



ONLINE FACULTY DEVELOPMENT PROGRAMME (FDP)

ON BASICS OF BIO-INFORMATICS

(26th May – 04th June 2021)

Organized by

E & ICT Academy, National Institute of Technology, Warangal.

in association with

University College of Engineering BIT Campus

Tiruchirappalli – 620 024



Date/Period	03.30 PM to 04.30 PM	04.40 PM to 05.40 PM	05.50 PM to 06.50 PM	07.00 PM to 08.00 PM
26.05.2021	<i>Introduction</i> Resource Person: Dr. Michael Gromiha, Professor, Department of Biotechnology, IIT Madras	<i>Bioinformatics with Perl Exploratory Session I</i> Resource Person: Dr. K. Uma Maheswari, Assistant Professor, Dept. of IT, University College of Engineering, Anna University, Trichy	<i>Bioinformatics with Perl Exploratory Session II</i> Resource Person: Dr. K. Uma Maheswari, Assistant Professor, Dept. of IT, University College of Engineering, Anna University, Trichy	<i>DNA sequence analysis</i> Resource Person: Dr. Perugu Shyam, Assistant Professor, Dept. of Biotechnology, NIT Warangal
27.05.2021	<i>Protein secondary structures</i> Resource Person: Dr. Thyageshwar Chandran, Assistant Professor, Dept. of Biotechnology, NIT Warangal	<i>Pairwise alignment</i> Resource Person: Dr. Michael Gromiha, Professor, Department of Biotechnology, IIT Madras	<i>Application of bioinformatics in gene expression study</i> Resource Person: Dr. Dev Mani Pandey, Associate Professor, Dept. of Bioengineering Birla Institute of Technology Mesra, Ranchi.	<i>DNA Databases</i> Resource Person: Dr. Perugu Shyam, Assistant Professor, Dept. of Biotechnology, NIT Warangal
28.05.2021	<i>Ramachandran plot & propensity</i> Resource Person: Dr. Thyageshwar Chandran, Assistant Professor, Dept. of Biotechnology, NIT Warangal	<i>Conservation score</i> Resource Person: Dr. Michael Gromiha, Professor, Department of Biotechnology, IIT Madras	<i>Bioinformatics with R Exploratory Session I</i> Resource Person: Dr. R. Srivatsan, Faculty Scientist, Institute of Bioinformatics and Applied Biotechnology (IBAB), Bengaluru	<i>Bioinformatics with R Exploratory Session II</i> Resource Person: Dr. R. Srivatsan, Faculty Scientist, Institute of Bioinformatics and Applied Biotechnology (IBAB), Bengaluru
29.05.2021	<i>Protein secondary structure prediction</i> Resource Person: Dr. Thyageshwar Chandran, Assistant Professor, Dept. of Biotechnology, NIT Warangal	<i>Protein sequence analysis</i> Resource Person: Dr. Michael Gromiha, Professor, Department of Biotechnology, IIT Madras	<i>Bioinformatics with R Exploratory Session III</i> Resource Person: Dr. R. Srivatsan, Faculty Scientist, Institute of Bioinformatics and Applied Biotechnology (IBAB), Bengaluru	<i>Bioinformatics with R Exploratory Session IV</i> Resource Person: Dr. R. Srivatsan, Faculty Scientist, Institute of Bioinformatics and Applied Biotechnology (IBAB), Bengaluru

