
</tr>
<tr>
<td>24</td>
<td>Material &amp; Supply</td>
<td>100999</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>Manpower</td>
<td>2557620</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>Mach. &amp; Equipments</td>
<td>60555969</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>Outsourcing (Security &amp; Sanitation)</td>
<td>2376026</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>Recurring &amp; consumables</td>
<td>21503773</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>Custom Duty &amp; PDA</td>
<td>10300000</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>Capital Works</td>
<td>1474343</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>AIIMS Recoveries Remitted</td>
<td>14048491</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>Outside Recoveries Remitted</td>
<td>6620442</td>
<td></td>
</tr>
<tr>
<td></td>
<td>J.P.N. Apex Trauma Centre</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Grant in Aid</td>
<td>Plan</td>
<td>Other Receipts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>533582000</td>
<td>273031</td>
</tr>
<tr>
<td></td>
<td></td>
<td>120000000</td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>Plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>Material &amp; Supply</td>
<td>1628773</td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>Manpower</td>
<td>30885699</td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>Recurring &amp; Outsource</td>
<td>114932007</td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>J.P.N. Apex Trauma Centre</td>
<td></td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>Grant in Aid</td>
<td>Plan</td>
<td>Other Receipts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>155000000</td>
<td>273031</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>Centre for Dental Education &amp; Research</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>Grant in aid</td>
<td>Plan</td>
<td>Other Receipts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>155000000</td>
<td>273031</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Description</td>
<td>Amount</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>----------------------------------------------------------------------------</td>
<td>----------</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Security Deposit</td>
<td>260000</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Interest on CLTD by bank</td>
<td>948734</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Misc. Receipt</td>
<td>163500</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Manpower &amp; consumables for Engg. maintenances on contract</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Machinery &amp; Equipment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Actual Payment</td>
<td>29724246</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Advance payments made to Foreign purchases</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(i) Actual Payment</td>
<td>17134994</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(ii) Advance payments made to Foreign purchases</td>
<td>46859240</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Advance paid to HSCC</td>
<td>88300000</td>
<td></td>
</tr>
</tbody>
</table>

**POOR PATIENT ACCOUNTS**

<table>
<thead>
<tr>
<th>i)</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>a) AIIMS</td>
<td>142407</td>
</tr>
<tr>
<td></td>
<td>b) Interest</td>
<td>73148</td>
</tr>
<tr>
<td></td>
<td>ii) R.P. Centre</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) Interest</td>
<td>600</td>
</tr>
<tr>
<td></td>
<td>b) Donation</td>
<td>58725</td>
</tr>
<tr>
<td></td>
<td>c) Wrongly credited by bank</td>
<td>30000</td>
</tr>
<tr>
<td></td>
<td>iii) (a) I.R.C.H.</td>
<td>149069</td>
</tr>
<tr>
<td></td>
<td>(b) Interest on FDR’s</td>
<td>394411</td>
</tr>
<tr>
<td></td>
<td>iv) N.S. Centre</td>
<td>37518</td>
</tr>
<tr>
<td></td>
<td>Donation</td>
<td>16676</td>
</tr>
</tbody>
</table>

**PATIENT TREATMENT ACCOUNTS**

<table>
<thead>
<tr>
<th>1</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(a) AIIMS</td>
<td>34370806</td>
</tr>
<tr>
<td></td>
<td>(b) Interest</td>
<td>627135</td>
</tr>
<tr>
<td></td>
<td>(c) Dr.B.R.A.I.R.C.H.</td>
<td>33738008</td>
</tr>
<tr>
<td></td>
<td>(d) Cheque Cancelled</td>
<td>467987</td>
</tr>
<tr>
<td></td>
<td>(e) Interest</td>
<td>479430</td>
</tr>
</tbody>
</table>

**HOSTELS**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Receipts during 2006-07</td>
<td></td>
</tr>
<tr>
<td>i) Security Deposits</td>
<td>719500</td>
</tr>
<tr>
<td>ii) Misc. Receipts</td>
<td>54050</td>
</tr>
<tr>
<td>iii) Interest earned</td>
<td>140351</td>
</tr>
<tr>
<td>b) Security refunds</td>
<td>316846</td>
</tr>
<tr>
<td>c) Misc. Expenditure</td>
<td>50671</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Interest</td>
<td>627135</td>
</tr>
<tr>
<td>b) Interest</td>
<td>479430</td>
</tr>
<tr>
<td>c) Interest</td>
<td>627135</td>
</tr>
<tr>
<td>d) Interest</td>
<td>479430</td>
</tr>
<tr>
<td>e) Interest</td>
<td>627135</td>
</tr>
<tr>
<td>f) Interest</td>
<td>479430</td>
</tr>
</tbody>
</table>
## CLOSING BALANCES

### A  
**CASH AT BANK**

<table>
<thead>
<tr>
<th>Description</th>
<th>Bank Balance</th>
<th>FDRs Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>i) AIIMS(Main)</td>
<td>483714326</td>
<td>382986814</td>
</tr>
<tr>
<td>b) Unspent Balance of Specific Grants remained</td>
<td>181989884</td>
<td>665704210</td>
</tr>
<tr>
<td>with AIIMS (Main)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ii) Schemes Cell</td>
<td>43642652</td>
<td>61200654</td>
</tr>
<tr>
<td>iii) Dr. R.P. Centre</td>
<td>42205910</td>
<td>24422198</td>
</tr>
<tr>
<td>iv) C.N. Centre</td>
<td>151455520</td>
<td>113473131</td>
</tr>
<tr>
<td>v) C.T. Patient A/c</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) Bank</td>
<td>14403127</td>
<td>13752622</td>
</tr>
<tr>
<td>(b) FDRs</td>
<td>220000000</td>
<td>235000000</td>
</tr>
<tr>
<td>vi) N.D.D.T.C.</td>
<td>7499458</td>
<td>7389074</td>
</tr>
<tr>
<td>vii) Angiography A/c</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Bank</td>
<td>12358587</td>
<td>12788961</td>
</tr>
<tr>
<td>b) FDRs</td>
<td>75000000</td>
<td>75000000</td>
</tr>
<tr>
<td>viii) UNDCP</td>
<td>316153</td>
<td>257664</td>
</tr>
<tr>
<td>ix) I.R.C.H.</td>
<td>46707703</td>
<td>36218452</td>
</tr>
<tr>
<td>x) J.P.N. Apex Trauma Centre</td>
<td>32786727</td>
<td>6966601</td>
</tr>
<tr>
<td>xi) Gamma Knife Pt. A/c</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Bank</td>
<td>66823583</td>
<td>5330282</td>
</tr>
<tr>
<td>b) FDRs</td>
<td>42500000</td>
<td>82500000</td>
</tr>
<tr>
<td>xii) Neuro Surgery Pt. A/c</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Bank</td>
<td>4985397</td>
<td>7577574</td>
</tr>
<tr>
<td>b) FDRs</td>
<td>42000000</td>
<td>32000000</td>
</tr>
<tr>
<td>xiii) Centre for Dental Education and Research</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### B  
**CASH IN HAND (IMPREST)**

<table>
<thead>
<tr>
<th>Description</th>
<th>Bank Balance</th>
<th>FDRs Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>i) AIIMS (Main)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Balance as per cash book of the cashier</td>
<td>498650</td>
<td></td>
</tr>
<tr>
<td>b) Excess paid by the cashier</td>
<td>-307426</td>
<td>191224</td>
</tr>
<tr>
<td></td>
<td></td>
<td>172864</td>
</tr>
<tr>
<td>ii) Dr. R.P. Centre</td>
<td>10000</td>
<td>10000</td>
</tr>
<tr>
<td>iii) C.N. Centre</td>
<td>40000</td>
<td>40000</td>
</tr>
<tr>
<td>iv) CT Patient A/c</td>
<td>793500</td>
<td></td>
</tr>
<tr>
<td>v) Angiography A/c</td>
<td>799000</td>
<td></td>
</tr>
</tbody>
</table>
vi) Neurosurgery Pt. A/c 44000  
C AMOUNTING UNDISBURSED  
   i) AIIMS (Main) 500  
   ii) Scheme Cell 108000 28000  
D POOR PATIENT ACCOUNT  
   i) AIIMS (Main)  
      (a) Cash/Bank 861808 813303  
      (b) FDR's 400226 327078  
   ii) IRCH  
      Cash/Bank 1393911 1234844  
   iii) Dr. R.P. Centre 25052 12829  
   iv) N.S. Centre  
      Cash at Bank 83806 59004  
E PATIENT TREATMENT A/C  
   i) AIIMS 18900463 14236140  
   ii) IRCH  
      a) Cash/Bank 5194183 11522423  
      b) FDRs 10000000 6000000  
       6000000  
F HOSTELS  
   i) Cash in hand 23806 7541  
   ii) Cash at Bank 318341 221318  
   iii) FDR's 2171124 1738028  

<table>
<thead>
<tr>
<th></th>
<th>10806059642</th>
<th>8711248635</th>
<th>10806059642</th>
<th>8711248635</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>10806059642</td>
<td>8711248635</td>
<td>TOTAL</td>
<td>10806059642</td>
</tr>
</tbody>
</table>

(MRS. BASANTI DALAL)  
FINANCE & CHIEF ACCOUNTS OFFICER  

(P. VENUGOPAL)  
DIRECTOR
### ALL INDIA INSTITUTE OF MEDICAL SCIENCES
#### INCOME AND EXPENDITURE ACCOUNT
##### FOR THE YEAR 2006-2007

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>AIIMS (MAIN)</td>
<td></td>
<td></td>
<td>AIIMS (MAIN)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>A NON-PLAN</strong></td>
<td></td>
<td></td>
<td><strong>GRANT-IN-AID</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Pay &amp; Allowances</td>
<td>1139148677</td>
<td>1056239333</td>
<td>(a) Non-Plan</td>
<td>2220938132</td>
<td>2031571017</td>
</tr>
<tr>
<td>2 Stipend</td>
<td>5527958</td>
<td>5142170</td>
<td>(b) Plan</td>
<td>10350656</td>
<td></td>
</tr>
<tr>
<td>3 Travelling Allowances</td>
<td>12989951</td>
<td>13949525</td>
<td><strong>REVENUE RECEIPTS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Pensionery Benefits</td>
<td>186292072</td>
<td>180701304</td>
<td>1 Hospital Receipts</td>
<td>115958381</td>
<td>99041194</td>
</tr>
<tr>
<td>5 Mat. &amp; Supply</td>
<td>536702644</td>
<td>447442184</td>
<td>2 Tuition Fee and</td>
<td>1174242</td>
<td>1995995</td>
</tr>
<tr>
<td>6 Office Contingency</td>
<td>316647167</td>
<td>375130054</td>
<td>3 Employees Health Scheme</td>
<td>9440192</td>
<td>9831979</td>
</tr>
<tr>
<td>7 Repair &amp; Maintenance of Mach. &amp; Equip.</td>
<td>31073733</td>
<td>22128113</td>
<td>4 License fee</td>
<td>15659351</td>
<td>15270086</td>
</tr>
<tr>
<td>8 Maintenance of Buildings</td>
<td>47888085</td>
<td>46317423</td>
<td>5 Interest</td>
<td>28470764</td>
<td>35342226</td>
</tr>
<tr>
<td>9 New Pension Scheme</td>
<td>10914500</td>
<td></td>
<td>6 Miscellaneous Receipts</td>
<td>8883367</td>
<td>83378676</td>
</tr>
<tr>
<td>i) Less Receipts</td>
<td>-3190277</td>
<td>7724223</td>
<td>7 L.S.P.C.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less payments during 2006-07</td>
<td>91624</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 L.S.P.C.</td>
<td>584935</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i) Less Receipts</td>
<td>-156056</td>
<td>428879</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>B PLAN</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 Pay &amp; Allowances - J.P.N. Apex Trauma Centre</td>
<td></td>
<td>9422199</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 Pay &amp; Allowances - Centre for Dental Education &amp; Research</td>
<td>928457</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>DR. RAJENDER PRASAD CENTRE FOR OPTHALMIC SCIENCES</strong></td>
<td></td>
<td></td>
<td><strong>DR. RAJENDER PRASAD CENTRE FOR OPTHALMIC SCIENCES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Grant-in-Aid</strong></td>
<td></td>
<td></td>
<td><strong>Non-Plan</strong></td>
<td>177500000</td>
<td>160000000</td>
</tr>
<tr>
<td>1 Pay &amp; Allowances Daily Wages</td>
<td>149746943</td>
<td>146815820</td>
<td>2 Hospital Receipts</td>
<td>75863819</td>
<td>75087078</td>
</tr>
<tr>
<td>2 Travelling Allowances</td>
<td>1443346</td>
<td>825723</td>
<td>3 Interest on Recoverable</td>
<td>394708</td>
<td>136219</td>
</tr>
<tr>
<td>3 Material &amp; Supply</td>
<td>82196022</td>
<td>73691315</td>
<td>4 Misc. Receipts</td>
<td>1522068</td>
<td>1810195</td>
</tr>
<tr>
<td>4 Office Expenses</td>
<td>6810590</td>
<td>2942512</td>
<td>5 Interest on CLTD</td>
<td>1316721</td>
<td>1356776</td>
</tr>
<tr>
<td>5 Maintenance of Buildings</td>
<td>3339892</td>
<td>2036691</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Repair &amp; Maintenance</td>
<td>4388669</td>
<td>8132182</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Description</td>
<td>Amount 1</td>
<td>Amount 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>----------------------------------------------</td>
<td>----------------</td>
<td>----------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Cash withdrawal Tax</td>
<td>563</td>
<td>2073</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Cheque Book Charges</td>
<td>6000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**CARDIO-THORACIC & NEURO SCIENCES CENTRE**

**Non-Plan**

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Amount 1</th>
<th>Amount 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pay &amp; Allowances &amp; Wages</td>
<td>327008537</td>
<td>311762934</td>
</tr>
<tr>
<td>2</td>
<td>Travelling Exp.</td>
<td>1590543</td>
<td>1574607</td>
</tr>
<tr>
<td>3</td>
<td>Material &amp; Supply</td>
<td>128938372</td>
<td>116439311</td>
</tr>
<tr>
<td>4</td>
<td>Office Contigency</td>
<td>1893041</td>
<td>1982676</td>
</tr>
<tr>
<td>5</td>
<td>Repair &amp; maintenance of Mach. &amp; Equip.</td>
<td>5605477</td>
<td>5084453</td>
</tr>
<tr>
<td>6</td>
<td>Maint of Buildings</td>
<td>7762997</td>
<td>6134191</td>
</tr>
<tr>
<td>7</td>
<td>Mat. &amp; Supply Stores(Plan)</td>
<td>16131565</td>
<td></td>
</tr>
</tbody>
</table>

**Revenue Receipts**

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Amount 1</th>
<th>Amount 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td>Hosp. Receipts</td>
<td>15675680</td>
<td></td>
</tr>
<tr>
<td>b)</td>
<td>Amount received from outside patients</td>
<td>-64912</td>
<td></td>
</tr>
<tr>
<td>c)</td>
<td>Amount due 2006-07</td>
<td>249662</td>
<td>15860430</td>
</tr>
<tr>
<td>3</td>
<td>Misc. Receipts</td>
<td>6980937</td>
<td>3513364</td>
</tr>
<tr>
<td>4</td>
<td>Licence Fee</td>
<td>829261</td>
<td>758546</td>
</tr>
<tr>
<td>5</td>
<td>Refund &amp; Recoveries</td>
<td>897867</td>
<td>1552663</td>
</tr>
<tr>
<td>6</td>
<td>Interest earned</td>
<td>3864798</td>
<td>1528858</td>
</tr>
<tr>
<td>7</td>
<td>Levy Charges</td>
<td>375760</td>
<td>384670</td>
</tr>
<tr>
<td>8</td>
<td>Transport</td>
<td>-</td>
<td>294</td>
</tr>
</tbody>
</table>

**C.T. PATIENT A/C**

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Amount 1</th>
<th>Amount 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Purchase for Stores</td>
<td>143340334</td>
<td>181984863</td>
</tr>
<tr>
<td>2</td>
<td>Mach. &amp; Equip. (Transferred to CNC)</td>
<td>49025000</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Bank Charges</td>
<td>9660</td>
<td>12464</td>
</tr>
</tbody>
</table>

**ANGIOGRAPHY PATIENT A/C**

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Amount 1</th>
<th>Amount 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Purchase for Stores</td>
<td>168224014</td>
<td>168217044</td>
</tr>
<tr>
<td>2</td>
<td>Bank Charges</td>
<td>4450</td>
<td>4140</td>
</tr>
</tbody>
</table>

**GAMMA KNIFE PATIENT A/C**

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Amount 1</th>
<th>Amount 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Purchase of Stores</td>
<td>1150477</td>
<td>2055168</td>
</tr>
<tr>
<td>2</td>
<td>MRI Charges</td>
<td>638000</td>
<td>590100</td>
</tr>
<tr>
<td>3</td>
<td>Bank Charges</td>
<td>755</td>
<td>-</td>
</tr>
</tbody>
</table>

**NEURO SURGERY PATIENT A/C**

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Amount 1</th>
<th>Amount 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Purchase of Stores</td>
<td>23486986</td>
<td>27951759</td>
</tr>
<tr>
<td>2</td>
<td>Contingency</td>
<td>47010</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Bank Charges</td>
<td>219</td>
<td>213</td>
</tr>
</tbody>
</table>
### NATIONAL DRUG DEPENDENCE TREATMENT CENTRE (N.D.D.T.C.)

<table>
<thead>
<tr>
<th>Description</th>
<th>2006-07</th>
<th>2007-08</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pay &amp; Allowances</td>
<td>19165168</td>
<td>18347041</td>
</tr>
<tr>
<td>Wages</td>
<td>1314737</td>
<td>2120786</td>
</tr>
<tr>
<td>Material &amp; Supply i)</td>
<td>15195875</td>
<td>10714601</td>
</tr>
<tr>
<td>ii) 2005-06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Misc. Expenditure</td>
<td>2594</td>
<td></td>
</tr>
</tbody>
</table>

#### NATIONAL DRUG DEPENDENCE TREATMENT CENTRE (N.D.D.T.C.) (UNDCP PROJECT)

<table>
<thead>
<tr>
<th>Description</th>
<th>2006-07</th>
<th>2007-08</th>
</tr>
</thead>
<tbody>
<tr>
<td>TA/DA</td>
<td>378411</td>
<td>551514</td>
</tr>
<tr>
<td>Printing Work/Stationary</td>
<td></td>
<td>310500</td>
</tr>
<tr>
<td>Misc./Office Contingency</td>
<td>233580</td>
<td>245515</td>
</tr>
<tr>
<td>Transfer to NDDTC a/c</td>
<td>71237</td>
<td>195721</td>
</tr>
<tr>
<td>Refund to WHO</td>
<td>625</td>
<td>550</td>
</tr>
<tr>
<td>Pay &amp; Allowances</td>
<td>184262</td>
<td></td>
</tr>
<tr>
<td>Correspondences</td>
<td>143124</td>
<td></td>
</tr>
</tbody>
</table>

### Dr. B.R.A. INSTITUTE ROTARY CANCER HOSPITAL

<table>
<thead>
<tr>
<th>Description</th>
<th>2006-07</th>
<th>2007-08</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pay &amp; Allowances</td>
<td>7305967</td>
<td>68383729</td>
</tr>
<tr>
<td>Manpower (Pay and allowances EFC)</td>
<td>2557620</td>
<td></td>
</tr>
<tr>
<td>Travelling expenses/DA</td>
<td>1183072</td>
<td>1185241</td>
</tr>
<tr>
<td>Material &amp; Supply</td>
<td>40443173</td>
<td>42377227</td>
</tr>
<tr>
<td>Maintenance of Building</td>
<td>2946967</td>
<td>4780108</td>
</tr>
<tr>
<td>Security Services</td>
<td></td>
<td>1143856</td>
</tr>
<tr>
<td>Sulabh Services</td>
<td>2376026</td>
<td>470489</td>
</tr>
<tr>
<td>Contingency Expenditure</td>
<td>1290753</td>
<td>802449</td>
</tr>
<tr>
<td>Recurring &amp; Consumables</td>
<td>21503773</td>
<td></td>
</tr>
</tbody>
</table>

### Dr. B.R.A. INSTITUTE ROTARY CANCER HOSPITAL

<table>
<thead>
<tr>
<th>Description</th>
<th>2006-07</th>
<th>2007-08</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grant-in-aid</td>
<td>4000000</td>
<td>3700000</td>
</tr>
<tr>
<td>Mach. &amp; Equip.</td>
<td>-1485128</td>
<td>-1867951</td>
</tr>
<tr>
<td>Motar Vehicle</td>
<td>-507973</td>
<td>-561616</td>
</tr>
<tr>
<td>Bldg. &amp; Const.</td>
<td>-109502</td>
<td></td>
</tr>
<tr>
<td>Furniture</td>
<td>-638117</td>
<td>-71286</td>
</tr>
<tr>
<td>Books &amp; Pub.</td>
<td>-1841503</td>
<td>35527279</td>
</tr>
<tr>
<td>Hospital Receipt</td>
<td>387437</td>
<td>477320</td>
</tr>
<tr>
<td>Misc. Receipts</td>
<td>12342</td>
<td>99074</td>
</tr>
<tr>
<td>FDR’s Interest</td>
<td>104546</td>
<td>73973</td>
</tr>
<tr>
<td>WHO Fund</td>
<td>121622</td>
<td></td>
</tr>
<tr>
<td>Manpower + Outsourcing</td>
<td>2660000</td>
<td></td>
</tr>
<tr>
<td>Recurring &amp; consumables(EFC)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### J.P.N. APEX TRAUMA CENTRE

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Material &amp; Supply (Plan)</td>
<td>100999</td>
</tr>
<tr>
<td>2</td>
<td>Manpower</td>
<td>30885699</td>
</tr>
<tr>
<td>3</td>
<td>Recurring &amp; Outsourcing</td>
<td>68889836</td>
</tr>
</tbody>
</table>

### CENTRE FOR DENTAL EDUCATION & RESEARCH

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pay &amp; Allowances (Plan)</td>
<td>1628773</td>
</tr>
<tr>
<td>2</td>
<td>Material &amp; Supply (Plan)</td>
<td>6243</td>
</tr>
<tr>
<td>3</td>
<td>Manpower &amp; consumable(plan) For Engineering maintenance on contract</td>
<td>66051</td>
</tr>
</tbody>
</table>

### HOSTELS

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Misc. Expenditure</td>
<td>50671</td>
</tr>
<tr>
<td></td>
<td></td>
<td>46253</td>
</tr>
</tbody>
</table>

### EXCESS OF INCOME OVER EXPENDITURE

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>AIIMS (Main)</td>
<td>196101040</td>
</tr>
<tr>
<td></td>
<td></td>
<td>126920312</td>
</tr>
<tr>
<td>2</td>
<td>DR. R.P. CENTRE</td>
<td>2563239</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3943952</td>
</tr>
<tr>
<td>3</td>
<td>C.N. CENTRE</td>
<td>6028521</td>
</tr>
<tr>
<td></td>
<td></td>
<td>17044713</td>
</tr>
<tr>
<td>4</td>
<td>CT PATIENT A/C</td>
<td>635212</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10612215</td>
</tr>
<tr>
<td>5</td>
<td>ANGIO PATIENT A/C</td>
<td>7451823</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10190280</td>
</tr>
<tr>
<td>6</td>
<td>NEURO SURGERY A/C</td>
<td>21423401</td>
</tr>
<tr>
<td></td>
<td></td>
<td>19383373</td>
</tr>
<tr>
<td>7</td>
<td>GAMMA KNIFE PATIENT A/C</td>
<td>355824</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2212595</td>
</tr>
<tr>
<td>8</td>
<td>N.D.D.T.C.</td>
<td>7333709</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7734212</td>
</tr>
<tr>
<td>9</td>
<td>I.R.C.H.</td>
<td>143730</td>
</tr>
<tr>
<td></td>
<td></td>
<td>89529</td>
</tr>
<tr>
<td>10</td>
<td>Hostel</td>
<td>58489</td>
</tr>
<tr>
<td>11</td>
<td>UNDCP Project</td>
<td>1004114</td>
</tr>
<tr>
<td>12</td>
<td>J.P.N. APEX TRAUMA CENTRE</td>
<td>1112234</td>
</tr>
</tbody>
</table>

### EXCESS OF EXPENDITURE OVER INCOME

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>N.D.D.T.C. (UNDCP)</td>
<td>1701067</td>
</tr>
<tr>
<td>2</td>
<td>Interest on CLTD by Bank</td>
<td>948734</td>
</tr>
<tr>
<td>3</td>
<td>Misc. Receipts</td>
<td>163500</td>
</tr>
</tbody>
</table>

### AIIMS (Main)

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Grant in AID (Plan)</td>
<td>196101040</td>
</tr>
<tr>
<td></td>
<td></td>
<td>126920312</td>
</tr>
<tr>
<td>2</td>
<td>AIIMS</td>
<td>2563239</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3943952</td>
</tr>
<tr>
<td>3</td>
<td>CNC</td>
<td>6028521</td>
</tr>
<tr>
<td></td>
<td></td>
<td>17044713</td>
</tr>
<tr>
<td>4</td>
<td>CT PATIENT A/C</td>
<td>635212</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10612215</td>
</tr>
<tr>
<td>5</td>
<td>GAMMA KNIFE PATIENT A/C</td>
<td>7451823</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10190280</td>
</tr>
<tr>
<td>6</td>
<td>NDDTC</td>
<td>21423401</td>
</tr>
<tr>
<td></td>
<td></td>
<td>19383373</td>
</tr>
<tr>
<td>7</td>
<td>DR. BRAIRCH</td>
<td>355824</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2212595</td>
</tr>
</tbody>
</table>

