JyotirmoyDas

Ph.D. (Tech.) in Bioinformatics

Address

Prästbolsgatan 40B
587 33, Linköping,
Sweden

Tel & Skype

+46 (0)76-136 96 45
Ⓢ jyotirmoy82

Mail

jyotirmoy.das@
liu.se
jyotirmoy21@
gmail.com

Web & Git

jyotirmoy21.ucraft.net
github.com/JD2112

Programming

R ★★★★★
Perl ★★★☆☆
Python ★★☆☆☆
Shell ★★★★★
C/C++ ★★☆☆☆
HTML ★★★★★
Markdown ★★★★★
Others ★★★★★

OS Handling

GNU/Linux ★★★★★
Unix ★★★★★
MacOS ★★★★★
HPC ★★★★★
Windows ★★★★★

Skills

Experience

2017 - Now	**Postdoctoral Researcher**	Linköping University, Sweden

Designing and developing computational pipeline to study genome-wide methylomics, transcriptomics pattern obtained from clinical samples analyzed by different Illumina platforms using R in CLI and GUI-based linux platform.

2014 - 2017	**Senior Research Fellow**	DST-INSPIRE (Govt. of India), Bose Institute, India

Part of PhD program.

2012 - 2014	**Junior Research Fellow**	DST-INSPIRE (Govt. of India), Bose Institute, India

Part of PhD program.

2010 - 2012	**Institute Fellow**	DST-INSPIRE (Govt. of India), Bose Institute, India

Learn programming in MATLAB® and work with protein structure and dynamics. Use R to study the co-expression gene network.

2009 - 2010	**Research Trainee**	National Institute of Plant Genome Research, New Delhi, India

Develop new DNA markers (Intron Length Polymorphism) using *Setaria italica* genome.

Education

2012 - 2017 PhD (Tech) Degree in Bioinformatics — Maulana Abul Kalam Azad University of Technology, West Bengal (Formerly known as West Bengal University of Technology), India

Molecular Evolution and MicroRNAs.
Main subjects: Molecular Evolution, MicroRNAs, Comutational Biology, Human Diseases.
Title of the Thesis: "In-silico studies of MicroRNA Regulations in higher eukaryotes from the perspective of Molecular Evolution" (PDF Link) .
Supervisor: Prof. Tapash C Ghosh, Bose Institute, India.

2008 - 2010 Master of Technology in Biotechnology — West Bengal University of Technology, India

Main subject: Biotechnology.
Title of the Thesis: "Identification and evaluation of Intron Length Polymorphism (ILP) marker in Foxtail millet (Setaria italica) and to study evolutionary relationship between species by cross-species transferability".
Supervisors: Dr. Manoj Prasad, NIPGR, India.
Prof. Nandan Bhattacharyya, Haldia Institute of Technology, India

2006 - 2008 Master of Science in Biotechnology — Bangalore University, Karnataka, India

Main subject: Biotechnology.

2003 - 2006 Bachelor of Science in Biotechnology — University of Kalyani, West Bengal, India

Main subjects: Biotechnology, Chemistry and Computer Application.
Project 1: "Drug Designing: Evaluation of iron chelation through blood in phytic acid treated thalassemia patients".
Project 2: "Study of Ecological Diversity in Sunderbans, Especially on Kingfishers"
Supervisors: Prof. Amit Chakravorty, IGE, India.
Dr. Sudipa Chakravorty, IGE, India

Supervision

Main Supervisor:
Master students [2]

Co-supervisor:
Master student [1],
PhD student [1]

Collaborations

Internal
Dr. Mika Gustafsson, Bioinformatics, LiU [One Article]

Dr. Deepti Verma, Cell Biology, LiU [One Manuscript]

Instruments

Pyrosequencer MD96
ThermalCycler
IncuCyte®

Personal Skills

Certifications

2020	**Research Supervision**	Linköping University Pedagogy Course
2019	**Becoming a Teacher in Higher Education**	Linköping University Pedagogy Course
2015	**Astrobiology and the Search for Extraterrestrial Life**	Coursera e-learning

The origin and evolution of life and the search for life beyond the Earth. (Link to Certificate)

2015 **Programming for Everybody (Getting Started with Python)** Coursera e-learning

Building a Python fundamental. (Link to Certificate)

Publications

2020 **Das J**, Idh N, Pehrson I, Paues J, Lerm M manuscript prepared
A DNA methylome biosignature in immune cells recovered from induced sputum from TB-exposed individuals predicts exposure to mycobacteria across multiple cell types

2019 **Das J**, Verma D, Gustafsson M, Lerm M IF: 5.171; Citations: 1
Identification of DNA methylation patterns predisposing for an efficient response to BCG vaccination in healthy BCG-naïve subjects
Epigenetics, Vol 14, Issue 6, 589 - 601
https://doi.org/10.1080/15592294.2019.1603963

