

Basic Bioinformatics

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Bioinformatics is a computer-assisted interface discipline dealing with acquisition, storage, management, access and processing of biological data. Bioinformatics is useful in identifying genes in DNA sequences, in the study of structure and function of genes and protein sequences in identifying families of related sequences, in aligning similar sequences and generating phylogenetic trees, in discovering drug targets, and in drug development. This book, designed to provide the newcomer enough information to understand the principles of bioinformatics applications covers:

- History and Importance of Bioinformatics
- DNA, RNA and Protein
- DNA and Protein Sequencing and Analysis
- Computers, Internet and World Wide Web
- Databases
- Sequence Alignment
- Predictive Methods using DNA and Protein sequences
- Homology and Phylogeny
- Drug discovery and Pharmainformatics