Contents

29. BIOINFORMATICS

- Development of Bioinformatics
- Role of Internet in Bioinformatics
- Online
- Browsing working and downloading
- Sequences and Nomenclature
- File Formats
- Files of Structural data
- Submission of Sequences
- Databases
  - Primary sequence databases
  - Subsidiary (Secondary) sequence databases
  - Composite databases
- Molecular Biology Databases
- Bioinformatics Databases and analysis Services
  - GenBank
  - EMBL
  - dbEST
  - Mito
  - NCBI's Molecular Modeling Database (MMDB)
  - The conserved Domain Database
  - PDB: The Protein Data Bank
  - SWISS-PROT and TrEMBL
  - BLAST
  - RPS-BLAST
  - VAST
  - VAST Search
- Specialized Resources
  - Plant databases
  - UK Crop Net
  - Genoplante
- Bioinformatics Databases and Analysis Services
- Bioinformatics tools for access to databases
  - Text based databases searching
  - Similarity based database searching
    - Global vs. Local Alignment
    - Alignment algorithms
    - Search parameters
  - Visualization tools
- Integrated Molecular Biology Database system
- Database integration strategies
  - Data Warehousing
  - Link Driven Federation
    - Entrez
    - SRS
    - LinkDB.