



Examples of topics

- Alignments and dot plots
- Phylogenetic trees
- BLAST
 - BLAST against NCBI and against local database
- Database search
 - NCBI
 - UniProt
- RNA analysis
 - Structure prediction
 - Graphical representation of structures
- Protein analysis
 - Prediction of secondary structure, signal peptides and transmembrane helices
 - 3D molecule analysis
 - Pfam domain search
 - Antigenicity & hydrophobicity
 - Proteolytic cleavage
- Motif search and pattern discovery
- Sequencing data analysis
 - Assembly, including reference assembly
 - Trimming
 - SNP analysis
- Primer design
 - Primer parameters
 - Standard PCR, nested PCR, and TaqMan
- In silico cloning
 - Graphical representation
 - Restriction site analysis
 - Cloning experiments