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EDUCATION

- ❖ B.Sc. Zoology, West Bengal State University (2010-2013)
- ❖ M.Sc. Zoology, University of Kalyani (2013-2015)
- ❖ Ph.D. Biotechnology, Institute of Life Sciences, Bhubaneswar, India (July 2016 -)

TEACHING EXPERIENCE

- ❖ Guest Faculty, Department of Biotechnology, Utkal University (March 2022 -)

EXPERIMENTAL SKILLS

- ❖ Molecular cloning, Protein expression and purification, Enzyme kinetics, Site-directed mutagenesis, Western blot, Southern blot, Northern blot, PCR, Analytical ultracentrifugation, Thin layer chromatography, High-performance liquid chromatography, Affinity chromatography, Size exclusion and Ion exchange chromatography
- ❖ Mammalian cell culture, Primary cell isolation and culture, Isotope labelling studies, ELISA, Immunofluorescence, Immunoprecipitation, Flow cytometry, Fluorescence Microscopy, Proteomics, Metabolomics
- ❖ *In vitro* cultures of *Plasmodium*, Transfection and Generation of transgenic parasites, *In vivo* Bioluminescence, Polyclonal antibody generation in mice
- ❖ *In vivo* animal model studies, Sexual stage development studies in *Anopheles stephensi*, Transmission stage studies in Hepatocyte cultures and mice

ACHIEVEMENTS

- ❖ Qualified CSIR/UGC NET (December 2015, June 2016)
- ❖ Qualified WBSET 2015

- ❖ Qualified GATE 2016 (AIR: 188)
- ❖ The Inspiring Science Award-2023 (Finalist)
- ❖ Best Poster Award 2022, Annual SAC Meeting, Institute of Life Sciences

PUBLICATIONS

- ❖ **Ghosh, S.**, Kundu, R., Chandana, M., Das, R., Anand, A., Beura, S., Bobde, R. C., Jain, V., Prabhu, S. R., Behera, P. K., Mohanty, A. K., Chakrapani, M., Satyamoorthy, K., Suryawanshi, A. R., Dixit, A., Padmanaban, G., & Nagaraj V. A. (2023). Distinct Evolution of Type I Glutamine Synthetase in *Plasmodium* and its Species-specific Requirement. *Nature communications*, 14, 4216. <https://doi.org/10.1038/s41467-023-39670-4>.
- ❖ Anand, A., Chandana, M.*, **Ghosh, S.***, Das, R.*, Singh, N.*, Vaishalli, P. M., Gantasala, N. P., Padmanaban, G., & Nagaraj, V. A. (2023). Significance of *Plasmodium berghei* Amino Acid Transporter 1 in Food Vacuole Functionality and Its Association with Cerebral Pathogenesis. *Microbiology spectrum*, e0494322. <https://doi.org/10.1128/spectrum.04943-22>. (* Contributed Equally)
- ❖ Chandana, M.*, Anand, A.*, **Ghosh, S.***, Das, R., Beura, S., Jena, S., Suryawanshi, A. R., Padmanaban, G., & Nagaraj, V. A. (2022). Malaria parasite heme biosynthesis promotes and griseofulvin protects against cerebral malaria in mice. *Nature communications*, 13(1), 4028. <https://doi.org/10.1038/s41467-022-31431-z>. (* Equally contributed first author)

PATENTS

- ❖ Griseofulvin as an adjunct drug for the treatment of cerebral and severe malaria. Indian Appl No. 202031050934, PCT Appl. No. PCT/IN2021/051071, Inventors: Viswanathan Arun Nagaraj, Govindarajan Padmanaban, Manjunatha Chandana Shetty, Aditya Anand, **Sourav Ghosh**
- ❖ A pharmaceutical composition to combat artemisinin resistance in malaria. (Provisional) Indian Appl No.202231018911, Inventors: Viswanathan Arun Nagaraj, Govindarajan Padmanaban, **Sourav Ghosh**, Rajib Kundu, Manjunatha Chandana, Aditya Anand.