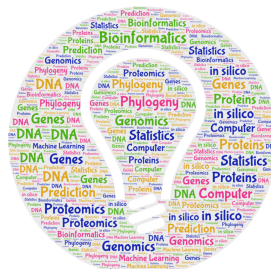


Workshop Basics of Bioinformatics

13 -15 February 2022

Institute of Graduate Studies and Research
Alexandria University



The workshop is designed for trainees and interested individuals in the fields of medicine, biology, and related fields with little or no experience in bioinformatics. It is designed for research scientists, graduate students, technicians, and those who require knowledge of bioinformatics.

Prerequisites: A basic background in biology is required to benefit most from the learning. Participants should be comfortable with basic computer skills. At the end of the course a trainee should have an idea of the underlying algorithms, know the main steps and elements of several bioinformatics methods of sequence analysis, and feel comfortable in using online resources.

Programme

During the workshop, attendees will get hands-on training on basic sequence analysis of nucleotides and proteins using publicly available resources.

Day 1 (9.00-15.00)

- Introduction to Bioinformatics.
- Databases.
- Genomic applications
- **Practical Session:** Databases

Day 2 (9.00-15.00)

- Sequencing techniques
- Primer design
- Sequence alignment BLAST
- **Practical session:** BLASTn

Day 3 (9.00-15.00)

- Protein structure & its prediction
- BLASTp
- Multiple Sequence Alignment
- Phylogeny trees
- **Practical session:** Phylogeny

Logistics

COURSE MATERIAL

Basics of Bioinformatics workshop book will contain recent materials for most of the topics covered in the course theoretically and practically. In addition, a CD contains most of the protocols and methodologies covered will be available.

WORKSHOP FEE

1500 Egyptian Pounds

This includes

- Course material
- Certificate of Participation
- Coffee breaks

WORKSHOP ORGANIZED BY

Department of Biotechnology. Institute of Graduate Studies and Research. Alexandria University.

Course coordinator

Nefertiti El-Nikhely
Lecturer of Biochemistry