PROF. BIKASH MEDHI

Present Address

Dr. Bikash Medhi

Professor

& Additional Medical Superintendent (AMS),

Chief Editor Indian Journal of Pharmacology(IJP),

Coordinator - PGIMER Pharmacovigilance Centre and Materiovigilance Centre,

Regional Resource and Training & Technical Support Centre for North India.

Regional Cordinator, NADA for North Zone,

Department of Pharmacology,

Research Block B,

Room No 4043

PGIMER, Chandigarh

India

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drbikash11@rediffmail.com drbikashmedhi@gmail.com

PERSONAL DETAILS

• Date of Birth : 01.09.1968

Sex : Male
Marital Status : Married
Medical Registration No : 11871

Telephone No. (Present Address) : +91- 9815409652
 Telephone No. (Permanent Address) : +91-361-2574113

Educational Qualifications

Examination passed	Year of passing	No. of attempts	University/ Institution
i) Undergraduate career, MBBS	1992	First	Assam Medical College, Dibrugarh/ Dibrugarh University
ii) Postgraduate career, MD(Pharmacology)	1997	First	All India Institute of Medical Sciences(AIIMS), New Delhi

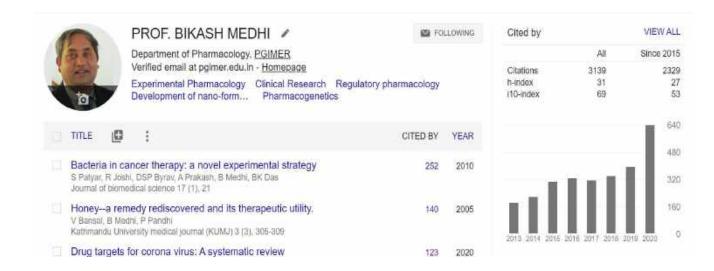
Additional Qualifications:

- 1. Elected as Fellow of International Medical Sciences Academy(FIMSA) in 2006
- 2. Awarded Member of National Medical Academy (MAMS) 2009
- Trained by DST as lead GLP inspector 2010 by Department of Science and Technology, Government of India.
- 4. Trained by USA-FDA as lead GCP inspector 2008-2010 for CDSCO, Ministry of Health, Government of India.
- 5. NABH Principle Assessor for Ethics Committee 2018.

(b) Awards/Distinction/Honours Conferred during

a. Graduate career: State Scholarship

b. Postgraduate career: Israeli application for training, New Zealand selection



1. Experience (Starting from current)

Post held	Period		Total	period		Employer's
(indicate permanent/ temporary)	From	То	Year	Months	Days	Address
PROFESSOR	01-07-2014	TILL DATE				PGIMER CHANDIGARH
Additional Professor	01-07-2010	30-06-2014	5 years	One month	1 day	
Associate Professor	01-07-2007	30-06-2010	3 years, three months and one day			Postgraduate Institute of Medical Education and Research,
Assistant Professor (Permanent)	16-12-2002	30-6-2007	Four and half years and 15 days			Chandigarh
Senior Lecturer (Adhoc)	May, 2002	Dec, 2002	Seven and half months			Government Medical College and Hospital, Sector 32, Chandigarh
Senior Resident	1998	2001		Three Years	S	Maulana Azad Medical College, New Delhi

2. Additional Qualification such as membership of scientificsociety/positional held in Scientific Societies:

MEMBER OF SCIENTIFIC ORGANIZATION I NTERNATIONAL

- American Society of Pharmacology and Experimental Therapeutics (ASPET) Regular Member
- Society of Experimental Biology and Medicine (Regular member)
- Fellow of International Medical Science Academy (FIMSA)
- Life member of Scientist of Indian origin in America (Honorary Member)
- International Society of Antimicrobial Society
- International Union of Physiological Sciences(IUPS)
- Regular Member of Society of Neurosciences, USA
- Member of Safety Pharmacology Society (SPS) USA
- British Pharmacology Society Membership (BPS)
- Australian Society Clinical and Experimental Pharmacological Society (ASCEPT)
- European Association for Clinical Pharmacology and Therapeutics(ESCPT)

Applied for membership

- American Society for Clinical Pharmacology and Therapeutics
- Argentine Society for Experimental Pharmacology
- Asia Pacific Federation of Pharmacologists
- Austrian Pharmacological Society.
- Brazilian Society of Pharmacology and Experimental Therapeutics
- Canadian Society of Pharmacology and Therapeutics
- Chinese Pharmacological Society
- Hong Kong Pharmacology Society
- European College of Neuropsychopharmacology
- Israel Society for Physiology and Pharmacology
- Japanese Pharmacological Society

- Latin American Association of Pharmacology
- South African Society for Basic and Clinical Pharmacology

NATIONAL

- Life member of Indian Pharmacological Society (IPS)
- Life member of Association of Physiologists and Pharmacologists of India (APPI)
- Indian Society of Anti Microbial Chemotherapy (Life member).
- AIIMSONIAN (life member)
- Member of Society for Pharmacovigilance India (Life member).
- Member of Indian Society for Rational Pharmacotherapeutics.
- Life member of PGIMER alumni Society
- Indian Science Congress
- Indian Society of Toxicologist

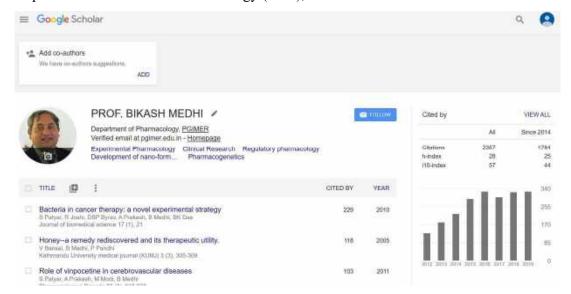
POSITIONS HELD IN SCIENTIFIC SOCIETIES

- Elected as Secretary Clinical Pharmacology, Indian Society of Pharmacology(IPS), India
- Co-Chairman India Initiative Programme, Indian Pharmacology Society(IPS)
- Executive committee member of Society for Rational Drug Use, India.
- Executive Committee Member of Society for Pharmacovigilance, India
- Executive member of society of nano-medicine in India
- Chief Editor Indian Journal of Pharmacology(IJP) nominated from 2017-2020

- 3. Awards/Fellowships/Orations received etc. within the years considered for evaluation for promotion (From date of appointment/promotion at the present level to the date of eligibility for further promotion).
 - 1. Awarded **Dr. D N Prasad Memorial Award with Gold medal** 2009 from Indian Council of Medical Research (ICMR), New Delhi. (**Awarded in 2013**)
 - 2. Awarded **Dr. V K Bhargava Award with Gold medal** from National Academy of Medical Sciences (NAMS) 2013
 - 3. Awarded **Dr.B N. Ghosh Oration** at 43rd Annual Conference of IPS and International Conference on "Pharmacology & Translational Research" was organized by National Executive Committee in association with Food and Drug Toxicology Research Centre, National Institute of Nutrition, Hyderabad from 13th 16th December, 2010.
 - 4. Col. Ram Nath Chopra Oration-December, 2014 in 48th Annual Conference of Indian Pharmacological Society & International Conference in Guwahati, December, 2014.
 - 5. PK Kar, Oration from IPS-Orrisa Chapter 2017.
 - 6. STOX best paper award (oral) 2017
 - 7. Awarded International Fellowship from **Alzheimer's Association International Organization (AAIC)**, July 13-18, 2013 at the Boston, USA.
 - 8. Awarded International Fellowship from **Alzheimer's Association International Organization (AAIC)**, July 18-23, 2015 at the Washigton DC, USA.
 - 9. Awarded from Hasanuddin University, Makassar Indonesia for work on complimentary medicine (honey) September, 2013
 - 10. Best paper award in PGIMER Research Day Symposium 2014.
 - 11. Trained by DST as Good Laboratory Inspector (GLP) 2010 under GLP Monitoring Authority, Department of Science and Technology, Government of India.
 - 12. Trained by US-FDA as Good Clinical Inspector (GCP) 2008-2010
 - 13. Investigator Travel award received IN 27thSingapore Congress, July 2007 at Singapore.
 - 14. Awarded MAMS by National Academy of Medical Sciences (India) at KGMC, Lucknow on 31st october 2009
 - 15. Awarded Bharat Joti Award 2013
 - 16. Vikas Ratan Award 2013
 - 17. Awarded a Bursary from Organizer Epilepsy Summer School, VENICE INTERNATIONAL UNIVERSITY, ITALY to participate in **8th international course on Bridging Basic Knowledge with Rational Prescribing in Epileptology**, which will be held in San Servolo, Venice, Italy from July 18 to 29, 2010.
 - 18. Awarded Fellowship to assist participation in the 4th Eilat International Educational Course: PHARMACOLOGICAL TREATMENT OF EPILEPSY; Eilat, Israel, September 18-25, 2011 by Jerusalem University
 - 19. Awarded Bursary for Manila Epilepsy Congress 22nd to 25th March 2012
 - 20. Elected as Secretary Clinical Pharmacology, Indian Society of Pharmacology(IPS), India (2012-2014)

- 21. Co-Chairman India Initiative Programme, Indian Pharmacology Society(IPS) 2014
- 22. Selected as Core panel of expert for **Investigational New Drug committee (IND)** under chairmanship of director general & secretary of health, ICMR, Ministry of Health and Family Welfare, Govt of India, Nirman Bhawan, New Delhi.
- 23. Selected as Core panel of expert for Task Force to frame guidelines for submission of dossiers or proposals for regulation of **biotech products** (r-D~A product), Ministry of Health and Family Welfare, Govt of India, Nirman Bhawan, New Delhi, 2011
- 24. Elected for Editorial Board, World Journal of Gastroenterology
- 25. Elected as Editorial Board for Journal of Neuroscience and Behavioral Health
- 26. Elected as member advisory board Indian Journal of Pharmacology.
- 27. Elected for Editorial Board of Gastroenterology and Hepatology (GH).
- 28. Elected as Editorial Board for Journal of Neuroscience and Behavioral Health.
- 29. Awarded Best 2nd Prize for paper entitled: "Effects of artemisinin, artemether, arteether on the pharmacokinetics of Phenytoin". *In International Comprehensive Update on Diagnostic and Therapeutic in Epilepsy and Neuro-Electrophysiology Workshop (CUTE conference), New Delhi, Feb 4-5, 2006.*
- 30. Elected as Fellow of International Medical Sciences Academy (FIMSA) in 2006.
- 31. Awarded Member of National Medical Academy (MAMS) 2009.
- 32. Executive Committee Member of Society for Rational Drug Use, India.
- 33. Travel Grant from Department of Science and Technology (DST) to attend IMSACON at Clare College in July 2002, Cambridge University, UK.
- 34. Travel Grant from Department of Science and Technology to attend IMSACON at Mayo Clinic in September 2003, Rochester, Minnesota, USA.
- 35. Travel grant from Indian National Sciences Academy to attend International Challenges in Pediatric Pharmacology, Satellite Symposum (15th World Congress of Pharmacology) Shanghai, China June 28 30, 2006.
- 36. Nominated as Indian delegate to attend IUPHAR, July 2014, Cape town, South Africa from INSA, Govt. of India
- 37. Travel Award from CSIR 2008 to attend Epilepsy Congress, Berlin, Germany
- 38. Travel Award from DST 2008 to attend Experimental Biology, Washington DC,USA
- 39. Travel Award to USA from UGC 2008.
- 40. Travel Award from UGC 2009, to attend Experimental Biology, New Oreland, USA
- 41. Travel Award from UGC 2014, to attend Therapeutic Drug Monitoring Conference at Prague, Europe.
- 42. Executive Committee Member of Society for Rational Drug Use, India.
- 43. Executive Committee Member of Society for Pharmacovigilance, India.
- 44. Awarded Bursary to assist participation in the 9th Asian & Oceanian Epilepsy Congress (AOEC), 22-25th March 2012 in Manila, Philippines
- 45. Awarded Independent Senior Research Fellow (ICMR-SRF) 2012 to Baldeep Kumar under Dr. Bikash Medhi
- 46. Awarded Independent Senior Research Fellow (ICMR-SRF) 2012 to Rakesh K Ruhela under Dr Bikash Medhi

- 47. Dr. Bikash Medhi, Dr. Pooja Sarotra and Ajay Prakash awarded for Clinical Research Training program by Department of Biotechnology (DBT) under, MoH, Govt. of India
- 48. Kumar B and Medhi B, ICMR awarded to Baldeep Kumar for Clinical Pharmacology training program on PK/PD
- 49. Ruhela R K and Medhi B, ICMR awarded to Rakesh Kumar Ruhela for Clinical Pharmacology training program on PK/PD
- 50. Prakash A, Medhi B & Chopra K. ICMR awarded to Ajay Prakash for Clinical Pharmacology training program on PK/PD.
- 51. Prakash A, Medhi B & Chakrabarty A. Growth factor induced stem cell attenuates an acute phase change induced by partial cerebral ischemia in mice. SfN-IBRO International travel Award, awarded to Ajay Prakash to present their research work in Neuroscience 2012.
- 52. Mr. Shubham Misra, PhD student has been awarded travel award to attend AAICAD 2011, at Paris France
- 53. Awarded Independent Senior Research Fellow (2008) (ICMR-SRF) to Ajay Prakash under Dr. Bikash Medhi
- 54. Prakash A, Bansal D & Medhi B. DST travel award-2008, granted to Ajay Prakash for presenting their work in Annual meeting of Safety Pharmacology Society, Madison, USA.
- 55. Awarded International Travel Fellowship from Alzheimer's Association International Organization (AAIC), July 18-22, 2015 at the Washington DC, USA
- 56. Selected as lead GLP Inspector by National GLP Compliance Monitoring Authority, Department of Science and Technology (DST), New Delhi



(a) Publication: Number of Papers as First Author:

	Pu	blished	Sent for	Presented at
	Indexed	Non-	publication	conferences
		indexed	(with proof)	
National	100	25	10	70+(GL 300)
International	250	1	20	80
Total	350	26	30	380

Publications:

4. Chapters in Books/Book(s) edited (Detailed of the book name, publishers, year of publication and page number of chapters):

Text Book and BOOK CHAPTERS

- Practical Manual of Experimental and Clinical Pharmacology by Bikash Medhi, Ajay Prakash., JP Brothers Publication, 2010, New Delhi
- 2. Advanced Pharmacology by Bikash Medhi & Ajay Prakash Publishers:
 PharmaMed BSPublication, Hyderabad Ist Edition, 2014
- Medhi B, Prakash A. Advanced Pharmacology (Student Edition-Reprint), PharmaMed Press/BSP Books, 2015
- **4.** Advanced Pharmacology, Second Edition, 2018. PharmaMed Publishers(BSP Books), Hyderabad, Editor: **Prof Bikash Medhi** and Dr. Ajay Prakash.
- 5. Clinical Research, principle, practice and perspective by Niti Mittal & Bikash Medhi

Book Chapters:

- One Chapters for MEDICINE UPDATE, Published by Bhabani Offset & Imaging System Pvt. Ltd. 2007 (December) Bikash Medhi, Fixed dose combinations (FDC) and its present scenario p 45-47.
- 2. Chapter in books/ Books Edited: written five Chapters for Text Book of Pharmacology by Dr. S D Seth, 3rd Edition, Published by ELSEVIER, December 2008:
- 3. Analgesic-Antipyretic and Anti-inflammatory Drugs: Drugs for the Treatment of

- Rheumatoid Arthritis and Gout (VI.35)
- 4. Alcohol (III.130)
- 5. Central Nervous System Stimulants (III.150)
- 6. Toxicology: Heavy Metals and Their Antagonist (XIV.3)
- 7. Opioid Analgesics and Antagonists (III.137)
- 8. One Chapters for MEDICATION & DRUG SAFETY, Bikash Medhi., Sarighat Press, Guwahati.
- ELEMENTS OF PHARMACOVIGILANCE: RISK MANAGEMENT AND BENEFITS, SAZAL PATYAR &BIKASH MEDHI, KOLPOSKAR PUBLICATION, 2010, Editor Raman Shegal
- 10. One Chapters Bacteria and Cancer", Springer Publishers.
- 11. Revised Chapters 1-15th of Modi's Medical Jurisprudence and Toxicology, publisher Lexis Nexis
- 12. Hospital Administration- A Problem- Solving Approach; Editors: Sonu Goel. Anil Kumar Gupta. Amarjeet Singh, Publishers: elsevier, year 2014
- 13. Harmanjit Singh, Bikash Medhi, Department of Pharmacology, PGIMER, Chandigarh, MEDICAL RECORD MANAGEMENT pages 370-374, Elsevier Publisher, New Delhi
- 14. Harmanjit Singh, Bikash Medhi, Management of hospital pharmacy services, page 170-176, Department of Pharmacology, PGIMER, Chandigarh, Elsevier Publisher, New Delhi.
- 15. Ajay Prakash, **Bikash Medhi**, Raman Aggarwal, Debasish Hota, Uma Nahar Saikia, Amitava Chakrabarti. Neuroprotective activity of progesterone in mice: translational evidence for trial in human stroke. Editor, Roy A and Gulati K, *Vidyanilyam Prakashan*, Delhi; Transnational Research in new drug development 2012, 55-86.
- 16. Invited Book Chapter "Bacteria for cancer therapy" for the book edition on "Current Strategies in Cancer Gene Therapy, published by Springer Int. Publisher. Over 200 volumes have been published in the series to date, and further volumes are in preparation.
- 17. Subodh Kumar; PhulenSarma; Ajay Prakash; Bikash Medhi. (2018). Recent Progress in Bacterial-Mediated Cancer Therapy. Book: Cancer Therapy, Publishers: Meddocs Publishers

