

GURDON  
INSTITUTE



**CANDIDATE INFORMATION PACK**

Senior Bioinformatician - PR41597

## LETTER FROM BEN SIMONS

Dear Candidate,

Thank you for your interest in the role of the Senior Bioinformatician at the Gurdon Institute.

The Wellcome Trust/Cancer Research UK Gurdon Institute is internationally renowned for its research into developmental and disease biology and has been in existence for more than 25 years. With core funding from Wellcome and Cancer Research UK, the Institute is a friendly, collaborative and exciting place to work.

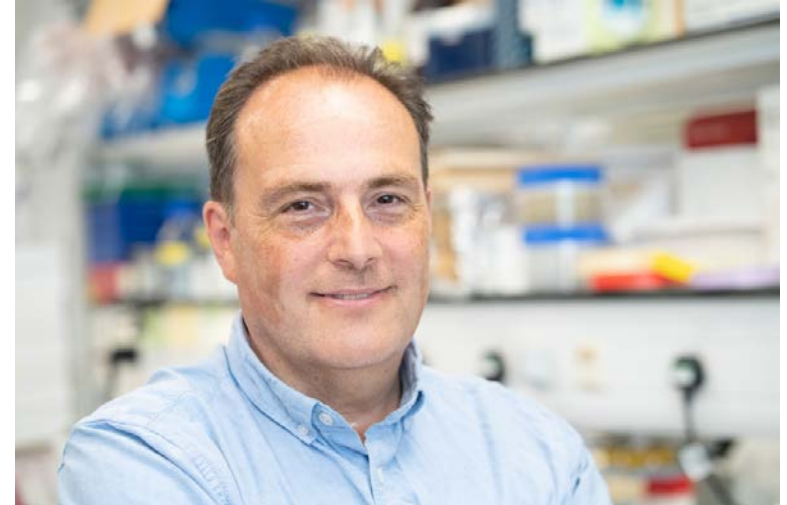
There are around 300 people in its self-contained building, comprising 16 research group leaders, 250 scientific staff including PhD students, and 40 support staff. The Institute is embedded in the School of Biological Sciences at the University of Cambridge and has interactions across Cambridge's vibrant research environment, which is the largest biomedical research campus in Europe.

The University of Cambridge has been in existence for eight centuries, and its research has had a profound impact, particularly in the arena of science and technology. The Institute is named after one of its founders, Sir John Gurdon, recipient of just one of the 107 Nobel prizes that have been awarded to Cambridge academics. These days, the University is placing increasing emphasis on multidisciplinary and collaborative research targeted towards tackling the most profound challenges of our era. It 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