### TOTAL

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>TOTAL</td>
<td>3941172482</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3585710303</td>
</tr>
</tbody>
</table>

(MRS. BASANTI DALAL)
FINANCE & CHIEF ACCOUNTS OFFICER

(P. VENUGOPAL)
DIRECTOR
### Liabilities

<table>
<thead>
<tr>
<th>Balance Sheet Details</th>
<th>2006-07</th>
<th>2005-06</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AIIMS (MAIN)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>1</strong> Balance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Amount due but not</td>
<td></td>
<td></td>
</tr>
<tr>
<td>paid (AIIMS CASHIER)</td>
<td>500</td>
<td></td>
</tr>
<tr>
<td>b) Amount due but not</td>
<td>108000</td>
<td>28000</td>
</tr>
<tr>
<td>paid (Scheme Cell)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2</strong> Capital Grants From Govt. Of India</td>
<td></td>
<td></td>
</tr>
<tr>
<td>i) Upto 2005-2006</td>
<td>6064952516</td>
<td></td>
</tr>
<tr>
<td>ii) During 2006-07</td>
<td>386718000</td>
<td></td>
</tr>
<tr>
<td>iii) Non-Plan capitalisation</td>
<td>3806598</td>
<td></td>
</tr>
<tr>
<td>iv) Less on account of</td>
<td>-56036431</td>
<td></td>
</tr>
<tr>
<td>Mach. &amp; Equip. condemned during 2006-07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>v) Less Books weeded out</td>
<td>-41502</td>
<td></td>
</tr>
<tr>
<td>during 2006-07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>vi) Less on account of</td>
<td>-689749</td>
<td></td>
</tr>
<tr>
<td>furniture condemned during 2006-07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>vii) Transfer to Trauma Centre on a/c of advance payment to M/s HSCC</td>
<td>-87912064</td>
<td></td>
</tr>
<tr>
<td>viii) Transfer to Land Account Trauma Centre</td>
<td>-9900000</td>
<td></td>
</tr>
<tr>
<td>ix) Transfer to Trauma Bldg. construction on a/c of advance payment to M/s HSCC</td>
<td>-449825743</td>
<td></td>
</tr>
<tr>
<td>x) Transfer to Centre for Dental Education &amp; Research</td>
<td>-158393676</td>
<td></td>
</tr>
<tr>
<td>xi) Transfer to Centre for Dental Education &amp; Research</td>
<td>-45557811</td>
<td></td>
</tr>
<tr>
<td><strong>Assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>AIIMS (MAIN)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>1</strong> Cash In Hand</td>
<td>191224</td>
<td>172864</td>
</tr>
<tr>
<td>a) Imprest (AIIMS CASHIER)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Amount due but not paid (AIIMS CASHIER)</td>
<td>-500</td>
<td></td>
</tr>
<tr>
<td>c) Amount due but not paid (Scheme Cell)</td>
<td>108000</td>
<td>28000</td>
</tr>
<tr>
<td><strong>2</strong> Cash at Bank</td>
<td>483714326</td>
<td></td>
</tr>
<tr>
<td>a) (i) AIIMS (Main)</td>
<td>483714326</td>
<td></td>
</tr>
<tr>
<td>(ii) Unspent Balance of Specific Grants remained with AIIMS (Main)</td>
<td>181989884</td>
<td></td>
</tr>
<tr>
<td>b) Scheme Cell</td>
<td>43642652</td>
<td>61200654</td>
</tr>
<tr>
<td><strong>3</strong> GPF Bank Account</td>
<td>42023283</td>
<td>15032985</td>
</tr>
<tr>
<td><strong>4</strong> NPS Account</td>
<td>5795530</td>
<td></td>
</tr>
<tr>
<td><strong>5</strong> Investment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>i) (Appendix-C)</td>
<td>1585368899</td>
<td>1456588127</td>
</tr>
<tr>
<td>ii) (Appendix-B)</td>
<td>3255838</td>
<td>7417446</td>
</tr>
<tr>
<td><strong>6</strong> Silver Jubilee Fund</td>
<td>200000</td>
<td>200000</td>
</tr>
<tr>
<td>on account of advance Sundary Debtors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scheme Cell</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Appendix-B)</td>
<td>330986</td>
<td>330986</td>
</tr>
<tr>
<td><strong>7</strong> Misc. Deposits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Appendix-E)</td>
<td>2350282</td>
<td>2849520</td>
</tr>
<tr>
<td><strong>8</strong> Recoverable Advances</td>
<td></td>
<td></td>
</tr>
<tr>
<td>i) Car</td>
<td>1001407</td>
<td>1691355</td>
</tr>
<tr>
<td>ii) Motor Cycle-Scooter</td>
<td>127755</td>
<td>132605</td>
</tr>
<tr>
<td>iii) Bicycle</td>
<td>2363482</td>
<td>1696073</td>
</tr>
<tr>
<td>iv) Computer Advance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research Construction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------</td>
<td>------------------</td>
<td></td>
</tr>
<tr>
<td>Grant recd. From Min. of Welf for P.M.R. ADIP Scheme</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) Upto 2005-06</td>
<td>18055</td>
<td></td>
</tr>
<tr>
<td>(b) Exp. during 2006-07</td>
<td>-16837</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1218</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>18055</td>
<td></td>
</tr>
<tr>
<td>Centralised Accident &amp; Trauma Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29142</td>
<td>29142</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>420000</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>240000</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>228888374</td>
<td></td>
</tr>
<tr>
<td>Diabets Control</td>
<td></td>
<td></td>
</tr>
<tr>
<td>420000</td>
<td>420000</td>
<td></td>
</tr>
<tr>
<td>AIDS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>240000</td>
<td>240000</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>193499723</td>
<td></td>
</tr>
<tr>
<td>NON-INSTIT. SCHEMES Unspent balance of grants received for specific purpose (APPENDIX-A)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>3036507</td>
<td></td>
</tr>
<tr>
<td>3036507</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Donated Vehicles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3036507</td>
<td>3036507</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Donated books</td>
<td></td>
<td></td>
</tr>
<tr>
<td>142723</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>11059524</td>
<td></td>
</tr>
<tr>
<td>10959524</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Donations (Appendix-C)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Misc. Donations (Appendix-D)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Up to 2005-2006</td>
<td>2373685</td>
<td></td>
</tr>
<tr>
<td>b) Transferto cochlear implant</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient tratment A/c</td>
<td>-327102</td>
<td></td>
</tr>
<tr>
<td>b) Receipts during 2006-2007</td>
<td>1118481</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>2300469</td>
<td></td>
</tr>
<tr>
<td>33734649</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Up to 2005-2006</td>
<td>2081406</td>
<td></td>
</tr>
<tr>
<td>b) During 2006-2007</td>
<td>26022</td>
<td></td>
</tr>
<tr>
<td>c) Furniture condemned During 2006-2007</td>
<td>-689749</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>1417679</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>2081406</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Up to 2005-2006</td>
<td>2572046210</td>
<td></td>
</tr>
<tr>
<td>b) During 2006-2007</td>
<td>86890517</td>
<td></td>
</tr>
<tr>
<td>c) Goods received during 2006-2007</td>
<td>305395247</td>
<td></td>
</tr>
<tr>
<td>d) Adjustment of Custom Duty</td>
<td>2572046210</td>
<td></td>
</tr>
<tr>
<td>1955671</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>56036431</td>
<td></td>
</tr>
<tr>
<td>2910251214</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Upto 2005-2006</td>
<td>2373685</td>
<td></td>
</tr>
<tr>
<td>b) During 2006-2007</td>
<td>16168532</td>
<td></td>
</tr>
<tr>
<td>c) Less equip. received During 2006-2007</td>
<td>-305395247</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td><strong>12</strong></td>
<td>Employees Insurance Schemes</td>
<td></td>
</tr>
<tr>
<td><strong>13</strong></td>
<td>Security Deposits/ Earnest Money</td>
<td></td>
</tr>
<tr>
<td>a)</td>
<td>Upto 2005-06</td>
<td>63421931</td>
</tr>
<tr>
<td>b)</td>
<td>Payment against receipts</td>
<td></td>
</tr>
<tr>
<td>Upto 2005-06</td>
<td>-18952395</td>
<td></td>
</tr>
<tr>
<td>b)</td>
<td>During 2006-07</td>
<td>25368343</td>
</tr>
<tr>
<td>c)</td>
<td>Payment against receipts of year 2006-07</td>
<td>-1441000</td>
</tr>
<tr>
<td><strong>14</strong></td>
<td>Caution Money</td>
<td></td>
</tr>
<tr>
<td>a)</td>
<td>Upto 2005-06</td>
<td>1064633</td>
</tr>
<tr>
<td>b)</td>
<td>Receipts</td>
<td>47400</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>15</strong></td>
<td>G.P.F. Account (Appendix F)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1601716748</td>
</tr>
<tr>
<td><strong>16</strong></td>
<td>NPS (Appendix F)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>20795530</td>
</tr>
<tr>
<td><strong>17</strong></td>
<td>Pot Fund</td>
<td></td>
</tr>
<tr>
<td>i)</td>
<td>Upto 2005-2006</td>
<td>364759</td>
</tr>
<tr>
<td>ii)</td>
<td>During 2006-07</td>
<td>281271</td>
</tr>
<tr>
<td>iii)</td>
<td>Less expd. during 2006-07</td>
<td>-29000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>18</strong></td>
<td>N.A.C.O.</td>
<td></td>
</tr>
<tr>
<td>a)</td>
<td>Salary/Reagents/Maint.</td>
<td></td>
</tr>
<tr>
<td>i)</td>
<td>Upto 2005-06</td>
<td>47915</td>
</tr>
<tr>
<td>ii)</td>
<td>Generated from test charges.</td>
<td></td>
</tr>
<tr>
<td>iii)</td>
<td>Less expenditure during 2006-07</td>
<td>-20000</td>
</tr>
<tr>
<td>iv)</td>
<td>Transfer to Scheme Cell</td>
<td>-351865</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>C</strong></td>
<td>P. &amp; AO (for procurement of stores)</td>
<td></td>
</tr>
<tr>
<td>a)</td>
<td>Upto 2005-06</td>
<td>3009714</td>
</tr>
<tr>
<td>b)</td>
<td>During 2006-07</td>
<td>900000</td>
</tr>
<tr>
<td>c)</td>
<td>Adjustment of advances made during 2006-07</td>
<td>-1069238</td>
</tr>
<tr>
<td><strong>D</strong></td>
<td>Ty. Contigent Adv.</td>
<td></td>
</tr>
<tr>
<td>a)</td>
<td>Upto 2005-2006</td>
<td>2980607</td>
</tr>
<tr>
<td>b)</td>
<td>During 2006-2007</td>
<td>2235302</td>
</tr>
<tr>
<td>c)</td>
<td>Adj.during 2006-2007 of previous year</td>
<td>-2930607</td>
</tr>
<tr>
<td><strong>E</strong></td>
<td>Private Firms for stores</td>
<td></td>
</tr>
<tr>
<td>a)</td>
<td>Upto 2005-2006</td>
<td>8421144</td>
</tr>
<tr>
<td>b)</td>
<td>During 2006-2007</td>
<td>2345757</td>
</tr>
<tr>
<td>c)</td>
<td>Less adj. during 2006-2007</td>
<td>-3286404</td>
</tr>
<tr>
<td><strong>F</strong></td>
<td>M/s. H.S.C.C. for Trauma Centre</td>
<td></td>
</tr>
<tr>
<td>Less transfer to Trauma Centre</td>
<td>-87912064</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>G</strong></td>
<td>M/s H.S.C.C. for Dental Centre</td>
<td></td>
</tr>
<tr>
<td>a)</td>
<td>Upto 2005-06</td>
<td>158393676</td>
</tr>
<tr>
<td>b)</td>
<td>During 2006-07</td>
<td></td>
</tr>
<tr>
<td>c)</td>
<td>Transfer to CDER</td>
<td>-158393676</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>H</strong></td>
<td>NDMC for augmenting L.T-Line in Eastern &amp;</td>
<td></td>
</tr>
</tbody>
</table>

<p>| | | | |
|   |   |   |   |</p>
<table>
<thead>
<tr>
<th>S.No.</th>
<th>Description</th>
<th>Details</th>
<th>Amounts</th>
</tr>
</thead>
<tbody>
<tr>
<td>b) Mach. &amp; Equipment</td>
<td>-</td>
<td>1932605</td>
<td>1932605</td>
</tr>
<tr>
<td>19</td>
<td>Revolving funds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Upto 2005-06</td>
<td>36078490</td>
<td>36078490</td>
<td></td>
</tr>
<tr>
<td>i) Receipt</td>
<td>52763213</td>
<td>52763213</td>
<td></td>
</tr>
<tr>
<td>ii) Expenditure</td>
<td>-36680413</td>
<td>52211290</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>P.P. Programme</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Upto 2005-06</td>
<td>162095</td>
<td>162095</td>
<td></td>
</tr>
<tr>
<td>b) Receipts during 2006-07</td>
<td>250000</td>
<td>250000</td>
<td></td>
</tr>
<tr>
<td>c) Expenditure during 2006-07</td>
<td>-208455</td>
<td>203640</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>V.V.I.P.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1207055</td>
<td>1207055</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>College of Nursing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upto 2005-06</td>
<td>275323</td>
<td>275323</td>
<td></td>
</tr>
<tr>
<td>a) Receipt</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>b) Expenditure</td>
<td>-213496</td>
<td>61827</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>VVIP Care at Parliament House Annexe</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Receipt</td>
<td>440000</td>
<td>440000</td>
<td></td>
</tr>
<tr>
<td>b) Expenditure</td>
<td>-432400</td>
<td>7600</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Cochlear Patient treatment A/c</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upto 2005-06</td>
<td>327102</td>
<td>327102</td>
<td></td>
</tr>
<tr>
<td>a) Receipt</td>
<td>25492000</td>
<td>25492000</td>
<td></td>
</tr>
<tr>
<td>b) Expenditure</td>
<td>-12845576</td>
<td>12973526</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Western Campus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>Delhi Vidyut Board</td>
<td>for Installation of 11 K.V.A. Sub-Station</td>
<td>3362787</td>
</tr>
<tr>
<td>J</td>
<td>NDMC for HT Transformer and laying of cable</td>
<td></td>
<td>7463500</td>
</tr>
<tr>
<td>K</td>
<td>Custom duty</td>
<td>Upto 2005-06</td>
<td>2148754</td>
</tr>
<tr>
<td></td>
<td>Adjust. of Custom Duty</td>
<td>-1955671</td>
<td>193083</td>
</tr>
<tr>
<td>L</td>
<td>Covering of Nallah</td>
<td></td>
<td>15338300</td>
</tr>
<tr>
<td>M</td>
<td>CPWD for Lift</td>
<td></td>
<td>14000000</td>
</tr>
<tr>
<td>N</td>
<td>CPWD for Surgical Ward</td>
<td></td>
<td>1711770</td>
</tr>
<tr>
<td>O</td>
<td>For Books &amp; Journals</td>
<td></td>
<td>3903205</td>
</tr>
<tr>
<td>P</td>
<td>For Cochlear Implant Patient Treatment A/c</td>
<td></td>
<td>12519000</td>
</tr>
<tr>
<td>Q</td>
<td>Careair Equip. India Pvt. Ltd.</td>
<td></td>
<td>192602</td>
</tr>
<tr>
<td>R</td>
<td>Indian Oil Corporation for LDO</td>
<td></td>
<td>3194680</td>
</tr>
<tr>
<td>S</td>
<td>NDMC for electric work</td>
<td></td>
<td>18723000</td>
</tr>
<tr>
<td>T</td>
<td>Upgrading Architectural cell of ESD at AIIMS</td>
<td></td>
<td>45132</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>i) Books &amp; Publications</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) Upto 2005-2006</td>
<td>158314865</td>
<td>158314865</td>
</tr>
<tr>
<td></td>
<td>b) During 2006-2007</td>
<td>12377371</td>
<td>12377371</td>
</tr>
<tr>
<td></td>
<td>c) Less books weeded out dg.2006-07</td>
<td>-41502</td>
<td>170650734</td>
</tr>
<tr>
<td></td>
<td>ii) Books donated</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) Upto 2005-2006</td>
<td>142723</td>
<td>142723</td>
</tr>
<tr>
<td></td>
<td>b) During 2006-2007</td>
<td>950</td>
<td>143673</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>Building Construction (A)</td>
<td>AIIMS (Main)</td>
</tr>
<tr>
<td></td>
<td>a) Upto 2005-2006</td>
<td>1782858014</td>
<td>1782858014</td>
</tr>
<tr>
<td></td>
<td>b) during 2006-2007</td>
<td>113716049</td>
<td>113716049</td>
</tr>
</tbody>
</table>
c) Add Adjustment during 06-07 791120
d) Adjustment of para 2.5.1 of SAR for the year 2005-06 -1111948 1896253235 1782858014

**(B) J.P.N. Apex Trauma Centre**

(a) Upto 2005-06 449825743
(b) During 2006-07
(c) Transfer to Trauma Centre -449825743 0 449825743

15 **Centre for Dental Education & Research**

During 2006-07 45557811
Transfer to CDER -45557811 0 45557811

16 **Advance Payment**

i) Indian Iron & Steel Co. 572139 572139
ii) Tata Iron & Steel Co. 654154 654154
iii) Hindustan Steel Ltd. 520295 520295
iv) Indian Iron & Steel Co. 594000 594000

17 **Land Account**

(a) Upto 2005-06 112832263 112832263

18 **Land Account Trauma Centre**

Transfer to Land Account 9900000
Trauma Centre -9900000 0 9900000

19 **Vehicles**

i) Vehicle (purchased for AIIMS)
   a) Up to 2006-2007 31344165 31344165
   b) Vehicles donated for AIIMS
      a) Upto 2006-07 3036507 3036507

20 **Advance payment to P&AO for purchase of Building Material**

a) Upto 2005-2006 32814014
b) During 2006-2007 2059706
c) Less Adjustment in 2006-2007 -791120 34082600 32814014

21 **Hospital receipts recoverable from outside patients**
<table>
<thead>
<tr>
<th>Balance Sheet</th>
<th>Amount due but not paid</th>
<th>Amount due but not paid</th>
<th>Amount due but not paid</th>
</tr>
</thead>
<tbody>
<tr>
<td>CASH IN HAND</td>
<td>10000</td>
<td>10000</td>
<td>10000</td>
</tr>
<tr>
<td>Cash at Bank</td>
<td>42205910</td>
<td>24422198</td>
<td>24422198</td>
</tr>
<tr>
<td>RECOVERABLE ADVANCE</td>
<td>Car</td>
<td></td>
<td></td>
</tr>
<tr>
<td>i) Upto 2005-06</td>
<td>40669</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ii) Paid during 2006-07</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>iii) Recovery received during 2006-07</td>
<td>-26004</td>
<td>14665</td>
<td>40669</td>
</tr>
<tr>
<td>b) Scooter</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i) Upto 2005-06</td>
<td>-104981</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ii) Paid during 2006-07</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>iii) Correction of previous years misclassification of Interest as recovery</td>
<td>104981</td>
<td>0</td>
<td>-104981</td>
</tr>
<tr>
<td>c) Cycle</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i) Upto 2005-06</td>
<td>-7168</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ii) Correction of previous years misclassification of Interest as recovery</td>
<td>7168</td>
<td>0</td>
<td>-7168</td>
</tr>
<tr>
<td>d) H.B.A.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i) Upto 2005-06</td>
<td>2607795</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ii) Paid during 2006-07</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>h)</strong> Upto 2005-2006</td>
<td>5305825</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------</td>
<td>-------</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>b)</strong> During 2006-2007</td>
<td>937150</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>c)</strong> Expenditure during 2006-2007</td>
<td>-2507633</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>iii)</strong> Recovery received during 2006-07</th>
<th>410680</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2197115</strong></td>
<td><strong>2607795</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>4)</strong> Machinery &amp; Equipment (Plan)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>i)</strong> Upto 2005-06</td>
</tr>
<tr>
<td><strong>ii)</strong> During 2006-07</td>
</tr>
<tr>
<td><strong>iii)</strong> M&amp;E condemned during 2006-07</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>5)</strong> Machinery &amp; Equipment (Non-Plan)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Upto 2005-06</strong></td>
</tr>
<tr>
<td><strong>5872266</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>6)</strong> Building Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>i)</strong> Upto 2005-06</td>
</tr>
<tr>
<td><strong>ii)</strong> During 2006-07</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>7)</strong> NPCB (M &amp; E)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Upto 2005-06</strong></td>
</tr>
<tr>
<td><strong>7002852</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>8)</strong> ICMR (M&amp;E)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Upto 2005-06</strong></td>
</tr>
<tr>
<td><strong>605150</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>9)</strong> Vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>i)</strong> RPC Vehicle</td>
</tr>
<tr>
<td><strong>Upto 2005-06</strong></td>
</tr>
<tr>
<td><strong>During 2006-07</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>ii)</strong> Donated Vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Upto 2005-06</strong></td>
</tr>
<tr>
<td><strong>During 2006-07</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>10)</strong> Hospital Furniture &amp; Fixture</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>i)</strong> Upto 2005-06</td>
</tr>
<tr>
<td><strong>ii)</strong> During 2006-07</td>
</tr>
</tbody>
</table>

