28. Bioinformatic sequence identification from sequence family databases

Anne-Muriel Arigon, Guy Perriere and Manolo Gouy

Laboratoire "Biometrieet Biologie Evolutive" UMRCNRS5558- UniversiteLyon 1 43, bd du 11 novembre 1918- 69622 Villeurbanne- FRANCE tel : 0472 43 35 83

We have developed a tool in order to identify sequences in relation to a sequence family database. This tool combiness everal algorithms: BLAST, multiple sequence alignment and phylogenetic tree building. After identification of the most similar gene family to the query sequence, this query sequence is added to the whole family alignment and the phylogenetic tree of the family is rebuilt including the query sequence. Thus, the query sequence can be easily located in its gene family.