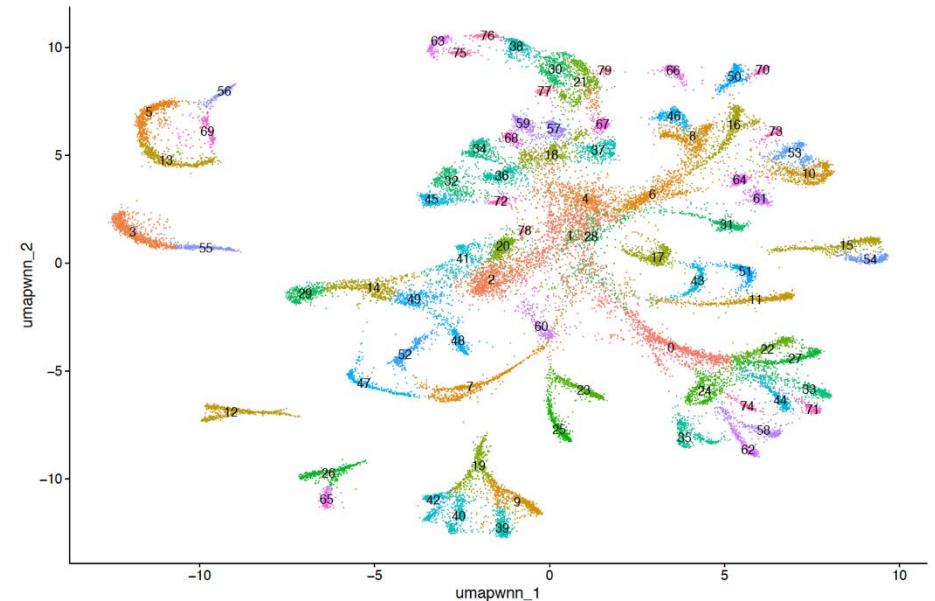


## THE ROLE

The core bioinformatics group at the Gurdon Institute, University of Cambridge is recruiting a Senior Bioinformatician to extend our capabilities in delivering world class research into developmental biology and cancer. Our group supports researchers across the institute in experimental design, analysis and presentation of high throughput data. Computational biology themes within the institute include analysis of whole genome sequencing, RNA-seq, ChIP-seq, and increasing amounts of single-cell multiomics. These are enabled by our in-house Illumina Novaseq DNA sequencer, Chromium 10X single-cell platform and dedicated compute cluster, as well as access to wider University resources. You will work collaboratively with researchers to develop new scientific understanding and contribute to publications. In addition, and depending on your skills and interests, you may contribute to the development of pipelines to supply researchers with processed data or development of new computational methods which would be widely applicable to institute research. You will maintain an awareness of current developments in the bioinformatics literature to support projects and be involved in developing and delivering training courses.

Working in a core bioinformatics group in an academic environment comes with a great number of benefits. You will work on diverse projects, utilising your existing skills and acquiring new ones, exploring the full breadth of cutting-edge developmental biology research taking place at the Gurdon Institute. Your work will have a meaningful impact on individuals as well as our research, solving their data analysis problems and helping them to gain skills.

You will have a strong background in bioinformatics, prior experience in the analysis of high-throughput genomic and transcriptomic data, and excellent computing skills (in programming and sequencing analysis software). A high level of proficiency in



Python and/or R programming in a LINUX/UNIX environment is essential. Experience of high-performance computing clusters, workflow managers (e.g. Nextflow, Snakemake) and version control (e.g. Git) would be an advantage. Of course, we expect that there will be things you are not so familiar with and training to develop your skills as a bioinformatician will be an important part of the role.

You should have a PhD (or equivalent post-doctoral experience) in computational biology, a sound understanding of molecular biology, and a publication track record in bioinformatics. You will be expected to be able to work independently and interact well in a dynamic multidisciplinary team environment. You will be able to communicate ideas and results clearly to wet lab scientists. You will be able to show evidence of methodical working, excellent record keeping and timely delivery of results.

## PERSON PROFILE

<b>Education and qualifications</b>	<b>Essential</b>	<b>Desirable</b>
PhD or equivalent post-doctoral experience in bioinformatics or computational biology	✓	
<b>Skills and experience</b>		
Expertise in scientific programming and statistics (e.g. Python, R)	✓	
Experience in using sequence analysis software to analyse high-throughput sequencing datasets	✓	
Proven track record of scientific publications and conference presentations	✓	
Ability to present scientific data clearly	✓	
Ability to deliver results in a timely fashion	✓	
Ability to work both independently and as part of a team	✓	
A strong understanding of molecular biology	✓	
Experience in the use of workflow managers (e.g. Nextflow or Snakemake)		✓
Experience of version control software (e.g. Git)		✓
Experience with of high-performance computing clusters		✓

## KEY RESPONSABILITIES

### Scientific/Research: 80%

- Work collaboratively with other researchers to develop new scientific understanding using bioinformatic methods and contribute to publications
- Perform appropriate and rigorous statistical analyses
- Execute and/or contribute to the development of pipelines to supply researchers with processed data
- Maintain an awareness of current developments in the bioinformatics literature to support projects.

### Managerial and training: 10%

- Develop and deliver training courses
- Actively contribute to all projects in the group by sharing experience, skills and insights with other members of the team

### Internal and External Communication: 10%

- Attend meetings, seminars and conferences to keep abreast of and contribute to research
- Present results at group meetings, Institute seminars, and conferences
- Write materials for publication

### Salary:

£40,521 – £54,395

### Contract:

2 years in the first instance with the possibility of extension subject to available funding

### Location:

Gurdon Institute,  
Central Cambridge

### Working Pattern:

Full-time

# TERMS OF APPOINTMENT

## TENURE and PROBATION

The post is initially available until 30<sup>th</sup> November 2026, with the possibility of extension subject to available funding.

