The University of Manchester

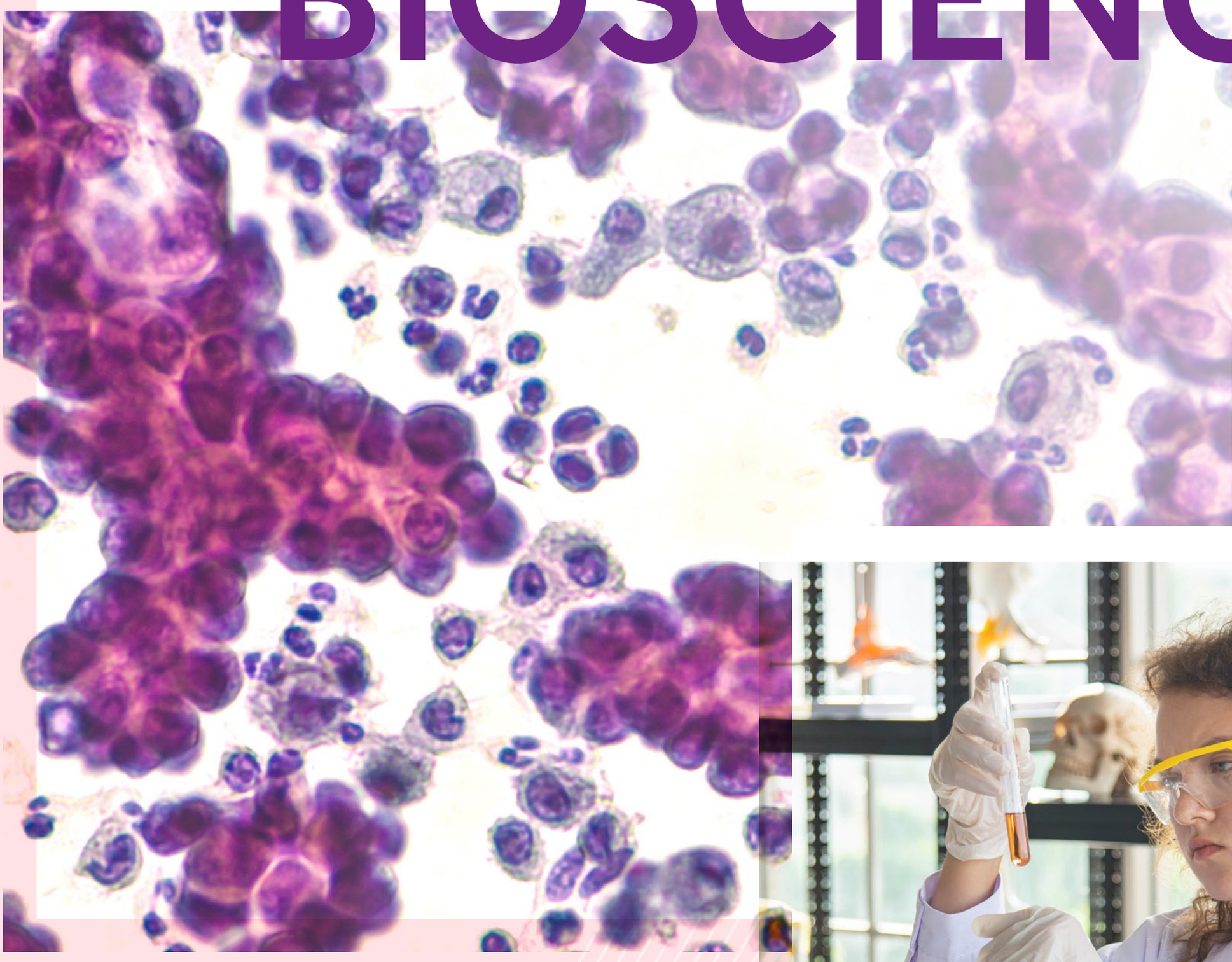
Faculty of Biology, Medicine and Health

POST-GRADUATE BIOSCIENCES

COURSES POWERED BY RESEARCH

CONTENTS

BIOSCIENCES



At Manchester

If you're considering undertaking a postgraduate taught course, you'll find the perfect environment at The University of Manchester.

The University's postgraduate courses draw upon our world-leading research and our strong links to global industry.

