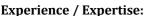
Dr. Nabanita Ghosh

Designation: Assistant Professor of Zoology

Qualifications: M.Sc., Ph.D. (University of Calcutta)

Ph.D. Thesis title- "Neurotransmitter modulation and neuronal status during Parkinsonism in mouse brain: Role of neuroinflammation and neurogenesis".



Research experience in the field of Neuroimmunology of Parkinson's Disease. Interested in immune modulation and behavioural alterations on stress exposure in vertebrate model. Proficient in immunology and cell biology experiments.

Specialisation & Area of Interests: Immunology and Cell Biology

Current Teaching: Chordate Biology, Cell biology, Immunology, Parasitology, Neuroscience, Developmental Biology.

Research Interests: Immunology and Neuroscience

Selected Publications:

Book Chapters

Sinha, P1. **Ghosh, N1**. Mitra, S2. & Bhattacharyya, A1. (2016). Neuroinflammation during Parkinson's disease: Key cells and molecules involved in it. Chapter 7 in Inflammation: the Common Link in Brain Pathologies, N. Jana et al. (eds.). ISBN 978-981-10-17117.

Papers

- 1. **Ghosh N1**, Mitra S1, Sinha P2. et al. (2019). 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, https://doi.org/10.1007/s12595-019-00296-4.
- 2. **Ghosh N1,** Mitra S1, Sinha P2, Chakrabarti N2, Bhattacharyya A1. (2018). TNFR2 mediated TNF-α signaling and NF-κB activation in hippocampus of 1-methyl-4phenyl-1,2,3,6-tetrahydropyridine-treated mice. Neuroscience Research, Dec;137:36-42. doi: 10.1016/j.neures.2018.02.007.
- 3. Mahapatra E1, Dasgupta D1, Bhattacharya N1, Mitra S1, Banerjee D1, Goswami S1,**Ghosh N1**, Dey A1, Chakraborty S2. (2017). Tissue Cell. Sustaining immunity during starvation in bivalve mollusc: A costly affair. Apr;49(2 Pt B):239-248. doi: 10.1016/j.tice.2017.02.005.
- 4. Mitra S1,**Ghosh N1**, Sinha P2, Chakrabarti N2, Bhattacharyya A1. (2016). Alteration of nuclear factor-kappaB pathway promote neuroinflammation depending on the functions of estrogen receptors in substantianigra after 1-methyl-4-phenyl1,2,3,6-tetrahydropyridine treatment. Neuroscience Letters, Mar 11;616:86-92. doi: 10.1016/j.neulet.2016.01.046.
- 5. Mitra S1,**Ghosh N1**, Sinha P2, Chakrabarti N2, Bhattacharyya A1. (2015). Alteration in Nuclear Factor-KappaB Pathway and Functionality of Estrogen via Receptors Promote Neuroinflammation in Frontal Cortex after 1-Methyl-4-Phenyl1,2,3,6-Tetrahydropyridine Treatment. Scientific reports, Sep 14;5:13949. doi: 10.1038/srep13949.
- 6. 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, Apr 5;306:74-84. doi: 10.1016/j.tox.2013.01.001.
- 7. Mitra S, Keswani T, Dey M, Bhattacharya S, Sarkar S, Goswami S, Ghosh N, Dutta A, Bhattacharyya. (2012). Copper-induced immunotoxicity involves cell cycle arrest and cell death in the spleen and thymus. Toxicology, Mar 11;293(1-3):78-88. doi: 10.1016/j.tox.2011.12.013.

Posters

- 1. Frontiers in Biotechnology, Chapter III, 2018 on 12th October, 2018 at St. Xavier's College (Autonomous), Kolkata. Title of Poster- Effect of rainfall and environmental temperature on parasitic burden in common toad (Bufo sp.): a preliminary study.
- 2. International Conference on "Neurodegenerative Disorders: Current and Future Perspective", Date: February 10 12, 2017. Title of Poster: Prevention of MPTP induced neurodegeneration in mouse hippocampus by TNF- α mediated TNFR2 activation.
- 3. Annual Conference of Indian Immunology Society, IMMUNOCON-2014, 12th -14th December 2014. Title of Poster: Copper induced immunotoxicity promotes distinct apoptotic pathways in spleen and thymus and causes cytotoxic t-cell proliferation.
- 4. International Symposium on Translational Neuroscience and XXXII Annual Conference of the Indian Academy of Neurosciences, November 1st -3rd, 2014. Theme- Translational Research: Novel Approaches to treat Neurological and Psychiatric Disorders. Title of the Poster presented: Exogenous Estrogen alters the MPTP-induced neuro-inflammatory status differentially in male and female mouse hippocampus.
- 5. XXXI Annual Meeting of Indian Academy of Neurosciences, October 25th–27th, 2013. Theme-"Emerging Trends and Challenges in Neuroscience". Title of Poster: Paraquat treatment causes differential region-specific dopaminergic neurotoxicity and variable inflammatory status in three regions of mouse brain.

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Professional Memberships and Activities:

- Life member of Zoological Society of Kolkata
- Annual member of Indian Academy of Neuroscience

