

Curriculum Vitae



Dr. Shyam S. Sharma

Professor and Head

Department of Pharmacology and Toxicology

National Institute of Pharmaceutical Education and Research (NIPER)

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Dr Shyam S. Sharma is Professor of Pharmacology and Toxicology at the National Institute of Pharmaceutical Education and Research (NIPER), Mohali, Punjab since 2009. Before joining NIPER Mohali as a faculty in 1999, he worked as postdoctoral fellow at the University of Illinois at Chicago, USA and did his PhD (Pharmacology) at the All India Institute of Medical Sciences (AIIMS), New Delhi. He is a fellow of Indian Pharmacological Society (FIPS). Dr Sharma has published more than 190 peer reviewed research papers/patents/book chapters with more than 7000 citations, *h*-index 46, and *i10*-index 129 <https://scholar.google.co.in/citations?user=yieVPfgAAAAJ&hl=en> and <https://niper.irins.org/profile/13140>. His research interests includes understanding the potential role of pharmacological agents in CNS disorders (cerebral ischemia, Parkinson's disease, Alzheimer's disease), diabetic complications (neuropathic pain, cognitive impairment, cardiomyopathy), cardiovascular diseases, and safety pharmacology. He has more than 25 years of teaching (master's and doctorate students) and research experience. Dr Sharma has guided more than 120 master's and doctorate students. He has delivered more than 100 invited talks at national & international levels. He has completed more than 20 extramural and industry funded projects. He is recipient of Organisation for Pharmaceutical Producers of India (OPPI) Scientist Award, Shakuntala Amir Chand Prize and Dr D N Prasad Memorial Oration Award of Indian Council of Medical Research, CDRI Oration award, PP Suryakumari Prize and Prof. NS Dhalla award of Indian Pharmacological Society. He was a secretary (International) of Indian Pharmacological Society for 2008-2011. He was an editor of Current Research and Information in Pharmaceutical Sciences (CRIPS) for 12 years and now he is on the editorial board of several impact factor international journals. He has organized several conferences including Drug Discovery and Development in New Millennium (D3NM1) conference in 2004, D3NM2 in 2005 and D3NM3 in 2006, 40th Annual Conference of Indian Pharmacological Society 2007, 11th Annual Conference of International Society for Heart Research (ISHRCON 2014), IPSCON2016, Society of Toxicology – India (STOX-India) 2017, STOX-India 2021 and NIPER-PHARMACON 2022.

Education

Postdoctoral Fellow

Department of Pharmacodynamics, College of Pharmacy
The University of Illinois at Chicago
Chicago, USA

PhD

Department of Pharmacology
All India Institute of Medical Sciences (AIIMS)
New Delhi, India

Master of Pharmacy (Pharmacology) and Bachelor of Pharmacy

Delhi Institute of Pharmaceutical Sciences and Research (DIPSAR)
(Formerly College of Pharmacy), University of Delhi, New Delhi

Current Positions

Head of the Department of Pharmacology and Toxicology, NIPER, Mohali (since April 2024)
Professor, Department of Pharmacology and Toxicology, NIPER, Mohali (since May 2009)
In-charge, National Centre for Safety Pharmacology

Previous Positions held

Associate Professor, Department of Pharmacology and Toxicology, NIPER, Mohali (2004-May 2009)
Assistant Professor, Department of Pharmacology and Toxicology, NIPER, Mohali (1999-2004)
Senior Research Associate, All India Institute of Medical Sciences (AIIMS), New Delhi (1998-1999)
Postdoctoral Fellow, College of Pharmacy, University of Illinois, Chicago, USA (1997)
CSIR Senior Research Fellow (1994-1996) and UGC Research Fellow (1989-1991)

Honour/Awards

Organisation for Pharmaceutical Producers of India (OPPI) Scientist Award 2012
Fellow of Indian Pharmacological Society (FIPS) 2014
Indian Council of Medical Research - Dr D. N. Prasad Memorial Oration award 2011
Dr NS Dhalla award 2017 of Indian Pharmacological Society
CDRI Oration 2009 of Indian Pharmacological Society
PP Suryakumari Prize 2009 of Indian Pharmacological Society
Shakuntala Amir Chand Prize 2006 of Indian Council of Medical Research
Senate member NIPER SAS Nagar (2016-2019)
Senate member, NIPER Raebarelli (2020 onward)
Secretary (International), Indian Pharmacological Society (2008-2011)
Editor, Behavioral Neurology
Editor, Current Research & Information on Pharmaceutical Sciences (CRIPS) 2000-2012
Editorial Board, Current Neurovascular Research (2012 onward)
Review Editor, International Journal of Pharmaceutical Sciences and Nanotechnology (2012-)
Editorial Board: Drugs : News and Views, AIIMS, New Delhi (1993-1997)
Silver medal awarded by Indian Pharmaceutical Association for the first rank in Master of Pharmacy (Pharmacology) in Delhi in 1991



ICMR awards function: Receiving ICMR Dr D. N. Prasad Memorial Oration Award 2011 from Shri Jagat Prakash Nadda, Union Minister of Health & family Welfare, GOI on January 19, 2016. Dr Soumya Swaminathan, DG-ICMR also graced this occasion.



OPPI awards presentation: Dr Sam Pitroda, Advisor to Prime Minister of India on Public Information, Infrastructure and Innovations presenting Organization of Pharmaceutical Producers of India (OPPI) Scientist award to Prof. Shyam S Sharma, Department of Pharmacology & Toxicology, NIPER, S.A.S. Nagar, Punjab on September 15, 2012 during the 46th Annual General Meeting of OPPI, Mumbai. Dr Sharma received this award for his outstanding research work in the area of pharmacology. Dignitaries graced the occasion (R-L) Shri Dilsher Singh Kalha, Secretary, Department of Pharmaceuticals, GOI; Dr Shyam S Sharma; Dr Sam Pitroda; Mr Ranjit Shahani, President, OPPI; Shri C. P. Singh, Chairman, NPPA, and Mr Tapan Ray, Director General OPPI.



Fellow of Indian Pharmacological Society (FIPS): Dr Dinesh Kumar, President Indian Pharmacological Society honoring Prof. Shyam S. Sharma, Department of Pharmacology and Toxicology, NIPER, S.A.S. Nagar as a Fellow of Indian Pharmacological Society (FIPS) for his outstanding contribution in the field of pharmacological Sciences during inaugural function of 47th Annual Conference of Indian Pharmacological Society on December 28, 2014 at Guwahati . Eminent pharmacologist Prof. Y. K. Gupta, AIIMS also graced FIPS ceremony.



ICMR awards presentation: Shri Ghulam Nabi Azad, Union Minister for Health & Family Welfare, Govt. of India presenting Shakuntala Amir Chand Prize 2006 of Indian Council of Medical Research to Dr. Shyam S. Sharma, Department of Pharmacology and Toxicology, NIPER S.A.S. Nagar for his contribution in the field of pharmacology. Dr Vishwa Mohan Katoch, Director-General ICMR graced this occasion.

RESEARCH AREAS/EXPERTISES

1. **CNS research:** Elucidation of molecular mechanisms and evaluation of effect of pharmacological interventions in the CNS diseases such as STROKE (MCAO, BCCAO models), Parkinson's disease (MPTP, 6-OHDA & Rotenone model), Alzheimer's disease (Amyloid beta model) and Huntington's disease (3-NP model)
2. **Cardiovascular research:** Evaluation of pharmacological interventions in CVS diseases such as myocardial ischemia and cardiac hypertrophy
3. **Diabetes and diabetic complications research:** Evaluation of pharmacological intervention and nanoformulations in diabetic neuropathy, diabetic cardiomyopathy and diabetic encephalopathy (memory impairment) models
4. **Pain and inflammation research:** Neuropathic pain studies (CCI model and cancer chemotherapy induced NP models), vascular pain model, Carrageenan hyperalgesia model etc
5. **Electrophysiology (Patch clamp):** Characterization of alteration in voltage gated sodium channels in DRG neuron exposed to high glucose and evaluation of effect of pharmacological interventions
6. **Safety pharmacology studies:** CNS, cardiovascular, respiratory and gastrointestinal safety pharmacological studies on NCEs (Non-GLP studies).

