



UNIVERSITY OF
CAMBRIDGE

Research Assistant in Developmental Mechanics and Morphogenesis

Gurdon Institute

Closing Date: 1 June 2025

Job Reference: PR45603



A Letter from Ben Simons

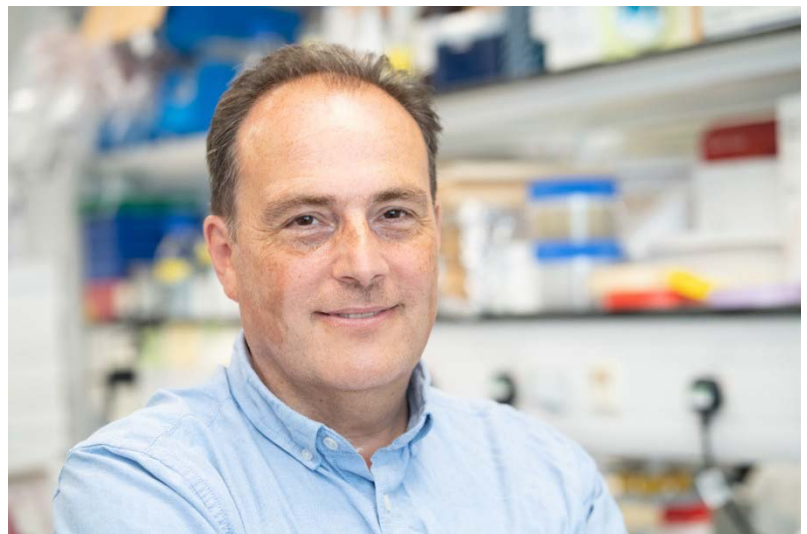
Dear Candidate,

Thank you for your interest to join the Gurdon Institute as a Research Assistant!

With a history dating back more than 30 years, the Gurdon Institute is internationally renowned for its research into developmental and disease biology. Its researchers have made seminal contributions to a broad range of scientific areas with relevance to stem cell biology, epigenetics, cellular reprogramming, and the treatment of human disease.

Crucially, discoveries of Institute researchers have been translated to develop therapies to target cancer, neurodegenerative diseases, and other disorders, with drug compounds now used in the clinic. The nurturing collaborative, and collegial environment has attracted talent from across the globe, providing a training arena that has launched the careers of exceptional scientists that populate Universities and Institutes worldwide.

Maintaining the ethos and vision of its founders as a crucible for innovation, the institute has made the strategic decision to evolve its activities towards human developmental biology, establishing it as a hub of research that stands at the intersection of basic science and translation, and draws together activities across the Cambridge campus and affiliated Institutions.



The Institute is a friendly, vibrant and exciting place to work. At capacity, the Gurdon building hosts around 300 researchers and staff, comprising 16-20 group leaders, 250 scientific staff including PhD students, and 40 support staff. The Institute is embedded in the University of Cambridge and has interactions across Cambridge's vibrant research environment, which is the largest biomedical research campus in Europe.

The University of Cambridge was founded more than eight centuries ago, and its research has had a profound impact both locally and globally. The achievements of Cambridge scientists are renowned, and the University is world-leading in science and technology. Today, the University encourages multidisciplinary collaborative research as a means of tackling the most profound challenges of our era, and continues to educate and champion brilliant minds, facilitate collaboration and catalyse world-changing ideas. Our mission at the Gurdon Institute is to continue to push the boundaries of scientific progress through world-leading research.

We look forward to receiving an application from you.

Best wishes,

Professor Ben Simons
Director,
Gurdon Institute

Research Assistant in Developmental Mechanics and Morphogenesis

Salary:

£32,546-£35,116. p.a.

Contract:

Fixed Term

Location:

Cambridge

Department:

Gurdon Institute

Responsible to:

Senior Research Associate

Working Pattern:

Full Time

We are looking for a full-time Research Assistant working closely with Dr Fengtong Ji in Dr Fengzhu Xiong's lab at the Gurdon Institute, University of Cambridge. The successful candidate will be involved in studies of collective cell dynamics and tissue morphogenesis during embryo development using cellular, molecular and nano-engineering approaches.

