

# **Job Description**

Job title	Florence Nightingale Bicentenary Fellow in Statistics (four posts)
Division	Mathematical, Physical and Life Sciences
Department	Statistics
Location	24-29 St Giles', Oxford, OX1 3LB
Grade and salary	Grade 8: £45,585-£54,395 (with a discretionary range to £59,421) per annum
Hours	Full time
Contract type	Fixed-term. Four posts are available, two for five years (one ending no later than September 2028, the other ending no later than December 2028) and two for two years (ending no later than August 2026).
Reporting to	Head of Department
Vacancy reference	168775
Additional information	These roles are advertised at a grade 8; however, we would be willing to consider candidates with potential but less experience who are seeking a development opportunity, for which an initial appointment would be at grade 7 (£38,205 - £44,263 per annum with a discretionary range to £48,350) with the responsibilities adjusted accordingly. This would be discussed with applicants at interview/appointment where appropriate.

# Job description

#### The role

The Department of Statistics is recruiting to four Florence Nightingale Bicentenary Fellow posts. These are career development positions intended to carry around half the teaching load of an ordinary Oxford faculty position. The successful candidates would be expected to take up their role by 1 September 2024 at the latest. Funding for research costs of £2,000 per year will be available.















The post holders will join the dynamic and collaborative Department of Statistics. The Department carries out world-leading research in computational statistics, machine learning, theoretical statistics, and probability as well as applied statistics fields, including statistical finance (including arbitrage and market microstructure), statistical and population genetics, bioinformatics and statistical epidemiology. The Department moved to a prominent and extensively-renovated building in the centre of Oxford in 2015, and this move has further enhanced our vibrant research environment. We possess state-of-theart facilities for our teaching and research, including two lecture theatres. Research from the Department of Statistics and the Mathematical Institute in Oxford was submitted together for the UK's most recent national research assessment exercise, the Research Excellence Framework (REF) 2021. Overall, 78% of our submission was judged to be 4\* (the highest score available, for research quality that is world-leading in terms of originality, significance, and rigour). This outstanding result is a testament to the breadth, quality and impact of the research produced by colleagues in our two departments, and the outstanding environment in which they work, supported by our excellent professional services staff.

The successful candidates will hold a doctorate in the field of statistics or a related subject. The Department seeks candidates with interests in any field of Statistical research, which integrate well with research by current members of the department. We aim to hire two candidates with interests in the areas of machine learning, optimization and/or statistical learning theory. All successful candidates will be outstanding individuals who have the potential to become leaders in their field. They will have the skills and enthusiasm to teach at undergraduate and graduate level within the Department of Statistics, to provide pastoral care to students, and to supervise MSc student projects. They will carry out and publish original research.

If you would like to discuss this post and find out more about joining the academic community in Oxford, please contact Christl Donnelly (<a href="mailto:christl.donnelly@stats.ox.ac.uk">christl.donnelly@stats.ox.ac.uk</a>) or Patrick Rebeschini (<a href="mailto:patrick.rebeschini@stats.ox.ac.uk">patrick.rebeschini@stats.ox.ac.uk</a>). All enquiries will be treated in strict confidence and will not form part of the selection decision.

The Department of Statistics holds an Athena SWAN Silver Award in recognition of its efforts to introduce organisational and cultural practices that promote gender equality in SET and create a better working environment for both men and women. Information about Athena Swan in MPLS can be found at <a href="http://www.mpls.ox.ac.uk/equality-and-diversity/athena-swan">http://www.mpls.ox.ac.uk/equality-and-diversity/athena-swan</a>.

## Responsibilities

- Initiate and pursue an independent programme of research of the highest academic standards within the Department of Statistics.
- Regularly write research articles for peer-reviewed journals, book chapters, and reviews. Present
  papers at national and international conferences and give seminars to disseminate research
  findings.















- Train other members of the department on specialist methodologies or procedures.
- Manage own research project and if required raise research funds through grant applications.
- Share responsibility for shaping the research group's plans and the writing of group-funding applications for new research projects.
- Represent the research group at external meetings/seminars, either with other members of the group or alone.
- Carry out collaborative projects with colleagues in partner institutions and research groups.
- Carry out teaching at undergraduate and graduate level, including lectures, classes, demonstrations, marking of exam papers and project supervision, under the direction of the Head of Department.
- Act as Departmental supervisor for up to four MSc students, provide pastoral care, and participate in the MSc admissions and exams processes.
- Participate in the administrative work of the department through one of its committees.

