

The three contributing universities of Salford, Keele and Manchester have considerable complementary research experience in the biology of parasites and the vectors which transmit them.

This has led to the development of this unique, pioneering joint MSc degree between the three institutions, focusing on the molecular aspects of parasite infections and vector biology.

#### Jayde Whittingham-Dowd

The best thing about being at Salford was how friendly and close all the staff and students are - I feel like I have been accepted as one of the team rather than just another student.

I really enjoyed everything about the course, especially the fact that I gained expertise from three different institutions. The teaching was excellent and the research project has helped me immensely.

I'm now working on a PhD in Molecular Biology and Physiology.



The initial teaching is based primarily at Salford but is undertaken by staff from all three institutions. Students are then able to carry out an extensive research project in one of the three universities. The course focuses on the molecular aspects of parasitic infections and on vector biology and control and will appeal to recent graduates wishing to further their training before embarking upon a research career in Entomology, Parasitology, Molecular Biology or Immunology; to those considering a career in Biotechnology; and to overseas students seeking specialist training before entering a career in managing parasitological or vector-related research and control appropriate to their own country.

#### The aims of the course are to provide:

- A sound insight into the biology of parasitic diseases and their control and control of their vectors
- Contemporary studies of current research on immunological and molecular aspects of selected parasites and vector/parasite relationships
- Training in research techniques appropriate to parasitology and entomology

#### Full details of module content are given on the School website. The key modules are:

- **Core Parasitology & Vector Biology** Human and animal parasites and their vectors/hosts, detailed consideration of life cycle strategies, systematics, pathology and control of parasites and vectors,



Manchester University

epidemiology, transmission and vector behaviour. Teaching is complemented by a residential field course focussed on parasite diagnostics.

- **Immunology of Parasitic Infections** focusses upon the mammalian immune system, its control and how it is involved in protection against parasitic infections and strategies mounted by parasites to evade the immune response.
- **Vector Biology & Control** explains major vector groups involved in parasite transmission, their behaviour and the application of modern control techniques.
- **Molecular Biology of Parasites** presents an overview of some of the most recent and important research that exploits molecular biology to advance the study of parasite biology and the diseases that they cause.
- **Analytical Parasitology** provides practical experience in the key skills required entomology and parasitology research and the biological significance and implications of such findings.
- **Research Skill Applications** teaches data analysis techniques and effective written and presentation skills.
- **Research Project** Individual research projects are then undertaken in one of the three institutions, choosing a topical aspect of parasitology or vector biology.  
The award of PMI2 (Prime Minister's Initiative 2) funding may also enable students to carry out their research project at the Universiti Sains Malaysia, based in Penang, Malaysia.



Keele University

#### About the partner universities

Manchester University has one of the largest and most interactive groupings of life scientists in Europe. There are more than 1,000 people involved in research activities from professors to technicians and research students. They hold more than £100 million in research grants and contracts from research councils, charities and industry.

Keele University, located in the centre of England, is internationally recognised for the quality of its teaching and research and offers a high-quality postgraduate education in a safe, friendly and supportive community environment. You will be taught by experts in each subject so you will benefit from the latest thinking in all subject areas.

#### Career Opportunities

Many graduates from this MSc programme go on to do a PhD, while others have entered employment as research assistants or research laboratory technicians in pharmaceuticals, drug design, and pesticide research. Other careers have included pollution microbiologists with water authorities, work in hospital laboratories investigating the haematology, molecular biology and immunology of infectious diseases, and also teaching and publishing.

**Fees** See page 27.

**Duration** One year full-time, two to years part-time (part-time fee payable for two years only).

**Entry requirements** Applicants should possess at least a UK lower second class honours degree (2.2) or equivalent in biology, biomedicine, medicine,

biochemistry, pharmacology, microbiology, or veterinary science.