Curriculum Vitae

Dr. Shyam S. Sharma
Associate Professor
Department of Pharmacology and Toxicology
National Institute of Pharmaceutical Education and Research (NIPER)
Sector 67, S.A.S. Nagar (Mohali) – 160062, Punjab, INDIA
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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) & Bachelor of Pharmacy
Delhi Institute of Pharmaceutical Sciences and Research (DIPSAR)
(Formerly College of Pharmacy), University of Delhi
New Delhi, India

Current Positions

Associate Professor, Department of Pharmacology and Toxicology, NIPER, Mohali (since May 2004)
In-charge, National Centre for Safety Pharmacology
In-charge, Central Animal facility

Previous Positions held

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 Research Fellow, UIC, Chicago (1997)
CSIR Senior Research Fellow (1994-1996)
UGC Research Fellow (1989-1991)

Honour/Awards

CDRI Oration award 2009 of Indian Pharmacological Society
PP Suryakumari Prize 2009 of Indian Pharmacological Society
Shakuntala Amir Chand Prize 2006 of Indian Council of Medical Research
Secretary (International), Indian Pharmacological Society (2009-2011)
Editor, Current Research & Information on Pharmaceutical Sciences (CRIPS) since 2000
Currently reviewer of more than 20 national and international journals
Subject expert for interview board for faculty and research positions at several universities/dept.
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

Teaching Experience

More than 12 years experience in teaching in the following areas of Pharmacology & Toxicology

- CNS Pharmacology
- CVS Pharmacology
- GI 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

Theses guided

Master's & PhD: Guided: 30 Under guidance: 11

Research Projects from Government and Industry

Research grants (*Completed/Ongoing)*

Evaluation of Effects of Pharmacological Interventions Targeted at Peroxisome Proliferator-Activated Receptors (PPARs) in Cognitive Dysfunctions Associated with CNS Disorders, DST (2010-2013), as Principal Investigator (PI)

Evaluation of Hyperglycaemic Effects on Sodium Channel Kinetics and Neurite Growth in Dorsal Root Ganglion Neurons and its Modulation by Neuronal Growth Factors, funded by CSIR, New Delhi (August 2010-July2013), as Co-PI

Setting up of National Centre of Safety Pharmacology, PRDSF, DST (April 2006-October 2009), as Principal Investigator (PI)

Evaluation of Pharmacological Interventions Targeted at Peroxynitrite-PARP Pathway in Diabetic Neuropathy, CSIR (December 2006-December 2009) as PI

Design synthesis and biological evaluation of novel heterocyclic ligands as phosphodiestrase IV inhibitors, DST (2008-2011), as Co-PI

Discovery of potential antileishmanial chemotherapeutics and ethnotherapeutics from medicinal plants, DST (2006-2009), as Co-PI

Evaluation of Pharmacological Interventions targeted at Oxidative stress and AGE pathways in diabetic neuropathy, Ministry of Chemicals and Fertilizers (2006-2007), as PI

Regulation of Scavenging Enzymes in Cerebral Ischemic Reperfusion Injury: A Proteomic Approach, DST (2005-2008), as Co-PI

Molecular mechanisms of diabetic complications, Ministry of Chemicals and Fertilizers (2004-2005), as PI

DST Young Scientists Project "Evaluation of neuroprotective agents in cerebral ischemia", DST (2002-2005), as PI

Pharma industry/CRO (Advisory and Research consultancy completed)

Endogenex, California, USA
Alkem Pharmaceuticals, Mumbai
Chemical Resources, Haryana
Disto Pharma, Hyderabad
Shaleen Pharmaceutical, Haryana
Vedic Life Sciences, Mumbai
Panacea Biotec, Punjab

RESEARCH AREAS/EXPERTISES

Stroke (Cerebral Ischemia)
Diabetes and Diabetic complications (neuropathy, neuropathic pain & encephalopathy)
Safety Pharmacology
Cognitive impairment associated with Parkinson's disease and stroke
Pharmacological profile of NCEs
Leishmaniasis
Pain and inflammation research
Cancer chemotherapy-induced side effects

