

Toxicogenomics and toxicoproteomics

Syllabus

Topics covered include:

1. Definition and objectives of genomics and proteomics applied to toxicology
2. Presentation of the main study strategies of the genome and proteome
3. Databases and Data Research Tools
4. Presentation of the principles of mass spectrometry and identification of proteins
5. Experimental design and analysis of genomic and proteomic data
6. DNA Sequencing, Gene Identification, and Gene / Protein Phylogenetics
7. Theoretical and practical training on the identification of proteins using bioinformatics tools, extraction of proteins from biological samples and their separation in polyacrylamide gel

Learning & Teaching

- Lectures and practical: 42 hr
- Seminary: group autonomous work with oral presentation

Teaching Staff

A. Antunes Pereira (Coord.)

Semester: 2

Timetable slot: To be advised

ECTS: 6

Level: Optional

Assessment

- Written examination (50%)
- Continuous evaluation (10%)
- Seminary and oral presentation (40%)

Course Evaluation

By completion of University Unit Evaluation Questionnaire by students, annual assessment by Unit Coordinator.