

# Pharmacology

## 1. Staff & Scholars

	<b>Post / Designation</b>
<b>Faculty</b>	
Prof. Amal Kanti Das MBBS, MD	Professor & Head
Prof. Mitali Chatterjee MBBS, MD, PhD, MAMS	Professor
Prof. Suparna Chatterjee MBBS, DTMH, MD	Professor
Prof. Avijit Hazra MBBS, MD	Professor
Dr. Amrita Sil MBBS, MD	Assistant Professor
Dr. Avjit Kundu MBBS, MD	Assistant Professor
Dr. Tridib Kumar Ray MBBS	Demonstrator
Dr. Chaitali Sengupta MBBS	Demonstrator
Dr. Sreya Todi MBBS	Demonstrator
<b>Postgraduate trainees</b>	
Dr. Bikramjit Barkondaj MBBS	MD PGT 2013-16
Dr. Nafisha Yasmin MBBS	MD PGT 2013-16
Dr. Subhrangsu Chatterjee MBBS	MD PGT 2013-16
Dr. Lily Dubey MBBS	MD PGT 2013-16
Dr. Chandrakona Bandyopadhyay MBBS, DLO	MD PGT 2013-16
Dr. Vivek Kumar Verma MBBS	MD PGT 2013-16
Dr. Manjari Kumari MBBS	MD PGT 2014-17
Dr. Amritendu Mondal MBBS	MD PGT 2014-17
Dr. Anindita Pal MBBS	MD PGT 2014-17
Dr. Banhisikha Adhikary MBBS	MD PGT 2014-17
Dr. Monalisa Dhuya MBBS	MD PGT 2014-17
Dr. Prajesh Kiran Bhunya MBBS	MD PGT 2015-18
Dr. Shouvik Choudhury MBBS	MD PGT 2015-18
Dr. Sandeep Lahiry MBBS	MD PGT 2015-18
Dr. Ayan Mukherjee MBBS	MD PGT 2015-18
Dr. Moumita Bala MBBS	MD PGT 2015-18
Dr. Koustuv Chowdhury MBBS	MD PGT 2015-18
<b>Research scholars</b>	
Dr. Tapas Kumar Sur MSc, PhD	Postdoctoral Research Scholar
Mr. Shibabrata Mukherjee MSc	Senior Research Fellow
Ms. Soumita De M Pharm	Senior Research Fellow
Ms. Sritama De Sarkar MSc	Senior Research Fellow
Ms. Sneha Mitra MSc	Senior Research Fellow
Ms. Srija Moulik MSc	Senior Research Fellow
Dr. Bishnu Prasad Sinha MVSc	Senior Research Fellow
Mr. Debkanya Dey MSc	Junior Research Fellow
Ms. Aishwarya Dighal MSc	Junior Research Fellow
Mr. Ayan Pradhan MSc	Junior Research Fellow
Ms. Ritika Sengupta MSc	Junior Research Fellow
Mr. Bodhisatta Chakraborty	Technical Associate – Pharmacovigilance Programme of India (pvPI)
Mr. Sampath Kumar	Pharmacovigilance Associate – PvPI
<b>Medical Technologists (Laboratory)</b>	
Mr. Debajyoti Pahari	M.T. (Lab) Transferred out on 17.10.2016
Mr. Anup Samanta	M.T. (Lab)
<b>Other non-teaching staff</b>	
Mr. Tapan Kumar Ghosh	GDA Transferred out on 04.08.2016
Mr. Md. Rahatulla	GDA

## 2. Transfers and postings

Nil for faculty.

## 3. Faculty news

### ***Prof. Amal Kanti Das***

- Served as Dean of Student Affairs, IPGME&R, Kolkata.
- Served as Member, Library Committee, Medical Education Committee, Anti-Ragging Committee and Institutional Animal Ethics Committee of IPGME&R, Kolkata.
- Convener, Merit cum Means Scholarship Award Committee of IPGME&R, Kolkata.
- Examiner in pharmacology for 2nd MBBS examination of The West Bengal University of Health Sciences, Kolkata.
- Centre-in-Charge for Professional MBBS Examinations and other University examinations at IPGME&R, Kolkata.
- MD Pharmacology Thesis Adjudicator for the West Bengal University of Health Sciences, Kolkata.
- Served as Member, Pharmacist Selection Panel of the Indian Institute of Science Education & Research (IISER), Shibpur, Howrah.
- Served as member of various expert panels appointed by Government of West Bengal for inspections and enquiries.

