MANCHESTER
CANCER
RESEARCH
CENTRE

Training in Manchester

Contents

www.mcrc.manchester.ac.uk

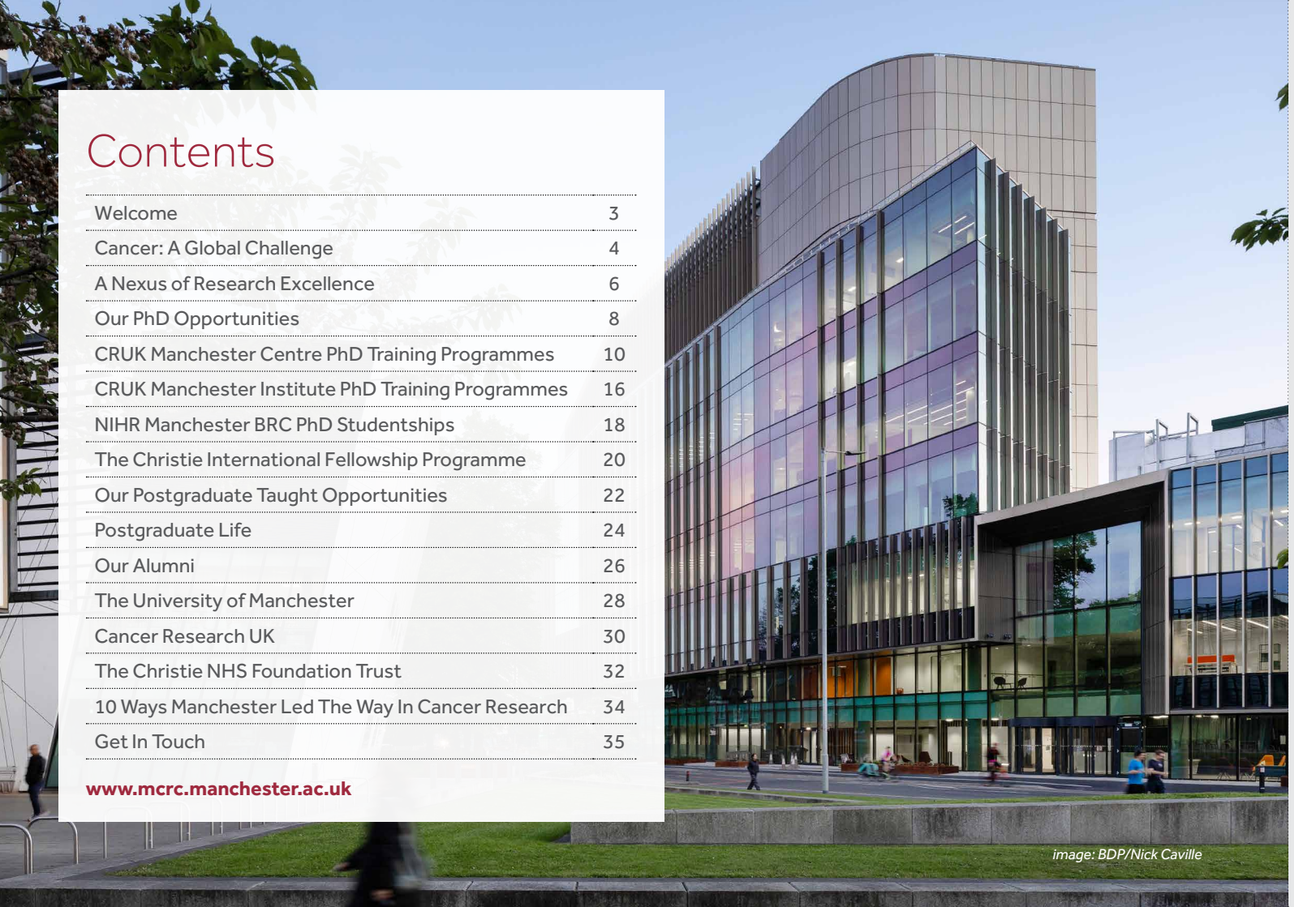


image: BDP/Nick Caville

Welcome

The Manchester Cancer Research Centre (MCRC) is a unique research partnership between The University of Manchester, Cancer Research UK and The Christie NHS Foundation Trust.

