

Bioinformatics – Lecture Notes

Announcements

Seminar – “Quality Control in Manufacturing Oligo Arrays”
Professor Charlie Colbourn (over 230 journal papers)
Friday February 1, 11: am
EC 2.112

Class 5

1. Local alignment for proteins not closely related

Follow and explain text Pages 87-88.

2. Global Pairwise Sequence Alignment

- A. Distance Methods – how different are the sequences
- B. Alignment with Tandem Duplication – Uses the DSI model which is a different evolutionary model with duplications, substitutions and indels
- C. Similarity Methods – align many sequences with of different lengths and find optimal alignment of all sequences

Distance Methods – Define

- Edit Operation
- Edit Distance
- Metric
- Alignment
- Alignment Distance