Cell-type transition and tissue property changes widely exist in the development of normal and malignant tissues. Using chick embryos as the model system, we are investigating the mechanical cues regulating tissue organisation and developing innovative techniques to explore the molecular and physical mechanisms through our cutting-edge homemade facilities, including a magnetic nanorobot platform for sensing and manipulation and a tissue force microscope (TiFM). In addition, ample resources from the core facilities at Gurdon Institute and other departments at Cambridge are accessible, including but not limited to advanced microscopes, computational services, and data analysis assistance.

As a member of an interdisciplinary team, the candidate will have the opportunity to receive training in a variety of techniques, including molecular biology, embryology, imaging, computation, biophysics, and nanorobotics. They will also have the opportunity to develop independent projects after gaining adequate experience. Moreover, they will receive support if they wish to participate in career development activities such as appropriate professional activities while in the role. This is an excellent opportunity for someone enthusiastic about learning new techniques, proactive in research and self-motivated in advancing science. Their active involvement in this project will contribute to their future PhD application or academic career if they wish.

The successful applicant is anticipated to have detail-oriented research insight and exceptional record-keeping working habits. They will have strong organisational and communication skills and excellent problem-solving skills. Experience and a good understanding of working in research labs are desired.

Main duties will include: conduct wet-lab experiments; acquire and process data; prepare reagents and samples; optimise protocols; program and debug codes for analysis; coordinate with the PI and Lab Manager; participate in regular group meetings and other group activities.

Person Specification

Criteria	Essential	Desirable
Education		
Bachelor, Master or PhD degree in a relevant field. Candidates submitting their thesis or awaiting degree conferral will also be considered.	✓	
Specialist Knowledge & Skills		
Delicate operational skills	✓	
Detail-oriented research practice	✓	
Cell and molecular biology		✓
Collective cell dynamics		✓
Programming		✓
Interpersonal & Communication Skills		
Communication skills	✓	
Enthusiasm for learning new techniques		✓
Works productively and harmoniously in a team	✓	
Time management skills	✓	
Relevant Experience		
Ability to organise specific tasks and deadlines	✓	
Microscopy, such as fluorescent and confocal microscopy		✓
Academic writing experience		✓
Previous experience in research laboratory		✓

Declaration on Research Assessment

The University of Cambridge is a signatory to the San-Francisco Declaration on Research Assessment (DORA), and in recruitment or promotion evaluations will assess research on the basis of its merits rather than the journal or venue in which it is published. Applicants should not include Journal Impact Factors or uncontextualized metrics in their applications. Full details are at: <https://www.research-strategy.admin.cam.ac.uk/research-policy/DORA> should be the same font as above

Terms of Appointment

Tenure and probation

Appointments will be made on a fixed-term basis due to limited funding. Appointments will be subject to satisfactory completion of a six-month probationary period.

Hours of Work and Working Pattern

The hours of work for the position are full-time, working Monday – Friday.

Salary

The starting pay point for all new employees is point 36 of the grade 5.

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/.

Annual leave

Full time employees are entitled to annual paid leave of 33 days exclusive of public holidays. For new part-time employees, annual leave will be pro rata'd based on days worked.

General information

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.

Screening Checks:

This role might require a basic disclosure/ standard Disclosure and Barring Service (DBS) Check/an enhanced Disclosure and Barring Service (DBS) check/a security check. Any offer of employment we make to you will be conditional upon the satisfactory completion of this/these check(s); whether an outcome is satisfactory will be determined by the University. The nature of this role means that the successful candidate will also need to undergo a health assessment.

Equality and Diversity

We particularly encourage women and /or candidates from a Black, Asian and Minority Ethnic background to apply for this vacancy as they are currently under-represented at this level within our University.

(Please see relevant guidance before inclusion:

<https://www.hr.admin.cam.ac.uk/recruitment/equality-law-and-recruitment/exceptions-equality-law/positive-action>)

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/>

The Gurdon Institute

Named after our co-founder, Nobel Laureate Sir John Gurdon, the Gurdon Institute is a world-leading centre for research into the biology of developmental processes and how these programmes become dysregulated in diseases such as cancer.

