

GYAN PRAKASH MISHRA

Submitted PhD Thesis, Looking for postdoctoral position

EDUCATION

2017
|
2022

Graduate student, Computational Biology (PhD Thesis Submitted)

Institute of Life Sciences, Department of Biotechnology and School
of Biotechnology, KIIT University

📍 Bhubaneswar, India

2013
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2015

M.S (Pharmacoinformatics)

National Institute of Pharmaceutical Education and Research (NIPER)

📍 Kolkata, India

2009
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2013

B.Pharm

Manipal College of Pharmaceutical Sciences, MAHE 📍 Manipal, India

TECHNICAL SKILLS

Bioinformatics

- **Next Generation Sequencing data analysis**
RNA-seq, ChIP-seq (transcription factor, H3K27ac, RNA-pol II)
- **Differential gene expression analysis using multiple factor design (DESeq2)**
 - Pairwise (Wald t-test)
 - Log Likelihood ratio test
 - Principal Component analysis
- **Multi-omics data integration**
- **Gene co-expression network analysis**
- **Gene set enrichment analysis**
- **Proficient in R, Perl, Bash, Awk and Sed. Basic knowledge in Python**
- **tidyverse**
- **Statistical analysis:**
 - parametric and non-parametric test
 - ANOVA
 - Fisher and Hypergeometric test
- **Exploratory data analysis using R**
- **Clustering using different methods (e.g correlation, euclidean distance etc.)**
- **Data visualization**
 - ggplot2
 - ComplexHeatmap



CONTACT

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🐦 [@gprakash047](https://twitter.com/gprakash047)

🔗 github.com/gyanmishra

📞 +91 8658481207

🆔 [0000-0002-8975-0371](https://orcid.org/0000-0002-8975-0371)

🔍 [Google Scholar](#)

Strong writing and oral
communication skill.

Team player
(Believe in collaborative work for
common goal)

*This resume was made with the R
package **pagedown**.*

Last updated on 2022-08-17.

- **Basic understanding of**
 - Immunology
 - Transcriptional regulation of gene expression
 - Epigenetics



RESEARCH EXPERIENCE

2015
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2017

- **Junior Research Fellow**
DST INDO-SWISS Project
Immunogenomics and Systems Biology Lab, Institute of Life Sciences 📍 Bhubaneswar, India



HONORS AND AWARDS

- 2013 ● **Graduate Pharmacy Aptitude Test (GPAT)**
National Level Entrance Examination for entry into M. Pharma Programme 📍 India
- 2013 ● **NIPER Joint Entrance Exam (NIPER JEE)**
Scholarship to study M.S (Pharm) at NIPER, Kolkata 📍 India
- 2015 ● **Introduction to R (edX 1.1)**
DataCamp ([Certificate](#)) 📍 Online
- 2017 ● **Bioinformatics National Certification (DBT-BINC)**
Department of Biotechnology, Govt. of India 📍 India
- 2019 ● **Nextgen Genomics, Biology, Bioinformatics and Technologies Conference (NGBT) Travel award**
SciGenom Research Foundation (SGRF) 📍 Mumbai, India
- 2019 ● **Outstanding poster presentation**
EMBOPress- molecular Systems biology @ NGBT-2019 📍 Mumbai, India
- 2019 ● **Travel grant and Oral presentation at EAPS**
EMBL Australia Postgraduate Symposium (EAPS) 📍 Melbourne, Australia



PUBLICATIONS






(* FOR EQUAL CONTRIBUTION)

- 2022 ● **Epigenomics of conventional type-I dendritic cells depicted preferential control of TLR9 versus TLR3 response by NCoR1 through differential IRF3 activation**
Cellular and Molecular Life Sciences 79, 429 (2022). doi: 10.1007/s00018-022-04424-w
Mishra GP*, Jha A*, Ahad A, Sen K, Sen A, Podder S, et al.
- 2022 ● **Spatio-temporal dynamics of intra-host variability in SARS-CoV-2 genomes.**
Nucleic Acids Research. 2022;50:1551–61. doi: 10.1093/nar/gkab1297
Pathak AK*, **Mishra GP***, Uppili B, Walia S, Fatihi S, Abbas T, et al.
- 2021 ● **NCoR1 and SMRT fine-tune inflammatory versus tolerogenic balance in dendritic cells by differentially regulating STAT3 signaling.**
bioRxiv 2021 Dec. doi: 10.1101/2021.03.11.434976
Jha A*, Ahad A*, **Mishra GP***, Sen K, Smita S, Minz AP, et al.