### ***Prof. Mitali Chatterjee***

- Elected Fellow, Indian Academy of Sciences, India (FNASc).
- Awarded Kshanika Oration Award (for 2013) of Indian Council of Medical Research, Govt. of India.
- Invited speaker, "Evaluation of the oxidant status of patients with Rheumatoid arthritis as a potential biomarker for disease progression", Cyto 2016, Seattle, USA, June 2016
- Invited speaker, 'Plant derived pro-oxidant compounds as anti-cancer therapeutics', Serampore College, Feb. 2016
- Invited Speaker "Plant derived pro-oxidant compounds against Leishmaniasis' Kalyani University
- Invited speaker, "Exploring the potential of plant derived anti-oxidants as an 'add on therapy' in Rheumatoid arthritis", West Bengal State University, Feb 2017
- Invited Speaker 'Tracking the evasion strategies adopted by the Leishmania parasite', Mumbai
- Served as Member, Life Sciences Committee, 'Funds for Improvement of S&T Infrastructure in Universities and Higher Educational Institutions (FIST)' Program, Dept. of Science & Technology, Govt. of India
- Serving as Member, State Level Task Force for Kala Azar in West Bengal
- Serving as Member, Departmental Technical Advisory Committee (R&D), Dept. of Biotechnology, Govt. of West Bengal
- President, The Cytometry Society of India, 2015-17.
- Served as Examiner for Pharmacology examination, 2nd MBBS, West Bengal Univ. of Health Sciences
- Served as MPhil/PhD examiner, Calcutta University, Jadavpur University, Kolkata, Jawaharlal Nehru University, New Delhi and WB Animal & Fishery Sciences, Kolkata.
- Acted as Coordinating Member of the Animal Ethics Committee of IPGME&R, Kolkata and served as Member, Biosafety Committee, Indian Institute of Chemical Biology, CSIR, Kolkata.
- Served as Examiner for Pharmacology examination, 2nd MBBS, West Bengal Univ. of Health Sciences
- Served as MPhil/PhD examiner, Calcutta University, Jadavpur University, Kolkata, Jawaharlal Nehru University, New Delhi and WB Animal & Fishery Sciences, Kolkata.
- Acted as Coordinating Member of the Animal Ethics Committee of IPGME&R, Kolkata and served as Member, Biosafety Committee, Indian Institute of Chemical Biology, CSIR, Kolkata.
- Served as Reviewer for Journal of Ethnopharmacology, International Immunopharmacology, Antimicrobial agents and Chemotherapy, Indian Journal of Medical Research, Indian Journal of Dermatology, Indian Journal of Pharmacology, PLoS One, PLoS Neglected Tropical Diseases, Journal of Antimicrobial Therapy
- Adjunct Faculty, Biomedical Genomics Centre, Kolkata
- Guest Faculty for MS Pharmaceutical Sciences course of National Institute of Pharmaceutical Education & Research (NIPER), Kolkata.

In addition to projects of concerned MD pharmacology students, served as Principal Investigator / Supervisor of the following projects

SN	Title of the project	Duration	Funding agency
1	Evaluation of molecular and diagnostic markers for monitoring of post kala-azar dermal leishmaniasis (PKDL) in West Bengal.	2012-16	ICMR, Govt. of India
2	A transcriptomic approach to identify clinico-immunological determinants of Post Kala-azar Dermal Leishmaniasis	2016-19	Dept. of Health Research, Govt. of India
3	Evaluation of Bioenergetic functions in mitochondria of <i>Leishmania</i> parasites and mammalian macrophages	2017-19	DST, Govt. of India
4	Towards a global research network for the molecular pathological stratification of leishmaniasis	2017-19	Global Challenges Research Fund, Medical Research Council.  As Co-Investigator, PI being Prof. Paul Kaye, Centre for Immunology & Infection, Univ. of York Medical School, UK