30.05.2021	<i>Protein tertiary structure</i> Resource Person: Dr. Thyageshwar Chandran , Assistant Professor, Dept. of Biotechnology, NIT Warangal	<i>Hydrophobicity profiles/patterns</i> Resource Person: Dr. Michael Gromiha , Professor, Department of Biotechnology, IIT Madras	<i>Bioinformatics with R Exploratory Session V</i> Resource Person: Dr. R. Srivatsan , Faculty Scientist, Institute of Bioinformatics and Applied Biotechnology (IBAB), Bengaluru	<i>Bioinformatics with R Exploratory Session VI</i> Resource Person: Dr. R. Srivatsan , Faculty Scientist, Institute of Bioinformatics and Applied Biotechnology (IBAB), Bengaluru
31.05.2021	<i>Protein Data Bank& visualization tools</i> Resource Person: Dr. Thyageshwar Chandran , Assistant Professor, Dept. of Biotechnology, NIT Warangal	<i>Protein stability</i> Resource Person: Dr. Michael Gromiha , Professor, Department of Biotechnology, IIT Madras	<i>Bioinformatics with R Exploratory Session VII</i> Resource Person: Dr. R. Srivatsan , Faculty Scientist, Institute of Bioinformatics and Applied Biotechnology (IBAB), Bengaluru	<i>Bioinformatics with R Exploratory Session VIII</i> Resource Person: Dr. R. Srivatsan , Faculty Scientist, Institute of Bioinformatics and Applied Biotechnology (IBAB), Bengaluru
01.06.2021	<i>Protein structural classification and contact maps</i> Resource Person: Dr. Thyageshwar Chandran , Assistant Professor, Dept. of Biotechnology, NIT Warangal	<i>Stabilizing residues/ Database</i> Resource Person: Dr. Michael Gromiha , Professor, Department of Biotechnology, IIT Madras	<i>Story Of Drug Designing</i> Resource Person: Dr. Koel Mukherjee , Assistant Professor, Dept. of Bioengineering Birla Institute of Technology Mesra, Ranchi.	<i>Tautomerism in chemical databases and its importance in drug design</i> Resource Person: Dr. Devendra Kumar Dhaked , Assistant Professor, Dept. of Pharmacoinformatics, National Institute of Pharmaceutical Education and Research (NIPER), Kolkata
02.06.2021	<i>Protein structural analysis</i> Resource Person: Dr. Thyageshwar Chandran , Assistant Professor, Dept. of Biotechnology, NIT Warangal	<i>Stability upon mutation</i> Resource Person: Dr. Michael Gromiha , Professor, Department of Biotechnology, IIT Madras	<i>Genomic Signal Processing</i> Resource Person: Dr. Sitanshu Sekhar Sahu , Assistant Professor, Dept. of Electronics & Communication Engineering, Birla Institute of Technology Mesra, Ranchi	<i>Bioinformatics with Perl Exploratory Session III</i> Resource Person: Mrs. R. Kavitha , Assistant Professor, Dept. of CSE, University College of Engineering, Anna University, Trichy
03.06.2021	<i>Protein structure prediction</i> Resource Person: Dr. Thyageshwar Chandran , Assistant Professor, Dept. of Biotechnology, NIT Warangal	<i>Protein folding rates</i> Resource Person: Dr. Michael Gromiha , Professor, Department of Biotechnology, IIT Madras	<i>Machine Learning in Bioinformatics</i> Resource Person: Dr. Sitanshu Sekhar Sahu , Assistant Professor, Dept. of Electronics & Communication Engineering, Birla Institute of Technology Mesra, Ranchi	<i>Identification of Protein-coding regions in DNA sequences using Signal Processing Techniques</i> Resource Person: Dr. Malaya Kumar Hota , Professor, Department of Communication Engineering, School of Electronics Engineering, VIT, Vellore
04.06.2021	<i>Protein interactions</i> Resource Person: Dr. Michael Gromiha , Professor, Department of Biotechnology, IIT Madras	<i>Molecular docking hands on (Swissdock server)</i> Resource Person: Dr. Koel Mukherjee , Assistant Professor, Dept. of Bioengineering Birla Institute of Technology Mesra, Ranchi.	<i>Bioinformatics with WEKA Exploratory Session I</i> Resource Person: Dr. D. Asir Antony Gnana Singh, Dept of CSE, University College of Engineering, Anna University, Trichy	<i>Bioinformatics with WEKA Exploratory Session II</i> Resource Person: Dr. D. Asir Antony Gnana Singh, Dept of CSE, University College of Engineering, Anna University, Trichy