| **iii)** Furniture condemned during 2006-07 | -85525 |

<table>
<thead>
<tr>
<th><strong>11)</strong> Sundry debtors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Upto 2005-06</strong></td>
</tr>
<tr>
<td><strong>During 2006-07</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>12)</strong> RAST</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Upto 2005-06</strong></td>
</tr>
<tr>
<td><strong>During 2006-07</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>7)</strong> Savers International</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>a)</strong> Upto 2005-2006</td>
</tr>
<tr>
<td><strong>b)</strong> During 2006-2007</td>
</tr>
<tr>
<td><strong>c)</strong> Expenditure during 2006-2007</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>8)</strong> Sight international-Surgeries</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>a)</strong> Upto 2005-2006</td>
</tr>
<tr>
<td><strong>b)</strong> During 2006-2007</td>
</tr>
<tr>
<td><strong>c)</strong> Expenditure during 2006-2007</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>9)</strong> Indeye</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>a)</strong> Upto 2005-2006</td>
</tr>
<tr>
<td><strong>b)</strong> During 2006-2007</td>
</tr>
<tr>
<td><strong>c)</strong> Expenditure during 2006-2007</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>10)</strong> ORBIS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>a)</strong> Upto 2005-2006</td>
</tr>
<tr>
<td><strong>b)</strong> During 2006-2007</td>
</tr>
<tr>
<td><strong>c)</strong> Expenditure during 2006-2007</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>11)</strong> Manage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>a)</strong> Upto 2005-2006</td>
</tr>
<tr>
<td><strong>b)</strong> During 2006-2007</td>
</tr>
<tr>
<td><strong>c)</strong> Expenditure during 2006-2007</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>12)</strong> RAST</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>a)</strong> Upto 2005-2006</td>
</tr>
<tr>
<td><strong>b)</strong> During 2006-2007</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td><strong>c)</strong> Expenditure during 2006-2007</td>
</tr>
<tr>
<td><strong>13</strong> NAB</td>
</tr>
<tr>
<td>a) Upto 2005-2006</td>
</tr>
<tr>
<td>b) During 2006-2007</td>
</tr>
<tr>
<td>c) Expenditure during 2006-2007</td>
</tr>
<tr>
<td><strong>14</strong> LCIF</td>
</tr>
<tr>
<td>a) Upto 2005-2006</td>
</tr>
<tr>
<td>b) During 2006-2007</td>
</tr>
<tr>
<td>c) Expenditure during 2006-2007</td>
</tr>
<tr>
<td><strong>15</strong> NPCB-RAAB</td>
</tr>
<tr>
<td>a) Upto 2005-2006</td>
</tr>
<tr>
<td>b) During 2006-2007</td>
</tr>
<tr>
<td>c) Expenditure during 2006-2007</td>
</tr>
<tr>
<td><strong>16</strong> NPCB-SSU</td>
</tr>
<tr>
<td>a) Upto 2005-2006</td>
</tr>
<tr>
<td>b) During 2006-2007</td>
</tr>
<tr>
<td>c) Expenditure during 2006-2007</td>
</tr>
<tr>
<td><strong>17</strong> WHO-Child blindness</td>
</tr>
<tr>
<td>a) Upto 2005-2006</td>
</tr>
<tr>
<td>b) During 2006-2007</td>
</tr>
<tr>
<td>c) Expenditure during 2006-2007</td>
</tr>
<tr>
<td><strong>18</strong> DBT-MUTIONAL(M.A.)</td>
</tr>
<tr>
<td>a) Upto 2005-2006</td>
</tr>
<tr>
<td>b) During 2006-2007</td>
</tr>
<tr>
<td>c) Expenditure during 2006-2007</td>
</tr>
<tr>
<td><strong>12</strong> Advance Payment made to Foreign Purchase</td>
</tr>
<tr>
<td>i) Upto 2005-06</td>
</tr>
<tr>
<td>ii) Advance during 2006-07</td>
</tr>
<tr>
<td>iii) Equip. received during 2006-07</td>
</tr>
<tr>
<td><strong>13</strong> Material &amp; Supply</td>
</tr>
<tr>
<td>i) Upto 2005-06</td>
</tr>
<tr>
<td>ii) Advance payment made to foreign purchase 2006-07</td>
</tr>
<tr>
<td>iii) Material received during 2006-07</td>
</tr>
<tr>
<td><strong>14</strong> Non-RPC</td>
</tr>
<tr>
<td>A. USP</td>
</tr>
<tr>
<td>i) Upto 2005-06</td>
</tr>
<tr>
<td>ii) Advance payment for foreign purchases 2006-07</td>
</tr>
<tr>
<td>iii) Material received during 2006-07</td>
</tr>
<tr>
<td>B. DST/DBT(M.A.)</td>
</tr>
<tr>
<td>i) Upto 2005-06</td>
</tr>
<tr>
<td>ii) Advance payment for foreign purchases 2006-07</td>
</tr>
<tr>
<td>iii) M&amp;E received during 2006-07</td>
</tr>
<tr>
<td>C. ORBIS(PECP)</td>
</tr>
<tr>
<td>i) Upto 2005-06</td>
</tr>
<tr>
<td>ii) Advance payment made during 2006-07</td>
</tr>
<tr>
<td>iii) Material received during 2006-07</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>18</td>
</tr>
<tr>
<td>a)</td>
</tr>
<tr>
<td>b)</td>
</tr>
<tr>
<td>c)</td>
</tr>
<tr>
<td>19</td>
</tr>
<tr>
<td>a)</td>
</tr>
<tr>
<td>b)</td>
</tr>
<tr>
<td>c)</td>
</tr>
<tr>
<td>20</td>
</tr>
<tr>
<td>a)</td>
</tr>
<tr>
<td>b)</td>
</tr>
<tr>
<td>c)</td>
</tr>
<tr>
<td>21</td>
</tr>
<tr>
<td>a)</td>
</tr>
<tr>
<td>b)</td>
</tr>
<tr>
<td>c)</td>
</tr>
<tr>
<td>22</td>
</tr>
<tr>
<td>a)</td>
</tr>
<tr>
<td>b)</td>
</tr>
<tr>
<td>c)</td>
</tr>
<tr>
<td>23</td>
</tr>
<tr>
<td>a)</td>
</tr>
<tr>
<td>b)</td>
</tr>
<tr>
<td>c)</td>
</tr>
<tr>
<td>25</td>
</tr>
<tr>
<td>a)</td>
</tr>
<tr>
<td>b)</td>
</tr>
<tr>
<td>c)</td>
</tr>
<tr>
<td>26</td>
</tr>
<tr>
<td>----------------------------------</td>
</tr>
<tr>
<td>Neema-International Pilot study</td>
</tr>
<tr>
<td>Workshop</td>
</tr>
<tr>
<td>DST/DBT (Stem)</td>
</tr>
<tr>
<td>WHO Short term Training Programme</td>
</tr>
<tr>
<td>Evaluation Study on glaucoma</td>
</tr>
<tr>
<td>ORP-VISION 2020</td>
</tr>
<tr>
<td>Multifocal IOL</td>
</tr>
<tr>
<td>-----</td>
</tr>
<tr>
<td>34</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>35</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>37</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>38</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>39</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>40</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>41</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>42</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>43</td>
</tr>
<tr>
<td>44</td>
</tr>
<tr>
<td>45</td>
</tr>
<tr>
<td>46</td>
</tr>
<tr>
<td>47</td>
</tr>
<tr>
<td>48</td>
</tr>
<tr>
<td>49</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>1916000</th>
<th>165000</th>
<th>-165000</th>
<th>1916000</th>
<th>1916000</th>
<th>1916000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outside Recoveries</td>
<td>214410</td>
<td>214410</td>
<td>214410</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CARDIO-THORACIC &amp; NEURO SCIENCES CENTRE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>1</strong> Capital Grant from Govt. of India</td>
<td><strong>11923</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i) Upto 2005-2006</td>
<td>2309883530</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ii) During 2006-2007</td>
<td>200000000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7750000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2</strong> Cost of the vehicle donated by Sai Bhakta Samaj</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>613384 613384</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>3</strong> CT Patient A/c Mach. &amp; Equip. Transfer Sai Bhakta Samaj</td>
<td>49025000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>4</strong> Neurology Patient A/c</td>
<td><strong>2650633530</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i) Upto 2005-2006</td>
<td>17530792</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ii) Receipt during 2006-2007</td>
<td>3125800</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>iii) Less refund/Exp. 2006-2007</td>
<td>-3668031</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>5</strong> Outside recoveries</td>
<td><strong>16988561</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i) Upto 2005-2006</td>
<td>304668</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ii) 2006-2007 (+)</td>
<td>-2702</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>301966 304668</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>6</strong> Donations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i) Upto 2005-2006</td>
<td>1973786</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ii) Receipt during 2006-2007</td>
<td>21500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1995286</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>7</strong> Security Deposits</td>
<td><strong>17992964</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i) Upto 2005-2006</td>
<td>17744964</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ii) During 2006-2007</td>
<td>3418000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-3170000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>17744964</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>8</strong> Thallium</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CARDIO-THORACIC &amp; NEURO SCIENCES CENTRE</strong></td>
<td><strong>12496</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>1</strong> Cash in hand</td>
<td><strong>12496</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i) Imprest (CTNS-Cashier) 2006-2007</td>
<td>40000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2</strong> Cash at Bank</td>
<td>151455520</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>3</strong> Recoverable Advance</td>
<td>113473131</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Computer</td>
<td>160800</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Car</td>
<td>680940</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Cycle</td>
<td>746188</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) Scooter</td>
<td>2100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e) House Building</td>
<td>918183</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>4</strong> Mach. &amp; Equip. Advance</td>
<td>8568940</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i) Upto 2005-2006</td>
<td>1745357896</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ii) During 2006-2007</td>
<td>1897421229</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>5</strong> Mach. &amp; Equip. Transfer From CT Patient A/C</td>
<td>49025000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>6</strong> Advance payment for Foreign purchase</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Mach. &amp; Equip.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i) Upto 2005-2006</td>
<td>112019520</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ii) During 2006-2007</td>
<td>342739524</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>iii) Less Equip.received</td>
<td>-184384381</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>270374663</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>7</strong> Building construction</td>
<td>112019520</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i) Upto 2005-2006</td>
<td>186421710</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ii) During 2006-2007</td>
<td>191491882</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>8</strong> Advance Agt. works 2005-06</td>
<td>178986910</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006-07</td>
<td>1851852</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>-----------</td>
<td>-----------</td>
<td>---------------------</td>
<td>---------------------</td>
<td>---------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Upto 2005-2006</td>
<td>3077653</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6242000</td>
</tr>
<tr>
<td>During 2006-2007</td>
<td>3112750</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less Expenditure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006-2007</td>
<td>-3771984</td>
<td>2418419</td>
<td>3077653</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heart Transplant Donation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i) Upto 2005-2006</td>
<td>386887</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ii) During 2006-2007</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>iii) Less Expenditure</td>
<td></td>
<td>-1077</td>
<td>385810</td>
<td>386887</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amount due from outside patients</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i) Upto 2005-2006</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1453960</td>
</tr>
<tr>
<td>ii) During 2006-2007</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>249662</td>
</tr>
<tr>
<td>iii) Less amount Recd.</td>
<td></td>
<td>-64912</td>
<td>1638710</td>
<td>1453960</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vehicles</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i) Ambulance ORBO</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Lab Test</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i) Upto 2005-2006</td>
<td>1326706</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ii) During 2006-2007</td>
<td>3785055</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>iii) Less Expenditure</td>
<td></td>
<td>-2224412</td>
<td>2887349</td>
<td>1326706</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cardiac Test</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i) Upto 2005-2006</td>
<td>5083830</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ii) During 2006-2007</td>
<td>3505250</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>iii) Less Expenditure</td>
<td></td>
<td>-3368822</td>
<td>5220258</td>
<td>5083830</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C.T. PATIENT A/C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Fixed Deposits</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2200000000</td>
</tr>
<tr>
<td>2 Cash in hand</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>3 Cash at Bank</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>14403127</td>
</tr>
<tr>
<td>ANGIOGRAPHY PATIENT A/C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>13752622</td>
</tr>
<tr>
<td>1 Cash recoverable from Sh. Dal Chand Verma,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3245441</td>
</tr>
<tr>
<td>Cashier</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3245441</td>
</tr>
<tr>
<td>2 Fixed Deposits</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>75000000</td>
</tr>
<tr>
<td>3 Cash in hand</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>799000</td>
</tr>
<tr>
<td>4 Cash at bank</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12358587</td>
</tr>
<tr>
<td>GAMMA KNIFE PATIENT A/C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12788961</td>
</tr>
<tr>
<td>1 Fixed Deposit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### NEURO SURGERY PATIENT A/C

<table>
<thead>
<tr>
<th>Description</th>
<th>2006-2007</th>
<th>2005-06</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash at Bank</td>
<td>66823583</td>
<td>5330282</td>
</tr>
</tbody>
</table>

### NATIONAL DRUG DEPENDENCE TREATMENT CENTRE (N.D.D.T.C.)

<table>
<thead>
<tr>
<th>Description</th>
<th>2006-2007</th>
<th>2005-06</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed Deposits</td>
<td>32000000</td>
<td>1000000</td>
</tr>
<tr>
<td>Cash in hand</td>
<td>44000</td>
<td></td>
</tr>
<tr>
<td>Cash at Bank</td>
<td>4985397</td>
<td>7577574</td>
</tr>
<tr>
<td>Capital fund of DAC</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>a) Upto 2005-06</td>
<td>124865718</td>
<td></td>
</tr>
<tr>
<td>b) Mach. &amp; Equip.</td>
<td>1485128</td>
<td></td>
</tr>
<tr>
<td>c) Motor Vehicle</td>
<td>507973</td>
<td></td>
</tr>
<tr>
<td>d) Furniture</td>
<td>638117</td>
<td></td>
</tr>
<tr>
<td>e) Building Const.</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>f) Books &amp; Pub.</td>
<td>1841503</td>
<td></td>
</tr>
<tr>
<td>g) Adj. of para-2.21 fund of land</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Institute Recovery</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>i) Upto 2005-06</td>
<td>139338439</td>
<td>124865718</td>
</tr>
<tr>
<td>j) During 2006-07</td>
<td>-</td>
<td>113215</td>
</tr>
<tr>
<td>Security Deposit</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>a) Upto 2005-06</td>
<td>115000</td>
<td></td>
</tr>
<tr>
<td>b) During 2006-07</td>
<td>40000</td>
<td></td>
</tr>
<tr>
<td>c) Refund 2006-07</td>
<td>-20000</td>
<td>135000</td>
</tr>
<tr>
<td>Books &amp; Publication</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>a) Upto 2005-06</td>
<td>7214235</td>
<td></td>
</tr>
<tr>
<td>b) During 2006-07</td>
<td>1841503</td>
<td>9055738</td>
</tr>
<tr>
<td>Furniture &amp; Fixture</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>a) Upto 2005-06</td>
<td>2106255</td>
<td></td>
</tr>
<tr>
<td>b) During 2006-07</td>
<td>638117</td>
<td>2744372</td>
</tr>
<tr>
<td>Building Construction</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>a) Upto 2005-06</td>
<td>91953715</td>
<td></td>
</tr>
<tr>
<td>b) Adj. para 2.21</td>
<td>101953715</td>
<td>91953715</td>
</tr>
<tr>
<td>Vehicle</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>a) Upto 2005-06</td>
<td>3393371</td>
<td></td>
</tr>
<tr>
<td>b) During 2006-07</td>
<td>507913</td>
<td>3901284</td>
</tr>
<tr>
<td>Outside recovery</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>a) Upto 2005-06</td>
<td>40708</td>
<td></td>
</tr>
<tr>
<td>b) During 2006-07</td>
<td>-</td>
<td>40708</td>
</tr>
<tr>
<td>Car Advance</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>a) 2005-06</td>
<td>120960</td>
<td></td>
</tr>
<tr>
<td>b) Recovery</td>
<td>-34560</td>
<td>86400</td>
</tr>
<tr>
<td>Mat. &amp; Supply</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>a) 2005-06</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Description</td>
<td>2005-06</td>
<td>2006-07</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------</td>
<td>---------------</td>
<td>---------------</td>
</tr>
<tr>
<td>Opening balance</td>
<td>257664</td>
<td>980715</td>
</tr>
<tr>
<td><strong>Dr.B.R.A. INSTITUTE ROTARY CANCER HOSPITAL</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. During 2005-2006</td>
<td>1067369232</td>
<td></td>
</tr>
<tr>
<td>(a) Plan (Non EFC)</td>
<td>37400000</td>
<td></td>
</tr>
<tr>
<td>(b) Plan (EFC)</td>
<td>39600000</td>
<td></td>
</tr>
<tr>
<td>(c) Less condemnation of M&amp;E as per CSD/Store Section</td>
<td>-90000</td>
<td></td>
</tr>
<tr>
<td>Budget/V-III dt. 25.5.07</td>
<td>1144279232</td>
<td>1067369232</td>
</tr>
<tr>
<td>2. Interest Accrued</td>
<td>-</td>
<td>2710</td>
</tr>
<tr>
<td>3. Revolving Fund</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i) Upto 2005-2006</td>
<td>3506982</td>
<td></td>
</tr>
<tr>
<td>(ii) Add during 2006-2007</td>
<td>2942250</td>
<td></td>
</tr>
<tr>
<td>(iii) Less payment during 2006-07</td>
<td>-4858671</td>
<td>1590561</td>
</tr>
<tr>
<td>4. Medical Oncology Fund</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i) Upto 2005-2006</td>
<td>62963</td>
<td></td>
</tr>
<tr>
<td>(ii) Add during 2006-2007</td>
<td>516075</td>
<td>579038</td>
</tr>
</tbody>
</table>

**NATIONAL DRUG DEPENDENCE TREATMENT CENTRE (N.D.D.T.C.) (UNDCP PROJECT)**

<table>
<thead>
<tr>
<th>Description</th>
<th>2005-06</th>
<th>2006-07</th>
<th>2007-08</th>
</tr>
</thead>
<tbody>
<tr>
<td>b) 2006-07</td>
<td>300000</td>
<td>300000</td>
<td></td>
</tr>
<tr>
<td>Cash in hand</td>
<td></td>
<td>316153</td>
<td>257664</td>
</tr>
<tr>
<td>Cash at Bank</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Advance Payment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006-07 Mat. &amp; Sup.</td>
<td></td>
<td></td>
<td>155000</td>
</tr>
<tr>
<td><strong>Dr.B.R.A. INSTITUTE ROTARY CANCER HOSPITAL</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Cash at Bank</td>
<td>46707703</td>
<td>36218452</td>
<td></td>
</tr>
<tr>
<td>2. Furniture &amp; Fixtures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Upto 2005-2006</td>
<td>10359311</td>
<td>10359311</td>
<td>10359311</td>
</tr>
<tr>
<td>3. Computer Advance</td>
<td>132000</td>
<td></td>
<td>131800</td>
</tr>
<tr>
<td>Less</td>
<td>-200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Car/HBA Advance</td>
<td>207750</td>
<td></td>
<td>207750</td>
</tr>
<tr>
<td>Less</td>
<td>-18000</td>
<td>189750</td>
<td></td>
</tr>
<tr>
<td>5. Mach. &amp; Equip.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Upto 2005-2006</td>
<td>481449188</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Add during 2006-2007</td>
<td>57984763</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Add Custom Duty</td>
<td>7359593</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) Less condemnation of M&amp;E as per CSD/Store Section</td>
<td>-90000</td>
<td>546703544</td>
<td>481449188</td>
</tr>
<tr>
<td>6. Advance Payments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) During 2005-2006</td>
<td>237155554</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Add during 2006-2007(+</td>
<td>6055969</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Less Advance Adjustments during the year 2006-07</td>
<td>-57984763</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Security Deposited with NDMC as per Audit Objection</td>
<td>2940407</td>
<td>24267167</td>
<td>237155554</td>
</tr>
<tr>
<td>J.P.N. APEXTRAUMACENTRE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------</td>
<td>--</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Capital Grants</td>
<td>120000000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Add capital A/c for the</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>previous year transferred</td>
<td>547637807</td>
<td></td>
<td></td>
</tr>
<tr>
<td>from AIIMS(M)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Add during 2006-07</td>
<td>433075382</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1100713189</td>
<td>119899001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Building Construction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Upto 2005-2006</td>
<td>298882915</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) During 2006-2007</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HSCC (Manifold)</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Less adjustment of Security deposit to NDMC</td>
<td>-2626000</td>
<td>296256915</td>
<td>298882915</td>
</tr>
<tr>
<td>8 Vehicle</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Upto 2005-2006</td>
<td>941321</td>
<td>941321</td>
<td>941321</td>
</tr>
<tr>
<td>9 Capital Works</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i) Upto 2005-06</td>
<td>4064201</td>
<td></td>
<td></td>
</tr>
<tr>
<td>During 2006-07</td>
<td>1474343</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5538544</td>
<td>4064201</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Capital Grants</td>
<td>120000000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash at Bank</td>
<td>32786727</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mach. &amp; Equip.</td>
<td>112932400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction of Building</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Advance paid to M/s HSCC</td>
<td>87912064</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Advance to M/s HSCC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>during 2006-07 towards construction of buildings</td>
<td>29000000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Machinery &amp; Equipment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i) L/C Advances on M&amp;E</td>
<td>333217199</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(ii) Unadjusted advance</td>
<td>28630705</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Construction of Building transferred from AIIMS(M)</td>
<td>449825743</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Land Account transferred from AIIMS(M) Account</td>
<td>9900000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 (i) Machinery &amp; Equipments Upto 2005-06</td>
<td>112932400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(ii) Payment against Bills Customs Duty, PDA paid</td>
<td>15036084</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Furniture &amp; Fixtures during 2006-07</td>
<td>2375382</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

AIIMS 2006-2007 / 794
## CENTRE FOR DENTAL EDUCATION & RESEARCH

### Capital Grant

1. **Upto 05-06 transferred from AIIMS Main A/c**
   - Amount: 203951487

2. **During 2006-07**
   - Amount: 15500000

3. **Less transferred to Income & Exp. A/c**
   - Amount: -1701067
   - Total: 357250420

### Security Deposits

- **Amount:** 260000

## POOR PATIENT A/C

### AIIMS (Main)

1. **Opening Balance**
   - **Cash/Bank:** 813303
   - **FDR’s:** 327078

2. **Receipts**
   - **Grants:** 142407
   - **Interest on FDR’s:** 73148
   - **Payments:** 93902

3. **Closing Balance**
   - **Cash/Bank:** 861808
   - **FDR’s:** 400226

## CENTRE FOR DENTAL EDUCATION & RESEARCH

### Cash at bank

- **Amount:** 19511927

### Machinery & Equip. (Plan)

- **Amount:** 29724246

### Advance Payment made to foreign purchases (06-07)

- **Amount:** 17134994

### Building

1. **Upto 05-06 transferred from AIIMS Main A/c**
   - **Amount:** 45557811

2. **During 06-07**
   - **Amount:** 165676424

3. **Correction of 2005-06 as per para 2.5.3(3) of SAR of 2005-06**
   - **Amount:** 4520000
   - **Adjusted:** 215754235

### Advance paid to HSCC

1. **Upto 05-06 transferred from AIIMS Main A/c**
   - **Amount:** 158393676

2. **During 06-07**
   - **Amount:** 8830000

3. **Less adjusted during 06-07**
   - **Amount:** -165676424

4. **Less correction of 2005-06 as per para 2.5.3(3) of SAR of 2005-06**
   - **Amount:** -4520000
   - **Adjusted:** 76497252

## POOR PATIENT A/C

### AIIMS (Main)

1. **Opening Balance**
   - **Cash/Bank:** 83806
   - **FDR’s:** 59004

2. **Dr. B. R. A. I. R. C. H**
   - **Cash/Bank:** 1393911
   - **Adjusted:** 1234844

3. **DR. R. P. CENTRE**
   - **Cash/Bank:** 25052
   - **Adjusted:** 12829

4. **N.S. CENTRE**
   - **Cash/Bank:** 83806
   - **Adjusted:** 59004

---

Note: The table above represents financial transactions and balances for the specified periods. The amounts are in Indian Rupees (INR).
<table>
<thead>
<tr>
<th>Account</th>
<th>Opening Balance</th>
<th>Receipts</th>
<th>Closing Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr.B.R.A.I.R.C.H.</td>
<td></td>
<td></td>
<td>1393911</td>
</tr>
<tr>
<td>a) Cash/Bank</td>
<td>1234844</td>
<td></td>
<td>1234844</td>
</tr>
<tr>
<td>b) Receipts</td>
<td></td>
<td>i) Grants</td>
<td>149069</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii) Interest</td>
<td>394411</td>
</tr>
<tr>
<td></td>
<td></td>
<td>iii) Payments</td>
<td>384413</td>
</tr>
<tr>
<td>c) Closing Balance</td>
<td>1393911</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dr. R.P. CENTRE</td>
<td></td>
<td></td>
<td>25052</td>
</tr>
<tr>
<td>a) Cash</td>
<td>12829</td>
<td></td>
<td>12829</td>
</tr>
<tr>
<td>b) Receipts</td>
<td></td>
<td>i) Interest</td>
<td>600</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii) Donation</td>
<td>58725</td>
</tr>
<tr>
<td></td>
<td></td>
<td>iii) Payments</td>
<td>-17102</td>
</tr>
<tr>
<td></td>
<td></td>
<td>iv) Wrongly credit by bank</td>
<td>corrected in 2006-07</td>
</tr>
<tr>
<td></td>
<td></td>
<td>v) Closing Balance</td>
<td>25052</td>
</tr>
<tr>
<td>N.S. Centre</td>
<td></td>
<td></td>
<td>83806</td>
</tr>
<tr>
<td>a) Cash/Bank</td>
<td>59004</td>
<td></td>
<td>59004</td>
</tr>
<tr>
<td>b) Donations</td>
<td></td>
<td>i) Payments</td>
<td>12716</td>
</tr>
<tr>
<td>c) Closing Balance</td>
<td>83806</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**PATIENT TREATMENT ACCOUNTS**

1. **AIIMS**
   - Opening Balance: 14236140
   - Receipts
     - i) Grants: 34370806
     - ii) Interest: 627135
   - Payments: 30333618
   - Closing Balance: 18900463

2. **Dr.B.R.A.I.R.C.H.**
   - Opening Balance: 11522423
   - FDR’s: 15194183
   - Receipts: 10000000

**PATIENT TREATMENT ACCOUNTS**

1. **AIIMS**
   - 18900463
   - 14236140

2. **Dr.B.R.A.I.R.C.H.**
   - 5194183
   - 11522423
   - 10000000
   - 6000000
| i) Grants | 33738008 |
| ii) Cheque Cancelled | 467987 |
| iii) Interest | 479430 |
| iv) Payments | 3101365 |
| c) Closing Balance | 17522423 |
| i) Cash/Bank | 5194183 |
| ii) FDRs | 1000000 |
| | 6000000 |

**HOSTELS**

Security Deposits
- i) Upto 2005-06: 577126
- ii) receipts during 2006-07: 719500
- iii) less refunds during 2006-07: 316846

**EXCESS OF INCOME OVER EXPENDITURE**

| i) During 2005-06 | 104620607 |
| ii) Excess of expenditure over income 2006-07 | 196101040 |
| iii) Correction due to para 2.5.1 of SAR for 2005-06 | 299609699 |

**EXCESS OF EXPENDITURE OVER INCOME**

| i) During 2005-06 | 10385391 |
| ii) Excess of Income over expenditure during 2006-07 | 2563239 |
| iii) Correction of previous year(Misclassification of Interest as recovery) | 112149 |

| i) Upto 2005-06 | 6028521 |
| ii) Less excess of expdr. | 248752622 |

**HOSTELS**

| i) Cash in hand | 23806 |
| ii) Cash at Bank | 318341 |
| iii) FDR’s | 2171124 |

**EXCESS OF INCOME OVER EXPENDITURE**

| i) During 2005-06 | 104620607 |
| ii) Excess of expenditure over income 2006-07 | 196101040 |
| iii) Correction due to para 2.5.1 of SAR for 2005-06 | 299609699 |

**EXCESS OF EXPENDITURE OVER INCOME**

| i) During 2005-06 | 10385391 |
| ii) Excess of Income over expenditure during 2006-07 | 2563239 |
| iii) Correction of previous year(Misclassification of Interest as recovery) | 112149 |

<p>| i) Upto 2005-06 | 6028521 |
| ii) Less excess of expdr. | 248752622 |</p>
<table>
<thead>
<tr>
<th>Description</th>
<th>Date</th>
<th>Amount</th>
<th>Amount</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>iii) Less fresh cheques issued against cancelled</td>
<td></td>
<td>-64502</td>
<td>23519627</td>
<td>248752622</td>
</tr>
<tr>
<td>cheques</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4 ANGIOGRAPHY PATIENT A/C

i) Upto 2005-06                      91034402  

ii) Add excess of expenditure over income 2006-07 635212  

iii) Less fresh cheques issued against cancelled cheques -266586 91034402 91034402  

5 GAMMA KNIFE PATIENT A/C

i) Upto 2005-2006 87830282  

ii) during 2006-07 21423401  

iii) Cancelled Cheque 69900 109323583 87830282  

6 NEURO SURGERY PATIENT A/C

i) Upto 2005-06 39577574  

ii) Excess of income over expenditure during 2006-07 7451823 47029397 39577574  

7 NDDTC

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>7686153</th>
<th>8041977</th>
<th>7686153</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upto 2005-06</td>
<td></td>
<td>7686153</td>
<td></td>
<td></td>
</tr>
<tr>
<td>During 2006-07</td>
<td></td>
<td>355824</td>
<td>8041977</td>
<td>7686153</td>
</tr>
</tbody>
</table>