**Prof. Suparna Chatterjee**

- Recipient of B. N. Ghosh Oration Award 2016 of the Indian Pharmacological Society.
- Member Signal Review Panel, Pharmacovigilance Program of India, Govt. of India.
- Member, Independent Expert Committee for "SAE of Death", CDSCO, Govt. of India.
- Member Subject Expert Committee (SEC) for approval of Clinical trials in Reproductive Medicine and Urology, CDSCO, Govt. of India.
- Chief Coordinator, Training and Technical Support of Eastern Regional Resource Centre of the Pharmacovigilance Program of India (PvPI), Govt. of India and Coordinator of ADR Monitoring centre (AMC) under PvPI at IPGME&R, Kolkata.
- Convener, Pharmacovigilance Committee of IPGME&R, Kolkata.
- Member, Pharmacovigilance Committee, National Institute of Cholera and Enteric Diseases (NICED), ICMR, Kolkata
- Member, Fair Price Shop Monitoring Committee of SSKM Hospital, Kolkata.
- Member, Purchase & Monitoring Committee of SSKM Hospital, Kolkata.
- Inspector, Medical Council of India.
- Member of Ethics Committee for Biomedical Research on Human subjects of Institute of Child Health, Kolkata.
- Member, Executive Committee, Biomedical Genomics Centre, Kolkata.
- External expert for Indian Pharmacopoeia Commission, Govt. of India for recruitment of Technical Associates.
- Guest Faculty for MS Pharmaceutical Sciences course of National Institute of Pharmaceutical Education & Research (NIPER), Kolkata and Postgraduate Diploma in Clinical Research of Jadavpur University, Kolkata.
- Guest faculty of CDSA, THSTI, DBT, Govt. of India sponsored GCP and Ethics awareness workshops at various places in India.
- Examiner and paper setter of MBBS and MD of the West Bengal University of Health Sciences and various other universities.
- Jul 1-2: Served as faculty in Research Methodology & Biostatistics Workshop on behalf of Medical Education Unit, IPGME&R.
- Oct 21-23: Attended as faculty 49th Annual Conference of Indian Pharmacological Society (IPSCON-2017) at PGIMER, Chandigarh. Faculty for pre-conference workshop. Delivered B. N. Ghosh Oration and faculty for symposium on curriculum reform in pharmacology.
- Nov 4-5: Attended 4th National Conference of Forum for Ethics Review Committees in India (FerciCon 2016), organized by Department of Pharmacology, School of Tropical Medicine (STM), Kolkata (in collaboration with UNESCO Chair in Bioethics, Haifa, Melbourne, Australia and Bioequivalence Study Centre, Jadavpur University, Kolkata) at Jadavpur University.
- Dec 9: Served as faculty and Coordinator at 'Training Program in Pharmacovigilance' at IPGME&R Kolkata. Program organized by Dept. of Pharmacology, IPGME&R, Kolkata and supported by Indian Pharmacopoeia Commission, Ghaziabad.

**Prof. Avijit Hazra**

- Recipient of R. N. Chopra Oration Award 2016 of the Indian Pharmacological Society.
- Recipient of P. K. Kar Oration Award 2016 of the Indian Pharmacological Society, Odisha State Branch.
- Served as Member Secretary, Institutional Ethics Committee, IPGME&R, Kolkata.
- Member, Institutional Ethics Committee of National Research Institute of Ayurveda for Drug Development (NRIADD), Kolkata, Nightingale Hospital, Kolkata, Peerless Hospital Kolkata, Eye Care & Research Institute, Kolkata, Health Point Hospital, Kolkata and Chairperson, National Allergy Asthma & Bronchitis Institute (NAABI), Kolkata.
- Deputy Coordinator of ADR Monitoring centre (AMC) of the Government of India Pharmacovigilance Program of India (PvPI) at IPGME&R, Kolkata.
- Member, Library Committee, Pharmacovigilance Committee and Merit cum Means Scholarship Award Committee of IPGME&R, Kolkata.
- Examiner in pharmacology for MBBS examination of medical / dental streams of The West Bengal University of Health Sciences and other universities.
- Faculty for the Medical and Dental Teachers Training Courses organized by the Institute of Health & Family Welfare, Government of West Bengal.
- Faculty for the ATCOM skill workshops for nurses organized by the Institute of Health & Family Welfare, Government of West Bengal.
- Guest Faculty for MS Pharmaceutical Sciences course of National Institute of Pharmaceutical Education & Research (NIPER), Kolkata, MSc Neuroscience course of University of Calcutta, Diploma in Clinical Research & Regulatory Affairs course of Jadavpur University, Kolkata and Diploma in Clinical Research course of AMRI Hospital, Kolkata.
- Paper-setter for examinations in pharmacology conducted by the West Bengal University of Health Sciences and paramedical courses conducted by West Bengal State Medical Faculty.
- Served as statistical consultant for various departments of IPGME&R, Kolkata. Also associated with a few projects of other institutions as statistical advisor.
- Served as reviewer for Indian Journal of Medical Research, Indian Journal of Pharmacology (IJP), Indian Journal of Dermatology, Journal of Postgraduate Medicine and Indian Journal of Physical Medicine & Rehabilitation. Member of Editorial Board of IJP.
- MD Pharmacology Examiner for KIIT University at Kalinga Institute of Medical Sciences (KIMS), Bhubaneswar.
- Feb 12: Faculty for workshop on 'Scientific Research Methodology and Biostatistics' as part of 4th IHTM Masterclass at Institute of Immunohematology & Transfusion Medicine, Medical College, Kolkata. [Originally scheduled on 05.02.2016].
- Feb 17: Faculty for workshop on 'Pharmacovigilance and Medicine Safety' organized as preconference workshop to 25th Annual Conference of IPS West Bengal Branch by Dept. of Pharmacology, R. G. Kar Medical College, Kolkata.
- Mar 17: Faculty for GCP workshop organized by Medical Education Unit, Medical College, Kolkata.
- Mar 21: Lead faculty for workshop on 'Pharmacovigilance' organized by Medical Education Unit, Tripura Medical College & Dr. B. R. Ambedkar Memorial Hospital, Hapania, Tripura.
- Apr 27: Served as faculty for the awareness program 'Current Ethical & Regulatory Requirements for Clinical Trials' organized at Tata Medical Centre, Kolkata, by Clinical Development Services Agency (CDSA), an extramural unit of Translational Health Science & Technology Institute (THSTI), Department of Biotechnology, Govt. of India.
- May 14: Attended as panelist, panel discussion on 'Dermatophytosis and its management: the current scenario', organized by M/s Sun Pharmaceuticals at HHI, Kolkata. Programme coordinated by Prof. Sumit Sen, Dept. of Dermatology, IPGME&R, Kolkata.
- Jun 11: Participated as faculty in Basic Workshop on The Principles and Practice of Clinical Research organized by the Department of Orthopedics, Medical College, Kolkata.
- Jul 1-2: Conducted Research Methodology & Biostatistics Workshop on behalf of Medical Education Unit, IPGME&R.
- Sep 8: Faculty at Workshop on Pharmacovigilance organized by Agartala Government Medical College at Agartala, Tripura.
- Sep 9: Principal faculty at Workshop on Biostatistics organized by Agartala Government Medical College at Agartala, Tripura.
- Oct 2: Served as Faculty for Research Methodology workshop organized as part of 23rd Annual Conference of Association of Physicians of India (API) WB Chapter and 1st International Conference of Indian College of Physicians in Kolkata.