Research guidance

Master's and PhD Thesis supervised : >120

Under guidance : Master's thesis : 11, PhD thesis: 8

PUBLICATIONS – 194

(RESEARCH PUBLICATIONS/ REVIEW ARTICLES/PATENTS/BOOK CHAPTERS)

Peer-Reviewed publications

1. Vaidya B, Gupta P, Biswas S, Laha JK, Roy I and Sharma SS. Effect of Clemizole on Alpha-Synuclein-Preformed Fibrils-Induced Parkinson's Disease Pathology: A Pharmacological Investigation. **Neuromolecular Medicine** 2024, 26, 19. <https://doi.org/10.1007/s12017-024-08785-2>
2. Valvaikar S, Vaidya B, Sharma S, Bishnoi M, Kondepudi KK, Sharma SS, Supplementation of probiotic Bifidobacterium breve Bif11 reverses neurobehavioural deficits, inflammatory changes and oxidative stress in Parkinson's disease model. **Neurochemistry International** 2024, 105691. <https://doi.org/10.1016/j.neuint.2024.105691>
3. Rihan M and Sharma SS Compound 3K attenuates isoproterenol-induced cardiac hypertrophy by inhibiting pyruvate kinase M2 (PKM2) pathway, **Life Sciences** 2024, 351: 122837, <https://doi.org/10.1016/j.lfs.2024.122837>.
4. Rihan M, & Sharma SS, Cardioprotective potential of compound 3K, a selective PKM2 inhibitor in isoproterenol-induced acute myocardial infarction: A mechanistic study. **Toxicology and Applied Pharmacology**, 2024 116905. <https://doi.org/10.1016/j.taap.2024.116905>
5. Rihan M, & Sharma SS, Inhibition of Pyruvate kinase M2 (PKM2) by shikonin attenuates isoproterenol-induced acute myocardial infarction via reduction in inflammation, hypoxia, apoptosis, and fibrosis. **Naunyn-Schmiedeberg's Archives of Pharmacology**, 2024, 397(1): 145-159. <https://doi.org/10.1007/s00210-023-02593-4>
6. Bommaraju S, Dhokne MD, Arun EV, Srinivasan, K, Sharma SS, & Datusalia AK, An insight into crosstalk among multiple signalling pathways contributing to the pathophysiology of PTSD and depressive disorders. **Progress in Neuro-Psychopharmacology and Biological Psychiatry**, 2024, 110943.
7. Sandeep, Shinde SH, Ahmed S, Sharma SS, Pande AH, Engineered polyspecific antibodies: A new frontier in the field of immunotherapeutics. **Immunology**, 2024, 171(4): 464-496.
8. Anakha J, Dobariya P, Sharma SS, Pande AH, Recombinant human endostatin as a potential anti-angiogenic agent: therapeutic perspective and current status. **Medical Oncology**, 2023, 41(1): 24.

9. Adhya P, Vaidya B, Sharma, SS (2023) BTB: A TRPC5 activator ameliorates mechanical allodynia in diabetic peripheral neuropathic rats by modulating TRPC5-CAMKII-ERK pathway. **Neurochemistry International**, 170:105609.
10. Vaidya B, Gupta P, Laha JK, Roy I, Sharma SS (2023) Amelioration of Parkinson's disease by pharmacological inhibition and knockdown of redox sensitive TRPC5 channels: Focus on mitochondrial health. **Life Sciences** 328 :121871.
11. Sushma G, Vaidya B, Sharma S, Devabattula G, Bishnoi M, Kondepudi KK, Sharma SS (2023) Bifidobacterium breve bif11 supplementation improves depression-related neurobehavioural and neuroinflammatory changes in the mouse. **Neuropharmacology**. 15; 229:109480.
12. Dobariya P, Adhya P, Vaidya B, Khandave PY, Sharma SS, Pande AH (2023) Fused human paraoxonase 1 as a prophylactic agent against organophosphate poisoning. *Enzyme and microbial technology*. 1; 165:110209.
13. Rihan M, Sharma SS (2023) Role of pyruvate kinase M2 (PKM2) in cardiovascular diseases. *Journal of Cardiovascular Translational Research*. 16(2):382-402.
14. Vaidya B, Roy I, Sharma SS, Neuroprotective Potential of HC070, a Potent TRPC5 Channel Inhibitor in Parkinson' s Disease Models: A Behavioral and Mechanistic Study, *ACS Chemical Neuroscience* 2022, 13 (18): 2728-2742 doi.org/10.1021/acchemneuro.2c00403.
15. Kulkarni NP, Vaidya B, Narula AS and Sharma SS, Caffeic Acid Phenethyl Ester (CAPE) Attenuates Paclitaxel-Induced Peripheral Neuropathy: A Mechanistic Study. *Current Neurovascular Research* DOI: 10.2174/1567202619666220829104851
16. Ghosh S, Rihan M, Ahmed S., Pande AH and Sharma SS, Immunomodulatory potential of apolipoproteins and their mimetic peptides in asthma: Current perspective, *Respiratory Medicine* 2022, 204: 107007, doi: 10.1016/j.rmed.2022.107007
17. Nankar SA, Ahmed S, Sharma SS, Pande AH, Apolipoprotein-mimetic Peptides: Current and Future Prospectives. *Current Protein & Peptide Science* 2022, doi: 10.2174/ 1389203723666221003122624
18. Rihan M and Sharma SS, Role of Pyruvate Kinase M2 (PKM2) in Cardiovascular Diseases, *Journal of Cardiovascular Translational Research* 2022, 121 doi.org/ 10.1007/s12265-022-10321-1

19. Tyagi R, Vaidya B, Sharma SS, Crosstalk between neurological, cardiovascular, and lifestyle disorders: insulin and lipoproteins in the lead role. *Pharmacological Reports* 2022, 74(5): 790-817, doi: 10.1007/s43440-022-00417-5.
20. Vaidya B and Sharma SS, Nitric Oxide in Parkinson's Disease: Insights into Research and Therapeutics, In: Ray, A., Gulati, K. (eds) *Nitric Oxide: From Research to Therapeutics. Advances in Biochemistry in Health and Disease*, Vol 22. Pg: 327-347 Springer, Cham. https://doi.org/10.1007/978-3-031-24778-1_16
21. Singh JN, Agarwal P and Sharma SS, Role of QT prolongation in drug discovery and development, *Curr Res Inform Pharm Sci* 2022, 16 (3): 50-56.
22. Ahmed S, Pande AH, Sharma SS, Therapeutic potential of ApoE-mimetic peptides in CNS disorders: Current perspective, **Experimental Neurology** 2022 Jul; 353:114051 (doi: 10.1016/j.expneurol.2022.114051)
23. Sardoiwala MN, Gupta S, Shrimali N, Choudhury SR, Sharma SS, Guchhait P, and Karmakar S, Colon targeted chitosan-melatonin nanotherapy for preclinical Inflammatory Bowel Disease, **Biomaterials Advances**, 2022, 212796 (<https://doi.org/10.1016/j.bioadv.2022.212796>).
24. Sardoiwala MN, Mohanbhai SJ, Kushwaha AC, Dev A, Biswal L, Sharma SS, Choudhury SR, and Karmakar S, Melatonin mediated inhibition of EZH2-NOS2 crosstalk attenuates inflammatory bowel disease in preclinical in vitro and in vivo models, **Life Sciences** 2022, 302: 120655 (<https://doi.org/10.1016/j.lfs.2022.120655>)
25. Vaidya B, Kaur H, Thapak P, Sharma SS, Singh JN, Pharmacological Modulation of TRPM2 Channels via PARP Pathway Leads to Neuroprotection in MPTP-induced Parkinson's Disease in Sprague Dawley Rats, **Molecular Neurobiology** 2022 Jan 8. doi: 10.1007/s12035-021-02711-4. Soni Jignesh Mohanbhai,
26. Kaundal R, Datusalia A and Sharma SS, Posttranscriptional Regulation of Nrf2 Through miRNAs and their Role in Alzheimer's Disease, **Pharmacological Research** 2021, December <https://doi.org/10.1016/j.phrs.2021.106018>
27. Khare P, Mahajan N, Singh DP, Kumar V, Kumar V, Mangal P, Boparai RK, Gesing A, Bhadada SK, Sharma SS, Kondepudi K, Chopra K, Bishnoi M, Allicin, a dietary trpa1 agonist, prevents high fat diet-induced dysregulation of gut hormones and associated complications. **Food and Function** 2021, 15;12(22):11526-11536. doi: 10.1039/d1fo01792f.
28. Thapak P, Bishnoi M, Sharma SS, Tranilast, a Transient Receptor Potential Vanilloid 2 Channel (TRPV2) Inhibitor Attenuates Amyloid β -Induced Cognitive Impairment: Possible Mechanisms. **Neuromolecular Medicine** 2021 Jul 6. doi: 10.1007/s12017-021-08675-x.