Stroke (Cerebral Ischemia)

- MCAO induced focal ischemia and BCAO induced global ischemia model is used and neurological damage is assessed by measuring neurological deficits, cerebral infarction using image analysis, cerebral blood flow using laser Doppler blood flow monitor and blood gases using blood gas analyser
- Involvement of oxidative stress, poly (ADP ribose) polymerase, MAP kinases, inflammation and apoptosis in cerebral ischemia have been demonstrated
- Thiazolidinedione (Pioglitazone) and a nonthiazolidinedione (GW1929) - PPARgamma agonists, ameliorated neurological damage in global cerebral ischemic-reperfusion injury through reduction in inflammation and DNA fragmentation
- Involvement of endoplasmic reticulum stress in cerebral ischemia associated with comorbid diabetes is under investigation
- Screening of potential neuroprotective interventions/NCEs against cerebral ischemia: TRH analogs have been evaluated for neuroprotective potential

Diabetes and diabetic complications

- Animal models of diabetes (Type I - Streptozotocin and Type II – HFD+STZ model)
- Experimental model of diabetic neuropathy (nerve conduction, nerve blood flow and pain) and encephalopathy (memory impairment and neurotransmitter levels) have been established.
- Pharmacological interventions targeted at oxidative stress, PARP and inflammation cascade were evaluated in diabetic neuropathy model
- We demonstrated that NF-kB inhibitory action of Resveratrol is a probable mechanism of neuroprotection in experimental diabetic neuropathy
- Functional and biochemical evidence have indicated the beneficial effect of melatonin and nicotinamide alone and in combination in experimental diabetic neuropathy. We also demonstrated that melatonin modulates neuroinflammation (NF-κB) and oxidative stress (Nrf2 cascades) in experimental diabetic neuropathy
- Concurrent targeting of nitrosative stress–PARP pathway corrects functional, behavioral and biochemical deficits in experimental diabetic neuropathy
- Electrophysiology : Alterations of sodium currents in DRG neurons on exposure to glucose have been demonstrated and endothelin-1 have found to potentiates outward voltage-gated potassium currents of DRG neurons
- Plan is underway to establish experimental model of diabetic cardiomyopathy

Cognitive impairment

- Evaluation of Effects of Pharmacological Interventions Targeted at Peroxisome Proliferator-Activated Receptors (PPARs) in Cognitive Dysfunctions Associated with CNS Disorders particularly Parkinson's disease and stroke

Safety Pharmacology (Core battery, follow up and supplemental SP studies)

- CNS Safety Pharmacology Studies: General sign and behaviour (Irwin test), Locomotor activity, Anticonvulsant activity, Proconvulsant activity, Analgesic activity, Motor coordination, Neurotransmitter and Microdialysis studies
- Cardiovascular Safety Pharmacology: Blood pressure and HR in conscious (Telemetry) and anaesthetized rats, ECG/QT studies in anaesthetized rats/G. pigs
- Respiratory Safety Pharmacology Studies: Pulmonary functions in anaesthetized/conscious rats using Whole body plethysmography
- Gastrointestinal Safety Pharmacology Studies: Charcoal propulsion test, Gastric emptying studies, Gastric irritation test

NCEs (TRH analogs) and formulations (Curcumin SEDDS and celecoxib formulations) have been investigated in CNS, CVS and Respiratory Safety Pharmacology core battery as well as supplemental GI studies. Combination of terfenidine and ketoconazole produced QT prolongation in Conscious Telemetred Guinea Pigs.

Pharmacological profile of NCEs

- Evaluated neuropharmacological profile of newer TRH analogs in epilepsy models (Maximal electroshock, Pentyelenetetrazole, Picrotoxin, Kainate, Theophylline seizures)
- Evaluated NCEs for antihypertensive activity in DOCA-salt induced hypertension
- Lab has potential to screen NCEs for various pharmacological activities including Parkinson's disease (MPTP model), gastric ulcer, anxiety, depression, LPS induced COPD etc.