At capacity, the Gurdon Institute plays host to around 240 researchers working in a modern, purpose-built, laboratory supported by a wealth of core facilities including sequencing and imaging.

Current activities span a broad range of projects in the area of developmental, regenerative, and disease biology, combining *in vivo* work with *in vitro* studies and the design of 3D organ culture systems.

Institute scientists use a range of model systems such as nematode worms, fruit flies, frogs, and mammalian cells to study development and disease at the level of molecules, cells and tissues.

For an Institute whose mission is fundamental research, we have had considerable success in translation. Research conducted here has so far led to 11 spin-out companies (including KuDOS Pharmaceuticals, Abcam, Chroma Therapeutics, CellCentric, MISSION Therapeutics and Gen2 Neuro) and five candidate drugs.

One of these, olaparib (Lynparza) has been approved in the UK, Europe and the USA for use against ovarian and breast cancer.

We believe that we have a responsibility to contribute to society through our Public Engagement programme. Our aim is to inspire the next generation of scientists, positively impact the public perception of fundamental research and make public engagement part of our research culture.

The Institute is an integrated part of Cambridge University and all Group Leaders are affiliated to a University Department and contribute to teaching and graduate student supervision.

The institute is committed to energy efficiency, and to minimising our environmental impact. We actively pursue equality and diversity in the workplace and renewed our Athena SWAN Bronze award in March 2018.



The School

The research and teaching carried out in the school of the Biological Sciences is diverse and covers animal, human, plant and microbial science from the atomic, molecular and cellular levels through to tissues, organs, whole organisms, populations, ecosystems, biodiversity, and human behaviour. The research has impacts on health and diseases across species, agriculture, conservation and the environment as well as on the pharmaceutical and biotechnology industries, with direct translational relevance to the clinic, public services and social policy, and the bio-economy.

The school is organised into nine Departments (Biochemistry; Genetics; Pathology; Pharmacology; Physiology, Development and Neuroscience; Plant Sciences; Psychology; Veterinary Medicine; Zoology) and four major interdisciplinary research institutes (Gurdon Institute, Cambridge Stem Cell Institute, Sainsbury Laboratory and the MRC Toxicology Unit) all of which are involved in fundamental biological research with varying contributions to undergraduate and postgraduate training.

The school has oversight of the Botanic Garden, the Herbarium and the Museum of Zoology through the Departments of Plant Sciences and Zoology respectively. The School also contributes to the Cambridge.

We know that to deliver our vision we must foster a working and learning environment that has the principles of collaboration, innovation and inclusivity at its heart, I am proud of the bold and ambitious strides that the School is already making to achieve this”.

The Research Themes in the School of Biological Sciences are designed to facilitate interactions across traditional departmental boundaries and all activities are founded in the principles of openness, inclusion and mutual respect. The themes provide new opportunities for leadership across the School, bringing people together from a variety of perspectives and career stages, with applications actively encouraged from groups traditionally under-represented in such roles.

Theme leadership teams are supported by the School’s research strategy facilitation team, and active engagement in these strategically important leadership roles is recognised in the University’s new Academic Career Pathways promotion scheme.



The University

The University of Cambridge is consistently ranked one of the best universities in the world, achieving academic excellence through its Faculties, Departments and other Institutions, together with the 31 Colleges.

The University is renowned for its record of discovery and innovation. It is one of the great institutions, with a regional, national and global reach, attracting the very best and brightest minds. Our staff and students shape the world around us for the better: we attract and partner with like-minded people.

Whether contributing to the development of new anti-cancer drugs, adding to the understanding of how black holes are formed, revolutionising the study of ancient settlements, convening academic expertise to offer solutions to the climate crisis, or analysing public attitudes towards democracy around the world, the University's research is remarkable in its breadth, quality and impact. The University also sits at the heart of Europe's largest technology cluster and has catalysed more than 1,500 high-tech companies. And yet what inspires our 24,000 students and 13,000 staff is not what has already been achieved, but what is possible in the future.

The education and experience of our students, based on a partnership between the University's academic Departments and Faculties and the 31 Colleges, is second to none. Every student is a member of one of the Colleges, each a community of students, academics and staff drawn from across the University's comprehensive range of subject areas.



