

Your future in oncology and cancer research



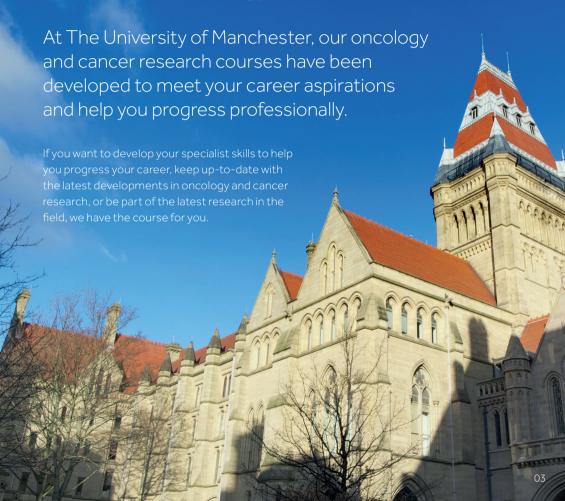
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This brochure provides a short introduction to our courses. Please visit **www.bmh.manchester.ac.uk** for full details and entry requirements.







## **Cancer Biology and Radiotherapy Physics**

- 🗂 1 year
- ( Full-time
- **≪** MSc
- 🗂 3 years
- Part-time
- 7 9 months
- (\) Full-time
- fill 6 months
- (\) Full-time

Our MSc in Cancer Biology and Radiotherapy Physics is ideal if you wish to pursue a career in cancer research and/or cancer therapy involving ionising radiation.

With around 40% of all cancer cure cases involving radiotherapy and the UK soon to have a proton therapy service, the need for multidisciplinary scientists in this field has never been greater.

We aim to develop multidisciplinary scientists to create the necessary skill base that will drive radiotherapy forward in the UK.

This course will enable you to train as a multidisciplinary scientist in this area by covering a variety of subjects in content that is delivered by staff with a range of expertise, including physicists, biologists, engineers, clinicians and oncologists.

Our collaboration with The Christie will allow you to undertake unique research projects in its radiotherapy facilities that cannot be carried out anywhere else in the UK or most of Europe.

### You will gain:

- a sound scientific knowledge of cancer biology and radiotherapy physics;
- the confidence to apply the scientific principles of radiotherapy to practical situations;
- the multidisciplinary skills required for world-leading cancer research and treatment delivery;
- a knowledge of cancer biology that can form a basis for research into existing and future treatment modalities.

Find out more +44(0)161 275 5220 pgtaught.medicine@manchester.ac.uk www.bmh.manchester.ac.uk/medicine

# Cancer Research and Molecular Biomedicine







Our MSc Cancer Research and Molecular Biomedicine is a research-focused master's course. You will take an interactive approach to learning through seminars, workshops, small group tutorials and research placements, rather than traditional lectures.

You will take several transferable skills units covering topics such as experimental design and statistics and science communication, as well a research placement in the labs of leading researchers working on various aspects of cancer research.

#### You will gain:

- thorough training alongside lab-based research placements;
- an understanding of the cell cycle control mechanisms and how they are disrupted in the formation of a tumour;
- knowledge of how cell signals regulate gene expression in different types of cells, and how this flow of information is compromised in cancer cells.

Find out more +44(0)161 306 5439 pgtaught.biosciences@manchester.ac.uk www.bmh.manchester.ac.uk/study/biosciences

## **Experimental Medicine (Cancer)**

- **≪** MRes
- 🗂 1 year
- N Full-time
- **≪** MSc
- 36 months
- Part-time
- **≪** PGCert
- 🗂 1 year
- Nart-time

This course will give nurses, doctors and clinical researchers the skills needed to work in early phase clinical studies.

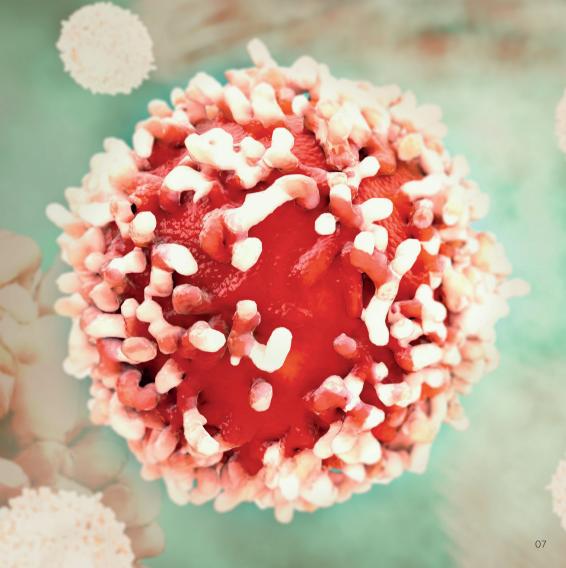
You will spend a year as a member of the Experimental Cancer Medicine Team at The Christie while also taking four structured taught units.