Leishmaniasis

- Established animal (Hamster) model of Visceral Leishmaniasis
- More than 50 NCEs/plants extract screened for antileishmanial activity

Pain and inflammation research

- Animal models of pain particularly neuropathic pain
- Evaluation of PARP inhibitors in neuropathic pain (Chronic constriction induced sciatic nerve injury model)
- Involvement of NMDA-nitric oxide pathway in L-arginine induced changes in opioids antinocipeption
- Morphine tolerance and dependence

Cancer Chemotherapy Side Effects

- Cancer chemotherapy induced emesis in dogs and Pica behavior in rats: effectiveness of serotonin (5-HT3) antagonists, ginger extracts and antioxidants
- Cancer chemotherapy induced neutropenia: effect of ashwagandha

Peer Reviewed Research Publications : 53

1. Kaundal R and Sharma SS, GW1929, a Nonthiazolidinedione PPARgamma Agonist, Ameliorates Neurological Damage in Global Cerebral Ischemic-Reperfusion Injury through Reduction in Inflammation and DNA Fragmentation, **Behav Brain Res** 2011, 216(2):606-12

2. Negi G, Kumar A and Sharma SS Melatonin modulates neuroinflammation and oxidative stress in experimental diabetic neuropathy: Effects on NF-κB and Nrf2 cascades. **Journal of Pineal Research** 2011 (in press)

3. Monga V, Meena CL, Rajput SK, Sharma SS, Lu X, Gershengorn MC, Jain R, Synthesis, Receptor Binding and CNS Pharmacological Studies of New Thyrotropin-Releasing Hormone (TRH) Analogues, **ChemMedChem** 2011 (in press)

4. Kumar A and Sharma SS. NF-kB Inhibitory action of Resveratrol: A Probable Mechanism of Neuroprotection in Experimental Diabetic Neuropathy, **Biochem Biophys Res Comm** 2010, 394(2):360-5.

5. Negi G, Kumar A, Kaundal RK, Gulati A and Sharma SS. Functional and Biochemical Evidence Indicating Beneficial Effect of Melatonin and Nicotinamide alone and in Combination in Experimental Diabetic Neuropathy, **Neuropharmacology** 2010, 58, 585-592.

6. Negi G, Kumar A and Sharma SS, Concurrent targeting of nitrosative stress–PARP pathway corrects functional, behavioral and biochemical deficits in experimental diabetic neuropathy, **Biochem Biophys Res Comm** 2010, 391: 102-106.

7. Prajapati KD, Sharma SS and Roy N, Upregulation of Albumin Expression in Focal Ischemic Rat Brain, **Brain Research** 2010, 1327: 118-124.

8. Kaur A, Singh R, Dey CS, Sharma SS, Bhutani KK, Singh IP, Antileishmanial phenylpropanoids from *Alpinia galangal* (Linn.) Willd. **Indian J Exp Biol** 2010, 48: 314-317.

9. Rajput SK, Singh JN and Sharma SS, Evaluation of the Terfenadine and Ketoconazole-induced QT Prolongation in Conscious Telemetred Guinea Pigs, **Pharmacological Reports** 2010, 62: 683-688.

10. Kaundal R and Sharma SS, PPARgamma agonists as neuroprotective agents, **Drugs News & Perspectives** 2010, 23(4):241-56.

11. Singh IP, Jain SK, Kaur A, Singh S, Kumar R, Garg P, Sharma SS and Arora SK, Synthesis and Antileishmanial activity of Piperoyl-Amino Acid Conjugates, Eur J Med Chem 2010, 45(8):3439-45.

12. Sharma SS, Kumar A, Arora M and Kaundal R. Neuroprotective Potential of Simultaneous Administration of Resveratrol and 4-Amino 1,8 Napthalimide in Experimental Diabetic Neuropathy: Focus on Functional, Sensorimotor and Biochemical Changes. **Free Radic Res** 2009, 43: 1-9.

13. Kaundal R, Iyer S, Kumar A and Sharma SS. Neuroprotective effect of pioglitazone in global cerebral ischemia. **J Pharmacol Sci** 2009, 109: 361-367.