Based primarily from the Withington Cancer Campus in south Manchester, our students benefit from access to state-of-the-art facilities at the Oglesby Cancer Research Building and £150 million Paterson Research Building and learn alongside leading research and clinical staff at The Christie NHS Foundation Trust, Europe's largest single-site cancer hospital.

There are numerous outstanding training and development opportunities available in Manchester across all of our partner organisations.

In this guide, we'll walk you through the different training programmes we provide and show you why Manchester is the ideal place to start the next phase of your cancer research academic career.

Professor Robert Bristow
Director, Manchester Cancer Research Centre and Cancer Research UK Manchester Centre

MANCHESTER CANCER RESEARCH CENTRE

A partnership founded by:

MANCHESTER 1824 The University of Manchester

CANCER RESEARCH UK

NHS The Christie NHS Foundation Trust

Cancer:
A Global Challenge

One in two of us born since 1960 will be diagnosed with cancer in our lifetime. This stark reality means that cancer affects us all in some way.

Through research, we can better understand the mechanisms of cancer, pioneer new treatments and ultimately give hope to people affected by this complex disease. But to do this, we need you: the next generation of cancer scientists and researchers.

Study with us in Manchester and you'll learn from world-leading cancer researchers, have access to cutting-edge facilities and pioneer your own research discoveries to help in our fight against cancer.

We offer a suite of PhD projects in specialist fields, including radiotherapy, molecular biology, genomics and many more. Explore our courses in this guide and see how you can help us realise our vision of creating a future free from the burden of cancer.

1 in 2
people will receive a cancer diagnosis at some point during their lifetime

375,000+
new cases of cancer in the UK each year

1/4
of all deaths in the UK are from cancer

200+
different types of cancer and each is diagnosed and treated in a particular way

50%
of people diagnosed with cancer in England and Wales survive their disease for ten years or more

27%
of patients diagnosed with cancer in England have radiotherapy as part of their treatment

For more information, visit: www.cancerresearchuk.org/health-professional/cancer-statistics-for-the-uk

A Nexus of **Research Excellence**

The cancer research environment in Manchester is truly unique. Our research is interconnected, collaborative, world-leading and impactful.

As a student, you'll have access to the latest academic research, clinical facilities and professional networks across our various Centres of Excellence, Research Institutes and partnerships.

www.mcrc.manchester.ac.uk/research

Our PhD **Opportunities**

Manchester has a wide range of PhD opportunities across various cancer disciplines.

Our PhD projects are open to application throughout the year, with the majority advertised from early October with a start date of Autumn the following year.

The core funded schemes that are available through the MCRC and our partners include:

- **Non-Clinical PhD Studentships**
- **Clinical Research Training Fellowships**
- **MB-PhDs**

A summary of all our funded opportunities is available on the Manchester Cancer Research Centre's Study webpages:
www.mcrc.manchester.ac.uk/study/training-in-manchester

You can also search for specific cancer-related PhD opportunities at:
www.findaphd.com

Training at Manchester cornerstones

All of our schemes for aspiring cancer researchers meet the high quality of standards outlined by our training cornerstones.

Environment

- Access to world leading laboratories and clinics
- Embedded Team Science in NHS Trusts and the Greater Manchester Cancer Plan
- Translational shadowing opportunities for all, increasing clinical impact
- Co-location of the Manchester Cancer Research Centre on the same site as The Christie NHS Foundation Trust

Networking and Engagement

- Manchester has excellent links and international programmes across leading global cancer centres
- All trainee cohorts are linked and have access to multiple institutions and resources
- Exposure across campus and into NHS trusts for shared learning

Support

- Dedicated training offices at The University of Manchester, The Christie and CRUK Manchester Institute and Centre
- Access to workshops, seminars and coaching
- Advice on your next step and follow-on funding opportunities

Mentorship and Career Development

- Exemplary supervision for academic research projects and hospital-based fellowships
- Career mentoring throughout your programme from global experts and peers
- Access to clinical and scientific experts throughout your pathway

CRUK Manchester Centre
PhD Training Programmes

Clinical Research Training Fellowships

Clinical research is vital in helping accelerate discoveries from the laboratory bench to the hospital bedside. That's why we're committed to training the next generation of clinical researchers so they're equipped with the skills and expertise they need to succeed.

Our Clinical Research Training Fellowships (CRTFs) are open to clinicians looking to undertake a period of PhD training in a cancer-relevant field.