Whether you're looking to boost your employability with a master's or embark on a career in research, you'll quickly develop skills and gain exposure to experiences that will set you apart in the jobs market.

WHY MANCHESTER?

Top city

Manchester is ranked among the best UK cities to live in.
2nd in The Economist's Global Liveability Index, 2024)

93%

of the University's research activity was assessed as 'world-leading' or 'internationally excellent'.

REF 2021

Papers

Each year, a number of our postgraduate students successfully co-author published papers.

Research intensive

You will benefit from a research-intensive training and a qualification that allows you to progress in your career or into further research.

1st

The University of Manchester is 1st in the UK and 2nd globally for social and environmental impact.

THE University Impact Rankings 2024

2nd

We are the second most targeted university by the UK's top 100 recruiters.

The Graduate Market 2024

Lab experience

Not only will you be taught by global leaders in their respective research fields, but you will also gain plenty of lab experience, making you highly employable or preparing you for PhD study.

LIFE-CHANGING RESEARCH

Our researchers contribute to society and improve healthcare and education through innovative discoveries and new knowledge.

By choosing Manchester, you will be joining a university at the forefront of research discoveries, but what does that mean for you?

> You'll study in an academic environment that helps brilliant thinkers turn inspiration into reality, encouraging enterprise, experimentation, and creative thinking.

> Courses are informed by the latest breakthroughs.

> You will learn from experts with first-hand knowledge of innovations and developments in their disciplines.

> You'll benefit from extensive hands-on work in the lab, learning from leading researchers through practical placements and working as part of a research team.

> Skills workshops and seminars with respected experts offer additional perspectives on conducting world-class research.

BIOSCIENCES RESEARCH

The Faculty of Biology, Medicine and Health delivers a truly translational approach to the life sciences, from pure discovery science through to drug development, clinical application, and patient care.

The integration of discovery biology, clinical application, and patient care within a single Faculty, particularly in a region with notable health inequality, provides us with a real opportunity to have a very significant and positive impact on people's lives.

The School of Biosciences has six research divisions:

> Cell Matrix Biology and Regenerative Medicine

> Evolution, Infection and Genomics

> Immunology, Immunity to Infection and Respiratory Medicine

> Molecular and Cellular Function

> Musculoskeletal and Dermatological Sciences

> Neuroscience

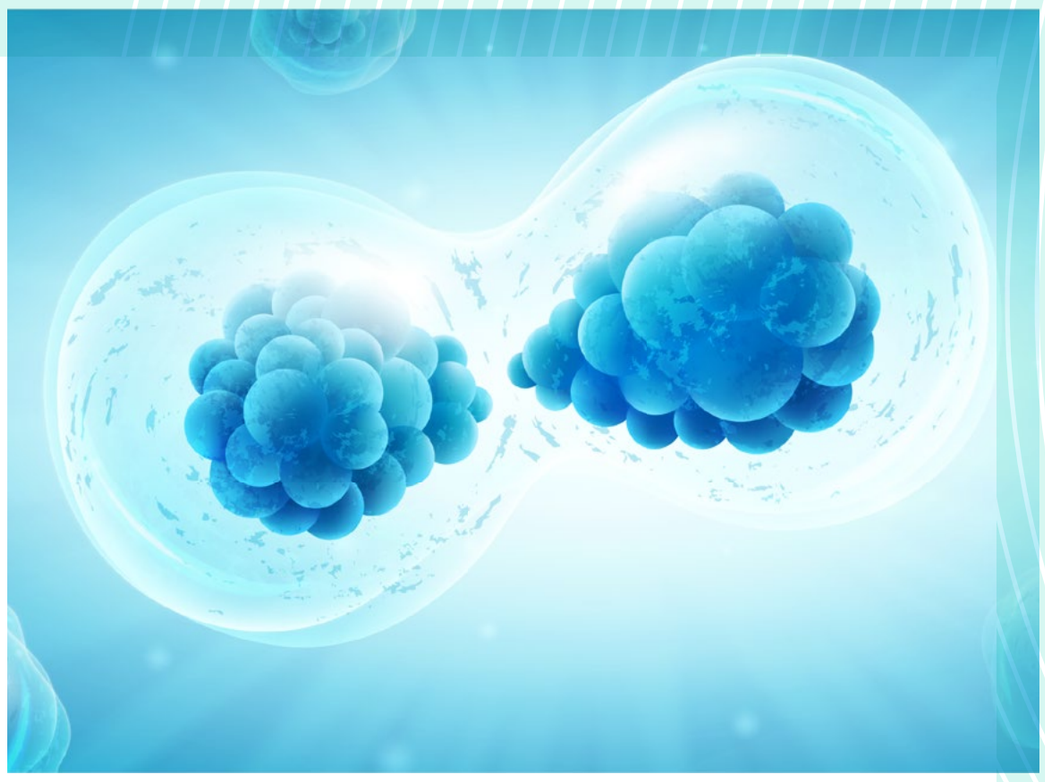
A SNAPSHOT OF RECENT BIOSCIENCES DISCOVERIES

