Ravinder Kumar Kaundal, MS (Pharm.), Ph.D.
Department of Pharmacology & Toxicology,
National Institute of Pharmaceutical Education and Research-Raebareli, Lucknow-226 002, India.
Email: ravinderkaundal@niperraebareli.edu.in

EDUCATION

Doctor of Philosophy (Ph.D.)-Pharmacology & Toxicology, (2005-2010). NIPER, SAS Nagar, Punjab, India.

Master of Science [MS (Pharm.)]- Pharmacology & Toxicology, (2003-2005). NIPER, SAS Nagar, Punjab, India.

Bachelor of Pharmacy (B.Pharm)-Pharmacy, (1999-2003). RTM Nagpur University, Maharashtra, India.

EXPERIENCE

Assistant Professor (Feburary 2021- Present), NIPER-R, Lucknow, India.
Postdoctoral Fellow (April 2018-Feburary 2021), Icahn School of Medicine at Mount Sinai, USA.
Associate Professor (March 2017-March 2018), Amity University, Noida, India.
Associate Professor (June 2016- March 2017), ISF College of Pharmacy, Moga, Punjab, India.
Postdoctoral Associate (March 2011- Dec 2015), Yale School of Medicine, New Haven, USA.

PUBLICATIONS (* first coauthor with equal contribution)

1. **Kaundal RK**, Datusalia AK, Sharma SS. Posttranscriptional regulation of Nrf2 through miRNAs and their role in Alzheimer's disease. Pharmacological Research. 2022,175:106018.
2. **Kaundal RK,** Kalvala AK, Kumar A. Neurological Implications of COVID-19: Role of Redox Imbalance and Mitochondrial Dysfunction. Molecular Neurobiology. 2021,58: 4575-87.
3. Singh R, **Kaundal RK,** Zhao B, Bouchareb R, Lebeche D. Resistin induces cardiac fibroblast-myofibroblast differentiation through JAK/STAT3 and JNK/c-Jun signaling. Pharmacological Research. 2021,167:105414.
4. Khatri N, Sumadhura B, Kumar S, **Kaundal RK,** Sharma S, Datusalia AK. The Complexity of Secondary Cascade Consequent to Traumatic Brain Injury: Pathobiology and Potential Treatments. Current Neuropharmacology. 2021,19:1984-2011.
5. Y, Chen Y, Mao S, **Kaundal R**, et al. In situ conversion of defective Treg into SuperTreg cells to treat advanced IPEX-like disorders in mice. Nature Communication. 2020, 11: 2781.
6. Rathore C, Upadhyay N, **Kaundal R**, et al. Enhanced oral bioavailability and hepatoprotective activity of thymoquinone in the form of phospholipidic nano-constructs. Expert Opinion on Drug Delivery. 2020, 17: 237-253.
7. Vikram A, Anish R, Kumar A, Tripathi, DN, **Kaundal, RK**. Oxidative Stress and Autophagy in Metabolism and Longevity. Oxidative Medicine and Cellular Longevity. 2017:3451528
8. **Kaundal RK***, Chaiyachati BH***,** Zhao J, Wu J, Flavell R, Chi T. LoxP-FRT Trap (LOFT): a simple and

flexible system for conventional and reversible gene targeting. BMC Biology. 2013, 10:96-109.