Our CRTFs are usually funded for three years and the fellowship covers:

- project running costs;
- university tuition fees (at the UK rate, with some scholarships available for high-performing EU and International candidates);
- an appropriate salary in line with the candidate's current salary.

All applicants must be post-registration clinicians and ideally have a specialist post in a related subject. It is generally expected that CRTFs will return to a training programme in the UK upon completion of their research degree.

You should contact any supervisors who you are interested in working with before applying.

For more information, visit the CRUK Manchester Centre website:
www.crukcentre.manchester.ac.uk/training/clinical-research-training-fellowships

Spotlight on...

"My research project is looking at a type of lung cancer where patients have KRAS mutations. I'm using different bioinformatic techniques to understand if patients with KRAS lung mutations have any difference in their genetic patterns or mutational signatures. The overall aim of my research project is to try and see if these patients have a different response to new treatment options, including immunotherapy or KRAS-inhibitors.

Before starting my PhD, I was training as an Oncology Registrar at The Christie NHS Foundation Trust. I'd been in the role for the past three years but it was always my plan to do a PhD and so I feel very fortunate that I've been able to pause my oncology training to study a Clinical Research Training Fellowship PhD.

Whilst working at The Christie I was exposed to the translational research taking place in the hospital that could help improve patient outcomes. That really inspired me to apply for my PhD. When I'm doing my research I've got the overall goal of how it could benefit patients in my mind. Ultimately I'd like my research to make a difference to patients in some way – that's my driver."

Dr Laura Woodhouse is a first year Clinical Research Training Fellow, supervised by Prof. David Wedge

Read Laura's story: www.mcrc.manchester.ac.uk/laura-woodhouse

Leeds-Manchester Clinical Research Training Fellowships

As part of our CRUK Manchester Centre Clinical Academic Training Programme Award, we've formed a strategic partnership with The University of Leeds to offer collaborative Leeds-Manchester Clinical Research Training Fellowships.

Through this partnership, you will benefit from the research expertise and facilities at both institutions and work to develop joint research ambitions in academic pathology, cancer therapies, imaging biomarkers and clinical trials.

Spotlight on...

My PhD uses MRI and hypoxia biomarkers to personalise how patients with prostate cancer are treated with radiotherapy. I have several supervisors who are split between The University of Leeds and University of Manchester, including researchers at The Christie.

It was during my final year medical elective at Columbia Medical Center (New York, USA) that I discovered minimally invasive image-guided treatments for cancer and this spurred my interest in the field of oncology.

I was drawn to the unique Research Training Fellowship with Leeds and Manchester because of the project's focus on prostate cancer, artificial intelligence and use of imaging in clinical trials. I was also amazed by how many academic clinicians were working in my area of research and knew that working in such a multidisciplinary environment, and sharing skills and experience, would be hugely beneficial.

In the future, I hope to set up clinical trials to determine the success of the interventional oncology treatment I am developing and would love to continue working between Leeds and Manchester.

Dr Jim Zhong is a Clinical Research Training Fellow, currently studying at The University of Leeds and The University of Manchester with primary supervisor Dr Ann Henry

Read Jim's story: www.mcrc.manchester.ac.uk/jim-zhong

MB-PhD Studentships

Our MB-PhD scheme allows aspiring clinician scientists and academics to intercalate with a PhD in Cancer Sciences, leading to the joint award of an MBChB and PhD.

The PhD component of the MB-PhD studentship is usually funded for three years. The studentship includes funding for:

- project running costs;
- university tuition fees (at the UK rate, with some scholarships available for high-performing EU and International candidates);
- an annual stipend to help with living costs;
- a bursary towards undergraduate medical tuition fees (at the UK rate).

You must currently be studying on a University of Manchester or University of Leeds medical degree or be on the St Andrews-Manchester medical school pathway to apply for our MB-PhD studentships.

Spotlight on...

My PhD is focused on developing advanced statistical models to analyse the life-course exposure to body fatness and the related cancer risk. With obesity affecting around one in four adults in the UK, and being the second most common cause of cancer, understanding the effects of excess weight during a person's lifetime is critical and at the forefront of my research.

My project is data-driven as opposed to lab-based. I use code and advanced statistics to analyse national and international datasets of over a million participants to try and find commonalities and patterns.

I've had the opportunity to work overseas and collaborate with researchers at the International Agency of Research on Cancer in Lyon, France – a specialised cancer agency that forms part of the World Health Organization.