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

## HOURS OF WORK AND WORKING PATTERN

Full-time. There are no conditions relating to hours and times of work but you are expected to work such hours and days as are reasonably necessary for the proper performance of your duties.

Your times of work should be agreed between you and your head of institution.

## 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-rated based on days worked. The Gurdon Institute holiday year runs from January-December.

## PENSION

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

## 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. If you need further information, you may find the Right to Work page within the 'Applying for a job' section of the University's Job Opportunities pages helpful (please see <http://www.jobs.cam>).

## REFERENCES

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

## 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.

Please ensure that you upload your Curriculum Vitae (CV) and covering letter in the Upload section of the online application. If you have any questions about this vacancy please contact Dr. Adam Reid [air236@cam.ac.uk](mailto:air236@cam.ac.uk).

The closing date for applications is 2nd June 2024.



Photo credit: Wellcome Sanger Institute

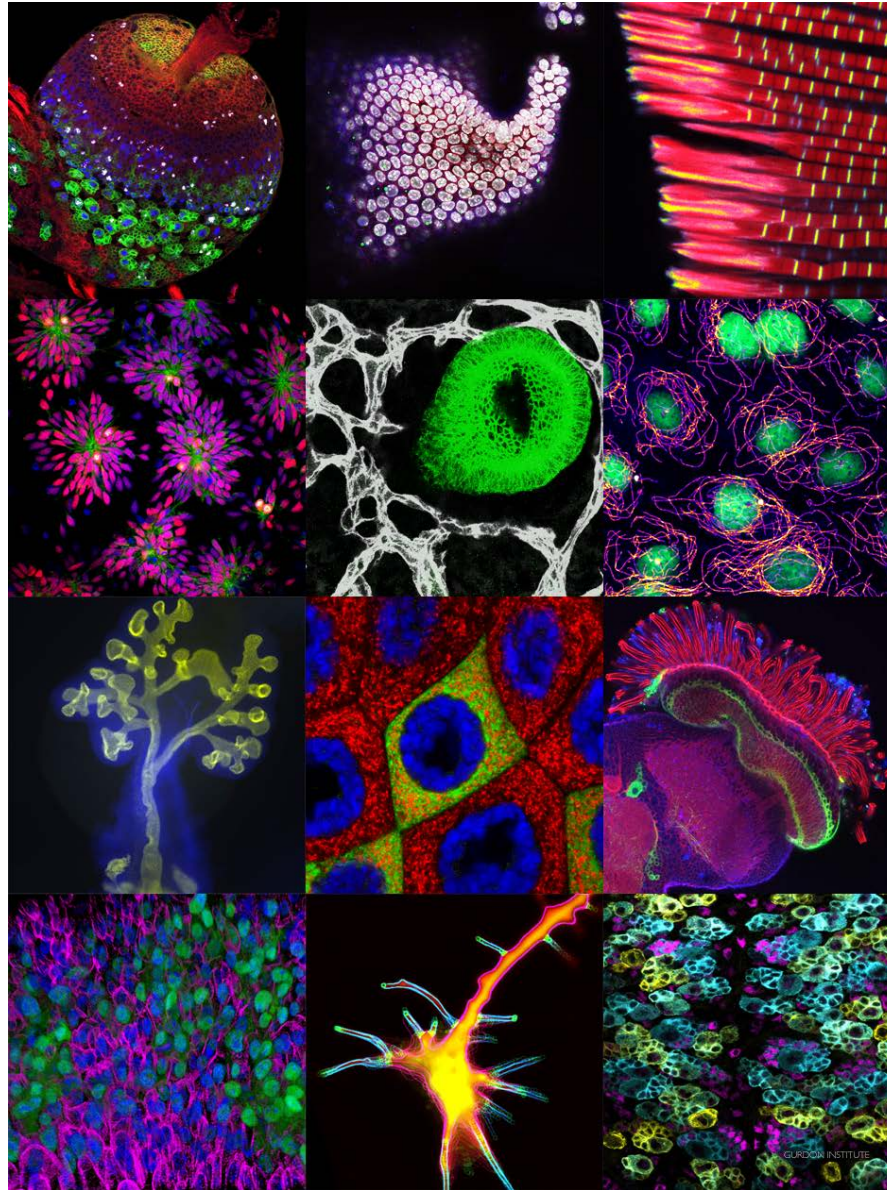
# THE INSTITUTE

Named after our co-founder, Nobel Laureate Sir John Gurdon, the Gurdon Institute is a world-leading centre for research into the biology of development and how normal growth and maintenance go wrong in diseases such as cancer.