8 Dr.B.R.A.I.R.C.H.

i) Upto 2005-06 7734212  

ii) During 2006-07 7333709  

(iii) Correction due to para 2.2 of SAR 2710  

(iv) Excess of Income 04-05 -9397407 5673224 7734212
9 HOSTEL

i) Upto 2005-06  1389761
ii) During 2006-07  143730  1533491  1389761

10 NATIONAL DRUG DEPENDENCE TREATMENT PROJECT (UNDCP)  58489

11 J.P.N. Apex Trauma Centre
   Upto 2006-07  1004114
   Less(-)  -100999  903115

12 CENTRE FOR DENTAL EDUCATION & RESEARCH  1112234

| Total | 14681235877 | 12763356910 | 14681235877 | 12763356910 |

Note:
1. The accounts have been prepared on actual Receipts and Expenditure basis.
2. No depreciation on Mach. & Equipment, vehicles etc. has been provided as the Institute is fully funded by the Govt.
3. A statement showing by various project Investigators during 2006-07 is attached at Appendix-A-I. It may be mentioned that on completion of Research Projects, the equipment are either returned to the funding agencies or are used in the Departments.
<table>
<thead>
<tr>
<th>S.No</th>
<th>Funding Agency</th>
<th>Opening Balance</th>
<th>Receipt</th>
<th>Total</th>
<th>Expenditure</th>
<th>Adjustment</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Credit Debit</td>
<td>Credit Debit</td>
<td></td>
<td>Credit Debit</td>
<td></td>
<td>Credit Debit</td>
</tr>
<tr>
<td>1</td>
<td>ICMR</td>
<td>16035900 0</td>
<td>65866207</td>
<td>81902107</td>
<td>46696002</td>
<td>2089989</td>
<td>33116116 0</td>
</tr>
<tr>
<td>2</td>
<td>C.S.I.R.</td>
<td>8994311 0</td>
<td>24395010</td>
<td>33389321</td>
<td>23168442</td>
<td>10220879</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>DST</td>
<td>30121829 0</td>
<td>50794255</td>
<td>80916084</td>
<td>41631502</td>
<td>39284582</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>UNICEF</td>
<td>287450 0</td>
<td>18266791</td>
<td>18554241</td>
<td>17342506</td>
<td>1211735</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>D.B.T.</td>
<td>63486156 0</td>
<td>76912517</td>
<td>140398673</td>
<td>83013237</td>
<td>57385436</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>CIPLA</td>
<td>69550 0</td>
<td>0 69550</td>
<td>0 69550</td>
<td>0</td>
<td>69550 0</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>W.H.O.</td>
<td>10381559 0</td>
<td>6646371</td>
<td>17027930</td>
<td>3404141</td>
<td>13623789</td>
<td>0</td>
</tr>
<tr>
<td>8</td>
<td>CTC/ICDS</td>
<td>0 3951 0</td>
<td>3951 0 3951</td>
<td>0</td>
<td>3951 0</td>
<td>0 0</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>U.G.C.</td>
<td>0 266440 5346921</td>
<td>5080481</td>
<td>2421086</td>
<td>2659395</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Indian Council of Agriculture Research</td>
<td>39936 0</td>
<td>0 39936</td>
<td>0</td>
<td>39936 0</td>
<td>0 0</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Domain Chemical India Pvt. Ltd.</td>
<td>0 663 0</td>
<td>0 663</td>
<td>0</td>
<td>663 0</td>
<td>0 0</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Ministry of Health and Family welfare</td>
<td>3225020 0</td>
<td>2667156</td>
<td>5892176</td>
<td>3271375</td>
<td>2620801</td>
<td>0</td>
</tr>
<tr>
<td>13</td>
<td>Ministry of Environment &amp; Forest</td>
<td>0 108411 227898</td>
<td>119487</td>
<td>542099</td>
<td>422612</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>14</td>
<td>Dabur Research Foundation</td>
<td>1281527 0</td>
<td>90755</td>
<td>1372282</td>
<td>555879</td>
<td>816403</td>
<td>0</td>
</tr>
<tr>
<td>15</td>
<td>M.R.C. U.K.</td>
<td>260370 0</td>
<td>0 260370</td>
<td>0</td>
<td>260370 0</td>
<td>0 0</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>DEPTT. OF ELECTRONICS</td>
<td>189154 0</td>
<td>0 189154</td>
<td>74612</td>
<td>114542</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Ministry of H.R.D. (DWCD)</td>
<td>0 4579 0</td>
<td>4579 0</td>
<td>4579 0</td>
<td>0 0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Himalaya Drug Co.</td>
<td>127407 0</td>
<td>453482</td>
<td>580889</td>
<td>385352</td>
<td>195537</td>
<td>0</td>
</tr>
<tr>
<td>19</td>
<td>International Atomic Energy Agency</td>
<td>1371346 0</td>
<td>1004634</td>
<td>2375980</td>
<td>1429156</td>
<td>946824</td>
<td>0</td>
</tr>
<tr>
<td>20</td>
<td>Deptt. of Atomic Energy</td>
<td>31811 0</td>
<td>0 31811</td>
<td>0</td>
<td>31811 0</td>
<td>0 0</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Convatee Sayibb</td>
<td>2328 0</td>
<td>0 2328</td>
<td>0</td>
<td>2328 0</td>
<td>0 0</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Rajiv Gandhi Foundation</td>
<td>21 0</td>
<td>320101</td>
<td>320122</td>
<td>210135</td>
<td>109987</td>
<td>0</td>
</tr>
<tr>
<td>23</td>
<td>Hind Chemicals</td>
<td>45072 0</td>
<td>0 45072</td>
<td>0</td>
<td>45072 0</td>
<td>0 0</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Directorate of Education (NSS)</td>
<td>32142 0</td>
<td>50000</td>
<td>82142</td>
<td>27459</td>
<td>54683</td>
<td>0</td>
</tr>
<tr>
<td>25</td>
<td>Ministry of Welfare</td>
<td>331901 0</td>
<td>0 331901</td>
<td>0</td>
<td>331901 0</td>
<td>0 0</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>Roussel Sci. Instit.</td>
<td>0 73 0</td>
<td>73 0</td>
<td>73 0</td>
<td>0 0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>Serum Instit. Of India</td>
<td>0 236 0</td>
<td>236 0</td>
<td>236 0</td>
<td>0 0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>Deptt. Of Ocean Development</td>
<td>0 5644 0</td>
<td>5644 0</td>
<td>5644 0</td>
<td>0 0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S.No</td>
<td>Funding Agency</td>
<td>Opening Balance</td>
<td>Receipt</td>
<td>Total</td>
<td>Expenditure</td>
<td>Adjustment</td>
<td>Balance</td>
</tr>
<tr>
<td>------</td>
<td>----------------------------------------------------------</td>
<td>-----------------</td>
<td>---------</td>
<td>-------</td>
<td>-------------</td>
<td>------------</td>
<td>---------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Credit</td>
<td>Debit</td>
<td></td>
<td>Credit</td>
<td>Debit</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>Torrent Pharma</td>
<td>0</td>
<td>51312</td>
<td>51312</td>
<td>0</td>
<td>51312</td>
<td>0</td>
</tr>
<tr>
<td>30</td>
<td>INDOUS</td>
<td>764123</td>
<td>0</td>
<td>764123</td>
<td>0</td>
<td>764123</td>
<td>0</td>
</tr>
<tr>
<td>31</td>
<td>IndFrench Centre for the Promotion of Advanced Research</td>
<td>31011</td>
<td>0</td>
<td>31011</td>
<td>0</td>
<td>31011</td>
<td>0</td>
</tr>
<tr>
<td>32</td>
<td>Ford Foundation</td>
<td>458594</td>
<td>0</td>
<td>458594</td>
<td>0</td>
<td>458594</td>
<td>0</td>
</tr>
<tr>
<td>33</td>
<td>Indian Epilepsy Research Association</td>
<td>61798</td>
<td>0</td>
<td>61798</td>
<td>0</td>
<td>61798</td>
<td>0</td>
</tr>
<tr>
<td>34</td>
<td>Prakash Health and Research Foundation</td>
<td>0</td>
<td>120</td>
<td>120</td>
<td>0</td>
<td>120</td>
<td>0</td>
</tr>
<tr>
<td>35</td>
<td>LapraUK</td>
<td>20</td>
<td>0</td>
<td>20</td>
<td>0</td>
<td>20</td>
<td>0</td>
</tr>
<tr>
<td>36</td>
<td>National Institute of Immunology</td>
<td>85662</td>
<td>0</td>
<td>85662</td>
<td>0</td>
<td>85662</td>
<td>0</td>
</tr>
<tr>
<td>37</td>
<td>Fulford India Ltd.</td>
<td>138025</td>
<td>0</td>
<td>800000</td>
<td>386454</td>
<td>551571</td>
<td>0</td>
</tr>
<tr>
<td>38</td>
<td>National Institute of Biological</td>
<td>2950</td>
<td>0</td>
<td>2950</td>
<td>0</td>
<td>2950</td>
<td>0</td>
</tr>
<tr>
<td>39</td>
<td>Infar (India) Ltd.</td>
<td>23975</td>
<td>0</td>
<td>23975</td>
<td>0</td>
<td>23975</td>
<td>0</td>
</tr>
<tr>
<td>40</td>
<td>National Thalassemia Welfare Society</td>
<td>48084</td>
<td>0</td>
<td>480000</td>
<td>54440</td>
<td>41644</td>
<td>0</td>
</tr>
<tr>
<td>41</td>
<td>Australian International Development Assistance Bureau</td>
<td>0</td>
<td>1858</td>
<td>1858</td>
<td>0</td>
<td>1858</td>
<td>0</td>
</tr>
<tr>
<td>42</td>
<td>INCLEN</td>
<td>0</td>
<td>220421</td>
<td>176023</td>
<td>2028188</td>
<td>2323267</td>
<td>0</td>
</tr>
<tr>
<td>43</td>
<td>ParkDavis</td>
<td>0</td>
<td>1011</td>
<td>1011</td>
<td>0</td>
<td>1011</td>
<td>0</td>
</tr>
<tr>
<td>44</td>
<td>Institute of Cancer Research UK coordination Committee</td>
<td>685067</td>
<td>0</td>
<td>685067</td>
<td>268601</td>
<td>416466</td>
<td>0</td>
</tr>
<tr>
<td>45</td>
<td>Hoechest India Ltd.</td>
<td>1194</td>
<td>0</td>
<td>1194</td>
<td>0</td>
<td>1194</td>
<td>0</td>
</tr>
<tr>
<td>46</td>
<td>Yoga And Naturopathy</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>47</td>
<td>A.S.T.A</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>48</td>
<td>Ranbaxy /Elililly &amp; company pvt Ltd</td>
<td>162418</td>
<td>0</td>
<td>873398</td>
<td>1035816</td>
<td>403911</td>
<td>0</td>
</tr>
<tr>
<td>49</td>
<td>Biomed Pvt. Ltd.</td>
<td>549</td>
<td>0</td>
<td>549</td>
<td>0</td>
<td>549</td>
<td>0</td>
</tr>
<tr>
<td>50</td>
<td>Smithline Beecham Pharma</td>
<td>16291</td>
<td>0</td>
<td>16291</td>
<td>0</td>
<td>16291</td>
<td>0</td>
</tr>
<tr>
<td>51</td>
<td>Rockefeller Fondation</td>
<td>19369</td>
<td>0</td>
<td>19369</td>
<td>0</td>
<td>19369</td>
<td>0</td>
</tr>
<tr>
<td>52</td>
<td>NATIONAL INSTITUTE OF HEALTH, USA</td>
<td>7545663</td>
<td>0</td>
<td>1572202</td>
<td>9117865</td>
<td>6112561</td>
<td>0</td>
</tr>
<tr>
<td>53</td>
<td>Norad, Norway</td>
<td>100183</td>
<td>0</td>
<td>1834898</td>
<td>1935081</td>
<td>33287</td>
<td>0</td>
</tr>
<tr>
<td>54</td>
<td>NIE</td>
<td>16171932</td>
<td>0</td>
<td>8289837</td>
<td>24461769</td>
<td>17513860</td>
<td>0</td>
</tr>
<tr>
<td>55</td>
<td>SAFA</td>
<td>25132</td>
<td>0</td>
<td>25132</td>
<td>0</td>
<td>25132</td>
<td>0</td>
</tr>
<tr>
<td>56</td>
<td>I.E.C.</td>
<td>0</td>
<td>757</td>
<td>757</td>
<td>0</td>
<td>757</td>
<td>0</td>
</tr>
<tr>
<td>57</td>
<td>Family Planning Foundation</td>
<td>1983</td>
<td>0</td>
<td>1983</td>
<td>0</td>
<td>1983</td>
<td>0</td>
</tr>
<tr>
<td>58</td>
<td>Sarabhai Chemicals</td>
<td>1236</td>
<td>0</td>
<td>1236</td>
<td>0</td>
<td>1236</td>
<td>0</td>
</tr>
<tr>
<td>S.No</td>
<td>Funding Agency</td>
<td>Opening Balance</td>
<td>Receipt</td>
<td>Total</td>
<td>Expenditure</td>
<td>Adjustment</td>
<td>Balance</td>
</tr>
<tr>
<td>------</td>
<td>--------------------------------------</td>
<td>-----------------</td>
<td>---------</td>
<td>-------</td>
<td>-------------</td>
<td>------------</td>
<td>---------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Credit Debit</td>
<td></td>
<td></td>
<td></td>
<td>Credit Debit</td>
<td></td>
</tr>
<tr>
<td>59</td>
<td>INSA</td>
<td>45331 0</td>
<td>0 0</td>
<td>45331</td>
<td>20000</td>
<td>83 0</td>
<td>25331 0</td>
</tr>
<tr>
<td>60</td>
<td>TCL Bombay</td>
<td>0 1264 0</td>
<td>1264 0</td>
<td>0 1264</td>
<td>0 0</td>
<td>83 0</td>
<td>0 0</td>
</tr>
<tr>
<td>61</td>
<td>Hindustan Antibiotic Ltd.</td>
<td>83 0 0</td>
<td>83 0</td>
<td>83</td>
<td>0</td>
<td>0 0</td>
<td>83 0</td>
</tr>
<tr>
<td>62</td>
<td>SRBC Clinical Pharmacology</td>
<td>0 3154100 0</td>
<td>3154100</td>
<td>0 3154100</td>
<td>0</td>
<td>0 3154100</td>
<td></td>
</tr>
<tr>
<td>63</td>
<td>Andaman/Nicobar</td>
<td>4192 0 0</td>
<td>4192 0</td>
<td>0</td>
<td>4192 0</td>
<td>0</td>
<td>0 4192</td>
</tr>
<tr>
<td>64</td>
<td>M/S Jagsonpal Pharma</td>
<td>7119 0 0</td>
<td>7119 0</td>
<td>0</td>
<td>7119 0</td>
<td>0</td>
<td>0 7119</td>
</tr>
<tr>
<td>65</td>
<td>Panacea biotech Ltd.</td>
<td>25060 0 292471</td>
<td>317531</td>
<td>313344</td>
<td>4187 0</td>
<td>0</td>
<td>0 4187</td>
</tr>
<tr>
<td>66</td>
<td>The Dr. Willmar Sachwabe Arznemittel Germany</td>
<td>14489 0 14489 0</td>
<td>0</td>
<td>14489</td>
<td>0</td>
<td>0</td>
<td>0 14489</td>
</tr>
<tr>
<td>67</td>
<td>Rhone Poulence India Ltd.</td>
<td>86 0 0 79 0</td>
<td>79 0</td>
<td>79</td>
<td>0</td>
<td>0</td>
<td>0 79</td>
</tr>
<tr>
<td>68</td>
<td>Somdutt Builders Ltd.</td>
<td>4192 0 0</td>
<td>4192 0</td>
<td>0</td>
<td>4192 0</td>
<td>0</td>
<td>0 4192</td>
</tr>
<tr>
<td>69</td>
<td>Hindustan Lever Ltd.</td>
<td>0 1511 0</td>
<td>1511 0</td>
<td>0</td>
<td>1511 0</td>
<td>0</td>
<td>0 1511</td>
</tr>
<tr>
<td>70</td>
<td>Revolving Funds for Drugs. / SNMC</td>
<td>195710 0 0</td>
<td>195710</td>
<td>0</td>
<td>195710 0</td>
<td>0</td>
<td>0 195710</td>
</tr>
<tr>
<td>71</td>
<td>Atomic Energy Regulatory Board</td>
<td>331306 0 175730</td>
<td>507036</td>
<td>130828</td>
<td>376208 0</td>
<td>0</td>
<td>0 376208</td>
</tr>
<tr>
<td>72</td>
<td>Bhart Electrical Ltd.</td>
<td>138 0 0</td>
<td>138 0</td>
<td>0</td>
<td>138 0</td>
<td>0</td>
<td>0 138</td>
</tr>
<tr>
<td>73</td>
<td>Sandoz</td>
<td>33 0 0</td>
<td>33 0</td>
<td>0</td>
<td>33 0</td>
<td>0</td>
<td>0 33</td>
</tr>
<tr>
<td>74</td>
<td>Pfizer Ltd.</td>
<td>1453532 0 3536446</td>
<td>4989978</td>
<td>3707305</td>
<td>0</td>
<td>0</td>
<td>0 1282673</td>
</tr>
<tr>
<td>75</td>
<td>Buyer India Ltd.</td>
<td>1648 0 0</td>
<td>1648 0</td>
<td>0</td>
<td>1648 0</td>
<td>0</td>
<td>0 1648</td>
</tr>
<tr>
<td>76</td>
<td>NATCO Pharma India</td>
<td>13044 0 332175</td>
<td>345219</td>
<td>273171</td>
<td>72048 0</td>
<td>0</td>
<td>0 72048</td>
</tr>
<tr>
<td>77</td>
<td>University of Maryland</td>
<td>339192 0 604964</td>
<td>944156</td>
<td>734720</td>
<td>0</td>
<td>0</td>
<td>0 209436</td>
</tr>
<tr>
<td>78</td>
<td>Glaxo India Ltd.</td>
<td>0 0 224100</td>
<td>224100</td>
<td>6723</td>
<td>217377 0</td>
<td>0</td>
<td>0 217377</td>
</tr>
<tr>
<td>79</td>
<td>Ministry of Defence (D.R.D.O)</td>
<td>68859 0 577000</td>
<td>645859</td>
<td>200294</td>
<td>445565 0</td>
<td>0</td>
<td>0 445565</td>
</tr>
<tr>
<td>80</td>
<td>Cynamid India Ltd.</td>
<td>27305 0 0</td>
<td>27305 0</td>
<td>0</td>
<td>27305 0</td>
<td>0</td>
<td>0 27305</td>
</tr>
<tr>
<td>81</td>
<td>Reckitt and Column</td>
<td>6595 0 0</td>
<td>6595 0</td>
<td>0</td>
<td>6595 0</td>
<td>0</td>
<td>0 6595</td>
</tr>
<tr>
<td>82</td>
<td>MBI Kits.</td>
<td>0 219 0 219</td>
<td>0</td>
<td>219</td>
<td>0</td>
<td>0</td>
<td>0 219</td>
</tr>
<tr>
<td>83</td>
<td>Nova Nordisk India</td>
<td>241532 0 0</td>
<td>241532</td>
<td>58753</td>
<td>182779 0</td>
<td>0</td>
<td>0 182779</td>
</tr>
<tr>
<td>84</td>
<td>Central Pollution Control Board</td>
<td>4416 0 0</td>
<td>4416 0</td>
<td>0</td>
<td>4416 0</td>
<td>0</td>
<td>0 4416</td>
</tr>
<tr>
<td>85</td>
<td>Bureau of Police Res. &amp; Development</td>
<td>2147 0 0</td>
<td>2147 0</td>
<td>0</td>
<td>2147 0</td>
<td>0</td>
<td>0 2147</td>
</tr>
<tr>
<td>86</td>
<td>Office of Salt Commission Jaipur</td>
<td>37114 0 0</td>
<td>37114 0</td>
<td>0</td>
<td>37114 0</td>
<td>0</td>
<td>0 37114</td>
</tr>
<tr>
<td>87</td>
<td>NAMS</td>
<td>12086 0 0</td>
<td>12086 0</td>
<td>0</td>
<td>12086 0</td>
<td>0</td>
<td>0 12086</td>
</tr>
<tr>
<td>88</td>
<td>European Union/Commission</td>
<td>41975 0 0</td>
<td>41975 0</td>
<td>0</td>
<td>41975 0</td>
<td>0</td>
<td>0 41975</td>
</tr>
<tr>
<td>89</td>
<td>Cystic Fibrosis/World Wide, USA</td>
<td>0 0 230165</td>
<td>230165</td>
<td>144810</td>
<td>85355 0</td>
<td>0</td>
<td>0 85355</td>
</tr>
<tr>
<td>90</td>
<td>CONARD, USA</td>
<td>0 0 591</td>
<td>591 0</td>
<td>0</td>
<td>591 0</td>
<td>0</td>
<td>0 591</td>
</tr>
<tr>
<td>91</td>
<td>The Cancer Foundation</td>
<td>230165 0 0</td>
<td>230165</td>
<td>144810</td>
<td>85355 0</td>
<td>0</td>
<td>0 85355</td>
</tr>
<tr>
<td>92</td>
<td>Novartis India Ltd.</td>
<td>533848 0 322232</td>
<td>856080</td>
<td>520312</td>
<td>335768 0</td>
<td>0</td>
<td>0 335768</td>
</tr>
<tr>
<td>S.No</td>
<td>Funding Agency</td>
<td>Opening Balance</td>
<td>Receipt</td>
<td>Total</td>
<td>Expenditure</td>
<td>Adjustment</td>
<td>Balance</td>
</tr>
<tr>
<td>------</td>
<td>----------------------------------------------------------</td>
<td>-----------------</td>
<td>---------</td>
<td>-------</td>
<td>-------------</td>
<td>------------</td>
<td>---------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Credit</td>
<td>Debit</td>
<td>Credit</td>
<td>Debit</td>
<td>Credit</td>
<td>Debit</td>
</tr>
<tr>
<td>93</td>
<td>Duke University Medical Centre</td>
<td>205588</td>
<td>0</td>
<td>205588</td>
<td>0</td>
<td>205588</td>
<td>0</td>
</tr>
<tr>
<td>94</td>
<td>Indian Council for Culture Relation</td>
<td>25944</td>
<td>0</td>
<td>25944</td>
<td>0</td>
<td>25944</td>
<td>0</td>
</tr>
<tr>
<td>95</td>
<td>Lupin Lab</td>
<td>96098</td>
<td>0</td>
<td>96098</td>
<td>0</td>
<td>96098</td>
<td>0</td>
</tr>
<tr>
<td>96</td>
<td>Maharishi Ayurveda</td>
<td>58478</td>
<td>0</td>
<td>116308</td>
<td>174786</td>
<td>168916</td>
<td>5870</td>
</tr>
<tr>
<td>97</td>
<td>UN International Drug and crime Control Programme</td>
<td>484102</td>
<td>0</td>
