2006/07 Taught Postgraduate Module Catalogue

BIOL5224M

Techniques in Human Molecular Genetics **10 credits**

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Taught Semester 2 View Timetable

Year running 2006/07

Pre-requisite qualifications

BSc or equivalent.

Pre-requisites BIOL5221M (or equivalent)

Module replaces BLGY5055M

This module is not approved as an Elective

Objectives

On completion of this module, students should be able to:

- deploy the strategies that have been used to generate the physical, genetic and integrated maps of the human genome that have provided the framework for genome sequencing;

- understand the procedures for locating and identifying disease genes and how mutations in these genes can be detected;

- understand the principles of transgenics and gene targeting used to study the molecular pathology of human hereditary disease;

- appreciate the novel approaches being developed for large-scale analysis of genome sequence data and gene expression.

Syllabus

Techniques for genome analysis and application of genome data; manipulating the genome to understand gene function; genetics in the new millennium - new technologies for the analysis of gene expression.

Teaching methods

Lectures: 12 x 1 hour; Workshops dedicated to the in-course assignment: 4 x 1 hour.

Private study

3 hours reading per lecture: 36 hours;

6 hours preparation per workshop: 24 hours; Writing up report on in-course assignment: 24 hours.

Progress monitoring

Through discussions at workshops.

Methods of assessment

Write-up of in-course assignment (case scenario) based on workshops (100%).

Reading list

The reading list is available from the Library website