The MB-PhD pathway to become a clinical scientist stood out for me, especially as 70% of women who take on an MD-PhD in the USA stay in research following graduation which is what I want to do.

Nadin Hawwash is a third year MB-PhD student, supervised by Prof. Andrew Renehan

Visit the CRUK Manchester Centre website for more information:
www.crukcentre.manchester.ac.uk/training/mb-phd-programme

Non-Clinical PhD Studentships

Our Non-Clinical PhD Studentships are open to recent graduates or final year undergraduates who have, or expect to achieve, a First or Upper Second-class honours degree in a relevant subject. A related Master's degree is also an advantage.

Our studentships are highly interdisciplinary and so we welcome applicants whose background isn't necessarily in an area of science but who have the ambition and motivation to develop a career in cancer-related research.

These studentships last for four years, with funding covering:

- project running costs;
- university tuition fees (at the UK rate, with some scholarships available for high-performing EU and International candidates);
- an annual stipend to help with living costs.

You should contact any supervisors who you are interested in working with before applying for our Non-Clinical PhD Studentships.

Find out more about the programme on the CRUK Manchester Centre website:
www.crukcentre.manchester.ac.uk/training/non-clinical-phd-studentships

Spotlight on...

"My research project is focused on understanding how radiotherapy affects cancer cells and their ability to respond to killing certain immune cells. We normally give radiotherapy in combination with other immunotherapy treatments, but little is known about how radiotherapy may impact the interaction between immune cells and cancer cells.

Building on previous research carried out by my lab and supervisory team, I'm exploring how radiotherapy may lead to cancer cells developing a transient resistance to immune cell killing and what this looks like in in-vivo models. My ultimate aim is to explore how this might impact radiotherapy-immunotherapy treatment protocols and to help guide future clinical trial designs.

I'm based in the Targeted Therapy group and work with other PhD students, postdocs and technicians. My supervisor, Dr Jamie Honeychurch, is very supportive and we meet regularly to discuss my research project. As a PhD student, I tend to work quite independently and the onus is on me to direct the path of my research but there are always people around in my lab group that I can bounce ideas off and ask for help if I'm unsure about certain methods or techniques that I need for my experiments.

Having my research published in an impactful journal and getting the chance to present and discuss my data at conferences would be an amazing outcome for my PhD. But really my end goal is to help generate new knowledge and do research that has a positive impact."

Adesewa Adebisi is a first year Non-Clinical PhD student, supervised by Dr Jamie Honeychurch

Read Adesewa's full story: www.mcrc.manchester.ac.uk/adesewa-adebisi

CRUK Manchester Institute
PhD Training Programmes

The CRUK Manchester Institute (CRUK MI) is a leading cancer research institute within The University of Manchester and one of only four Cancer Research UK core-funded institutes across the country.

The Institute has an active postgraduate programme, designed to train the next generation of cancer-related scientists and clinical scientists, and offers students and clinical research fellows the opportunity to study a cancer-related PhD.

The Institute's PhD training programmes are open to talented and motivated graduates with a background in biological sciences, mathematics, computer science or chemistry who are interested in pursuing scientific research careers.

PhD studentships are funded for four years. You'll study in one of the institute's research groups but will collaborate, and learn alongside, students across different disciplines.

Studentships are advertised in Autumn each year, with interviews typically taking place the following January, however additional opportunities may be advertised throughout the year on the CRUK MI website:
www.cruk.manchester.ac.uk

12
group leaders

1 of 4
core-funded Cancer Research UK institutes across the country

95%
of students continue in academia or pursue careers in industry or healthcare across the UK, Europe and USA

Access to state-of-the-art cancer research facilities
including a world-leading Cancer Biomarker Centre, in the new Paterson Research Building

NIHR Manchester Biomedical Research Centre (BRC) **PhD Studentships**

NIHR | Manchester Biomedical Research Centre

The National Institute for Health and Care Research (NIHR) Manchester Biomedical Research Centre (BRC) is driving health improvements and lasting change for all through creative, inclusive and proactive research that identifies and bridges gaps between new discoveries and individualised care.

Awarded £59.1m from 2022-27 by the NIHR, Manchester BRC translates scientific discoveries into new treatments, diagnostic tests, and medical technologies to improve patients' lives in Greater Manchester, Lancashire and South Cumbria.

