

THE TASK OF COMPUTER BIOLOGY

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A review of main tasks of computer biology is done. Among the many directions the most important are:

1. The problems of protein space structure decoding (X-ray structure and NMR-structure analysis);
2. Recognition of protein-coding sites in the biopolymer primary structure. Comparative analysis of polymer primary structures.
3. Theoretical prediction of protein space structure (3D-folding);
4. Modelling of biomacromolecules structure and dynamics;
5. Bioinformatics.

Providing of specialized data bases (protein data bases, nucleotide sequences bases, metabolic reactions path ways bases, cell assemblies bases etc.).

A special attention is paid to the employment of high performance calculation in biology and bioinformatics.