Teaching for International Courses – Visiting Professors
Academic year 2017/2018

2nd term

COURSE TITLE
Biochemical and Molecular Basis of Metabolism

Scientific area
Biochemistry, Molecular Biology

Department of Clinical and Biological Sciences and Oncology

English-taught degree course
(One long cycle degree in) Medicine and Surgery

Language used to teach
English

Teaching Commitment: 22 hours

Course summary
Genome sequencing
Functional genomic analysis
Data organization
Structure of Biological Databases

Learning objectives
Students will acquire knowledge on how modern Genomics explores and stores both the structure of individual Human Genomes (nucleotide sequences) and the functional features of genomes in different cells and tissues from individuals (transcriptomes and epigenomes).
Students will then be introduced to the structure and organization of Multinational Projects and the organization of Biological Databases storing primary or annotated information.
Finally, students will obtain a basic introductory ability to interact with these databases and how to discern and select proper official information.

Tutorship activities

Lab activities
Hands-on practice on database is foreseen.

Other activities besides the course: i.e. seminars and conferences addressed to PhD students and research fellows, dissemination conferences
Two seminars for PhD students and post-doc researchers.

Visiting Professor Profile

The Visiting Professor should have strong background in Genomics and Bioinformatics, and demonstrated ability to deal with structural and functional genomic data.
Experience in teaching to the first-level (Bachelor) students is desirable but not mandatory.
Due to the fact that this is a first-year course, fluent and correct English-speaking is required: therefore, the Visiting Professor applicant will demonstrate at least five-years work experience in a English-based university or Research Centre, ideally in a English-speaking Country.
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