2018 **Sen K, Bhattacharyya D, Sarkar A, Das J, Maji N, Basu M, Ghosh Z, Ghosh TC** IF: 3.681 ; Citations: 4
Exploring the major cross-talking edges of competitive endogenous RNA networks in human Chronic and Acute Myeloid Leukemia
Biochim Biophys Acta, Gen Subj, 1862 (9): 1883 – 1892
https://doi.org/10.1080/15592294.2019.1603963

2014 **Das J, Podder S, Ghosh TC** IF: 3.986; Citations: 28
Insights into the miRNA regulations in human disease genes.
BMC Genomics, 15:1010.
https://doi.org/10.1186/ 1471-2164-15-1010

2013 **Das J, Chakraborty S, Podder S, Ghosh TC** IF: 3.805; Citations: 7
Complex-forming proteins escape the robust regulations of miRNA in Human.
FEBS Lett 587(14):2284-7.
https://doi.org/10.1016/j.febslet.2013.05.062

2011 **Gupta S, Kumari K, Das J, ..., Prasad M** IF: 2.152; Citations: 43
Development and utilization of novel intron length polymorphic markers in foxtail millet (Setaria italica (L.) P. Beauv.).
Genome 54(7): 586-602.
https://doi.org/10.1139/g11-020

Fellowship & Awards

2019   **Travel grant award**   Hjärt-Lungfonden
Heart-Lung Foundation travel grant award to attend 4th International Conference on Innate Immune Memory, Nijemegen, the Netherlands.

2012   **Research grant award**   Department of Science & Technology, Govt of India
DST-Inspire fellowhip award by Govt. of India to pursue PhD degree program.

2010   **Institute Scholarship**   Bose Institute, Kolkata
National Scholarship awarded to pursue PhD program by Bose Institute, Kolkata - an autonomous body undertaken by Govt of India.

2010   **University Gold Medal**   West Bengal University of Technology
Awarded University Gold Medal for the topper of the batch, M.Tech (BT), 2010.

2008   **Graduate Aptitude Test in Engineering**   Ministry of Human Resources Development, GOI
Successfully scored rank where the sucess rate is 12-15%.

Teaching & Mentoring

2019   **Organize 3 weeks R workshop for PhD students**   Linköping University
Organize the R fundamental workshop for the PhD students (total 18 participants) to understand the data analysis, mangement, statistical analysis and graphical representation of multi-variate data in R in 3 weekly sessions. The workshop is supported by Forum Scientium, LiU

2018   **Live imaging of intracellular infections, NDPIA workshop**   Linköping University
Mentoring and co-working with a group of students at NDPIA one week's workshop at Department of Clinical and Experimental Medicine.

2019   **Expert reviewer**   Linköping University
Expert reviewer of one International Master's Program in Medical and Experimental Neurosicence.

2018-19   **Mentoring two masters' projects on Bioinformatics**   Linköping University
Co-working with Prof. Maria Lerm to guide two master's theses on the bioinformatics part with DNA methylation analysis in R and fundamental of Linux.

2018   **Mentoring one master's project on Image analyses**   Linköping University
Co-working with Prof Maria Lerm to guide one master's thesis with image analysis and statistical calculations with live imaging techniques.

2015   **Course design, teaching and examinar**   Bidhannagar Govt College, WB, India
One semester Bioinformatics course curriculum design, deliver lectures and set examination for a group of masters (microbiology) students.

Poster & Oral presentation

2019	**Poster presentation - 4th International Conference on Innate Immune Memory** Radbound University, the Netherlands
	poster presented at the international conference.

2019   **Oral presentation - Machine Learning and Epigenetics** Linköping University
Demonstrating the Machine Learning approach towards the big data of epigentics among a group of undergraduate enginnering students (total 16 participants) from Purdue University, USA

2019   **Short oral presentation** MIIC, Linköping University
Short oral presentation to market own research, organized by Mucosal Infection and Inflammation Center.
best presenter award

2018   **Oral presentation -Advanced Image analysis** Linköping University
Oral presentation in advanced image analysis with MATLAB®in NDPIA workshop.

2018   **Poster presentation - IKE Day** Linköping University
Poster presentation at the annual IKE day seminar.

2018   **Poster presentation - Tuberculosis research seminar** Karolinska Institute, Stockholm
Poster presentation at the tuberculosis research seminar.

Referees

Referee 1   **Prof. Maria Lerm,**
Professor of Immunology
Department of Clinical & Experimental Medicine (BKV)
Faculty of Health Sciences
Linköping University, Sweden
Email: **Maria.Lerm**@liu.se
Phone: +46 (0)73-270 77 86

Referee 2   **Prof. Tapas C Ghosh,**
Senior Professor
Bioinformatics Center (Center of Excellence),
Bose Institute, India
Email: **Tapash**@jcbose.ac.in, **Tapash@gmail.com**
Phone: +91 704 477 04 27