



Dr. Soumita Podder
Assistant Professor of Microbiology

Academic Qualifications:

M.Sc, PhD

Contact Address:

Department of Microbiology,
Raiganj University,
Raiganj, Uttar Dinajpur,
W.B, Pin-733134.

Email: piu2007.soumita@gmail.com

Phone numbers: **9432834018**

Research Interest:

- To study molecular interaction pathway of gut microbiota in human health and disease
- To study molecular pathogenesis of life- threatening viral disease in human
- To study plant-pathogen interaction for evading biotic stress of economically important plant like Rice, Mustard.

Fellowships:

DBT Research Grant

Award: DST Travel Award,2013

DS Kothari Postdoctoral Fellowship,2016

Conference/Seminar/Organisation:

- **Delivered lecture on “Evolutionary Dynamics of Human Autoimmune Disease Genes and Malfunctioned Immunological Genes”** at the “**International Conference on Functional and Comparative Genomics & Pharmacogenomics**” held in **Chicago-North Shore, USA** on 12th November – 14th November, 2013.
- **Delivered lecture on “Investigating the Molecular Architecture of Monogenic and Polygenic Disease Genes in the Evolutionary Framework”** at the “**Conference on Informatics and Integrative Biology**”, organized by Bose Institute, Kolkata, held on December 14-16, 2011.
- **Presented poster at “International Conference & Exhibition on Proteomics & Bioinformatics”** organized by OMICS Group, Hyderabad, held on June 6-8, 2011.
- **Presented poster at “The Eight Asia-Pacific Bioinformatics Conference”** at Bangalore, India, held on January 18-21, 2010.
- **Presented poster in the 13th Human Genome Meeting on the “Genomics and the Future Medicine”** organized by HUGO (Human Genome Organization) committee at Hyderabad, held on September 27-30, 2008.
- Attended the National workshop on “**Protein folding and bioinformatics**” organized by Bioinformatics Center, Bose Institute, held on March 04-05, 2008.
- Attended the workshop on “**Introduction to Bioinformatics: Principles & Applications**” organized by Biomedical Informatics Center, Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow, held on February 22-24, 2008.
- **Presented poster On “Baculovirus-a weapon of Modern day Immunization”** in a UGC sponsored State Level Symposium on “**Environment & Industrial Aspect of Microbes in the New Millennium**” organized by Department of Microbiology, Barrackpore Rastraguru Surendranath College.

Teaching Experience: **3years**

Research Experience: **8years**

Previous & Present Employment:

August 2016 to Present: Assistant Professor in Microbiology, Raiganj University
2013-2016: Research Associate, Bose Institute, Kolkata
2010-2013: Senior Research Fellow, Bose Institute, Kolkata
2008-2010: Junior Research Fellow, Bose Institute, Kolkata

Financial Assurances from following Organisations for attending International Conferences in abroad:

Science and Engineering Research Board, DST

Publications:17

Book Chapter:1

Chakraborty S, **Podder S**, Kahali B, Begum T, Sen K Ghosh TC. Insights into Eukaryotic Interacting Protein Evolution. SpringerLink: **Evolutionary Biology - Concepts, Biodiversity, Macroevolution and Genome Evolution**.2011 Part 1 (Chapter 4), 51-70.

Research Papers:17

Country Visited: **United States of America**

Editorial Board Member: **Peertechz Journal of Biological Research and Development**

REVIEWER of the following Books and Journals: **BMC Genomics**

LIST OF PUBLICATIONS:

RESEARCH PAPERS : 17

National: Nil

Sr. No.	TITLE OF PAPER	AUTHORS	REFERENCE OF JOURNAL	YEAR OF PUBLICATION	IMPACT FACTOR
1.	Deciphering the intrinsic properties of fungal proteases in optimizing phytopathogenic interaction	Podder S* , Saha D, Ghosh TC	GENE	2019	2.65
2.	Evolutionary rate heterogeneity between multi- and single-interface hubs across human housekeeping and tissue-specific protein interaction network: Insights from proteins' and its partners' properties.	Biswas K, Acharya D, Podder S , Ghosh TC	Genomics	2017	2.38

3.	Engagement of Components of DNABreak Repair Complex and NFκB in Hsp70A1A Transcription Upregulation by Heat Shock	Hazra J, Mukherjee P, Ali A, Poddar S , Pal M	PLOS ONE	2017	3.057
4.	Overlapping Regions in HIV-1 Genome Act as Potential Sites for Host-Virus Interaction	Saha D, Podder S , Ghosh TC	Frontiers in Microbiology	2016	4.02
5.	Insights into the dN/dS ratio Heterogeneity between Brain Specific Genes and Widely Expressed Genes in Species of Different Complexity	Biswas K, Chackraborty S, Podder S* , Ghosh TC	Genomics	2016	2.38
6.	Overlapping genes: A significant genomic correlate of prokaryotic growth rates.	Saha D, Podder S , Panda A, Ghosh TC	GENE	2016	2.65
7.	Investigating different duplication pattern of Essential Genes in Mouse and Human	Acharya D, Mukherjee D, Podder S , Ghosh TC	PLOS ONE	2015	3.057
8.	Impact of Overlapping Genes in Thermophilic Adaptation of Bacteria	Saha D, Panda A, Podder S , Ghosh TC	Extremophiles	2015	2.346
9.	Insights into the miRNA regulations in human disease genes	Das J, Podder S* , Ghosh TC	BMC Genomics	2014	3.86
10.	GC-made protein disorder sheds new light on vertebrate	Panda A, Podder S , Ghosh TC	Genomics	2014	2.38

	evolution				
11.	Complex-forming Proteins Escape the Robust Regulations of miRNA in Human	Das J, Chackraborty S, Podder S , Ghosh TC	FEBS Letters	2013	3.519
12.	Evolutionary Dynamics of Human Autoimmune Disease Genes and Malfunctioned Immunological Genes	Podder S , Ghosh TC	BMC Evolutionary Biology	2012	3.406
13.	On the quest for selective constraints shaping the expressivity of the genes casting retropseudogenes in human	Sen K, Podder S , Ghosh TC	BMC Genomics	2011	3.867
14.	Insights into the Molecular Correlates Modulating Functional Compensation between Monogenic and Polygenic Disease Gene Duplicates in Human	Podder S , Ghosh TC	Genomics	2011	2.386
15.	Insights into the genomic features and evolutionary impact of the genes configuring duplicated pseudogenes in human	Sen K, Podder S , Ghosh TC	FEBS Letters	2010	3.519
16.	Exploring the Differences in Evolutionary Rates between Monogenic and	Podder S , Ghosh TC	Molecular Biology and Evolution	2010	13.649

	Polygenic Disease Genes in Human.				
17.	Multifunctionality dominantly determines the rate of human housekeeping and tissue specific interacting protein evolution	Podder S, Mukhopadhyay P, Ghosh TC	Gene	2009	2.65

*Corresponding Author