

Biological Sequence Analysis

Monday 4. February at Noon in C221

1. 3.2 and 3.3 from Durbin
2. 3.5 from Durbin
3. 3.8 from Durbin
4. 3.10 and 3.11 from Durbin
5. Durbin et al. book, on page 78, describes a trick how to add log transformed probability values fast and approximately correctly.
 - Explain this trick
 - How one can generalize the trick for more than two numbers to be added?
6. Try the BLAST search engine (www.ncbi.nlm.nih.gov/BLAST/).
 - (a) Search sequence GAATTCCAATAGA with blastn from the Yeast database (try database "nr", and choose from options "or select from" latin name "Saccharomyces cerevisiae[ORGN]");
 - (b) Search the sequences given in Fig. 2.1 of Durbin using PSI-BLAST from SWISSPROT database. Select values for the sensitivity parameters such that you really find something.