

## **PUBLICATIONS:**

### **JOURNALS (SCI/ SCI-EXPANDED):**

- **Mukherjee S**, Kumar G, Patnaik R. Identification of potential inhibitors of PARP-1, a regulator of caspase-independent cell death pathway, from *Withania somnifera* phytochemicals for combating neurotoxicity: A structure-based in-silico study. *Journal of Theoretical and Computational Chemistry*. 2017 Sep 11:1750062. DOI: 10.1142/S0219633617500626.
- **Mukherjee S**, Kumar G, Patnaik R. Withanolide A penetrates brain via intra-nasal administration and exerts neuroprotection in cerebral ischemia reperfusion injury in mice. *Xenobiotica*. 2019 Dec; 1-29. DOI: 10.1080/00498254.2019.1709228.
- Vermani B<sup>1</sup>, **Mukherjee S**<sup>1</sup>, Kumar G, Patnaik R. Prolactin attenuates global cerebral ischemic injury in rat model by conferring neuroprotection. *Brain Injury*. 2020 Feb 17; 1-9. DOI: 10.1080/02699052.2020.1726466. (<sup>1</sup>**Equal contribution**)
- Kumar G, Kasiviswanathan U, **Mukherjee S**, Mahto SK, Sharma N, Patnaik R. Changes in electrolyte concentrations alter the impedance during ischemia-reperfusion injury in rat brain. *Physiological measurement*. 2019 Oct 30;40(10):105004. DOI: 10.1088/1361-6579/ab47ee.
- Kumar G, Paliwal P, **Mukherjee S**, Patnaik N, Krishnamurthy S, Patnaik R. Pharmacokinetics and brain penetration study of chlorogenic acid in rats. *Xenobiotica*. 2018 Mar 7:1-7. DOI:10.1080/00498254.2018.1445882.
- Kumar G, **Mukherjee S**, Paliwal P, Singh SS, Birla H, Singh SP, Krishnamurthy S, Patnaik R. Neuroprotective effect of chlorogenic acid in global cerebral ischemia-reperfusion rat model. *Naunyn-Schmiedeberg's archives of pharmacology*. 2019 Jun 12:1-7. DOI: 10.1007/s00210-019-01670-x

### **UGC INDEXED:**

- Kumar, G., **Mukherjee, S.** and Patnaik, R. Identification of Withanolide-M and Stigmasterol as Potent neuroprotectant and Dual inhibitor of Inducible/Neuronal Nitric Oxide Synthase by Structure-Based Virtual Screening. *Journal of Biological Engineering Research and Review*, 2017, 4(1), pp.09-13.

### **MANUSCRIPTS UNDER COMMUNICATION**

- **Mukherjee S**, Kumar G, Vermani B, Patnaik R. Intraperitoneal delivery of Estetrol exerts neuroprotection in global cerebral ischemia in mice. (Under review: Drug Delivery and Translational Research).

- Mukherjee S, Kumar G, Bhatnagar U, Tripathi A K, Patnaik R. Estetrol confers neuroprotection by inhibiting Necroptosis Mediator RIPK-1: An in-silico study. (Under review: International Journal of Computational Biology and Drug Design).

#### **PUBLISHED BOOK CHAPTER**

- **Sumedha Mukherjee**, Gaurav Kumar, Durga Prasad Mishra, Ranjana Patnaik. Neuroprotective potential of small molecule phytochemicals in stroke therapy. Advancement in the pathophysiology of cerebral stroke, 2018 (Accepted) ISBN 978-981-13-1453-7.
- Gaurav Kumar, **Sumedha Mukherjee**, Amit kumar Tripathi, Pankaj Paliwal, K Sairam, Ranajana Patnaik, Stem cell-based therapy for ischemic stroke, Advancement in the pathophysiology of cerebral stroke, 2018 (Accepted) ISBN 978-981-13-1453-7.