- Oct 21-23: Attended as faculty 49th Annual Conference of Indian Pharmacological Society (IPSCON-2017) at PGIMER, Chandigarh. Delivered Ram Nath Chopra Oration and faculty for symposium on curriculum reform in pharmacology.
- Nov 4-5: Attended 4th National Conference of Forum for Ethics Review Committees in India (FerciCon 2016), organized by Department of Pharmacology, School of Tropical Medicine (STM), Kolkata (in collaboration with UNESCO Chair in Bioethics, Haifa, Melbourne, Australia and Bioequivalence Study Centre, Jadavpur University, Kolkata) at Jadavpur University. Conducted Quiz on Bioethics and summarized Pre-conference Satellite Event 'Teaching research ethics to medical, dental and health science students' organized on Nov 3 at STM, Kolkata.
- Nov 26: Attended 26th Annual Conference of Indian Pharmacological Society Odisha State Branch at MKCG Medical College, Brahmapur, Odisha. Delivered Prof. Prafulla Kumar Kar Oration. Chaired Multidisciplinary Symposium on Geriatric Medicine
- Dec 3: Faculty for symposium 'Methods in research' at 3rd PGCON (A conference for resident doctors & PG teachers) organized by IADVL WB State Branch, under auspices of IADVL Academy, at IPGME&R, Kolkata
- Dec 9: Served as faculty at 'Training Program in Pharmacovigilance' at IPGME&R Kolkata. Program organized by Dept. of Pharmacology, IPGME&R, Kolkata and supported by Indian Pharmacopoeia Commission, Ghaziabad.

In addition to projects of concerned MD pharmacology students, served as Investigator / Co-Investigator / Supervisor of the following projects

SN	Title of the project	Duration	Funding agency
1	Assessment of environmental contaminants in raw herbal materials used in medicinal products in West Bengal. [Ongoing; Principal Investigator]	2015-17	DST, Govt. of West Bengal
2	Assessment of factors associated with non-compliance regarding drugs and lifestyle behaviors in post-renal transplant patients [PhD thesis, registered 2010, under The West Bengal University of Health Sciences of Mrs. Uma Rani Adhikari, Staff Nurse, West Bengal Nursing Service] [Ongoing; Co-Supervisor]	2010-15	Nil

**Dr. Amrita Sil**

- Attended Training program in Pharmacovigilance on 10.12.2016 held at East Zone Regional Centre for training and technical support, Department of Pharmacology, IPGME & R, Kolkata
  - Attended 4th National Conference of Forum for Ethics Review Committees in India & International Colloquium "FERCIcon2016" and "Pre-Conference Satellite Events" on November 3rd, 4th, 5th 2016 at Medical College, Kolkata
  - Attended Dermatology East Zonal Conference "Dermazone East Zone" 2016 held at Bodh Gaya, Bihar from 17th – 20th November, 2016
  - Guest speaker on "Ethical considerations in dermatology research and aesthetic medicine" at The 4th National Conference of Forum for Ethics Review Committees in India & International Colloquium FERCIcon2016. Pre-Conference Satellite Events on November 3, 2016 at Medical College, Kolkata
  - Faculty lecture on "Introduction to Clinical Trials, Drafting a protocol, Analysing data" at Dermazone East Zone 2016 held at Bodh Gaya, Bihar from 17th – 20th November, 2016
  - Chairperson at Dermazone East Zone 2016 held at Bodh Gaya, Bihar from 17th – 20th November, 2016 for the session "Drugs safe in Pregnancy and Lactation" and "Rituximab is suitable as first line treatment in Pemphigus.
- Projects ongoing or recently completed.

