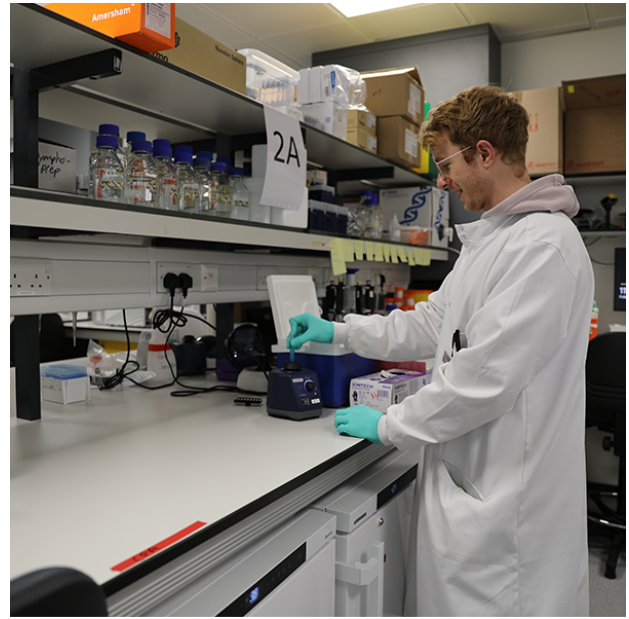


Research Assistant

The Milner Therapeutics Institute (MTI)

CLOSING DATE: 11th December

Job Reference: PR44235



Research Assistant

Salary: Grade 5

(£32,296-£34,866)

The full incremental salary range for the position is advertised in order to demonstrate the progression for the grade. In majority of cases appointments will be made at the Grade minimum; only in very specific circumstances can be a higher salary be offered.

Contract:

2 years fixed-term

Location:Jeffrey Cheah Biomedical Centre
Cambridge Biomedical Campus**Department:**The Milner Therapeutics
Institute (www.milner.ac.uk)**Responsible to:**Head of Computational Biology &
Artificial Intelligence**Working Pattern:**Full Time – We welcome
applications from individuals who
wish to work flexibly or who are
seeking a hybrid working model.**Purpose of the role**

This is a new role at the Milner Therapeutics Institute (MTI) within the Computational Biology and Artificial Intelligence (AI) group.

The Milner Therapeutics Institute (MTI) is a purpose-built research institute at the University of Cambridge. The overarching vision of the MTI is to transform pioneering science into therapies. The MTI is breaking new ground in academic/business interactions and demonstrates a world-leading model of start-up companies, academics and pharma working side by side at the bench. The MTI environment offers a unique opportunity to work at the interface of academia and business, applying ground-breaking technologies to drug discovery and patient treatment.

In partnership with the Korean Research Institute of Bioscience and Biotechnology (KRIBB), MTI is engaged in an ambitious AI-based drug screening project aimed at supporting gene and cell therapy advancements. This collaborative project will leverage AI to develop screening tools for gene therapy vector materials, build a comprehensive digital bank of these materials, and predict transcription and translation processes to enhance gene therapy efficiency. This project presents an exceptional opportunity to work at the interface of computational biology and biopharmaceutical development.

The role holder will need to hold a Master's degree in bioinformatics, computational biology, biology, or a related scientific discipline. They should have foundational knowledge in computational analysis of biological or clinical data, and the ability to work collaboratively and communicate effectively within a multidisciplinary team. The full role specifications can be found in the Further Particulars document.



Key Responsibilities

Research and Scholarship

Develop research objectives and proposals for the KRIBB collaborative project, including:

- Assisting in the development and refinement of AI-based tools for screening gene therapy vector materials, including tissue-specific promoters and enhancers.
- Supporting the construction of a digital bank to catalogue gene therapy vector components, enabling researchers to access and utilize key information.
- Contributing to the development of predictive models for transcription and translation processes to improve gene therapy specificity and efficiency.
- Organizing and analyzing multi-omics data from diverse sources to support AI model development and refinement.

Conduct individual and collaborative research projects:

- Maintain and update knowledge in bioinformatics and computational biology, particularly in AI applications in gene therapy.
- Translate insights from computational biology into practical applications within the MTI-KRIBB project framework.
- Participate in preparation of reports and presentations on research progress and findings.

