Short CV of Nabanita Ghosh

Nabanita Ghosh, an assistant professor in Zoology at the Department of Zoology in Maulana Azad College, Kolkata, India, holds a bachelor's and a master's degree in Zoology from the University of Calcutta, Kolkata. She earned her Ph.D. in applied neuroscience, focusing on Parkinson's disease, from the same university. She has many publications in international journals. Her passion lies in exploring the utilization of AI/ML in the realm of applied neuroscience. Currently, her research centers around the gut microbiome and the gut-brain axis in healthy condition and in neurodegenerative diseases.

Research articles:

1. Ghosh, S., Das, S. K., Sinha, K., Ghosh, B., Sen, K., Ghosh, N., & Sil, P. C. (2024). The Emerging Role of Natural Products in Cancer Treatment. *Archives of toxicology*, *98*(8), 2353–2391. https://doi.org/10.1007/s00204-024-03786-3
2. Ghosh, N., Sinha, K., & Sil, P. C. (2024). Pesticides and the Gut Microbiota: Implications for Parkinson's Disease. *Chemical research in toxicology*, *37*(7), 1071–1085. https://doi.org/10.1021/acs.chemrestox.4c00057
3. Das, S. K., Sen, K., Ghosh, B., Ghosh, N., Sinha, K., & Sil, P. C. (2024). Molecular mechanism of nanomaterials induced liver injury: A review. *World journal of hepatology*, *16*(4), 566–600. https://doi.org/10.4254/wjh.v16.i4.566
4. Ghosh, N., Sinha, K., & Sil, P. C. (2024). A review on the new age methodologies for early detection of Alzheimer's and Parkinson's disease. *Basic & clinical pharmacology & toxicology*, *134*(5), 602–613. https://doi.org/10.1111/bcpt.14003
5. Sinha, K., & Ghosh, N. (2024). A Review on the Recent Advancements in Machine Learning-Assisted Tobacco Research. *NIPES - Journal of Science and Technology Research*, *6*(2). https://doi.org/10.5281/zenodo.11223324
6. Sinha, K., Ghosh, N., & Sil, P. C. (2023). A Review on the Recent Applications of Deep Learning in Predictive Drug Toxicological Studies. *Chemical research in toxicology*, *36*(8), 1174–1205. https://doi.org/10.1021/acs.chemrestox.2c00375
7. Sinha, P., Chakrabarti, N., Ghosh, N., Mitra, S., Dalui, S., & Bhattacharyya, A. (2020). Alterations of thyroidal status in brain regions and hypothalamo-pituitary-blood-thyroid-axis associated with dopaminergic depletion in substantia nigra and ROS formation in different brain regions after MPTP treatment in adult male mice. *Brain research bulletin*, *156*, 131–140. https://doi.org/10.1016/j.brainresbull.2019.12.013
8. Ghosh, N., Mitra, S., Sinha, P. *et al.* Study of Microglial and Astroglial Alterations Induced by Acute 1-Methyl-4-Phenyl-1,2,3,6-Tetrahydropyridine Treatment in Mouse Brain. *Proc Zool Soc* **73**, 32–39 (2020). https://doi.org/10.1007/s12595-019-00296-4
9. Ghosh, N., Mitra, S., Sinha, P., Chakrabarti, N., & Bhattacharyya, A. (2018). TNFR2 mediated TNF-α signaling and NF-κB activation in hippocampus of 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine-treated mice. *Neuroscience research*, *137*, 36–42. https://doi.org/10.1016/j.neures.2018.02.007
10. Mahapatra, E., Dasgupta, D., Bhattacharya, N., Mitra, S., Banerjee, D., Goswami, S., Ghosh, N., Dey, A., & Chakraborty, S. (2017). Sustaining immunity during starvation in bivalve mollusc: A costly affair. *Tissue & cell*, *49*(2 Pt B), 239–248. https://doi.org/10.1016/j.tice.2017.02.005
11. Mitra, S., Ghosh, N., Sinha, P., Chakrabarti, N., & Bhattacharyya, A. (2016). Alteration of nuclear factor-kappaB pathway promote neuroinflammation depending on the functions of estrogen receptors in substantia nigra after 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine treatment. *Neuroscience letters*, *616*, 86–92. https://doi.org/10.1016/j.neulet.2016.01.046
12. Mitra, S., Ghosh, N., Sinha, P., Chakrabarti, N., & Bhattacharyya, A. (2015). Alteration in Nuclear Factor-KappaB Pathway and Functionality of Estrogen via Receptors Promote

Neuroinflammation in Frontal Cortex after 1-Methyl-4-Phenyl-1,2,3,6-Tetrahydropyridine Treatment. *Scientific reports*, *5*, 13949. https://doi.org/10.1038/srep13949

13. Mitra, S., Keswani, T., Ghosh, N., Goswami, S., Datta, A., Das, S., Maity, S., & Bhattacharyya, A. (2013). Copper induced immunotoxicity promote differential apoptotic pathways in spleen and thymus. *Toxicology*, *306*, 74–84. https://doi.org/10.1016/j.tox.2013.01.001
14. Mitra, S., Keswani, T., Dey, M., Bhattacharya, S., Sarkar, S., Goswami, S., Ghosh, N., Dutta, A., & Bhattacharyya, A. (2012). Copper-induced immunotoxicity involves cell cycle arrest and cell death in the spleen and thymus. *Toxicology*, *293*(1-3), 78–88. https://doi.org/10.1016/j.tox.2011.12.013

Book Chapters:

1. Ghosh, N., Sinha, K., & Sil, P. C. (2023). The Role of Neuro-Immune Axis in Regulating Spleen Immunology. Horizons in Neuroscience Research. Volume 50. © 2023 Nova Science Publishers, Inc.

2. Dasgupta, S.C., & Ghosh, N. (2024). Animal Derivatives as a Source of Biofuel. Biofuels Scientifc Explorations and Technologies for a Sustainable Environment. Volume 1. CRC Press © 2024 Taylor & Francis Group, LLC.