SN	Title of the project	Duration	Funding agency
1	Subcutaneous AST in chronic urticaria [Co-Investigator]	2015-16	Nil.
5	Molecular epidemiological study for evaluating role of potential host factors as markers of susceptibility of leprosy in West Bengal, India. [Co-Investigator]	2013-15	DST Govt. of West Bengal

### **Dr. Tridib Kumar Ray**

- Served as Centre-in-Charge for various examinations of the West Bengal University of Health Sciences at IPGME&R Kolkata, conducted at IPGME&R, Kolkata.

### **Dr. Sreya Todi**

- Conferences / workshops attended:
  - Research Methodology & Biostatistics Workshop conducted by the Department on Jul 1-2, 2016.
  - Training program in Pharmacovigilance on 09.12.2016 held at East Zone Regional Centre for training and technical support, Department of Pharmacology, IPGME&R, Kolkata.
  - Annual State Conference of IPS, West Bengal Branch on 18.12.2016 at J. B. Roy Ayurvedic College, Kolkata.

### **Publication by faculty, students and research scholars**

1. Mukherjee S, Mukhopadhyay D, Braun C, Mitra S, Roy S, Das NK, Chatterjee U, von Stebut E, Chatterjee M. CD8+ T-cell exhaustion in Indian Post Kala-azar Dermal Leishmaniasis. *PLoS Negl Trop Dis* 2016; (accepted).
2. Mitra S, Pati A, Sen S, Chatterjee S, Chatterjee M. Effect of an ethanolic extract of Piper betle leaves on generation of reactive oxygen species in patients with vitiligo. *Ind J Dermatol Venereol Leprol* 2017; 83: 40-6.
3. De S, Manna A, Kundu S, De Sarkar S, Chatterjee U, Sen T, Chattopadhyay S, Chatterjee M. Allylpyrocatechol mitigates collagen induced arthritis via modulating the MAPkinase, Nrf2-ARE, STAT1 and STAT3 pathways. *J Pharm Exp Ther* 2016; PMID: 27856937
4. Manna A, De Sarkar S, De S, Bauri AK, Chattopadhyay S, Chatterjee M. Impact of MAPK and PI3K/AKT signaling pathways on Malabaricone-A induced cytotoxicity in hematopoietic cell lines. *Int Immunopharmacol* 2016; 39:34-40.
5. Ghosh S, Nandi M, Pal S, Mukhopadhyay D, Chakraborty B, Khatun M, Bhowmick D, Mondal R, Das S, Das K, Ghosh R, Banerjee S, Santra A, Chatterjee, M, Chowdhury A, Datta S. Natural Killer cells contribute to hepatic injury and help in viral persistence during progression of HBeAg-negative chronic HBV infection. *Clin Microbiol Inf* 2016 22(8): 733.e9-733.e19.
6. Banerjee K, Das S, Sarkar A, Chatterjee M, Biswas J, Choudhuri SK A copper chelate induces apoptosis and overcomes multidrug resistance in T-cell acute lymphoblastic leukemia through redox imbalance and inhibition of EGFR/PI3K/Akt expression. *Biomed Pharmacother* 2016; 84: 71-92.
7. Mukherjee S, Mukhopadhyay D, Ghosh S, Barbhuiya JN, Das NK, Chatterjee M. Decreased frequency and secretion of CD26 promotes disease progression in Indian Post kala-azar dermal leishmaniasis. *J Clin Immunol* 2016; 36: 85-94.
8. Mukhopadhyay D, Mukherjee S, Ghosh S, Roy S, Saha B, Das NK, Chatterjee M. A male preponderance in patients with Indian Post kala-azar dermal leishmaniasis is associated with increased circulating levels of testosterone. *Int J Dermatol* 2016; 55: e250-5.
9. Pradhan R, Jain P, Paria A, Saha A, Sahoo J, Sen A, Mukherjee S, Som T, Hazra A, Warner N, Singh AK, Chatterjee M. Ratio of neutrophilic CD64 and monocytic HLA-DR: a novel parameter in diagnosis and prognostication of neonatal sepsis. *Cytometry B Clin Cytom* 2016; 90: 295-302.
10. Das A, Chatterjee S, Pal J. Clinical effectiveness and safety of low cost versus innovator brand amlodipine in hypertension: A single blind, randomized, crossover, non-inferiority trial *Indian J Pharmacol* (accepted in press).
11. Dubey L, Chatterjee S, Ghosh A. An observational study of the hepatic and hemopoietic adverse effects of long term low dose methotrexate therapy in rheumatoid arthritis. *Indian J Pharmacol* 2016; 48(5):591-594.
12. Mitra M, Shah N, Ghosh A, Chatterjee S, Kaur I, Bhattacharya N, Basu S. Efficacy and safety of vi-tetanus toxoid conjugated typhoid vaccine (PedaTyph™) in Indian children: school based cluster randomized study. *Hum Vaccin Immunother* 2016; 12: 939-45.
13. Mitra S, Pati A, Manna A, Ghosh AP, Sen S, Chatterjee S, Chatterjee M, S study of free radical scavenging effects of Piper betle leave extracts in patients with vitiligo. *Indian J DermatolVenerolLeprol* Aug 4. doi: 10.4103/0378-6323.187688. [Epub ahead of print]
14. Choudhury S, Pradhan R, Dubey L, barman L, Biswas T, Das M, Chatterjee S. Knowledge and perception regarding clinical trials among doctors in government medical colleges: A questionnaire based study. *Perspect Clin Res* 2016; 7: 94-9.
15. BOOK CHAPTER: Hazra A. Professor Salil K. Bhattacharya (1939-2003): A doyen of Indian neuropharmacology. In: Dandiya PC, Kulkarni SK, Khilnani GD. *Pharmacologists of India: their contribution*. New Delhi: Vallabh Prakashan; 2016.
16. Chatterjee D, Ghosh SK, Sen S, Sarkar S, Hazra A, De R. Efficacy and tolerability of topical sertaconazole versus topical terbinafine in localized dermatophytosis: A randomized, observer-blind, parallel group study. *Indian J Pharmacol* 2016;48:659- 64.