Planning and Organising

- Plan and manage own research activity in collaboration with team members.
- Contribute to KRIBB's strategic goals by setting standards for data analysis and management.
- Support the digital bank's development and ensure data quality for efficient access by researchers and collaborators.

Liaison and networking

Working with KRIBB and academic institutions:

- Prepare scientific reports and updates for the KRIBB team.
- Assist in coordinating data sharing and joint documentation efforts with KRIBB collaborators.

IT and bioinformatics support

- Provide support in the use and maintenance of bioinformatics tools and databases within the project.
- Assist technical staff, students, and research staff in the use of computational tools relevant to the KRIBB project.
- Facilitate communication between the MTI team and KRIBB collaborators for seamless data integration and software compatibility.

Miscellaneous

- Undertake additional tasks as required for the smooth running of the project, including participation in meetings, contributing to technical discussions, and supporting data management needs.

Person Specification

Criteria	Essential	Desirable
<i>Education</i>		
A master's degree in bioinformatics, computational biology, biology, or a related scientific discipline.	✓	
<i>Specialist Skills & Knowledge</i>		
Foundational knowledge in computational analysis of biological or clinical data	✓	
Statistical background in machine-learning, survival or Bayesian techniques	✓	
Familiarity with statistical software and programming languages such as R and Python.	✓	
Basic understanding of multi-omics data analysis, including RNA-seq and other sequencing technologies.	✓	
Good theoretical knowledge of DNA & RNA bioinformatics	✓	
Working knowledge of LINUX operating systems	✓	
Experience with relational databases, such as MySQL or PostgreSQL, is advantageous.	✓	
Experience with data visualisation	✓	
Experience with front-end web development and associated languages/frameworks	✓	
Experience in gene therapy.		✓
Experience with machine learning methods and data processing techniques.		✓
Interest in or experience with AI applications in gene therapy or drug screening.		✓
Exposure to software development for data integration or visualization is a plus.		✓

Person Specification

Criteria	Essential	Desirable
<i>Experience</i>		
Interest in advancing practical applications in drug discovery or gene therapy through data-driven methods.	✓	
<i>INTERPERSONAL & COMMUNICATION SKILLS</i>		
Ability to work collaboratively and communicate effectively within a multidisciplinary team.	✓	
Strong organizational and data management skills, with attention to detail.	✓	
Ability to translate computational needs into practical applications for research users.	✓	
<i>ADDITIONAL REQUIREMENTS</i>		
Regularly present/report on project progress, including potential challenges and solutions.	✓	
Contribute to the publication of research findings and the development of computational tools where applicable.	✓	

Behavioural Attributes

This section summarises the behavioural attributes (or competencies) that we expect the role holder to be able to demonstrate and at what level.

Full definitions are at: <https://www.hr.admin.cam.ac.uk/policies-procedures/behavioural-attributes>

Please review these and provide specific examples in your application of how you have demonstrated these attributes in your work, education or other experience.

Attribute	Level	Description
Valuing Diversity	A	Considers and respects the ideas, circumstances and feelings of others. Treats everyone with fairness and respect, adhering to the principles of diversity and inclusion.
Communication	C	Communicates effectively and appropriately with a variety of stakeholders including external partners, teams, colleagues and contacts.
Relationship Building	C	Maintains working relationships with existing partners. Works effectively within a team or work group as appropriate.
Achieving Results	C	Solves work-related problems effectively. Provides support and contributes to the performance of the institution. Manages own workload and where applicable, the workload of others.
Strategic Focus	D	Demonstrates awareness of the University's direction; understands and supports its mission.
People Development	C	Promotes and facilitates the development of others.
Negotiating and Influencing	D	Persuades and influences colleagues through involvement and consultation.
Innovation and Change	C	Develops and promotes new ways of working to improve performance within team and institution.

Milner Therapeutics Institute (MTI)

The Milner Therapeutics Institute (MTI) is a purpose-built research institute at the University of Cambridge. The overarching vision of the MTI is to transform pioneering science into therapies. The MTI is breaking new ground in academic/business interactions and demonstrates a world-leading model of start-up companies, academics and pharma working side by side at the bench. The MTI environment offers a unique opportunity to work at the interface of academia and business, applying ground-breaking technologies to drug discovery and patient treatment.