<td>2373201</td>
<td>1194846</td>
<td>1662457</td>
<td>0</td>
</tr>
<tr>
<td>98</td>
<td>Dupher Interfrom Ltd</td>
<td>8463</td>
<td>0</td>
<td>8463</td>
<td>0</td>
<td>8463</td>
<td>0</td>
</tr>
<tr>
<td>99</td>
<td>Russan Pharma Ltd Mumbai</td>
<td>5015</td>
<td>0</td>
<td>675000</td>
<td>289239</td>
<td>390776</td>
<td>0</td>
</tr>
<tr>
<td>100</td>
<td>Central Council for Research in Ayurveda &amp; Sidha</td>
<td>830123</td>
<td>0</td>
<td>762500</td>
<td>554370</td>
<td>1038253</td>
<td>0</td>
</tr>
<tr>
<td>101</td>
<td>Global Forum for Health and Research</td>
<td>106750</td>
<td>0</td>
<td>106750</td>
<td>0</td>
<td>106750</td>
<td>0</td>
</tr>
<tr>
<td>102</td>
<td>Nucron Pharma Ltd.</td>
<td>66472</td>
<td>0</td>
<td>66472</td>
<td>0</td>
<td>66472</td>
<td>0</td>
</tr>
<tr>
<td>103</td>
<td>Terry Fox Foundation/CANADIAN HIGH COMMISSION</td>
<td>4950</td>
<td>0</td>
<td>4950</td>
<td>130068</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>104</td>
<td>Ministry of Social Justice and Empowerment</td>
<td>77882</td>
<td>0</td>
<td>77882</td>
<td>0</td>
<td>77882</td>
<td>0</td>
</tr>
<tr>
<td>105</td>
<td>Quintiles Spectral India</td>
<td>2275838</td>
<td>0</td>
<td>3963890</td>
<td>2593466</td>
<td>3646262</td>
<td>0</td>
</tr>
<tr>
<td>106</td>
<td>United Nation Industrial Development</td>
<td>43857</td>
<td>0</td>
<td>43857</td>
<td>0</td>
<td>43857</td>
<td>0</td>
</tr>
<tr>
<td>107</td>
<td>Mustrad Research And Promotion Center</td>
<td>17436</td>
<td>0</td>
<td>17436</td>
<td>0</td>
<td>17436</td>
<td>0</td>
</tr>
<tr>
<td>108</td>
<td>Ministry of Communication and Information &amp; Technology</td>
<td>2093936</td>
<td>0</td>
<td>910000</td>
<td>2292181</td>
<td>711755</td>
<td>0</td>
</tr>
<tr>
<td>109</td>
<td>University of Bergan, Norway</td>
<td>3747523</td>
<td>0</td>
<td>3986951</td>
<td>4671126</td>
<td>3063348</td>
<td>0</td>
</tr>
<tr>
<td>110</td>
<td>Zydas Healthcare Ltd</td>
<td>0</td>
<td>398</td>
<td>0</td>
<td>398</td>
<td>0</td>
<td>398</td>
</tr>
<tr>
<td>111</td>
<td>Ferrosan, Denmark</td>
<td>6552</td>
<td>0</td>
<td>6552</td>
<td>0</td>
<td>6552</td>
<td>0</td>
</tr>
<tr>
<td>112</td>
<td>University of Delhi</td>
<td>19218</td>
<td>0</td>
<td>19218</td>
<td>0</td>
<td>19218</td>
<td>0</td>
</tr>
<tr>
<td>113</td>
<td>Oxford University, UK</td>
<td>874163</td>
<td>0</td>
<td>1133640</td>
<td>741103</td>
<td>1266700</td>
<td>0</td>
</tr>
<tr>
<td>114</td>
<td>Federation of Obstetric &amp; Gynaecological</td>
<td>0</td>
<td>376</td>
<td>0</td>
<td>376</td>
<td>0</td>
<td>276</td>
</tr>
<tr>
<td>115</td>
<td>United Nation Development Programme</td>
<td>37786</td>
<td>0</td>
<td>37786</td>
<td>0</td>
<td>37786</td>
<td>0</td>
</tr>
<tr>
<td>116</td>
<td>Aimil Pharmaceutical India Ltd.</td>
<td>135</td>
<td>0</td>
<td>135</td>
<td>0</td>
<td>135</td>
<td>0</td>
</tr>
<tr>
<td>117</td>
<td>U.S.V. Ltd.</td>
<td>186</td>
<td>0</td>
<td>186</td>
<td>0</td>
<td>186</td>
<td>0</td>
</tr>
<tr>
<td>118</td>
<td>Heinz Nutrition Foundation India</td>
<td>24370</td>
<td>0</td>
<td>24370</td>
<td>0</td>
<td>24370</td>
<td>0</td>
</tr>
<tr>
<td>119</td>
<td>SGPGIMS</td>
<td>28531</td>
<td>0</td>
<td>28531</td>
<td>0</td>
<td>28531</td>
<td>0</td>
</tr>
<tr>
<td>120</td>
<td>Caltaq Laboraties Ltd(U.S.A)</td>
<td>22058</td>
<td>0</td>
<td>22058</td>
<td>0</td>
<td>22058</td>
<td>0</td>
</tr>
<tr>
<td>S.No</td>
<td>Funding Agency</td>
<td>Opening Balance</td>
<td>Receipt</td>
<td>Total</td>
<td>Expenditure</td>
<td>Adjustment</td>
<td>Balance</td>
</tr>
<tr>
<td>------</td>
<td>--------------------------------------</td>
<td>-----------------</td>
<td>---------</td>
<td>-------</td>
<td>-------------</td>
<td>------------</td>
<td>---------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Credit</td>
<td>Debit</td>
<td>Credit</td>
<td>Debit</td>
<td>Credit</td>
<td>Debit</td>
</tr>
<tr>
<td>121</td>
<td>INCTR USA</td>
<td>246205</td>
<td>0</td>
<td>754547</td>
<td>1000752</td>
<td>948569</td>
<td>0</td>
</tr>
<tr>
<td>122</td>
<td>Indian Institute of Sciences, Bangalore</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>14229</td>
<td>0</td>
<td>14229</td>
</tr>
<tr>
<td>123</td>
<td>Nottingham Health Care</td>
<td>14229</td>
<td>0</td>
<td>0</td>
<td>14229</td>
<td>0</td>
<td>14229</td>
</tr>
<tr>
<td>124</td>
<td>International Consortium for Mental Health Policy</td>
<td>422153</td>
<td>0</td>
<td>0</td>
<td>422153</td>
<td>0</td>
<td>422153</td>
</tr>
<tr>
<td>125</td>
<td>Emcure Pharmaceutical Ltd.</td>
<td>15</td>
<td>0</td>
<td>0</td>
<td>15</td>
<td>6395</td>
<td>0</td>
</tr>
<tr>
<td>126</td>
<td>Delhi State Control Society/AIDS</td>
<td>111</td>
<td>0</td>
<td>170870</td>
<td>170981</td>
<td>181126</td>
<td>0</td>
</tr>
<tr>
<td>127</td>
<td>Bharat Biotech International Ltd</td>
<td>12241</td>
<td>0</td>
<td>0</td>
<td>12241</td>
<td>0</td>
<td>12241</td>
</tr>
<tr>
<td>128</td>
<td>L.G. Chemicals India Pvt Ltd.</td>
<td>162</td>
<td>0</td>
<td>162</td>
<td>830</td>
<td>0</td>
<td>668</td>
</tr>
<tr>
<td>129</td>
<td>Wockhardt, Mumbai</td>
<td>21169</td>
<td>0</td>
<td>0</td>
<td>21169</td>
<td>0</td>
<td>21169</td>
</tr>
<tr>
<td>130</td>
<td>NSD (Security Deposit)</td>
<td>1863550</td>
<td>0</td>
<td>1880100</td>
<td>3743650</td>
<td>1573000</td>
<td>0</td>
</tr>
<tr>
<td>131</td>
<td>IIM, Ahmedabad</td>
<td>105</td>
<td>0</td>
<td>0</td>
<td>105</td>
<td>9557</td>
<td>0</td>
</tr>
<tr>
<td>132</td>
<td>Sanofi Pasteur India Pvt Ltd</td>
<td>16</td>
<td>0</td>
<td>60000</td>
<td>6016</td>
<td>1800</td>
<td>0</td>
</tr>
<tr>
<td>133</td>
<td>Endocrina</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>134</td>
<td>Helpage India</td>
<td>27966</td>
<td>0</td>
<td>0</td>
<td>27966</td>
<td>0</td>
<td>27966</td>
</tr>
<tr>
<td>135</td>
<td>Johnson &amp; Johnson</td>
<td>0</td>
<td>0</td>
<td>94390</td>
<td>94390</td>
<td>2832</td>
<td>0</td>
</tr>
<tr>
<td>136</td>
<td>Beijing Toshiba Pharmaceuticals Co. Ltd.</td>
<td>180235</td>
<td>0</td>
<td>0</td>
<td>180235</td>
<td>0</td>
<td>180235</td>
</tr>
<tr>
<td>137</td>
<td>Lyon, France</td>
<td>11291</td>
<td>0</td>
<td>0</td>
<td>11291</td>
<td>0</td>
<td>11291</td>
</tr>
<tr>
<td>138</td>
<td>C.P.W.W. Jerusalam</td>
<td>6534</td>
<td>0</td>
<td>6534</td>
<td>6534</td>
<td>0</td>
<td>6534</td>
</tr>
<tr>
<td>139</td>
<td>Aventis Pharmaceutical, USA</td>
<td>14344</td>
<td>0</td>
<td>161592</td>
<td>15936</td>
<td>134184</td>
<td>0</td>
</tr>
<tr>
<td>140</td>
<td>Alcon Research Ltd., USA</td>
<td>15744</td>
<td>0</td>
<td>0</td>
<td>15744</td>
<td>0</td>
<td>15744</td>
</tr>
<tr>
<td>141</td>
<td>Dr. Reddy’s Lab. Pvt. Ltd.</td>
<td>313598</td>
<td>0</td>
<td>307461</td>
<td>621059</td>
<td>294382</td>
<td>0</td>
</tr>
<tr>
<td>142</td>
<td>Glenmark Laboratories Pvt. Ltd.</td>
<td>2281</td>
<td>0</td>
<td>0</td>
<td>2281</td>
<td>0</td>
<td>2281</td>
</tr>
<tr>
<td>143</td>
<td>Hindustan Latex Family Planning Promotion</td>
<td>67244</td>
<td>0</td>
<td>0</td>
<td>67244</td>
<td>0</td>
<td>67244</td>
</tr>
<tr>
<td>144</td>
<td>The Population Council</td>
<td>0</td>
<td>1589737</td>
<td>0</td>
<td>1589737</td>
<td>0</td>
<td>1589737</td>
</tr>
<tr>
<td>145</td>
<td>SIRO CLIN PHARMA PVT. LTD</td>
<td>1070229</td>
<td>0</td>
<td>151172</td>
<td>1221401</td>
<td>415773</td>
<td>0</td>
</tr>
<tr>
<td>146</td>
<td>Charak Pharma (P)Ltd.</td>
<td>147586</td>
<td>0</td>
<td>0</td>
<td>147586</td>
<td>0</td>
<td>147586</td>
</tr>
<tr>
<td>147</td>
<td>INCLEN &amp; USAID</td>
<td>1580608</td>
<td>0</td>
<td>9722088</td>
<td>11302696</td>
<td>6388557</td>
<td>0</td>
</tr>
<tr>
<td>148</td>
<td>National Institute of Oceanography</td>
<td>0</td>
<td>2918</td>
<td>0</td>
<td>2918</td>
<td>0</td>
<td>2918</td>
</tr>
<tr>
<td>149</td>
<td>INST. OF NUCLEAR MEDICINE &amp; ALLIED SCIENCE</td>
<td>22569</td>
<td>0</td>
<td>0</td>
<td>22569</td>
<td>0</td>
<td>22569</td>
</tr>
<tr>
<td>150</td>
<td>SAVING NEWBORN LIVES, USA</td>
<td>8920</td>
<td>0</td>
<td>192404</td>
<td>201324</td>
<td>74484</td>
<td>0</td>
</tr>
<tr>
<td>151</td>
<td>DANIDA RESEARCH COUNCIL</td>
<td>173218</td>
<td>0</td>
<td>0</td>
<td>173218</td>
<td>153789</td>
<td>0</td>
</tr>
<tr>
<td>S.No</td>
<td>Funding Agency</td>
<td>Opening Balance</td>
<td>Receipt</td>
<td>Total</td>
<td>Expenditure</td>
<td>Adjustment</td>
<td>Balance</td>
</tr>
<tr>
<td>------</td>
<td>----------------</td>
<td>-----------------</td>
<td>---------</td>
<td>-------</td>
<td>-------------</td>
<td>------------</td>
<td>---------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Credit</td>
<td>Debit</td>
<td></td>
<td>Credit</td>
<td>Debit</td>
<td></td>
</tr>
<tr>
<td>152</td>
<td>THE MICRONUTRIENT INITIATIVE, ASIA</td>
<td>15012</td>
<td>0</td>
<td>18645</td>
<td>33657</td>
<td>0</td>
<td>4702</td>
</tr>
<tr>
<td>153</td>
<td>Ministry of Health And Family Welfare(N.A.C.O)</td>
<td>2880099</td>
<td>0</td>
<td>8453606</td>
<td>11333705</td>
<td>3853528</td>
<td>7480177</td>
</tr>
<tr>
<td>154</td>
<td>The University of Alabama, USA</td>
<td>2469345</td>
<td>0</td>
<td>1125085</td>
<td>3594430</td>
<td>3343532</td>
<td>250898</td>
</tr>
<tr>
<td>155</td>
<td>Ministry of External Affairs</td>
<td>212920</td>
<td>0</td>
<td>0</td>
<td>212920</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>156</td>
<td>Indian council of Philosophical Research</td>
<td>0</td>
<td>0</td>
<td>69000</td>
<td>69000</td>
<td>61080</td>
<td>7920</td>
</tr>
<tr>
<td>157</td>
<td>Sterling Synergy System (P) Ltd.</td>
<td>165978</td>
<td>0</td>
<td>62400</td>
<td>228378</td>
<td>114798</td>
<td>113580</td>
</tr>
<tr>
<td>158</td>
<td>Reliance Clinical Research Services (P) Ltd.</td>
<td>62571</td>
<td>0</td>
<td>5000</td>
<td>67571</td>
<td>20150</td>
<td>47421</td>
</tr>
<tr>
<td>159</td>
<td>KLPF,USA</td>
<td>1859112</td>
<td>0</td>
<td>0</td>
<td>1859112</td>
<td>1202338</td>
<td>656774</td>
</tr>
<tr>
<td>160</td>
<td>Vulimini Ramalingaswami Foundation</td>
<td>53802</td>
<td>0</td>
<td>0</td>
<td>53802</td>
<td>60310</td>
<td>6508</td>
</tr>
<tr>
<td>161</td>
<td>Texas A&amp;M Research Foundation (TAMRF) USA</td>
<td>17653</td>
<td>0</td>
<td>0</td>
<td>17653</td>
<td>1416</td>
<td>16237</td>
</tr>
<tr>
<td>162</td>
<td>Biomerieux India (P)Ltd.</td>
<td>11206</td>
<td>0</td>
<td>90000</td>
<td>101206</td>
<td>56307</td>
<td>44899</td>
</tr>
<tr>
<td>163</td>
<td>Media Lab Asia</td>
<td>265181</td>
<td>0</td>
<td>790988</td>
<td>1056169</td>
<td>1007802</td>
<td>48367</td>
</tr>
<tr>
<td>164</td>
<td>University of Warwick U.K</td>
<td>166220</td>
<td>0</td>
<td>399500</td>
<td>565720</td>
<td>133754</td>
<td>431966</td>
</tr>
<tr>
<td>165</td>
<td>BHARAT SERUMS AND VACCINES LTD.</td>
<td>16623</td>
<td>0</td>
<td>65000</td>
<td>81623</td>
<td>85511</td>
<td>0</td>
</tr>
<tr>
<td>166</td>
<td>D.I.P.A.S</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>167</td>
<td>CENTER FOR BLOOD RESEARCH</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>168</td>
<td>CD PHARMA INDIA PRIVATE LIMITED</td>
<td>218819</td>
<td>0</td>
<td>1168687</td>
<td>1387506</td>
<td>700985</td>
<td>686521</td>
</tr>
<tr>
<td>169</td>
<td>Khandelwal Laboratories Ltd.</td>
<td>26197</td>
<td>0</td>
<td>0</td>
<td>26197</td>
<td>28718</td>
<td>0</td>
</tr>
<tr>
<td>170</td>
<td>Directorate General of Health Services</td>
<td>0</td>
<td>0</td>
<td>718308</td>
<td>718308</td>
<td>158209</td>
<td>560099</td>
</tr>
<tr>
<td>171</td>
<td>Laajolla Pharmaceutical Company, California</td>
<td>0</td>
<td>0</td>
<td>215662</td>
<td>215662</td>
<td>27270</td>
<td>188392</td>
</tr>
<tr>
<td>172</td>
<td>BONE &amp; JOINT DECADE INDIA</td>
<td>9000</td>
<td>0</td>
<td>190000</td>
<td>199000</td>
<td>163120</td>
<td>35880</td>
</tr>
<tr>
<td>173</td>
<td>ANTISENSE PHARMA GmbH, GERMANY</td>
<td>0</td>
<td>0</td>
<td>71736</td>
<td>71736</td>
<td>2152</td>
<td>69584</td>
</tr>
<tr>
<td>174</td>
<td>T.S.H.T.M</td>
<td>73637</td>
<td>0</td>
<td>154000</td>
<td>227637</td>
<td>218665</td>
<td>8972</td>
</tr>
<tr>
<td>175</td>
<td>National Institute of Nutrition (NIN) Hyderabad</td>
<td>0</td>
<td>15264</td>
<td>300000</td>
<td>284736</td>
<td>287307</td>
<td>0</td>
</tr>
<tr>
<td>176</td>
<td>Ozone pharmaceuticals ltd.</td>
<td>120857</td>
<td>0</td>
<td>155565</td>
<td>276422</td>
<td>189760</td>
<td>86662</td>
</tr>
<tr>
<td>S.No</td>
<td>Funding Agency</td>
<td>Opening Balance Credit</td>
<td>Opening Balance Debit</td>
<td>Receipt</td>
<td>Total</td>
<td>Expenditure</td>
<td>Adjustment Credit</td>
</tr>
<tr>
<td>------</td>
<td>----------------------------------------------------</td>
<td>------------------------</td>
<td>-----------------------</td>
<td>---------</td>
<td>-------</td>
<td>-------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>177</td>
<td>Delhi Tapedic Unmulan Samiti</td>
<td>140799</td>
<td>0</td>
<td>248580</td>
<td>389379</td>
<td>240043</td>
<td>149336</td>
</tr>
<tr>
<td>178</td>
<td>John Hopkins Bloomberg School of Public Health (JHBSPH)</td>
<td>0</td>
<td>0</td>
<td>1119600</td>
<td>1119600</td>
<td>263274</td>
<td>856326</td>
</tr>
<tr>
<td>179</td>
<td>Clinigene International Pvt. Ltd</td>
<td>0</td>
<td>0</td>
<td>152232</td>
<td>152232</td>
<td>36766</td>
<td>115466</td>
</tr>
<tr>
<td>180</td>
<td>FREEDOM TRIAL</td>
<td>0</td>
<td>0</td>
<td>88920</td>
<td>88920</td>
<td>2667</td>
<td>86253</td>
</tr>
<tr>
<td>181</td>
<td>KOBE, JAPAN</td>
<td>211897</td>
<td>0</td>
<td>815050</td>
<td>1026947</td>
<td>994711</td>
<td>32236</td>
</tr>
<tr>
<td>182</td>
<td>Troikaa Pharmaceutical Ltd</td>
<td>34858</td>
<td>0</td>
<td>100000</td>
<td>134858</td>
<td>98000</td>
<td>36858</td>
</tr>
<tr>
<td>183</td>
<td>International Paedtrics Nephrology Association</td>
<td>76500</td>
<td>0</td>
<td>399000</td>
<td>475500</td>
<td>376100</td>
<td>99400</td>
</tr>
<tr>
<td>184</td>
<td>Synergy Network India Pvt Ltd</td>
<td>5237</td>
<td>0</td>
<td>266000</td>
<td>271237</td>
<td>270686</td>
<td>551</td>
</tr>
<tr>
<td>185</td>
<td>Ciola Ltd.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>186</td>
<td>Solvey Pharma Ltd.</td>
<td>120051</td>
<td>0</td>
<td>120051</td>
<td>69386</td>
<td>50665</td>
<td>0</td>
</tr>
<tr>
<td>187</td>
<td>IFCPAR, NEW DELHI</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>188</td>
<td>Relisys Medical Devices Ltd.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>189</td>
<td>PPD Pharmaceutical Development India Pvt. Ltd.</td>
<td>70879</td>
<td>0</td>
<td>537036</td>
<td>607915</td>
<td>469219</td>
<td>138696</td>
</tr>
<tr>
<td>190</td>
<td>Auxilium Technical &amp; Management Services Pvt. Ltd.</td>
<td>0</td>
<td>0</td>
<td>50000</td>
<td>50000</td>
<td>49600</td>
<td>400</td>
</tr>
<tr>
<td>191</td>
<td>M/S ASPREVA PHARMACEUTICAL CORPORATION, CANADA</td>
<td>0</td>
<td>2393</td>
<td>216310</td>
<td>213917</td>
<td>140650</td>
<td>73267</td>
</tr>
<tr>
<td>192</td>
<td>CLINIRx RESEARCH PVT. LTD. GURGAON, HARYANA</td>
<td>108846</td>
<td>0</td>
<td>1747846</td>
<td>1856692</td>
<td>341925</td>
<td>1514767</td>
</tr>
<tr>
<td>193</td>
<td>Central Council for Research in Unani Medicine</td>
<td>0</td>
<td>0</td>
<td>803700</td>
<td>803700</td>
<td>742901</td>
<td>60799</td>
</tr>
<tr>
<td>194</td>
<td>CLINICYTE, USA</td>
<td>242500</td>
<td>0</td>
<td>250000</td>
<td>492500</td>
<td>245213</td>
<td>247287</td>
</tr>
<tr>
<td>195</td>
<td>M/S Markansas Research Division</td>
<td>0</td>
<td>0</td>
<td>284700</td>
<td>284700</td>
<td>38344</td>
<td>246356</td>
</tr>
<tr>
<td>196</td>
<td>Threshold Pharmaceuticals, USA</td>
<td>0</td>
<td>0</td>
<td>294759</td>
<td>294759</td>
<td>258575</td>
<td>36184</td>
</tr>
<tr>
<td>197</td>
<td>GlaxoSmith Kline Asia Private Ltd</td>
<td>0</td>
<td>0</td>
<td>379315</td>
<td>379315</td>
<td>181058</td>
<td>198257</td>
</tr>
<tr>
<td>198</td>
<td>AJINOMOTA CO. JAPAN</td>
<td>0</td>
<td>0</td>
<td>445250</td>
<td>445250</td>
<td>318207</td>
<td>127043</td>
</tr>
<tr>
<td>199</td>
<td>MSD (India) Pvt. Ltd.</td>
<td>0</td>
<td>0</td>
<td>959769</td>
<td>959769</td>
<td>99528</td>
<td>860241</td>
</tr>
<tr>
<td>200</td>
<td>Solumiks Herbaceuticals Limited</td>
<td>0</td>
<td>0</td>
<td>262700</td>
<td>262700</td>
<td>229289</td>
<td>33411</td>
</tr>
<tr>
<td>201</td>
<td>C.N. Centre (AIIMS)</td>
<td>0</td>
<td>0</td>
<td>9000</td>
<td>9000</td>
<td>9000</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>193499723</strong></td>
<td><strong>7417446</strong></td>
<td><strong>325658465</strong></td>
<td><strong>525438572</strong></td>
<td><strong>286108406</strong></td>
<td><strong>4541800</strong></td>
</tr>
</tbody>
</table>