17. Chakraborty S, Ghosh S, Banerjee A, De RR, Hazra A, Mandal SK. Prescribing patterns of medicines in chronic kidney disease patients on maintenance hemodialysis. *Indian J Pharmacol* 2016; 48: 586-90.
18. Das S, Hazra A, Ray BK, Ghosal M, Chaudhury A, Banerjee TK, Das SK. Knowledge, attitude, and practice in relation to stroke: A community-based study from Kolkata, West Bengal, India. *Ann Indian Acad Neurol* 2016; 19: 221-7.
19. Sabui TK, Samanta M, Mondal R, Banerjee I, Saren A, Hazra A. Survey of musculoskeletal abnormalities in school-going children of hilly and foothill regions of Eastern Himalayas using the pediatric Gait, Arms, Legs, Spine screening method. *Int J Rheumatic Diseases* 2016 Jun 16 [Epub ahead of print].
20. Mondal R, Ray S, Chatterjee K, Sabui TK, Hazra A, Das S, Chaudhuri J, Sil A, Samanta M. Penile length and testicular volume in newborns. *Indian J Pediatr* 2016 Jun 8. [Epub ahead of print]
21. Banerjee TK, Dutta S, Das S, Ghosal M, Ray BK, Biswas A, Hazra A, Chaudhuri A, Paul N, Das SK. Epidemiology of dementia and its burden in the city of Kolkata, India. *Int J Geriatr Psychiatry* 2016 Jun 1. [Epub ahead of print]
22. Sur TK, Hazra A, Hazra AK, Bhattacharyya D. Antioxidant and hepatoprotective properties of Indian Sunderban mangrove *Bruguiera gymnorrhiza* L. leave. *J Basic Clin Pharma* 2016; 7: 75-9.
23. Saha S, Ganguly S, Sarkar DK, Hazra A. Clinicopathological characteristics of patients of certain molecular subtypes and elevated postoperative cancer antigen 15.3 levels and its correlation with menopausal status. *Indian J Pathol Microbiol* 2016; 59: 172-6.
24. Adhikari UR, Taraphder A, Hazra A, Das T. Is there an association between medication knowledge and medication compliance in renal transplant recipients? *Asian J Nurs Edu Res* 2016; 6: 32-6.
25. Mondal M, Chatterjee K, Samanta M, Hazra A, Ray S, Sabui TK, Banerjee B, Das S, Roychowdhury D, Biswas R. Clitoral length and anogenital ratio in Indian newborn girls. *Indian Pediatrics* 2016; 53: 299-303.
26. Hazra A, Gogtay N. Biostatistics Series Module 6: Correlation and linear regression. *Indian J Dermatol* 2016; 61: 593-601.
27. Hazra A, Gogtay N. Biostatistics Series Module 5: Determining sample size. *Indian J Dermatol* 2016; 61: 496-504.
28. Hazra A, Gogtay N. Biostatistics Series Module 4: Comparing groups: Categorical variables. *Indian J Dermatol* 2016; 61: 385-92.
29. Hazra A, Gogtay N. Biostatistics Series Module 3: Comparing groups: Numerical variables. *Indian J Dermatol* 2016; 61: 251-60.
30. Hazra A, Gogtay N. Biostatistics Series Module 2: Overview of hypothesis testing. *Indian J Dermatol* 2016; 61: 137-45.
31. Hazra A, Gogtay N. Biostatistics Series Module 1: Basics of biostatistics. *Indian J Dermatol* 2016; 61: 10-20.
32. Hazra A. Consumer reporting of medicine side effects: A dream fulfilled? [Editorial]. *Indian J Pharmacol* 2016; 48: 1-2.
33. Adhikari UR, Taraphder A, Hazra A, Das T. Pill burden does not influence compliance with oral medication in recipients of renal transplant. *Indian J Pharmacol* 2016; 48: 21-5.
34. Bhadra R, Choudhuri AR, Hazra A, Mukhopadhyay JD. Serum vitamin D level and its relation with carotid intima-media thickness in type 2 diabetic patients: a cross-sectional observational study. *Diabetes Metab Syndr* 2016 Jan 15. [Epub ahead of print]
35. Ray S, Mondal R, Samanta M, Hazra A, Sabui TK, Debnath A, Chatterjee K, Mukhopadhyay D, Sil A. Prospective study of neonatal birth trauma: Indian perspective. *J Clin Neonatol* 2016; 5: 91-5.
36. Samanta M, Mondal R, Shah A, Hazra A, Ray S, Dhar G, Biswas R, Sabui TK, Raychaudhuri D, Chatterjee K, Kundu C, Sarkar S. Animal bites and rabies prophylaxis in rural children: Indian Perspective. *J Trop Pediatr* 2016; 62: 55-62.
37. BOOK CHAPTER: Das NK, Sil A. Ethical issues in LASER practice. In: Lahiri K, De A, Sarda A, editors. *Lasers in Dermatology*. New Delhi: Jaypee Brothers Medical Publishers Pvt Ltd. 2016:p.1-4
38. Badarkhe GV, Sil A, Bhattacharya S, Nath UK, Das NK. Erythema multiforme due to arsenic trioxide in a case of acute promyelocytic leukemia: A diagnostic challenge. *Indian J Pharmacol* 2016; 48: 216-8.
39. Podder I, Bhattacharya S, Mishra V, Sarkar TK, Chandra S, Sil A, Pal S, Kumar D, Saha A, Shome K, Bandyopadhyay D, Das NK. Immunotherapy in viral warts with intradermal Bacillus Calmette-Guerin vaccine versus intradermal tuberculin purified protein derivative: A double-blind, randomized controlled trial comparing effectiveness and safety in a tertiary care center in Eastern India. *Indian J Dermatol Venereol Leprol* 2016. Epub ahead of print.
40. Sil A, Sengupta C, Das AK, Sil PD, Datta S, Hazra A. A study of knowledge attitude and practice regarding administration of pediatric dosage forms and allied health literacy of caregivers for children. *J Fam Med Primary Care* [Accepted Sep, 2016.]

