CURRICULUM VITAE

Priyam Ghosh

PhD in Genetics, Molecular and Cellular Biology – University of Pavia

Thesis Title: Genomic analysis and expression profiles promoting cancer phenotype in cells expressing DDB2 mutated protein.

Supervisor: Dr. Ornella Cazzalini

Reviewer: Dr. Natalia Simona Pellegata

EDUCATIONAL QUALIFICATIONS

M.Sc. in Molecular Biology and Genetics: University of Pavia (2021-2024)

B.Sc. in Microbiology: University of Calcutta (2015-2018)

Higher Secondary Examination: Central Board of Secondary Education (2015)

Secondary Examination: Indian Certificate of Secondary Education (2013)

RESEARCH EXPERIENCE

October 2024 - Ongoing: Genomic analysis and expression profiles promoting cancer phenotype in cells expressing DDB2 mutated protein – PhD, Department of Biology and Biotechnology, University of Pavia, Italy

I am working on genomic analysis and expression profiles to understand how DDB2 mutations promote cancer phenotypes. This research aims to uncover key pathways and molecular mechanisms influenced by these mutations.

January 2024 - June 2024: Understanding the expression of NDUFA4L2 protein in Neuroendocrine Tumors (NET) – Erasmus Traineeship, Institute of Diabetes and Cancer, Helmholtz Munich, Germany

I was tasked with finding the expression of NDUFA4L2 protein in NETs using 786-O and U87 cell lines by utilizing western blotting and visualizing the same with the help of immunofluorescence. I also used ELISA to find the concentration of TET enzyme in the abovementioned cell lines.

October 2022 – December 2023: Investigation of Novel Somatostatin Analogs (SSAs) at inhibiting hormone secretion and proliferation of pituitary NET

cells – Masters Thesis, Human Genetics - Cancer Genetics Laboratory, University of Pavia, Italy

I evaluated the efficacy of five novel SSAs with varying affinities for somatostatin receptor (SSTR) 2 and SSTR5 in AtT-20 NET cells against reference drugs. The expression of SSTR was measured with qRT-PCR, Western Blotting, and Immunofluorescence. The efficacy of the drugs was measured with ELISA and WST-1 assay.

May 2019 – July 2019: Understanding the role of black tea bioactive compound in the regulation of colon cancer: Focusing molecular signalling of DNMT using HCT-116 cell line – Department of Environmental Science, University of Calcutta, India

I used Western Blotting to determine the expression of DNMT1 and RXRα gene in the specified cell line when treated with black tea polyphenolic compounds. I also surveyed specified locations of South Calcutta to understand the trend of tea consumption among individuals.

September 2018: Understanding the microbial population at specific locations – Department of Microbiology, University of Calcutta, India

We took freshly prepared agar plates and opened the lid at a railway station, washroom, canteen, and park. After incubation, we evaluated the presence of various microbes in the corresponding plates and tabulated the results based on the locations.

November 2017: Collection of evolutionary data at Alipore Zoo and The Indian Museum – Department of Zoology, University of Calcutta, India

Observational data was collected at the above-mentioned locations to illustrate a clear picture of possible evolutionary pathways in endemic species of India with evidence from historical samples and current living species.

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LABORATORY TECHNIQUES

- Cell culture
- Protein extraction and estimation
- Western Blotting
- Immunofluorescence
- RNA extraction
- qRT-PCR
- Cell viability assay
- ELISA
- Cell migration assay
- Cloning

WORK EXPERIENCE

February 2020 – May 2020: Subject Matter Expert at Nerdy Turtlez, Kolkata, India

Specialized in academic writing, focusing on research papers and editing tasks across various fields within Biological and Health Sciences. This role required me to swiftly conduct research, gaining a deep understanding of diverse academic frameworks and concepts in a short time frame.

January 2016 – September 2021: Volunteer and HR at A Little Contribution Welfare Society, Kolkata, India

This is a non-profit charitable organization, where I used to work to help people in need and build a better society. Here, I was involved as a general volunteer, and I had the opportunity to teach underprivileged children. I also represented the organization as an HR professional.

EXTRACURRICULAR

- Reading
- Singing
- Guitar
- Writing
- Swimming
- Karate