

# Research Associate (Fixed Term 6 months)

MRC Toxicology Unit

Closing Date: 3<sup>rd</sup> December 2024

Job Reference: PU44118



# Research Associate

**Salary:**

£36,924 - £45,163

**Contract:**

Fixed Term for 6 months

**Location:**

Cambridge

**Faculty / Department:**

MRC Toxicology Unit

**Responsible to:**

Kiran Patil

**Working Pattern:**

Full Time

**Purpose of the role**

The Patil lab at the MRC Toxicology Unit is looking to appoint a postdoctoral researcher to join their team. We are a diverse team spanning multiple scientific disciplines, including microbiology, metabolomics, and bioinformatics. We are looking for a microfluidics engineer to develop innovative devices that mimic spatial heterogeneity of microenvironments in the gut.

The MRC Toxicology Unit offers excellent research infrastructure and support for personal development. The candidate is required to work in a close collaboration with geneticists and microbiologists in the lab.

Candidates should have a PhD in a relevant discipline such as bioengineering and hands-on experience with culturing gut bacteria. A good publication record in peer-reviewed journals is required.

**Key responsibilities**

- To conduct research on spatial organisation of gut bacteria using microfluidic devices.
- To participate in collaborative research, both within and external to the Toxicology Unit
- To present scientific work at group meetings, seminars within the Unit

and at external meetings where appropriate

- To write up research work and be actively engaged in the dissemination of new research results in the form of scientific papers
- To build internal and external contacts for the exchange of information and collaboration
- To continually update knowledge and understanding in field or area of specialism
- To manage own research activities, with guidance if required
- To plan the use of research resources as appropriate
- To contribute to the Unit's mission in the public engagement of science
- To assist with training and/or informal supervision of students as required



# Person Specification

Criteria	Essential	Desirable
<b>Education</b>		
PhD in a relevant discipline such as bioengineering or physics	✓	
<b>Relevant Experience</b>		
Research experience in microfluidic devices	✓	
A strong publication record in peer-reviewed journals	✓	
Proven skills in working with gut bacteria	✓	
Enthusiasm for multi-disciplinary research	✓	
<b>Interpersonal /Communication Skills</b>		
Ability to plan and manage projects over the medium term	✓	
Drive and focus to work at a highly competitive international level with a passion for problem solving	✓	
Full commitment to open publication of data	✓	
Strong commitment to collaboration and teamwork	✓	
Highly organised, detail-oriented, and meticulous approach	✓	
Experience of informal supervision/mentoring (e.g. PhD students/Junior Staff/Visiting Workers) and facilitating collaborative studies with other research groups		✓
Experience of providing assistance regarding lab resources, managing established protocols/developed methodologies	✓	
Commitment to inclusivity, diversity, and equality	✓	



**The MRC Toxicology Unit is a leading international research institute within the School of Biological Sciences at the University of Cambridge. Our mission is to carry out pioneering research which leads to improved health and to train and mentor the next generation of toxicologists.**

### **About the faculty**

The Unit was established in 1947 and now sits within the School of Biological Sciences at the University of Cambridge. The Unit undertakes world-class research to generate new knowledge of mechanisms underpinning the causal links between exposure to various toxicants and the adverse outcomes they may cause. By determining any risks to health from drug and environmental exposures, the Unit aims to improve health by making our medicines and environment safer.

More than 100 scientists and non-research staff work at the Unit, which is based in the newly refurbished Gleeson building in central Cambridge.

Our research groups are organised into four key research themes, which form a key part of the strategic remit of the Cambridge Academy of Therapeutic Sciences (CATs) and Cambridge Alliance on Medicines Safety (CAMS).

Our research environment provides state-of-the-art research facilities including Advanced Imaging, Histopathology and Flow Cytometry. In addition, excellent opportunities exist for collaborative interactions with researchers throughout the University but also with neighbouring pharmaceutical, clinical and biotech organisations to support translating our findings into industrial and clinical settings.