14. Rajput SK, Krishnamoorthy S, Pawar C, Kaur N, Monga V, Meena CL, Jain R and Sharma SS. Antiepileptic potential and behavioral profile of L-pGlu-(2-propyl)-L-His-L-ProNH2, a newer Thyrotropin-releasing hormone (TRH) Analog. **Epilepsy Behav** 2009, 14: 48-53.

15. Kumar P, Kaundal R, More S, and Sharma SS. Beneficial effects of Pioglitazone on cognitive impairment in MPTP model of Parkinson's disease. **Behav Brain Res** 2009, 197: 398-403.

16. Sharma R, Kaundal R and Sharma SS. Amelioration of airway hyperresponsiveness and neutrophilic inflammation by PPARgamma agonist in LPS exposed guinea pigs, **Pulm Pharmacol Ther** 2009, 22: 183-189.

17. Singh JN, Jain G, Ramarao P, Sharma SS. Inhibition of sodium current by carbamazepine in DRG neuron in vitro. **Indian J Physiol Pharmacol** 2009, 53: 147-154.

18. Rajput SK, Singh JN, Jain G, Kaur N, Monga V, Meena CL, Jain R, Sharma SS. Neuropharmacological Profile of L-pGlu-(1-Benzyl)-L-His-L-ProNH2, a newer Thyrotropin-Releasing Hormone Analog: Effects on Seizure Models, Sodium Current, Cerebral Blood Flow and Behavioral Parameters, **Epilepsy Research** 2009, 87, 223-233

19. Sharma SS, Kumar S, Srinivasan K, Kaushal AM and Bansal AK. Preclinical Safety Pharmacological Studies on the Amorphous Formulation of Celecoxib. **Arzeimittel-Forschung/Drug Res** 2009, 59: 254-262.

20. Sharma SS, Kaundal R and Kumar A. 4-Amino1,8-napthalimide: A potent PARP inhibitor, its neuroprotective role in experimental diabetic neuropathy. **Life Sciences** 2008, 82:570-576.

21. Arora M, Kumar A, Kaundal R and Sharma SS. Amelioration of Neurological and Biochemical Deficits by Peroxynitrite Decomposition Catalysts in Experimental Diabetic neuropathy. **Eur J Pharmacol**. 2008, 596:77-83.

22. Sreedhar S and Sharma SS. Protective effect of adenosine in diabetic neuropathic pain is mediated through adenosine a1 receptors. **Indian J Physiol Pharmacol** 2008, 52: 233-242.

23. Monga V, Meena CL, Kaur N, Kumar S, Pawar C, Sharma SS and Jain R. A New Facile Route to *N*-α-Boc-1,2-Dialkyl-L-Histidines and Their Use in the Synthesis of In Vivo Biologically Active Thyrotropin-Releasing Hormone (TRH) Analogs. **J Heterocyclic Chem** 2008, 45: 1603-1608.

24. Sharma SS and Kaundal RK. Neuroprotective effects of 6-hydroxy-2,5,7,8-tetramethylchroman-2-carboxylic acid (Trolox), an antioxidant in middle cerebral artery occlusion induced focal cerebral ischemia in rats. **Neurol Res** 2007, 29:304-9.

25. Sharma SS and Gupta S. Neuroprotective effect of MnTMPyP, a SOD/Catalase mimetic in global cerebral ischemia is mediated through reduction of oxidative stress and DNA fragmentation. **Eur J Pharmacol**. 2007, 561:72-79.

26. Sharma SS, Kaundal R and Dhar A. FeTPPS protects against global cerebral ischemic-reperfusion injury in gerbils. **Pharmacol Res** 2007, 55: 335-342.

27. Gupta S, Gupta YK and Sharma SS. Neuroprotective effects of Pifithrin-ALPHA in global cerebral ischemia. **Indian J Physiol Pharmacol** 2007, 51: 62-68.

28. Kumar A, Kaundal R, Iyer S and Sharma SS. Effects of Resveratrol on nerve functions, oxidative stress and DNA fragmentation in experimental diabetic neuropathy, **Life Sciences** 2007, 80: 1236-44.

