

High End Workshop

on

Computational Genomics and Proteomics

("KARYASHALA" Under the Accelerate Vigyan Scheme - A SERB Initiative)

24-30 July 2022



ACCELERATE
विद्यया



Funded by
Science & Engineering Research Board (SERB)
Department of Science and Technology (DST), New Delhi

Organized by
Department of Electronics and Communication Engineering
PDPM IITDM, Jabalpur, M.P.

ABOUT PDPM IITDM

PDPM IITDM Jabalpur is an Institute of National Importance, established by the Government of India in 2005 with a focus on education and research in IT enabled Design and Manufacturing. Since its inception, PDPM IITDM Jabalpur has been playing a vital role in producing quality human resources for contribution in India's mission of inclusive and sustainable growth. The Institute offers undergraduate, postgraduate and PhD programs in Computer Science and Engg., Electronics and Communication Engg., Mechanical Engg., Design and PhD programs in Natural Sciences (Mathematics and Physics). Under IIT act, the Institute has been declared as an Institute of National Importance in January 2015. The Institute is located at 10 kms from the Jabalpur railway station and 5.5 kms from Dumna Airport, Jabalpur. <http://www.iiitdmj.ac.in>

ABOUT THE WORKSHOP

'KARYASHALA' is aimed to provide hands-on experience to the students primarily from universities, colleges, private academic institutions, and newly established institutes in handling/troubleshooting of high-end scientific instruments and such skill development on themes required for research work. The program is meant to support motivated PG and Ph.D. level students, who are having a strong willingness to get excellence in their scientific and engineering research pursuits in the field of Bioinformatics and Computational Genomics & Proteomics. The objective of the course is to examine current issues in Mathematical Biology, Computational Biology and Bioinformatics from an engineering perspective. A major goal of this course is to introduce students studying Biology or Biochemistry to the concepts and analytical techniques of engineering. Likewise, engineers will be exposed to the terminology and concepts of Molecular Biology, Genomics and Proteomics. Students, faculty and researchers in Computer Engineering, Electrical Engineering, Bioinformatics, Biology, and Biochemistry will be the targeted participants.

LEARNING OBJECTIVES: * Accessing DNA & Protein Data Bases * Study of DNA and Amino Acid Mapping Schemes * Genomic & Proteomic Signal Processing * Statistical Methods for Genomics & Proteomics * Genomic & Proteomic Data Analysis Using Machine Learning * MATLAB Bioinformatics Toolbox.

WHO CAN ATTEND?

Karyashala is open to postgraduate and PhD students from Institutes, Colleges, and Universities in India. Applicants pursuing PG/PhD programs in any discipline of Electrical Engineering, Computer Engineering, Bioinformatics, Biology, and Biochemistry are eligible. Students who have recently completed their PG programs are also eligible. Preference will be given to the students having interest in Machine Learning, Signal Processing, Mathematical Biology, Computer Science & Engineering, Computational Biology, and Bioinformatics. Candidates who have completed PhD will not be considered. Total numbers of seats are limited to 25. **There is no registration fee.**

HOW TO APPLY?

Register through google form link:
<https://forms.gle/KkcqFQpma9zU5eMz8>
or
by scanning the QR code



IMPORTANT DATES

- Registration opens: 23 June 2022
- Last date for registration: 10 July 2022
- Display of shortlisted candidates: 12 July 2022
- Workshop dates: 24-30 July 2022

BOARDING, LODGING & T.A.

Boarding and lodging to the selected candidates will be borne by the organizing institute. TA will be admissible as per GoI norms.

CHIEF PATRON

Prof. P. N. Kondekar
Director
PDPM IITDM Jabalpur, M.P.

ORGANIZING COMMITTEE

Prof. Prabin Kumar Padhy
Dr. Anil Kumar
Dr. Rakesh Kumar Jha
Dr. Varun Bajaj
Dr. Ravi Panwar

EVENT ORGANIZER

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एवं विनिर्माण संस्थान, जबलपुर



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