29. Singh R, Adhya P and Sharma SS, Redox-sensitive TRP channels: a promising pharmacological target in chemotherapy-induced peripheral neuropathy, **Expert Opinion on Therapeutic Targets** 2021, doi.org/10.1080/14728222.2021.1956464
30. Soni JM, Sardoiwala NM, Choudhury SR, Sharma SS, Karmakar S, Melatonin-loaded chitosan nanoparticles endows nitric oxide synthase 2 mediated anti-inflammatory activity in inflammatory bowel disease model. **Materials Science and Engineering C: Materials for Biological Applications**, May 2021;124:112038. doi: 10.1016/j.msec.2021.112038.
31. Kulkarni NP, Vaidya B, Narula AS, Sharma SS, Neuroprotective Potential of Caffeic Acid Phenethyl Ester (CAPE) in CNS Disorders: Mechanistic and Therapeutic Insights, **Current Neuropharmacology** 2021, DOI: 10.2174/1570159X19666210608165509
32. Methiwala HN, Vaidya B, Addanki VK, Bishnoi M, Sharma SS and Kondepudi KK, Gut microbiota in mental health and depression: Role of Pre/Pro/Synbiotics in their modulation, **Food and Function** 2021,12, 4284-4314 <https://doi.org/10.1039/D0FO02855J>
33. Vaidya B, Guru P, Dhamija K and Sharma SS, Parkinson's disease in Women: Mechanisms underlying sex differences, **European Journal of Pharmacology** 2021, 895: 173862. doi.org/10.1016/j.ejphar.2021.173862
34. Das NR, Vaidya B, Khare P, Bishnoi M, Sharma SS, Combination of Peroxisome Proliferator-activated Receptor Gamma (PPAR γ) Agonist and PPAR Gamma Co-Activator 1 α (PGC-1 α) Activator Ameliorates Cognitive Deficits, Oxidative Stress, and Inflammation in Rodent Model of Parkinson's Disease, **Current Neurovascular Research** 2021; 18(5): 497-507 (doi: 10.2174/1567202619666211217140954.
35. Thapak P, Khare P, Bishnoi M and Sharma SS; Neuroprotective Effect of 2-Aminoethoxydiphenyl Borate (2-APB) in Amyloid β -Induced Memory Dysfunction: A Mechanistic Study, **Cellular and Molecular Neurobiology**, November 2020, doi.org/10.1007/s10571-020-01012-z
36. Vaidya B and Sharma SS, Transient Receptor Potential Channels as an Emerging Target for the Treatment of Parkinson's Disease: An Insight Into Role of Pharmacological Interventions, **Frontiers in Cell and Developmental Biology**, November 2020, doi.org/10.3389/fcell.2020.584513
37. Singh, S., Bhatia, R., Khare, P. Sharma S, Rajammohan, S, Bishnoi M, Bhadada SK, Sharma SS, Kaur J and Kondepudi KK, Anti-inflammatory *Bifidobacterium strains* prevent dextran sodium sulfate induced colitis and associated gut microbial dysbiosis in mice. **Scientific Report** 2020, 10: 18597, doi.org/10.1038/s41598-020-75702-5

38. Thapak P, Bishnoi M and Sharma SS; Amelioration of Diabetes-induced Cognitive Impairment by Transient Receptor Potential Vanilloid 2 (TRPV2) Channel inhibitor: Behavioral and Mechanistic Study, **Neurochemistry International** 2020 Jul 8;139:104783. doi: 10.1016/j.neuint.2020.104783
39. Thapak P, Bishnoi M and Sharma SS; Pharmacological Inhibition of Transient Receptor Potential Melastatin 2 (TRPM2) Channels Attenuates Diabetes-induced Cognitive Deficits in Rats: A Mechanistic Study, **Current Neurovascular Research** 2020 Apr 15. doi: 10.2174/1567202617666200415142211.
40. Thapak P, Vaidya B, Joshi HC, Singh JN and Sharma SS, Therapeutic potential of Pharmacological Interventions targeting TRP Channels in CNS Disorder, **Pharmacological Research** 2020, 159:105026 · June 2020 (DOI: 10.1016/j.phrs.2020.105026)
41. Resham K, Khare P, Bishnoi M, and Sharma SS, "Neuroprotective Effects of Isoquercitrin in Diabetic Neuropathy via Wnt/ β -Catenin Signaling Pathway Inhibition", **Biofactors** 2020, 46(3):411-420. doi: 10.1002/biof.1615. Epub 2020 Jan 21.
42. Ramakrishna K, Srinivasan K, Sharma SS, Chronic treatment of 4-Phenylbutyric acid ameliorates cognitive impairment after focal cerebral ischemia/reperfusion injury in rats, **Indian J of Physiol Pharmacol** 2020, 64(3):188-194,doi.org/10.25259/IJPP_172_2020
43. Adhya P and Sharma SS, Redox TRPs in Diabetes and Diabetic Complications: Mechanisms and Pharmacological Modulation, **Pharmacological Research** 2019, 146:104271. doi: 10.1016/j.phrs.2019.104271
44. Resham K and Sharma SS, Pharmacological Inhibition of Porcupine, Disheveled and β -catenin in Wnt Signaling Pathway Ameliorates Diabetic Peripheral Neuropathy in Rats, **Journal of Pain** 2019 20(11): 1338-1352, DOI: <https://doi.org/10.1016/j.jpain.2019.04.010>
45. Resham K and Sharma SS, Pharmacological interventions targeting Wnt/ β -catenin signaling pathway attenuate paclitaxel-induced peripheral neuropathy, **European Journal of Pharmacology** 2019, 864:172714. DOI: 10.1016/j.ejphar.2019.172714
46. Sunil A. Nankar¹, Yogesh Bulani², Shyam S. Sharma² and Abhay H. Pandel^{1,*} APOE-Derived Peptides Attenuated Diabetes-Induced Oxidative Stress and Inflammation, **Protein & Peptide Letters**, 2020, 27, 1-8. doi: 10.2174/0929866526666191002112655.
47. Kumar R, Saha N, Purohit P, Garg SK, Seth K, Meena VS, Dubey S, Dave K, Goyal R, Sharma SS, Banerjee UC, Chakraborti AK, Cyclic enaminone as new chemotype for selective cyclooxygenase-2 inhibitory, anti-inflammatory, and

- analgesic activities, **European Journal of Medicinal Chemistry** 2019, 182: 111601
48. Bulani Y, Srinivasan K, Sharma SS. Attenuation of type-1 diabetes-induced cardiovascular dysfunctions by direct thrombin inhibitor in rats: a mechanistic study. **Molecular Cellular Biochemistry** 2019, 451: 69-78.
49. Datusalia AK, Agarwal P, Singh JN, Sharma SS. Hyper-insulinemia increases the glutamate-excitotoxicity in cortical neurons: A mechanistic study. **European Journal of Pharmacology** 2018, 833:524-530.
50. Khare P, Mangal P, Baboota RK, Jagtap S, Kumar V, Singh DP, Boparai RK, Sharma SS, Khardori R, Bhadada SK, Kondepudi KK, Chopra K, Bishnoi M, Involvement of Glucagon in Preventive Effect of Menthol Against High Fat Diet Induced Obesity in Mice. **Frontiers in Pharmacology** 2018, 9: 1244 doi: 10.3389/fphar.2018.01244.
51. Mule NK, Singh JN, Shah KU, Gulati A and Sharma SS, Endothelin-1 decreases excitability of the dorsal root ganglion neurons via ETB receptor, **Molecular Neurobiology** 2018, 55(5):4297-4310.
52. Singh JN, Negi G, Kharatmal SB, Mule N, Sharma D, and Sharma SS; Short term extracellular glucose exposure alters neurite outgrowth and intracellular reactive oxygen species without altering viability in neuronal cells; **Indian Journal of Experimental Biology** 2017; 55:648-654.
53. Bulani Y and Sharma SS, Argatroban attenuate diabetic cardiomyopathy in rats by reducing fibrosis, inflammation, apoptosis and protease activated receptors expression, **Cardiovascular Drugs and Therapy** 2017, 31(3):255-267.
54. Khare P, Datusalia AK, Sharma SS, Parthenolide, an NF- κ B Inhibitor Ameliorates Diabetes-Induced Behavioural Deficit, Neurotransmitter Imbalance and Neuroinflammation in Type 2 Diabetes Rat Model. **Neuromolecular Med.** 2017, 19(1): 101-112.
55. Sachan V, Srinivasan K, Sharma SS, Imatinib alleviates neurological deficits and brain injury after transient focal cerebral ischemia associated with comorbid type 2 diabetes, **Indian J Physiol Pharmacol** 2017, 61(2) : 191–201
56. Khare P, Jagtap S, Jain Y, Baboota RK, Mangal P, Boparai RK, Bhutani KK, Sharma SS, Premkumar L, Kondepudi K, Chopra K and Bishnoi M. Cinnamaldehyde supplementation prevents fasting induced hyperphagia, lipid accumulation and inflammation in high fat diet fed mice, **Biofactors** 2016, 42(2):201-11.

