

Jyotirmayee Padhan

Research Scholar

- Chromatin Biology and Epigenetics lab
- Department of Biological Sciences
- ▶ IISER Kolkata

Research Interests

- Epigenetic readers and their role in gene regulation
- Protein engineering for interactome mapping
- Natural compounds for Cancer therapy

Proud Of

- **♥** Qualified GATE-Life Sciences (2021) Score 47/100, AIR-838
- PDST-INSPIRE Fellowship (2015-2020)
- P Qualified JEE-Main (2015)

Contact

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About me

I am a Research Scholar at the Indian Institute of Science Education and Research, Kolkata, currently in my first year of PhD. My research interest broadly lies in the field of Cancer Epigenetics. And I want to understand the role of epigenetic players like histone and DNA modification readers in regulating gene expression in the context of cancer and other neurodevelopmental disorders to develop novel epigenetic therapy.

Education

Doctor of Philosophy Programme

Aug 2021 - Ongoing

Indian Institute of Science Education and Research, (Kolkata, India)

Department of Biological Sciences Supervisor- Dr. Babu Sudhamalla.

Project title - Understanding the role of methyl CpG binding domain containing proteins in gene expression regulation

Integrated Bachelor's and Master's of Science (BS-MS)

Aug 2015 - July 2020

Indian Institute of Science Education and Research, (Kolkata, India)

Major- Biological Sciences

CGPA: 8.13/10

Publications

- Barman S, Roy A, Padhan J, Sudhamalla B. Molecular Insights into the Recognition of Acetylated Histone Modifications by the BRPF2 Bromodomain. *Biochemistry* 2022 Sep 6;61(17):1774-1789. doi: 10.1021/acs.biochem.2c00297. Epub 2022 Aug 17. PMID: 35976792.
- Yadav Y, Barman S, Roy A, Padhan J, Sudhamalla B. Uncovering the Domain-Specific Interactome of the TAF1 Tandem Reader Using Site-Specific Azide-Acetyllysine Photochemistry. Biochemistry. 2022 Jul 5. doi: 10.1021/acs.biochem.2c00140. Epub ahead of print. PMID: 35786907.
- Roy A, Barman S, Padhan J, Sudhamalla B. Engineering an acetyllysine reader with a photocrosslinking amino acid for interactome profiling. Chem Commun (Camb). 2021 Sep 28;57(77):9866-9869. doi: 10.1039/d1cc04611j. PMID: 34490864.
- Singh SK, Sinha S, Padhan J, Jangde N, Ray R, Rai V. MYH9 suppresses melanoma tumorigenesis, metastasis and regulates tumor microenvironment. *Med Oncol.* 2020 Sep 9;37(10):88. doi: 10.1007/s12032-020-01413-6. PMID: 32902730.

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