9. **Kaundal RK***, Wan M*, Huang H*, Zhao J, Yang X, Chaiyachati BH, et al. A general approach for controlling transcription and probing epigenetic mechanisms: application to the CD4 locus. Journal of Immunology. 2013, 190:737-747.
10. Wan M, Gu H, Wang J, Huang H, Zhao J, **Kaundal RK**, et al. Inducible mouse models illuminate parameters influencing epigenetic inheritance. Development. 2013, 140:843-852.
11. **Kaundal RK,** Deshpande TA, Gulati A, Sharma SS. Targeting endothelin receptors for pharmacotherapy of ischemic stroke: current scenario and future perspectives. Drug Discovery Today. 2012, 17:793-804.
12. **Kaundal RK**, Sharma SS. Ameliorative effects of GW1929, a nonthiazolidinedione PPARγ agonist, on inflammation and apoptosis in focal cerebral ischemic-reperfusion injury. Current Neurovascular Research. 2011, 8:236-245.
13. **Kaundal RK**, Sharma SS. GW1929: a nonthiazolidinedione PPARγ agonist, ameliorates neurological damage in global cerebral ischemic-reperfusion injury. Behavioral Brain Research. 2011, 216:606-612.
14. **Kaundal RK,** Sharma SS. Peroxisome proliferator-activated receptor gamma agonists as neuroprotective agents. Drug News & Perspectives. 2010, 23:241-256.
15. **Kaundal RK,** Iyer S, Kumar A, Sharma SS. Protective effects of Pioglitazone in Global Cerebral Ischemic- Reperfusion Injury in Gerbils. Journal of Pharmacological Sciences. 2009, 109:361-367.
16. **Kaundal RK,** Shah KK, Sharma SS, Neuroprotective effects of NU1025, a PARP inhibitor in cerebral ischemia are mediated through reduction in NAD depletion and DNA fragmentation. Life Sciences. 2006, 79:2293-2302.
17. Negi G, Kumar A, **Kaundal RK,** et al. Functional and biochemical evidence indicating beneficial effect of Melatonin and Nicotinamide alone and in combination in experimental diabetic neuropathy. Neuropharmacology. 2010, 58:585-592.
18. Kumar P, **Kaundal RK**, More S, Sharma SS. Beneficial effects of pioglitazone on cognitive impairment in MPTP model of Parkinson's disease. Behavioural Brain Research. 2009, 197:398-403.
19. Sharma SS, Kumar A, Arora M, **Kaundal RK**. Neuroprotective potential of combination of resveratrol and 4-amino 1,8 naphthalimide in experimental diabetic neuropathy. Free Radical Research. 2009, 43:400-408.
20. Sharma R, **Kaundal RK**, Sharma SS. Amelioration of pulmonary dysfunction and neutrophilic inflammation by PPARγ agonist in LPS-exposed guinea pigs. Pulmonary Pharmacology & Therapeutics. 2009, 22:183-189.
21. Arora M, Kumar A, **Kaundal RK**, Sharma SS. Amelioration of neurological and biochemical deficits by peroxynitrite decomposition catalysts in experimental diabetic neuropathy. European Journal of Pharmacology. 2008, 596:77-83.
22. Sharma SS, Kumar A, **Kaundal RK**. Protective effects of 4-amino1,8-napthalimide, a poly (ADP-

ribose) polymerase inhibitor in experimental diabetic neuropathy. Life Sciences, 2008, 82, 570-576.

23. Sharma SS, Dhar A, **Kaundal RK**. FeTPPS protects against global cerebral ischemic-reperfusion injury in gerbils. Pharmacological Research. 2007, 55:335-342.
24. Kumar A, **Kaundal RK,** Iyer S, Sharma SS. Effects of resveratrol on nerve functions, oxidative stress and DNA fragmentation in experimental diabetic neuropathy. Life Sciences. 2007, 80:1236-1244.
25. Sharma SS, **Kaundal RK.** Neuroprotective effects of 6-hydroxy-2,5,7,8-tetramethylchroman-2-carboxylic acid (Trolox), an antioxidant in MCAO induced focal cerebral ischemia in rats. Neurological Research. 2007, 29:304-309.
26. Dhar A, **Kaundal RK,** Sharma SS. Neuroprotective effects of FeTMPyP: A peroxynitrite decomposition catalyst in global cerebral ischemia model in gerbils. Pharmacological Research. 2006, 54:311-316.
27. **Kaundal RK**, Sharma SS. Challenges in CNS Drug Discovery, Current Research & Information on Pharmaceutical Science. 2005, 6:2-6.
28. **Kaundal RK**, Sharma SS. Future neuroprotective approaches in stroke. http://www.pharmainfo.net/reviews/future-neuroprotective-approaches-stroke.

Book Chapters

1. **Kaundal RK,** Yang Y, Notttoli T, Chi T (2013). Toward molecular mechanisms of transgenerational epigenetic inheritance, In Transgenerational Epigenetics: Evidence and Debate (Tollefsbol, T eds) pp 75-85, Academic Press, Elsevier, USA.
2. Sharma SS, **Kaundal RK** (2007). Targeting molecular pathways in stroke, in Current Trends in Pharmacology (Ray A and Gulati K eds) pp 311-326, I.K. International Publishing House Pvt. Ltd., New Delhi.
3. Singh I, **Kaundal RK** (2017). Experimental Animal Model on Stroke, In Animal Screening: Vol-1, pp. 110-121, Paging Publishers, India.
4. Singh I, **Kaundal RK** (2019). In-vitro and in-vivo models for pre-clinical screening of anticancer drugs, In Animal Screening: Basics of Drug Discovery, Vol-II, pp 273-298, Paging Publishers, India.
5. Zangi L, Kaundal RK, Kaur K (2021). Gene Therapy for Heart Disease: Modified mRNA Perspectives. In Cardiomyopathy - Disease of the Heart Muscle (Mattsson G, Magnusson P, eds) IntechOpen; London.