57. Sharma D, Singh JN, Sharma SS. Effects of 4-phenyl butyric acid on high glucose-induced alterations in dorsal root ganglion neurons. **Neurosci Lett**. 2016, 635:83-89.
58. Rajput SK, Sharma AK, Meena CL, Pant AB, Jain R, Sharma SS. Effect of L-pGlu-(1-benzyl)-l-His-l-Pro-NH₂ against in-vitro and in-vivo models of cerebral ischemia and associated neurological disorders. **Biomed Pharmacother**. 2016 Oct 27;84:1256-1265
59. Jawale A, Datusalia AK, Bishnoi M and Sharma SS, Reversal of Diabetes-induced Behavioral and Neurochemical Deficits by Cinnamaldehyde, **Phytomedicine** 2016 ; 23(9):923-30.
60. Bajaj P, Agarwal G, Tripathy R, Datusalia AK, Sharma SS and Pande A, Refolded recombinant human paraoxonase 1 variant exhibits prophylactic activity against organophosphate poisoning, **Applied Biochemistry and Biotechnology** 2016 180(1):165-76.
61. Das NR and Sharma SS, "Cognitive Impairment Associated with Parkinson's Disease: Role of Mitochondria", **Current Neuropharmacology** 2016, 14(6):584-92.
62. Komirishetty P, Areti A, Yerra VG, Ruby PK, Sharma SS, Gogoi R, Sistla R, Kumar A, PARP inhibition attenuates neuroinflammation and oxidative stress in chronic constriction injury induced peripheral neuropathy, **Life Sciences** 2016, 150: 50-60
63. Meena CL, Thakur A, Nandekar PP, Sharma SS, Sangamwar AT and Jain R, Synthesis and biology of ring-modified l-Histidine containing thyrotropin-releasing hormone (TRH) analogues. **European Journal of Medicinal Chemistry** 2016, 111:72-83.
64. Negi G, Vanaja N, Kamble P and Sharma SS, Heme oxygenase-1, a novel target for the treatment of diabetic complications: focus on diabetic peripheral neuropathy, **Pharmacological Research** 2015, 102:158-167.
65. O'Donnell JN, Gulati A, Lavhale MS, Sharma SS, Patel AJ, Rhodes NJ and Scheetz MH, pharmacokinetics of centhaquin citrate in a rat model, **Journal of Pharmacy and Pharmacology** 2016, 68(1), 56-62.
66. Datusalia A, and Sharma SS, NF- κ B Inhibition Resolves Cognitive Deficits in Experimental Type 2 Diabetes Mellitus through CREB and Glutamate/GABA Neurotransmitters Pathway, **Current Neurovascular Research** 2016, 13(1):22-32.

67. Negi G and Sharma SS, Inhibition of I κ B kinase (IKK) protects against peripheral nerve dysfunction of experimental diabetes, **Molecular Neurobiology** 2015, 51(2):591-8.
68. Kharatmal S, Singh JN and Sharma SS, Calpain inhibitor, MDL 28170 confer electrophysiological, nociceptive and biochemical improvement in diabetic neuropathy, **Neuropharmacology** 2015, 97:113-121
69. Kharatmal S, Singh JN and Sharma SS Comparative evaluation of in vitro and in vivo high glucose-induced alterations in voltage-gated tetrodotoxin-resistant sodium channel: effects attenuated by sodium channel blockers **Neuroscience** 2015, 305:183-96.
70. Kharatmal S, Singh JN and Sharma SS, Rufinamide Improves Functional and Behavioral Deficits via Blockade of Tetrodotoxin-Resistant Sodium Channels in Diabetic Neuropathy, **Current Neurovascular Research** 2015, 12(3):262-268.
71. Bulani Y and Sharma SS, Therapeutic Potential of Targeting Protease Activated Receptors (PAR) in Cardiovascular Diseases, **Current Pharmaceutical Design** 2015, 21(30):4392-9.
72. Meena CL, Ingole S, Rajpoot S, Thakur A, Nandekar PP, Sangamwar AT, Sharma SS and Jain R, Discovery of a low affinity thyrotropin-releasing hormone (TRH)-like peptide that exhibits potent inhibition of scopolamine-induced memory impairment in mice, **RSC Advances** 2015, 5:56872-56884.
73. Meena CL, Thakur A, Nandekar PP, Sangamwar AT, Sharma SS, Jain R. Synthesis of CNS active thyrotropin-releasing hormone (TRH)-like peptides: Biological evaluation and effect on cognitive impairment induced by cerebral ischemia in mice. **Bioorg Med Chem.** 2015, 23(17): 5641-53.
74. Kharatmal S, Singh JN and Sharma SS, Voltage-Gated Sodium Channels as Therapeutic Targets for Treatment of Painful Diabetic Neuropathy, **Mini-Reviews in Medicinal Chemistry** 2015, 15(14): 1134-47.
75. Datusalia A, and Sharma SS, Amelioration of Diabetes-induced Cognitive Deficits by GSK-3 β Inhibition is Attributed to Modulation of Neurotransmitters and Neuroinflammation, **Molecular Neurobiology** 2014, 50(2):390-405.
76. Das NR and Sharma SS, Peroxisome proliferator activated receptor gamma coactivator 1 alpha: An emerging target for neuroprotection in Parkinson's disease, **CNS & Neurological Disorders - Drug Targets**, 2015, 14(8):1024-30.
77. Sharma M, Akhtar N, Sambhav K, Shete G, Bansal AK, Sharma SS, Emerging Potential of Citrus Flavanones as an Antioxidant in Diabetes and its Complications. **Current Topics in Medicinal Chemistry** 2015, 15(2):187-95.

78. Gangwal RP, Damre MV, Das NR, Dhoke GV, Bhadauriya A, Varikoti RA, Sharma SS, Sangamwar AT, Structure based virtual screening to identify selective phosphodiesterase 4B inhibitors, **Journal of Molecular Graphics and Modelling** 2015, 57:89-98.
79. Singh JN, Rathej M and Sharma SS. Diabetic-induced increased sodium channel activity attenuated by tetracaine in sensory neurons in vitro, **Biochem Biophys Res Comm** 2014, 453(3):296-301
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General Articles : 18

177. Gulati A and Sharma SS, Challenges in Drug Discovery: Overcoming the Development Hurdles. *Curr Trends Pharm Sci* 2014.
178. Negi G, Kumar A, Joshi R, Ruby PK and Sharma SS, Oxidative Stress and Diabetic neuropathy: Effects of antioxidants, *IIOAB Journal* 2011, 2 (6): 71-78.
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Abstracts Presentations : National and International Level: More than 200

Teaching Experience

More than 25 years experience in teaching in the following areas of Pharmacology & Toxicology

- CNS Pharmacology
- CVS Pharmacology
- GI Pharmacology
- Autacoid pharmacology
- Pharmacological screening models in Drug Discovery
- Experimental Pharmacology
- Regulatory Affairs (IND, NDA, Safety Pharmacology and GLP)
- General pharmacology particularly receptor downregulation, upregulation and transmembrane signal transduction mechanisms

Invited Lectures: 135

1. Therapeutic Potential of Pharmacological Interventions Targeting Transient Receptor Potential (TRP) channels in CNS Disorders: Focusing on Cognitive Functions, INNOVATE24, March 7-9, 2024, BITS Pilani, Rajasthan
2. Elucidation of the Role of Redox-sensing Transient Receptor Potential Canonical 5 Channels (TRPC5) in Diabetic Peripheral Neuropathy and in Diabetic Cardiac Autonomic Neuropathy using pharmacological approach, 52nd Annual Conference of Indian Pharmacological Society, JSS College of Pharmacy, Mysore, February 22-25, 2023
3. Elucidation of Role of Protease Activated Receptors in Diabetes induced cardiac dysfunctions using pharmacological Interventions, Joint Annual Conference of IACS and ISHR (ACMR 2023), PGIMER, Chandigarh, February 16-18, 2023
4. Therapeutic potential of TRP Modulators, 3rd North Zone conference of Indian Pharmacological Society, February 9-10, 2023
5. Elucidation of the involvement of TRP channels in Diabetic complication using pharmacological Interventions, 2nd Nirma eConference for International connect (NCIC 2023), Nirma University, Ahmedabad, January 24-25, 2023
6. Translational Potential of CNS disease models in discovery of CNS therapeutics; 6th Advanced Training Program in Experimental Behavioural Neuroscience, PGIMER, Chandigarh, January 19-21, 2023
7. Elucidation of involvement of TRPs in cognitive impairment using pharmacological Interventions, IBRO-APRC School and Society for Neurochemistry – India, University of Hyderabad, December 12-16, 2022
8. Translational Challenges in the Development of Neurotherapeutics, 1st IBRO-APRC Associate School on Advances in Nanoneurotherapeutics and neurological Disorders, ISFCP, Moga, Punjab, November 7-10, 2022
9. Recent Trends and Application of GLP, DST-NGCMA Sensitization workshop on GLP for students/researchers, ISFCP, Moga, Punjab, October 6, 2022

