



MSc in Reproductive & Maternal Sciences

This 12-month course has been developed primarily to meet the needs of overseas medical graduates requiring training in Reproductive Science. This course is the first of a family of degrees that will have a common core with specialist options. The core will give a thorough grounding in research methodology and Evidence Based Medicine giving an advantage to students wishing to go onto do a PhD. The MSc is also ideal for those wishing to pursue speciality training in Obstetrics and Gynaecology with the option to study problems of pregnancy, benign gynaecology and Reproductive Medicine.

In addition, there is the opportunity to get some exposure to specialist clinical practice. It is likely to enhance a student's chances of getting an academic or teaching hospital post either in their home country or in the UK although the latter will be dependent on current and future legislation and medical registration. It is possible that it will also be appropriate for UK graduates wishing to gain additional experience in research methodology. It is anticipated that students would graduate with an MSc in Reproductive & Maternal Sciences.

Course Structure

The MSc begins in the Autumn and is taught over 12 months in 4 terms.

The course structure will comprise:

1. A dissertation covering a research or audit project.
2. Training in research methodology that will include all aspects of writing a protocol including hypothesis generation as well as statistics, data handling, systematic reviewing etc.
3. Specialist training in reproductive science with clinical exposure allowing acquisition of knowledge and experience in their chosen fields of interest. The programme should enhance the student's prospect of achieving a pass in the MRCOG.

We will utilise problem-based learning, as is currently the model for the undergraduate medical curriculum.

Course aims

This course will provide training in reproductive sciences, clinical exposure as well as basic research methodology to enable the student to develop their interest and expertise in their chosen areas.

Entrance Requirements

Applicants must be qualified as a Medical Practitioner (MB, BS or equivalent) and intend to pursue a career in Obstetrics and Gynaecology. Overseas students who do not have English as their first language need to be able to provide evidence of fluency in written and spoken English. The following are acceptable as evidence:

- IELTS 6.5 or above
- Paper-based TOFEL 570 or above
- Computer-based TOFEL 250 or above
- Cambridge Certificate in Advanced English A
- Cambridge Certificate of Proficiency in English C

Objectives

All students will require to have had clinical experience in the speciality. By the end of the project, they should:

1. Have an increased understanding of the principles underlying problems relating to Obstetrics and Gynaecology.
2. Have had training in basic research methodology.

3. Understand the importance of the ethics of medical research in this area.
4. Be able to carry out systematic reviewing and literature searching.
5. Use appropriate statistics.
6. Develop appropriate data handling techniques.
7. Complete a research or audit project in Obstetrics and Gynaecology.

Specialist Teaching

The aims of the specialist teaching in Reproductive Science will be as follows:

1. To develop the student's knowledge of physiological processes that are involved in human reproduction including anatomy, physiology and embryology relating to conception and early human development, as well as pregnancy.
2. To develop the students understanding of obstetrical and gynaecological problems.
3. To expand the student's knowledge of the literature relating to current clinical practice in our area of interest.

More specifically the following topics will be covered and by the end of the course students will be able to:

1. Discuss and critically evaluate the major theories underlying the cause of sub-fertility.
2. Describe and discuss in depth the development of the early human embryo and factors that will affect its growth and development.
3. Discuss the importance of genetics and its impact on growth and development.
4. Understand endocrinology as relevant to reproduction and also the impact of hormones and endocrinopathies on growth and development.
5. Make valid comparisons between the pathology and pathophysiology of common problems in the field of sub-fertility.
6. Understand the ethical issues in Reproductive Medicine.
7. Discuss and critically evaluate the available options for the treatment of sub-fertility and the problems of pregnancy outlined above.
8. Discuss the theories and the processes underlying the development of pregnancy problems such as pregnancy induced hypertension and intrauterine growth restriction.
9. Understand the importance of coagulopathies in relationship to Obstetrics and Gynaecology.

These topics will be covered in Modules. Three will need to be completed from the list of Options. These modules will initially cover the following although other options may become available according to demand:

1. Assisted Conception and Infertility.
2. Early Human Development and Embryology.
3. Reproductive Endocrinology including the Menopause.
4. Reproductive Science in relation to Obstetrics.

Research/Audit Project

The student will be able to choose a project that will be related to one of their specialist modules. This project will contribute 30% of the final marks and will be assessed by means of a dissertation. It is anticipated that all types of projects will be available including laboratory based, clinical and audit. As with other student projects, these will be aligned with the research being carried out within the Division of Developmental Medicine and the Assisted Conception Unit at Glasgow Royal Infirmary. Thus a comprehensive range will be available.

Reproductive & Maternal Medicine

The University Department is based in the Glasgow Royal Infirmary which will also be the site of much of the specialist teaching although this will also take place in other Glasgow hospitals and Assisted Conception Units, all within easy reach of the city centre. The Section of Reproductive & Maternal Medicine is part of the Division of Developmental Medicine within the University of Glasgow. This Division also covers Human Nutrition and Child Health. It has a worldwide reputation for teaching and research in Obstetrics and Gynaecology with a wide range of opportunities available in these areas. The Section of Reproductive & Maternal Medicine contains both clinical and non-clinical researchers and has excellent facilities for both clinical and laboratory-based research.

The University of Glasgow

The University of Glasgow is in the UK's top ten universities and in the world's top 50 research-intensive universities and is recognised as a leading postgraduate university, renowned for the quality and breadth of its provision. It is an international leader in research across the physical sciences, life sciences, social sciences and humanities and is renowned internationally for enquiry-led learning in a knowledge culture shaped by the research environment. Overall, it is a great place to study and live.

The City of Glasgow

Glasgow is the cultural centre of Scotland and is one of Britain's liveliest and most stimulating cities. It offers excellent shopping facilities; an innovative arts and music scene; impressive architecture; numerous theatres, cinemas, museums and galleries; top class sporting facilities and events; and more parks and galleries than any other comparable city in Europe. Glasgow also benefits from excellent road, rail, sea and air links. Glasgow international airport is located just 13km from the city centre and links Glasgow with the rest of the UK, Europe and very many international destinations. Scotland is an exceptionally beautiful country with some of the world's most dramatic and unspoilt scenery. Glasgow is a short distance away from the Clyde coast, Loch Lomond and the mountains of the Highlands and Trossachs.

Further information

Further details of the course and the University of Glasgow are available from:

<http://www.glasgow.ac.uk/faculties/medicine/gradschool/taught.html> or:

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