MSc in Transfusion & Transplantation Sciences

Further information

Programme
The programme comprises 8 taught units that run from September- March and a research project that begins in May and runs until August. Example project topics have included:

- A study on red cell antibody formation in trauma patients
- Optimisation of platelet antigen detection using recombinant proteins
- Expression of red cell membrane proteins during large scale red cell culture
- A comparison of stem cell mobilisation drugs for stem cell transplantation

Taught units cover the following

1. **Transfusion and Transplantation Science**: This arms students with the basics of haemopoiesis, blood group molecular genetics, the structure and function of platelets, haemostasis and the HLA genes and proteins.

2. **Pathology of Transfusion and Transplantation Science**: This aims to explain the basis of haematological diseases such as sickle cell disease and haemophilia where transfusion support is required. It also provides a grounding in immunology, followed by the effect of red cell and platelet antibodies on the adult and fetus and their identification.

3. **Provision of Blood, Cells, Tissues and Organs**: Where and how do we get our blood? How and why do we test it? What components can we make and store? Lectures also include product development and how processes can make components safer.

4. **Clinical Transfusion and Transplantation**: This Unit provides insight into organ transplantation, engineered tissues, stem cell transplants and clinical blood transfusion. It also covers laboratory investigation and management of complications associated with these procedures.

5. **Transfusion and Transplantation in Practice (2 units)**: These units comprise practical classes designed to expose students to many different types of technology used in transfusion and transplantation laboratories.

6. **Biostatistics**: These units teach the principles of experimental design including basic, intermediate and some advanced statistical methods required to interpret published data and to analyse new data generated from clinical and laboratory research. The units also include interactive workshop teaching sessions dealing with planning, design of experiments and the statistical analysis of results.

7. **Research and Laboratory Management**: Assessments are designed to teach skills such as co. This Unit provides an understanding of the manager’s role in maintaining a quality system in a blood bank or blood establishment, how this is applied and its role in accreditation and licencing purposes. The unit will also cover clinical audit as this feeds into quality and any new UK developments in the structure and management of blood transfusion services. The second part of the unit covers the process of research, writing a grant application, ethics, governance and the actual management of a project.
Location
The course is based at the NHS Blood and Transplant Centre in Filton, north Bristol. Although there are buses from the centre it takes about 45mins to travel to Filton.

All lectures, practical sessions and usually the projects are run in the centre. Full details and a map will be sent with your information pack before you start the course.

Duration
Briefly, the programme begins at the end of September and can be taken as full-time over 1 year or part-time over 3 years. Exceptionally part-time students can complete the course in 2 years.

Full time students attend all blocks. First year part-time students attend “A” blocks and second year part-time students attend “B” blocks.

Teaching blocks run for 2 weeks beginning on;
“A” blocks 28th September 2015, 2nd November 2015, 11th January 2016, 15th February 2016. This consists of Units A, C1 and D1.

“B” blocks 12th October 2015, 16th November 2015, 25th January 2016, 29th February 2016. This consists of Units B, C2 and D2.

Exams are during the week beginning April 18th 2016.

Accommodation
The University accommodation office (http://www.bris.ac.uk/accom/) can provide rooms in University postgraduate residences. Post graduate students paying fees at the overseas rate are guaranteed an offer of a room provided that they:

Apply by 1st August of the required year

Are Unaccompanied

Have firmly accepted an offer of study

Are new full-time students in their first year of study at the University of Bristol.

These are near the centre of town.

You may wish to live near to NHSBT which is north of Bristol and find rooms or a house to rent in Filton, Patchway, Little Stoke or Bradley Stoke.

For part-time students, accommodation for the 2 week blocks is available in the nurses’ home at Southmead hospital. This is only 2 miles away from NHSBT. Car parking is available at Southmead. Prices are very reasonable and students can also use the restaurant and library at Southmead hospital and there are also several pubs and restaurants in Henleaze and Westbury –on-Trym If you wish to use the kitchen in the nurses’ home you will need to bring your own pots/pans. If you are interested e-mail residences@nbt.nhs.uk

Full time students may also be able to stay at Southmead and this can also be use for a few weeks until you find a shared house for example.

There is a free shuttle bus between Southmead Hospital and the NHSBT centre.
Otherwise there are B&B in the local area.

NHSBT Filton has limited car parking and 4 spaces are issued to students. If you intend to use a car to travel, you may wish to bring some other students with you.

There is a bus service from the centre of town.

Students working at NHSBT Filton have access via the internet to the University library and IT support, although students cannot work in the centre at weekends.

Costs

The course fees for 2015/16 are £9600 for the whole course, which can be split over 2 or 3 years.

The course fees for overseas students for 2015/16 are £18,100