[This video provides a snapshot overview of the Unit and our work.](#)

We believe that we have a responsibility to contribute to society through our public engagement programme. Our aim is to generate increased trust with society, ensure our research remains relevant, inspire the next generation of scientists and build an engaged research culture.

The Unit is committed to sustainability, energy efficiency and minimising our environmental output being awarded a Bronze LEAF award in 2023. We actively pursue equality and diversity in the workplace through the Athena SWAN programme and are a proud supporter of the Technician Commitment.

# The school of the Biological Sciences

The School of the Biological Sciences is one of the six Schools that are responsible for delivering teaching and research and the administration of those activities within the University. The School delivers internationally leading research and teaching on animal, plant and microbial science at scales that range from the atomic, molecular and cellular through whole organisms to populations and communities. The research impacts on the pharmaceutical and biotechnological industries, on human and animal health and the clinic as well as in conservation, agriculture and the environment.

## About the School

The School of the Biological Sciences employs around 2000 staff teaching over 4000 students (around 2000 undergraduates in the Natural Sciences, Medical Sciences and Veterinary Sciences and Psychological and Behavioural Sciences Triposes plus around 2000 postgraduates).

The School collaborates closely with the School of Clinical Medicine. The joint Graduate School of Life Sciences looks strategically at graduate provision and education across the two Schools and at the undergraduate level the Medical Education Committee oversees medical education.

The School is currently arranged in two Faculty Boards (Biology and Veterinary Medicine) which are divided into nine Departments: Biochemistry, Genetics, Pathology, Pharmacology, Physiology, Developmental and Neuroscience, Plant Sciences, Psychology and Zoology are part of the Faculty Board of biology while Veterinary Medicine is part of the Faculty Board of Veterinary Medicine.

The School also contains five major interdisciplinary Institutes: Wellcome Trust/CRUK Gurdon Institute for Cancer and Development, Wellcome Trust/MRC Stem Cell Institute, Cambridge Systems Biology Centre, Cambridge Centre for Crop Science and the Sainsbury Laboratory for Plant Development. It has also incorporated the MRC Toxicology Unit.



The School is involved with several Strategic Research Initiatives including being a major player in the Cambridge Conservation Initiative. The School is associated with the Museum of Zoology and the Botanic Garden. Key officers of the School plus details of relevant Research Ethics Committee (Human Biology and Psychology) can be found on the School's website.

## Athena SWAN

The Athena Swan Charter was launched in June 2005 to recognise and reward commitment to advancing the careers of women working in higher education in science, technology, engineering, mathematics and medicine (STEMM).

The University of Cambridge was a founder member of Athena SWAN Charter and the University won its first award in the inaugural round of March 2006.

Since then, the University has successfully renewed its Bronze Athena SWAN award in 2009 and 2012 and in 2014 achieved a Silver Athena SWAN award.

Many of the Departments in the School of Biological Sciences hold awards at Bronze or Silver level and the School continues to support the Athena SWAN process across all subjects.

# Terms of Appointment

## Tenure and probation

Appointments will be made on a fixed-term basis of 6 months due to limited funding.

Appointments will be subject to satisfactory completion of a six-month probationary period.

Appointment to Research Associate is dependent on having a PhD

## Hours of Work and Working Pattern

The hours of work for the position are 37 per week, working Monday – Friday.

## Pension

You will automatically be enrolled to become a member of USS (Universities Superannuation Scheme) – a hybrid pension scheme. For further information please visit: [www.pensions.admin.cam.ac.uk/](http://www.pensions.admin.cam.ac.uk/).

## Annual leave

Full time employees are entitled to annual paid leave of 41 days inclusive of public holidays. For new part-time employees, annual leave will be pro rata'd based on days worked.

## Pre-employment checks

### Right to work in the UK

We have a legal responsibility to ensure that you have the right to work in the UK before you can start working for us. If you do not have the right to work in the UK already, any

offer of employment we make to you will be conditional upon you gaining it.

**Health declaration:** Once an offer of employment has been made the successful candidate will be required to complete a work health declaration form.