10. Challenges in CNS Drug Discovery and Development, lecture delivered during International Brain Research Organization (IBRO) workshop, May 13-15, 2022, ISF College of Pharmacy, Moga
11. Cardiovascular Safety Assessment of COVID19 drugs: Focusing on ICH S7B and E14 guidelines, lecture delivered during International Webinar on "Emerging Infectious Diseases, Molecular Diagnostics, Vaccines and Future Medicine ", March 17, 2022, organized by Kerala Academy of Sciences and Central University of Kerala, Trivandrum
12. Cardiovascular Safety of COVID-19 drugs: Preclinical Assessment Strategies, lecture delivered in the National Conference-cum-Workshop on “Post Covid-19 Pandemic Era: Prospective Shift towards Clinical and Translational Research” at Department of Pharmaceutical Sciences and Drug Research, Punjabi University, Patiala, Punjab on March 16-17, 2022.
13. Elucidation of Involvement of Oxidative Stress and Redox Sensitive Transient Receptor Potential (TRP) Channels in Diabetic Neuropathy Using Pharmacological Approach, lecture delivered during 6th International Conference (NIPiCON) jointly with Indian Pharmacological Society (IPS) as NIPiCON-IPS 2022, Nirma University, Ahmedabad February 17-19, 2022
14. Scientific social responsibilities and publication ethics, lecture delivered in certificate course on "Improving the Quality and Outcome of Experimental Research", NIPER-Raebareli, November 15-21, 2021.
15. Role of GLP in Safety Pharmacological Studies, lecture delivered during CME on Good Laboratory Practices (GLP) and Drug Development, October 4-5, 2021, Gauhati University, Gauhati, Assam
16. Transforming pharmacy and pharmaceutical sciences through innovation, keynote lecture delivered on the occasion of World Pharmacist Day, September 25, 2021, Central University of Haryana, Haryana
17. Drug Discovery and Development: A Career Opportunity for Pharmaceutical Sciences Graduates, SGT University, Gurugram, Haryana, July 30, 2021
18. Career Opportunity for Pharma Graduates, Department of Pharmaceutical Sciences, Gurukul Kangri , Haridwar, July 24, 2021
19. Translational Challenges in the Development of Neurotherapeutics for the Treatment of Stroke, 12th NIPER (R) International E-Symposium “Translational Research and Drug Delivery Systems” 15th-16th February, 2021, NIPER Raebarelli
20. Regulatory Guidelines for Assessment of Cardiovascular Safety Pharmacology of anti-COVID-19 molecules, International Webinar on "Pharmacology and Toxicology", Virtual Conference, PGIMER Chandigarh, January 29-30, 2021
21. Translational Potential of CNS disease models in the Discovery of CNS Therapeutics, 5th Advanced Training Programme in Experimental Behavioral Neurosciences” (NBRL-ATP-EBN) in Department of Pharmacology, PGIMER, Chandigarh, December 21-22, 2020

22. Cardiovascular safety assessment of New Chemical Entities (NCEs), International webinar series on 'Food, Chemicals and Nanomaterials toxicity' Virtual conference, Central University of Kerala, November 26-27, 2020
23. Research Ethics: Recommendations and Guidelines to Prevent Research Misconduct, AICTE Sponsored Online STTP on Training in Excellence with Ethics and Behavioural science, Virtual conference, ISF College of Pharmacy, Moga, November 23-27, 2020
24. Safety Pharmacology in Drug Discovery and Development: Current Guidelines and Innovations, 'International virtual conference on Drug Discovery and Delivery, BITS Pilani, November 6-7, 2020
25. Research Integrity: Strategies for Promoting it in Pharmaceutical Sciences, AICTE Sponsored Online STTP on Training in Excellence with Ethics and Behavioural science, ISF College of Pharmacy, Moga, October 24, 2020
26. Institutional Ethics Committee: Role and responsibilities in Clinical Research, 33rd Quality Improvement program, DIPsAR, New Delhi. September 22-25 2020
27. Career Opportunity for Pharma Graduates, Chetnad College of Pharmacy, September 23, 2020
28. Cardiac Safety of Repurposed COVID19 drugs: Focusing on Criteria to Assess Cardiac Safety in Preclinical Studies, lecture delivered during Two Days online International Conference on Covid-19, ISF College of Pharmacy, Moga, Punjab May 22-23, 2020
29. Safety Pharmacology of Anti-COVID19 Molecules: Current Methods of SP Assessment, lecture delivered during International E conference 2020 on the theme Pharmaceutical Care and Management Prospective of COVID-19 Pandemic, Organized by Rayat Bahra University, Mohali, Punjab, May 15-16, 2020.
30. Bridging the gap between Industry and Academia in Pharmaceutical Education, lecture delivered during Industry-Academia Interaction 2020, March 6, 2020 at University School of Pharmaceutical Sciences, Rayat-Bahra University, Mohali
31. Elucidation of Role of Protease Activated Receptors (PARs) in Diabetes-induced Cardiac Dysfunctions using Pharmacological Approach” lecture delivered during International Conference of Cardiovascular Sciences (ICCS-2020), February 21–23, 2020, DPSRU, New Delhi
32. Potential of Molecules from the Natural Products for the Treatment of Diabetic Neuropathy, invited talk delivered 5th International Union of Pharmacology (IUPHAR) World conference and 51st Annual Conference of Indian Pharmacological Society, December 5-7, 2020, NIN, Hyderabad.
33. Neurodegenerative Diseases: Current Status of PD Models and their Translational Potential in Drug Discovery, lecture delivered during *4th Advanced Training Programme in Experimental Behavioral Neurosciences” (NBRL-ATP-EBN)*, November 29-December 1, 2019, PGIMER Chandigarh

34. Drug Discovery and Development: An Insight into Pharmacovigilance” lecture delivered during National Conference on ‘Current Trends and Future Perspective in Pharmacovigilance’, November 29, 2019 at M. M. University, Solan, HP
35. Research Methodologies in Neuropharmacology, lecture delivered during faculty Development Program, November 18-22, 2019 at MM College of Pharmacy, M. M. University, Mullana, Ambala,
36. Safety pharmacological studies for biotechnology derived products, lecture delivered during Indian Technical and Economic Cooperation (ITEC) training program on “Recent Trends and Challenges in Biopharmaceuticals”, August 19-29, 2019 at NIPER SAS Nagar.
37. Role of herbal medicine prevention and the treatment of stroke, lecture delivered during the conference Zoocon2019 “Biodiversity for human health and Societal welfare: Current Challenges and Achievable”, March 26-27, 2019, Panjab University, Chandigarh
38. Translational Challenges in Stroke Research: Guidelines for Conducting Animal Studies for Developing Neuro-protective Agents” inaugural lecture delivered during Workshop on Ethical Contemplation of Animal Resources for Experimentation (WeCARE-2019)”, February 25-March 1, 2019, IMTECH Chandigarh
39. Translational Neuropharmacology, lecture delivered during North Zone Indian Pharmacological Society Conference, February 14-15, 2019, MM University, Ambala, Haryana
40. Research using animals: demystifying the truth, lecture delivered during 70th Indian Pharmaceutical Congress, December 20-22, 2018
41. Role of IAEC in animal experimentation, lecture delivered during 4th National Symposium cum Workshop on Experimental Research and Alternatives (NSWERA)”, December 1, 2018, PGIMER Chandigarh
42. Neurodegenerative disorders, lecture delivered during 3rd Advanced Training Programme of Experimental Behavioral Neuroscience, November 29, 2018, PGIMER Chandigarh
43. Pre-clinical studies of protein pharmaceuticals, lecture delivered during Indian Technical and Economic Cooperation (ITEC) training program on “Recent Trends and Challenges in Biopharmaceuticals”, October 3-13, 2018 at NIPER SAS Nagar.
44. CNS drug discovery, lecture delivered at International Conference on "Pharmacology and Drug Discovery" October 4-6, 2018 at Maharaja Agrasen University, Baddi, Himachal Pradesh
45. Career Opportunities in Pharmaceutical Sciences” lecture delivered at workshop on “Funding Opportunities for Research, Innovation & Career Development ” July 22, 2018, ISF College of Pharmacy, Moga, Punjab
46. Role of Citrus flavonoids in cardiovascular disorders, International Society of heart Research – Indian section ISHR PGIMER Chandigarh February 17-19, 2018