Manchester is the largest BRC in the north of England and brings together world-leading academic researchers based at The University of Manchester and six NHS Trusts:

- **Blackpool Teaching Hospitals NHS Foundation Trust**
- **The Christie NHS Foundation Trust**
- **Greater Manchester Mental Health NHS Foundation Trust**
- **Lancashire Teaching Hospitals NHS Foundation Trust**
- **Manchester University NHS Foundation Trust**
- **Northern Care Alliance NHS Foundation Trust**

Among its 13 research themes, Manchester BRC delivers pioneering cancer research encompassing: Prevention and Early Detection, Advanced Radiotherapy, Precision Medicine and Living With and Beyond Cancer, grouped within its Cancer Cluster.

Manchester BRC offers a range of clinical and non-clinical PhD studentships to develop the next generation of cancer researchers with the knowledge and skills to undertake high-quality experimental medicine and translational research.

Entry requirements vary for non-clinical and clinical projects and eligibility criteria apply for studentships for non-UK applicants.

Please visit the Manchester BRC website for the latest programme information:
www.manchesterbrc.nihr.ac.uk

1 of 20

Biomedical Research Centres across England, and the largest outside of the southeast

Awarded £59m

to translate scientific discoveries into new treatments, diagnostic tests, and medical technologies to improve patients' lives in Greater Manchester

The Christie International **Fellowship Programme**

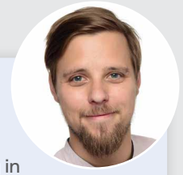
The Christie School of Oncology is an internationally renowned teaching centre that delivers world class education to healthcare professions at all stages of their career – from undergraduate education through to specialist training.

Education and training in the School is developed and delivered by some of the country's leading experts in cancer care, treatment and research.

Programmes are delivered either in-person, online or via a hybrid approach. The School has also developed 'The Christie International School of Oncology' to enable the delivery of education programmes across the world.

For more information on the courses available, visit:
www.christie.nhs.uk/education/the-christie-international-school-of-oncology

Spotlight on...



Before joining The Christie, I worked at The University Medical Centre Hamburg-Eppendorf in Germany as a clinical academic. My main clinical focus was on testicular cancer and my research focus was on DNA repair and treatment resistance in testicular and prostate cancers.

As Europe's largest cancer centre, I was drawn to The Christie because of its unique facilities and the chance to work with leaders in various research fields, including Professor Robert Bristow, Director of the MCRC, a world-expert in prostate cancer.

After exploring various fellowship opportunities, I was awarded a European Society for Medical Oncology (ESMO) translational research fellowship. My research project explored the role of tissue hypoxia and genomic instability in the development of bone metastases in prostate cancer. As part of the fellowship, I set up the translational HYPROGEN trial, co-founded the Manchester Penile Cancer Research Institute and did clinical research in the genitourinary cancer trial group.

The fellowship helped inform my future career planning.

I really enjoyed working in such a collaborative, multidisciplinary environment and, after completing my fellowship, have recently started a new post as a clinical academic at The University of Newcastle and the Northern Centre for Cancer Care where I'm hoping to establish a Northern England collaborative prostate cancer research project with the MCRC.

Dr Christoph Oing was a Clinical Research Fellow at The Christie NHS Foundation Trust in 2018-2022, supervised by Prof. Robert Bristow, Prof. Silke Gillessen and Dr Tony Elliott

Read Christoph's story: www.mcrc.manchester.ac.uk/christoph-oing

Our Postgraduate **Taught Opportunities**

Master's Programmes

The University of Manchester offers a range of oncology-related Master's courses. Visit the Faculty of Biology, Medicine and Health website for more information:
www.bmh.manchester.ac.uk

MSc Cancer Research and Molecular Biomedicine

This MSc prepares you for a career in the biosciences industry or academic research. You'll gain significant laboratory experience through placements with leading cancer and molecular biomedicine researchers and develop transferable skills in experimental design, statistics and science communication.

MRes Oncology

Through the MRes Oncology, you'll develop the specialist knowledge and hands-on experience needed to pursue a research career in medical and clinical oncology. You will gain an understanding of the scientific basis of cancer and its treatments and undertake laboratory or clinical-based research projects to enhance your skill set.

MSc Specialist Practice (Cancer)

This MSc is aimed at nurses and other allied health professionals who want to develop their skills and clinical practice within oncology. You will gain an expert knowledge base, higher decision-making skills and professional competencies to deliver care for people with cancer.