**Qualifications:** The person specification for this position lists qualifications that are essential and/or desirable. Please note that if you are offered the post you will be asked to provide your relevant original certificates of these qualifications.

**References:** Offers of appointment will be subject to the receipt of satisfactory references.

## Information if you have a disability

The University welcomes applications from individuals with disabilities. We are committed to ensuring fair treatment throughout the recruitment process. We will make adjustments to enable applicants to compete to the best of their ability wherever it is reasonable to do so and, if successful, to assist them during their employment.

Information for disabled applicants is available at <http://www.admin.cam.ac.uk/offices/hr/staff/disabled/>

We encourage you to declare any disability that you may have, and any reasonable adjustments that you may require, in the section provided for this purpose in the application form. This will enable us to accommodate your needs throughout the process as required. However, applicants and employees may declare a disability at any time.

If you prefer to discuss any special arrangements connected with a disability, please contact, the Department Administrator, who is responsible for recruitment to this position at [hradmin@mrc-tox.cam.ac.uk](mailto:hradmin@mrc-tox.cam.ac.uk)

# The University

**The University of Cambridge is one of the world's oldest and most successful universities. We are a renowned centre for research, education, and scholarship that makes a significant contribution to society. The University is consistently ranked amongst the top universities in the world. Our affiliates have won more Nobel Prizes than any other University.**

Our sustained pursuit of academic excellence is built on a long history of world-leading teaching and research within a distinctive collegiate system. For eight centuries our ideas and innovations have shaped the world. Our principal goal is to remain one of the world's leading universities in an increasingly competitive global higher education sector. Today the University of Cambridge is at the centre of a cluster of over 4,300 businesses employing 58,000 people.

Our capital investment projects include academic and commercial growth at both the West Cambridge Innovation District, and the Biomedical Campus in the south of the city. Eddington, in North West Cambridge, is a mixed-use development including key worker housing for staff, a community centre and a new primary school, managed by the University. Through these projects, the University is deeply embedded in, and committed to serving, our local community. These are all conspicuous signs of a University that is not only adapting to new needs, but also anticipating the future.

Our mission is to contribute to society through the pursuit of education, learning, and research at the highest international levels of excellence. Our core values are:

- freedom of thought and expression; and
- freedom from discrimination.



# About Us

**The University is one of the world's leading academic centres. It comprises 150 faculties and departments, together with a central administration and other institutions. Our institutions, museums and collections are a world-class resource for researchers, students and members of the public representing one of the country's highest concentrations of internationally important collections.**

The University has an annual income of £2 billion. Research income, won competitively from the UK Research Councils, the European Union (EU), major charities and industry, exceeds £500 million per annum and continues to grow.

The Colleges and the University remain committed to admitting the best students regardless of their background and to investing considerable resources both in widening access and financial support. The 31 Colleges are self-governing, separate legal entities which appoint their own staff. Many academic staff are invited to join a College as a Teaching Fellow, which provides a further social and intellectual dimension. The Colleges admit undergraduate students, provide student accommodation and pastoral support and deliver small group teaching for undergraduates.

The University awards degrees and its faculties and departments provide lectures and seminars for students and determine the syllabi for teaching.

Our instinct for seeking out excellence and setting up enduring and mutually beneficial collaborations has led us to establish strategic partnerships across the globe. Whether it is the successful Cambridge-Africa Programme involving universities in Ghana, Uganda and elsewhere on the African continent; or the close association with the government of India to pursue new research in crop science; or the creation, with Germany's Max Planck Institutes, of a Cambridge-based centre for the study of ethics, human economy and social change – international partnerships are now an inextricable part of the University's make-up.

“Cambridge graduates and researchers have made – and continue to make – a colossal contribution to human knowledge and the understanding of the world around us. Their work touches on the lives and livelihoods of everyone from patients diagnosed with life-threatening diseases, to residents of areas critically affected by climate change, to children growing up in conflict zones. It has a lasting impact on our society, our economy and our culture: the world is truly a better place thanks to their efforts.”