- 18. Subodh Kumar; PhulenSarma; Ajay Prakash; Bikash Medhi, K L Khanduja. Cigarette smoke induced oxidative stress in type I and type II lung epithelial cells (2019). Book: Oxidative Stress in Lung Disease, Publishers: Springer Nature Publishing group.
- Rupa Joshi, Nitika Garg, Ajay Prakash, Bikash Medhi. Biological Passport.
 Published in Advanced Pharmacology. PharmaMed Publishers (BSP Books)-Second Edition, Hyderabad, 2018.
- 20. Praveen Kumar, Neha Dhir, Bikash Medhi. Drugs in legal aspects. Published in Advanced Pharmacology. PharmaMed Publishers (BSP Books) -Second Edition, Hyderabad, 2018.
- 21. Rupa Joshi, Ajay Prakash, Bikash Medhi. Drug Excipient. Published in Advanced Pharmacology. PharmaMed Publishers (BSP Books) -Second Edition, Hyderabad, 2018.
- 22. Seema Bansal, Saniya Mahendiratta, Subodh Kumar, Ajay Prakash, Bikash Medhi. Nutraceuticals. Published in Advanced Pharmacology. PharmaMed Publishers (BSP Books) -Second Edition, Hyderabad, 2018.
- 23. PhulenSarma, Subodh Kumar, Abhishek Mishra, Vidya Mahalmani, Ajay Prakash, Bikash Medhi. Virtual Clinical Trial. Published in Advanced Pharmacology. PharmaMed Publishers (BSP Books), Hyderabad, 2018.
- 24. Rupa Joshi, Amit Raj Sharma, Manisha Prajapat, Ajay Prakash, Bikash Medhi. Metagenomics. Published in Advanced Pharmacology. PharmaMed Publishers (BSP Books), Hyderabad, 2018.
- 25. Dhruv Mahendru, Ajay Prakash, **Bikash Medhi**. Therapeutic Use Exemption. Published in Advanced Pharmacology. PharmaMed Publishers (BSP Books), Hyderabad, 2018.
- 26. Vidya Mahalmani, Surinder Pal Singh, PhulenSarma, Subodh Kumar, Ajay Prakash, Bikash Medhi. Systems Pharmacology. Published in Advanced Pharmacology. PharmaMed Publishers (BSP Books), Hyderabad, 2018.
- 27. ShringikaSoni, Ashutosh Singh, Sammy Shammy Chandel, Subodh Kumar, Ajay Prakash, Bikash Medhi. Forensic Pharmacology. Published in Advanced Pharmacology. PharmaMed Publishers (BSP Books), Hyderabad, 2018.
- 28. Neha Dhir, Shweta Sinha, **Bikash Medhi**. Drug Repositioning. Published in Advanced Pharmacology. PharmaMed Publishers (BSP Books), Hyderabad, 2018.

5. (a) Projects conducted as Principle Investigator during the period of Evaluation

S. No.	Project Title	Sanction date/Start	Sponso ring	Funds received	Highlighting of Progress
110.		date/Start	agency	received	(in 100 Words)
		Proposed			
		Completio n Date			
1.	Combined effects of G-CSF	15.09.2010	ICMR	20 Lak	Completed
1.	and dizocilpine (MK-801)	to	TOWIT	approx	Completed
	on acute phase changes	15.09.2013		арргол	
	induced by partial global	1010912010			
	cerebral ischemia in mice				
	(58/18/2008-BMS)				
2.	Study to evaluate correlation	01.01.2012	ICMR	20 lak	Completed
	of different type of	to		approx	
	peripheral inflammation and	31.12.2014			
	epilepsy and role of				
	cytokines in inflammation				
	induced in experimental model in rats				
	(58/26/2010-BMS)				
3.	Effect of Metformin on	01.11.2012	ICMR	20 lakh	Ongoing
	Alzheimer's Disease in rats	to		approx	
	(54/18/2008-BMS)	31.10.2015			
4.	Development of ophthalmic	01.08.2012	ICMR		Ongoing
	formulations of	to			
	acetazolamide and	31.07.2016			
	memantine using novel drug	(Extension			
	delivery techniques for the treatment of glaucoma)			
	(45/8/2012-PHA/BMS)				
5.	Comparative Evaluation of	01.06.2012	ICMR		Ongoing
	Thalidomiode, Sulfasalazine	to			2 0
	with Nanotechnology Based	30.05.2016			
	Drug Delivery in	(Extension			
	Experimentally Induced)			

	Inflammatory Bowel				
	Disease in Rats				
	(45/24/2011/NAN-BMS)				
7	Effect of Risperidone and Withaniasomnifera treatment alone and in combination on behavioral and molecular parameters in a modified valproic acid induced model of autistic spectrum disorders (ASD) & experimentally induced epilepsy in rats Nephroprotective	27.12.2013 to 27.12.2016	DBT	60 lakh approx	Ongoing
	therapeutic validation of ethnomedicinal plants of NE India against cisplatin induced chemotherapeutic toxicity (File No. BT/335/NE/TBP/2012)	to 06.11.2016	DDT		
8	Evaluation of the potential of probiotics for the prevention and treatment of intestinal and vaginal infection", (BT/PR-14969/FNS/20/506/2010)	05.07.2011 to 05.07.2014	DBT	20 lakh	Completed
9	To establish the diagnostic criteria for the celiac disease patients with the higher titers of h-tTG/DGP (SR/SO/HS/189/2013)	22.05.2015 to 22.05.2018	DST	55 lakh approx	Ongoing
10	ICMR project on Pharmacogenomics	2014	ICMR		In principle approved
13	ICMR thesis funding of Dr. RamayaRao: Experimentally induced various inflammatory models and seizure: understanding the role of cytokine in rat.	2007	ICMR		Completed
14	ICMR thesis funding of Dr. Veeru Prasad: Comparative evaluation of different doses of green tea extract alone and in	2008	ICMR		Completed

	4			
	combination with			
	sulfasalazine in			
	experimentally induced			
	inflammatory bowel disease			
	in rats			
15	ICMR thesis funding of Dr.	2009	ICMR	Completed
	Prashantrana:			
	Comparative evaluation of			
	aceclofenac, diacerein and			
	ricinoleic acid alone and			
	combination in			
	experimentally induced			
	arthritis in rats.			
16	ICMR thesis funding of Dr.	2012	ICMR	Completed
	ShobanBabu: Comparative			
	Effect of Different			
	Polyphenols of Green Tea			
	Extract with			
	Nanotechnology Based Drug			
]			
	Delivery alone and			
	Combined with			
	Sulfasalazine in TNBS			
	Induced Inflammatory			
	Bowel Disease in Rats.			
17	Evaluation of effects of	2014	ICMR	
	antimalarial drugs and their			
	nanoformulations in			
	experimentally induced			
	malaria in drug resistant			
	Plasmodium berghei rodent			
	model			
	(ICMR Independent SRF			
	Ashutosh)			
18	Evaluation of	2018-2021	ICMR	Ongoing
	neuroprotective effect of			
	GCSF and plant herb in			
	ASD.			
19	To establish the diagnostic	2015-2018	DST	Completed
	criteria for celiac disease			
	patients with higher titer of			
	h-ttg/DGP.			
20	To elucidate therapeutic	20 <u>-</u> -2018	PGIME	Completed
	potential of GCSF in ASD		R	

21	Pharmacological	2017-2019	DST-	Completed
	investigation to explore the role of PI3K/AKT pathway in type 3 diabetes		SERB	
22	To study the neuroprotective effect of PERK inhibitor, GSK2606414 in middle cerebral artery occlusion induced model of stroke in rats.	2018-2021 (DHR)	DHR	Ongoing
23	Role of metformin in modulating neuroimmuno-inflammation in experimental models of status epilepticus.	2017-2020	DBT	Ongoing
24	Understanding potential mechanisms of third generation antiepileptic drugs i.e. Brivaracetam and eslicarbazepine, in cognitive impairment induced by kindling model of epilepsy in rats: A proof of concept study	2017-2019	DST- SERB	Completed
25	To study the role of fingolimod, nitric oxide inhibitor and p-glycoprotein inhibitor in reducing p-glycoprotein activity: functional implication for pharmacoresistance in epilepsy.	2015-2019	ICMR	Completed
26	Evaluation of 3,3'-dimethylmethane and valproic acid alone and in combination in experimental model of traumatic brain injury in rats.		PGI	Ongoing
27	Elucidation of effect of cysteamine and thymulin alone and in combination in experimental model of celiac disease in mice: An exploratory study	2019-2022	ICMR- SRF	Ongoing

20	T 1 4 41 CC 4 C	2017 2010		
28	To evaluate the effect of	2017-2019		Ongoing
	bone marrow stem cell			
	secretome by exploring their			
	mechanistic role in			
	neuroprotection by pre-			
	clinical model of			
	Parkinson's disease in rats			
29	Evaluation of predictors of	2016-2019	DHR	Ongoing
	prolonged			
	thrombocytopenia in			
	patients with dengue.			
30	Adverse Drug Reactions and	2017-2020	ICMR	Ongoing
	Gene Polymorphism:			
	Linking the evidence bases			
	research in drug treatment			
	and onset of adverse drug			
	reaction.			
31	To evaluate the role of	2019-2021	ICMR	Ongoing
	calorie restriction along with			
	a modulator on circadian			
	rhythm regulation and their			
	combined effect on glioma			
	suppression: in vitro and in			
	vivo studies			
32	Clinical, metabolomic and	2019-2022	ICMR	Ongoing
	pharmacogenomic			
	predictors of anti tubercular			
	therapy (att) induced			
	hepatitis in patients with			
	tubercular meningitis"			
33	Rational use of drugs	2019-2022	ICMR	Ongoing
34	Drug Development unit and	2019-2022	DST	Ongoing
	training centre for			
	Neurological disorders: A			
	capacity Building			
	Program			
35	Effect of interplay between	2019-2022	ICMR	Ongoing
	miR-2909 and anti-			
	psychotic drugs on cancer			
	cell epigenomics			
36	To elucidate the role of alpha	2019-2022	ICMR	Ongoing
	estradiol on parkinsonism in			
	translational and surgical			
	model of menopause			
	1 1			ı

b <u>) Sponsored Projects as Co-Prinicipal Investigator</u>

S. No	Project Title	Sanction date/Start date/ Proposed Completion Date	Sponsoring agency	Funds received (in rupees)	Highlighting of Progress in 100 words
1.	Correlation of Biomarkers and advanced imaging techniques with disease severity in patients with dementia (2013-2744), PI: Dr. Manish Modi	(2013-2744)	ICMR	60,78,442.00	On going
2.	Development of pharmacogenomic SNP database of two metabolic genes CYP3A4, CYP2C9 and CYP2C19 for predicting adverse drug reactions in epileptic patients receiving Carbamazepine or Phenytoin therapy in North Indian population (2012-0597) PI: Dr. Manish Modi	(2012-0597)	ICMR	23,79,300.00	On going
3	Study of pathogenesis of HSV-linduced uveitis in a rabbit animal model and development of a topical microemulsion of vitamin D as a therapeutic regimen submitted by you for financial support to this Department. The Permanent Project Registration Number of this project is: BT/PR10811/MED/29/840/201 4: PI Dr Mini P Singh	BT/PR10811/ME D/29/840/2014		60 lakh	On going
4.	DSIR project, Delhi University Characterization of a unique dihydropyrimidinone, ethyl 4-(4'- heptanoyloxyphenyl)-6-methyl- 3,4-dihydropyrimidin-2-one-5- carboxylate, as an effective antithrombotic agent in a rat experimental model.	2009-2010			On going

) Extramural grant for Different Centers

S. No.	Name of Centre	Sanction date	Sponsoring agency
1.	FIST-DST Centre for Small Animal Scanning System	2013	DST
2.	Pharmacovigilance Centre & Regional training and Resource Centre, PGIMER, Chandigarh	2010	Indian Pharmacopoeia Commission (IPC)
3.	Pharmacovigilance Centre	2014	DHR-ICMR
4.	Clinical research Centre: PK-PD Modeling	2014	DHR-ICMR
5.	Centre for Excellence (awaiting)		CDSA-DBT
6.	Pharmacogenomics Project (in Prinicipal approved)	2014	ICMR
7.	Materiovigilance Centre	2015	Indian Pharmacopoeia Commission (IPC)
8.	National Anti-Doping Agency	2017	Ministry of Youth and Sports Govt. of India

6. Contribution to Teaching during the period of evaluation for promotion: At PGI-any special contribution to highlight

Contribution to academics (Experimental/Clinical)

Techniques in biomedical research play major role and have crucial function in any kind of pharmacological or basic research. It is a skill and science and its development helps other researchers working in the same field. Keeping in mind I have standardized the several experimental (animal) models and techniques in our laboratory

Standardization of various animal models

Established Experimental model of Autism: Autism is a heterogeneous neurodevelopmental disorder of unknown aetiology that affects 1 in 50-80 individuals. Diagnosis is based on three categories of behavioural criteria: abnormal social interactions,

communication deficits and repetitive behaviours. We have established a well equipped Neurobehavioural research laboratory (NBRL) to study autism in rats and successfully established the animal model of autism in rats.

Established Experimental model of Celiac disease: Lifelong gluten free diet is the only therapy for celiac disease (CD) which is difficult to comply. So, in order to optimize the alternative non-dietary therapies for CD, appropriate animal model is required to quantify the activities of drug candidates in the upper small intestine. In a path to develop an animal model which can be a good assay system to evaluate new drug therapies, the current study used Swiss albino mice and black C57 mice.

Cerebral Ischemia Model: The mouse model is developed and standardized in our laboratory to assess the drugs used for treatment of cerebral stroke. The model is bilateral common carotid Artery occlusion (BCCAO).

Colitis Model: This model established to screen the drugs to treat ulcerative colitis. The model is established into rats by using Tri nitro Benzene Sulphonic acid (TNBS)

Arthritis Model: This model is established in Guinea Pigs by using Freund's Adjuvant directly intrarticularly.

Colon cancer model: Colon cancer model is established in our laboratory into rats by the administration of 1,2-dimethylhydrazine (DMH).

Alzheimer Model: This is commonest model used in the development of Alzheimer Disease across the globe. This model established in our laboratory by using the ICV injection of Amyloid- β_{1-42} protein.

Depression Model: Established by using Forced Swim test (FST), both in rats and mice. **Epileptic model:** is established in our laboratory by using Pentylene Tetrazole (PTZ) chemical.

Standardization of equipments

BP Apparatus: Non-invasive equipment used to measure the BP of rats by Tail cuff method is established in our laboratory.

Langendorff's apparatus: This is an *in vitro* method used to assess the cardiac output, and is used to screen the several drugs in CVS, is also established.

Experimental model Computerization help in generation of data among UG and PG medical student: I have generated data on computerized assisted learning in order to minimize the use of experimental animals.

Contributed in DM curriculum for MCI, India sponsored by WHO

Contributed toward management of epilepsy. The pharmacokinetic interaction of different drugs with phenytoin and carbamazepine, especially reports of interaction with artemisin compound, etoricoxib, aceclofenac, newer proton pump inhibitor.

Also analyzed TDM pattern of antiepileptic sand lithium in our centre which will help the other centre in TDM service to hospital patient's care.

Some of the projects on peripheral inflammation with seizure susceptibility have shown strong evidence that inflammation can cause the increase seizure susceptibility in chronic inflammatory process.

Work on inflammatory bowel disease indicate efficacy of Thalidomide and sulfasalazine combination in the treatment of IBD as well as efficacy with Manuka honey, the Manuka honey also found to be effective in MDR TB *in vitro* study.

Besides this, research is on going to develop a suitable route of administration of anticholinergic drugs for paediatric patients with over active bladder. Regarding curriculum in experimental pharmacology,

Outside Institute- Invitation for Lecture, Visiting Professor, Contribution in National bodies to frame MCQs, OSCE etc.