Postgraduate biosciences courses at Manchester will give you the chance to carry out quality research and undertake world-class lab training.

Many of our students work on papers that they co-author and publish during their course.

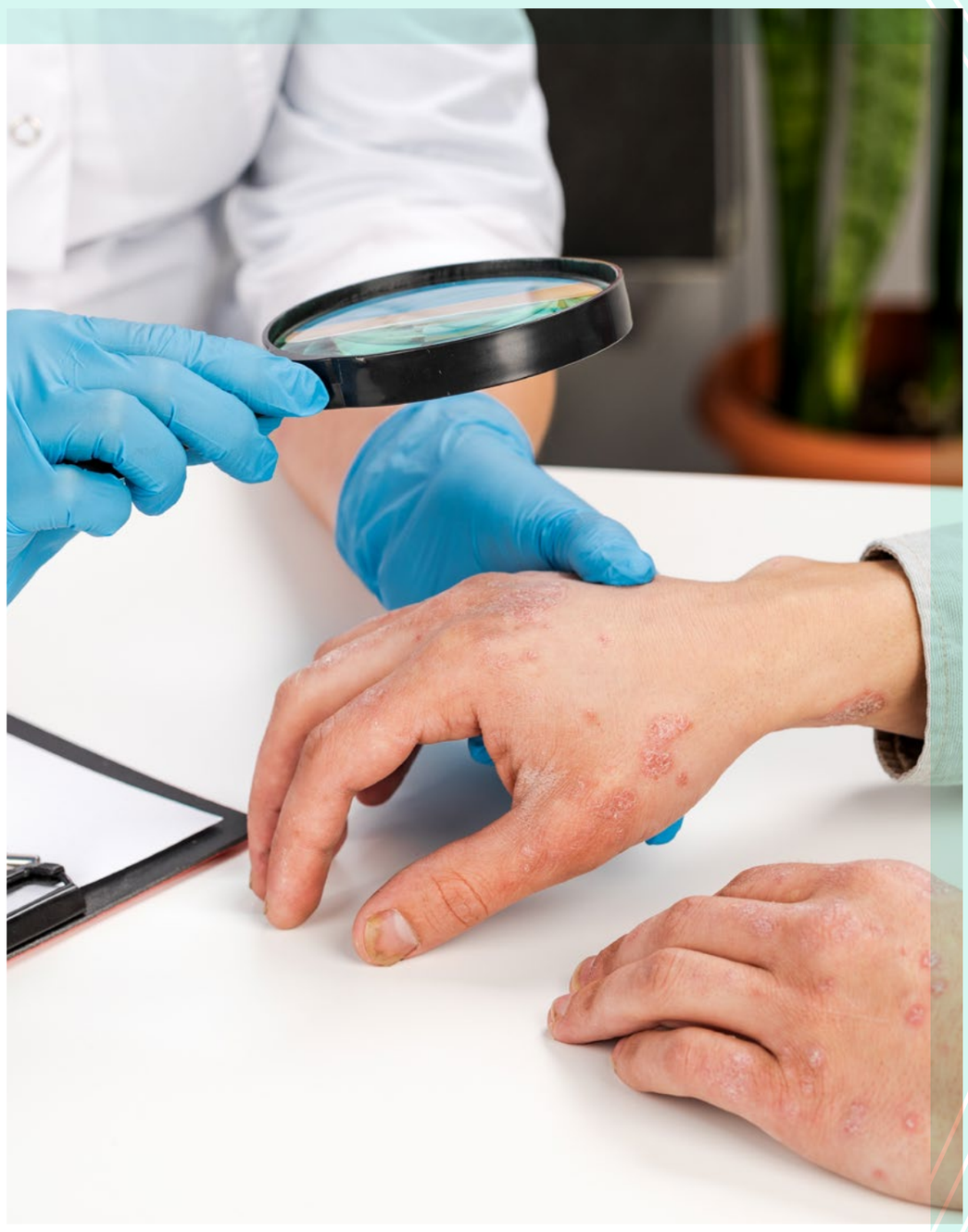
UNDERSTANDING THE INTERPLAY BETWEEN MECHANICAL FORCE AND CELL DIVISION IN DEVELOPMENT