MSc Transformative Oncology

Our MSc/PG Dip/ PG Cert in Transformative Oncology brings together the excellence and global approach of The University of Manchester, The Manchester Cancer Research Centre and The Christie to empower you to take the next step in your career in the field of oncology.

Drawing on Manchester's strengths in cancer biology and discovery research, early detection, clinical trials design, immune-oncology and genomics, you'll develop the skills and training required to advance the field of precision oncology.

This part-time course is suited to candidates with a clinical or scientific background and is delivered fully online so you can learn flexibly while still working. We expect you to spend approximately 15-20 hours per week studying and the course takes between 1-3 years to complete the PG Cert, 2-4 years to complete the PG Dip and up to 3-5 years to complete the MSc.

For more information, please contact **studyonline@manchester.ac.uk** or visit **www.manchester.ac.uk/transformativeoncology**

"I've worked with world-leading specialist oncology researchers, scientists and clinicians in Manchester to develop this new online course and create a series of units that are research-led, clinically relevant and medically applicable.

You'll gain the skills and knowledge required to revolutionise the field of oncology and effectively transform outcomes for patients with cancer. The course is fully online so you can study from anywhere in the world and fit it around your day-to-day life. You will be able to integrate your learning directly into your work and use examples from your work throughout your study."

Dr Suzanne Johnson, Transformative Oncology course director

Postgraduate life

The University of Manchester offers a range of funded clinical and non-clinical studentships, including structured doctoral training programmes (DTPs) and individually funded opportunities.

Our postgraduate research students are embedded in world-leading research groups and have access to training and skills development to complement their research project.

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

International and EU students

The University of Manchester is one of the most international universities in the UK and welcomes students from over 160 different countries each year.

Before you start your course, you'll have the chance to meet other international students and take part in a series of induction activities to help you settle in and feel at home. You'll also receive an invite to a special event to welcome you to the University, hosted by the Lead for International Postgraduate Students.

The University's International Society currently has more than 4,500 members and organises a range of trips, activities, classes and events throughout the year for new international students.

www.manchester.ac.uk/study/international

Researcher Development

Through the Faculty of Biology, Medicine and Health's Doctoral Academy you can access a wide range of professional, personal and career development training and support to help develop the necessary skills to complete your research degree and successfully transition to the next stage of your career.

www.doctoral-academy.bmh.manchester.ac.uk

The University of Manchester's Research Development Team also provide training tailored to the different stages of your postgraduate research project – from writing your literature review and planning your project to proofreading your thesis and preparing for your VIVA.

www.researcherdevelopment.manchester.ac.uk/researcher-development-for-pgrs

FBMH Fellowship Academy

The Faculty of Biology, Medicine and Health's Fellowship Academy helps researchers gain externally funded fellowships, from doctoral studies to senior levels. They offer clinic appointments to discuss funding opportunities, as well as the chance to practice interview skills, pick up tips for grant writing and advice on application timelines.

www.bmh.manchester.ac.uk/research/support/fellowships

Our Alumni

From forming world-leading research groups to undertaking practice-changing clinical studies, alumni from the Manchester Cancer Research Centre go on to accomplish incredible things.

www.mcrc.manchester.ac.uk/category/alumni-stories

Spotlight on...

"My Non-Clinical PhD was focused on the role of osteoblasts in prostate cancer bone metastasis. My project investigated the link between bone and prostate cancer cells and found that bone cells induce a process called autophagy in prostate cancer cells as a survival mechanism.

I'd previously completed my MRes in Translational Medicine at The University of Manchester and spent six months working on a project in Professor Caroline Dive's lab at the CRUK Manchester Institute. I thoroughly enjoyed this project and it inspired me to apply for my PhD. I chose to stay in Manchester due to its reputation in cancer research. I knew how strong the connections were with The Christie and Cancer Research UK, and that Manchester was the place to be for cancer research.

I'm now working as a Senior Editor at Communications Medicine, a medical journal from the Nature Portfolio publishing research across all areas of clinical and translational medicine, epidemiology and public health. I handle most of our journal's cancer-related content. I still feel involved in scientific research, even though I am no longer in the lab, and the knowledge and skills I gained during my PhD have been instrumental to my work."

Dr Ben Abbott completed a Non-Clinical PhD in 2020, under the supervision of Professor Paul Townsend. Ben is now a Senior Editor at Communications Medicine, a medical journal.

