Unestablished Lecturer in Statistics (Fixed Term)
Department of Pure Mathematics and Mathematical Statistics

March 2018
The role

**Purpose of the role**
Applications are invited for an Unestablished (Temporary) University Lectureship in Statistics to commence on 1st October 2018 or by agreement. Funding for this post is available for 3 years. Appointment will be made at an appropriate point on the University scale. Candidates should hold a PhD or equivalent in statistics, mathematics or a closely related subject, and have an outstanding record of research in mathematical aspects of data science. Preference will be given to candidates with a research focus in statistics.

This Lectureship is based in the Statistical Laboratory and is affiliated with the Cantab Capital Institute for Mathematics of Information (CCIMI) which is hosted within the Faculty of Mathematics. CCIMI accommodates research activity on fundamental mathematical and statistical problems and methodology for understanding, analysing, processing and simulating data.

**Key responsibilities**
The responsibilities of a University Lecturer are to engage in the teaching and research programmes of the Department and University under the direction of the Director of the Statistical Laboratory. Lecturers are expected to participate in administration and examining.

The expected total teaching load for this position will conform to the normal load for Lecturers within the department (approximately two courses or 48 lectures per year, being typically, but not invariably, one undergraduate course and one Masters course).

In exceptional circumstances, it may be possible to offer a supplement to the salary range stated for this role of up to £10,000. Any such supplement would be awarded on the basis of a demonstrable history of exceptional achievement and is entirely at the discretion of the University. Extra remuneration may also be received for additional College responsibilities.

Further general information regarding the Department of Pure Mathematics and Mathematical Statistics can be found at [www.dpmms.cam.ac.uk](http://www.dpmms.cam.ac.uk) and specific information about the Statistical Laboratory can be found at [www.statslab.cam.ac.uk](http://www.statslab.cam.ac.uk).

Information on initial activities of the Cantab Capital Institute for Mathematics of Information can be found at [www.ccimi.maths.cam.ac.uk](http://www.ccimi.maths.cam.ac.uk).

Informal enquiries should be directed in the first instance to either Professor Richard Samworth (Statistical Laboratory) or Dr Carola-Bibiane Schönlieb (Director of the Cantab Capital Institute for the Mathematics of Information via [LF15240@maths.cam.ac.uk](mailto:LF15240@maths.cam.ac.uk)).

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**Salary:**
£39,992 -£50,618

**Contract:**
Fixed term (3 years)

**Location:**
Centre for Mathematical Sciences

**Department:**
Pure Mathematics and Mathematical Statistics

**Responsible to:**
Director of the Statistical Laboratory

**Working pattern:**
Full-time
Person specification

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<th>Education</th>
<th>Essential</th>
<th>Desirable</th>
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<th>Academic</th>
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<td>A developing bibliography of research publications</td>
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<td>Demonstrate a firm commitment to teaching at both the undergraduate and postgraduate levels</td>
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<td>A track record of securing research funding</td>
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<td>Willing to take a leading role in the supervision of Research Students</td>
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<td>An interdisciplinary and collaborative research approach</td>
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<th>Leadership experience and achievements</th>
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<td>Willingness to undertake management and administrative duties</td>
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<td>Proven ability to lead and inspire a team and work with vision and foresight</td>
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The Department of Pure Mathematics and Mathematical Statistics (DPMMS) is one of the two Mathematics Departments in Cambridge, the other being the Department of Applied Mathematics & Theoretical Physics. The Statistical Laboratory is a sub-department of DPMMS. Together with the Isaac Newton Institute, the two departments occupy the Centre for Mathematical Sciences (CMS). The CMS is a beautiful development west of the city centre and close to other science departments. The accommodation is of the highest quality and was designed by mathematicians and architects to facilitate the study of mathematics. It comprises offices, meeting rooms, seminar/lecture rooms, and common rooms, and is equipped with an excellent computer network. It may be viewed at https://www.dpmms.cam.ac.uk/about/photos/

DPMMS comprises at present about 42 tenured staff, more than 40 post-doctoral members of the Department and more than 80 PhD students. It gained an excellent quality profile in the 2014 Research Excellence Framework (see: www.ref.ac.uk).

The Faculty holds an Athena SWAN Bronze award for promoting women in Science, Technology, Engineering and Medicine and supports the aims of the Charter and the LMS Good Practice Scheme in seeking to advance women's careers in the mathematical sciences. New staff are mentored and all staff are offered advice on career and promotion opportunities.

Teaching

DPMMS is responsible with DAMTP for teaching the undergraduate and Masters courses in mathematics. The student body is quite remarkable in size and quality, and is a privilege to teach. We admit in excess of 230 new mathematics undergraduates each year, leading to graduation after three or four years of study. First and second year lectures are generally held in the centre of Cambridge, a short distance from the CMS, while third-year lectures are held in the CMS. Each student is admitted to the University and also to one of the Colleges (of the University). Undergraduates generally reside in their College, and are taught there by subject supervisors. Undergraduate teaching takes place during three 8/9-week terms; in the final term of the academic year, lecturing occupies the first 4 weeks, and examining the remainder. The teaching of undergraduates in small groups is an essential element of the success of mathematics education in Cambridge and is a College responsibility. The fourth-year Masters (also known as Part III of the Mathematical Tripos course) attracts a substantial number of strong students from all parts of the world. Approximately 250 students enrol each year, the majority of whom come from outside the United Kingdom. A very wide range of graduate level courses are given; in excess of 72 this academic year ranging across the whole of Pure and Applied Mathematics, Statistics, and Theoretical Physics.

