

MR, SUNIL KANTI MONDAL

Milpara (Joy Gopal Pure Road),

Ranaghat, Nadia, Pin-741201

Mobile: +91-9434129568

Email: sunil_mondal32@yahoo.com, sunil_mondal31@rediffmail.com



Objective:

To take up any sort of challenging job commensurate with my ability and knowledge to perform it successfully. I would be more than eager to shoulder responsibilities, which would broaden my knowledge and scope for future development in the context of my research interest in understanding biological process using bioinformatics analysis and simulation studies.

Present Status:

Faculty (Contractual)

Department of Biotechnology

The University of Burdwan

Golapbag Campus, Burdwan

West Bengal 713104

Education:

PhD Research: Awarded on 20th Jun, 2016.

Thesis title – “**Genotypic Comparison of Different Microorganisms**”

Under supervision of Prof. Sudip Kundu, Professor, Department of Biophysics, Molecular Biology and Bioinformatics, University of Calcutta, Kolkata, PIN - 700009.

M.Phil in Environmental Science.

2007 – 2008

University of Kalyani, Kalyani, Nadia

One year advanced diploma in Bioinformatics.

2005 - 2006

University of Calcutta, Kolkata, WB

M.Sc. in Biophysics.

2003 - 2005

University of Kalyani, Kalyani, Nadia

B.Sc. in Physics (Hons.).

2000 - 2003

Chakdaha College (University of Kalyani), Chakdaha, Nadia

Higher Secondary.

1998 - 2000

Nasra High School (WBCHSE), Ranaghat, Nadia

Madhyamik.

1998

Nawpara High School (WBBSE), Nawpara, Ranaghat, Nadia

Fellowship:

Course: 1yr Adv. Diploma in Bioinformatics Course (DBT Sponsored), University of Calcutta.

Session: 2005 – 2006

Amount: Rs. 3000/- per month

Technical competence:

Bioinformatics - Sequence & Structure Analysis for molecular phylogeny, docking, domain conservation, expression etc. (using databases, in-house programs, online/downloaded open Software & Tools), Bio - Statistics.

Biophysics - Molecular Biology, Biophysical Techniques, Biophysical Chemistry.

Computer Knowledge

Programming Language – Perl (script developed for sequence analysis, codon usage & adoption etc.), C, FORTRAN, and FoxPro.

Certificate - GDCA certificate from ICEI

Others - Proficient in Microsoft Word, Excel, Power-Point, Open-office, Linux, Dos, Basics of MySQL.

Trainings Participated

I have participated in a **refresher course** on “Application of Bioinformatics in Modern Biology” Organized by BIF Centre, Department of Microbiology, Vidyasagar University, Midnapore, West Bengal in the month of March, 2010, an **Orientation Programme** Organized by UGC – ASC, The University of Burdwan, Burdwan, West Bengal in the month of March, 2011 and a **short training** on “Bioinformatic Tools for Analysis of Genomic and Proteomic Data in Livestock and Poultry” Organized by ICAR - **NBAGR**, Karnal, Haryana in the month of January, 2016.

Dissertation & Project:

Topic: “A Bioinformatic Approach to Understand The Relationships Of Different Microorganisms”.

Course: M.Phil in Environmental Science (2007 – ’08)

Supervisor: Dr. Sudip Kundu., Associate Prof.,

Department of Biophysics, Molecular Biology and Bioinformatics, University of Calcutta, Kolkata

Topic: “Tryptophan Biosynthetic Pathway Genes and Their Organization in Genome”.

Course: One year advanced diploma in Bioinformatics (2005 – ’06).

Supervisor: Prof. Somdatta Sinha, Scientist, Center for Cellular and Molecular Biology (**CCMB**), Hyderabad.

Research Interest: Sequence Analysis, Structural Biology, Analysis of Biochemical Pathways, Microarray Data Analysis, Statistical Analysis.

Collaboration: Interested to collaborate with wet laboratory people for the validation of the hypothesis coming from In-Silico approaches.

Research Goal:

- I've the interest to find out the house keeping genes and their product involved in different biochemical pathways in microbes, plant and human and to make the analysis of their sequences like codon usage pattern, mutational pattern etc. Find out the exact order of interaction/reaction within a biochemical pathway through which reconstruction/curation of the biochemical process will be possible.
- I'm very much interested to study the protein-protein interaction, interacting site determination and microarray data analysis to see the changes in expression level and its relation with rate of reaction and also with the physico-chemical features.
- There are enormous numbers of uncharacterised gene/proteins which will be characterised and structural determination through bioinformatical approaches.

Publication:

1. Mondal, S.K. & Roy, S. (2016) A comparative genome-wide study of sequential, evolutionary, organizational and expression patterns of phenylpropanoid biosynthesis associated R2R3-type MYB transcription factors in the context of plant response to abiotic stress (Manuscript communicated)
2. Mondal, S.K., Kundu, S., Das, R.N. & Roy, S. (2015) Analysis of phylogeny and codon usage bias and relationship of GC content, amino acid composition with expression of the structural nif genes, *Journal of Biomolecular Structure and Dynamics (JBSD)*, 34(8), 1649-1666. doi: 10.1080/07391102.2015.1087334
3. Mondal, S.K., Das, R.N., Kundu, S, Kim, J., Grover, G. & Ansari, S.A. (2015). Mean Variance Relationships of Genome Size and GC Content, *ARRB*, 7(4), 206 – 221. (doi: 10.9734/ARRB/2015/16709)
4. Mondal, S. K., Study of *phoBR* in *Escherichia coli* and *phoPR* in *Bacillus*: Computational Approach, *IJARBS*, 4(2015) 20-34.
5. Mondal, S. K., Shit, S. & Kundu, S., A comparative computational study of the ‘*rbcL*’ gene in plants and in the three prokaryotic families—Archaea, cyanobacteria and proteobacteria, *IJBT*, 12(2013) 58-66.
6. Mondal S. K., Mazumdar C. & Banerjee S., Characterization of some hypothetical orthologous inorganic phosphate transporter genes from some *plants*: Bioinformatical Approach, *IJOSR*, II-9(2013) 1-4.
7. Mondal S. K., Neogi C., Choudhury K., Comparative study of Glycerate Kinase (GK): Bioinformatical Approach, *IRJBS*, 2-12(2013) 50-59.
8. Mondal S. K., Chakraborty P., Genomic and Proteomic properties of the genes involved for zinc transportation in Firmicutes, *IRJBS*, 2-12(2013) 90-101.
9. Pal A., Biswas B., Mondal S. K., Lin C.H. & Ghosh R., Copper (II) complexes with neutral Schiff bases: Synthesis, crystal structures and DNA interactions, *Polyhedron*, 31(2012) 671-675.

