

BioSkills @

Box Hill Institute



The Specialist Centre for Biotechnology Training

Bioinformatics, Databases & Other Information Resources

Dates: 20th March 2009
7th August 2009

Course Description

Course Objective

This session will introduce the field of bioinformatics, focusing on data retrieval and deposition at the two main global repositories of biological information: NCBI in the United States and EBI in Europe. New additions to this course are the inclusion of CLUSTAL Sequence Alignment, PubMed, and Sequence Similarity Searching using NCBI BLAST.

Course Outline

- Bioinformatics – a role in life science research
- NCBI/Entrez and EBI/SRS
- Sequence alignment using Clustal
- Sequence searches using BLAST
- Pub Med

For Whom

- Science graduates looking for higher skills in bioinformatics
- Lab staff seeking to update their skills
- Post-graduate students
- Those doing DNA sequence and protein studies
- People looking for a change in career

Certificate of Participation

- Awarded to participants who have achieved 75% attendance for the course.

Outcomes

General

- Identify the major web-resources for bioinformatics
- Use database resources to search for on-line biological information on any topic

NCBI

- Select appropriate databases to search
- Find information using the Entrez search interface,
- Refine a search using the functions of Limits and Preview/Index tabs,
- Find information in other databases linked to a search hits
- Using MyNCBI, save a search and schedule it to run on a regular basis
- Run sequence similarity searches using BLAST

EBI

- Select appropriate databases to search
- Use the full flexibility of the SRS interface to search for information within these databases
- Use cross-references in SRS to find related information linked across a range of databases

CLUSTAL

- Align DNA and protein sequences

Course information

Course code:	BIO 11
Course fee (incl GST):	\$660.00
Maximum class size:	20 participants
Time:	9.00am – 5.00pm
Total course duration:	8 hours (inc. lunch)

Venue:

Building 8, Level 2, Room to be advised
Box Hill Institute,
465 Elgar Road, Box Hill