The Institute houses: [in-house research teams](#), including the [MRC-AstraZeneca-University of Cambridge Functional Genomics Screening Laboratory \(FGSL\)](#), and the [Frame Shift Bio-incubator](#).

The Milner's in-house research teams focus on target identification and validation through artificial intelligence, machine-learning, functional genomics and the development of human in vitro models. Our aim is to investigate and validate signatures of disease to uncover new high confidence targets for drug discovery.

The Institute is also the global headquarters for the [Milner Therapeutics Consortium](#) and Global Alliance, which consists of 82 organisations and connects academia and business to enable collaborative research. Our [events programme](#) is designed to facilitate interactions across this network, and includes an [annual Symposium](#) that has grown to over 850 attendees, [a seminar series](#) and bespoke workshops.

The MTI is based at the Jeffrey Cheah Biomedical Centre on the Cambridge Biomedical Campus, which also houses the Cambridge Stem Cell Institute and the Cambridge Institute of Therapeutics Immunology and Infectious Disease (CITIID).

Milner Cultural Values

Our Mission:

Bringing discoveries to life: We pioneer science into therapies by catalysing partnerships between academia and industry

Culture:

noun | cul·ture | \ˈkəl-çər\

the set of shared attitudes, values, goals, and practices that characterizes an institution or organization

Our Cultural Values:

All employees at the Milner Therapeutics Institute agree to uphold the following key values in order to build, develop and foster a positive and productive work environment.

1. Embracing uniqueness

There is no other department or institution doing what we do at the Milner Therapeutics Institute. Our culture is forward-thinking and adaptive, and team members are encouraged to be actively involved in MTI strategy.

2. Clear and respectful two-way communication

Team members understand that they each have the power to shape a great working culture through clear and respectful communication. Team members are given regular opportunities to identify issues, address them, and put guidelines in place to create a more positive work environment.

3. Equality/diversity

We believe that diversity is the key to great ideas and that having team members from different walks of life is essential to a dynamic work environment. Team members respect each other for their differences and where communication issues arise, actively seek support to identify and remedy this early on and in a respectful way.

4. Leading by example

Team members understand and appreciate that their own attitude/words have impact on others, even if sometimes the intent is innocent. Team members are self-reflective and act as representatives of Milner cultural values and lead by example to other/new team members.

5. Work-life balance

The MTI culture respects healthy work-life balance, and is open to discussion around flexible working including compacted hours, hybrid working, flexi-time etc. This should always be discussed with line management but

opportunities for communication around this should always be open. Milner culture is that this level of flexibility works two ways and that respectful communication is key to achieving this.

6. Room for mistakes

Team members adopt a ‘fail fast, learn fast’ approach, meaning the MTI is a safe space for mistakes and failure. Mistakes should be met with empathy at all levels of seniority and team members are supported to learn and improve.

7. Celebrating successes

Team members are encouraged to communicate their own successes and appropriate celebrations will be funded by the MTI wherever possible.

8. Supporting each other

Team members recognise that we are all on the same side, working toward the same mission.



Terms of Appointment

Tenure and probation

Appointments will be made on a 2-year fixed-term basis due to limited funding.

Appointments will be subject to satisfactory completion of a 6-month probationary period.

Hours of Work and Working Pattern

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

Pension

You will automatically be enrolled to become a member of USS (Universities Superannuation Scheme) – a defined benefits 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 41 days inclusive 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.

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.