29. Saini A, Arun Kumar H.S and Sharma SS. Preventive and curative effect of edaravone on nerve functions and oxidative stress in experimental diabetic neuropathy. **Eur J Pharmacol** 2007, 568:164-72

30. Bodiwala HS, Singh G, Singh R, Dey CS, Sharma SS, Bhutani KK, Singh IP. Antileishmanial amides and lignans from Piper cubeba and Piper retrofractum. **J Natural Med** 2007, 61:418-421.

31. Dhar A, Kaundal RK and Sharma SS. Neuroprotective effects of FeTMPyP: A peroxynitrite decomposition catalyst in global cerebral ischemia model in gerbils. **Pharmacol Res** 2006, 54: 311-316.

32. Gupta S and Sharma SS. Neuroprotective effects of trolox in global cerebral ischemia in gerbils. **Biol Pharm Bull** 2006, 29: 957-961.

33. Kaundal RK, Shah KK and Sharma SS. Neuroprotective effects of NU1025, a PARP inhibitor in cerebral ischemia are mediated through reduction in NAD depletion and DNA fragmentation. **Life Sci** 2006, 79: 2293-302.

34. Saini AK, Patel RJ, Sharma SS and H.S AK. Edaravone attenuates hydroxyl radical stress and augmented angiotensin II response in diabetic rats. **Pharmacol Res** 2006, 54: 6-10.

35. Sayyed SG, Kumar A and Sharma SS. Effects of U83836E on nerve functions, hyperalgesia and oxidative stress in experimental diabetic neuropathy. **Life Sci** 2006, 79: 777-783.

36. Sharma SS and Sayyed SG. Effects of trolox on nerve dysfunction, thermal hyperalgesia and oxidative stress in experimental diabetic neuropathy. **Clin Exp Pharmacol Physiol** 2006, 33: 1022-1028.

37. Kumar S., Arun KHS, Kaul CL and Sharma SS. Effects of adenosine and adenosine A_{2A} receptor agonist on motor nerve conduction velocity and nerve blood flow in experimental diabetic neuropathy. **Neurol Res** 2005, 27: 60-6.

38. Saini AK, Arun KHS, Kaul CL, Sharma SS. Acute hyperglycemia attenuates nerve conduction velocity and nerve blood flow in male Sprague-Dawley rats: Reversal by adenosine. **Pharmacol Res** 2004; 56: 593-599.

39. Thiyagarajan M, Kaul CL and Sharma SS. Neuroprotective efficacy and therapeutic time window of peroxynitrite decomposition catalysts in focal cerebral ischemia in rats. **Br J Pharmacol** 2004, 142: 988-911.

40. Kabra DG, Thiyagarajan M, Kaul CL, and Sharma SS. Neuroprotective effect of 4-Amino-1,8-napthalimide, a poly (ADP ribose) polymerase inhibitor in middle cerebral artery occlusion induced focal cerebral ischemia in rat. **Brain Research Bulletin** 2004, 62: 425-433.

41. Sharma SS, Munusamy S, Thiyagarajan M, and Kaul CL. Neuroprotective effect of peroxynitrite decomposition catalyst and poly (ADP-ribose) polymerase inhibitor alone and in combination on focal cerebral ischemia in rats. **Journal of Neurosurgery** 2004, 101: 669-674.

42. Gupta S, Kaul CL and Sharma SS. Neuroprotective effect of combination of poly (ADP ribose) polymerase inhibitor and antioxidant in middle cerebral artery occlusion induced focal cerebral ischemia in rats, **Neurological Research** 2004, 26: 103-107

43. Thiyagarajan and Sharma SS. Neuroprotective activity of curcumin in middle cerebral artery occlusion induced focal cerebral ischemia. **Life Sciences** 2004, 74: 969-985.

44. Gupta YK, Sharma SS. Involvement of 5-HT1A and 5-HT2 receptor in cisplatin induced emesis in dogs. **Indian Journal of Physiology and Pharmacology** 2002, 46:463-467.