Book Chapter:

Name of the book: Biology of useful plants and microbes

Chapter 21: Tryptophan biosynthetic pathway genes and their organization.

Publication House: Narosa Publishing House, New Delhi, India

Invited talk:

Delivered lecture in the workshop for undergraduate student on Introductory Bioinformatics organized by BIF, Vidyasagar University.

Delivered lecture on Bioinformatics for **Ph.D. course work at School of Tropical Medicine**, Kolkata & Department of Microbiology, Vidyasagar University, Midnapore, West Bengal.

Oral Presentation:

Presented a paper on “A comparative computational study of the ‘*rbcL*’ gene in plants and in the three prokaryotic families- Archaea, cyanobacteria & proteobacteria” in a National conference organized by BIF Centre, NBU, Siliguri.

Poster Presented:

1. Presented a **poster** on “*Bioinformatic Approach to Understand the Relationships of Different Microorganisms*” in **IPCMB** (04 – 06 December’08) at **Bose Institute**, Kolkata.
2. Presented a poster on “*The Relationships Of Different Microorganisms From Different Environmental Conditions On The Basis Of Genes And Genomes*” in the symposium “Theoretical and Mathematical Biology” (21 – 22nd Aug’09), IISER, Pune.
3. Presented a poster on “*Tryptophan Biosynthetic Pathway Genes and Their Organization*” in the **InCoFIBS** (01st – 03rd Oct’10), NIT, Rourkela, Orrisa.
4. Presented a poster on “*A Bioinformatic Approach to Examine Three nif Genes H, D and K*” in the **National Seminar on Recent Trends in Biotechnology** (11th – 12th Mar’10), Burdwan University, Burdwan

Supervision of Project:

| | |
|----------|----------|
| M.Tech.: | One |
| M.Sc.: | Fourteen |

Experiences:

1. **Teaching Experience as a Faculty (Contractual) in Biotechnology from Jul'08 to till now.**
Department of Biotechnology, The University of Burdwan, Golapbag, Burdwan.
2. **Teaching Experience as a Guest Lecturer in Bioinformatics (Continuing).**
Department of Biochemistry and Medical Biotechnology, School of Tropical Medicine, Kolkata.
3. **Teaching Experience as a Guest Lecturer in Bioinformatics (Continuing).**
Department of Microbiology, Vidyasagar University, Midnapore.
4. **Teaching Experience as a Guest Lecturer in Bioinformatics (Continuing).**
Department of Molecular Biology and Biotechnology, Kanchrapara College (affiliated to University of Kalyani).
5. **Teaching Experience as a Guest Faculty in Biotechnology.**
Department of Biotechnology, University of Kalyani, Kalyani, Nadia.
6. **Teaching experience as a guest lecturer.**
Department of Microbiology, Rabindra Mahavidyalaya, Champadanga, Hoogly.
7. Working experience as an **Office Assistant** at BIF, Dept. of Biochemistry and Biophysics, K.U.

Administrative Activities:

1. Member of Post Graduate Board of Studies, Department of Biotechnology, The University of Burdwan.
2. Acted as Convenor, Moderator, Question Paper Setter, Examiner and Reviewer for Postgraduate, Undergraduate and Entrance Examinations for different Universities from 2008 to till now.
3. Organized Seminar, Workshop, Conference, Colloquium, Excursion etc.
4. Active participation in Departmental Purchase.

Personal Information:

Father's Name: Subhas Ch. Mondal

Permanent Address: Milpara (Joy Gopal Pure Road), Ranaghat, Nadia, Pin – 741201

Nationality - Indian

Date of Birth: 3rd March of 1983

Sex: Male

Marital Status: Married

Hobbies: Reading, Travelling, Social Work etc.

References:

Prof. Bisnu Pada Mukhopadhyay

Department of Chemistry
NIT, Durgapur.
Email: bpmk2@yahoo.com
Mobile: +91 - 9434788031

Prof. Somdatta Sinha

Professor of Biology
Indian Institute of Science Education and Research
(IISER) Mohali
Sector 81, Knowledge City, P.O. Manauli
SAS Nagar, Mohali, Punjab 140 306
Email: somdattasinha@gmail.com;
ssinha@iisermohali.ac.in
Mobile: +91-8968744849

Prof. Sudip Kundu

Department of Biophysics,
Molecular Biology and Bioinformatics
University of Calcutta, Kolkata
Mobile: +91- 9433428324
Email: sudimp@gmail.com

Prof. Pranab Roy

Department of Biotechnology
Haldia Institute of Technology
ICARE Complex, Hatiberia (HIT Campus)
Purba Medinipur
West Bengal, 721657
Mobile: +91-09933037099
Email: pranabroy@rediffmail.com

Date:

Place: Ranaghat, Nadia

SUNIL KANTI MONDAL