*Stephen Toope, Vice Chancellor 2019*





# Working at the University

**Working at Cambridge you will join a diverse, talented and innovative community, with more than 23,000 students and over 16,000 staff from all walks of life and corners of the world.**

The University continually explores strategies to attract and retain the best people. It is committed to supporting its staff to achieve their best. We are a fair, diverse and inclusive society and we believe our staff are our greatest asset. There is strong commitment to developing institutional leadership and supporting and encouraging staff development at all levels.

We offer a variety of roles including academic, research, professional, managerial and support roles. We also offer extensive benefits and excellent learning opportunities within a stimulating working environment.

The University's estate is undergoing the most significant transformation in its history. Cambridge has been able to create a science and technology campus to the west of the city centre, and is expanding further to the north west of Cambridge including investing in affordable homes for University key workers and community facilities. Even with our continued development, the University remains within walking or cycling distance across the campus. The University is a major partner on the Cambridge Biomedical Campus and we continue to redevelop our historic city centre sites demonstrating our determination to ensure that we can offer the best facilities and opportunities for our staff and students.



## Equality & diversity

The University has built its excellence on the diversity of its staff and student community. We aim to be a leader in fostering equality and inclusion, and in promoting respect and a sense of belonging for all. We encourage applications from all sections of society. All appointments are made on the basis of merit. We have an Equal Opportunities Policy, along with a range of diversity groups, including the Women's Staff Network, Race Equality Network and LGBT+ Staff Network. More details are available here:

<http://www.equality.admin.cam.ac.uk/>

The University has a bronze Race Equality Charter award, with a framework for improving the representation, progression and success of minority ethnic staff and students within higher education. Furthermore, the University's silver Athena swan award recognises and celebrates good practice in recruiting, retaining and promoting gender equality.

# Living in Cambridge

**Cambridge is rich in cultural diversity. From beautiful University and College buildings, museums and art galleries, quaint gardens and punts on the River Cam, to a vibrant restaurant and café scene, our employees are surrounded by the wonderful features of this unique city.**

You can find a wide-range of high street shops and 3 shopping centres, with independent alternatives at the historic market and nestled within the passageways in the city centre. You will find a cinema, bowling alley, a nightclub and various live performances at the Cambridge Leisure Park, with further entertainment options at the Corn Exchange, Arts Theatre and the ADC Theatre. Further information can be found on the Visit Cambridge website.

If you prefer the faster pace of life, London is a 45 minute train journey away. For those travelling from overseas, Stansted Airport is just 45 minutes away and Heathrow Airport under 2 hours away. The University is a short distance from a host of other attractions such as Ely Cathedral, Newmarket Races and various wildlife parks and stately homes. Cambridge is also within easy reach of the beautiful Broads and coastlines of Norfolk and Suffolk.

## Relocation Support

The University recognises the importance of helping individuals to move and settle into a new area. We provide support and guidance to those relocating internationally or domestically to take up a post at the University of Cambridge, liaising with other University offices and selected partners to ensure comprehensive relocation support is available. This includes: accommodation, childcare, schools, banking, immigration and transport. If you would like further information, please visit <https://www.accommodation.cam.ac.uk/RelocationService/>. The Shared Equity Scheme and the Reimbursement of Relocation Expenses Scheme provide financial assistance to qualifying new members of staff with the costs of relocating to Cambridge.

## Accommodation Service

The University Accommodation Service helps staff, students and visiting scholars who are affiliated to the University in their search for suitable accommodation in Cambridge. The dedicated accommodation team can provide access to a wide range of University-owned furnished and unfurnished properties, and has a database of private sector accommodation available for short and long-term lets. For further information and to register with this free service please visit <https://www.accommodation.cam.ac.uk/>



# What Cambridge can offer

**We offer a comprehensive reward package to attract, motivate and retain high performing staff at all levels and in all areas of work.**

The University offers a wide range of competitive benefits, from family leave entitlement, to shopping and travel discount schemes. Our generous annual leave package contributes to the positive wellbeing of our University employees. Sabbatical leave enables academics to focus on research and scholarship, whilst still maintaining their full salary. The University also has a [career break scheme](#) for academic and academic-related staff, with additional flexible working policies for all other staff.