(Mrs. Basanti Dalal)
Finance & Chief Accounts Officer
Statement of Expenditure Made for Purchasing Equipment
during the Financial Year 2006-2007

<table>
<thead>
<tr>
<th>S.NO.</th>
<th>Code No.</th>
<th>Project Investigators</th>
<th>Month</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>N891</td>
<td>DR. A.K. DINDA</td>
<td>Feb-07</td>
<td>436,445</td>
</tr>
<tr>
<td>2</td>
<td>N891</td>
<td>DR. A.K. DINDA</td>
<td>Mar-07</td>
<td>313,955</td>
</tr>
<tr>
<td>3</td>
<td>N669</td>
<td>DR. ALKA KRIPLANI</td>
<td>Feb-07</td>
<td>99,799</td>
</tr>
<tr>
<td>4</td>
<td>N017</td>
<td>DR. BIR SINGH</td>
<td>Jun-06</td>
<td>5,000</td>
</tr>
<tr>
<td>5</td>
<td>N017</td>
<td>DR. BIR SINGH</td>
<td>Jan-07</td>
<td>6,990</td>
</tr>
<tr>
<td>6</td>
<td>N469</td>
<td>DR. D.N. SRIVASTAVA</td>
<td>Jul-06</td>
<td>108,990</td>
</tr>
<tr>
<td>7</td>
<td>D209</td>
<td>DR. DEBABRATA GHOSH</td>
<td>Sep-06</td>
<td>386,757</td>
</tr>
<tr>
<td>8</td>
<td>D209</td>
<td>DR. DEBABRATA GHOSH</td>
<td>Oct-06</td>
<td>63,245</td>
</tr>
<tr>
<td>9</td>
<td>N726</td>
<td>DR. DEEPIKA DEKA</td>
<td>Feb-07</td>
<td>30,000</td>
</tr>
<tr>
<td>10</td>
<td>I413</td>
<td>DR. H.K. PRASAD</td>
<td>Aug-06</td>
<td>4,049</td>
</tr>
<tr>
<td>11</td>
<td>N796</td>
<td>DR. H.K. PRASAD</td>
<td>May-06</td>
<td>766,200</td>
</tr>
<tr>
<td>12</td>
<td>N835</td>
<td>DR. H.N MALLICK</td>
<td>Feb-07</td>
<td>55,954</td>
</tr>
<tr>
<td>13</td>
<td>C608</td>
<td>DR. J.S. TYAGI</td>
<td>Jan-07</td>
<td>34,680</td>
</tr>
<tr>
<td>14</td>
<td>N728</td>
<td>DR. J.S. TYAGI</td>
<td>Aug-06</td>
<td>104,748</td>
</tr>
<tr>
<td>15</td>
<td>N823</td>
<td>DR. J.S. TYAGI</td>
<td>Jun-06</td>
<td>50,711</td>
</tr>
<tr>
<td>16</td>
<td>N823</td>
<td>DR. J.S. TYAGI</td>
<td>Aug-06</td>
<td>7,243</td>
</tr>
<tr>
<td>17</td>
<td>N823</td>
<td>DR. J.S. TYAGI</td>
<td>Oct-06</td>
<td>242,020</td>
</tr>
<tr>
<td>18</td>
<td>N823</td>
<td>DR. J.S. TYAGI</td>
<td>Jan-07</td>
<td>43,722</td>
</tr>
<tr>
<td>19</td>
<td>N823</td>
<td>DR. J.S. TYAGI</td>
<td>Feb-07</td>
<td>14,230</td>
</tr>
<tr>
<td>20</td>
<td>N823</td>
<td>DR. J.S. TYAGI</td>
<td>Mar-07</td>
<td>995,559</td>
</tr>
<tr>
<td>21</td>
<td>N707</td>
<td>DR. K. ANAND</td>
<td>Jun-06</td>
<td>105,610</td>
</tr>
<tr>
<td>22</td>
<td>N707</td>
<td>DR. K. ANAND</td>
<td>Nov-06</td>
<td>11,804</td>
</tr>
<tr>
<td>23</td>
<td>N707</td>
<td>DR. K. ANAND</td>
<td>Mar-07</td>
<td>33,430</td>
</tr>
<tr>
<td>24</td>
<td>D175</td>
<td>DR. K.K. DEEPAK</td>
<td>Aug-06</td>
<td>64,896</td>
</tr>
<tr>
<td>25</td>
<td>D175</td>
<td>DR. K.K. DEEPAK</td>
<td>Sep-06</td>
<td>208,832</td>
</tr>
<tr>
<td>26</td>
<td>D178</td>
<td>DR. K.K. DEEPAK</td>
<td>Jun-06</td>
<td>46,764</td>
</tr>
<tr>
<td>27</td>
<td>D178</td>
<td>DR. K.K. DEEPAK</td>
<td>Nov-06</td>
<td>6,990</td>
</tr>
<tr>
<td>28</td>
<td>N746</td>
<td>DR. K.K. DEEPAK</td>
<td>Jun-06</td>
<td>49,500</td>
</tr>
<tr>
<td>29</td>
<td>N746</td>
<td>DR. K.K. DEEPAK</td>
<td>Jul-06</td>
<td>152,176</td>
</tr>
<tr>
<td>30</td>
<td>N746</td>
<td>DR. K.K. DEEPAK</td>
<td>Aug-06</td>
<td>566</td>
</tr>
<tr>
<td>31</td>
<td>N746</td>
<td>DR. K.K. DEEPAK</td>
<td>Sep-06</td>
<td>7,090</td>
</tr>
<tr>
<td>32</td>
<td>I466</td>
<td>DR. KALPANA LUTHRA</td>
<td>Aug-06</td>
<td>221,427</td>
</tr>
<tr>
<td>No.</td>
<td>Reference</td>
<td>Name</td>
<td>Date</td>
<td>Salary</td>
</tr>
<tr>
<td>-----</td>
<td>-----------</td>
<td>-----------------------</td>
<td>---------</td>
<td>----------</td>
</tr>
<tr>
<td>33</td>
<td>I466</td>
<td>DR. KALPANA LUTHRA</td>
<td>Oct-06</td>
<td>28,463</td>
</tr>
<tr>
<td>34</td>
<td>N842</td>
<td>DR. KAMESHWAR PRASAD</td>
<td>Mar-07</td>
<td>93,500</td>
</tr>
<tr>
<td>35</td>
<td>N766</td>
<td>DR. KRISHNA DALAL</td>
<td>May-06</td>
<td>126,830</td>
</tr>
<tr>
<td>36</td>
<td>N727</td>
<td>DR. M.R.RAJESWARI</td>
<td>Feb-07</td>
<td>278,267</td>
</tr>
<tr>
<td>37</td>
<td>N888</td>
<td>DR. MADHURI BEHARI</td>
<td>Mar-07</td>
<td>16,536</td>
</tr>
<tr>
<td>38</td>
<td>N754</td>
<td>DR. MANJU MEHTA</td>
<td>Jun-06</td>
<td>51,000</td>
</tr>
<tr>
<td>39</td>
<td>N754</td>
<td>DR. MANJU MEHTA</td>
<td>Aug-06</td>
<td>8,570</td>
</tr>
<tr>
<td>40</td>
<td>D212</td>
<td>DR. N.C.CHANDRA</td>
<td>Mar-07</td>
<td>395,267</td>
</tr>
<tr>
<td>41</td>
<td>I486</td>
<td>DR. N.C.CHANDRA</td>
<td>Mar-07</td>
<td>79,605</td>
</tr>
<tr>
<td>42</td>
<td>N781</td>
<td>DR. N.K.MEHRA</td>
<td>Aug-06</td>
<td>227,020</td>
</tr>
<tr>
<td>43</td>
<td>D185</td>
<td>DR. N.K.SHUKLA</td>
<td>Jul-06</td>
<td>76,874</td>
</tr>
<tr>
<td>44</td>
<td>D179</td>
<td>DR. N.R.JAGANNATHAN</td>
<td>Aug-06</td>
<td>3,479</td>
</tr>
<tr>
<td>45</td>
<td>D179</td>
<td>DR. N.R.JAGANNATHAN</td>
<td>Sep-06</td>
<td>5,856</td>
</tr>
<tr>
<td>46</td>
<td>D179</td>
<td>DR. N.R.JAGANNATHAN</td>
<td>Feb-07</td>
<td>698,558</td>
</tr>
<tr>
<td>47</td>
<td>N852</td>
<td>DR. NIKHIL TANDON</td>
<td>Sep-06</td>
<td>8,066</td>
</tr>
<tr>
<td>48</td>
<td>N856</td>
<td>DR. NIKHIL TANDON</td>
<td>Mar-07</td>
<td>41,000</td>
</tr>
<tr>
<td>49</td>
<td>n612</td>
<td>DR. NAVEET WIG</td>
<td>Feb-07</td>
<td>79,396</td>
</tr>
<tr>
<td>50</td>
<td>n756</td>
<td>DR. NEERJA BHATLA</td>
<td>Aug-06</td>
<td>373,928</td>
</tr>
<tr>
<td>51</td>
<td>n756</td>
<td>DR. NEERJA BHATLA</td>
<td>Mar-07</td>
<td>8,840</td>
</tr>
<tr>
<td>52</td>
<td>N850</td>
<td>DR. NEERJA BHATLA</td>
<td>Aug-06</td>
<td>17,426</td>
</tr>
<tr>
<td>53</td>
<td>N731</td>
<td>DR. NEETASINGH</td>
<td>Jun-06</td>
<td>187,950</td>
</tr>
<tr>
<td>54</td>
<td>N731</td>
<td>DR. NEETASINGH</td>
<td>Nov-06</td>
<td>105,000</td>
</tr>
<tr>
<td>55</td>
<td>N731</td>
<td>DR. NEETASINGH</td>
<td>Dec-06</td>
<td>146,475</td>
</tr>
<tr>
<td>56</td>
<td>C614</td>
<td>DR. NIBHIRTI DAS</td>
<td>Dec-06</td>
<td>225,677</td>
</tr>
<tr>
<td>57</td>
<td>N616</td>
<td>DR. P.K.JULKAR</td>
<td>Sep-06</td>
<td>93,563</td>
</tr>
<tr>
<td>58</td>
<td>I450</td>
<td>DR. PARTHAPRASAD CHATTOPADHY</td>
<td>May-06</td>
<td>54,476</td>
</tr>
<tr>
<td>59</td>
<td>I450</td>
<td>DR. PARTHAPRASAD CHATTOPADHY</td>
<td>Jul-06</td>
<td>13,741</td>
</tr>
<tr>
<td>60</td>
<td>I450</td>
<td>DR. PARTHAPRASAD CHATTOPADHY</td>
<td>Mar-07</td>
<td>39,996</td>
</tr>
<tr>
<td>61</td>
<td>N698</td>
<td>DR. PEUSH SAHNI</td>
<td>Nov-06</td>
<td>18,200</td>
</tr>
<tr>
<td>62</td>
<td>N698</td>
<td>DR. PEUSH SAHNI</td>
<td>Mar-07</td>
<td>13,800</td>
</tr>
<tr>
<td>63</td>
<td>D168</td>
<td>DR. PRATIMA RAY</td>
<td>Aug-06</td>
<td>580</td>
</tr>
<tr>
<td>64</td>
<td>D168</td>
<td>DR. PRATIMA RAY</td>
<td>Dec-06</td>
<td>18,002</td>
</tr>
<tr>
<td>65</td>
<td>I380</td>
<td>DR. PUNIT KAUR</td>
<td>Jan-07</td>
<td>18,563</td>
</tr>
<tr>
<td>66</td>
<td>I380</td>
<td>DR. PUNIT KAUR</td>
<td>Mar-07</td>
<td>92,600</td>
</tr>
<tr>
<td>67</td>
<td>N284A</td>
<td>DR. R.M.PANDEY</td>
<td>Jun-06</td>
<td>4,900</td>
</tr>
<tr>
<td>68</td>
<td>N284A</td>
<td>DR. R.M.PANDEY</td>
<td>Sep-06</td>
<td>3,700</td>
</tr>
<tr>
<td>69</td>
<td>N284A</td>
<td>DR. R.M.PANDEY</td>
<td>Nov-06</td>
<td>89,953</td>
</tr>
<tr>
<td>70</td>
<td>N798</td>
<td>DR. RAJESH SAGAR</td>
<td>Jun-06</td>
<td>19,025</td>
</tr>
<tr>
<td>71</td>
<td>N798</td>
<td>DR. RAJESH SAGAR</td>
<td>Nov-06</td>
<td>5,800</td>
</tr>
<tr>
<td>No.</td>
<td>Code</td>
<td>Name</td>
<td>Project Date</td>
<td>Amount</td>
</tr>
<tr>
<td>-----</td>
<td>--------</td>
<td>-----------------------</td>
<td>--------------</td>
<td>---------</td>
</tr>
<tr>
<td>72</td>
<td>N530</td>
<td>DR. RAKESH KUMAR</td>
<td>Mar-07</td>
<td>140,500</td>
</tr>
<tr>
<td>73</td>
<td>N845</td>
<td>DR. RAMA CHAUDHARY</td>
<td>Mar-07</td>
<td>6,920,279</td>
</tr>
<tr>
<td>74</td>
<td>N671</td>
<td>DR. RANDEEP GULERIA</td>
<td>Feb-07</td>
<td>104,000</td>
</tr>
<tr>
<td>75</td>
<td>N826</td>
<td>DR. RATNA SHARMA</td>
<td>Sep-06</td>
<td>42,050</td>
</tr>
<tr>
<td>76</td>
<td>N826</td>
<td>DR. RATNA SHARMA</td>
<td>Oct-06</td>
<td>454,300</td>
</tr>
<tr>
<td>77</td>
<td>D160</td>
<td>DR. RENU SAXENA</td>
<td>Aug-06</td>
<td>5,172</td>
</tr>
<tr>
<td>78</td>
<td>D184</td>
<td>DR. RENU SAXENA</td>
<td>Jun-06</td>
<td>139,362</td>
</tr>
<tr>
<td>79</td>
<td>D184</td>
<td>DR. RENU SAXENA</td>
<td>Aug-06</td>
<td>16,643</td>
</tr>
<tr>
<td>80</td>
<td>D199</td>
<td>DR. S.K.ACHARYA</td>
<td>Dec-06</td>
<td>189,170</td>
</tr>
<tr>
<td>81</td>
<td>D199</td>
<td>DR. S.K.ACHARYA</td>
<td>Feb-07</td>
<td>4,086,654</td>
</tr>
<tr>
<td>82</td>
<td>D199</td>
<td>DR. S.K.ACHARYA</td>
<td>Mar-07</td>
<td>518,896</td>
</tr>
<tr>
<td>83</td>
<td>N687</td>
<td>DR. S.K.ACHARYA</td>
<td>Feb-07</td>
<td>121,986</td>
</tr>
<tr>
<td>84</td>
<td>N759</td>
<td>DR. S.K.AGARWAL</td>
<td>Sep-06</td>
<td>10,800</td>
</tr>
<tr>
<td>85</td>
<td>N813</td>
<td>DR. S.K.AGARWAL</td>
<td>Jun-06</td>
<td>10,500</td>
</tr>
<tr>
<td>86</td>
<td>N813</td>
<td>DR. S.K.AGARWAL</td>
<td>Sep-06</td>
<td>75,192</td>
</tr>
<tr>
<td>87</td>
<td>N79</td>
<td>DR. S.K.AGARWAL</td>
<td>Mar-07</td>
<td>20,800</td>
</tr>
<tr>
<td>88</td>
<td>D198</td>
<td>DR. S.K.MAULIK</td>
<td>Jan-07</td>
<td>294,937</td>
</tr>
<tr>
<td>89</td>
<td>D173</td>
<td>DR. S.K.PANDA</td>
<td>Sep-06</td>
<td>111,280</td>
</tr>
<tr>
<td>90</td>
<td>D220</td>
<td>DR. S.K.PANDA</td>
<td>Mar-07</td>
<td>1,537,256</td>
</tr>
<tr>
<td>91</td>
<td>N724</td>
<td>DR. S.K.PANDA</td>
<td>Aug-06</td>
<td>4,938</td>
</tr>
<tr>
<td>92</td>
<td>N820</td>
<td>DR. S.K.SHARMA</td>
<td>Sep-06</td>
<td>44,304</td>
</tr>
<tr>
<td>93</td>
<td>N820</td>
<td>DR. S.K.SHARMA</td>
<td>Feb-07</td>
<td>14,490</td>
</tr>
<tr>
<td>94</td>
<td>N830</td>
<td>DR. S.K.SHARMA</td>
<td>Aug-06</td>
<td>68,325</td>
</tr>
<tr>
<td>95</td>
<td>D181</td>
<td>DR. SARMAN SINGH</td>
<td>Aug-06</td>
<td>17,011</td>
</tr>
<tr>
<td>96</td>
<td>N582</td>
<td>DR. SATYA N DAS</td>
<td>Jul-06</td>
<td>1,002</td>
</tr>
<tr>
<td>97</td>
<td>D177</td>
<td>DR. SAVITA YADAV</td>
<td>Jul-06</td>
<td>4,252</td>
</tr>
<tr>
<td>98</td>
<td>D022A</td>
<td>DR. SHASHI WADHWA</td>
<td>Jun-06</td>
<td>9,048</td>
</tr>
<tr>
<td>99</td>
<td>D022A</td>
<td>DR. SHASHI WADHWA</td>
<td>Dec-06</td>
<td>474,864</td>
</tr>
<tr>
<td>100</td>
<td>D022A</td>
<td>DR. SHASHI WADHWA</td>
<td>Jan-07</td>
<td>563,853</td>
</tr>
<tr>
<td>101</td>
<td>D022A</td>
<td>DR. SHASHI WADHWA</td>
<td>Mar-07</td>
<td>396,392</td>
</tr>
<tr>
<td>102</td>
<td>N863</td>
<td>DR. SHASHI WADHWA</td>
<td>Dec-06</td>
<td>211,006</td>
</tr>
<tr>
<td>103</td>
<td>N725</td>
<td>DR. SHINJINI BHATNAGAR</td>
<td>May-06</td>
<td>430,216</td>
</tr>
<tr>
<td>104</td>
<td>N725</td>
<td>DR. SHINJINI BHATNAGAR</td>
<td>Jul-06</td>
<td>119,835</td>
</tr>
<tr>
<td>105</td>
<td>N725</td>
<td>DR. SHINJINI BHATNAGAR</td>
<td>Aug-06</td>
<td>11,303</td>
</tr>
<tr>
<td>106</td>
<td>N737</td>
<td>DR. SHINJINI BHATNAGAR</td>
<td>Oct-06</td>
<td>9,000</td>
</tr>
<tr>
<td>107</td>
<td>N737</td>
<td>DR. SHINJINI BHATNAGAR</td>
<td>Nov-06</td>
<td>19,800</td>
</tr>
<tr>
<td>108</td>
<td>N838</td>
<td>DR. SHINJINI BHATNAGAR</td>
<td>Sep-06</td>
<td>14,456</td>
</tr>
<tr>
<td>109</td>
<td>N838</td>
<td>DR. SHINJINI BHATNAGAR</td>
<td>Nov-06</td>
<td>99,800</td>
</tr>
<tr>
<td>110</td>
<td>N869</td>
<td>DR. SHINJINI BHATNAGAR</td>
<td>Mar-07</td>
<td>146,640</td>
</tr>
<tr>
<td>No.</td>
<td>Code</td>
<td>Name</td>
<td>Date</td>
<td>Amount</td>
</tr>
<tr>
<td>-----</td>
<td>------</td>
<td>---------------------------</td>
<td>----------</td>
<td>------------</td>
</tr>
<tr>
<td>111</td>
<td>I435</td>
<td>DR. SHOBHA BROOR</td>
<td>Dec-06</td>
<td>490,258</td>
</tr>
<tr>
<td>112</td>
<td>I435</td>
<td>DR. SHOBHA BROOR</td>
<td>Mar-07</td>
<td>2,212,098</td>
</tr>
<tr>
<td>113</td>
<td>N734</td>
<td>DR. SHOBHA BROOR</td>
<td>Jun-06</td>
<td>2,850,010</td>
</tr>
<tr>
<td>114</td>
<td>N734</td>
<td>DR. SHOBHA BROOR</td>
<td>Aug-06</td>
<td>105,310</td>
</tr>
<tr>
<td>115</td>
<td>N623</td>
<td>DR. SEEMA MUKHOPADHYAY</td>
<td>Dec-06</td>
<td>170,000</td>
</tr>
<tr>
<td>116</td>
<td>D192</td>
<td>DR. SUBRATA SINHA</td>
<td>Mar-07</td>
<td>1,972,500</td>
</tr>
<tr>
<td>117</td>
<td>I464</td>
<td>DR. SUBRATA SINHA</td>
<td>Jul-06</td>
<td>891</td>
</tr>
<tr>
<td>118</td>
<td>D200</td>
<td>DR. SUJATA SHARMA</td>
<td>Aug-06</td>
<td>109,002</td>
</tr>
<tr>
<td>119</td>
<td>D200</td>
<td>DR. SUJATA SHARMA</td>
<td>Sep-06</td>
<td>47,250</td>
</tr>
<tr>
<td>120</td>
<td>D200</td>
<td>DR. SUJATA SHARMA</td>
<td>Jan-07</td>
<td>83,114</td>
</tr>
<tr>
<td>121</td>
<td>N819</td>
<td>DR. T.VELPANIDAN</td>
<td>Nov-06</td>
<td>48,924</td>
</tr>
<tr>
<td>122</td>
<td>D176</td>
<td>DR. TULIKA SETH</td>
<td>Jul-06</td>
<td>4,154</td>
</tr>
<tr>
<td>123</td>
<td>N358</td>
<td>DR. V. RAINA</td>
<td>Jan-07</td>
<td>143,900</td>
</tr>
<tr>
<td>124</td>
<td>I447</td>
<td>DR. Y.D. SHARMA</td>
<td>Aug-06</td>
<td>70,731</td>
</tr>
<tr>
<td>125</td>
<td>N052</td>
<td>DR. Y.D. SHARMA</td>
<td>Mar-07</td>
<td>372,418</td>
</tr>
<tr>
<td>126</td>
<td>N672</td>
<td>DR. CHETAN D. PATEL</td>
<td>Jun-06</td>
<td>86,270</td>
</tr>
<tr>
<td>127</td>
<td>D164</td>
<td>DR. MADHABANANDA KAR/ N.K. SH</td>
<td>Oct-06</td>
<td>19,050</td>
</tr>
<tr>
<td>128</td>
<td>N889</td>
<td>DR. SANDEEP GULARIA</td>
<td>Mar-07</td>
<td>44,500</td>
</tr>
<tr>
<td>129</td>
<td>N750</td>
<td>DR. ARVIND BAGGA</td>
<td>Jul-06</td>
<td>73,658</td>
</tr>
<tr>
<td>130</td>
<td>N750</td>
<td>DR. ARVIND BAGGA</td>
<td>Dec-06</td>
<td>30,988</td>
</tr>
<tr>
<td>131</td>
<td>N831</td>
<td>DR. G. KARTHIKEYAN</td>
<td>Sep-06</td>
<td>20,000</td>
</tr>
<tr>
<td>132</td>
<td>N000</td>
<td>SH. S.P. MAHLA</td>
<td>Jun-06</td>
<td>159,346</td>
</tr>
<tr>
<td>133</td>
<td>N000</td>
<td>SH. S.P. MAHLA</td>
<td>Aug-06</td>
<td>16,120</td>
</tr>
<tr>
<td>134</td>
<td>N000</td>
<td>SH. S.P. MAHLA</td>
<td>Sep-06</td>
<td>62,978</td>
</tr>
<tr>
<td>135</td>
<td>D180</td>
<td>DR. NAGENDRA SINGH/ T.P. SINGH</td>
<td>Jul-06</td>
<td>17,975</td>
</tr>
<tr>
<td>136</td>
<td>D186</td>
<td>Dr. ROHIT SAXENA</td>
<td>Oct-06</td>
<td>16,875</td>
</tr>
<tr>
<td>137</td>
<td>N817</td>
<td>DR. V.K. SHARMA</td>
<td>Aug-06</td>
<td>12,500</td>
</tr>
<tr>
<td>138</td>
<td>N817</td>
<td>DR. V.K. SHARMA</td>
<td>Jan-07</td>
<td>87,750</td>
</tr>
<tr>
<td>139</td>
<td>D194</td>
<td>Dr. Sharmistha Dey</td>
<td>Jul-06</td>
<td>19,387</td>
</tr>
<tr>
<td>140</td>
<td>D194</td>
<td>Dr. Sharmistha Dey</td>
<td>Sep-06</td>
<td>47,250</td>
</tr>
<tr>
<td>141</td>
<td>C615</td>
<td>DR. SUMAN JAIN</td>
<td>Nov-06</td>
<td>78,771</td>
</tr>
<tr>
<td>142</td>
<td>D196</td>
<td>Dr. Rashmi Mathur</td>
<td>Jun-06</td>
<td>898,247</td>
</tr>
<tr>
<td>143</td>
<td>N821</td>
<td>DR. RAKESH AGGARWAL</td>
<td>Dec-06</td>
<td>69,605</td>
</tr>
<tr>
<td>144</td>
<td>N824</td>
<td>DR. Sanjeev Sinha</td>
<td>Jun-06</td>
<td>10,000</td>
</tr>
<tr>
<td>145</td>
<td>N824</td>
<td>DR. Sanjeev Sinha</td>
<td>Aug-06</td>
<td>140,572</td>
</tr>
<tr>
<td>146</td>
<td>N824</td>
<td>DR. Sanjeev Sinha</td>
<td>Sep-06</td>
<td>12,700</td>
</tr>
<tr>
<td>147</td>
<td>N824</td>
<td>DR. Sanjeev Sinha</td>
<td>Dec-06</td>
<td>1,627</td>
</tr>
<tr>
<td>148</td>
<td>N872</td>
<td>DR. Sanjeev Sinha</td>
<td>Mar-07</td>
<td>52,852</td>
</tr>
<tr>
<td>149</td>
<td>N790</td>
<td>DR. RAJAT RAY</td>
<td>Sep-06</td>
<td>61,800</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>150</td>
<td>I485</td>
<td>DR. D. PRABHAKARAN</td>
<td>Mar-07</td>
<td>499,502</td>
</tr>
<tr>
<td>151</td>
<td>N372</td>
<td>Dr. Suman Bhasker</td>
<td>Oct-06</td>
<td>15,500</td>
</tr>
<tr>
<td>152</td>
<td>N372</td>
<td>Dr. Suman Bhasker</td>
<td>Jan-07</td>
<td>136,074</td>
</tr>
<tr>
<td>153</td>
<td>D202</td>
<td>DR. VEENA KALRA</td>
<td>Dec-06</td>
<td>7,666,138</td>
</tr>
<tr>
<td>154</td>
<td>D206</td>
<td>Dr. RITU GUPTA</td>
<td>Dec-06</td>
<td>29,904</td>
</tr>
<tr>
<td>155</td>
<td>N890</td>
<td>Dr. Ravinder Goswami</td>
<td>Mar-07</td>
<td>431,003</td>
</tr>
<tr>
<td>156</td>
<td>N736</td>
<td>Dr. A Srinivasan</td>
<td>Jun-06</td>
<td>2,282,667</td>
</tr>
<tr>
<td>157</td>
<td>N736</td>
<td>Dr. A Srinivasan</td>
<td>Sep-06</td>
<td>431,395</td>
</tr>
<tr>
<td>158</td>
<td>N736</td>
<td>Dr. A Srinivasan</td>
<td>Nov-06</td>
<td>1,025,282</td>
</tr>
<tr>
<td>159</td>
<td>N736</td>
<td>Dr. A Srinivasan</td>
<td>Feb-07</td>
<td>105,000</td>
</tr>
</tbody>
</table>

**GRAND TOTAL**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>49,254,022</td>
</tr>
</tbody>
</table>

(Mrs. Basanti Dalal)
Finance & Chief Accounts Officer
### Appendix B

**ALL INDIA INSTITUTE OF MEDICAL SCIENCES**  
**LIST OF SUNDARY DEBTORS (SCHEME CELL)**

<table>
<thead>
<tr>
<th>S.No</th>
<th>Funding Agency</th>
<th>Debit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Central Council for Research in Yoga And Naturopathy</td>
<td>63681</td>
</tr>
<tr>
<td>2</td>
<td>SRB Clinical Pharmacology</td>
<td>3154100</td>
</tr>
<tr>
<td>3</td>
<td>Zydas Healthcare Ltd</td>
<td>398</td>
</tr>
<tr>
<td>4</td>
<td>Federation of Obstetric &amp; Gynaecological</td>
<td>276</td>
</tr>
<tr>
<td>5</td>
<td>Emcure Pharmaceutical Ltd.</td>
<td>6380</td>
</tr>
<tr>
<td>6</td>
<td>Delhi State Control Society/AIDS</td>
<td>10145</td>
</tr>
<tr>
<td>7</td>
<td>L.G. Chemicals India Pvt Ltd.</td>
<td>668</td>
</tr>
<tr>
<td>8</td>
<td>THE MICRONUTRIENT INITIATIVE, ASIA</td>
<td>4702</td>
</tr>
<tr>
<td>9</td>
<td>Vulimini Ramalingaswami Foundation</td>
<td>6508</td>
</tr>
<tr>
<td>10</td>
<td>BHARAT SERUMS AND VACCINES LTD.</td>
<td>3888</td>
</tr>
<tr>
<td>11</td>
<td>KHANDELWAL LABORATORIES LTD.</td>
<td>2521</td>
</tr>
<tr>
<td>12</td>
<td>National Institute of Nutrition (NIN) Hyderabad</td>
<td>2571</td>
</tr>
</tbody>
</table>

