

Dr. Ditipriya Hazra

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Research experience

Postdoctoral Research Associate, Department of Biochemistry University of Oxford, UK

Postdoctoral Researcher, École Polytechnique, Paris, France

Ph.D in Structural Biology, École Polytechnique, Paris, France

Academic qualification

M. Tech, Biotechnology and Biochemical Engineering, Indian Institute of Technology Kharagpur (2013 - 2015)

B. Tech, Biotechnology, Heritage Institute of technology (WBUT), Kolkata (2009-2013)

Research interest

- Investigating the role of epitranscriptomic modulators in methylation dependent RNA degradation using X-ray crystallography
- Structure guided drug designing and deciphering protein-drug interaction by molecular dynamics simulation
- Protein engineering and vaccine designing

Publications

- Manna, S., Samal, P., Basak, R., Mitra, A., Roy, A.K., Kundu, R., Ahir, A., Roychowdhury, A. and **Hazra, D.**, 2023. Amentoflavone and methyl hesperidin, novel lead molecules targeting epitranscriptomic modulator in acute myeloid leukemia: in silico drug screening and molecular dynamics simulation approach. *Journal of Molecular Modeling*, 29(1), p.9.
- Mitra, A., Manna, S., Kundu, R., **Hazra, D.** and Roychowdhury, A., 2023. Brute Force Virtual Drug Screening with Molecular Dynamics Simulation and MM/PBSA to Find Potent Inhibitors of METTL16. *IEEE/ACM Transactions on Computational Biology and Bioinformatics*.
- **Hazra, D.** and Roychowdhury, A., 2022. Protein-Based Nanostructures. *Nanomaterials in Clinical Therapeutics: Synthesis and Applications*, pp.269-283. (Book chapter)
- Andric, V.†, Nevers, A.†, **Hazra, D.**†, Auxilien, S., Menant, A., Graille, M., Palancade, B. and Rougemaille, M., 2021. A scaffold lncRNA shapes the mitosis to meiosis switch. *Nature Communications*, 12(1), pp.1-12. †: **equal contribution**
- **Hazra, D.**, Andrić, V., Palancade, B., Rougemaille, M. and Graille, M., 2020. Formation of *S. pombe* Erh1 homodimer mediates gametogenic gene silencing and meiosis progression. *Scientific reports*, 10(1), pp.1-11.
- **Hazra, D.**, Chapat, C. and Graille, M., 2019. m6A mRNA Destiny: Chained to the rYTHm by the YTH-Containing Proteins. *Genes*, 10(1), p.49.
- Biswas, R., Dutta, A., Dutta, D., **Hazra, D.**, Banerjee, D.R., Basak, A. and Das, A.K., 2015. Crystal structure of dehydratase component HadAB complex of mycobacterial FAS-II pathway. *Biochemical and biophysical research communications*, 458(2), pp.369-374.
- Chakraborty, B., Indra, S., **Hazra, D.**, Betai, R., Ray, L. and Basu, S., 2013. Performance study of

chromium (VI) removal in presence of phenol in a continuous packed bed reactor by escherichia coli isolated from east Calcutta wetlands. BioMed Research International, 2013.

- **PDB entry:** 4RV2, 6S2W, 6YYM, 6YYL