The taught units will see you learn the details of designing and delivering Phase 1 clinical studies, understanding the pre-clinical data required before a clinical programme can commence, and how to optimise early clinical studies to provide evidence for progressing a promising drug into Phase II/III clinical testing.

### You will gain:

- experience of working in a leading UK Phase 1 cancer clinical trials unit;
- skills and knowledge that will open up career opportunities in other experimental cancer medicine centres within the UK and EU, as well as careers in academia, the pharmaceutical industry, clinical trials management and medicine.

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## **Molecular Pathology**





Full-time

**≪** MSc

🗂 3 or 4 years

N Part-time

The number of academic pathologists trained in molecular pathology has steadily declined over the past 20 years. As such, it has been identified as an area requiring support and development by the Medical Research Council (MRC) and the Royal College of Pathologists, creating careers opportunities for students and professionals alike.

This course is aimed at medical students, biomedical scientists, medical practitioners and trainee pathologists who want to learn more about molecular pathology. Trainee pathologists can take our course as part of an existing training programme.

You will benefit from a unique focus on the molecular analysis of tissue samples and take optional units in various areas of laboratory medicine and emerging diagnostic methods, such as proteomics and chemical pathology.

You will also become part of Manchester's world leading precision medicine research community, learning practical skills that will be directly applicable to this emerging field.

#### You will gain:

- a wide and detailed understanding of molecular pathology and associated disciplines (including genomics and bioinformatics);
- experience of and skills in scientific investigation, analytical thought and scientific criticism:
- the skills necessary for a career in clinical practice, the NHS, diagnostic laboratories, the pharmaceutical industry or academic research.

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## **Oncology**

- 🗂 1 year
- Sull-time

Understanding the basis of tumourigenesis and developing new therapies are high priority areas for investment, especially since the economic burden of cancer is increasing. The field of oncology encompasses a wide variety of biological and physical sciences.

You will learn from renowned basic, translational and clinical scientists at the Manchester Cancer Research Centre, the Cancer Research UK (CRUK) Manchester Institute and The Christie NHS Foundation Trust, with a focus on developing practical research skills

You will also have the opportunity to undertake laboratory or clinical-based research projects at the Christie Hospital, the largest cancer centre in Europe with some of the UK's leading cancer researchers.

### You will gain:

- postgraduate level training that will equip you with the specialist knowledge and research skills to pursue a research career in the fields of medical and clinical oncology;
- an understanding of the scientific basis of cancer and its treatments, as well as the skills needed to evaluate the potential efficacy of new treatments;
- hands-on research experience, use of the latest research equipment, the opportunity to publish your work, and the chance to attend national and international conferences.

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## **Specialist Practice (Cancer)**

- 🗂 1 year
- (\) Full-time
- **≪** MSc
- 2 or 3 years
- Part-time
- 4-5 years
- Part-time

This course is a partnership between The University of Manchester and The Christie School of Oncology aimed at nurses and other health professionals who want to develop their professional skills and clinical practice within oncology.

You will develop an expert knowledge base, higher decision-making skills and professional competencies to deliver care within the integrated multi-professional clinical teams that will form the basis of future healthcare delivery.

The course consists of a wide range of taught generic professional skills and advanced clinical practice units that can be undertaken individually as CPD or as part of a postgraduate qualification.

You can study individual units or the full MSc on a part-time or full-time basis, depending on your learning needs and other commitments.

#### You will gain:

 knowledge and practical skills in palliative care, lung cancer, radiology and systematic anti-cancer therapy.

Find out more +44(0)161 306 7605 cpd.nursing@manchester.ac.uk www.bmh.manchester.ac.uk/nursing



#### **CPD**

We also provide a wide range of CPD courses that give you the flexibility to fit study around other commitments, building skills relevant to your career aspirations.

#### Find out more:

www.bmh.manchester.ac.uk/study/cpd

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#### Disclaimer

This brochure is prepared well in advance of the academic year to which it relates. Consequently, details of the courses may vary with staff changes. The University therefore reserves the right to make such alterations to courses as are found to be necessary. If the University makes an offer of a place, it is essential that you are aware of the current terms on which the offer is based. If you are in any doubt, please feel free to ask for confirmation of the precise position for the year in question, before you accept the offer.