A student on the MSc Cell Biology has co-authored a review article in the Journal of Developmental Biology with the title Sculpting an Embryo: The Interplay between Mechanical Force and Cell Division. In this paper, the authors review our current understanding of the cellular mechanisms by which mechanical force regulates cell division, and place this knowledge within the context of embryogenesis and tissue morphogenesis.



DEVELOPING NEW SCREENING TOOLS FOR AUTISM SPECTRUM DISORDER

Autism spectrum disorder (ASD) affects 1–2% of the overall population and can considerably impact an individual's quality of life. However, there are currently no treatments available for its core symptoms, largely because of a poor understanding of the underlying mechanisms involved. A student on the MSc Neuroscience worked on a research project using a fruit fly model to understand the role of specific genes in autism spectrum disorder. The MSc student has published this work as co-author in the prestigious Journal of Neuroscience.



DEFINING THE IMMUNOLOGICAL MECHANISMS OF PSORIASIS

An MSc Clinical Immunology student has co-authored a research article in the journal Mucosal Immunology entitled 'CD200R1 promotes IL-17 production by ILC3s, by enhancing STAT3 activation'. In this paper, the authors used animal models of disease to understand the role of ILC3s in psoriasis, a common chronic inflammatory skin disease.

STUDY REVEALS HUGE EXTENT OF FUNGAL DISEASE IN INDIA

Over 50 million Indians are affected by serious fungal disease and 10% of the 50+ million have a dangerous mould infection, researchers from India and Manchester have shown.

PROFESSOR DAVID DENNING

"There have been major diagnostic improvements in recent years, with public health services in India catching up with private hospitals in terms of capability. However, fungal disease continues to be threat to public health and a cause of significant morbidity and mortality representing a considerable socioeconomic burden to those who are infected by them."

EXPLORE OUR RESEARCH →

WHAT IS IT LIKE STUDYING A POSTGRAD COURSE AT MANCHESTER?

PATRICK DANCER
PhD student, Manchester Fungal Infection Group

"I have loved living and studying in Manchester. The city is very international and it's common to see people of all races, ethnicities, religions and cultures in and around the area. As an international student, you can rapidly settle down here, and you can easily find your community."

"Undertaking the Infection Biology master's course at Manchester was the best decision I have ever made. The course gave me a wealth of experience and expertise in a fast-paced research environment. This allowed me to develop my skills in a range of modern techniques and ultimately helped me gain a PhD studentship."

JUNWEI JI
MSc in Biotechnology and Enterprise graduate from China

READ MORE BIOSCIENCE BLOGS →

CORE RESEARCH FACILITIES

At Manchester, our core research facilities cross disciplines and applications.

We have a range of sophisticated tools that are in constant development. You will benefit from a multi-technique approach to research that exploits methodological developments pioneered across our technology platforms. This will help develop your understanding of biological problems and maximise the impact of your research.

CORE FACILITIES →

“My group study the cell-matrix interactions in the glomerulus, and their role in kidney disease. We have benefited enormously from input into experimental design and access to cutting-edge technologies through our interactions with almost all of the facilities. The opportunity for skills training is superb, and this brings high-quality and reproducible results.

“Our technology platforms are a huge asset that greatly enhance our activities and outputs. The research in my group would not be possible without them.”

PROFESSOR RACHEL LENNON
Professor of Nephrology

DR CERYS MANNING
MRC CDA Fellow

“The Bioimaging Core Facility and staff have been instrumental in helping me develop a new method for live imaging of embryonic mouse spinal cord ex-vivo slices. The wide range of microscopes and objective lenses enabled me to optimise the imaging and the staff were inventive in helping me improve the culture set-up.