**Total**  

3255838

---

(Mrs. Basanti Dalal)  
Finance & Chief Accounts Officer
<table>
<thead>
<tr>
<th>S.NO.</th>
<th>PARTICULARS &amp; MODE OF INVESTMENT</th>
<th>AMOUNT OF DONATION</th>
<th>AMOUNT OF INVESTMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>AIIMS ROTARY CANCER HOSPITAL</td>
<td>700000</td>
<td>700000</td>
</tr>
<tr>
<td>2</td>
<td>MISC. DONATION - HEAMOT0OLOGY</td>
<td>8000</td>
<td>8000</td>
</tr>
<tr>
<td></td>
<td>UNDER Dr. A.K. SARAYA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>R.S. NANDA (UNIT TRUST)</td>
<td>78274</td>
<td>78274</td>
</tr>
<tr>
<td>4</td>
<td>ANNONYMOUS DONORS</td>
<td>70000</td>
<td>70000</td>
</tr>
<tr>
<td>5</td>
<td>DR. B.B. DIXIT LIB.</td>
<td>10000</td>
<td>13700</td>
</tr>
<tr>
<td>6</td>
<td>CHACHAMA DONORS</td>
<td>150000</td>
<td>199600</td>
</tr>
<tr>
<td>7</td>
<td>MJ. GENERAL S.L. BHATIA</td>
<td>10000</td>
<td>9800</td>
</tr>
<tr>
<td>8</td>
<td>MJ. GENERAL AMIR CHAND</td>
<td>150000</td>
<td>149660</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100000</td>
<td>100000</td>
</tr>
<tr>
<td>9</td>
<td>DR. K.L. WIG (UNIT TRUST)</td>
<td>15000</td>
<td>14910</td>
</tr>
<tr>
<td>10</td>
<td>ZENITH FINANCE &amp; CO. (UNIT TRUST)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>D.C. BHUTNA</td>
<td>6000</td>
<td>6000</td>
</tr>
<tr>
<td>11</td>
<td>KAMANI CHARITY TRUST (UNIT TRUST)</td>
<td>5000</td>
<td>5100</td>
</tr>
<tr>
<td>12</td>
<td>SARUP CHAND HANS RAJ</td>
<td>20000</td>
<td>19500</td>
</tr>
<tr>
<td>13</td>
<td>RAJ KUMARI AMRIT KAUR</td>
<td>25000</td>
<td>25000</td>
</tr>
<tr>
<td>14</td>
<td>KATHERINE SORAL FREYMAN</td>
<td>5000</td>
<td>5000</td>
</tr>
<tr>
<td>15</td>
<td>DR. S.L. KALRA</td>
<td>6000</td>
<td>5800</td>
</tr>
<tr>
<td>16</td>
<td>R.L. RAJGARHIA</td>
<td>850000</td>
<td>850000</td>
</tr>
<tr>
<td>17</td>
<td>SMT. PRAKASH WATI DONATION</td>
<td>13800</td>
<td>13800</td>
</tr>
<tr>
<td>18</td>
<td>SMT. KRIPAL KAUR (UNIT TRUST)</td>
<td>6000</td>
<td>5908</td>
</tr>
<tr>
<td>19</td>
<td>SMT. KAUSHALYA THAPAR (UNIT TRUST)</td>
<td>12000</td>
<td>12017</td>
</tr>
<tr>
<td>20</td>
<td>SH. G.D JHANGINI</td>
<td>25500</td>
<td>25602</td>
</tr>
<tr>
<td>21</td>
<td>LALA KHUSHI RAM</td>
<td>247753</td>
<td>247753</td>
</tr>
<tr>
<td>22</td>
<td>SMT. BRIJ RANI SAWHENY (UNIT TRUST)</td>
<td>22501</td>
<td>22472</td>
</tr>
<tr>
<td>23</td>
<td>S.P. VIRMANI (FIXED DEPOSIT)</td>
<td>1500</td>
<td>1500</td>
</tr>
<tr>
<td>24</td>
<td>EAST INDIA COMMERCIAL PVT. LTD</td>
<td>3200000</td>
<td>2800000</td>
</tr>
<tr>
<td></td>
<td>CALCUTTA (FIXED DEPOSIT) SRB</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>DR. KANTI KAPILA (UNIT TRUST)</td>
<td>10079</td>
<td>10002</td>
</tr>
<tr>
<td>26</td>
<td>DR. V. RAMALINGASWAMI (UNIT TRUST)</td>
<td>8000</td>
<td>7996</td>
</tr>
<tr>
<td>27</td>
<td>SR. S. SABHARWAL (UNIT TRUST)</td>
<td>10000</td>
<td>9951</td>
</tr>
<tr>
<td>28</td>
<td>DR. N.H. KASWANI (UNIT TRUST)</td>
<td>10000</td>
<td>9990</td>
</tr>
<tr>
<td>29</td>
<td>DR. B.K. ANAND (UNIT TRUST)</td>
<td>5000</td>
<td>4995</td>
</tr>
<tr>
<td>30</td>
<td>DR. V. HINGORANI</td>
<td>15000</td>
<td>15000</td>
</tr>
<tr>
<td>31</td>
<td>KUMUDINI KRISHNA MOORTHY</td>
<td>15000</td>
<td>15000</td>
</tr>
<tr>
<td>32</td>
<td>G.D. RADHAKRISHNA (SARWESHWARI MEMORIAL ORATION, UNIT TRUST)</td>
<td>200000</td>
<td>19987</td>
</tr>
<tr>
<td>33</td>
<td>P.L. TANDON (FIXED DEPOSIT)</td>
<td>15000</td>
<td>15000</td>
</tr>
<tr>
<td>34</td>
<td>XV INTERNATIONAL CONGRESS OF PEDIATRICS (UNIT TRUST)</td>
<td>400000</td>
<td>400000</td>
</tr>
<tr>
<td>35</td>
<td>RAM LOBHAYA DONATION (FIXED DEPOSIT)</td>
<td>15000</td>
<td>15000</td>
</tr>
<tr>
<td>36</td>
<td>SUBHASH MEMORIAL FOUNDATION</td>
<td>10101</td>
<td>10101</td>
</tr>
<tr>
<td></td>
<td>Donor Name</td>
<td>Amount (INR)</td>
<td>Remarks</td>
</tr>
<tr>
<td>---</td>
<td>----------------------------------</td>
<td>-------------</td>
<td>---------------------------------------------------</td>
</tr>
<tr>
<td>37</td>
<td>SMT. INDIRA SATYANAND</td>
<td>10000</td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>SH. K.V. SUBA RAO</td>
<td>10000</td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>NEWZELAND HIGH COMMISSION</td>
<td>10000</td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>AKHILESH MITTAL (SUMITH MOHAN)</td>
<td>20000</td>
<td>SADAN DAYAL TRUST</td>
</tr>
<tr>
<td>41</td>
<td>PREMALATA KAPOOR</td>
<td>10000</td>
<td></td>
</tr>
<tr>
<td>42</td>
<td>DWARKA PRASAD TRUST</td>
<td>50000</td>
<td></td>
</tr>
<tr>
<td>43</td>
<td>LATE. SH. D.R. BAHRI</td>
<td>15000</td>
<td></td>
</tr>
<tr>
<td>44</td>
<td>SEWA RAM</td>
<td>15000</td>
<td></td>
</tr>
<tr>
<td>45</td>
<td>FACULTY BENEVELENT FUND</td>
<td>60065</td>
<td></td>
</tr>
<tr>
<td>46</td>
<td>V.RANGA MEMORIAL TRUST</td>
<td>50000</td>
<td></td>
</tr>
<tr>
<td>47</td>
<td>SH. DORABJI TRUST</td>
<td>10000</td>
<td></td>
</tr>
<tr>
<td>48</td>
<td>CORPUS FUND</td>
<td>30000</td>
<td></td>
</tr>
<tr>
<td>49</td>
<td>AIIMSONIANS</td>
<td>10000</td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>SARLA ATAM PRAKASH</td>
<td>15000</td>
<td></td>
</tr>
<tr>
<td>51</td>
<td>K.L. WIG RESEARCH FOUNDATION</td>
<td>100000</td>
<td></td>
</tr>
<tr>
<td>52</td>
<td>KAMLA B.K. ANAND</td>
<td>100000</td>
<td></td>
</tr>
<tr>
<td>53</td>
<td>V.K. MITTAL</td>
<td>130000</td>
<td></td>
</tr>
<tr>
<td>54</td>
<td>SNEH LATA SONI</td>
<td>15000</td>
<td></td>
</tr>
<tr>
<td>55</td>
<td>AIIMSONIAN OF AMERICA</td>
<td>129850</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>151630</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>126471</td>
<td></td>
</tr>
<tr>
<td>56</td>
<td>SMT. LEELA WATI SALWAN</td>
<td>15000</td>
<td></td>
</tr>
<tr>
<td>57</td>
<td>DR. D.K. GUPTA</td>
<td>100000</td>
<td></td>
</tr>
<tr>
<td>58</td>
<td>J.R. CHAWLA</td>
<td>15000</td>
<td></td>
</tr>
<tr>
<td>59</td>
<td>URMIL SHARMA IN R/O SHYAM SHARMA</td>
<td>15000</td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>SMT. SUSHILA WATI MALHOTRA</td>
<td>500000</td>
<td></td>
</tr>
<tr>
<td>61</td>
<td>BASANTI KUMARI</td>
<td>100000</td>
<td></td>
</tr>
<tr>
<td>62</td>
<td>ORTHOPAEDICS FUND</td>
<td>250000</td>
<td></td>
</tr>
<tr>
<td>63</td>
<td>DR. S.B. ROY</td>
<td>125000</td>
<td></td>
</tr>
<tr>
<td>64</td>
<td>MR. R.V. KANDHARI</td>
<td>100000</td>
<td></td>
</tr>
<tr>
<td>65</td>
<td>DR. B.K. KAPOOR</td>
<td>125000</td>
<td></td>
</tr>
<tr>
<td>66</td>
<td>SMT. SAVITRI UGGARSEAN</td>
<td>100000</td>
<td></td>
</tr>
<tr>
<td>67</td>
<td>VIMAL LAUMAS</td>
<td>200000</td>
<td></td>
</tr>
<tr>
<td>68</td>
<td>MRS. PRAMADA BAJAJ</td>
<td>200000</td>
<td></td>
</tr>
<tr>
<td>69</td>
<td>DR. V. RAMALINGASWAMI</td>
<td>100000</td>
<td></td>
</tr>
<tr>
<td>70</td>
<td>DR. N.C. NAYAK</td>
<td>100000</td>
<td></td>
</tr>
<tr>
<td>71</td>
<td>DR. H.D. TANDON</td>
<td>100000</td>
<td></td>
</tr>
<tr>
<td>72</td>
<td>PROF. N. GOPINATH (CTVS)</td>
<td>1200000</td>
<td></td>
</tr>
<tr>
<td>73</td>
<td>PROF. L.K. BHUTANI ORATION</td>
<td>500000</td>
<td></td>
</tr>
<tr>
<td>74</td>
<td>BINEY ROHTAGI &amp; SMT. SHAKUNTALA</td>
<td>36000</td>
<td></td>
</tr>
<tr>
<td>75</td>
<td>MRS. PRAMIDA BAJAJ (FOR TREATMENT</td>
<td>200000</td>
<td>OF BREAST CANCER PATIENT)</td>
</tr>
<tr>
<td>76</td>
<td>G.P.F. INVESTMENT</td>
<td></td>
<td>1559693465</td>
</tr>
<tr>
<td>77</td>
<td>N.P.S. INVESTMENT</td>
<td></td>
<td>15000000</td>
</tr>
</tbody>
</table>

**TOTAL** 11059524 1585368899

(Mrs. Basanti Dalal)
Finance & Chief Accounts Officer

AIIMS 2006-2007 / 814
## ALL INDIA INSTITUTE OF MEDICAL SCINECES

Details of Misc. Donations as on 31.3.2007

<table>
<thead>
<tr>
<th>S.NO.</th>
<th>DEPARTMENT</th>
<th>OP. BAL. AS ON 1/4/2006</th>
<th>GRANT</th>
<th>TOTAL</th>
<th>EXPD.</th>
<th>CL. BAL AS ON 31-03-2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>R &amp; AL</td>
<td>19475</td>
<td></td>
<td>19475</td>
<td></td>
<td>19475</td>
</tr>
<tr>
<td>2</td>
<td>PSYCHIATRY</td>
<td>28495</td>
<td></td>
<td>28495</td>
<td></td>
<td>28495</td>
</tr>
<tr>
<td>3</td>
<td>HEAMATOLOGY</td>
<td>59342</td>
<td></td>
<td>59342</td>
<td>632</td>
<td>58710</td>
</tr>
<tr>
<td>4</td>
<td>ORTHO</td>
<td>65586</td>
<td></td>
<td>65586</td>
<td></td>
<td>65586</td>
</tr>
<tr>
<td>5</td>
<td>IMMUNOLOGY</td>
<td>824</td>
<td></td>
<td>824</td>
<td></td>
<td>824</td>
</tr>
<tr>
<td>6</td>
<td>PAED SURGERY</td>
<td>32041</td>
<td></td>
<td>32041</td>
<td></td>
<td>32041</td>
</tr>
<tr>
<td>7</td>
<td>INSTT. MISC.</td>
<td>137338</td>
<td></td>
<td>137338</td>
<td></td>
<td>137338</td>
</tr>
<tr>
<td>8</td>
<td>DERMATOLOGY</td>
<td>15974</td>
<td></td>
<td>15974</td>
<td></td>
<td>15974</td>
</tr>
<tr>
<td>9</td>
<td>IRCH DR. V. KOCHUPILLAI</td>
<td>10460</td>
<td></td>
<td>10460</td>
<td></td>
<td>10460</td>
</tr>
<tr>
<td>10</td>
<td>LEPROSY PATIENT</td>
<td>115785</td>
<td></td>
<td>115785</td>
<td></td>
<td>115785</td>
</tr>
<tr>
<td>11</td>
<td>IRCH DR. A.K. BASU</td>
<td>17651</td>
<td></td>
<td>17651</td>
<td></td>
<td>17651</td>
</tr>
<tr>
<td>12</td>
<td>CN CENTRE</td>
<td>20418</td>
<td></td>
<td>20418</td>
<td></td>
<td>20418</td>
</tr>
<tr>
<td>13</td>
<td>BB DIXIT LIB</td>
<td>3324</td>
<td></td>
<td>3324</td>
<td></td>
<td>3324</td>
</tr>
<tr>
<td>14</td>
<td>EMP. WELFARE FUND</td>
<td>125139</td>
<td></td>
<td>125139</td>
<td></td>
<td>125139</td>
</tr>
<tr>
<td>15</td>
<td>PMR POOR FUND</td>
<td>44199</td>
<td></td>
<td>44199</td>
<td></td>
<td>44199</td>
</tr>
<tr>
<td>16</td>
<td>SURGERY</td>
<td>501</td>
<td></td>
<td>501</td>
<td></td>
<td>501</td>
</tr>
<tr>
<td>17</td>
<td>K.L. WIG CEMET</td>
<td>12021</td>
<td></td>
<td>12021</td>
<td></td>
<td>12021</td>
</tr>
<tr>
<td>18</td>
<td>N/ MEDICINE</td>
<td>19571</td>
<td></td>
<td>19571</td>
<td></td>
<td>19571</td>
</tr>
<tr>
<td>19</td>
<td>CEU</td>
<td>30000</td>
<td></td>
<td>30000</td>
<td></td>
<td>30000</td>
</tr>
<tr>
<td>20</td>
<td>DR. NK MEHRA</td>
<td>50000</td>
<td></td>
<td>50000</td>
<td>24765</td>
<td>25235</td>
</tr>
<tr>
<td>21</td>
<td>I.C.G.E.B. DR. T.P SINGH</td>
<td>444630</td>
<td></td>
<td>444630</td>
<td></td>
<td>444630</td>
</tr>
<tr>
<td>22</td>
<td>DR. VEENA KALRA</td>
<td>138200</td>
<td></td>
<td>138200</td>
<td></td>
<td>138200</td>
</tr>
<tr>
<td>23</td>
<td>LEVER CLINIC - GASTRO</td>
<td>2865</td>
<td></td>
<td>2865</td>
<td></td>
<td>2865</td>
</tr>
<tr>
<td>24</td>
<td>DR. N.P. GUPTA - UROLOGY</td>
<td>4982</td>
<td></td>
<td>4982</td>
<td></td>
<td>4982</td>
</tr>
<tr>
<td>25</td>
<td>DR. N. KOCHUPILLAI-POOR PT.</td>
<td>120000</td>
<td></td>
<td>120000</td>
<td></td>
<td>120000</td>
</tr>
<tr>
<td>26</td>
<td>PEAD. GENETICS</td>
<td>527762</td>
<td>1118481</td>
<td>1646243</td>
<td>839198</td>
<td>807045</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>2046583</strong></td>
<td><strong>1118481</strong></td>
<td><strong>3165064</strong></td>
<td><strong>864595</strong></td>
<td><strong>2300469</strong></td>
</tr>
</tbody>
</table>

(Mrs. Basanti Dalal)
Finance & Chief Accounts Officer
## ALL INDIA INSTITUTE OF MEDICAL SCIENCES

### Details of Misc. Deposits as on 31.3.2007

#### 2006-2007

<table>
<thead>
<tr>
<th>S.NO.</th>
<th>NAME OF THE DEPARTMENT</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Controller of Printing &amp; Stationary</td>
<td>16076</td>
</tr>
<tr>
<td>2</td>
<td>C.P.W.D. Shimla</td>
<td>70432</td>
</tr>
<tr>
<td>3</td>
<td>C.P.W.D.</td>
<td>7096</td>
</tr>
<tr>
<td>4</td>
<td>Delhi Municipal Corporation</td>
<td>33750</td>
</tr>
<tr>
<td>5</td>
<td>Indian Institute of Technology</td>
<td>4250</td>
</tr>
<tr>
<td>6</td>
<td>N.D.M.C.</td>
<td>173242</td>
</tr>
<tr>
<td>7</td>
<td>P. &amp; T. Circle Division</td>
<td>12796</td>
</tr>
<tr>
<td>8</td>
<td>Indian Telephone Industries</td>
<td>13344</td>
</tr>
</tbody>
</table>

**TOTAL** 330986

(Mrs. Basanti Dalal)
Finance & Chief Accounts Officer
ALL INDIA INSTITUTE OF MEDICAL SCIENCES

Details of GPF Investment

2006-2007

Opening Balance of Investment as on 1.4.2006 1446012693
Investment during 2006-07 365000000
Closing balance as on 31.3.2007 42023283

1853035976

Investment matured during 2006-07 -251319228

1601716748

Details of NPS Investment

2006-2007

Opening Balance of Investment as on 1.4.2006 ——
Investment during 2006-07 15000000
Closing balance as on 31.3.2007 5795530

20795530

(Mrs. Basanti Dalal)
Finance & Chief Accounts Officer
12.1 Audit Report on the accounts of All India Institute of Medical Sciences, New Delhi for the year 2006-2007

1 Introduction

The All India Institute of Medical Sciences was established in November, 1956 under All India Institute of Medical Sciences Act, 1956. The main objectives of the institute are to provide (i) undergraduate and post graduate teaching in the science of modern medicines and other allied sciences including biological sciences (ii) facilities for research in various branches of such sciences, establish and maintain one or more medical college, dental college, nursing college and well equipped hospital etc. and hold examinations and grant degrees, diplomas and other distinctions and titles.

The audit of the institute was conducted under section 19(2) of the Comptroller and Auditor General’s (Duties, Power and conditions of Service) Act, 1971 read with section 18 (2) of the All India Institute of Medical Sciences Act, 1956.

The institute is mainly financed from the grants of Government of India. During the year 2006-07 the institute received grants of Rs. 457.33 crore (Plan Rs. 160.33 crore and Non Plan Rs. 297 crore). It also had its own income from hospital receipts, tuition fee, examination fee, license fee and interest income etc. The total plan expenditure was Rs. 122.68 crore and Rs. 31.75 crore was utilized for giving advances for various purposes. The total non plan expenditure was Rs. 312.24 crore which also include advances given to suppliers etc. The institute received grants for various schemes for Rs. 32.57 crore and incurred an expenditure of Rs. 28.61 crore. It also received Rs.4 crore for NDDTC and Rs. 11,67,928 for NDDTC (UNDCP) and Rs. 4,40,000 for V.I.P. care at Parliament House.

2 Comments on accounts

2.1 Balance Sheet

2.1.1 Assets

2.1.1.1 Fixed assets

No depreciation has been provided on fixed assets resulting in overstatement of assets and under statement of expenditure. Fixed assets for Rs 37.99 crore has been reduced from the assets side and from the capital fund of the respective centres for which sanction of the competent authority was not made available.

The schedule of fixed assets showing the opening balance, additions, deletion, depreciation and closing balance have not been attached.

The fixed assets acquired out of grants received for various schemes were not included in figures in fixed assets.

2.1.1.2 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. 160.17 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.

2.2 Income and Expenditure Account

2.2.1 Income

2.2.1.1 Understatement of income

An amount of Rs. 26.61 lakh was directly paid by the Ministry of Health and Family Welfare to advocates and booked as expenditure in the Grants in aid (Non plan) of AIIMS which was not accounted for in accounts resulting in understatement of income – Grants in aid (Non plan) by Rs. 26.61 lakh and understatement of current assets–advances Rs. 19.30 lakh and understatement of expenditure by Rs. 7.31 lakh.

3 General

3.1 Non adoption of common format of accounts

The institute had not adopted the common format of accounts prescribed by the Ministry of Finance vide O.M.No. 10(1)/Misc./2005/TA/450-490 dated 23.7.2006 for central autonomous bodies.

3.2 Non Consolidation of accounts.

The different departments of the institute were treated as separate entity and for each department receipt and payment account, income and expenditure account and balance sheet was prepared and excess of income over expenditure, capital fund and investments are worked out but the consolidation of these accounts is not carried out as such the head wise consolidated financial position of the institute is not available.

Significant accounting policy adopted by the Institute in the preparation of annual accounts were not disclosed.

3.3 . Non-disclosure of accounting policy about fees and subscription

The AIIMS had received Rs. 11,74,242/- on account of tuition fees and examination fee. But no accounting policy on fees and subscription was appended with the Annual Accounts, as per the Accounting Principles.

4 Net impact on accounts

The net impact of audit comments on accounts is that income has been understated by Rs. 26.62 lakh, expenditure has been understated by Rs. 7.31 lakh and assets have been understated by Rs. 19.30 lakh.

The Institute has noted the audit observations.

5 Deficiencies, warranting attention of management 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 corrective and remedial action.

Place:- New Delhi

Date:- 07.12.2007

Director General of Audit

Central Revenues

AIIMS 2006-2007 / 819
Audit Certificate

I have audited the attached Balance Sheet of All India Institute of Medical Sciences, New Delhi as at 31st March, 2007 and the Income and Expenditure Account, Receipts and Payments Account for the year ended as on that date. Preparation of these financial statements is the responsibility of the Institute’s management. Our responsibility is to express an opinion on these financial statements based on my audit.

I have conducted my audit in accordance with applicable rules and the auditing standards generally accepted in India. These standards require that I plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatements. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. I believe that my audit provides a reasonable basis for my opinion.

Based on our audit, we report that:

1. I have obtained all the information and explanations, which to the best of out knowledge and belief were necessary for the purposes of our audit.

2. Subject to the observations in the Audit Report annexed herewith. I report that the Balance Sheet and the Income and Expenditure Account. Receipts and Payments Account dealt with by this report are properly drawn up and are in agreement with the books of accounts

3. In my opinion and to the best of my information and according to the explanations given to me:
   (i) the accounts give the information required under the earlier prescribed format of accounts.
   (ii) The said Balance Sheet, Income and Expenditure Account/Receipts and Payments Account subject to the matters mentioned in the Audit Report annexed herewith give a true and fair view:
      (a) In so far as it relates to the Balance Sheet of the state of affair of the All India Institute of Medical Sciences as at 31st March, 2007 and
      (b) In so far as it relates to the Income and Expenditure account of the surplus for the year ended on that date.

Place:- New Delhi                              Director General of Audit
Date: - 07.12.2007                             Central Revenues

AIIMS 2006-2007 / 820
12.2 Para-wise replies to the Audit Report on the Accounts of the All India Institute of Medical Sciences, New Delhi for the year 2006-2007.

2.1 Balance Sheet
2.1.1 Assets
2.1.1.1 Fixed Assets
• As of date AIIMS is preparing its accounts on actual receipt & expenditure basis. Hence a note regarding non provision of depreciation has been placed below the balance sheet. Moreover, it is also mentioned here that AIIMS is under the process of finalization of the Annual Accounts as per new/common format of accounts. Accordingly depreciation will also be taken into account.
• Regarding reduction of assets as already explained to audit, Stores are declared condemned by Apex Condemnation Board and thereafter on taking approval of the Competent Authority, these are disposed off. One of the minutes of the meeting of the Condemnation Board has already been provided to audit.
• All the receipts and payments in respect of scheme cell are reflected in the item no.12 on payment side of Main A/c. The Appendix A-I mentioned there, enumerates the details of machinery & equipment purchased during the year by Scheme Cell. However, observation is noted.

2.1.1.2 Investments – Non adherence to the approved pattern of investment for G.P.Fund accumulations.

AIIMS is following all the guidelines issued by the Government vide notification 24.1.2005 in three categories. However, observation is noted.

2.1 Income and Expenditure Account
2.2.1 Income
2.1.2.1 Understatement of Income

In this regard it is stated that the entire amount of Non-Plan grant of Rs.296.73 crores, received from the Ministry by the AIIMS has correctly been reflected in the accounts.
3. Gernal

3.1 Non adoption of common format of accounts
For the preparation of Annual Accounts as per new format of Accounts, the Institute is in the process of finalizing certain preliminary modalities. Sincere and earnest efforts are being made to adopt the new format of account.

3.2 Non consolidation of accounts
Audit observation will be taken into consideration at the time of finalisation of next year accounts.

3.3 Non-disclosure of accounting policy about fees and subscription
As suggested by the Audit, Accounting policy on fees and subscription will be appended with the Annual Accounts for the year 2007-08.