47. Cardiovascular Dysfunction and Stroke in Diabetes: Effects of pharmacological agents targeting PAR and ER stress Golden Jubilee conference of Indian Pharmacological Society NMIMS Mumbai February 15-17, 2018
48. Preclinical Cardiac Safety Assessment: Regulatory guidelines and recent developments STOX 37th Annual Conference of Society of Toxicology (STOX 2017) PGIMER Chandigarh November 16-19, 2017
49. Safety Pharmacology and GLP 37th Annual Conference of Society of Toxicology (STOX 2017) PGIMER Chandigarh November 16-19, 2017
50. CNS Drug Discovery: Focusing on Stroke Research, delivered invited talk during GIAN workshop on "Chemical Biology and Drug Discovery", October 24-30, 2017
51. Drug Development in CNS disorders, an invited talk delivered during Training Programme on "2nd Advanced Training Programme on Behavioral Neurosciences" on November 16th, 2017 at PGIMER, Chandigarh.
52. Future of Safety Pharmacology, invited talk delivered during Faculty Development Program on the topic -"Pharmacology-Preclinical to Clinical" from 10th July to 14th July, 2017 at KIET, Ghaziabad.
53. Panellist on the panel discussion on "PMBJK need and importance of pharmaceutical skill and entrepreneurship, during 3rd Annual Convention of APTI Punjab State Branch and National Conference on interdisciplinary trends in pharmaceutical research, April 13-14, 2017, Rayat-Bahra University
54. Safety Pharmacological studies for Regulatory Submission, invited talk delivered at National conference on Regulatory Toxicology and Pharmacology, April 20, 2017, Baddi University of Emerging Science and Technology, Baddi, Himachal Pradesh
55. Exploratory Safety Pharmacology, invited talk delivered at 35th National Workshop on Clinical Pharmacology and Therapeutics (NWCPT), March 6-10, 2017, PGIMER, Chandigarh
56. Safety Pharmacology: Current guidelines and emerging concepts, invited talk delivered at "International conference on Challenges in drug discovery and delivery" (ICCD3-2017) during March 2-4, 2017 at BITS Pilani, Rajasthan.
57. GLP and safety pharmacology, guest lecture delivered at Preconference during 49th Annual Conference of Indian Pharmacological Society, October 18, 2016, PGIMER Chandigarh.
58. Neurobehavioural studies in safety Pharmacology, guest lecture delivered at Preconference during 49th Annual Conference of Indian Pharmacological Society, October 18, 2016, PGIMER Chandigarh.
59. Translational stroke research, guest lecture delivered at 49th Annual Conference of Indian Pharmacological Society, October 20-22, 2016, PGIMER Chandigarh.

60. Techniques to assess safety pharmacology of a NCE, UGC Networking Resource centre workshop on Innovative tools and techniques for pharma research, March 14-19, 2016, Panjab University, Chandigarh
61. Role of Animal Models in CNS Drug Discovery, 48th Annual Conference of Indian Pharmacological Society, December 18-20, 2015, Saurashtra University, Rajkot, Gujarat.
62. Safety Pharmacology and GLP, 4th International and 7th National Conference of Indian Society for Rational Pharmacotherapeutics (ISRPTCON 2015), December 4-6, 2015, PGIMER, Chandigarh
63. Introduction to GLP, Preconference ISRPTCON 2015, December 4, 2015, PGIMER, Chandigarh
64. Neuroprotectives for stroke: Current status and translational challenges, Annual conference of Indian Academy of Neuroscience, Panjab University, Chandigarh, October 31-November 2, 2015
65. Targeting PPAR γ , PGC1 α and Mitochondria for Neuroprotection, International Brain Research Organization (IBRO) school, October 26-October 30, 2015, Panjab University, Chandigarh
66. CNS Drug Discovery and Development, National Conference on Emerging Trends in Pharmacological Research, October 16, 2015, Rayat and Bahra University, Mohali
67. Therapeutic Potential of Targeting Nitric Oxide Pathway for the Treatment of Stroke, invited talk delivered at Symposium on Nitric Oxide: From Research to Applications held at VP Chest Institute, University of Delhi, on 6th April, 2015.
68. Cardiovascular Complications Associated with Diabetes: Effect of Pharmacological Interventions, invited talk delivered at 12th Annual Conference of International Society of Heart Research (ISHRCON 2015), March 14-15, 2015, JNU, New Delhi.
69. Safety Pharmacology in Drug discovery and Development, invited talk delivered at 34th National Workshop on Clinical Pharmacology and Therapeutics (NWCPT), February 23-28, 2015, PGIMER, Chandigarh
70. Pharmacological Techniques in Brain Research: Focus on evaluation of NCEs for cerebral ischemia, guest lecture delivered at 47th Annual Conference of Indian Pharmacological Society, December 27, 2014, GMC and NIPER, Guwahati.
71. Neuroprotective Potential of Peroxisome Proliferator Activated Receptor (PPAR) agonists in CNS disease models, guest lecture delivered at 47th Annual Conference of Indian Pharmacological Society, December 28, 2014, GMC and NIPER, Guwahati.
72. Elucidation of Involvement of Oxidative/nitrosative stress - Inflammation Cascade in Diabetic Neuropathy using Pharmacological Approach, guest lecture delivered at 47th Annual Conference of Indian Pharmacological Society, December 28, 2014, GMC and NIPER, Guwahati.

73. Safety Pharmacology: Current Guidelines and Good Laboratory Practices, guest lecture delivered at 47th Annual Conference of Indian Pharmacological Society, December 27, 2014, GMC and NIPER, Guwahati.
74. Neuroprotective potential of peroxisome proliferator activated receptor (PPAR) agonist in CNS disorders, invited lecture delivered in IBRO/APRC Chandigarh Neuroscience school, November 2-8, 2014, UIPS, Panjab University, Chandigarh
75. Safety Pharmacology: Current Guidelines and Challenges, guest lecture delivered during North Zone Indian Pharmacological Society conference, October 16-18, 2014, MM College of Pharmacy, M. M. University, Mullana, Ambala
76. Mechanisms of neuroprotection with PPAR agonists, invited lecture delivered during 28th Annual Meeting of Society for Neurochemistry, India (SNCI), September 10-12, 2014 held at CEFT, Sri Ramachandra University (SRU), Chennai.
77. Challenges in the Discovery and Development of CNS Therapeutics for the Management of CNS disorders, guest lecture delivered on July 2, 2014 during Two weeks Pharmacy Practice Training Programme for Pharmacy Teachers on “Rationale Drug Use and Disease Management”, June 30-July 11, 2014, MM College of Pharmacy, Mullana, Ambala.
78. Nitric oxide based strategies for the treatment of cerebral ischemia, guest lecture delivered at 46th Annual Conference of Indian Pharmacological Society & International Conference on Translational Pharmacology, December 16-18, 2013, Bangalore
79. Pre-marketing strategies for detecting risk, invited lecture delivered during National Conference on “Current Perspectives in Pharmacovigilance and Drug Risk Management” held at MM College of Pharmacy, Mullana, Ambala during November 21-23, 2013.
80. Safety Pharmacology in Drug Discovery: Use of Animals, Alternatives & GLP Principles, National Symposium cum Workshop on Animal Welfare, Ethics, Experimental Research & Alternatives School of Pharmacy & Emerging Sciences, Baddi University of Emerging Sciences & Technology, Baddi, H.P., November 16, 2013
81. Elucidation of Involvement of Oxidative stress and Inflammation in Diabetic Neuropathy using Pharmacological Interventions, invited lecture delivered during National Conference on Diabetes and its Complications, September 6-7, 2013, Nirma University, Ahmedabad.
82. Use of Animals and Alternatives in Safety Pharmacological Studies during Drug Discovery & Development, invited lecture delivered during symposium on “Management of Experimental Animals & Alternatives”, May 11, 2013 organized by ASBASJSM College of Pharmacy, Bela, Punjab,
83. GLP: Role in Safety Pharmacological Studies, invited lecture delivered in the UGC Networking Summer Course on “Innovations in Pharma Research: Stepping Stones”, March 11-16, 2013, UIPS, Panjab University, Chandigarh
84. GLP : Role in Safety Pharmacology, invited talk delivered at National Symposium cum workshop on Experimental Research and Alternatives (NSWERA), March 11-15, 2013, PGIMER, Chandigarh