#### 4. Regular academic activities

The department continued its usual PG teaching program comprising didactic lectures, seminars, journal clubs and practical demonstrations.

The department has acquired 120 m<sup>2</sup> of additional space on the 5th Floor of the College Building which is now being utilized as Clinical Pharmacology Unit, Museum, Seminar Room (capacity 50 heads) and additional research and archival space. The Museum and Pharmacy Laboratory were utilized for teaching MBBS students. The Experimental Pharmacology laboratory was utilized by PG students and research scholars. The MBBS teaching program (both theory and practicals) has been running smoothly.

The department also undertook regular classes for BSc Nursing students of IPGME&R School of Nursing, Bachelor of Physiotherapy students of IPGME&R and students of various paramedical diploma courses posted in IPGME&R. The postgraduate medical students shared a large part of the teaching responsibility of these students.

## 5. Research projects and grants

The department achieved the rare distinction of being awarded the third consecutive grant under the infrastructure development scheme (FIST) of the Department of Science and Technology, Government of India. The sanctioned amount is Rs. 1,45,00,000/- (1 crore 45 lakhs) to be utilized during the period 2017-21. Additional equipment are to be procured.

Other research projects, as mentioned earlier, are ongoing in the department, with postgraduate students or research scholars as the major workers and the faculty in supervisory position.

## 6. Theses publication, student and research scholar information

The following theses were successfully defended at the MD Pharmacology examination of the West Bengal University of Health Sciences, in April-May, 2016, leading to award of MD degree.