DIRECTOR
# INDEX

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Receipts &amp; Payment Account for the period ending 31.3.2007</td>
<td>1-16</td>
</tr>
<tr>
<td>2.</td>
<td>Income &amp; Expenditure Account for the period ending 31.3.2007</td>
<td>17-20</td>
</tr>
<tr>
<td>3.</td>
<td>Balance Sheet as on 31.3.2007</td>
<td>21-42</td>
</tr>
<tr>
<td>4.</td>
<td>Statement showing the Receipts and Expenditure of the Grant received during the year 2006-2007 (Appendix-A)</td>
<td>43-49</td>
</tr>
<tr>
<td>5.</td>
<td>Statement showing Equipments purchased by various projects during the year 2006-2007 (Appendix-A-I)</td>
<td>50-54</td>
</tr>
<tr>
<td>6.</td>
<td>List of Sundry Debtors (Appendix-B)</td>
<td>55</td>
</tr>
<tr>
<td>7.</td>
<td>Statement showing the Donations &amp; Investments as on 31.3.2007 (Appendix-C)</td>
<td>56-57</td>
</tr>
<tr>
<td>10.</td>
<td>Details of Investment of GPF &amp; NPS for the year 2006-2007 (Appendix-F)</td>
<td>60</td>
</tr>
</tbody>
</table>
## Statement Showing the Expenditure of the Grant Received for the Specific Purpose for the Year 2006 - 2007

<table>
<thead>
<tr>
<th>S.No</th>
<th>Funding Agency</th>
<th>Expenditure</th>
<th>Undisbursed E</th>
<th>Total Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ICMR</td>
<td>46693002.00</td>
<td>3000.00</td>
<td>46696002.00</td>
</tr>
<tr>
<td>2</td>
<td>C.S.I.R.</td>
<td>23168442.00</td>
<td></td>
<td>23168442.00</td>
</tr>
<tr>
<td>3</td>
<td>DST</td>
<td>41631502.00</td>
<td></td>
<td>41631502.00</td>
</tr>
<tr>
<td>4</td>
<td>UNICEF</td>
<td>17342506.00</td>
<td></td>
<td>17342506.00</td>
</tr>
<tr>
<td>5</td>
<td>D.B.T.</td>
<td>82988237.00</td>
<td>25000.00</td>
<td>83013237.00</td>
</tr>
<tr>
<td>6</td>
<td>CIPLA</td>
<td>0.00</td>
<td></td>
<td>0.00</td>
</tr>
<tr>
<td>7</td>
<td>W.H.O.</td>
<td>3329141.00</td>
<td>75000.00</td>
<td>3404141.00</td>
</tr>
<tr>
<td>8</td>
<td>CTC/ICDS</td>
<td>0.00</td>
<td></td>
<td>0.00</td>
</tr>
<tr>
<td>9</td>
<td>U.G.C.</td>
<td>2421086.00</td>
<td></td>
<td>2421086.00</td>
</tr>
<tr>
<td>10</td>
<td>Indian Council of Agriculture Research</td>
<td>0.00</td>
<td></td>
<td>0.00</td>
</tr>
<tr>
<td>11</td>
<td>Domain Chemical India Pvt. Ltd.</td>
<td>0.00</td>
<td></td>
<td>0.00</td>
</tr>
<tr>
<td>12</td>
<td>Ministry of Health and Family welfare</td>
<td>3271375.00</td>
<td></td>
<td>3271375.00</td>
</tr>
<tr>
<td>13</td>
<td>Ministry of Environment &amp; Forest</td>
<td>542099.00</td>
<td></td>
<td>542099.00</td>
</tr>
<tr>
<td>14</td>
<td>Dabur Research Foundation</td>
<td>555879.00</td>
<td></td>
<td>555879.00</td>
</tr>
<tr>
<td>15</td>
<td>M.R.C. - U.K.</td>
<td>0.00</td>
<td></td>
<td>0.00</td>
</tr>
<tr>
<td>16</td>
<td>DEPTT. OF ELECTRONICS</td>
<td>74612.00</td>
<td></td>
<td>74612.00</td>
</tr>
<tr>
<td>17</td>
<td>Ministry of H.R.D. (DWCD)</td>
<td>0.00</td>
<td></td>
<td>0.00</td>
</tr>
<tr>
<td>18</td>
<td>Himalaya Drug Co.</td>
<td>385352.00</td>
<td></td>
<td>385352.00</td>
</tr>
<tr>
<td>19</td>
<td>International Atomic Energy Agency</td>
<td>1429156.00</td>
<td></td>
<td>1429156.00</td>
</tr>
<tr>
<td>20</td>
<td>Deptt. of Atomic Energy</td>
<td>0.00</td>
<td></td>
<td>0.00</td>
</tr>
<tr>
<td>21</td>
<td>Convatee Sayibb</td>
<td>0.00</td>
<td></td>
<td>0.00</td>
</tr>
<tr>
<td>22</td>
<td>Rajiv Gandhi Foundation</td>
<td>210135.00</td>
<td></td>
<td>210135.00</td>
</tr>
<tr>
<td>23</td>
<td>Hind Chemicals</td>
<td>0.00</td>
<td></td>
<td>0.00</td>
</tr>
<tr>
<td>24</td>
<td>Directorate of Education (NSS)</td>
<td>27459.00</td>
<td></td>
<td>27459.00</td>
</tr>
<tr>
<td>25</td>
<td>Ministry of Welfare</td>
<td>0.00</td>
<td></td>
<td>0.00</td>
</tr>
<tr>
<td>26</td>
<td>Roussel Sci. Instt.</td>
<td>0.00</td>
<td></td>
<td>0.00</td>
</tr>
<tr>
<td>27</td>
<td>Serum Instt. Of India</td>
<td>0.00</td>
<td></td>
<td>0.00</td>
</tr>
<tr>
<td>28</td>
<td>Deptt. Of Ocean Development</td>
<td>0.00</td>
<td></td>
<td>0.00</td>
</tr>
<tr>
<td>29</td>
<td>Torrent Pharma</td>
<td>0.00</td>
<td></td>
<td>0.00</td>
</tr>
<tr>
<td>30</td>
<td>INDO-US</td>
<td>0.00</td>
<td></td>
<td>0.00</td>
</tr>
<tr>
<td>31</td>
<td>Indo—French Centre for the Promotion of Advanced Research</td>
<td>0.00</td>
<td></td>
<td>0.00</td>
</tr>
<tr>
<td>32</td>
<td>Ford Foundation</td>
<td>0.00</td>
<td></td>
<td>0.00</td>
</tr>
</tbody>
</table>

**Grand Total:** 329750858.00
<table>
<thead>
<tr>
<th></th>
<th>Organisation</th>
<th>Amount 1</th>
<th>Amount 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>33</td>
<td>Indian Epilesy Research Association</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>34</td>
<td>Prakash Health and Research Foundation</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>35</td>
<td>Lapra-UK</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>36</td>
<td>National Institute of Immunology</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>37</td>
<td>Fulford India Ltd.</td>
<td>386454.00</td>
<td>386454.00</td>
</tr>
<tr>
<td>38</td>
<td>National Institute of Biological</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>39</td>
<td>Infar (India) Ltd.</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>40</td>
<td>National Thalassemia Welfare Society</td>
<td>54440.00</td>
<td>54440.00</td>
</tr>
<tr>
<td>41</td>
<td>Australian International Development Assistance Bureau</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>42</td>
<td>INCLEN</td>
<td>295079.00</td>
<td>295079.00</td>
</tr>
<tr>
<td>43</td>
<td>Park-Davis</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>44</td>
<td>Institute of Cancer Research UK</td>
<td>268601.00</td>
<td>268601.00</td>
</tr>
<tr>
<td>45</td>
<td>Hoechst India Ltd.</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>46</td>
<td>Central Council for Research in Yoga And Naturopathy</td>
<td>1873402.00</td>
<td>1873402.00</td>
</tr>
<tr>
<td>47</td>
<td>A.S.T.A</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>48</td>
<td>Ranbaxy /Elilily &amp; company pvt Ltd</td>
<td>631905.00</td>
<td>631905.00</td>
</tr>
<tr>
<td>49</td>
<td>Biomed Pvt. Ltd.</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>50</td>
<td>Smithline Beecham Pharma</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>51</td>
<td>Rockfeller Fondation</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>52</td>
<td>NATIONAL INSTITUTE OF HEALTH, USA</td>
<td>3000304.00</td>
<td>5000.00</td>
</tr>
<tr>
<td>53</td>
<td>Norad, Norway</td>
<td>1901794.00</td>
<td>1901794.00</td>
</tr>
<tr>
<td>54</td>
<td>NIE</td>
<td>6947909.00</td>
<td>6947909.00</td>
</tr>
<tr>
<td>55</td>
<td>SAFA</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>56</td>
<td>I.E.C.</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>57</td>
<td>Family Planning Foundation</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>58</td>
<td>Sarabhai Chemicals</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>59</td>
<td>INSA</td>
<td>20000.00</td>
<td>20000.00</td>
</tr>
<tr>
<td>60</td>
<td>TCL Bombay</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>61</td>
<td>Hindustan Antibiotic Ltd.</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>62</td>
<td>SRB-Clinical Pharmacology</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>63</td>
<td>Andaman/Nicobar</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>64</td>
<td>M/S Jagsonpal Pharma</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>65</td>
<td>Panacea biotech Ltd.</td>
<td>313344.00</td>
<td>313344.00</td>
</tr>
<tr>
<td>66</td>
<td>The Dr.Willimar Sachwabe Arznemittel Germany</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>67</td>
<td>Rhone-Poulence India Ltd.</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>68</td>
<td>Somdutt Builders Ltd.</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>69</td>
<td>Hindustan Lever Ltd.</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>70</td>
<td>Revolving Funds for Drugs. / SNMC</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>71</td>
<td>Atomic Energy Regulatory Board</td>
<td>130828.00</td>
<td>130828.00</td>
</tr>
<tr>
<td></td>
<td>Company/Institution</td>
<td>Amount 1</td>
<td>Amount 2</td>
</tr>
<tr>
<td>---</td>
<td>--------------------------------------------------------</td>
<td>----------</td>
<td>----------</td>
</tr>
<tr>
<td>72</td>
<td>Bhart Electrical Ltd.</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>73</td>
<td>Sandoz</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>74</td>
<td>Pfizer Ltd.</td>
<td>3707305.00</td>
<td>3707305.00</td>
</tr>
<tr>
<td>75</td>
<td>Buyer India Ltd.</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>76</td>
<td>NATCO Pharma India</td>
<td>273171.00</td>
<td>273171.00</td>
</tr>
<tr>
<td>77</td>
<td>University of Maryland</td>
<td>734720.00</td>
<td>734720.00</td>
</tr>
<tr>
<td>78</td>
<td>Glaxo India Ltd.</td>
<td>6723.00</td>
<td>6723.00</td>
</tr>
<tr>
<td>79</td>
<td>Ministry of Defence (D.R.D.O)</td>
<td>200294.00</td>
<td>200294.00</td>
</tr>
<tr>
<td>80</td>
<td>Cynamid India Ltd.</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>81</td>
<td>Reckitt and Column</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>82</td>
<td>MBI Kits.</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>83</td>
<td>Nova Nordisk India</td>
<td>58753.00</td>
<td>58753.00</td>
</tr>
<tr>
<td>84</td>
<td>Central Pollution Control Board</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>85</td>
<td>Bureau of Police Research and Development</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>86</td>
<td>Office of Salt Commission Jaipur</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>87</td>
<td>NAMS</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>88</td>
<td>European Union/Commission</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>89</td>
<td>Cystic Fibrosis/World Wide, USA</td>
<td>45716.00</td>
<td>45716.00</td>
</tr>
<tr>
<td>90</td>
<td>CONARD, USA</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>91</td>
<td>The Cancer Foundation</td>
<td>144810.00</td>
<td>144810.00</td>
</tr>
<tr>
<td>92</td>
<td>Novartis India Ltd.</td>
<td>520312.00</td>
<td>520312.00</td>
</tr>
<tr>
<td>93</td>
<td>Duke University Medical Centre</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>94</td>
<td>Indian Council for Culture Relation</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>95</td>
<td>Lupin Lab</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>96</td>
<td>Maharishi Ayurveda</td>
<td>168916.00</td>
<td>168916.00</td>
</tr>
<tr>
<td>97</td>
<td>UN International Drug and crime Control Programme</td>
<td>1194846.00</td>
<td>1194846.00</td>
</tr>
<tr>
<td>98</td>
<td>Dupher Interfrom Ltd</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>99</td>
<td>Russian Pharma Ltd Mumbai</td>
<td>289239.00</td>
<td>289239.00</td>
</tr>
<tr>
<td>100</td>
<td>Central Council for Research in Ayurveda &amp; Sidha</td>
<td>554370.00</td>
<td>554370.00</td>
</tr>
<tr>
<td>101</td>
<td>Global Forum for Health and Research</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>102</td>
<td>Nucron Pharma Ltd.</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>103</td>
<td>Terry Fox Foundation/CANADIAN HIGH COMMISSION</td>
<td>135018.00</td>
<td>135018.00</td>
</tr>
<tr>
<td>104</td>
<td>Ministry of Social Justice and Empowerment</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>105</td>
<td>Quintiles Spectral India</td>
<td>2593466.00</td>
<td>2593466.00</td>
</tr>
<tr>
<td>106</td>
<td>United Nation Industrial Development</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>107</td>
<td>Mustrad Research And Promotion Center</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>108</td>
<td>Ministry of Communication and Information&amp; Technology</td>
<td>2292181.00</td>
<td>2292181.00</td>
</tr>
<tr>
<td>109</td>
<td>University of Bergan, Norway</td>
<td>4671126.00</td>
<td>4671126.00</td>
</tr>
<tr>
<td>110</td>
<td>Zydus Healthcare Ltd</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>111</td>
<td>Ferrosan, Denmark</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Name</td>
<td>Amount 1</td>
<td>Amount 2</td>
</tr>
<tr>
<td>---</td>
<td>-------------------------------------------</td>
<td>-----------</td>
<td>----------</td>
</tr>
<tr>
<td>112</td>
<td>University of Delhi</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>113</td>
<td>Oxford University, UK</td>
<td>741103.00</td>
<td>741103.00</td>
</tr>
<tr>
<td>114</td>
<td>Federation of Obstetric &amp; Gynaecological</td>
<td>-100.00</td>
<td>-100.00</td>
</tr>
<tr>
<td>115</td>
<td>United Nation Development Programme</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>116</td>
<td>Aimil Pharmaceutical India Ltd.</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>117</td>
<td>U.S.V. Ltd.</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>118</td>
<td>Heinz Nutrition Foundation India</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>119</td>
<td>SGPGIMS</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>120</td>
<td>Caltaq Laboraties Ltd.(U.S.A)</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>121</td>
<td>INCTR USA</td>
<td>948569.00</td>
<td>948569.00</td>
</tr>
<tr>
<td>122</td>
<td>Indian Institute of Sciences, Bangalore</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>123</td>
<td>Nottingham Health Care</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>124</td>
<td>International Consortium for Mental Health Policy</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>125</td>
<td>Emcure Pharmaceutical Ltd.</td>
<td>6395.00</td>
<td>6395.00</td>
</tr>
<tr>
<td>126</td>
<td>Delhi State Control Society/AIDS</td>
<td>181126.00</td>
<td>181126.00</td>
</tr>
<tr>
<td>127</td>
<td>Bharat Biotech International Ltd.</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>128</td>
<td>L.G. Chemicals India Pvt Ltd.</td>
<td>830.00</td>
<td>830.00</td>
</tr>
<tr>
<td>129</td>
<td>Wockhardt, Mumbai</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>130</td>
<td>NSD (Security Deposit)</td>
<td>1573000.00</td>
<td>1573000.00</td>
</tr>
<tr>
<td>131</td>
<td>INDIAN INSTITUTE OF MANAGEMENT AHMEDABAD</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>132</td>
<td>Sanofi Pasteur India Pvt Ltd</td>
<td>1800.00</td>
<td>1800.00</td>
</tr>
<tr>
<td>133</td>
<td>Endocrinia</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>134</td>
<td>Helpage India</td>
<td>27966.00</td>
<td>27966.00</td>
</tr>
<tr>
<td>135</td>
<td>Johnson &amp; Johnson</td>
<td>2832.00</td>
<td>2832.00</td>
</tr>
<tr>
<td>136</td>
<td>Beijing Toshibi Pharmaceuticals Co. Ltd.</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>137</td>
<td>Lyon, France</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>138</td>
<td>C.P.W.W. Jersulam</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>139</td>
<td>AVENTIS PHARMACEUTICALS, USA</td>
<td>134184.00</td>
<td>134184.00</td>
</tr>
<tr>
<td>140</td>
<td>Alcon Research Ltd., U.S.A.</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>141</td>
<td>Dr. Reddy's Lab. Pvt. Ltd.</td>
<td>294382.00</td>
<td>294382.00</td>
</tr>
<tr>
<td>142</td>
<td>Glenmark Laboratories Pvt. Ltd.</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>143</td>
<td>Hindustan Latex Family Planning Promotion</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>144</td>
<td>The Population Council</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>145</td>
<td>SIRO CLIN PHARMA PVT. LTD</td>
<td>415773.00</td>
<td>415773.00</td>
</tr>
<tr>
<td>146</td>
<td>Charak Pharma (P)Ltd.</td>
<td>104805.00</td>
<td>104805.00</td>
</tr>
<tr>
<td>147</td>
<td>INCLEN &amp; USAID</td>
<td>6388557.00</td>
<td>6388557.00</td>
</tr>
<tr>
<td>148</td>
<td>National Institute of Oceanography</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>149</td>
<td>INST. OF NUCLEAR MEDICINE &amp; ALLIED SCIENC</td>
<td>22569.00</td>
<td>22569.00</td>
</tr>
<tr>
<td>150</td>
<td>SAVING NEWBORN LIVES, USA</td>
<td>74484.00</td>
<td>74484.00</td>
</tr>
<tr>
<td>151</td>
<td>DANIDA RESEARCH COUNCIL</td>
<td>153789.00</td>
<td>153789.00</td>
</tr>
<tr>
<td>152</td>
<td>THE MICRONUTRIENT INITIATIVE, ASIA</td>
<td>38359.00</td>
<td>38359.00</td>
</tr>
<tr>
<td></td>
<td>Name</td>
<td>Amount (INR)</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>----------------------------------------------------------------------</td>
<td>--------------</td>
<td></td>
</tr>
<tr>
<td>153</td>
<td>Ministry of Health And Family Welfare (N.A.C.O)</td>
<td>3853528.00</td>
<td></td>
</tr>
<tr>
<td>154</td>
<td>The University of Alabama, USA</td>
<td>3343532.00</td>
<td></td>
</tr>
<tr>
<td>155</td>
<td>Ministry of External Affairs</td>
<td>212920.00</td>
<td></td>
</tr>
<tr>
<td>156</td>
<td>Indian Council of Philosophical Research</td>
<td>61080.00</td>
<td></td>
</tr>
<tr>
<td>157</td>
<td>Sterling Synergy System (P) Ltd.</td>
<td>114798.00</td>
<td></td>
</tr>
<tr>
<td>158</td>
<td>Reliance Clinical Research Services (P) Ltd.</td>
<td>20150.00</td>
<td></td>
</tr>
<tr>
<td>159</td>
<td>KLPF, USA</td>
<td>1202338.00</td>
<td></td>
</tr>
<tr>
<td>160</td>
<td>Vulimini Ramalingaswami Foundation</td>
<td>60310.00</td>
<td></td>
</tr>
<tr>
<td>161</td>
<td>Texas A&amp;M Research Foundation (TAMRF) USA</td>
<td>1416.00</td>
<td></td>
</tr>
<tr>
<td>162</td>
<td>Biomerieux India (P) Ltd.</td>
<td>56307.00</td>
<td></td>
</tr>
<tr>
<td>163</td>
<td>Media Lab Asia</td>
<td>1007802.00</td>
<td></td>
</tr>
<tr>
<td>164</td>
<td>University of Warwick U.K.</td>
<td>133754.00</td>
<td></td>
</tr>
<tr>
<td>165</td>
<td>BHARAT SERUMS AND VACCINES LTD.</td>
<td>85511.00</td>
<td></td>
</tr>
<tr>
<td>166</td>
<td>D.I.P.A.S</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>167</td>
<td>CENTER FOR BLOOD RESEARCH</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>168</td>
<td>CD PHARMA INDIA PRIVATE LIMITED</td>
<td>700985.00</td>
<td></td>
</tr>
<tr>
<td>169</td>
<td>KHANDELWAL LABORATORIES LTD.</td>
<td>28718.00</td>
<td></td>
</tr>
<tr>
<td>170</td>
<td>Directorate General of Health Services</td>
<td>158209.00</td>
<td></td>
</tr>
<tr>
<td>171</td>
<td>Lajolla Pharmaceutical Company, California</td>
<td>27270.00</td>
<td></td>
</tr>
<tr>
<td>172</td>
<td>BONE &amp; JOINT DECADE INDIA</td>
<td>163120.00</td>
<td></td>
</tr>
<tr>
<td>173</td>
<td>ANTISENSE PHARMA Gmbh, GERMANY</td>
<td>2152.00</td>
<td></td>
</tr>
<tr>
<td>174</td>
<td>I.S.H.T.M</td>
<td>218665.00</td>
<td></td>
</tr>
<tr>
<td>175</td>
<td>National Institute of Nutrition (NIN) Hyderabad</td>
<td>287307.00</td>
<td></td>
</tr>
<tr>
<td>176</td>
<td>Ozone Pharmaceuticals Ltd.</td>
<td>189760.00</td>
<td></td>
</tr>
<tr>
<td>177</td>
<td>DELHI TAPEDIK UNMULAN SAMITI</td>
<td>240043.00</td>
<td></td>
</tr>
<tr>
<td>178</td>
<td>JOHN HOPKINS BLOOMBERG SCHOOL OF PUBLIC HEALTH</td>
<td>263274.00</td>
<td></td>
</tr>
<tr>
<td>179</td>
<td>Clinigene International Pvt. Ltd.</td>
<td>36766.00</td>
<td></td>
</tr>
<tr>
<td>180</td>
<td>FREEDOM TRIAL</td>
<td>2667.00</td>
<td></td>
</tr>
<tr>
<td>181</td>
<td>KOBE, JAPAN</td>
<td>994711.00</td>
<td></td>
</tr>
<tr>
<td>182</td>
<td>Troikaa Pharmaceutical Ltd.</td>
<td>98000.00</td>
<td></td>
</tr>
<tr>
<td>183</td>
<td>International Paedetrics Nephrology Association</td>
<td>376100.00</td>
<td></td>
</tr>
<tr>
<td>184</td>
<td>Synergy Network India Pvt Ltd.</td>
<td>270686.00</td>
<td></td>
</tr>
<tr>
<td>185</td>
<td>Ciola Ltd.</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>186</td>
<td>Solvey Pharma Ltd.</td>
<td>69386.00</td>
<td></td>
</tr>
<tr>
<td>187</td>
<td>IFCPAR, NEW DELHI</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>188</td>
<td>Relisy Medical Devices Ltd.</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>189</td>
<td>PPD Pharmaceutical Development India Pvt. Ltd.</td>
<td>469219.00</td>
<td></td>
</tr>
<tr>
<td>190</td>
<td>Auxilium Technical &amp; Management Services Pvt. Ltd.</td>
<td>49600.00</td>
<td></td>
</tr>
<tr>
<td>No.</td>
<td>Company Name</td>
<td>Amount (Rs)</td>
<td></td>
</tr>
<tr>
<td>-----</td>
<td>--------------------------------------</td>
<td>---------------</td>
<td></td>
</tr>
<tr>
<td>191</td>
<td>M/S ASPREVA PHARMACEUTICAL CORPORATION, CANADA</td>
<td>140650.00</td>
<td></td>
</tr>
<tr>
<td>192</td>
<td>CLINIRx RESEARCH PVT. LTD. GURGAON, HARYANA</td>
<td>341925.00</td>
<td></td>
</tr>
<tr>
<td>193</td>
<td>Central Council for Research in Unani Medicine</td>
<td>742901.00</td>
<td></td>
</tr>
<tr>
<td>194</td>
<td>CLINCYTE, USA</td>
<td>245213.00</td>
<td></td>
</tr>
<tr>
<td>195</td>
<td>M/S Markansas Research Division</td>
<td>38344.00</td>
<td></td>
</tr>
<tr>
<td>196</td>
<td>THRESHOLD PHARMACEUTICALS, USA</td>
<td>258575.00</td>
<td></td>
</tr>
<tr>
<td>197</td>
<td>GlaxoSmith Kline Asia Private Ltd</td>
<td>181058.00</td>
<td></td>
</tr>
<tr>
<td>198</td>
<td>AJINOMOTA CO. JAPAN</td>
<td>318207.00</td>
<td></td>
</tr>
<tr>
<td>199</td>
<td>MSD (India) Pvt. Ltd.</td>
<td>99528.00</td>
<td></td>
</tr>
<tr>
<td>200</td>
<td>Solumiks Herbaceuticals Limited</td>
<td>229289.00</td>
<td></td>
</tr>
<tr>
<td>201</td>
<td>C.N. Centre (AIIMS)</td>
<td>9000.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Grand Total:</td>
<td>286000206.00</td>
<td></td>
</tr>
</tbody>
</table>

Expenditure Disbursed: 286000206.00
Closing Balance: 43642652.00
Undisbursed: 108000.00
Grand Total: 329750858.00

(S.P MAHLA)
Finance & Chief Accounts Officer
Research Section

**Note: Equipment purchased during the financial year 2006 - 2007 Rs. 49254022/= (List Enclosed)**