Read Ben's story: www.mcrc.manchester.ac.uk/ben-abbott

Spotlight on...

"My research project involved examining circulating tumour DNA to find early recurrence of melanoma and understanding resistance mechanisms to therapy which can ultimately help improve survival rates for patients.

My PhD helped me decide that I wanted a career as a clinician scientist. I went from never having touched a pipette to performing extensive laboratory work which I found fascinating.

Since finishing my PhD I'm now a Senior Lecturer in Medical Oncology and split my time between The University of Manchester, University College London, The Francis Crick Institute and The Christie.

I am currently investigating mechanisms of immune tolerance in liver metastasis which is funded by a Wellcome Trust Early Career Investigator award. I am also running a number of clinical trials to assess how circulating tumour DNA could be used as a tool to improve outcomes to standard melanoma treatment. As part of this research programme, I have recently been awarded funding for my first PhD student through the CRUK Manchester Centre PhD training scheme to understand the dynamics of tumour evolution in order to develop new strategies to treat melanoma."

Dr Rebecca Lee completed a Clinical Research Training Fellowship in 2018, under the supervision of Professor Richard Marais and Professor Paul Lorigan. Rebecca is now a Wellcome Trust Early Career Investigator and Senior Lecturer in Medical Oncology split between The University of Manchester, The Christie, The Francis Crick Institute and University College London.

Read Rebecca's story: www.mcrc.manchester.ac.uk/rebecca-lee

The University of Manchester

MANCHESTER 1824
The University of Manchester

www.manchester.ac.uk

The University of Manchester is one of the largest and most successful research-intensive institutions in the UK.

The University is recognised as a global research powerhouse, with 93% of research activity rated 'world-leading' or 'internationally excellent' in the Research Excellence Framework 2021.

Cancer is one of the University's research beacons – exemplars of interdisciplinary collaboration and cross-sector partnerships that deliver pioneering discoveries and improve the lives of people around the world.

www.manchester.ac.uk/research/beacons/cancer

Division of Cancer Sciences

Cancer research activity at The University of Manchester is overseen by the dedicated Division of Cancer Sciences in the Faculty of Biology, Medicine and Health. The Division is one of the largest clinical cancer services in the UK and has a world-leading academic reputation. Research in the Division covers many aspects of cancer biology and biomarker discovery, pathology, imaging, and cancer treatment including experimental therapeutics, immunotherapy and radiotherapy.

As a researcher, you'll benefit from the thriving research community at The University of Manchester, where you'll study at the frontier of research and make your own contribution to our knowledge of cancer.

Top for employability

The University of Manchester is amongst the top ten universities in the UK for employability, meaning our graduates are highly sought after by employers

(Times Higher Education Global University Employability Ranking 2022)

5th in the UK

for research power, making the University one of the best in Europe for academic and social impact

(Research Excellence Framework 2021)

No. 1

Manchester was voted the top UK city to live in, thanks in part to our thriving nightlife, live music scene and sports venues

(The Economist Global Liveability Index 2022)

1st in Europe

for social and environmental impact

(Times Higher Education University Impact Rankings 2023)

Cancer Research UK

CANCER RESEARCH UK

www.cancerresearchuk.org

Cancer Research UK (CRUK) is the world's largest charitable funder of cancer research. Its work into the prevention, diagnosis and treatment of cancer has been at the heart of the progress that has already seen survival rates in the UK double in the last forty years.

CRUK supports research into all aspects of cancer through the work of more than 4,000 scientists, doctors and nurses nationwide. Together with its partners and supporters, Cancer Research UK's vision is to beat cancer sooner.

If you choose to study with us, you'll benefit from the funding CRUK has invested into various research projects, programmes and initiatives across Manchester in recent years.

You'll learn from, and work alongside, researchers at the CRUK Manchester Centre and CRUK Manchester Institute and have access to a global network of conferences, events and a plethora of funding opportunities.

CRUK supports scientists throughout their academic journey – from PhD funding and early career development funds, through to programme grants supporting the establishment of research laboratories.

CANCER RESEARCH UK | MANCHESTER INSTITUTE

The CRUK Manchester Institute

The CRUK Manchester Institute (CRUK MI) is a leading cancer research institute within The University of Manchester, covering the whole spectrum of cancer research – from investigating the molecular and cellular basis of cancer, to translational research and the development of therapeutics.