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. Alternatively, you may contact the MTI HR Team who are responsible for recruitment to this position via: hr@milner.cam.ac.uk



The University

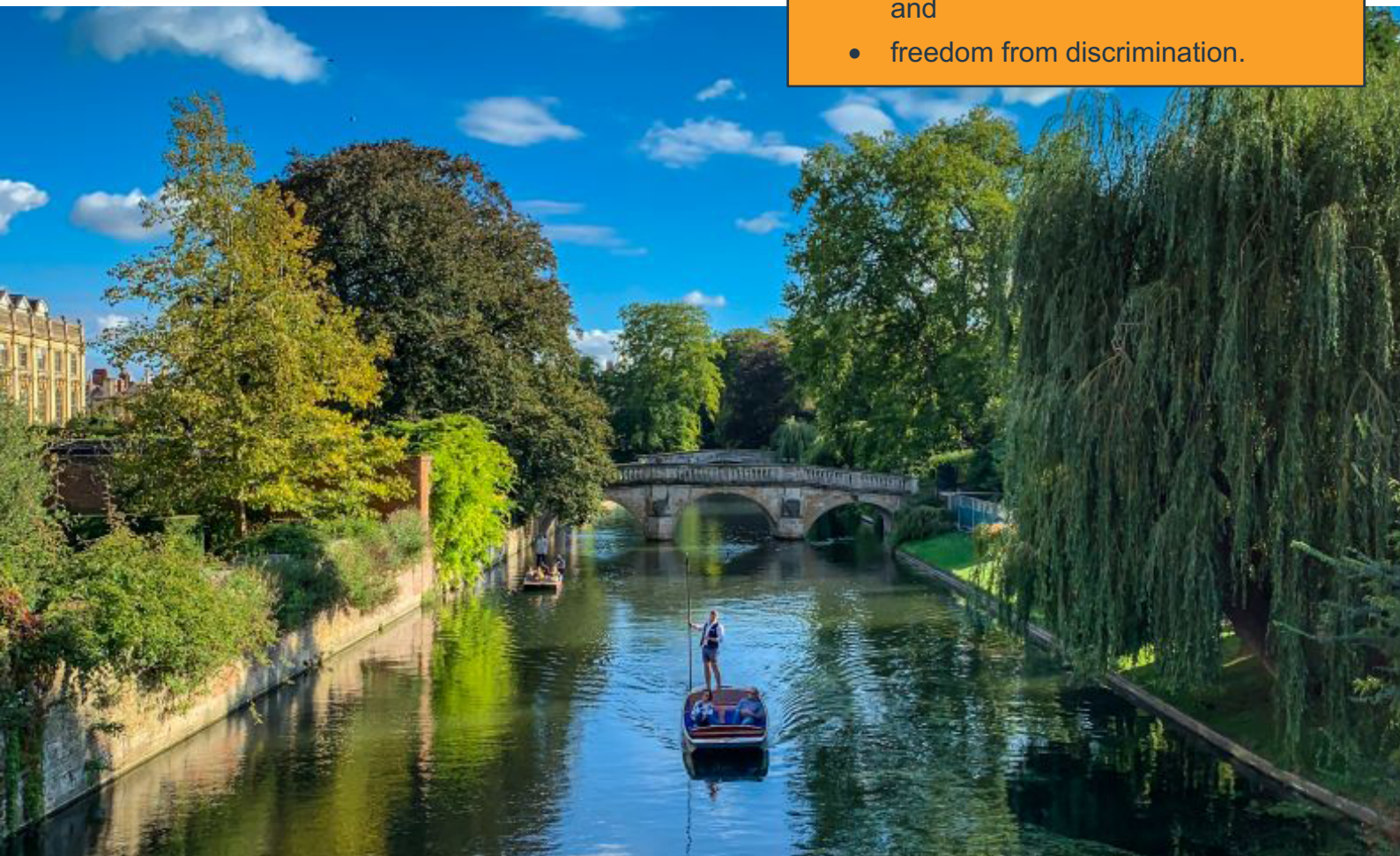
The University of Cambridge is one of the world's oldest and most successful universities. We are a renowned centre for research, education, and scholarship that makes a significant contribution to society. The University is consistently ranked amongst the top universities in the world. Our affiliates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

Our sustained pursuit of academic excellence is built on a long history of first-class 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 the West Cambridge site, the North West Cambridge development and the growth of the Biomedical Campus in the south of the city. The North West Cambridge development includes the opening of a primary school – the first in the UK to be managed by a University. So we are 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 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.

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 a 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 18,000 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 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.



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 networks for women, black and minority ethnic and lesbian, gay, bisexual and transgender staff. More details are available here: <http://www.equality.admin.cam.ac.uk/>

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

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.