85. Determination of Pharmacokinetic and Pharmacodynamics parameters for nano-drug delivery system during the DBT Expert Group Meeting and Brainstorming on Application of Nanotechnology in Cancer Therapy, March 4-5, 2013
86. Pharmacological Interventions Targeting Oxidative Stress-PARP Pathway Attenuates Diabetes-induced Cardiac Dysfunctions, “International Conference on Cardiomyopathy Research (ICCR 2013)” (March 1-2, 2013)”
87. Safety Pharmacology in Drug Development: Use of Animals and Alternatives in National Conference on “Use of Animals and Alternatives in Biomedical Research with Special reference to Drug Discovery and Drug Development”, February 14-15, 2013, Amity University, Noida, Uttar Pradesh
88. Pharmacological Interventions Targeting ER stress in stroke with diabetes, guest lecture delivered at 45th Annual Conference of Indian Pharmacological Society & International conference on navigating pharmacology towards safe and effective therapy, January 5-7, 2013, Nagpur
89. Safety Pharmacology and Good Laboratory Practices, guest lecture delivered at National Symposium on Good Laboratory Practices (GLP), July 28, 2012, PGIMER, Chandigarh
90. Safety Pharmacology, invited talk delivered at National Symposium cum workshop on Experimental Research and Alternatives (NSWERA), March 3, 2012, PGIMER, Chandigarh
91. PPARs as a therapeutic target for the treatment of ischemic stroke, guest lecture delivered at International Conference on Cardiovascular Research Convergence, February 17-18, 2012, Department of Pharmacology and Department of Cardiology, AIIMS, New Delhi, India
92. Targeting NFkB inflammatory cascade in diabetic neuropathy, guest lecture delivered at Annual Conference of Indian Pharmacological Society, December 19-21, 2011, KMC, Manipal.
93. PPARgamma as a neuroprotective target for stroke, delivered at Annual Conference of Indian Academy of Neuroscience, October 31-November 1, 2011, DIPAS, New Delhi
94. 4R’s Concept and Guidelines for Animal Research, delivered during DST sponsored workshop on Research Methodologies for Women Scientists at Department of Pharmacology, AIIMS, New Delhi, October 3-7, 2011.
95. Neuroprotective potential of PPAR in experimental models of stroke and Parkinson’s Disease, delivered during UGC sponsored workshop “Hands-on-Exposure to Neuropharmacological & Molecular Biological Tools”, 19 – 24 September 2011, UIPS, Chandigarh
96. Translational challenges in stroke research, delivered at ASBASJSM College of Pharmacy, Bela, Punjab, September 7, 2011.
97. Ethical use of animal in pharmacological experimentation: Rules, Regulations, Guidelines and Alternatives, delivered during Faculty development program on “Recent Development in pharmaceutical education and research”, Rayat-Bahara Institute, Kharar, Punjab, July 19, 2011

98. Pharmacological Interventions Targeting peroxynitrite and PARP Pathways for Stroke treatment”, delivered on April 15, 2011 at NIMHANS, Bangalore as a part of SfN Bangalore Chapter activity.
99. Animal Usage in Biological test methods in Indian Pharmacopoeia, WHO-Indian Pharmacopoeia Commission workshop, April 7-8, 2011
100. Neuroprotective potential of PPARgamma agonists in Cognitive dysfunction, National symposium on Molecular pathogenesis of neurological disorders, Panjab University, Chandigarh, February 22, 2011
101. Cardiovascular Safety Pharmacology of Pharmaceuticals, delivered at “Word Congress of International Academy of Cardiovascular Sciences”, February 1-3, 2011, Vadodara
102. Targeting Oxidative stress-peroxynitrite pathway in stroke: Translational Challenges, guest lecture delivered at V. B. Patel Chest Institute, University of Delhi, January 13, 2011
103. Neuroprotective potential of PPARgamma agonists in CNS disorders, guest lecture delivered at Annual Conference of Indian Pharmacological Society, December 16-19, 2010, Hyderabad.
104. Emerging Neurotherapeutics for the treatment of ischemic stroke, guest lecture delivered in “Emerging Trends in Drug Discovery & Development”, 3rd UGC Networking Resource Centre Training Program, UIPS, Panjab University, Chandigarh, May 31-June 12, 2010.
105. Cell Injury and Inflammation in Cerebral Ischemia. Guest lecture delivered at Swift College of Pharmacy, Rajpura, Punjab on April 14, 2010.
106. Potential Role of Natural products for the treatment of stroke: Neuroprotective studies on curcumin. Guest lecture delivered in the workshop Natural Products in Health and Disease: Biochemical and Molecular mechanisms, at Panjab University, Chandigarh, March 6, 2010.
107. Targeting Peroxynitrite-PARP pathway for the treatment of Stroke, delivered in Indo-US conference held at Manesar, Haryana, December 19-21, 2009.
108. Emerging strategies for the treatment of stroke, delivered as a CDRI oration at the Annual Conference of Indian Pharmacological Society, December 12-15, 2009, Kolkata.
109. Targeting oxidative stress-PARP pathway for the treatment of vascular disease, delivered in the Symposium on Molecular cardiovascular Pharmacology at DIPSAR, New Delhi, March 16, 2009
110. Diabetic neuropathy: Therapeutic potential of Peroxynitrite scavengers and PARP inhibitors, lecture delivered at Midwestern University, Chicago, USA on April 17, 2009.
111. Targeting Peroxynitrite-PARP pathway for the treatment of Stroke, delivered in International Society for Free Radical Research (SFRR) Satellite Symposium-2009 on Free Radicals in Health and Disease, AMU, Aligarh, March 17-18, 2009

112. Targeting oxidative stress-PARP pathway for the treatment of vascular disease, delivered in the Symposium on Molecular cardiovascular Pharmacology at DIPSAR, New Delhi, March 16, 2009
113. Evaluation of Pharmacological Interventions Targeting Nitrosative Stress-PARP Pathway for the Treatment of Diabetic Neuropathy”, delivered in the National Conference on Innovations in Drug Discovery and Research, Punjabi University, Patiala, March 3-4, 2009
114. Targeting Nitrosative Stress-PARP Pathway in Diabetic Neuropathy, delivered in the National Symposium on Emerging Trends in Nitric Oxide Research: Impact on Health and Disease Drug Development, Vallabh Bhai Patel chest institute, University of Delhi, Delhi, January 11, 2009
115. Technological advances in pharmacological research, inaugural key note lecture delivered during International workshop on Next Generation Tools for Life Sciences Research and Education, November 9, 2009 at ASBASJSM College of Pharmacy, Bela, Punjab.
116. Emerging Therapeutic Targets for the Treatment of Stroke, delivered in the Department of Biochemistry, Panjab University, Chandigarh, Chandigarh, November 1, 2008
117. Schedule Y, delivered during the Two week Training program for Regulatory Personnel, CBP, NIPER, S.A. S. Nagar, June 16-27, 2008
118. Pharmacological Interventions targeting oxidative stress and PARP pathway in diabetic neuropathy, delivered in the Indo-US symposium on the treatment of neurological disorders at AIIMS, Nov. 19, 2007
119. Pharmacological Interventions targeting stroke, delivered at the Dr. B. R. Ambedkar Centre for Biomedical Research, New Delhi, June 27, 2007
120. Laboratory Animal Facility: Guideline and Inspection, delivered in the Training program for drug regulatory personnel, NIPER, April 21, 2007
121. Safety Pharmacology : Current Guidelines and Future Challenges, delivered in the Indian Pharmacological Society, Jaipur, December 21-23, 2006
122. Neuroprotection and Neurorestoration, delivered in the National Symposium on Neural Plasticity and Repair, New Delhi, October 18-19, 2006
123. Laboratory Animal Facility: Guideline and Inspection, delivered in the Training program for drug regulatory personnel, NIPER, April 21, 2006
124. Neuroprotective Potential of Pharmacological Interventions Targeted at Oxidative Stress, Poly (ADP-ribose) Polymerase and Mitogen Activated Protein Kinase Pathways in Stroke, delivered in the Indian Pharmacological Society, January 14, 2005, Kolkata
126. Laboratory Animal Facility: Guideline and Inspection, delivered in the Training program for drug regulatory personnel, NIPER, March 30, 2005

127. Pharmacological Interventions Targeted at Oxidative Stress, Poly (ADP-ribose) Polymerase and Mitogen Activated Protein Kinase Pathways in Diabetic neuropathy, delivered in the Indian Pharmacological Society, Chennai, December 27-29, 2005
128. Laboratory Animal Facility: Guideline and Inspection, delivered in the Training program for drug regulatory personnel, NIPER, May 24, 2005
129. Targeting Cerebral Ischemia, delivered in the Delhi Institute of Pharmaceutical Sciences and Research, New Delhi, June 6, 2005
130. Pharmacological interventions targeted at Stroke, delivered in the Delhi Institute of Pharmaceutical Sciences and Research, New Delhi, June 1, 2004
131. Laboratory animal facility: Guidelines and Inspection”, lecture delivered during course for Drug Regulatory Personnel under Capacity Building Project of World Bank, January 19-31, 2004, NIPER, S.A.S. Nagar.
132. Clinically significant drug interactions”, lecture delivered during Training Program for Hospital Pharmacist, December 16-21, 2002, AIIMS, New Delhi
133. Pharmacological data and Inspection of Animal House facility, lecture delivered during “An intensive course on “Inspection of Pharmaceutical Facility” September 3-21, 2001, AIIMS, New Delhi
134. Pharmaco-toxicological Documentation”, lecture delivered during An intensive course on “Pharmaceutical registration Dossier” September 2000, AIIMS, New Delhi
135. Lectures on Newer drugs; Antidote of common poisoning; Quality control of drugs and pharmaceuticals and Drug delivery system in Training programme for the pharmacist organised by Department of Hospital Administration, AIIMS, New Delhi, March 1998