Invitation for Lecture

- Workshop on Essential Medicine, Adverse Drug Reactions and Therapeutic Drug Monitoring at KGMU, Lucknow deliverd guest lecture on Spontaneous Adverse Drug Reaction Monitoring, 22nd and 23 August 2005. KGMU, Lucknow
- 2. Drug discovery and development in new millennium (d3nm-3) workshop, **NIPER**, **Mohali**, **Punjab delivered guest lecture on** Conducting Phase III and Phase IV trials,21-24 Feb,2005.
- 3. (i) Indian Pharmacological Society, Annual conference, Oct 31 to Nov 3rd 2007, NIPER, Mohali, Punjab. Anticytokine therapy in inflammatory bowel disease (IBD): current and future perspectives
- 4. (ii) Association of Physician of India (API) at Guwahati, 14th to 16th December, 2007. Fixed Dose Combinations (FDC) and its present scenario
- 5. (iii) Indian Orthopaedic Society, Chandigarh on 6/10/2007: Lornoxicam: its safety and efficacy in inflammatory conditions.
- 6. Indian Pharmacovigilance Society, Annual conference, January 9-11th 2009, Kolkata: Medication Error and Drug Safety.
- 7. Association of Orthopaedic Society of India at Chandigarh Sept 2008. Diacerin in the treatment of Osteoarthritis.
- 8. Basic Workshop on Clinical Research Inspection 9-10th January Kolkata, 2009 , delivered three guest lecturers:
 - (a) Informed Consent
 - (b) Assessing sponsor and ethics committee compliance
 - (c) Inspectors' Preparation for a Clinical Investigator Inspection
- 9. Workshop on Clinical Research Inspection 14-15th February, Chennai, 2009, delivered four guest lecturers:
 - a. Understanding clinical trial
 - b. Process of informed Consent
 - c. Assessing sponsor and ethics committee compliance
 - d. Assessments of protocol at Clinical Investigator Inspection site
- 1) GCP Clinical trial inspection workshop 24& 25th April 2009, New Delhi: (a) Understanding Clinical Trials (b) Inspection of Sponsor and Ethics committee (c) Inform consent.
- 2) Audits and Inspections of Clinical Trials, National Clinical Research Course Workshop 28th August 2009 (DBT, sponsored) at AIIMS, New Delhi.

- 3) Nanotechnology Based Therapeutic Design and Delivery in Animal Model Systems at National symposium on Animal Remodeling: From Laboratory to Clinic at PGIMER on 3rd Oct 2009 organized by Department of Experimental Medicine and Biotechnology (INSA sponsored)
- 4) Inflammation and seizure susceptibility: a new dimension toward epilepsy research at International Conference on Integrative & Personalized Medicine and 42nd Annual Conference of the Indian Pharmacological Society (IPSCON-2009), that is scheduled to be held between December 10-12, 2009 at Swabhumi, Kolkata.
- 5) International Symposium on Pharmaceutical Medicine, January 10th 2010 by Ministry of Chemical & Fertilizer, Patna, NIPER, Bihar, lecture on Cytokine and epilepsy.
- 6) Safe Drug Practice at XIX APICON, Assam and 3^{rd} NEAPICON 2009 at Sibsagar , Assam on 25^{th} to 27^{th} December.2009.
- 7) National Symposium on Pharmacovigilance 17th March 2010, at Guwahati Medical College, Guwahati, Assam: Spontaneous Adverse Drug Reaction
- 8) Symposium on "Pharmacovigilance" organised by North Eastern Indira Gandhi Regional Institute of Health & Medical Sciences, Shillong & Indian Pharmacological Society (IPS) Clinical Pharmacology Section on 18th March 2010, lecture on Pharmacovigilance Need, Relevance & Scope.
- 9) Delivering lecture in UGC Networking Programme, on 30.03.2010 Venue: ICSSR Complex (Near Faculty House), Panjab University 160014.
- 10. Audits and Inspections of Clinical Trials, IPS pre-conference workshop 2010
- 11. Presented Clinical trial inspection at Clinical Pharmacology Section of Indian Pharmacological Society (IPS) in collaboration with All India Institute of Hygiene & Public Health, Kolkata (AIIHPH) and Calcutta School of Tropical Medicine, Kolkata (CSTM) shall hold a six-day National Workshop on Basics of Clinical Research Methods during January 31 February 05, 2011 at AIIHPH Auditorim, Kolkata.
- 12. Indo-Italian meet New Delhi December 2010; Study to evaluate correlation of oxidative stress in experimentally induced seizure and cerebral ischemia
- 13. Molecular Pathogenesis of Neurodegenerative Disease, Under the aegis of the UGC-Special Assistance Programme On February 22, 2011, Panjab University, presented Clinical relevance of biomarker in early diagnosis and intervention of neurodegenerative diseases
- 14. Second National Clinical Research Training Course from August 22-27, 2011, organized by Department of Pharmacology, All India Institute of Medical Sciences, with support of DBT, New Delhi: presented lecture on Clinical Trial Inspection: Indian prospective.
- 15. Indo-Italian conference cum workshop: presented: Oxidative stress and experimentally induced Inflammatory Bowel Disease (IBD)
- 16. DST workshop on Research Methodology for women on 3rd- 7th October 2011 at Department of Pharmacology; All Indian Institute of Medical Sciences, New Delhi presented *Pre-clinical toxicity study and Drug Development*

- 17. ASACON 2011 at Kaziranga, Assam 28th& 29th October 2011; presented Antibiotic Resistance and Current Scenario.
- 18. National Conference and CME cum Workshop of Indian Society for Rational Pharmacotherapeutics with the theme "Bridging Clinical Medicine with Rational Pharmacotherapeutics" at Govt Medical College, Jammu on 25th 27th November, 2011. Presented lecture on Pharmacovigilance and participate in panel discussion
- 19. Four Guest lecture for telemedicine –Bhutan (a) Therapeutic Drug Monitoring, (b) Anti-biotic Resistance (c) Medication error (d) Pharmacovigilance
- 20. Presented lecture on symposium on patients compensation in clinical trial on 28th December in DCGI office 2011.
- 21. Invited for guest lecture Salt Lake City on epilepsy or any other neurological disorders, University of Utah.
- Delivered a talk on Essential Medicine co-morbidities and health system response in WHO meeting on 26-27th September2013, New Delhi.
- 23. Delivered a talk in Workshop on GCP and schedule Y organized by WHO, New Delhi on 24-25th June 2013.
- Delivered a talk on Ethical Aspects of Biomedical Research on Human Participant WHO-ICMR, New Delhi on 28-29th October 2013.
- 25. Delivered a talk in WHO Pharmacovigilance meeting at Hyderabad on 9-10th December 2013 on ADR causality assessment.
- 26. Delivered a two talk in WHO Pharmacovigilance meeting at Ahmadabad on 12- 13th December 2013 on ADR coding and causality assessment.
- 27. Delivered a guest lecture on Drug kinetics in special population in PK/PD, ICMR workshop at Navi-Mumbai Tata Hospital on 19–20th May 2013.
- 28. Delivered a two lecture at IPC-TA training program on 10th May 2013.
- 29. Delivered a talk in ethical practice and Indian Scenario 25th Meeting on Clinical trial Day at Kolkata.
- 30. Delivered a lecture at GMC-NIPER, Guwahati on 15-16th June 2013 on Recent advances in Biotechnology.
- 31. Delivered a lecture on Patients safety and Adverse Drug Reaction in NINE-CME at PGIMER, Chandigarh on 20th April 2013.
- 32. Delivered a talk at NIPER, Mohali on 11th May 2013.
- 33. Delivered a lecture in CME on Hemovigilance at PGIMER, Chandigarh on 20th July 2013
- Delivered a lecture in CME on Good Clinical Practice at AJ Institute of Medical Sciences, Manglore on 2-3rd August 2013.
- 35. Delivered a three lecture in CME on Pharmacovigilance at Imphal on 28th

- September 2013.
- 36. Delivered two lectures in CME on Pharmacovigilance, Srinagar on 23rd October 2013.
- 37. Delivered two lectures in CME on Pharmacovigilance, Tanda, Kangra on 31st October 2013.
- 38. Delivered two lectures in CME on Pharmacovigilance, Saifai, Etawah on 9th November 2013.
- 39. Delivered a talk in 16TH CPCSEA WORKSHOP at BADDI UNIVERSITY, Baddi on National and International Regulation on animal experiments.
- 40. Delivered two lectures in CME on Pharmacovigilance at Ranchi on 30th November 2013.
- 41. Delivered two lectures in CME on Pharmacovigilance at Aligarh on 7th Dec 2013.
- 42. Delivered a talk in 2nd CME Programme on Haemovigilance at PGIMER, Chandigarh on 14th December 2013.
- 43. Delivered two lectures in 4th Training cum Meeting of Coordinators and Technical Associates of Northern Zone under PvPI at PGIMER, Chandigarh on 21st December 2013.
- 44. Delivered a talk in National Forensic conference at NIPER, Guwahati on 1-3rd February 2014, Forensic Pharmacovigilance and Indian Scienerio.
- 45. Delivered a lecture in 11th Annual conference of International society for heart research, Indian section on 8-9th February 2014 on Recent advances in Drug therapy of Stroke.
- 46. Delivered a talk at Induction cum Training Programme for the Newly Recruited Technical Associates under PvPI on 10-13th February 2013.
- 47. Delivered a lecture in Indian Pharmacological Society North Zone Conference at GLA University Mathura, U.P. on 15-16th February 2014.
- 48. Delivered a four lecture in Indian Pharmacological Society Conference at Banglore on 17-19th December 2013.
- 49. Delivered two lectures in CME on Pharmacovigilance at Chennai on 22nd February 2014.
- 50. Delivered a talk in Forensic Conference at Goa on 25-27th February 2014 on Biomarker and correlation postmortem finding with dementia.
- 51. Presented paper at IUPHAR Meeting, Cape Town on 13-18th July 2014 and attended Joint meeting with British, Australian, Japanese, European, Canadian Pharmacological Societies.

- 52. Attended ASCEPT-MPGPCR Joint Scientific Meeting at the Melbourne Convention and Exhibition Centre from 7 to 11th December 2014, presented scientific paper.
- 53. Participated in 2nd International Conference Kathmandu Symposia on Advanced Materials on 7-10th September 2014 in Kathmandu, Nepal presented lecture on Nanotechnology and Health.
- 54. Attended International conference: SEARAME 2014, Colombo, Srilanka on 12 14th November 2014
- 55. Attended and delivered lecture on "Patients safety and pharmacovigilance Programme of India: present Scienerio" in Health and Medicine conference at Colombo, Sri-Lanka from 17-20th March 2015
- 56. Participated in 3rd international Conference of Nepal Academy of Managements 27-29th March 2015 in Kathmandu University Nepal, presented Patient time lag and satisfaction level in Outpatient Clinics of Tertiary Care and Teaching Centre of North India
- 57. Delivered a lecture in 1st IBRO/APRC Chandigarh Neuroscience School: Basic & Research Concepts of Depression & Cognitive Dysfunction" at Panjab University, Chandigarh, India from 3rd 8th November 2014 delivered lecture on Autism.
- 58. Delivered a talk in CME on Haemovigilance for Clinician, GMCH, Chandigarh on 26th April 2014.
- 59. Delivered a lecture in NRHM workshop on patients Safety and Pharmacovigilance 30th April 2014.
- 60. Delivered a talk on Causality Assessment; the logic and Methods in CME on Pharmacovigilance, Shillong, on 28th June 2014
- Presented Clinical Grand round presentation before faculty and Resident: Medication Error and Patients Safety, NIGRIMS, Shillong on 28th June 2014
- 62. Attended A Mid-term meeting of Indian Pharmacology Society at Department of Pharmacology and Toxicology, West Bengal University of Animal and Fishery Sciences, Kolkata on 2nd August 2014
- 63. Delivered a lecture on Good Clinical Practice (GCP) in GMCH on 5th September 2014 .

- 64. Attended Haemovigilance CME on 17th September 2014 at Government Medical College Patiala, Punjab.
- 65. Participated in Refresher Training for GLP Inspectors on 31st October to 1st November 2014 at CCMB, Hyderabad by DST, GOI, New Delhi
- 66. Participated in Pre-conference workshop and delivered lecture at JIMPER on 20th November 2014
- 67. Attended Rational Pharmaceutics conference in JIPMER, Pondicherry on 20th November 2014
- 68. Delivered four lectures in an event at AJ Institute of Medical Sciences, Mangalore 28- 29th
 November 2014
- 69. Delivered Invited lectures in CDSA-DBT on Ethics on 18th December 2014
- 70. Delivered various lectures on Pharmacology in IPSCON 2014, Guwahati from 28 30th December 2014
- 71. Delivered a lecture in GCP-Training Programme, Maulana, Ambala on 21st February 2014
- 72. Delivered a talk at Anti-doping Awareness Programme held in Chennai on 7th March 2014
- 73. Delivered a talk on Pharmacovigilance Program of India at UIPS, PU, Chandigarh on 21st
 March 2015
- 74. Delivered a lecture in School of Public Heath on Good laboratory Practice and Present need on 21st March 2015
- Delivered two lectures at Anti-doping Awareness Programme at Panjab University, Chandigarh on 26th March 2015
- 76. Delivered two lectures in NADA-CME at Lucknow on 31st March 2015
- 77. Delivered two lectures on GCP training organized by CDSCO-HQ in Hyderabad.
- Delivered lecture on Biomedical Records in Research Methodology Course, PGIMER, Chandigarh

Visiting Professor: To NIPER-Guwahati, NIGRIMS Shillong, NIPER-Mohali, University of Otta etc.

Contribution in National bodies to frame MCQs, OSCE etc.: National Board of Examination (NBE), Different University, Union Public Service Commission etc.

Others:

- Invited as Panelist for Fixed drug combination guideline, Ministry of Health, Nirman Bhawan
 Department of Pharmacology, AIIMS, New Delhi.
- Participated in revision of Essential Medicine List(EDL), DCGI office, Ministry of Health, Nirman Bhawan, Government of India, on 16th September 2009.
- 3. Examiner for Delhi university, Panjub University, Punjabi University
- 4. Examiner for Gurunanak Dev University, Amritsar.
- 5. Executive member of Indian Rational Pharmacotherapeutica
- 6. Executive member of Indian Society of Pharmacovigilance
- 7. Member of DC committee for twenty PhD students

Lecture deliverd and CME organized and attended during 2015-2016

Prof. Bikash Medhi was invited for International Meetings on May 19 - 21, 2015, Tomorrow's Medicines - Pharmacology, Patients and Populations: A Joint Meeting of the Asia Pacific Federation of Pharmacologists, Australasian Society of Clinical and Experimental Pharmacologists and Toxicologists,

the British Pharmacological Society, and the Hong Kong Pharmacology Society; invited to 12th International Conference on Urban Health, Dhaka, Bangladesh, May 24-27, 2015 at Dhaka, Bangladesh and invited for guest lecture on May 7, 2015 for Anti-Doping panel in Ranchi; May 8, 2015, delivered lecture in CME Programme in SMS Medical College, Jaipur; May 30, 2015, Joint Secretary Meeting RRC and JS, Mumbai; CME programme on Pharmacovigilance, June 27, 2015 Sikkim; July 9-10, 2015 International conference on Pharmacovigilance meetings; July 17

-23, 2015 Washington DC Alzheimer's Society USA; July 31, 2015 Symposium on Clinical research Indian Habitat Centre, New Delhi, September 2-4, 2015 Nano-conference in Colombo, Sri Lanka and chaired the session in September 12, 2015 Gastro-Conference, Chandigarh; September 14-15, 2015 Anti-doping awareness programme, Kolkata; September 16, 2015 Anti-Doping Panel meeting at Indian Habitate Centre, New Delhi; Meeting of American Society of Pharmacology from September 28 to October 1, 2015 (Safety Pharmacology Society) at Prague, Czech; October 5-8, 2015 SRP meeting with UMC training; October 9-11, 2015 Path conference, Chandigarh; October 12-15, 2015 Hyderabad OECD meeting; October 21, 2015 Assistant Drug Inspector Training Programme; October 27, 2015 RCU-Chennai Pharmacovigilance workshop; 15th Annual

Conference of Society Of Pharmacovigilance (INDIA) & International Colloquium on Patient Safety October 31 - November 02, 2015, Kolkata; National Centre Participating in Pharmacovigilance Progress on November 3-6, 2015; November 7, 2015 NADA-Anti- dpoing programme, Vanarasi; November 16, 2015 NIB training morning session; NADA awareness programme at 3 PM on November 16, 2015; November 27, 2015, CME on Pharmacovigilance, Kolkata; December 4-6, 2015 ISRPT-2015, Chandigarh; Two days Training/ Workshop on Pharmacovigilance and Interactive session for the Coordinators of north zone on December 8-9, 2015 at Chandigarh; December 17-19, 2015 IPS annual meeting in Rajkot, Gujarat; January 13, 2016 Training Programme for Drug Inspector at NIB; January 18-20, 2016, Autism conference, New Oreland, USA; DBT for Global Biotechnology Summit being organized on February 5-6, 2016 at Vigyan Bhawan, New Delhi; 8th NADA, LPU, Jalandhar; 10th workshop on NADA, Chandigarh group of Colleges, Chandigarh; February 11-13, 2016 SRIPS 2016 at Belgum, Karnataka; February 17, 2016 Pharmacovigilance training programme at IPC; 26th IPC-current scenario meeting National Symposium on "Quality, Safety and Rationale use of Medicines; 11th Asia Pacific Travel Health Conference, Kathmandu, Nepal from March 2-5, 2016; 11th March Pharmacovigilance CME in Amity, university; March 11, 2016, Bidaqualine DSMB meeting in Nirman Bhawan and Anti-doping panel at 3 PM, New Delhi; March 19, 2016 Patiala Lecture, Patiala University, Patiala; March 21, 2016 Pharmarendezvous 2016, Varoda, Gujarat; 29th World TB-day Lecture in AIIMS. New Delhi; 30th NWCP lecture in PGI and CME on Pharmacovigilance in Faridkot University,

He has organized number of workshops/ CME and conference, May 8, 2016 CME Programme in SMS Medical College, Jaipur; October 9-11, 2015 Path Ethical workshop and conference, Chandigarh; December 4- 6, 2015 ISRPT-2015; December 8 - 9, 2015, Training/ Workshop on Pharmacovigilance and Interactive session for the Coordinators of north zone, Chandigarh and March 31, 2016, CME on Pharmacovigilance in Faridkot University, Faridkot, Punjab.