Further Information about Mathematics in Cambridge

Further information about the Department may be found via the Departmental website at www.dpmms.cam.ac.uk/; Further information about the Faculty of Mathematics in Cambridge is also available at www.maths.cam.ac.uk/.

The Cantab Capital Institute for the Mathematics of Information performs data science research at the highest international level, aiming to extract relevant information from large- and high-dimensional data with predictable certainty. The aim of the Institute is to advance data science by developing fundamental mathematical techniques, involving mathematical expertise ranging from statistics, applied and computational analysis, to topology and discrete geometry.

The Institute will also focus on interdisciplinary engagement with, for example: economists and social scientists, on questions about financial markets and the internet, physicists and engineers on software and hardware development questions in the context of security, imaging and structured data processing, as well as biomedical scientists on data science in healthcare and biology. Further information for CCIMI is available at: www.ccimi.maths.cam.ac.uk.
The School

The School of the Physical Sciences is one of six Schools making up the academic work of the University. It covers Astronomy, Chemistry, Earth Science, Geography, Materials Science and Metallurgy, Mathematics and Physics.

The School’s aim is to contribute to our understanding of the physical world through excellence in observational, theoretical and experimental science and to extend quantitative, qualitative and combined methodologies to address problems in the fields of biology, technology, medicine, social science and the humanities. In pursuit of these goals, the School coordinates objectives in research, teaching, and infrastructure.

About the school
The School of the Physical Sciences comprises the following Departments:

- Applied Mathematics and Theoretical Physics (DAMTP)
- Chemistry
- Earth Sciences
- Geography (including the Scott Polar Research Institute)
- Institute of Astronomy
- Issac Newton Institute of Mathematical Sciences
- Materials Science and Metallurgy
- Physics (Cavendish Laboratory)
- Pure Mathematics and Mathematical Statistics (DPMMS)

The School is responsible for allocating core funds to departments and provides broad strategic focus across its constituent departments in a number of areas including; research activity, undergraduate and graduate education, estate needs, fundraising and human resources.

As part of the University’s annual planning cycle, the School prepares a financial and academic plan which sets out strategic objectives, determines budgets as well as the flow of resources to departments. The School manages a wide range of administrative activities and projects across its departments and works alongside other Schools to further interdisciplinary research.

The School has over 1500 members of staff, over 3000 students and an annual budget of over £100 million.

The governing body of the School of the Physical Sciences is the Council of the School (CSPS), which is chaired by the Head of the School and meets twice a term. The arrangements for this body are set out in Statutes and Ordinances.

The School undertakes certain activities to coordinate education at both undergraduate and graduate level. It provides an umbrella in which strategic education issues can be addressed including: responses to relevant consultations, implementing School policy through coordination with departments and University bodies, providing a forum to facilitate best practice and raise awareness and encourage collaboration between departments within the School, and with other Schools.
Terms of appointment

Tenure and probation
Appointment will be made on a fixed-term basis for three years. Appointments will be subject to satisfactory completion of a probationary period which will be set dependent on the length of tenure.

Hours of Work and Working Pattern
The appointment is full-time working Monday-Friday.

Pension
You will automatically be enrolled to become a member of USS (Universities Superannuation Scheme) – a defined benefits pension scheme. If you are already a member of the NHS Pension scheme, you may be eligible to continue in the scheme and should contact the Pensions section of the University.

For further information please visit: www.pensions.admin.cam.ac.uk/.

Annual leave
Full time employees are entitled to annual paid leave of 6.6 weeks (or 33 days for those working full time), plus public holidays. The holiday entitlement will normally be taken outside the University Full Term.

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.

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 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, Ms Julie Bazin, who is responsible for recruitment to this position, on 01223 764289 or by email on hr-office@maths.cam.ac.uk. Alternatively, you may contact the HR Business Manager responsible for the department you are applying to via hrenquiries@admin.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.
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 £1.66 billion. Research income, won competitively from the UK Research Councils, the European Union (EU), major charities and industry, exceeds £400 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.

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. 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.

Our ideas and innovations have shaped the world. Our campaign, 'Dear World... Yours, Cambridge', will raise £2 billion to help us shape all our futures.
Working at the University

Working at Cambridge you will join a diverse, talented and innovative community, with more than 18,000 students and over 11,000 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. Furthermore, the University’s Athena SWAN award recognises and celebrates good practice in recruiting, retaining and promoting women. 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 has signed up to the Race Equality Charter, a notional framework for improving the representation, progression and success of minority ethnic staff and students within higher education.

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.

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.

Further information about attractions in and around Cambridge can be found at visit Cambridges, the official tourism website for the city.
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.

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. CAMbens Cars and CAMbens Cycle to Work salary sacrifice schemes are also available, which enable 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 highly regarded workplace nurseries, childcare vouchers, a childcare salary sacrifice scheme and a high quality holiday pay 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. 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.
What Cambridge can offer

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.

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

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. The University has introduced a Rental Deposit Loan Scheme to support new starters and existing employees with the set up costs of renting privately in the Cambridge area: https://www.hr.admin.cam.ac.uk/pay-benefits/cambens-employee-benefits/relocation-housing/rental-deposit-loan-scheme

Equality & diversity
The University has a vibrant and varied community. We support and encourage under-represented groups and we value diversity. We welcome applications from individuals with disabilities. Our recruitment and selection procedures follow best practice. 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/

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
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.

Informal enquiries are welcomed and should be directed to:

HR Office
Tel: 01223 760394
Email: LF15240@maths.cam.ac.uk

If you have any queries regarding the application process please contact LF15240@maths.cam.ac.uk.

The closing date for applications is 10 May 2018