

## University of Manchester MSc in Medical Mycology

This University of Manchester Medical Mycology Masters programme has been specifically designed for graduates who wish to develop their skills as mycologists. The programme aims to result in a significant level of theoretical understanding and practical skills, which will be important for those wishing to follow a career in clinical sciences or academic and industrial research in the UK or overseas.

The Medical Microbiology MSc, Diploma and Certificate are intensive full-time or part-time postgraduate taught programmes encompassing the epidemiological, diagnostic, medical and molecular aspects of fungal disease and immunity to infection. They run in parallel with the MSc Medical Microbiology and MSc in Medical Virology programmes with long traditions and excellent reputation in their fields.

The Manchester mycology programme is unique, because our students spend much of their time actually in the laboratory, learning how to be mycologists. We will provide a number of hands-on practicals linked with each module as well as work experience at the NHS Mycology Reference Centre Manchester (MRCM), clinics and ward rounds. This will ensure that students graduate with the knowledge and practical skills needed to pursue a specialist career in diagnostic, clinical or academic settings, and will provide them with comprehensive skills to set up good quality diagnostic services around the world. We will seek accreditation for our course with IBMS in line with the MMic and MV masters programs.

In addition, the faculty for Manchester mycology programme is exceptionally high standard with a number of world leading scientists, microbiologists and clinicians involved. The University of Manchester Fungal Infection Research Group (MFIG) is aligned to the international LIFE (Leading International Fungal Education) initiative ([www.life-worldwide.org](http://www.life-worldwide.org)) aiming at better awareness of fungal diseases, global access to fungal diagnostics and instigation against fungal infection world wide.

Some of the 3-week Units of the new Manchester MSc will also be offered as independent CPD/CME courses ([link](#)) and we will seek for accreditation by the Royal College of Pathologists for these.

The aim of the programme is to provide students with an understanding of the scientific basis and practical skills of traditional and novel microbiological concepts in medical mycology. In addition, you will develop clinical knowledge, specialist practical skills and critical awareness needed to enable graduates to pursue a career in mycology.

The program will contain a high practical teaching element: we will provide a number of hands-on practicals linked with each module as well as work experience at the NHS Mycology Reference Centre Manchester, clinics and ward rounds. This will ensure that students graduate with the knowledge and practical skills needed to pursue a specialist career in diagnostic, clinical or academic settings, and will provide them with minimal skills to set up good quality diagnostic services around the world.

**Faculty of Medical and Human Sciences**

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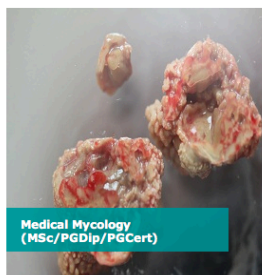
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**Medical Mycology (MSc)**

- [Course details](#)

**Related links**

- [LIFE \(Leading International Fungal Education\)](#)
- [NHS Mycology Reference Centre Manchester \(MRCM\)](#)
- [National Aspergillosis Centre \(NAC\)](#)



**Medical Mycology (MSc/PGDip/PGCert)**

**Course details**

The Manchester mycology programme is unique as it is the only practical led mycology course in the UK.

This programme provides theoretical understanding and practical skills, which will benefit those wishing to follow a career in clinical sciences or academic and industrial research in the UK or overseas.

Within the programme we have world leading scientists, microbiologists and clinicians.

This programme is suitable for students with an undergraduate degree in: Mycology, Microbiology, Virology, Medical laboratory sciences, Medicine, Veterinary medicine, Dentistry, Pharmacy or other biology degrees with an element of microbiology.

- [Fact file](#)
- [About the course](#)
- [Entry requirements](#)
- [Selection criteria](#)
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**How to apply**

[Apply online](#)

Help and guidance for submitting an online application.

**Deadline:** 30 June 2013

**This programme is subject to university approval**



**Scholarships and bursaries**

For further information on [funding opportunities](#) please visit the University of Manchester web page.

**Course tutor profiles**

- [Dr Riina Rautemaa-Richardson](#)
- [Prof David Denning](#)
- [Professor Malcolm Richardson](#)

**Videos: Medical Mycology**



Introductions to Medical Mycology by Dr David Denning and Professor Malcolm Richardson.

**Career opportunities**

There is a worldwide need for better access to rapid diagnostics of fungal diseases enabling more targeted use of antifungals and other resources. This course will enable graduates to pursue a career in mycology.

**Related research**

Current research areas include:

- Basic mechanisms of disease and antifungal resistance
- Molecular epidemiology and taxonomy
- Provision of tools and access for Aspergillus genome analysis
- Epidemiology of fungal infection in the UK

[Manchester Fungal Infection Research Group](#)

[Institute of Inflammation and Repair](#)

**Graduate school**

The [Graduate School](#) acts as the hub for our graduate community to encourage networking and sharing of good practice.

The University of Manchester is not responsible for the content of external internet sites.

Training is provided through lectures, bench work and seminars and will cover:

- **Technical aspects:** choice of media, culture conditions, storage of isolates, molecular diagnosis and identification (PCR, qPCR, sequencing, MALDI-TOF), typing techniques (microsatellite, MLST), antifungal susceptibility testing (CLSI/EUCAST microbroth dilution methods, commercially available tests), antigen/antibody detection and histopathology.
- **Practical aspects:** Good laboratory practise, standard operating procedures, role of the laboratory in the diagnosis and monitoring of patients, spectrum of antifungal drugs, and limitation and use of public and specific databases for molecular identification
- **Fungal aspects:** genome organization, phylogeny, species identification, resistance mechanisms.
- **Medical aspects:** epidemiology, pathophysiology, clinical presentation, diagnostic criteria for infections caused by yeasts or filamentous fungi, management, treatment guidelines, pharmacokinetics/dynamics of antifungal drugs, and discussion of clinical cases.