Faridkot, Punjab on March 31, 2016.

8. Thesis/dissertation (PhD/MD/MS/DM/MCh) guided as main guide/co- guide (specify) during the period of evaluation:

T hesis/ Dissertation

S. No	Degree (PhD/MD/MS/DM/MCh)	Guide/Co- Guide	Name of his/her Thesis/Diss ertation	Application's Contribution
1	Ph.D Pharmacology Elucidation of neurobehavioral and Neuroprotective effect of G- CSF	Guide	Mr. Ajay Prakash	Making Hypothesis, Design of the study, Experimental models, selecting material and methods and in several parameters assessment
	Ph.D Pharmacology Effect of Artemisinin compounds and 5- Fluorouracil, alone and in combination, in 1, 2- dimethylhydrazine- induced colon carcinogenesis in rats	Guide	Ms Sazal Patyar	Making Hypothesis, Design of the study, Experimental models, selecting material and methods and in the assessment of various parameters
3	Ph.D Anesthesiology Prospective Evaluation of Pharmacokinetics model of Propofol for Indian Populations	Co-guide	Mr. Avinash Puri	Propofol estimation by HPLC, Calculation ofdiffrent pharmacokinetic parameters
4	Ph.D General Surgery Study to evaluate the effect of a nano- formulation of Artemisinin and a novel formulation of 5- Fluorouracil alone and in combination, in 1,2- dimethylhydrazine induced colon carcinogenesis in rats	Co-guide	Dr L Kaman	Development of animal models, Design of the study, Designing materials and methods, assessment of different parameters

5	Ph.D Pharmacology Neurobiological effects of Mesenchymal stem cells alone and its combination with Galantamine nanoparticles in Isoproterenol induced cognitive deficit in rats	Guide	Shubham Misra	Making Hypothesis, Design of the study, Experimental models, selecting material and methods and in several parameters assessment
6	Ph.D Pharmacology Study to evaluate the seizure susceptibility in various experimental models of inflammation and sepsis in rats	Guide	Rakesh Kumar	Making Hypothesis, Design of the study, Experimental models, selecting material and methods and in several parameters assessment
7	Ph.D Endocrinology Efficacy and safety of bone marrow derived mesenchymal stem cell transplantation in type 2 diabetes mellitus"	Co-guide	Shobit Bansali	Making Hypothesis, Design of the study, Experimental models, selecting material and methods and in several parameters assessment
8	Ph.D Cardiology To study the cardioprotective efficacy of natural derivative of Piper longun. L, its synthetic analog, rat mesenchymal stem cells alone and in combination in experimentally induced metabolic syndrome in rat targeting TNFα and identification of major pathway activated by TNFα.	Co-guide	Kanupriya Vashisht	Making Hypothesis, Design of the study, Experimental models, selecting material and methods and in several parameters assessment
10	Ph.D Gastroenterology Evaluation of non-dietary therapeutic approaches for celiac disease an experimental approach	Co-guide	Rahul Singh	Making Hypothesis, Design of the study, Experimental models, selecting material and methods and in several parameters assessment
11	PhD Pharmacology	Guide	Baldeep Kumar	Making Hypothesis, Design of the study,

	Evaluation of pharmacokinetics and pharcodynamics correlation of newer antiepileptic drug in hepatic and renal failures in MES induced seizes in rats			Experimental models, selecting material and methods and in several parameters assessment
12	PhD Pharmacology Effect of Risperidone and Withania somnifera treatment alone and in combination on behavioral and molecular parameters in a modified Valproic Acid induced model of Autistic Spectrum Disorder (ASD) and experimentally induced epilepsy in rats.	Guide	Rakesh Kumar Ruhela	Making Hypothesis, Design of the study, Experimental models, selecting material and methods and in several parameters assessment
13	PhD Immunopathology Role of metformin in neuro- immunoinflammation modulation in experimental models of status epilepticus.	Co-guide	Shree Lalitha Bhoja	Making Hypothesis, Design of the study, Experimental models, selecting material and methods and in several parameters assessment
14	PhD Parasitology In-vitro and in-vivo evaluation of antimalarial effects of novel derivatives of chalcones	Co-guide	Shweta	Making Hypothesis, Design of the study, Experimental models, selecting material and methods and in several parameters assessment
15	PhD Pharmacology Comparative evaluation of green tea extract and EGCG with nanotechnology based drug delivery alone and in combination with progesterone in experimental induced cerebral ischemia in mice.	Co-guide	Harjeet Kaur	Making Hypothesis, Design of the study, Experimental models, selecting material and methods and in several parameters assessment

16	PhD Neurology Study of pharmaco- genetics of antiepileptic drug related adverse reactions in north India population.	Co-guide	Vivek Garg	Making Hypothesis, Design of the study, selecting material and methods and in several parameters assessment
17	PhD Pharmacology Studies on the neuroprotective effects of trpm-2 channel inhibitor flufenamic acid and mesenchymal stem cells secreted secretome on MCAO induced cerebral ischemia	Guide	DHK Reddy	Making Hypothesis, Design of the study, Experimental models, selecting material and methods and in several parameters assessment
18	PhD Pharmacology Mechanistic exploration of role of metformin in neurodegeneration.	Co-guide	Harish Kumar	Making Hypothesis, Design of the study, Experimental models, selecting material and methods and in several parameters assessment
19	PhD Pharmacology Metabolic risks associated with antipsychotic drugs: A cross sectional study	Co-guide	Raghunath Singh	Making Hypothesis, Design of the study, Experimental models, selecting material and methods and in several parameters assessment
20	PhD Neurology Prevalence and association of adipokines drug metabolism and platelet receptor(P2Y12) SNP in ischemic stroke patients with extracranial and intracranial atherosclerotic disease in north Indians	Co-guide	Jitender Goriola	Making Hypothesis, Design of the study, selecting material and methods and in several parameters assessment
21	PhD Neurosurgery To evaluate the neuroprotective effects of Ca2+-activated Cl- channel blocker (Niflumic	Co-guide	Shammy Chandel	Making Hypothesis, Design of the study, Experimental models, selecting material and

	Acid) on Weight Drop and Ferric chloride induced traumatic brain injury in rats.			methods and in several parameters assessment
22	PhD	Co-guide	Dr. Goni	
23	PhD Pharmacology To elucidate the role of Fingolimod, Nitric Oxide inhibitor and P- Glycoprotein inhibitor in reducing P- Glycoprotein activity: Functional implication for pharmaciresistance in Epilepsy.	Guide	Nitika Garg	Making Hypothesis, Design of the study, Experimental models, selecting material and methods and in several parameters assessment
24	MD Pharmacology Effect of artemisnin compounds on pharmacokinetic phenytoin and carbamazepine	Guide	Dr. Manpreet Sukhija	Making Hypothesis, Design of the study, Experimental models, selecting material and methods and in several parameters assessment
25	MD Pharmacology Comparative evaluation of different doses of thalidomide with sulfasalazine in experimentally induced inflammatory bowel disease in rats.	Guide	Dr. Om Prakash	Making Hypothesis, Design of the study, Experimental models, selecting material and methods and in several parameters assessment
26	MD Pharmacology Role of blood biomarkers to differentiate Idiopathic Parkinson's Disease from Parkinson Plus Syndrome.	Guide	Dr. Missamma	Making Hypothesis, Design of the study, Experimental models, selecting material and methods and in several parameters assessment
27	MD Pharmacology The role of plasma biomarker in diagnosis	Guide	Dr. Hari Om	Making Hypothesis, Design of the study, Experimental models,

	and prognosis of Alzheimer's patient			selecting material and methods and in several parameters assessment
28	MD Pharmacology Experimentally induced various inflammatory models and seizure: Understanding the role of cytokine in rat	Guide	Dr. Ramaya Rao	Experimental models development, Design of the study, selecting material and methods and in parameters assessment, other scientific Input
29	MD Pharmacology Comparative evaluation of different doses of PPAR–γ agonist and green tea extract alone and combination with sulfasalazine in experimentally induced inflammatory bowel disease in rats''	Guide	Dr. Prasad Byarav D S	Making Hypothesis, Design of the study, Experimental models, selecting material and methods and in several parameters assessment
30	MD Pharmacology Comparative evaluation of aceclofenac, diacerein and ricinoleic acid alone and combination in experimentally induced arthritis in rats	Guide	Dr Prasant Rana	Making Hypothesis, Design of the study, Experimental models, selecting material and methods and in the assessment of various parameters
31	MD Forensic Medicine Study to evaluate the pattern of substance abuse among injured drivers in Chandigarh zone of north- west India	Co-guide	Dr. Santhil Kumar R	Making Hypothesis, Design of the study, selecting material and methods and in several parameters assessment
32	MD Pharmacolgy Comparative evaluation of different polyphenols of green tea and to study the most effective polyphenol in nanotechnology based drug delivery system alone and in combination with sulfasalazine in experimental	Guide	Dr. Shoban Babu Varthya	Making Hypothesis, Design of the study, Experimental models, selecting material and methods and in several parameters assessment

	inflammatory bowel disease in rats.			
33	MD Anesthesia Comparison of two walking epidural protocol for labour analgesia and their effect on labour and neonatal outcome.	Co-guide	Dr. Anshul Bhatia	Making Hypothesis, Design of the study, selecting material and methods and in several parameters assessment
34	MD Paediatrics Randomized double blind placebo controlled trial to evaluate the role of cyproheptadine hydrochloride in promoting weight gain in children with acute lymphoblastic leukemia	Co-guide	Dr. Bikramjit Das	Making Hypothesis, Design of the study, Experimental models, selecting material and methods and in several parameters assessment
35	MD Anesthesiology Comparison of two walking epidural protocols for labour analgesia and their effect on labour and neonatal outcome	Co-guide	Dr. Anshul Bhatia	Helped in Estimation of Fentanyl plasma level by HPLC, Pharmacokinetic assessment input and calculation of drug level in cord blood
36	MD Paediatrics Evaluation of neutrophilic functions and oxidative stress among children in relation to iron status and acute pyogenic infection: a prospective observational comparative study.	Co-guide	Dr. Vinay Vamdev Kulkarni	Making Hypothesis, Design of the study, selecting material and methods and in several parameters assessment
37	MS General Surgery Therapeutic angiogenesis by autologous transplantation of peripheral blood mononuclear cells in patient with critical limb ischemia – a study.	Co-guide	Dr. Poonam Guha	Making Hypothesis, Design of the study, selecting material and methods and in several parameters assessment

38	MS Orthopaedic Surgery Effect of bone morphogenetic protein granulocyte- colony stimulating factor & bone marrow stem cells on fracture healing in rats with osteoporosis. A comparative study	Co-guide	Dr. Kishan R. Bhagwat	Making Hypothesis, Design of the study, Experimental models, selecting material and methods and in several parameters assessment
39	MS General Surgery Cytokines response following autologous stem cell treatment in patient suffering from lower limb ischemia.	Co-guide	Dr. Ajay Meena	Making Hypothesis, Design of the study, selecting material and methods and in several parameters assessment
40	MS General Surgery Effect of preoperative atorvastatin on liver reperfusion injury in major hepatic resection: A randomized controlled trials.	Co-guide	Dr. Shashwat Sarin	Making Hypothesis, Design of the study, selecting material and methods and in several parameters assessment
41	MS ORTHOPAEDICS Comparative efficacy of conventional and nanoparticle coated antibiotics in infected open fractures of rats. An experimental study	Co-guide	Dr. Gokul G.	Making Hypothesis, Design of the study, Experimental models, selecting material and methods and in several parameters assessment
42	MS General Surgery A prospective observational study: to evaluate the prognostic significance of S-100B and neuron specific enolase in patient with severe traumatic brain injury	Co-guide	Dr. Diptiranjan Satapathy	Making Hypothesis, Design of the study, selecting material and methods and in several parameters assessment
43	MS General surgery Effect of intravenous fluid resuscitation on	Co-guide	Dr. Shibojit Talukder	Making Hypothesis, Design of the study, Experimental models,

	inflammatory markers of acute pancreatitis.			selecting material and methods and in several parameters assessment
44	MS General Surgery Therapeutic Angiogenesis by Autologus Transplantation of Peripheral Blood Mononeuclear Cells in Critical Limb Ischemia	Co-guide	Dr. Poonam Guah	Randomization in clinical trials, Design of the study,data analysis, calculation and in Cytokines assessment
45	MS General Surgery Influence of hypoxia and hypothermia on predictive value of Mangled Extremity severity scoring system in lower extremity combined vascular orthopedics trauma	Co-guide	Dr. Neeraj Goyal	Randomization in clinical trials, Design of the study, data analysis, calculation and in Cytokines assessment
46	MS General Surgery Cytokinemia Following Reperfusion of Acute Lower Limb Ischemia	Co-guide	Dr. Monica	Randomization in clinical trials, Design of the study, data analysis, Data calculation and in Cytokines assessment
47	MS General Surgery Cytokine response following autologus stem cell treatment in patients suffering from lower limb ischemia	Co-guide	Dr. Ajay Cheema	Randomization in clinical trials, Design of the study, data analysis, Data calculation and in Cytokines assessment
48	MS General Surgery A randomized double-blind, clinical trial comparing 2% topical diltiazem and verapamil with different concentration in patients suffering from chronic anal fissure"	Co-guide	Dr Senthil	Randomization in clinical trials, Design of the study,data analysis, Data calculation and in Cytokines assessment
49	MS General Surgery Vascular endothelial growth factor (VEGF) expression following therapeutic angiogenesis	Co-guide	Dr Manivanan	Randomization in clinical trials, Design of the study, data analysis, Data calculation and in Cytokines assessment

	using autologus mononuclear stemm cells in patients with peripheral arterial disease (PAD)			
50	MS General Surgery Assessment of systemic endotoxemia and role of pre-operative bowel preparation in Patients with portal hypertension for shunt surgery	Co-guide	Dr PallaviPur war	Randomization in clinical trials, Design of the study, data analysis, Data calculation and in Cytokines assessment
51	MS Orthopaedic Surgery Effect of bone marrow stem cells, bone marphogenetic protein & granulocyte- colony stimulating factor on fracture healing in rats with osteoporosis-A comparative study	Co-guide	Dr. Kishan R. Bhagwat	Hypothesis development, Design of the study, Selecting material and methods and in Cytokines assessment
52	MCh Paediatric Surgery Comparative efficacy and safety of extended and instant release tolterodine in children with neural tube defects having cystometric abnormalities	Co-guide	Dr. Kinkar Mahanta	Randomization in clinical trials, product development, data analysis, and Data calculation
53	MCh Paediatric Surgery Role of anticholinergic drugs and □-1 Adrenergic blockers in bladder management in posterior urethral valves-A randomized controlled trial.	Co-guide	Dr. B. Akshay Kalawant	Randomization in clinical trials, product development, data analysis, and Data calculation
54	MCh Paediatric Surgery Comparative evaluation of safety and efficacy on oxybutynin by different routes of administration in children with neurogenic bladder hyperactivity.	Co-guide	Dr. Bikash Kumar Naredi	Randomization in clinical trials, data analysis, Data calculation and in Cytokines assessment