More than 240 scientists work in the Gurdon Institute's purpose-built laboratories under sixteen Group Leaders, on projects ranging from breast cancer and brain development to liver regeneration and leukaemia. Many have made pioneering contributions to the fields of basic cell biology, cellular reprogramming, epigenetics and DNA repair.

Institute scientists use a range of model systems such as yeast, nematode worms, fruit flies, frogs, mammalian cells and organoids 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 cancers, and is showing promise in clinical trials against others such as 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 committed to energy efficiency, and to minimising our environmental impact. By May 2017 we had saved five million kWh of electricity during five years of initiatives to reduce consumption, equivalent to a whole year's worth of energy consumption before this began in 2012.

We actively pursue equality and diversity in the workplace, and renewed our Athena SWAN Bronze award in November 2017.

Our major sponsors are Wellcome and Cancer Research UK and Group Leaders are normally funded in large part by one or other organisation.

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 UNIVERSITY

For 800 years the University of Cambridge has championed brilliant minds, facilitating collaboration and encouraging the creation of world-changing ideas.

Cambridge scholars have identified the origins of the universe as well as the very building blocks of life, and the University has been home to the discovery of ground-breaking scientific breakthroughs such as humanized monoclonal antibodies, in-vitro fertilisation, the insulin molecule and DNA.

The University of Cambridge is a world leader in science and technology and its practical application, and maintains a significant tradition in the arts, humanities and social sciences. Its research touches upon, and is relevant to, all aspects of life. The work of the University addresses questions as far-reaching and profound as how to tackle climate change and carbon emissions, the future of healthcare, global inequality and biodiversity.

It is developing the technology of the future with significant research into machine learning, bioengineering and robust digital infrastructure

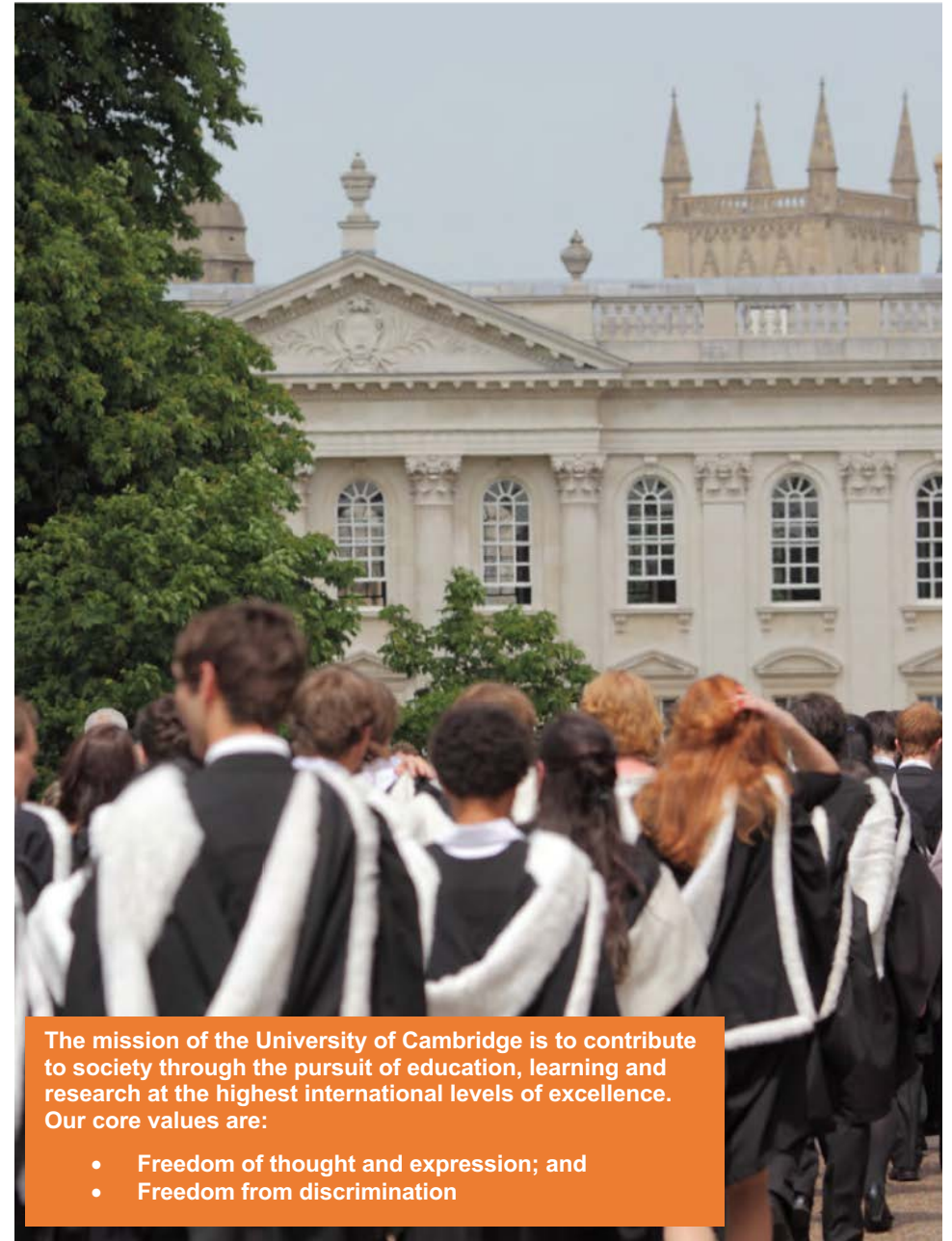
The University of Cambridge is consistently ranked among the top five universities in the world. The University's sustained pursuit of academic excellence is built upon a long history of first-class teaching and research within its distinctive collegiate system. Its principal goal is to continue to be in the foremost rank of research-led universities worldwide.