The University is a self-governing community, with a system for decision-making that provides a high degree of accountability and transparency to its members. Each Department and Faculty is part of one of six academic Schools, but each of them, and each individual academic, has a great deal of autonomy. The Colleges are independent and self-governing, working in a symbiotic relationship with the University.

The University has a number of Institutions that are independent of any Faculty or Department and are not part of the academic Schools. These include the Institute of Continuing Education (which provides high-quality education to adults throughout their lives), the Fitzwilliam Museum, Kettle's Yard (an historic house and gallery that holds important collections of modern art) and the University Library. In addition to their diverse contributions to University and public life, these non-School Institutions are also important centres of teaching and research.

Cambridge University Press & Assessment provides academic publishing, examinations and learning materials worldwide, supporting the dissemination of research, academic development at school and in higher education, and international student mobility. Legally, the Press & Assessment is a department of the University. It provides very important funds to invest in the academic purposes of the University.

The University has made truly remarkable contributions to the sum of human understanding, with breakthrough ideas and discoveries that have changed the way we understand ourselves, our planet, and the universe around us. Yet the global and national contexts in which it operates are fast-changing and increasingly filled with uncertainty. In a world that is becoming – politically, economically, socially, and technologically – ever more interconnected but even less equal, the University's mission – “to contribute to society through the pursuit of education, learning and research at the highest international levels of excellence” – has never been more relevant.



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.

“Through its outstanding education, research and innovation, the University of Cambridge has made – and continues to make – a lasting contribution to human knowledge and is flourishing. By working at the University of Cambridge, you will be joining a vibrant community of students, scholars and professional services staff committed to supporting and enhancing the University's mission to contribute to society.”

Professor Deborah Prentice,

Vice Chancellor 2023



Working at the University

Working at Cambridge you will join a diverse, talented and innovative community, with more than 24,000 students and over 13,000 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.

The University offers 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.

Equality, Diversity and Inclusion

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'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 their 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 continues to redevelop its historic city centre sites demonstrating a clear determination to ensure that we can offer the best facilities and opportunities for our staff and students.



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

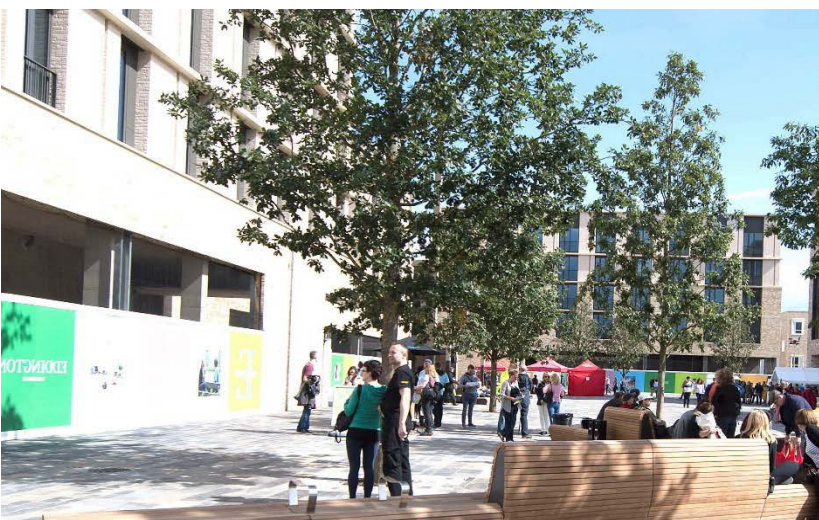
<https://www.accommodation.cam.ac.uk/RelocationService/>. The Shared Equity Scheme and the Reimbursement of Relocation Expenses Scheme provide financial assistance to qualifying new members of staff with the costs of relocating to Cambridge.

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 26 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 are 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 (<https://www.nvs.admin.cam.ac.uk/>) is an organisation within the University that welcomes the partners and families of visiting scholars and new members of the University. Run by volunteers, the group offers opportunities to visit interesting Cambridge venues, learn about the community, take part in social events and gain local knowledge while developing a strong support network of both residents and other newcomers.

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 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.

If you have any queries regarding the application process, please contact:

HR@gurdon.cam.ac.uk

The closing date for applications is 1st of June 2025.