The Institute supports several investigative programmes, spanning both basic and translational cancer research. It has state-of-the-art laboratory facilities and outstanding core services, including genomic sequencing, high-resolution microscopy, bioinformatics, histology, and mass-spectrometry based proteomics.

The Institute is made up of over 400 Postdoctoral Scientists, Clinical Fellows, Scientific Officers, Operational and Technical staff, Postgraduate Research Students and Visiting Fellows.

www.cruk.manchester.ac.uk

CANCER RESEARCH UK | MANCHESTER CENTRE

The CRUK Manchester Centre

Manchester is also home to the CRUK Manchester Centre, part of a network of seven dedicated cancer centres across the UK.

The Centre benefits from strong partnerships across Manchester and works collaboratively to improve the translation of science from the lab to the clinic and to ultimately improve outcomes for patients with cancer.

The Centre supports ground-breaking research across five core cross-cutting research themes: cancer biomarkers, integrative pathology, experimental cancer medicine, radiotherapy bio-adaption and cancer early detection.

www.crukcentre.manchester.ac.uk

The Christie NHS Foundation Trust

NHS
The Christie
NHS Foundation Trust

www.christie.nhs.uk

The Christie is the largest single-site cancer centre in Europe and is world renowned for exceptional care, treatment and research of cancer.

The Christie's close location to the Oglesby Cancer Research Building and Paterson Research Building creates the perfect environment for collaboration.

We work across subject boundaries and so it's common for our clinicians and scientists to work together and share ideas to develop new innovations and help improve best practice and care for cancer patients.

As a researcher in Manchester, you'll have access to The Christie's state-of-the-art facilities. This includes the use of biological samples from cancer patients for your laboratory experiments and access to dedicated radiotherapy research rooms and proton beam therapy equipment.

About The Christie

- Serves a population of 3.2 million across Greater Manchester and receives a quarter of patient referrals from outside the city region
- One of the biggest clinical trials units in Europe, with more than 600 clinical trials currently open
- A specialist surgical centre concentrating on rare cancers and complex procedures

800+
clinical studies
active during 2021/22, including open and follow-up studies and clinical trials

4,400+
patients
involved in Christie research projects in 2021/22

£150m
cancer research facility
Access to a new comprehensive cancer research facility, the Paterson Research Building, which is the largest concentration of scientists, doctors and nurses in Europe

1 of only 2
sites in the world to offer high-energy proton beam therapy and MR-Linac technologies

10 ways Manchester **led the way in cancer research**

1. Ernest Rutherford changed the world in 1917 when he split the atom at The University of Manchester – a breakthrough that resulted in the development of cancer-fighting radiotherapy.

2. Ralston Paterson, Herbert Parker and others developed the Manchester Method in 1932, the first international standard for determining the most effective dose of radium therapy.

3. The world's first randomised trial to treat ovarian ablation in breast cancer patients was carried out at The Christie Hospital in 1948.

4. In 1970, Dr Moya Cole and Dr Ian Todd conducted the first clinical use of tamoxifen (Nolvadex) to treat breast cancer.

5. The MCRC Biobank was set up in 2008 to collect and store biological samples from cancer patients in Greater Manchester to use in cancer research projects.

6. The first clinical trials in Europe for a pioneering new radioimmunotherapy cancer treatment took place in Manchester in 2009.

7. In 2017 the first UK pilot for a mobile cancer screening unit invited smokers and ex-smokers to a lung health check in convenient locations near to their homes.

8. Manchester hosts one of two NHS high-energy proton beam centres at The Christie, which opened in 2018.

9. The Christie began treating patients with a new MR-guided radiotherapy machine in 2019, making Manchester one of only two sites in the world to offer both MR-Linac and proton beam therapy treatments and research.

10. The Paterson Research Building, a new £150 million cancer research facility, opened its doors in 2023 and brings together the largest concentration of scientists, doctors and nurses in Europe.

Get in **touch**

Please contact us to find out more about any of the training opportunities included in this guide: **MCRCtraining@manchester.ac.uk**

BEFORE YOU GO...

Why not listen to our new podcast '**One in Two: A Manchester Cancer Research Podcast**' and explore some of the discoveries that are shaping the cancer research landscape.

Scan the QR code to find out more.

www.mcrc.manchester.ac.uk/category/podcast

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www.mcrc.manchester.ac.uk

@MCRCnews

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