Colloborators

- Prof. Anil Gulati, Associate Dean, Midwestern University, USA
- Dr A. B. Pant, Indian Institute of Toxicological Research, Lucknow
- Prof. Arvind Bansal, Department of Pharmaceutics, NIPER, Mohali
- Prof. A. K. Chakraborti, Department of Medicinal Chemistry, NIPER, Mohali
- Prof. Y.K. Gupta, Department of Pharmacology, AIIMS, New Delhi
- Prof. Rahul Jain, Department of Medicinal Chemistry, NIPER, Mohali
- Dr Inder Pal Singh, Department of Natural Product, NIPER, Mohali
- Dr Mahendra Bishnoi, National Agri - Food Biotechnology Institute (NABI), Mohali
- Dr Kanthi Kiran Kondepudi, National Agri - Food Biotechnology Institute (NABI), Mohali

Conferences/Workshop Organised

Co-organising Secretary, 40th Annual Conference of Society of Toxicology, India 2021 (STOX—India 2021) conference, January 29-30, 2021 organized on the theme “Pharmacology and Toxicology in view of COVID-19”, PGIMER, Chandigarh and SCTIMST, Trivandrum

Co-organising Secretary, Annual Conference of Society of Toxicology, India 2017 (STOX-India 2017) conference, PGIMER, Chandigarh

Co-organising Secretary, 49th Annual Conference of Indian Pharmacological Society (IPSCON 2016), October 18-22, 2016.

Organizing secretary, 11th Annual Conference of International Society of Heart Research (ISHRCON 2014), February 8-9, 2014.

Organizing secretary, Minisymposium on Newer Targets/treatment of diabetic and diabetic complications” January 28, 2009, NIPER Mohali.

Joint Organising Secretary, 40th Annual Conference of Indian Pharmacological Society (IPSCON 2007), November 1-3, 2007.

Organizing secretary, Workshop on “Drug Discovery & Development in New Millennium-3 (D3NM-3)”, February 21-24, 2006.

Organizing secretary, Workshop on “Acquaintance with CPCSEA Guidelines and handling, care and use of small laboratory animals”, August 2-3, 2006.

Organizing secretary, Workshop on “Drug Discovery & Development in New Millennium (D3NM-2), February 28-March 3, 2005.

Organizing secretary, Workshop on “Drug Discovery & Development in New Millennium (D3NM-1), February 26-29, 2004.

Program co-ordinator, “Pharmacological and Toxicological assessment of Pharmaceutical, in an intensive course on “Preparation and assessment of pharmaceutical registration dossier” September 11-13, 2000.



Inaugural ceremony of 40th Annual Conference of Indian Pharmacological Society (IPSCON 2007), November 1-3, 2007 (IPSCON2007), NIPER, Mohali: Conference was inaugurated by Dr A.R. Kidwai, Hon'ble Governor of Haryana. Dignitaries Lighting the lamp (L-R): Prof. P. Rama Rao, Director, NIPER, Prof. S. S. Sharma, Joint Organizing secretary, Dr A.R. Kidwai, Prof. K.K. Bhutani, Dean, NIPER, and Dr Prakash Diwan, President, Indian Pharmacological Society



Inaugural ceremony of the 11th Annual Conference of International Society of Heart Research (ISHRCON 2014), February 8-9, 2014, NIPER, Mohali: Dignitaries lighting the lamp (L-R) Prof. Arun Kumar Grover; Prof. K.K. Bhutani, Director (Officiating) NIPER; Prof KK Talwar, President ISHR Indian section, Prof. S. S. Sharma, Organizing secretary and Prof. SK Maulik, General Secretary ISHR Indian section,

Committee member/Session chaired

- Member, EMEQ committee, SERB, New Delhi (2017-2021)
- Member, NPDF committee, SERB, New Delhi (2015-2021)
- Member, Young Scientist Expert committee, Early Career Research Award and Start up Grant committee – Life Sciences, SERB, New Delhi (2015-2021)
- Member, Institute Ethics Committee, IISER Mohali
- Member, Institutional Biosafety Committee, INST, Mohali
- Member, Institute Ethics Committee, NABI, Mohali
- Member, IAEC, NIPER (2001-2017)
- In-charge, Central Animal Facility, NIPER (2001-2017)
- Chairperson, technical session, 2nd Annual Convention of APTI Punjab State Branch, March 18-19, 2016.
- Judge for OD Gulati Prize session, 48th Annual Conference of Indian Pharmacological Society, December 18-20, 2015, Saurashtra University, Rajkot, Gujarat.

- Expert Committee Member, DST –SERB, New Delhi
- Chaired a session at International Conference on Current Trends and Genetics in Heart Failure and Cardiac Arrhythmia (ICHF 2015), PGIMER, January 31-February 1, 2015
- Judge for Gufic Prize session, 47th Annual Conference of Indian Pharmacological Society, December 28, 2014, GMC and NIPER, Guwahati.
- Member, DPRP, DST, New Delhi
- Member, Project Review Committee, DSIR, New Delhi
- Member, Technical Committee, BIRAC, DBT, New Delhi
- Member (Pharmacology expert), ICMR
- Member, Subject Review committee, National Formulary of India
- Judge for Achari Prize session, 46th Annual Conference of Indian Pharmacological Society & International Conference on Translational Pharmacology, December 16-18, 2013, Bangalore
- Participated in preparing National List of Essential Medicine (NLEM) 2011 as a Pharmacology expert
- Currently reviewer of more than 20 national and international journals
- Subject expert for interview board for faculty and research positions at several universities/dept.
- Judge at Achari Prize session at 47th Annual Conference of Indian Pharmacological Society, December 27, 2014, GMC and NIPER, Guwahati.
- Chaired NS Dhalla award session for best oral presentation in basic science during 11th Annual Conference of International Society of Heart Research (ISHRCON 2014), February 8-9, 2014
- Judge OD Gulati session at the 46th Annual Conference of Indian Pharmacological Society & International Conference on Translational Pharmacology, December 16-18, 2013, Bangalore
- Chaired session at the 45th Annual Conference of Indian Pharmacological Society & International conference on navigating pharmacology towards safe and effective therapy, January 5-7, 2013, Nagpur
- Chaired session at the National Symposium cum workshop on Experimental Research and Alternatives (NSWERA), March 3, 2012, PGIMER, Chandigarh
- Guest of Honour by Indian Pharmacy Graduate Association, Kurushetra Chapter, November 17, 2012
- Pharmacology Subject expert for Faculty selection at the Shoolini University, Solan
- Judge for the “Niranjan Dhalla Award for Basic Sciences”, International Conference on Cardiovascular Research Convergence, February 17-18, 2012, AIIMS, New Delhi, India
- Chaired session at the IPS conference “Gufic Prize” at IPS, Manipal, December 19-21, 2011
- Judge for Chaired session at the IPS conference “Gufic Prize” at IPS, Manipal, December 19-21, 2011
- Judge for the Achari Prize session at the Annual Conference of Indian Pharmacological Society, December 19-21, 2011, KMC, Manipal.
- Chaired session, Word Congress of International Academy of Cardiovascular Sciences, February 1-3, 2011, Vadodara
- Pharmacology Subject expert, Faculty selection committee, Punjabi University, Patiala

- Chief Guest for Inauguration of International workshop on Next Generation Tools for Life Sciences Research and Education, November 9, 2009 at ASBASJSM College of Pharmacy, Bela, Punjab.
- Chaired session in the “National Symposium on Neural Plasticity and Repair”, New Delhi, October 18, 2006
- Chaired session in the “CME cum workshop on Drafting Skills in Medical Research” , Chandigarh, September 16, 2006
- Chaired session in the Brain storming workshop on Rationality assessment and guidelines for FDCs, AIIMS, June 25-26, 2007

MEMBERSHIP OF PROFESSIONAL BODIES

- Indian Pharmacological Society (Life membership # LS 75)
- Indian Pharmaceutical Association (Life membership # PUN/LM/0109)
- Association of Physiologists and Pharmacologists of India
- Indian Academy of Neurosciences (Life membership # LS 228)
- Society of Neurochemistry, India (Life membership # LM-I-451)
- International Society of Neurochemistry (ISN # 16183)
- International Society for Hear Research-Indian Section