45. Gupta YK, Sharma SS, Kamala Rai, Katiyar CK. Reversal of paclitaxel induced neutropenia by *Withania somnifera* in mice. **Indian Journal of Physiology and Pharmacology** 2001, 45:253-257.

46. Sharma M, Kamala Rai, Sharma SS, Gupta YK. Effect of antioxidants on pyrogallol induced delay in gastric emptying in rat. **Pharmacology** 2000, 60:90-96.

47. Bhargava HN, Sharma SS and J.T. Bian. Evidence for a role of N-methyl-D-asparate receptors in L-arginine-induced attenuation of morphine antinociception. **Brain Research** 1998, 782, 314-317.

48. Sharma SS and Bhargava HN. Enhancement of morphine antinociception by ibogaine and noribogaine in morphine tolerant mice. **Pharmacology** 1998, 617: 229-232.

49. Sharma SS and Gupta YK. Effect of ginger (Zingiber officinale) against cisplatin induced delay in gastric emptying in rats. **Journal of Ethnopharmacology** 1998, 62: 49-55..

50. Sharma SS and Gupta YK. Effects of antioxidants on cisplatin induced delay in gastric emptying in rats. **Environmental Toxicology and Pharmacology** 1997, 3: 41-46.

51. Sharma SS, Kochupillai V, Gupta SK, Seth SD and Gupta YK. Antiemetic efficacy of ginger (Zingiber officinale) against cisplatin induced emesis in dogs. **Journal of Ethnopharmacology** 1997, 57: 93-96.

52. Sharma SS, Gupta SK, Kochupillai V, Seth SD and Gupta YK. Prevention of cisplatin induced pica behaviour in rats by antioxidants with antiemetic activity. **Environmental Toxicology and Pharmacology** 1997, 3: 145-149.

53. Gupta YK and Sharma SS. Antiemetic activity of antioxidants against cisplatin induced emesis in dogs, **Environmental Toxicology and Pharmacology** 1996, 1:179-184.

Patents: 01

1. Jain R, Monga V, Kaur N, Sharma SS, Kumar S, Roy N, Majumdar J, Agarwal S, Pawar C, Kadam RU, Chavan A, 2006. CNS effective Thyrotropin Releasing Hormone analogs.WTO Indian Patent Application No 2065/DEL/2006.

Book Chapters: 07

1. **Sharma SS**, Kumar N, Kapoor M. Drug Delivery System, in **Text Book of Pharmacology**, SD Seth and V Seth (Eds), Elsevier, a division of Reed Elsevier India Pvt. Ltd. 2009, 3/e, pp. 61-64.

2. Sharma SS and Chawla P. Anxiolytics and Hypnotic Drugs, in **Text Book of Pharmacology**, SD Seth and V Seth (Eds), Elsevier, a division of Reed Elsevier India Pvt. Ltd. 2009, 3/e, pp. 93-104.

3. Sharma SS and Chawla P. Antipsychotic agents and Lithium, in **Text Book of Pharmacology**, SD Seth and V Seth (Eds), Elsevier, a division of Reed Elsevier India Pvt. Ltd. 2009, 3/e, pp. 105-118.

4. Sharma SS, Chawla P. Drug Therapy for Affective Disorders, in **Text Book of Pharmacology**, SD Seth and V Seth (Eds), Elsevier, a division of Reed Elsevier India Pvt. Ltd. 2009, 3/e, pp. 119-129.

5. Sharma SS, Medhi B & Maulik M. Psychostimulants and Psychodelic Agents, in **Text Book of Pharmacology**, SD Seth and V Seth (Eds), Elsevier, a division of Reed Elsevier India Pvt. Ltd. 2009, 3/e, pp150-158.

6. **Sharma SS** and Kaundal R, Targeting Molecular Pathways in Stroke, in **Current Trends in Pharmacology**, A.Ray and K. Gulati (Eds.), I.K. International Publishing House, New Delhi, 2007, pp. 311-326.

7. **Sharma SS** and Thiyagarajan M., Molecular mechanisms of cerebral ischemia, in "Molecular and Cellular Neurobiology" Thakur MK & Prasad S (Eds) Naroasa Publishing House Pvt. Ltd., New Delhi. 2005, 191-202.