Abstracts

1. **Kaundal RK,** Singh R, Zhao B, Bouchareb R, Hajjar R, Lebeche D, Resistin Loss Mitigates High-Fat Diet (HFD)-Induced Cardiac Dysfunction. Circulation Research. 2019;125:e98–e111.
2. Singh R, **Kaundal RK,** Zhao B, Bouchareb R, Hajjar R, Lebeche D. Resistin Accelerates Fibroblast-Myofibroblast Differentiation and Induces Myocardial Fibrosis. Circulation Research. 2019;125:A259
3. **Kaundal RK,** Sharma SS. Neuroprotective Effect of PPARa Agonist, GW7647, In Global Cerebral

Ischemic Reperfusion Injury in Gerbils. Brain Injury, 24:3, 115-463.

4. Sharma SS, **Kaundal RK,** More S. Neuroprotective Effect of PPARγ Agonists (Pioglitazone & GW7845) on the MPTP Model of Parkinson's Disease. Brain Injury, 24:3, 115-463

ORAL PRESENTATIONS AT SCIENTIFIC CONFERENCES

1. **Kaundal RK**, Lebeche D, Long Term in vivo Dlk1 Gene Transfer Protects Against Myocardial Infarction-induced Cardiac Dysfunction. AHA Scientific Sessions, USA. November 13-17, 2020
2. **Kaundal RK**, Hajjar RJ, Lebeche D, SERCA activation as a neuroprotective target for Alzheimer's Disease, Neurotherapeutics Symposium, Icahn School of Medicine at Mount Sinai, NY, USA. September 25, 2019.
3. **Kaundal RK,** Kabra DG, Shankar M, Gupta S, Sharma SS, Neuroprotection with poly(ADP-ribose) polymerase inhibitors in focal cerebral ischemia, 37th Annual Conference of Indian Pharmacological Society, Kolkatta, India. January 14-16, 2005.
4. **Kaundal RK,** Sharma SS, Neuroprotective potential of a PPARγ agonist; pioglitazone, in global cerebral ischemic-reperfusion (IR) injury, International Conference on Translational Pharmacology & 41st Annual Conference of Indian Pharmacological Society. December 18-20, 2008.

RECOGNITION/ PROFESSIONAL ACTIVITIES AND AFFILIATIONS

- **H factor** =17, **Total citation** >900
- Qualified **National Eligibility Test**, CSIR, India (2005)
- **Guest Editor: Oxidative Medicine and Cellular Longevity**, (2017), **Medicina** (2020-2021), **Current Neuropharmacology** (2020-2021).
- **Academic Editor** for PPAR Research since 2019.
- **Review Editor** for Frontiers in Neuroscience, Frontiers in Neurology, Frontiers in Pharmacology since 2019.
- **Certificate for Outstanding Contribution in Reviewing** by Pharmacological Reports; February 2018.
- **Reviewer for > 30 scientific journals**

  Life science, Scientific Reports, ACS Chemical Neuroscience, Drug Discovery Today, Journal of Pharmacology and Experimental Therapeutics, Pharmacological Research, Molecular and Cellular Endocrinology, Epigenomes, Current Drug Targets, Cells, Metabolic Brain Disease, Molecular Pharmacology, Human & Experimental Toxicology, International Journal of Molecular Sciences, etc.
- **Chairperson at** NRIPSCON – 2017 held on September 1-2, 2017 at KIET School of Pharmacy, Uttar Pradesh.
- **Co-coordinator for** 8th National IPA Student Congress held on September 3 -4, 2016 at ISF College of Pharmacy, Moga, India.

- **Invited Speaker**
  - *International Conference Innovations in Pharmaceutical Sciences, September 26, 2020 at CT University, Ludhiana, India*
  - *Current Advances in Sciences (CAS)-Research Symposium, November 21, 2019 at LaGuardia Community College, NY, USA.*
  - *Emerging Trends in Pharmaceutical and Life Sciences, June 04, 2017 at Indian Drugs and pharmaceuticals ltd. Rishikesh, India.*
  - *Recent Trends in Drug Discovery & Development, April 29, 2017 at Motherhood University, Uttarakhand, India.*
- Member of American Heart Association since 2017.
- Life member for Indian Pharmacological Society since 2007.
- Nominated for participation in the AAAS/Science Program for Excellence in Science at Icahn school of medicine, NY, USA.

RESEARCH HIGHLIGHTS

- *Inducible Models Breathe New Life into Epigenetic Inheritance Studies (Published in epigenie.com on October 8, 2013). http://epigenie.com/cas9-breathes-new-life-into-tet-inducible-models-of- epigenetic-inheritance/*
- *World of Reproductive Biology: Epigenetics: Get Them While They're Young. http://www.biolreprod.org/content/early/2013/02/21/biolreprod.113.108985.abstract*