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 students, provide student accommodation and deliver small group teaching. The University awards degrees and its faculties and departments provide lectures and seminars for students and determine the syllabi for teaching and conducting research.

The University's estate is undergoing the most significant transformation in its history. Cambridge has been able to create a new science and technology campus to the west of the city centre, and is now 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.

Our instinct for seeking out excellence and setting up enduring and mutually beneficial collaborations has led us to establish strategic partnerships across the globe. International partnerships are now an inextricable part of the University's make-up.



**The mission of the University of Cambridge 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**

There is much more information about the University at <http://www.cam.ac.uk/univ/works/index.html> which we hope you will find helpful.



# EQUALITY OF OPPORTUNITY AT THE UNIVERSITY

The University is committed to a proactive approach to equality, which includes supporting and encouraging all under-represented groups, promoting an inclusive culture and valuing diversity. Selection decisions are made based on personal merit and an objective assessment against the criteria required for the post. The University does not treat job applicants or members of staff less favourably than one another on the grounds of sex (including gender reassignment), marital or parental status, race, ethnic or national origin, colour, disability (including HIV status), sexual orientation, religion, age or socio-economic factors.

Further information can be found at <http://www.equality.admin.cam.ac.uk>

There are various diversity networks to help progress equality; these include the Women's Staff Network, the Disabled Staff Network, the Black and Minority Ethnic Staff Network and the Lesbian, Gay, Bisexual and Transgender Staff Network. In addition, the University was ranked in the top 100 employers for lesbian, gay and bisexual (LGB) staff in Stonewall's Workplace Equality Index 2013 and holds an Athena SWAN bronze award at organisation level for promoting women in Science, Technology, Engineering and Medicine.

## Information if you have a Disability

The University welcomes applications from individuals with disabilities and is committed to ensuring fair treatment throughout the recruitment process. It 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.jobs.cam.ac.uk/applying/disability/>

You are encouraged to declare any disability that you may have, and any reasonable adjustments that you may require, when applying for the role. This will enable the University 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 [HR@gurdon.cam.ac.uk](mailto:HR@gurdon.cam.ac.uk). Alternatively, you may contact the HR Business Manager responsible for the department you are applying to via [hrrassistants@admin.cam.ac.uk](mailto:hrrassistants@admin.cam.ac.uk).



# WHAT CAMBRIDGE CAN OFFER

## What the University can offer you

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.