Review/General Articles: 16

1. Shah KU, Mule N, Singh JN and Sharma SS, Voltage Gated Sodium Channel Blockers: Potential Treatment for Neuropathic Pain Curr. Res. Infor. Pharm. Sci. 2010, 11: 11-16
2. Negi G, Kumar A, Sharma SS and Gulati A, Biological actions of GLP-1 analogues: Recent advances & Development, Curr Res Infor Pharm Sci 2008, 9: 73-76.
3. Kumar A, Negi G, Gulati A and Sharma SS, Diabetic neuropathic pain, Curr Res Infor Pharm Sci 2008, 9: 69-72.
4. Negi G, Kumar A and Sharma SS, Oxidative stress in the pathophysiology of diabetic neuropathy: Mechanism to Management, Curr Res Infor Pharm Sci 2008, 9: 62-68.
5. Ingole SR, Rajput SK and Sharma SS, Cognitive enhancers: Current strategies & Future perspectives, Curr Res Infor Pharm Sci 2008, 9: 42-48.
6. Sharma R and Sharma SS, Targeting inflammation in COPD: Hope or Hype, Curr Res Infor Pharm Sci 2008, 9: 22-27.
7. Sathish K, Joshi B and Sharma SS, CNS Safety Pharmacology: International Guidelines & Methods, Curr Res Infor Pharm Sci 2007, 8: 2-5
8. Singh JN, Kumar S, Berhe AH and Sharma SS, QT prolongation: Paradigm shift in drug discovery & development, Curr Res Infor Pharm Sci 2007, 8: 6-12
9. Sharma R, Kumar S and Sharma SS, Respiratory safety Pharmacology, Curr Res Infor Pharm Sci 2007, 8: 13-16
10. Kumar S, Pawar C, Kumar Sathish K and Sharma SS, Therapeutic potential of thyrotropin releasing hormone and its analogues, Curr Res Infor Pharm Sci 2006, 7: 28-35
11. More SV and Sharma SS, Emerging Pharmacological targets for Parkinson's disease, Curr Res Infor Pharm Sci 2006, 7: 67-72
12. Kaundal R and Sharma SS, Challenges in CNS Drug Discovery, Curr Res Infor Pharm Sci 2005, 6: 2-6
13. Sharma SS, Srinivasan K and Satish Kumar S., Challenges and Future of Safety Pharmacology, Curr Res Infor Pharm Sci 2005, 6: 7-9
14. Sharma Ss And Kaundal R, Newer Pharmacological Strategies For Stroke, Www.Pharmainfo.Net
15. Sharma Ss And Kumar S, Stroke Genomics, Curr Res. Infor Pharm Sci 2004, 5:2-5
16. Sharma Ss. Emerging Neuroprotective Approaches In Stroke Treatment, Curr Res Infor Pharm Sci 2003, 4(4): 8-12.

Abstracts Presentations : National and International Level: More than 70

Invited Lectures: 34

1. Cardiovascular Safety Pharmacology of Pharmaceuticals, delivered at "Word Congress of International Academy of Cardiovascular Sciences", February1-3, 2011, Vadodara

2. Translational Challenges in Stroke Research, guest lecture delivered at V. B. Patel Chest Institute, University of Delhi, January 13, 2011

3. Neuroprotective potential of PPARgamma agonists in CNS disorders, guest lecture delivered at Annual Conference of Indian Pharmacological Society, December 16-19, 2010, Hyderabad.

4. 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.

5. Cell Injury and Inflammation in Cerebral Ischemia. Guest lecture delivered at Swift College of Pharmacy, Rajpura, Punjab on April 14, 2010.

6. 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.

7. Targeting Peroxynitrite-PARP pathway for the treatment of Stroke, delivered in Indo-US conference held at Manesar, Haryana, December 19-21, 2009.

8. 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.

9. 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

10. Diabetic neuropathy: Therapeutic potential of Peroxynitrite scavengers and PARP inhibitors, lecture delivered at Midwestern University, Chicago, USA on April 17, 2009.

