



Dr. Soumita Podder
Assistant Professor of Microbiology

Academic Qualifications:

M.Sc, PhD

Contact Address:

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Raiganj University,
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Research Interest:

- Comparative genomics
- Host-Pathogen Interaction
- Molecular Evolution
- Disease Genetics
- Epigenetic Regulation
- miRNA regulation

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: **6 months**

Research Experience: **8 years**

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:**15**

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:**15**

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 : 15

National: Nil

International:

1. **Podder S**, Mukhopadhyay P, Ghosh TC, 2009. *Multifunctionality dominantly determines the rate of human housekeeping and tissue specific interacting protein evolution.***Gene**, **439**:11-16. (Impact Factor: **2.319**).
- 2.**Podder S**, Ghosh TC, **2010**. *Exploring the Differences in Evolutionary Rates between Monogenic and Polygenic Disease Genes in Human.***Molecular Biology and Evolution**, **27**:934-941. (Impact Factor: **13.649**).
3. Sen K, **Podder S**, Ghosh TC, 2010. *Insights into the genomic features and evolutionary impact of the genes configuring duplicated pseudogenes in human.* **FEBS Letters**, **584**: 4015–4018.(Impact Factor: **3.519**).
4. **Podder S**, Ghosh TC, 2011.*Insights into the Molecular Correlates Modulating Functional Compensation between Monogenic and Polygenic Disease Gene Duplicates in Human.***Genomics**, **97**:200-204. (Impact Factor: **2.386**)

5. Sen K, **Podder S**, Ghosh TC, 2011. *On the quest for selective constraints shaping the expressivity of the genes casting retropseudogenes in human.***BMC Genomics**, **12**:401. (Impact Factor: **3.867**).
6. **Podder S**, Ghosh TC, 2012. *Evolutionary Dynamics of Human Autoimmune Disease Genes and Malfunctioned Immunological Genes.***BMC Evolutionary Biology**, **12(1)**:10. (Impact Factor: **3.406**).
7. Das J, Chackraborty S, **Podder S**, Ghosh TC, 2013. *Complex-forming Proteins Escape the Robust Regulations of miRNA in Human.* **FEBS Letters**, **587(14)**:2284-2287 (Impact Factor: **3.519**).
8. Panda A, **Podder S**, Ghosh TC, 2014. *GC-made protein disorder sheds new light on vertebrate evolution.***Genomics**, **104(6 Pt B)**:530-7 (Impact Factor: **2.386**)
9. Das J, **Podder S***, Ghosh TC, 2014. *Insights into the miRNA regulations in human disease genes.***BMC Genomics**, **15**:1010 (Impact Factor: **3.867**).
10. Saha D, Panda A, **Podder S**, Ghosh TC, 2015. *Impact of Overlapping Genes in Thermophilic Adaptation of Bacteria.***Extremophiles**, **19(2)**:345-53 (Impact Factor: **2.346**)
11. Acharya D, Mukherjee D, **Podder S**, Ghosh TC, 2015. *Investigating different duplication pattern of Essential Genes in Mouse and Human.* **Plos One**, **10(3)**:e0120784 (Impact Factor: **3.057**)
12. Saha D, **Podder S**, Panda A, Ghosh TC, 2016. Overlapping genes: A significant genomic correlate of prokaryotic growth rates. **Gene** **15**; **582(2)**:143-7, (Impact Factor: **2.319**).
13. Biswas K, Chackraborty S, **Podder S***, Ghosh TC, 2016. *Insights into the dN/dS ratio Heterogeneity between Brain Specific Genes and Widely Expressed Genes in Species of Different Complexity.* **Genomics**(Impact Factor: **2.386**).
14. Saha D, Podder S, Ghosh TC. 2016, *Overlapping Regions in HIV-1 Genome Act as Potential Sites for Host-Virus Interaction.***Frontiers in Microbiology**, **4**:7:1735. (Impact Factor: **4.165**)
15. Hazra J, Mukherjee P, Ali A, Poddar S, Pal M, **2017**, *Engagement of Components of DNA-Break Repair Complex and NFκB in Hsp70A1A Transcription Upregulation by Heat Shock.***PLoS One**. **12(1)**:e0168165. (Impact Factor: **3.057**)

*Corresponding Author