55	DM Neurology A double blind, randomized, placebo controlled trial of role of doxycycline in acute ischemic stroke.	Co-guide	Dr. Sathish Kumar V	Randomization in clinical trials, product development, data analysis, and Data calculation
56	DM Neurology To study the role of oral corticosteroids in the treatment of solitary cycticercus granulomas(SGSs)	Co-guide	Dr. Monika Singla	Randomization in clinical trials, product development, data analysis, and Data calculation
57	M.Sc. Medical Surgical Nursing Comparative efficacy safety and pharmaco- economic evaluation of dressing with 'Ichthammol glycerine', 'Heperinoid preparation' and 'Magnesium sulphate- glycerine' and on phlebitis following peripheral intravenous cannulation: Arandomized observation blind study, in Advance Cardic Centre wars, PGIMER, Chandigarh in 2013-14	Co-guide	Bidisha Basu	Randomization in clinical trials, product development, data analysis, and Data calculation
58		Co-Guide	Ms Renu	Randomization in clinical trials, product development, data analysis, and Data calculation
59		Co-Guide	Mr. Rai Singh	Randomization in clinical trials, product development, data analysis, and Data calculation
60	MSc Pharmacology Evaluation of Effect of probiotic as an addon therapy with conventional therapy and alone in the	Guide	Ms. Esahni	Making Hypothesis, Design of the study, Experimental models, selecting material and

	experimentally induce malaria in mice			methods and in several parameters assessment
61.	M.Sc. Pharmacology Determination of ocular penetration and irritation potential of acetazolamide microemulsion ophthalmic formulation.	Guide	Harish Kumar	Making Hypothesis, Design of the study, Experimental models, selecting material and methods and in several parameters assessment
62	M.Sc. Pharmacology Validation of the effects of progesterone and MK- 801 on acute phase changes induced by partial global cerebral ischemia in mice	Guide	Mr. Raman Aggrawal	Making Hypothesis, Design of the study, Experimental models, selecting material and methods and in several parameters assessment
63	DM Clinical Pharmacology	Guide	Dr. Phulen Sarma	Making Hypothesis, Design of the study Randomization in clinical trials, product development, data analysis, and Data calculation
64	DM Neurology To study the role of biomarkers DJ-1 and APO A-1 idiopathic Parkinson's disease and Parkinson plus syndromes.	Co-Guide	Dr. Ritu Shree	Making Hypothesis, Design of the study Randomization in clinical trials, product development, data analysis, and Data calculation
65	Early predictors of pancreatic leak after pancreatic anastomosis.		Dr. Awaj Kafle	data analysis, and Data calculation

S tudent Guided

Ph.D Pharmacology/Anesthesiology/General Surgery/Cardiology/Immunopathology

- Ajay Prakash
 Sazal Patyar
 Avinash Puri

- 4. Dr. L Kaman
- 5. Dr. Goni
- 6. Shobit Bansali

- 7. Rakesh Kumar
- 8. Shubham Misra
- 9. Kanupriya Vashisht
- 10. Rahul Singh
- 11. Ms Shweta
- 12. Rakesh Ruhela

- 13. Baldeep Kumar
- 14. Harjeet Kaur
- 15. Ms. Lalita
- 16. Mr. H K Reddy
- 17. Ms. Nitika
- 18. Mr. Shammy Chandel
- 19. Mr. Harish Kumar
- 20. Mr. Jitender Goirela
- 21. Mr. Vivek Kumar
- 22. Mr. Raghunath
- 23. Ms. Harpreet Kaur
- 24. Mr. Ashutosh Singh
- 25. Dr. Prasad Thota
- 26. Mr. Abhishek Mishra,
- 27. Mr. Abhnav Chaubey
- 28. Ms Sania Medhirata

DM-Clinical Pharmacology

44. Dr Phulan Sarma

MD Pharmacology

- 45. Dr. Manpreet Sukhija
- 46. Dr. Om Prakash
- 47. Dr. Ramaya Rao
- 48. Dr. Prasad Byarav D S
- 49. Dr. Prasant Rana
- 50. Dr. Soban Babu

M.Sc Pharmacology

- 57. Mr. Raman Aggrawal
- 58. Mr. Harish Kumar
- 59. Ms Arti Ralta

MD Anesthesiology

- 63. Dr. Anshul Bhatia
- 64. Dr. Prabhakar

MS General Surgery

- 65. Dr. Poonam Guah
- 66. Dr. Neeraj Goyal
- 67. Dr. Monica Singla
- 68. Dr. Ajay Meena
- 69. Dr Manimanan

- 29. Ms Manisha Prajapat
- 30. Mr. Harvinder Singh
- 31. Mr. Anupam Raja,
- 32. Ms Eshani Mahajan,
- 33. Ms. Neha Dhir,
- 34. Mr. Ashish Jain
- 35. Ms. Gitika Batra
- 36. Mr. Amit Raj Sharma
- 37. Ms. Arushi
- 38. Ms. Isrpreet Kaur
- 39. Mr. Jyoti Hadia
- 40. Ms Garima Bhat
- 41. Mr Priyanka Dhawan
- 42. Ms Tripti Rungta
- 43. Ms. Bipasha Gautam
- 51. Dr. Hari Om
- 52. Dr. Missamma
- 53. Dr. Praveen Kumar
- 54. Dr. Dhruv Mahindru
- 55. Dr. Kumar Vel
- 56. Dr. Manav Jain
- 60. Ms Rubal Singla
- 61. Ms. Eshnai
- 62. Mr. Saifudeen

70. Dr Senthil

71. Dr Pallavi Purwar

72. Dr. Shashwat Sarin

73. Dr. Awaj Kafle

MD Pediatrics

- 74. Dr. Bikramjit Das
- 75. Dr. Vinay Kulkarni

MS Orthopaedic Surgery

- 49. Dr. Kishan R. Bhagwat
- 50. Dr. Gakul 51. Orth Resident

MSc Nursing Student

- 51. Ms Bidisa Basu
- 52. Ms. Renu
- 53. Mr. Rai Singh

MCh Paediatric Surgery

- 54. Dr. Kinkar Mahanta
- 55. Dr. Bikash Nirthi
- 56. Dr. B. Akshay Kalawant

DM Neurology

- 57. Dr. Monika Singla
- 59. Dr. Satish Kumar
- 60. Dr Ritu Sree
- 61. DM Neurology

MD Forensic Medicine

61. Dr. Senthil Kumar

DM Paediatrics

1. & 2

9. Any Patent registered within the evaluation period. Detail of Patent country where registered.

- 1. **Patent:** Applied for two patents; one patent approved by Technology Information, Forecasting and Assessment Council (TIFAC), Department of Science & Technology, Government of India, New Delhi: We have developed ocular formulation (microemulsion) of the Acetazolamide in oily base as well as eye drop for sustained release and topical application.
 - Patent no: 201611032255
- 2. We have designed a new formulation of tolterodine tartrate for once a day therapy with natural polymers for urinary incontinence.

- 3. We have developed ocular formulation of the acyclovir in oily base as well as eye drop for sustained release and topical application.
- 4. We have developed a novel eye drop with better bioavailability and stability of the drug for ocular instillation of mimantine in specialy in diabetic retinopathy.
- 5. We developed a novel eye drop formulation that had better bioavailability and suitable for multiple application. Accelofenac is widely used for the treatment of glaucoma but no topical formulation available in the market. We have developed a novel eye drop with better bioavailability and stability of the drug for ocular instillation.
- 6. Naoformulation of galantamine for Dementia
- 7. New chemical entity for colon cancer is under process for patent application
- 10. CME/Workshop conducted as organizing secretary/organizing chairman during the period of evaluation for promotion. Invited lectures/keynotes /address /resource person/presentation in conferences (National/International)

S. No.	Name of CME/workshop	Dates	Role of the applicant in CME/Workshop
1	1 st Training Programme for Technical Associates (TA's) of Northern Zone of India on "Causality Assessment and Vigiflow", PGI, Chandigarh	21-01-2012	Organizing Secretary
2	National Symposium cum Workshop on Experimental Research and Alternatives (NSWERA), PGI, Chandigarh	03-03-2012	Organizing Secretary
3	National Symposium on Translational Pharmacovigilance (NSTP), PGI, Chandigarh	14-04-2012	Organizing Secretary
4	National Symposium on Good laboratory Practice (GLP), PGI, Chandigarh	28-07-2012	Organizing Secretary
5	2 nd training Programme for Technical Associates (TA's) of North Zone of India, PGI, Chandigarh	22-02-2013	Organizing Secretary
6	31 st National Workshop on Clinical Pharmacology (NWCP - 2013), PGI, Chandigarh	11 to 15-03- 2013	Organizing Secretary
7	CME Programme on Haemovigilance, PGI, Chandigarh	20-07-2013	Organizing Secretary
8	3 rd Training cum Meeting of Coordinators and Technical	27-07-2013	Organizing Secretary

	Associates of Northern Zone under Pharmacovigilance Programme of India (PvPI), PGI, Chandigarh		
9	CME on Good Clinical Practice, Mangalore	2 to 3 -08- 2013	Organizing Secretary from IPS
10	CME on Pharmacovigilance, Imphal	28-09-2013	Organizing Secretary from IPS
11	CME on Pharmacovigilance, Srinagar	23-10-2013	Organizing Secretary
12	CME on Pharmacovigilance, Tanda	31-10-2013	Organizing Secretary
13	CME on Pharmacovigilance, Saifai	09-11-2013	Organizing Secretary
14	CME on Pharmacovigilance, Ranchi	30-11-2013	Organizing Secretary
15	CME on Pharmacovigilance, Aligarh	07-12-2013	Organizing Secretary
16	2 nd CME Programme on Haemovigilance, PGI, Chandigarh	14-12-2013	Organizing Secretary
17	4 th Training cum Meeting of Coordinators and Technical Associates of Northern Zone under Pharmacovigilance Programme of India (PvPI), PGI, Chandigarh	21-12-2013	Organizing Secretary
18	CME on Pharmacovigilance, Chennai	22-02-2014	Coordinator from IPC
19	CME on Haemovigilance for Clinicians, GMCH, Chandigarh	26-04-2014	Organizing Secretary
20	CME on Haemovigilance, Tanda	16-05-2014	Organizing Secretary
21	CME on Pharmacovigilance under aegis of IPS, Sikkim	27-06-2014	Organizing Secretary from IPS
22	CME on Pharmacovigilance and Coordinators Meeting, Shillong	28-06-2014	Organizing Secretary
23	IPC-WHO Meeting of Coordinators of New AMC's of North Zone (5 th training Programme), Kasauli	02-07-2014	Organizing Secretary
24	Mini-symposium on Pharmacovigilance, IGMC, Shimla	15-10-2014	Organizing Secretary
25	IPS North Zone Conference	16 to 18-10- 2014	Organizing Secretary from IPS
26	National Essential Medicine List revision meeting, Guwahati	December 2014	Organizer and Coordinator
27	National Workshop on Clinical Pharmacology and therapeutics 2015, PGI, Chandigarh	23 to 28-02- 2015	Organizing Secretary
28	One day workshop on Awareness programme of Indian Pharmacopoeia and Indian	17-03-2015	Organizing Secretary from IPC

	Pharmacopoeia reference standards, PGI,		
	Chandigarh		
29	Anti-doing Awareness Program, PU,	26-03-2015	Organizing Secretary
	Chandigarh		
30	CME on Pharmacovigilance, Manipal	June 2015	Organizing Secretary from
	Medical College, Sikkim		IPS

Sl.	Name of CME/ workshop	Dates	Role of the applicant as
no.			faculty/organizer
1	National Workshop on Clinical Pharmacology	Yearly from 2003 till date	Help in organization of workshop, taken lecture on Pharmacovigilance in 2007 February

Others:

- ii) Help in organization of National Symposium on Pharmacovigilance 17th March 2010, at Guwahati Medical College, Guwahati, Assam: Spontaneous Adverse Drug Reaction
- iii) Symposium on "Pharmacovigilance" organised by North Eastern Indira Gandhi Regional Institute of Health & Medical Sciences, Shillong & Indian Pharmacological Society (IPS) Clinical Pharmacology Section on 18th March 2010, lecture on Pharmacovigilance Need, Relevance & Scope.
- iv) Help in organization of four workshop in east zone Kolkata, South zone Chennai, West Zone Mumbai, and North Zone in Delhi for training drug inspector under Clinical Research Inspection Programme, MOH, Nirman Bhawan
- v) GCP Clinical trial inspection workshop 9-10th January 2009 Kolkatta: (a) Inform consent (b) Inspection of Sponsor and Ethics committee (c) Protocol evaluation
- vi) GCP Clinical trial inspection workshop 14-15th February 2009, Chennai: (a) Understanding Clinical Trials (b) Inspection of Sponsor and Ethics committee (c) Protocol evaluation
- vii) GCP Clinical trial inspection workshop 6 & 7th March 2009, Mumbai: (a) Understanding Clinical Trials (b) Inspection of Sponsor and Ethics committee (c) Protocol evaluation (d) Inform consent.
- viii) GCP Clinical trial inspection workshop 24& 25th April 2009, New Delhi: (a)
 Understanding Clinical Trials (b) Inspection of Sponsor and Ethics committee (c) Inform consent.

11. Presentation in conference National/International.

International

1. Seasonal variation in plasma levels of lithium in the Indian population-is there need to modify dosage? Medhi B, Jose VM, Prakash O, Pradhan B, Chakrabarty S,

- Pandhi P. Paper presented at XXXV International Union of Physiological Sciences (IUPS) Congress held in San Diego, California, USA from 31st March
- 6th April, 2005. Abstract published in The Faseb Journal 2005; Vol 19(5):Abstract LB-344.(As Govt. nominees)
- Long term efficacy of topical NSAIDs in knee osteoarthritis: meta-analysis of randomized placebo controlled clinical trials. Bikash Medhi, Shibadas Biswal and Promila Pandhi. Paper presented at Souh Asian Conference & CME on Synergy in Healthcare, 15-19th November, 2005, Paro, Bhutan. (As Govt. nominees)
- Randomized, Double blind, Cross over Study to Compare 3. A Efficacy and Safety of Fexofenadine Ebastine in Patients with Chronic Urticaria. Medhi B, Manpreet S, Sumedh G, Prasad D, Pandhi P. Paper presented at Annual meeting of SODVELONCON-2005, IVth National conference of the Society of Dermatologist, Veneralogist and Leprologist of Nepal, Nepal 25-26th ,2005, B.P.Koirala Institute of Health Sciences, Dharan(Nepal) (As Govt. nominees)
- 4. **International Challenges in Pediatric Pharmacology**--Satellite Symposium (15th World Congress of Pharmacology)Shanghai, China June 28 30, 2006Presented paper entitled: Efficacy and safety of oxybutanin and tolterodine in pediatrics patients suffering from urinary incontinence.
- 5. MOACON, 2006, on 14th &15th Oct.2006 at Colombo-Sri-Lanka. Disease modifying agents in osteoarthritis
- 6. Annual Conference of International Medical Sciences Academy-3rd 5th November 2006, Lahore Medical & Dental College, Lahore, Pakistan. Presented paper entitled: Long term efficacy of topical NSAIDs in knee osteoarthritis: meta-analysis of randomized placebo controlled clinical trials.
- 7. Experimental Biology, April 28th to May 2, 2007, Washington DC, USA and presented paper entitled: Effect of Combination of thalidomide and sulfasalazine in experimentally induced inflammatory bowel disease in rats FASAB 2007
- 8. Attend 27th International Sigapore Congress, from 8th to 12th July 2007, Singapore and presented paper entitled: Evaluation of proposol effect in altering pentylenetetrazol induced seizure threshold in peripheral inflammatory models in rats
- Attended Asia Pacific Pharmaceutical Symposium (APPS) at Kathmandu University,
 Dhulikhel, Nepal from 18th 25th July 2007 Dhuikel, Nepal and presented paper entitled :Effect of Etoricoxib on Pharmacokinetics of Phenytoin.
- 10. **National conference on Statistics**; 7-8 January 2008, Colombo University, Colombo, Sri Lanka; presented paper on: Data mining in pharmacovigilance system.

- 11. Experimental Biology, April 28th to May 2, 2008, Washington DC, USA and presented paper entitled:
 - (a) Experimentally induced various inflammatory models and seizure: Understanding the role of cytokine in rat. FESAB 2008
 - (b) Effects of Pioglitazone on acute phase changes induced by partial global cerebral ischemia in mice. FESAB 2008.
- 12. 5th Conference of orthopaedics Association of SAARC Countries which will be held in the Republic of Maldives from 14th to 17th June 2008. paper presented: Comparative clinical trial of paracetamol alone and Vitamin C and E as an add on therapy in patients suffering from primary knee osteoarthritis
- 13. Orthopaedic Research and Education Foundation, 18th Sep to 21st Sep 08, Kathmandu, Nepal, paper presented: Antioxidant therapy and osteoarthritis.
- 14. 8th European Congress on Epileptology, Berlin, Germany, September 21 25, 2008, paper presented: Experimentally induced various inflammatory models and seizure: correlation of various biochemical parameters in rat.
- 15. Annual conference of International Medical Sciences Academy (12th & 13th October, 2008) in Dubai, U.A.E. Following lecture were delivered:
- (a) TDM pattern of the antiepileptic drugs in developed and developing countries: an experience from tertiary care centre
- (b) A randomized, double-blind, clinical trial comparing different concentration of topical diltiazem and assessment of quality of life in the Indian patients suffering from chronic anal fissure
- (c) Drug surveillance: Its Importance and Current Status in Western Counties and India
- 16. **Experimental Biology** April 16-21,2009, New Oreland, USA, Experimental Biology and presented paper entitled: Evaluation of proposol effect in altering pentylenetetrazol induced seizure threshold in peripheral inflammatory models in rats
- 17. **International Union of Physiological Sciences (IUPS)** July 27 to August 1st Kyoto, 2009, Japan, paper presented: Correlation of seizures and biochemical parameters of oxidative stress in experimentally induced inflammatory rat models
- 18. National conference on Biostatistics; Sri Lanka 7-9th Jan 2010, paper presented: *Data mining in pharmacovigilance*
- 19. **Experimental Biology 2010APRIL 24-28, 2010, ANAHEIM, CA**at California, USA. Presented Effect of diacerein alone and combination with aceclofenac in adjuvant induced arthritis and in chronic inflammatory model in rats.
- 20. Participated in **8th international course on Bridging Basic Knowledge with Rational Prescribing in Epileptology**, which was held in San Servolo, Venice, Italy from July 18 to 29, 2010.