- 2020 ● **BedSect: An Integrated Web Server Application to Perform Intersection, Visualization, and Functional Annotation of Genomic Regions From Multiple Datasets.**
Frontiers in Genetics. 2020;11:3. doi: 10.3389/fgene.2020.00003
 Mishra GP* , Ghosh A*, Jha A, Raghav SK.
- 2020 ● **NCoR1 fine-tunes type-I IFN response in cDC1 dendritic cells by directly regulating Myd88-IRF7 axis under TLR9.**
European Journal of Immunology. 2020;50:1959–75. doi: 10.1002/eji.202048566
 Ahad A, Smita S* , Mishra GP* , Biswas VK* , Sen K, Gupta B, et al.
- 2020 ● **Identification and Characterization of Circular Intronic RNAs Derived from Insulin Gene**
International Journal of Molecular Sciences. 2020;21:4302. doi: 10.3390/ijms21124302
 Das D, Das A, Sahu M, Mishra SS, Khan S, Bejugam PR, Rout PK, Das A, Bano S, Mishra GP et al.
- 2019 ● **NCoR1: Putting the Brakes on the Dendritic Cell Immune Tolerance.**
iScience. 2019;19:996–1011. doi: 10.1016/j.isci.2019.08.024
 Ahad A, Stevanin M, Smita S, Mishra GP, Gupta D, Waszak S, et al.
- 2018 ● **EumicrobeDBLite: a lightweight genomic resource and analytic platform for draft oomycete genomes.**
Molecular Plant Pathology. 2018;19:227–37. doi: 10.1111/mpp.12505
 Panda A, Sen D, Ghosh A, Gupta A, C. MM, Mishra GP, et al.
- 2018 ● **Deciphering the genome sequences of the hydrophobic cyanobacterium *Scytonema tolypothrichoides* VB-61278.**
Genome Announcements. 2015;3:e00228-15.. doi: 10.1128/genomeA.00228-15
 Das A, Panda A, Singh D, Chandrababunaidu MM, Mishra GP, Bhan S, et al.
- 2018 ● **Draft Genome Sequence of the Terrestrial Cyanobacterium *Scytonema millei* VB511283, Isolated from Eastern India.**
Genome Announcements. 2015;3:e00009-15. doi: 10.1128/genomeA.00009-15
 Sen D, Chandrababunaidu MM, Singh D, Sanghi N, Ghorai A, Mishra GP, et al.



CONFERENCES/WORKSHOPS

- 2018 ● **Big Data in Biomedicine**
 EMBO Courses and Workshops (Poster Presentation)  New Delhi, India
- 2018 ● **Workshop on “Analysis of Genome Scale Data from Bulk and Single-Cell Sequencing”**
 NIBMG and EMBL-EBI  Kalyani, Kolkata
- 2019 ● **9th International Meeting NextGen Genomics, Biology, Bioinformatics and Technologies (NGBT)**
 Sci Genome research foundation Conference (Poster Presentation)  Mumbai, India
- 2019 ● **EMBL Australia Postgraduate Symposium (EAPS)**
 Oral presentation  Melbourne, Australia
- 2021 ● **47th Annual Conference of the Indian Immunological Society**  Online



GITHUB PROJECTS

- 2021 ● **R code used in the NCoR1-TLR9-TLR3 Project.**
github link <https://github.com/sraghav-lab/NCoR1-and-SMRT-Project>
- 2021 ● **R code used in the NCoR1-SMRT-TLR9 Project.**
github link <https://github.com/sraghav-lab/NCoR1-TLR9-TLR3-Project>
- 2019 ● **BedSect Project.**
github link <https://github.com/sraghav-lab/Bedsect>



TEACHING EXPERIENCE

- 2017 ● **PhD course work.**
Basics of NGS Data analysis (RNA-seq and ChIP-seq)

📍 Bhubaneswar, India



ACADEMIC REFERENCES

- **Dr. Sunil Kumar Raghav (PhD Supervisor)**
Scientis-F
Infectious Disease Biology Group
Institute of Life Sciences
Department of Biotechnology, Govt. of India
Email: sunilraghav@ils.res.in
Office: +91 674 2304310 ; Phone: +91 9937468600
- **Dr. Bhawna Gupta (PhD Co-supervisor)**
Assistant Professor
School of Biotechnology
Kalinga Institute of Industrial Technology (KIIT) University
Email: bhawna.gupta@kiitbiotech.ac.in
- **Dr. Punit Prasad**
Scientis-E
Cancer Biology Group
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