## CAMBens employee benefits

We offer a CAMBens scheme for University employees, providing access to online and in-store shopping discounts and cashback. With more than 2,000 participating retailers, employees can save money on a wide range of household expenses, from groceries and clothes, to holidays and insurance and much more. A range of local discounts are also available, helping employees to save money whilst also supporting local Cambridge businesses and a CAMBens Cycle to Work salary sacrifice schemes is also available, which enables employees to save money on transport costs. A 10% discount rate on the purchase of train season tickets, bulk buy tickets and an interest free travel to work loan are also available for staff of the University of Cambridge.

## 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 emergency family care support via My Family Care. In addition, our Ofsted rated 'outstanding' workplace nurseries, childcare vouchers, a childcare salary sacrifice scheme and a high quality holiday play scheme are available to help support University employees with caring responsibilities. 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.

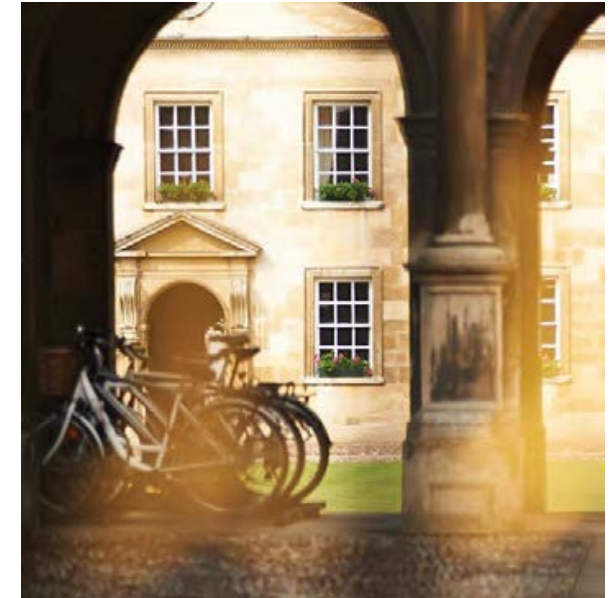
## Your wellbeing

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. There are many societies in Cambridge catering for almost every taste and interest. Whether you want to take part in a sport, participate in music or drama, pursue a hobby, or join a political group, you will almost certainly find that a society exists for this purpose.

The University also hosts the Cambridge Science Festival and Cambridge Festival of Ideas, as well as Open Cambridge weekend, which together attract over 50,000 visitors per year. The festivals are a great opportunity to get your first taste of public engagement, through volunteering, supporting hands-on activities or proposing a talk.

## 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. Payroll giving is also a simple, tax-efficient way for employees to make monthly donations to charity.



# WHAT CAMBRIDGE CAN OFFER

## Relocating to Cambridge

The University Accommodation Service exists to help employees in their search for a rental home in Cambridge. A new University development at North West Cambridge called Eddington offers subsidised rented accommodation to University staff. The development consists of high quality furnished one and two bedroom apartments. For more information about the development and how to apply please visit the website [www.nwcambridge.co.uk](http://www.nwcambridge.co.uk).

The importance of helping individuals settle into a new area is also recognised by the University.

## The Shared Equity Scheme

<https://www.hr.admin.cam.ac.uk/pay-benefits/cambens-employee-benefits/financial/shared-equity-scheme> provides financial assistance to qualifying new members of staff with the purchase of living accommodation, where they have to relocate to take up their appointment. Removal expenses are also available for qualifying new members of staff.

## Development opportunities

We support new employees to settle in through various activities. The encouragement of career development for all staff is one of the University's values and we put this into practice through various services and initiatives. Our Personal and Professional Development Department provides development opportunities and courses for all University employees. These include face-to-face sessions, online learning modules and webinars. Employees may also apply for financial support to undertake training that will lead to a qualification. 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.

The CareerStart@Cam programme also supports employees in assistant staff roles who do not hold higher education qualifications to develop their skills, experience and qualifications.



**Whether it is understanding the molecular basis of neurodegenerative diseases, or helping farmers in India increase their yield, or discovering better ways to live in large cities – I know that what we do in Cambridge affects lives, and livelihoods, the world over.**

*Vice Chancellor Emeritus, Professor Sir Leszek Borysiewicz, 2016*