11. 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

12. 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

13. 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

14. 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

15. Emerging Therapeutic Targets for the Treatment of Stroke, delivered in the Department of Biochemistry, Panjab University, Chandigarh, Chandigarh, November 1, 2008

16. Schedule Y, delivered during the Two week Training program for Regulatory Personnel, CBP, NIPER, S.A. S. Nagar, June 16-27, 2008

17. 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

18. Pharmacological Interventions targeting stroke, delivered at the Dr. B. R. Ambedkar Centre for Biomedical Research, New Delhi, June 27, 2007

19. Laboratory Animal Facility: Guideline and Inspection, delivered in the Training program for drug regulatory personnel, NIPER, April 21, 2007

20. Safety Pharmacology : Current Guidelines and Future Challenges, delivered in the Indian Pharmacological Society, Jaipur, December 21-23, 2006

21. Neuroprotection and Neurorestoration, delivered in the National Symposium on Neural Plasticity and Repair, New Delhi, October 18-19, 2006

22. Laboratory Animal Facility: Guideline and Inspection, delivered in the Training program for drug regulatory personnel, NIPER, April 21, 2006

23. 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

25. Laboratory Animal Facility: Guideline and Inspection, delivered in the Training program for drug regulatory personnel, NIPER, March 30, 2005

26. 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

27. Laboratory Animal Facility: Guideline and Inspection, delivered in the Training program for drug regulatory personnel, NIPER, May 24, 2005

28. Targeting Cerebral Ischemia, delivered in the Delhi Institute of Pharmaceutical Sciences and Research, New Delhi, June 6, 2005

29. Pharmacological interventions targeted at Stroke, delivered in the Delhi Institute of Pharmaceutical Sciences and Research, New Delhi, June 1, 2004

30. 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.

31. Clinically significant drug interactions", lecture delivered during Training Program for Hospital Pharmacist, December 16-21, 2002, AIIMS, New Delhi

32. 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

33. Pharmaco-toxicological Documentation", lecture delivered during An intensive course on "Pharmaceutical registration Dossier" September 2000, AIIMS, New Delhi

34. 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
- Prof. Rahul Jain, Department of Medicinal Chemistry, NIPER, Mohali
- Dr Inder Pal Singh, Department of Natural Product, NIPER, Mohali
- Prof. Arvind Bansal, Department of Pharmaceutics, NIPER, Mohali
- Dr Nilanjan Roy, Department of Biotechnology, NIPER, Mohali
- Dr Neeraj Kumar, Department of Pharmaceutics, NIPER, Mohali
- Prof. A. K. Chakraborti, Department of Medicinal Chemistry, NIPER, Mohali

Conferences / Workshop Organised

Convener, Minisymposium on Newer Targets/treatment of diabetic and diabetic complications" January 28, 2009.

Joint Organising Secretary, Annual Conference of Indian Pharmacological Society, Nov. 1-3, 2007 (taken care of designing & executing scientific program for more than 1000 delegates)

Workshop Co-ordinator, Drug Discovery & Development in New Millennium-3 (D3NM-3), February 21-24, 2006

Workshop Co-ordinator: Acquaintance with CPCSEA Guidelines and handling, care and use of small laboratory animals, August 2-3, 2006

Workshop Co-ordinator, "Drug Discovery & Development in New Millennium (D3NM-2), February 28-March 3, 2005

Workshop Co-ordinator, "Drug Discovery & Development in New Millennium, February 26-29, 2004
Program co-ordinator for "Pharmaco-toxicological Documentation" in An intensive course on "Pharmaceutical registration Dossier" September 2000, NIPER

Session chaired

- Chaired session, Word Congress of International Academy of Cardiovascular Sciences, February1-3, 2011, Vadodara
- 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, AAIMS, June 25-26, 2007

MEMBERSHIP OF PROFESSIONAL BODIES

- Indian Pharmacological Society
- Indian Pharmaceutical Association
- Association of Physiologists and Pharmacologists of India
- Safety Pharmacology Society, USA