## Pay and benefits

The University salary structure includes automatic service-related pay progression in many of its grades and an annual cost of living increase. In addition to this, employees are rewarded for outstanding contribution through a number of regular pay progression schemes. The University offers attractive pensions schemes for employees, with an additional benefit of a salary exchange arrangement providing tax and national insurance savings.

## CAMbens employee benefits

The University offers employees a wide range of competitive benefits, known as CAMbens. CAMbens offers something for everyone across a range of categories, including:

- Financial Benefits, including shopping discounts (both local and national) and a Payroll Giving scheme;
- Relocation and Accommodation Benefits, including relocation assistance and interest-free Rental Deposit Loans;
- Travel Benefits, including Cycle to Work, discounts on train season tickets and interest-free Travel to Work loans;
- Family Friendly and Lifestyle Benefits, including support with childcare and family friendly policies;
- Health and Wellbeing Benefits, including a University Staff Counselling Service, discounts at the University Sports Centre, and other local gyms, and healthcare schemes.



# What Cambridge can offer

## Family-friendly policies

The University recognises the importance of supporting its staff. We have a range of family-friendly policies to aid employees' work-life balance including a generous maternity, adoption and shared parental leave entitlement of 18 weeks full pay, and paid emergency leave for parents and carers.

Other family-friendly support includes:

Our highly regarded workplace nurseries, a childcare salary exchange scheme and a high quality holiday Playscheme may be available to help support University employees with caring responsibilities (subject to demand and qualifying criteria). Further childcare information can be found here:

<https://www.childcare.admin.cam.ac.uk/>

The [Newcomers and Visiting Scholars Group](#) is an organisation within the University run by volunteers whose aim is to help newly arrived wives, husbands, partners and families of Visiting Scholars and members of the University to settle in Cambridge and give them an opportunity to meet local people. The Postdoc Academy supports the postdoctoral community within Cambridge. Further details are available here: <https://www.postdocacademy.cam.ac.uk/>

## Your wellbeing

The University's Sport Centre, Counselling Services and Occupational Health are just some of the support services available to University employees to promote their physical and mental wellbeing. The University delivers The Festival of Wellbeing annually, which is a programme of stimulating talks and activities, which aim to promote wellbeing and good mental and physical health. The University also hosts the [Cambridge Festival](#), which is a great opportunity to get your first taste of public engagement, through volunteering, supporting hands-on activities or proposing a talk.

## Development opportunities

We support new employees to settle in through various activities as well as supporting their professional and career development on an ongoing basis. Our Personal and Professional Development (PPD) team provide development opportunities for all University employees, including face-to-face sessions, online learning modules and webinars. All employees also have unlimited access to LinkedIn Learning to support their development. Both new and existing employees can undertake funded Apprenticeships, which lead to a range of vocational and professional qualifications. We offer reduced staff fees for University of Cambridge graduate courses and the opportunity to attend lectures and seminars held by University departments and institutions. A range of University training providers also offer specialist learning and development in their own areas e.g. teaching and learning, digital literacy, finance, health and wellbeing, safety.



# How to apply

Applications should be submitted online via the University of Cambridge jobs page [www.jobs.cam.ac.uk](http://www.jobs.cam.ac.uk) by clicking “Apply online” in the job advert. You will need an email address to register for our online system.

Conversations about flexible working are encouraged at the University of Cambridge. Please feel free to discuss flexibility prior to applying (using the contact information below) or at interview if your application is successful.

Informal enquiries can be directed to:

Kiran Patil

**Email:** [kp533@mrc-tox.cam.ac.uk](mailto:kp533@mrc-tox.cam.ac.uk)

If you have any queries regarding the application process please contact [hadmin@mrc-tox.cam.ac.uk](mailto:hadmin@mrc-tox.cam.ac.uk)



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