“This has allowed me to detect gene expression dynamics in single neural progenitor cells undergoing fate decisions in the tissue environment for the first time.”

A WORLD OF OPPORTUNITIES

One of the benefits of coming to a world-class university like The University of Manchester for your master's degree is that you are taught by some of the global leaders in their respective fields of research. Many of you will undertake your research project with a supervisor featured in the list of the world's most cited scientists that has been published by Stanford University.

"I am working as a consultant dermatologist within the NHS. The course has made me much more confident in interpreting and applying genetic test results."

SREEDHAR KRISHNA
PGCert in Clinical Bioinformatics graduate.

"I was accepted by the Harvard Medical School Online Learning Platform on the immunology course, which will broaden my knowledge in this field, since nowadays a scientist must have multidisciplinary backgrounds to address complex diseases. With the solid formation I acquired at The University of Manchester and the new preparation that is coming ahead, I do hope to be able to keep transforming my community on a bigger scale and keep promoting my passion for science."

ANA CASTILLO
MSci in Genomic Medicine graduate from Mexico.

ROLES AND RECRUITERS

As a Manchester graduate, your skills will set you apart and prepare you for an exciting future. Here's just a small taste of what our alumni have progressed into:

- Commercial Analyst at 4D Pharma
- Consultant Dermatologist in the NHS
- Research Assistant (RA) in the Cancer Science Institute in Singapore
- Lecturer at ITESM, Mexico City
- Conservation Researcher
- Technical Assistant at QIAGEN
- Research Assistant at The Kalahari Meerkat Project
- Associate Medical Writer at Nucleus Global
- Scientific Editor at Librarie du Liban
- Applied Biotechnology Manager at Semillas Fitó
- Senior Bioinformatics Scientist at AstraZeneca
- Medical Communications Associate at Prime Global
- Marketing Officer at Oxford Biotech
- Senior Consultant at Strategic North
- Conference Producer at Selectbio
- Conservation Executive at Malaysian Palm Oil Green Conservation Foundation
- Laboratory Technologist at Mediterranean Hospital of Cyprus
- Global Business Development Associate at Retrogenix
- Molecular Diagnostics Technician at Premaitha Health
- Doctor at Leeds General Infirmary
- Consultant Rheumatologist at NHS - Salford Royal Foundation Trust
- Genetic Technologist at University Hospital
- Producer and Director of TV Documentaries

COURSES

> Biochemistry (MSc)

> Bioinformatics and Systems Biology (MSc)

> Biological Sciences (MSc)

> Biotechnology and Enterprise (MSc)

> Cancer Research and Molecular Biomedicine (MSc)

> Cell Biology (MSc)

> Cognitive Neuroscience and Neuropsychology (MRes)

> MSc Developmental Biology and Stem Cells (Research)

> Experimental Psychology with Data Science (MRes)

> Genomic Medicine (MSc)

> History of Science, Technology and Medicine (MSc)

> Infection Biology (MSc)

> Medical and Molecular Virology (MSc)

> Nanomedicine by Research (MSc)

> Neuroscience (MSc)

> Neuroimaging for Clinical and Cognitive Neuroscience (MSc)

> Precision Medicine (MSc)

> Tissue Engineering for Regenerative Medicine (MSc)

> Science and Health Communication (MSc)

> Skin Ageing and Aesthetic Medicine (MSc)

PHD WITH INTEGRATED MASTER'S

If you're planning to undertake a PhD after this master's, our Integrated PhD programme will enable you to combine this postgraduate taught course with a related PhD project.

Learn more about the Integrated PhD programme.

CONTINUING PROFESSIONAL DEVELOPMENT

Our CPD course units and workshops draw on the expertise of some of the UK's most respected academics, clinicians and health professionals.

Biosciences CPD at Manchester

CONTACT US

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Connect with us:

DISCLAIMER

This prospectus was produced in August 2022 for the purpose of the 2023 intake. It has therefore been produced in advance of course starting dates. As such, for a number of reasons, course information, including, for example, details of course content, unit availability and/or published term dates, may be amended either prior to or after you apply for a place on a course.

All information relating to tuition fees and funding is correct at the time of publication. However, this may change for a number of reasons, including if there is a change to government policy.