- Attended 6th International Congress on Bio-Medical Informatics 15th& 16th Sept *21*. 2010 at Water Edge, Battermulla, Sri-Lanka. Presented Drug information and E-health.
- *22*. Attended POLYCHAR 19 (March 20 - 24, 2011), Kathmandu, NEPAL and presented Nanotechnology based drug design and delivery in animal models
- Attended 11th Indo-Italian meet from 9-11 November 2011 at Rome, Italy 23.
- Neurosciences from 12-16, Nov 2011 at Washington DC USA 24.
- Manila Epilepsy congress 22nd to 25th Manila, Philippine, 2012 25.
- Total Quality Management in Clinical Laboratory Workshop" on $26^{\mbox{th}}-27^{\mbox{th}}$ June 2011; 26. B.P.Koirala Institute of Health Sciences, Dharan, Nepal presented three lectures:(a) History and Development of GLP: OECD, MAD ,its Current Perspective, (b) GLP-Documentation: Raw data and Quality Assurance, (c) Good Clinical Laboratory Practices (GCLP)- Basic Requirement and Application in Clinical Trial. Sri-lanka Biostatics conference 29th& 30th 2011 presented: data mining and
- 27. pharmacovigilance
- Attended International Conference on Recent Update in Pharmacology Organized by the 28. Department of Clinical Pharmacology & Therapeutics B.P. Koirala Institute of Health Sciences, 15th March 2012, Dharan, Nepal, presented Drug Development of next decade and role of Pharmacologist.
- 29. Attended 12th Annual Meeting, Safety Pharmacology Society (SPS), October 1-4, 2012, in beautiful Phoenix, AZ, USA; presented Chemopreventive effect of artemisinin in 1, 2dimethylhydrazine-induced rat colon carcinogenesis.
- 7th Latin American Congress on Epilepsy, 14th 17th November 2012 in Quito, 30. Ecuador paper presented: Effect of Esomeprazole on pharmacokinetics of Phenytoin.
- 31. Kathmandu Symposia on Advanced Materials 2012 (KaSAM - 2012), May 9- 12, 2012 paper presented: Nanomedicine, a new and improved technology or a double edge sword.
- 32. ANMECON 26 March 2-4, 2013, paper presented Kathmandu Study to evaluate awareness about pharmacovigilance amongst health care personnel:An-observational prospective
- 44th Asia Pacific Consortium for Public Health (APACPH), 14th 17th October 2012, Sri 33. Lanka paper presented: A descriptive study to evaluate awareness about medication errors amongst health care personnel representing North, East, West region of India.
- 34. Presented paper in Alzheimer's AssociationInternational Conference (AAIC) at the Boston Convention & Exhibition Center (BCEC), Boston, United States on 13-18th July 2013. Paper entitled: Effect of Granulocyte colony stimulating factor (GCSF) alone and in combination with acetylcholinesterase inhibitor improves memory in an amyloid-beta induced experimental model of Alzheimer's disease
- 11th Congress of the European Association for Clinical Pharmacology and Therapeutics 35. (EACPT), co-sponsored by the Swiss Society for Clinical Pharmacology and Toxicology at Geneva, Switzerland on 28-31st August 2013. Paper entitled: Clinical trials registry and GCP: an Indian Scenario.

- 36. 3rd International Conference on Medicinal Use of Honeybee Product (ICMUH 2013) at Hasanuddin University, Makassar-Indonesia on 20-22nd November 2013. Paper entitled: Effect of monuka honey in Inflammatory bowel disease.
- 37. Presented paper at IUPHAR Meeting, Cape Town on 13-18th July 2014 and attended Joint meeting with British, Australian, Japanese, European, Canadian Pharmacological Societies.
- 38. Attended ASCEPT-MPGPCR Joint Scientific Meeting at the Melbourne Convention and Exhibition Centre from 7 to 11th December 2014, presented scientific paper.
- 39. Participated in 2nd International Conference Kathmandu Symposia on Advanced Materials on 7-10th September 2014 in Kathmandu, Nepal presented lecture on Nanotechnology and Health.
- 40. Attended International conference: SEARAME 2014, Colombo, Srilanka on 12 14th November 2014
- 41. Attended and delivered lecture on "Patients safety and pharmacovigilance Programme of India: present Scienerio" in Health and Medicine conference at Colombo, Sri-Lanka from 17-20th March 2015
- 42. Participated in 3rd international Conference of Nepal Academy of Managements 27-29th March 2015 in Kathmandu University Nepal, presented Patient time lag and satisfaction level in Outpatient Clinics of Tertiary Care and Teaching Centre of North India
- 43. Delivered a lecture in 1st IBRO/APRC Chandigarh Neuroscience School: Basic & Research Concepts of Depression & Cognitive Dysfunction" at Panjab University, Chandigarh, India from 3rd 8th November 2014 delivered lecture on Autism.
- 44. ASCEPT-BPS Joint Scientific Meeting to be held at **Hong Kong**from 19 May to 21 May 2015. My abstract entitled "Neuroprotective action of GSCF and dizocilpine in cerebral ischemia induced neuronal injury.
- 45. Attended 12th International Conference on Urban Health 2015 (Macrh 9 to 12, 2015), Dhaka, Bangladesh: presented on Patients Safety and expire medicine
- 46. Attended Alzheimer's AssociationInternational Organization (AAIC), July 18-23, 2015 at the Washigton DC, USA: Galantamine Loaded Solid Lipid Nanoparticles: Preparation, Characterization and Pharmacodynamics evaluations
- 47. Conference Organizing Committee Serendivus Symposium International Conference on Food Safety and Nutrition, Serendivus International (PVT) Limited, Colombo 06, Sri Lanka: presentation on dietary supplements and sports.

National

- International Comprehensive Update on Diagnostic and Therapeutic in Epilepsy and Neuro-Electrophysiology Workshop (CUTE conference), New Delhi, Feb 4&5,2005, (As Govt. nominees) Awarded Best 2nd Prize for paper entitled: Effects of artemisinin, artemether, arteether on the pharmacokinetics of Phenytoin. Bikash Medhi, Manpreet Sukhija, P.Pandhi.
- 2. Attended Indian Society of Pharmacology(IPS), Annual conference at Jaipur, 19th to 22nd 2006, SMS Medical college.
- 3. Invited lecture on PGIMER experience on antiepileptic therapeutic drugs monitoring at AIIMS, New Delhi, National TDM symposium on 2nd & 3rd February, 2007
- ACADEMIA INDUSTRY SYNERGY CONTINUUM SYMPOSIUM ON PROMOTION OF PHARMACOVIGILANCE IN INDIA, Organized by Department of Pharmacology, All India Institute of Medical Sciences, New Delhi(Zonal Pharmacovigilance Centre of CDSCO, Govt. Of India) & Johnson & Johnson Ltd. 15th March 2007, AIIMS, New Delhi.
 - Brainstorming Workshop on Rationality Assessment and Guidelines for Fixed Dose Combinations (FDC) Venue: Board Room, AIIMS Organized by: Department of Pharmacology, AIIMS & CDSCO, MOH&FW, New Delhi, Sponsor: World Health Organization, 25&26th June, 2007
 - 3. **Digester Management symposium**; Aug 30-31st, 2007, AIIMS, New Delhi
 - 4. **Indian Pharmacological Society,** Annual conference, Oct 31 to Nov 3rd 2007, NIPER, Mohali, Punjab. Presented following papers and Guest Lecture:
 - (a) Medhi B, Prakash O, Saikia UN, Pandhi P. Effect of different doses of thalidomide in experimentally induced inflammatory bowel disease in rats.
 - (b) **Bikash Medhi.** Anticytokine therapy in inflammatory bowel disease (IBD): current and future perspectives(invited lecture)
 - (c) Raman Aggarwal, Bikash Medhi, Amitava Chakrabarti. Neuroprotective effect of Progesterone on acute phase changes induced by partial global cerebral ischemia in mice
 - (d) RAO RS, MEDHIB, PANDHI P. Effect of thalidomide on PTZ induced convulsion in experimentally induced different inflammatory models in rats
 - (e) Rupa Joshi, **Medhi B**, Prakash A, Bansal S Y, Attrey S D, Singh D, Pandhi P. Effect of Aceclofenac on pharmacokinetic of Phenytoin
 - (f) Pawan k Singh, , **Bikash Medhi**, Ajay Prakash, Pramod Avti, Raman Aggarwal. Effects of Esomeprazole on the pharmacokinetics of carbamazepine
 - (g) Vijay Kumar, Ambika Sharma, Bikash Medhi. Bacteria: An alternative future therapy for cancer.
 - (h) Prakash A ,Medhi B, , Avti PK, Saikia UN, Pandhi P, Khanduja KL.The combined treatment effect of Manuka Honey and sulfasalazine promotes the antioxidant defense system in experimentally induced inflammatory

bowel disease in rats.

- 5. Attended Association of Physician of India (API) at Guwahati, 14th to 16th December, 2007. Invited for a Guest Lecture:Fixed Dose Combinations (FDC) and its present scenario
- 6. **Indian Pharmacological Society,** Annual conference, December 18-20th December 2009., Paper presented:
 - (a) Medhi B, Prakash A, Prasad B. Evaluation of propofol effect in altering pentylenetetrazol induced seizure threshold in peripheral inflammatory models in rats
 - (b) Prasad B D S, **Bikash Medhi**, Rupa Joshi Ajay Prakash. Effects of Esomeprazole on the pharmacokinetics of phenytoin.
 - (c) Rao R S, **Medhi B**, Pandhi P, Khanduja K L. Study to evaluate correlation between experimentally induced various inflammatory models seizure and biochemical parameters in rats.
 - 7. GCP Clinical trial inspection workshop 24& 25th April 2009, New Delhi: (a) Understanding Clinical Trials (b) Inspection of Sponsor and Ethics committee (c) Inform consent.
- National symposium on Animal Remodeling :From Laboratory to Clinic at PGIMER on 3rd
 Oct 2009 organized by Department of Experimental Medicine and Biotechnology (INSA
 sponsored):
 - Paper presented: (a)**Bikash Medhi**, Ajay Prakash. Nanotechnology Based Therapeutic Design and Delivery in Animal Model Systems.
 - (b) Ajay Prakash, Sazal Patyar, Byrav S Prasad, **Bikash medhi**. Animal use in biomedical research and its regulations
 - (c) Prasad Byrav D S, Prakash A, Patyar S, **Medhi B**^{*} Effect of Rabeprazole on pharmacokinetic of Phenytoin and carbamazepine
- 9. Inflammation and seizure susceptibility: a new dimension toward epilepsy research at International Conference on Integrative & Personalized Medicine and 42nd Annual Conference of the Indian Pharmacological Society (IPSCON-2009), that is scheduled to be held between December 10-12, 2009 at Swabhumi, Kolkata.: Determinants of patients becoming seizure free with antiepileptics? An observational study in patients suffering from Epilepsy
- 10. Safe Drug Practice at XIX APICON, Assam and 3^{rd} NEAPICON 2009 at Sibsagar , Assam on 25^{th} to 27^{th} December.2009.
- 11. Indo-Italian Meet, Delhi University, December 10-11th, 2009
- 12. Brainstorming Workshop on "National Pharmacovigilance Programme: The way ahead" organized by the CDSCO in collaboration with the Department of Pharmacology, AIIMS, New Delhi on 29th and 30th December, 2009
- 13. International Symposium on Pharmaceutical Medicine, January 10th 2010 by Ministry of Chemical & Fertilizer, Patna, NIPER, Bihar
- 14. International Conference on Medical Negligence & Litigation in Medical Practice, National Conference on Recent Advances in Forensic Medicine & Toxicology; 25th 26th January, 2010; Kodaikanal, Tamil Nadu 624 101, India; Organized by: Indian Association of Medico-legal Experts

- **15.** National Symposium on "Pharmacovigilance", *Organised by* Guwahati Medical College, Guwahati, Assam. Delivered lecture on **Spontaneous adverse drug reaction monitoring**
- 16. Symposium: "Pharmacovigilance" Organised by North Eastern Indira Gandhi Regional Institute of Health & Medical Sciences, Shillong & Indian Pharmacological Society (IPS) Clinical Pharmacology Section, presented lecture on Pharmacovigilance Need, Relevance & Scope
- 17. Invited as Expert for National Consultative Meeting on Pharmacology Curriculum Review September 29-30, 2010 at Kolkata, India
- 18. Attended National Essential Medicines List, a National Consultation Meeting held on December 3-4, 2010 at AIIMS, New Delhi.
- 19. Attending Third GLP Inspector Training Course from Oct 3rd to 6th Oct 2010 by Department of Science and Technology (DST), New Delhi.
- 20. Operational Pharmacovigilance 24 & 25th November AIIMS, New Delhi
- 21. Indo-italian meet December Delhi University, Delhi
- 22. Indian Pharmacology Society Conference, NIN, Hyderabad 13-16th December 2010
- 23. Presented Clinical trial inspection at Clinical Pharmacology Section of Indian Pharmacological Society (IPS) in collaboration with All India Institute of Hygiene & Public Health, Kolkata (AIIHPH) and Calcutta School of Tropical Medicine, Kolkata (CSTM) shall hold a six-day National Workshop on Basics of Clinical Research Methods during January 31 February 05, 2011 at AIIHPH Auditorium, Kolkata.
- 24. 2rd International Conference on Legal Medicine, Medical Negligence and Litigation in Medical Practice International Conference on Current Trends in Forensic Sciences, Forensic Medicine & Toxicology , 20th -24th Goa presented study to correlated drug level in premortem and postmortem
- 25. National conference on Evidence based medicine on March 26-27, 2011, SKIMS, Srinagar; presented paper on Evidenced Based Medicine: framework to minimized patient harm in clinical practice.
- 26. Second National Clinical Research Training Course from August 22-27, 2011, organized by Department of Pharmacology, All India Institute of Medical Sciences, with support of DBT, New Delhi: presented lecture on Clinical Trial Inspection: Indian prospective.
- 27. South Asian Chapter of American College of Clinical Pharmacology Fifth International Annual Conference "CLINICAL PHARMACOLOGY- DISCOVERY DEVELOPMENT AND BEYOND" 26-28th August 2011.
- 28. Indo-Italian conference cum workshop: presented : Oxidative stress and experimentally induced Inflammatory Bowel Disease (IBD)

- 29. DST workshop on Research Methodology for women on 3rd- 7th October 2011 at Department of Pharmacology; All Indian Institute of Medical Sciences, New Delhi presented *Pre-clinical toxicity study and Drug Development*
- 30. ASACON 2011 at Kaziranga, Assam 28th& 29th October 2011;presented Antibiotic Resistance and Current Scenario.
- 31. Invited to participated in National Formulary (NFM) Meeting by Indian Pharmacopoeia Commission
- 32. National Conference and CME cum Workshop of Indian Society for Rational Pharmacotherapeutics with the theme "Bridging Clinical Medicine with Rational Pharmacotherapeutics" at Govt Medical College, Jammu on 25th 27th November, 2011. Presented lecture on Pharmacovigilance and participate in panel discussion
- 33. Clinical Research Workshop by DBT in Chennai 12-13 December 2012
- 34. Presented two lecture in Indian Pharmacological Society Conference in Manipal 20-22nd December 2012
- 35. Attended SIGNET Workshop on *'Effecting Systems Change'* from March on 24, 2013, Chandigarh
- 36. Invited as panellist NRHC meeting held on 27th October 2012 at AIIMS, New Delhi
- 37. Invited for guest lecture entitled: Need of Pharmacovigilance, Reporting of ADRs and Causality of ADRS at National Symposium on ADR Monitoring & Pharmacovigilance" in collaboration with Indian Hospital Pharmacists Association (IHPA), one of the constituent of IPCA and in technical collaboration with National Coordination Centre, Pharmacovigilance Programme of India (PvPI), Indian Pharmacopoeia Commission MoH&FW, Government of India on 9 &10th (Sat-Sun) February 2013 at ATL Centre, Ghaziabad, Uttar Pradesh.
- 38. Invited for guest lecture entitled: Evaluation of Adverse Event and causality assessment and presentation of Case studies in CME on "Advanced Pharmacovigilance Workshop" on 8th December, 2012 (Saturday).
- 39. Invited for guest lecture in Symposium Indian Pharmacological Symposium(IPS) conference Nagpur, form 5-7 Jan 2012 Current status for the treatment of Epilepsy: Appraising Comprehensiveness of Antiepileptic drugs available and in pipeline for treatment of epilepsy and its comorbidities"
- 40. International conference of pharmacoeconomics and outcomes Research, 23rd 24th November 2012, New Delhi, India, lecture presented entitled: Safety evaluation of during Pharmacovigilance
- 41. Invited as Guest speaker in 1st East Zonal Conference of Indian Pharmacological

- Society on 3rd and 4^{th} November, 2012 at College of Veterinary Science, Khanapara, Guwahati -22^{nd} on Stem Cell Research and Pharmacovigilance.
- 42. Invited for guest lecture on seminar on advance Pharmacovigilance sponsored by IPS in collaboration with Abbott knowledge academy on 11- Oct, 2012
- 43. **Invited as expert** member of the Panel on Mercury poisoning held at AIIMS on June, 23rd, 2012.
- 44. DBT sponsored Expert Group Meeting and Brain Storming on Application of Nanotechnology in Cancer, 4th and 5th March, 2013 at Ramalinga Swamy Board Room, AIIMS, New Delhi.

