

2007/08 Taught Postgraduate Module Catalogue

BIOL5242M

Reproductive Genetics and Stem Cells

10 credits

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Taught Semester 1 [View Timetable](#)

Year running 2007/08

Pre-requisite qualifications

BSc or Equivalent

Module replaces BIOL5230M

This module is not approved as an Elective

Objectives

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

- Describe the main genetic causes of female and male infertility and pregnancy loss and critically evaluate current research in this area
- Describe the characteristics of both adult and embryonic stem cells of different origins and critically evaluate current research in this area
- Understand how stem cells may be used therapeutically in common degenerative diseases and apply this information to propose hypotheses and solve problems

Syllabus

Male and female reproductive systems. Gametogenesis and early human development. Infertility, including genetic causes, assisted reproduction and preimplantation genetic diagnosis. Embryonic stem cells and models of human disease. Origin and derivation of human embryonic and adult stem cells. Therapeutic cloning. Applications in regenerative medicine.

WEEK TITLE

Human Reproduction and Genetics

1 Reading (lecture material available via NBB) + associated reading - independent study

2 Preparation for Workshop 1 - independent study

3 Workshop 1 - Alan Handyside

Reproductive Genetics

- 4 Reading (lecture material available via NBB) + associated reading - independent study
 5 Preparation for Workshop 2 - independent study
 6 Workshop 2 - Alan Handyside
 Stem Cells
 7 Reading (lecture material available via NBB) + associated reading - independent study
 8 Preparation for Workshop 3 - independent study
 9 Workshop 3 - Alan Handyside
 11 Assessed debate

Teaching methods

Delivery type	Number	Length hours	Student hours
Workshop	3	3.00	9.00
Private study hours			91.00
Total Contact hours			9.00
Total hours (100hr per 10 credits)			100.00

Private study

- 27 hours - work (3 hours for each of 9) on-line lectures;
 24 hours - preparation for workshops: 8 hours each;
 40 hours - preparation of 2 reports: 25 hours each;
 14 hours - preparation for debate.

Progress monitoring

- Reports and workshops
 2 reports: problem-based and case study: 35% each;
 Workshop contributions: 30%.

Methods of assessment

Coursework

Assessment type	Notes	% of formal assessment
Case Study	Case study report	35.00
Problem Sheet	Problem-based study report	35.00
Group Discussion	Contribution to Workshops	30.00
Total percentage (Assessment Coursework)		100.00

Reading list

The [reading list](#) is available from the Library website