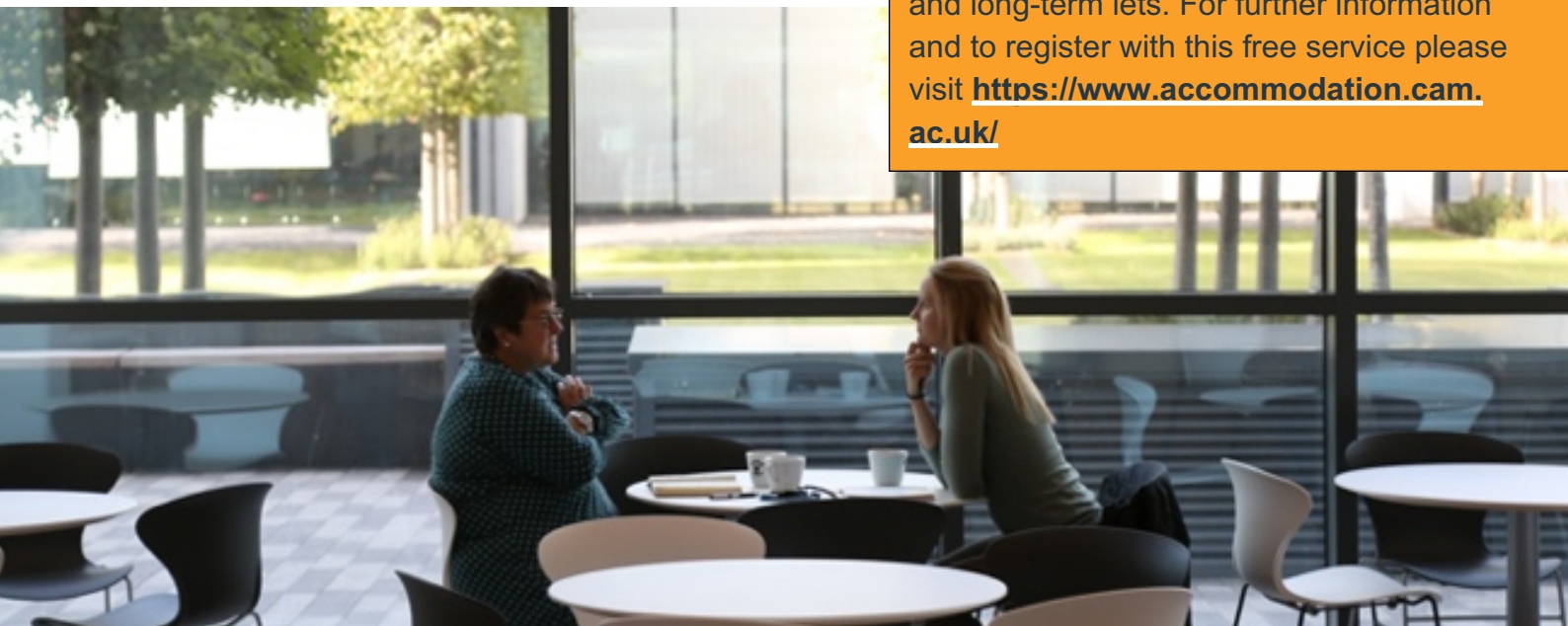
If you prefer the faster pace of life, London is a 45 minute train journey away. For those travelling from overseas, Stansted Airport is just 45 minutes away and Heathrow Airport under 2 hours away. The University is a short distance from a host of other attractions such as Ely Cathedral, Newmarket Races 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/>. 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. Payroll giving is also a simple, tax-efficient way for employees to make monthly donations to charity.



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 scheme 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.



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 emergency family care support via My Family Care.

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 Office of Postdoctoral Affairs supports the postdoctoral community within Cambridge. Further details are available here: <https://www.opda.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. 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.

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. Apprenticeship programmes are also available to support employees to develop their skills, experience and qualifications.



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.

For an informal discussion in confidence please contact Dr Namshik Han, Head of Computational Biology & AI on nh417@cam.ac.uk

The closing date for applications is midnight 11th December.

Interview will take place on the w/c 16th December although this could be subject to change.