Chairing the session

- 1. Delhi university on 11th December 2009, Indo Italian Meet on Antioxidant
- **2.** National Symposium on Pharmacovigilance 17th March 2010, at Guwahati Medical College, Guwahati, Assam: Spontaneous Adverse Drug Reaction
- 3. IPS, AIIMS, New Delhi 18-20th and Chair a session for poster section

12. Applicant's contribution in patients care/Laboratory Services during the period for evaluation for promotion (Limit: 100 words)

Patients Care:

- 1. Establishment of *Pharmacovigilance center* in the Department of Pharmacology, PGIMER under the National Pharmacovigilance Program. The program is started to assess ADR in the clinical practice, funded by Ministry of Health, Nirman Bhawan, Government of India
 - Completed To evaluate awareness about Pharmacovigilance system among medical personnel in different department in tertiary care hospital
 - -Study to Evaluate awareness about medication errors among medical personnel and patients in tertiary care hospital: observational study
- 2. Therapeutic drug monitoring of anti-epileptics (Phenytoin, Carbamazepine, Phenobarbitone) and lithium as well as Pyrogen testing. Beside contribution toward drug information and toxicological information to the hospital and other hospital in Chandigarh.
- 3. Services: Started Therapeutic Drug Monitoring (TDM) service for Antiepileptic drug was provided for 25 patients during the year. The departmental Drug

Information Unit (DIU) provided Drug information services to various physicians within and outside PGIMER, Chandigarh.

Three years services are provided in tabular form below:

Year/Session	2014	2013	2012	2011-12
Number of Lithium samples estimation	NIL	220	1075	405
Number of TDM samples	25	-	-	-

4. **Drug information to hospital staff:** In PGIMER, Chandigarh, Department of Pharmacology is operating the Drug Information Center Any pertinent information regarding drugs, therapeutics may be obtained telephonically by contacting 2755245. The proposal for making the facility available at the website is underway. Summaries of selected evidence based replies to the queries are being made available at the website.

Contribution in Stem Cells therapy in Patients suffering from Lower Limb Ischemia Collaborative Projects with Panjab University

- 1. Tolterodine tartrate is a muscaranic receptor antagonist indicated for the treatment of overactive bladder with symptoms of urge urinary incontinence, urgency, and frequency. In market extended release formulation of the drug is available but in all available formulations only synthetic polymers are used. Natural polymers are novel concepts for extended release of formulations and they also increase bioavailability by mucoadhesion. Keeping in view, we have designed a new formulation of tolterodine tartrate for once a day therapy with natural polymers.
- 2. Eye diseases are major cause of blindness in human and in every 5 seconds one person goes blind. Glaucoma, viral infection and inflammatory eye diseases are major reason for visual impairment and eye blindness. Among NSAIDs preferential cyclooxygenase-2 (COX-2) are preferred over non selective cyclooxygenase inhibitors due to their selective nature for inducible COX-2. Aceclofenac is

- preferential COX-2 inhibitors and no formulation of the drug is available in the market for ocular topical application. We have developed ocular formulation of the aceclofenac in oily base as well as eye drop for sustained release and topical application.
- 3. Glaucoma is a mutifactorial disease. It is defined as a condition in which the intraocular pressure exceeds the tolerance of the affected eye producing visual field loss. The cause of 12% to 30% of all blindness, glaucoma is the second leading cause of vision loss. Acetazolamide is widely used for the treatment of glaucoma but no topical formulation available in the market. We have developed a novel eye drop with better bioavailability and stability of the drug for ocular instillation.
- 4. Adenoviral infections are some of the most common external eye infections. Infection with Herpes simplex virus (HSV) is the single most frequent cause of corneal opacities in developed countries. Acyclovir is available in the market as ointment and the preparation is un-suitable for frequent as it causes blurring of vision. We developed a novel eye drop formulation that had better bioavailability and suitable for multiple application.
- 5. **Collaborative Projects with Delhi University :** We have work on new molecule (PR-6) which has anti-platelet activity alone with Department of Chemistry and Department of Biochemistry VPCI, Delhi

Findings of PRA-6 from earlier studies: PRA-6 (180 μ M) when incubated with Human Platelet rich plasma (PRP) was found to enhance NO levels by 8 folds as measured by flow cytometry.PRA-6 unlike aspirin and Clopidogrel is very effective in producing significant inhibition of ADP-induced platelet aggregation in vitro. PRA-6 (180 μ M) when incubated with platelets for 10 min produce 95% inhibition of ADP induced platelet aggregation. PRA-6 is very effective in producing in producing significant inhibition of collagen induced platelet aggregation in vitro. PRA-6 (150 μ M) when incubated with platelets for 10 min produce 95% inhibition of collagen induced platelet aggregation. PRA-1 the deacylated product of PRA-6 was much less effective in causing the antiplatelet action. PRA-6 upon administration (1323 μ moles/kg) to rats (p.o) was also found very effective in producing the antiplatelet action. PRA-6 was also found to ameliorate the various factors,

induced by lipopolysaccharide (LPS), *in vivo* that has bearing on the anti-platelet action, such as tissue plasminogen factor and cGMP (all measured by ELISA).

- 13. Innovation (new surgery/protocol/test/method development), if any, during the period of evaluation: (limit: 100 words)
 - 1. Ulcerative colitis is the chronic relapsing remitting illness that affects the millions of individuals in the world and produces symptoms that impairs the quality of life. The diagnosis of the disease is through the colonoscopy which is a difficult procedure. We have established an indirect method to assess the intestinal permeability through HPLC that will help to assess the status of the Colon in IBD. This method is the easiest and simplest way and can be applied to the clinical set up as it is cost effective.
 - 2. Other markers like Calprotectin and Lactoferrin has been estimated with the help of the ELISA and can be used to assess the inflammation indirectly. These methods can be used day to day in the clinical set up and will help the patients.
- 14. Editor of Scientist Journal/member of National Scientific Body/Member of policy Making body (during the period for evaluation for promotion) [review of Any journal should not be mentioned]

Editor of Scientist Journal/member of National Scientific Body

- Elected as Secretary Clinical Pharmacology, Indian Society of Pharmacology(IPS), India
- Co-Chairman India Initiative Programme, Indian Pharmacology Society(IPS)
- Executive committee member of Society for Rational Drug Use, India.
- Executive Committee Member of Society for Pharmacovigilance, India

Member of National Scientific Body/Member of policy Making body:

Α.	DCGI	office	Ministry	of Health	and Family	Welfare

Core panel of expert for Investigational New Drug committee (IND) under
chairmanship of director general & secretary of health, ICMR, Govt of India, Govt
of India, Ministry of Health and Family Welfare, Nirman Bhawan, New Delhi.
Core panel of expert for Task Force to frame guidelines for submission of dossiers
or proposals for regulation of biotech products (r-D~A product),Govt of India,
Govt of India, Ministry of Health and Family Welfare, Nirman Bhawan, New
Delhi, 2011
Fixed Dose Committee of DCGI
DCGI SAE-Compensation Committee,

		Essential Medicine committee
		Subject Expert Committee
		DGHS panel
		Sub-committee of Drug Regulation,
		Schedule Y amendment Committee,
		Good Clinical Inspector (GCP) for DCGI office
		Member of Gelatin capsule issue in India
B.	Ind	n Pharmacopoeia Commission, Ministry of Health and Family Welfare
	0	Cordinator, Pharmacovigilance Centre & Regional Resource Centre for Northern
		Region for Training and Technical Support
	0	Central Working Group Committee for Pharmacovigilance(PvPI),
	0	Member of Signal Preview Committee (PvPI)
	0	Core Training Panel Committee Pharmacovigilance (PvPI),
	0	National Formulary Committee(NFI)–IPC,
	0	Chairman selection Committee for TA(IPC),
	0	National Formulary Committee (NFI)
C.	Nat	onal Institute of Biologics, Ministry of Health and Family Welfare.
		☐ Central Advisory Committee Special invite: Haemovigilance
		Programme of India (HvPI)
		 □ Drugs Survey – Core Expert Committee □ Member of committee for evaluation of Spurious Drugs
		- Member of committee for evaluation of Spurious Diags
D.	Ind	nn Council of Medical Research (ICMR), MOHFW,GOI
		Basic Medical Sciences Project evaluation Committee (ICMR),
		Antimicrobial Evaluation Committee(ICMR).,
		β-HCG Vaccine Committee(ICMR),
		Technical Evaluation Committee of HRD scheme (DHR)
		Core member for Committee ICMR-NIREH Bhopal,
		Member of Advisory Committee meeting to discuss the modalities for

		•	N. 10	MILL LDI			
		• •	National Centre on C				
		Member of ICM	R Technical Commit	tee for procureme	nt of in	struments in	ICMR
		HQ/ICMR instit	ute/Centre				
		Member of ICM	R funding to CDRI (Under DHR-Repr	oductiv	e Division)	
		Expert panel me	mberfor ICMR-acade	emic clinical Rese	arch		
E.	Depart	ment of	Biotechnology,	Ministry	of	Science	and
	Techno	ology, GOI					
	☐ Task force member of Expert Group on Tuberculosis"						
	☐ Reviewer for projection evaluation Nutrition devision						
	☐ Member Nano-intiative group-DBT						
		Special Invitee -	TB Task Force, DB7	Γ Task Force men	ıber		
F.	Department of Science and Technology, MOS,GOI						
	 Trained by DST as Good Laboratory Inspector (GLP)2010 under GLP Moni Authority, Department of Science and Technology, Government of India. Reviewer for project evaluation-DST 					onitoring	
			oject evaluation-DSI				
G.	National Anti-doping Agency(NADA), Ministry of Sports, GOI						
	[Member of A	nti-doping panel				
	[Member anti-	dpoing awareness pro	ogramme for NAI	OA.		
Н.	WHO-Country office						
		As expert panel	member				
I.	Nation	al Institute of Ph	armaceutical and R	esearch (NIPER))		
		Member of sens	nte (academic Counci	[1]			
		Member of sele	ction committee				
		Member of IEC	-NIPER (Mohali)				
J.	Punjab	ınjab University, Chandigarh					

☐ Member of Board of studies of Punjab University, Chandigarh

K National Board of Examination

- Member of expert panel for validation of MCQ
- K. Member of Department of Helath Resaerch (DHR), MOH.
- A. LList of committees handling by Dr. Bikash Medhi.

Working as Additional Medical Superintendent Since 7 years

- 1. Joint Medical Superintendent & Officer Inchage New OPD, Advance Eye centre and Deaddiction Centre (three years)
- 2. Joint Medical Superintendent and office In charge Advance Cardiac Centre (one year)
- 3. Joint Medical Superintendent and office In charge Advance Eye Centre till date
- 4. Others Committee in PGIMER:
- 5. Replacement of HVAC in New OPD.

Dr. A. Rajwanshi (Chairman) AE (RAC) (convener) Dr. Bikash Medhi (Member)

6. Spot committee

Store Officer (convener) Dr. Bikash Medhi (Chairman)

7. Non purchase committee (furniture/fixture)

Dr. Y.K. Batra (Chairman) Store Officer (Convener) Dr. Bikash Medhi (Member)

8. Non plan purchase committee(Chemicals and Glassware)

Dr. Babu Ram Thapa (Chairman), Store officer (convener)

Dr. Bikash Medhi(member)

9. Irregularities in the Echo Lab appointments

Dr. R.K. Ratho (chairman)

Dr. Bikash Medhi (member convener)

- 10. Safe handling and storage of mercury waste Dr. Bikash Medhi(Chairman)
- 11. Day care O.T complex New OPD Block

Dr. K.L.N Rao Chairman Dr. Bikash Medhi (memberconvener)

12. Inspection committee

Dr. Anil Bhansali (Chairman) Dr. Bikash Medhi (member convener)

13. Udhampur rotary sarai camp (Jammu & Kashmir) Dr. Bikash Medhi (Nodal Officer for PGIMER)

14. Computer monitoring committeeMember15. Sanitation tenderMember16. Central committee-Animal HouseMember

17. Member of Sport Committee, PGIMER, 2005-2006

- 18. Advisory panel PGIMER Drug Bulletin
- 19. Member of Advisory Committee Drug Bulletin, PGIMER, Chandigarh
- 20. Member of Institute Bio safety Committee, PGIMER, 2005-2006
- 15. Highlights of Application's research activity/any other major contribution(s) during the period for evaluation for promotion: (Limit:100wards)

CNS: RESEARCH RELATED TO EPILEPSY/CEREBRAL ISCHEMIA/

ALZHEIMER'S DISEASE/CEREBRAL ISCHEMIA

Experimental Studies

- 1. Intestinal inflammation and seizure: understanding the role of TNF-ά in rat model.
- 2. Experimentally induced various inflammatory models and seizure: Understanding the role of TNF□ in rat.
- 3. Validation of the effects of progesterone and MK-801 on acute phase changes induced by partial global cerebral ischemia in mice.
- 4. Effect of pioglitazone on acute phase changes induced by partial global cerebral ischemia in mice.
- 5. Combined effects of G-CSF and Dizocilpine on acute phase changes induced by partial global cerebral ischemia in mice. (Funded by ICMR Adhoc project, New Delhi)
- 6. Study to evaluate correlation of different peripheral inflammation and epilepsy and role of cytokines in inflammation induced in experimental model in rats.
- 7. Effect of newer fluroquinolones on pharmacokinetic of different antiepileptic
- 8. Evaluation of effect of different drugs on morphine induced straub tail phenomenon following experimentally induced different pathological conditions in rats
- 9. Study to evaluate the seizure susceptibility in experimentally induced sepsis model in mice.
- 10. Effect of GCSF in experimentally induced Alzheimer disease in rats.
- 11. Effect of Metformin on Alzheimer Disease in rats.

Clinical Studies

- 12. Lithium therapeutic drug monitoring pattern at a tertiary care hospital in India.
- 13. Antiepileptic TDM pattern at a tertiary care hospital in India.
- 14. TDM pattern of the antiepileptic drugs in developed and developing countries.
- 15. Study to evaluate seasonal variation in plasma levels of lithium in the Indian population.

- 16. Determinants of patients becoming seizure free with anti-epileptics? An observational study in patients suffering from Epilepsy.
- 17. A double blind, randomized, placebo controlled trial of role of Doxycycline in acute ischemic stroke (with Neurology)
- 18. To study the role of oral Corticosterone in the treatment of Solitary Cyticercus Granulomas (SCGs) (with Neurology)
- 19. Evaluation of efficacy and tolerability of long term treatment Patients with Bipolar Disorder Treated with a Mood Stabilizer and Adjunctive Atypical Antipsychotics.
- 20. Comparative evaluation of ECT with Sertaline and Venlafaxine, correlation with serum, plasma 5 HT, urinary metabolite of 5 HT and assessment of quality of life in patients suffering from depression.
- 21. Prospective study to evaluate seasonal variation in plasma levels of lithium in the Indian population
- 22. To evaluate diagnostic criteria in the early age groups of individuals, susceptible for Alzheimer Disease.
 - Developed the model of Autism in experimental rat
 - Developed the model Celiac Disease in experimental rat Pharmacokinetic

Experimental Studies

- 1. Effect of artemisnin compounds on pharmacokinetic phenytoin and carbamazepine.
- 2. Effect of Etoricoxib on pharmacokinetic of Phenytoinand Carbamazipine.
- 3. Effect of Esomeprozole and Rebeprazole on pharmacokinetic of Phenytoin and Carbamazepine: An experimental study.
- 4. Effect of Aceclofenac and Ebastine on pharmacokinetic Phenytoin and Carbamazepine:An experimental study.

