



Dr. N.G.P. ARTS AND SCIENCE COLLEGE

Coimbatore - 641 048



Workshop

on

Bioinformatic Tools and its Applications

(For Final Year UG and PG Microbiology Students)

26th - 27th June 2024

Organized by

Department of Microbiology
(Under DBT Star Status Scheme)



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Students of Microbiology

Objectives

Bioinformatics represents an interdisciplinary field, synthesizing concepts from computer science, mathematics, and biology. The aim of bioinformatics is to enrich biological data and apply computer algorithms for its analysis. Essentially, it is concerned with the analysis, storage, and exchange of vast quantities of biological data. For bioinformatics, the biological content represents the research goal, entity, and object, while information science provides the research platform, technologies, and means. This growth is attributable not only to significant advancements in research methodologies, technological developments within Biology, particularly the continual progress in omics technology, that result in exponentially growing volumes of biological data, but also to the rapid pacing of Information Science. The identification of genetic diversity of a large number of microorganisms is a data-intensive project, and bioinformatics can greatly improve its efficiency. Through protein sequence, DNA sequence, and protein structure information, bioinformatics technology can provide researchers with a precise information to the profile of microbes.

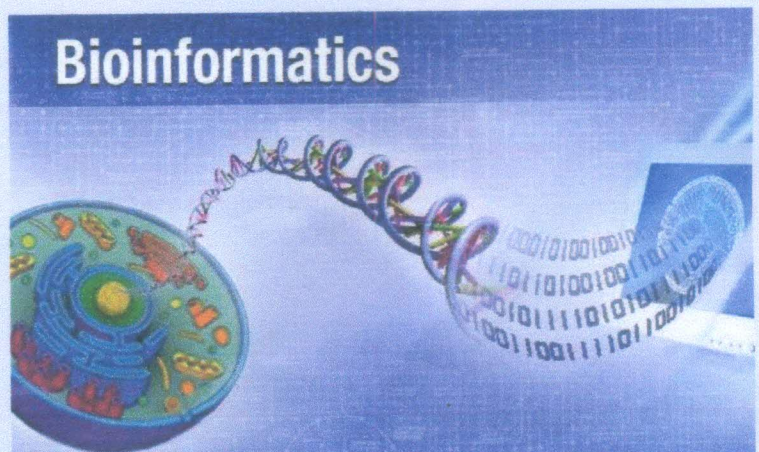
Workshop will Focus on:

- Basic bioinformatics tools and techniques (BLAST and FASTA).
- Navigate and utilize the databases such as NCBL, EMBL, and DDBJ.
- DNA and RNA and Protein sequence analysis.
- Visualize and analyze the protein structures using computational tools.

Resource Person



Mr. ANIETH NOEL A,
Bioinformatician,
Genomic Data Analyst,
Boltzman/Bayer Labs
Bengaluru.



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22/06/2024