<b>Lily Dubey</b>	An observational study to evaluate the hematological and hepatic adverse effects of long term low dose methotrexate therapy in Rheumatoid Arthritis patients of India.
<b>Subhrangsu Chatterjee</b>	A randomized controlled trial of topical mupirocin versus mupirocin with bromelain combination in chronic skin ulcers.
<b>Bikramjit Barkondaj</b>	Role of dipeptidyl peptidase-4 (DPP-4) in pathophysiology of chronic liver disease.
<b>Nafisha Yasmin</b>	Effect of malabaricones on multidrug resistant / sensitive cancer cell lines.
<b>Chandrakana Bandyopadhyay</b>	Antitumor effect of malabaricones in Ehrlich ascites carcinoma (EAC) in mice.
<b>Vivek Kumar Verma</b>	An observational study to evaluate epidemiological trends of acute poisoning and drug overdosage in a tertiary care hospital of West Bengal.

Drs. **Pradipta Das**, **Dwaipayan Sarathi Chakraborty**, **Donik Peter**, **Sudipta Ghosh**, **Kousik Mishra** (Service PGT) and **Subrata Ray** (service PGT) joined the department as new MD PGTs.

Dr. **Tapas Kumar Sur**, PhD continued working in the department, as an honorary post-doctoral fellow, on the project 'Assessment of environmental contaminants in raw herbal materials used in medicinal products in West Bengal'.

Mr. **Bodhisatta Chakraborty** as Coordinator – Pharmacovigilance Programme, continued to do exemplary work in keeping up a regular flow of adverse drug reaction reports from IPGME&R and SSKM Hospital, Kolkata, to the National Coordinating Centre for National Pharmacovigilance Programme, India at Indian Pharmacopoeia



Commission, Ghaziabad. Reports are now being submitted and revised online. Following his resignation Mr. **Sampath Kumar** has joined and carrying on the diligent work.

Other research scholars are pursuing projects as stated below:

SN	Name	Fellowship and Guide	Title of research
1	<b>Ms. Sritama De Sarkar</b>	CTPL, India Prof. Mitali Chatterjee	Modulation of the cellular redox status as a chemotherapeutic strategy
2	<b>Ms. Sneha Mitra</b>	INSPIRE (DST, Govt. of India) Prof. Suparna Chatterjee & Prof. Mitali Chatterjee	Evaluation of redox status and immune regulation markers in vitiligo
3	<b>Ms. Srija Moulik</b>	GLRA-INDIA Prof. Mitali Chatterjee	Identification of lesional biomarkers in Indian Leishmaniasis.
4	<b>Ms. Debkanya Dey</b>	ICMR, DHR, Govt. of India Prof. Mitali Chatterjee	Transcriptomic profiling of patients with post kala-azar dermal Leishmaniasis.
5	<b>Ms. Aishwarya Dighal</b>	CSIR-UGC NET (UGC-JRF) Prof. Mitali Chatterjee	Iron based chemotherapeutic modalities in Leishmaniasis.
6	<b>Mr. Ayan Pradhan</b>	Prof. Mitali Chatterjee	Evaluation of markers of oxidative damage in rheumatoid arthritis.
6	<b>Ms. Ritika Sengupta</b>	ICMR - JRF Prof. Mitali Chatterjee	Comparison of clinico-immunological responses of macular versus polymorphic Indian Post Kala Azar Dermal Leishmaniasis
8	<b>Tapas Kumar Sur</b>	DST, Govt. of West Bengal Dr. Avijit Hazra	Assessment of environmental contaminants in raw herbal materials used in medicinal products in West Bengal.

Ms. Susmita Ghosh MSc, Mr. Shibabrata Mukherjee MSc and Ms. Soumita De M. Pharm, research scholars under supervision of Prof. Mitali Chatterjee, were awarded PhD degree in 2016.

## 7. Other information – Programs / Conferences / Workshops

Faculty, students and research scholars participated and presented oral papers / posters at various conferences / symposia as follows:

- July 1-2: Research Methodology & Biostatistics Workshop organized by the department on behalf of Medical Education Unit, IPGME&R.
- Oct 21-23: 49th Annual Conference of Indian Pharmacological Society (IPS) at PGIMER, Chandigarh.
- Dec 9: Pharmacovigilance Workshop at IPGME&R Kolkata, organized by the department with participations of Central Drugs Standard Control Organization (CDSCO), East Zone, and Indian Pharmacopoeia Commission, Ghaziabad.
- Dec 18: Annual State Conference of IPS West Bengal branch at J. B. Roy Ayurvedic College, Kolkata.

In addition, faculty members and students participated in several CMEs organized by Indian Pharmacological Society (IPS) West Bengal state branch at various Kolkata-based medical colleges from time to time.