Clinical Studies

- 1. Pharmacokinetic of Propofol in Indian patients.
- 2. Performance of Target control infusion (TCI) system of Propofol in adult Indian population.
- 3. Effect of Newer Antimalarials (Artemisinin compound) on pharmacokinetics of different antiepileptics in patients suffering from epilepsy.(DST, New Delhi)

- 4. Comparative study to evaluate pharmacokinetic profile of delayed release of Aceclofenac tablet (a newly designed preparation) with Aceclofenac tablet.
- 5. To evaluate Pharmacokinetic Interaction of Single Dose of Curcumin with Steady-state Phenytoin in Epilepsy Patients.

Cardiovascular System

Experimental Studies

- 1. Effect of anti-aldosterone in prevention of myocardial infarction.
- 2. Effect of different anti-aldosterone compounds in normotensive rats and DOCA salt induced hypertensive rats in prevention of isoprotonolol induced myocardial infarction: An experimental study.
- 3. Study to evaluate the antithrombotic effect of Aryl Dihydropyrimidone (PRA 6) in experimental model of rats.
- 4. Role of matrix metalloproteinases and cytokine receptors in experimental autoimmune myocarditis induced by cardiac myosin peptides (collaboration with Histopathology, Dr Uma Nahar)
- 5. Comparative study to assess ankle edema following of Aryl Dihydropyrimidone (PRA 6) and Amlodipine in experimental model of rats

Clinical

Gastrointestinal System

Experimental Studies

- 1. Evaluation of MOA of diazepam in acetaminophen induced hepatotoxicity an experimental study.
- 2. Comparative evaluation of thalidomide with different doses and along with Sulfasalazine in experimentally induced inflammatory bowel disease in rats.
- 3. Effect of honey alone and in combination with Sulfasalazine in experimental induced bowel disease in rats.
- 4. Evaluation of Propofol effect in altering Pentylenetetrazol induced seizure threshold in peripheral inflammatory model in rats
- 5. Study to evaluate the effect of Propofol in altering Pentylenetetrazol induced seizure threshold in rat
- 6. Effect of Pioglitazone alone and in combination with Sulfasalazine in experimentally induced inflammatory bowel disease in rats.
- 7. Study to evaluate the potential effect of probiotics (Lactobacillus Spp.) for the prevention and treatment of experimentally induce inflammatory bowel disease and to correlate with arthritis in Rats"
- 8. Comparative evaluation of different doses of PPAR–γ agonist and green tea extract alone and combination with Sulfasalazine in experimentally induced inflammatory bowel disease in rats.

Clinical Studies

- 1. A randomized double-blind, clinical trial comparing 2% topical Diltiazem and Verapamil different concentration in patients suffering from chronic anal fissure (with Surgery)
- A randomized prospective double-blind, clinical trial comparing different concentration of topical Diltiazem and assessment of quality of life in the Indian patients suffering from chronic anal fissure.
- 3. A randomized double-blind, clinical trial comparing 2% topical Diltiazem with Lignocaine gel alone and in combination in patients suffering from chronic anal fissure.(Industry sponsor Study)
- 4. Assessment of systemic endotoxemia and role of pre-operative bowel preparation in Patients with portal hypertension for shunt surgery (with General Surgery).
- 5. Pioglitazone in mild to moderate ulcerative colitis: a randomized controlled clinical trial.
- 6. A randomized double blind trial to evaluate combined effect of erythromycin and metochloropropamide in patients suffering from post operative ileus.

Stem Cells Project

Experimental StudiesStudies

- 1. Study to evaluate effect of Stem cells following GCSF induction in experimentally induce Alzheimer disease in rats
- 2. Effect of Stem cells in experimentally induced Alzheimer disease in rats. (ICMR, New Delhi)

Clinical Studies

- 3. Therapeutic angiogenesis by autologus transplantation of peripheral blood mononeuclear cells in critical limb ischemia.
- 4. Cytokinemia and endotoxemia following reperfusion of acute lower limb ischemia. (with General Surgery)
- 5. Cytokines response to following autologus stem cells treatment in patients suffering from lower limb ischemia. (with General Surgery)
- 6. Vascular endothelia growth factor (VEGF) expression following therapeutic angiogenesis using autologus mononuclear stem cells in patients with peripheral arterial disease(PAD)

Nanotechnology - Project

- 1. Determination of ocular penetration and irritation potential of acyclovir micro- emulsion.
- 2. Comparative evaluation of thalidomide, sulfasalazine with nanotechnology based drug delivery in experimentally induced inflammatory bowel disease in rats.
- 3. Determination of ocular penetration and irritation potential of acyclovir ophthalmic formulation.
- 4. Determination of ocular penetration and irritation potential of aceclofenec ophthalmic formulation.
- 5. Study to evaluate the effect of a nano-formulation of Artemisinin and a novel formulation of 5-Fluorouracil alone and in combination, in 1,2-dimethylhydrazine induced colon carcinogenesis in rats
- 6. Determination of ocular penetration and irritation potential of acetazolamide ophthalmic formulation.
- 7. Study to evaluate pharmacokinetic and pharmacodynamic of different preparation of tolterodine in rabbits.
- 8. To develop and evaluate the nanoformulation of anti-malerial drugs in anti-malarial drug resistance"

Arthritis

Experimental studies

- 1. Study to evaluate effect of diacerein alone and combination with aceclofenac in adjuvant induced arthritis and in chronic inflammatory model.
- 2. Green tea extract in G Pig model of Osteoarthritis.
- 3. Comparative evaluation of aceclofenac, diacerein and ricinoleic acid alone and combination in experimentally induced arthritis in rats.
- 4. EFFECT OF LAKSHADI GUGGULU (AN AYURVEDIC FORMULATION) IN EXPERIMENTALLY INDUCED FRACTURE HEALING IN RATS
- 5. Experimental analysis of bone healing potential of an Ayurvedic Formulation "Lakshadi Guggulu" alone and combination with ACE inhibitor in Rat.

ClinicalStudies

- 6. Comparative clinical study of paracetamol, nimesulide CR, valdecoxib and Vit C&E as an add on therapy in patients suffering from primary knee osteoarthritis.
- 7. Epidemiology of osteoarthritis among adults population in the union territory of Chandigarh.

- 8. Comparative efficacy and safety of extended and instant release of tolterodine in children with neural tube defects having cystometric abnormalities.
- Evaluation of ADR and QIL in patents of neurogenic bladder receiving oral Oxybutanin and Tolterodine.
- 10. Evaluation of Eperisone HCL in the treatment of acute musculoskeletal spasm associated with low back pain: A double blind, randomized, placebo controlled clinical trial.(Multinational Clinical Trial)
- 11. Comparative study to evaluate the effect of castor oil and Diclofenac sodium in patients of primary knee osteoarthritis.
- 12. Diclofenac induced hepatotoxicity in patients of knee osteoarthritis.
- 13. Comparative clinical study of Diacerein and Aceclofenac alone and in combination as an add on therapy in patients suffering from primary knee osteoarthritis.
- 14. Long term efficacy of topical therapies in knee osteoarthritis: meta-analysis of randomized placebo controlled trials.
- 15. Comparative Study to Evaluate Efficacy and Safety of Diacerein as an add on therapy in Treatment of Rheumatoid Arthritis
- 16. Comparative clinical study of Aceclofenac and green tea extract as an add on therapy in patients suffering from primary knee osteoarthritis.
- 17. Comparative clinical study of Aceclofenac and green tea extract as an add on therapy in patients suffering from primary knee osteoarthritis.
- 18. Evaluation of efficacy and tolerability of a fixed dose combination of glucosamine sulfate and omega 3 fatty acid for treatment of painful osteoarthritis of knee: an open, prospective randomized three arm studies.

Cancer

ExperimentalStudies

- 1. Chemopreventive response of Aceclofenec in 1-2 dimethy hydrazine induced colon carcinogenesis in rats and development of colon targeted drug delivery system.
- 2. Effect of Artimisinin compound and 5-Fluorouracil alone and in combination in 1,2-dimethylhydrazine induced colon cancer in rats.
- 3. Effect of PPRγ agonist and 5-Fluorouracil alone and in combination in 1,2- dimethylhydrazine induced colon cancer in rats.
- 4. To evaluate the efficacy of various drugs in animal model of multiple myeloma

ClinicalStudies

5. Randomized double blind placebo controlled trial to evaluate the role of cyproheptidine hydrochloride in promoting weight gain in children with acute lymphoblastic leukemia.

Pediatric Urology

- 1. Comparative evaluation of safety and efficacy of Oxybutynin by different routes (oral, rectal and intra-vesicle) of administration in children with neurogenic bladder and bladder hyperactivity. (with Pediatric Surgery)
- 2. Angiotensin converting enzyme and angiotensin type 2 receptor gene related polymorphism in North West Indian children with posterior urethral valves: A pharmacogenomic study. (**funded by DBT, New Delhi**)
- Comparative pharmacokinetic study of sustain release and instant release of Oxybutanin by different routes in patients with neurogenic bladder and bladder hyperactivity (CSIR, New Delhi).

Miscellaneous

Experimental Studies

- 1. Effect of Manuka honey and Diltiazem alone and in combination in the treatment of wound in rats
- 2. Development of Biodegradable Scaffold for tissue engineered blood vessel.(DBT)
- 3. Evaluation of a topical muscle relaxant activity in an experimental frog model.
- 4. Effect of different hormonal preparation and its antagonist in cadmium induced overran and testicular apoptosis: An experimental study.
- 5. Comparative study to assess ankle edema following of Aryl Dihydropyrimidone (PRA 6) and Amlodipine in experimental model of rats.

Clinical Studies

- 6. Post-marketing surveillance of Ebastine in patients suffering from Allergic Rhinitis and Chronic Urticaria
- 7. A randomized, double blind, parallel group study to compare efficacy and safety of Fexofenadine and Ebastine in patients with chronic idiopathic Urticaria.

- A single blind randomized parallel group clinical trial to evaluate the efficacy and safety of G-CSF in pediatric patients with chemotherapy induced neutropenia.
- 9. Comparison of two walking epidural protocols for labour analgesia and their effect on labour and neonatal outcome.(with Anesthesiology)
- 10. Study to evaluate the efficacy of honey in different parasitic infections. (In vitro study)
- 11. Post marketing surveillance of fexofenadine in patients of allergic rhinitis and chronic urticaria.
- 12. Fexofenadine: its efficacy in the Indian population suffering from allergic rhinitis and chronic urticaria.
- 13. Experimental teaching and interactive computer-assisted learning: the student's viewpoint: an observational study.
- 14. Study to evaluate co-relation of serum cholesterol and serotonin level in suicidal death.(With Forensic Medicine)
- 15. Influence of hypoxia and hypothermia on predictive value of Mangled extremity severity score in lower extremity combined vascular and orthopedic trauma. (with General Surgery)
- 16. Correlation of post mortem drug level with ante mortem drug level in suspected cases of drug and poison related death.(ICMR, New Delhi)
- 17. Open Study for The Treatment of Hypertrophic, Keloid and Atrophic Scars with an Innovative Silicone Gel sheet Delivered In A Patented Gel Formulation.
- 18. To evaluate awareness about Pharmacovigilance system among medical personnel in different department in tertiary care hospital
- 19. Study to Evaluate awareness about medication errors among medical personnel and patients in tertiary care hospital: observational study
- 20. Comparative Study of efficacy of different Anti-Tubercular Treatment (ATT) regimens in the management of CNS Tuberculosis: A Randomized Trial

16. Anything else the applicant likes to mention (limit: 100wards)

Established Pharmacovigilance Centre and Materiovigilance centre:
 Pharmacovigilance Centre has been established in the Department of Pharmacology,

PGIMER, Chandigarh under the aegis of Central Drugs Standard Control Organization, Ministry of Health and family welfare, Govt. of India w.e.f. Oct, 2010. Later PGIMER has been identified by National Coordinating Centre, Indian Pharmacopoeia Commission as Regional Resource Centre for Northern Region for Training and Technical Support for North India. The prime objective of said centre is to collect the adverse drug reaction-reports from different departments of the Institute and also to foster the culture of reporting of adverse drug reactions amongst health care professionals. So collected reports of adverse drug reactions are then entered into Vigiflow; a database maintained and owned by Uppsala Monitoring Center, World Health Organization (WHO). AMC, PGIMER has contributed 10,158 Individual Case Safety Reports (ICSR's) till July, 2015 since its inception. AMC has a score of 0.94 for the completeness of ICSR's as compared to developed countries. The performance of the center has been appreciated time to time by the National Coordinating Centre, IPC, Ghaziabad and UMC-WHO.

Year wise distribution of the number of ICSR's reported by AMC, PGIMER, Chandigarh to NCC-IPC and UMC-WHO is as below:

Year	ICSR's Reported		
2010	131 (Oct, Nov, Dec)		
2011	1248		
2012	1969		
2013	2013		
2014	3126		
2015 (till July)	1671		

Furthermore, the centre is also committed to explore its scope to the other hospitals in the neighboring states also. More than 40 awareness seminars have been conducted in North Indian states. Being a Regional Resource Centre for Northern Region for Training and Technical Support, AMC-PGIMER has provided the training to personals from various medical institutes from North India. AMC-PGIMER is also providing the training to students from Panjab University every year to pharmacology students.

- 2. Experimental Pharmacology Lab: Research is any gathering of data, information and facts for the advancement of knowledge. It must be organised and undergo planning including performing literature reviews of past research and evaluating what questions need to be answered. Experimental pharmacology Laboratory (EPL) with such aims has been established in 2009. In these few years, EPL comes up with well maintained infrastructure, hardworking manpower and remarkable performances. EPL focuses on establishing animal models and exploring pathophysiology of various clinical ailments including Cerebral ischemia, Alzheimer's disease, Epilepsy, Autism, Malaria, Celiac disease and Inflammatory Bowel Disease. The mission of EPL is to foster research in neurological conditions and disorders such as Cerebral ischemia, Alzheimer's disease, Epilepsy and Autism. EPL's long term ambition is to encourage novel and creative approaches to basic and clinical research problems. The EPL has ongoing collaborations with various departments at PGIMER, Punjab University, Chandigarh and NIPER, Mohali. EPL believes in teamwork which means the ability to work together toward a common vision. The goal of team of EPL is to study brain based cognitive functioning, its disorders, enhance teaching and research mentoring in clinical and cognitive neuroscience and evaluate therapeutic approaches for celiac disease, malaria and to explore EPL's capability to become a leader in an area that is rapidly developing and essential to understanding human behaviour/condition and improve bench to bedside research to serve the humanity.
- Neurobiovoural Lab: We have established a well equipped Neurobehavioural research laboratory (NBRL) to study autism in rats and successfully established the animal model of autism in rats. Autism is a heterogeneous neurodevelopmental disorder of unknown aetiology that affects 1 in 50-80 individuals. Diagnosis is based on three categories of behavioural criteria: abnormal social interactions, communication deficits and repetitive behaviours. As the diagnostic criteria for autism are behavioural phenotyping, these rat models requires behavioural assays with high relevance to each category of the diagnostic symptoms. The validation of Autism Spectrum Disorder (ASD) model in animals is totally depended on the behavioural tests, so we required a well equipped animal behavioural laboratory set up. There are some common and basic requirements of any animal behavioural lab facility of autism, which includes:Ethovision XT Software, A room with controlled light and temperature facility, All the behavioural equipment. (i.e. Morris water maze, Elevated plus maze, Three chamber sociability test, Open field test, Hanging wire test, Hole board, Forced swim test, Negative geotaxis test, Grid walking test, Walking initiation test, Olfactory discrimination test.), A microbalance and microscope, Pregnant mother and pups monitoring system, A fully loaded Work

station., A video recording system with night vision camera., An automated behavioural analysis software system,

4. Pharmacogenomic & Pharmacoproteomic Laboratory: Pharmacogenomic tests are used to inform various factor about dosing and predict efficacy and adverse events for therapeutic agents. Most tests involve genetic testing, and In the case of cancer, both the DNA of the host and the tumor can be used to inform treatment choices. Pharmacoproeomic test are helpful in discovery of new biomarkers, which can help in the prediction of the ant disease as well as to monitor therapeutic progress. In our department I have established a Pharmacogenomic & Pharmacoproteomic laboratory to understand the disease like epilepsy, Alzheimer's, autism etc in better way. We have a full flagged lab with the most advanced instrument like PCR, Spectrophotometer, Cold centrifuge, Sonicator, Elisa reader, deep freezer etc. As we monitor ADR in pharamcovigilance centre, it is very necessary to evaluate all the adverse reaction on the genomic and proteomic level, so these facilty may play an important role to understand effect of the drug on the genome.