#### Selection criteria

#### **Essential selection criteria**

- Hold a relevant PhD/DPhil with post-qualification research experience in statistics or a related subject. For Grade 7, the successful applicant is not required to have post-qualification research experience, but will hold or be close to completion of a relevant PhD/DPhil.
- Strong publication record appropriate to their career stage and familiarity with the existing literature and research in the field.
- Possess sufficient specialist knowledge in their discipline to develop research projects and methodologies.
- Ability to independently plan and manage a research project, including if required a research budget.
- Ability to raise research funds through making grant applications.
- Ability to teach effectively, both at undergraduate and graduate level, a range of topics within the field of Statistics and Mathematics.
- Ability to supervise graduate students.















- Excellent interpersonal skills necessary for undertaking teaching and the pastoral care of students.
- A strong record of communicating results effectively, both in person and on paper.
- Ability and willingness to undertake administrative tasks in a timely manner.
- A commitment to promoting equality, diversity and inclusion

#### Desirable selection criteria

- Experience of teaching, at both the undergraduate and graduate level, a range of topics within the field of Statistics and Mathematics.
- Experience of supervising students.
- Experience of making grant applications
- Experience of research collaborations at national and international level

# **Pre-employment screening**

#### Standard checks

If you are offered the post, the offer will be subject to standard pre-employment checks. You will be asked to provide: proof of your right-to-work in the UK; proof of your identity; and (if we haven't done so already) we will contact the referees you have nominated. You will also be asked to complete a health declaration so that you can tell us about any health conditions or disabilities for which you may need us to make appropriate adjustments.

Please read the candidate notes on the University's pre-employment screening procedures at: https://www.jobs.ox.ac.uk/pre-employment-checks

### **About the University of Oxford**

Welcome to the University of Oxford. We aim to lead the world in research and education for the benefit of society both in the UK and globally. Oxford's researchers engage with academic, commercial and cultural partners across the world to stimulate high-quality research and enable innovation through a broad range of social, policy and economic impacts.

We believe our strengths lie both in empowering individuals and teams to address fundamental questions of global significance, while providing all our staff with a welcoming and inclusive workplace that enables everyone to develop and do their best work. Recognising that diversity is our strength, vital for innovation















and creativity, we aspire to build a truly diverse community which values and respects every individual's unique contribution.

While we have long traditions of scholarship, we are also forward-looking, creative and cutting-edge. Oxford is one of Europe's most entrepreneurial universities and we rank first in the UK for university spinouts, and in recent years we have spun out 15-20 new companies every year. We are also recognised as leaders in support for social enterprise.

Join us and you will find a unique, democratic and international community, a great range of staff benefits and access to a vibrant array of cultural activities in the beautiful city of Oxford.

For more information, please visit <a href="https://www.ox.ac.uk/about/organisation">www.ox.ac.uk/about/organisation</a>.

### The Department of Statistics

The Department of Statistics at Oxford is a world-leading centre for research with a broad portfolio that covers pure theory, the development of innovative methods to analyse and understand data, and their applications to scientific and societal problems. Research is loosely structured around seven interconnected research groups: Statistical Theory and Methodology; Computational Statistics and Machine Learning; the Oxford Protein Informatics Group; Probability; Statistical Genetics and Epidemiology; Economics and Population Statistics; and Computational Biology and Bioinformatics. The Department has recently undergone a period of rapid expansion, growing from 21 submitted researchers in the 2014 Research Excellence Framework exercise to 32 in REF 2021.

The Department relocated to a newly renovated building on St Giles' in the heart of the University of Oxford in 2015. The building provides state-of-the-art teaching facilities and modern space to facilitate collaboration and integration, creating a highly visible centre for Statistics in Oxford. Since moving to St Giles', Faculty have secured over £14m in research funding from a variety of funders including UKRI, the Wellcome Trust, the European Commission, NIH, and industrial partners from sectors ranging from services to pharma. Research from the Department of Statistics and the Mathematical Institute in Oxford was submitted together for the UK's most recent national research assessment exercise, the Research Excellence Framework (REF) 2021. Overall, 78% of our submission was judged to be 4\* (the highest score available, for research quality that is world-leading in terms of originality, significance, and rigour). This outstanding result is a testament to the breadth, quality and impact of the research produced by colleagues in our two departments, and the outstanding environment in which they work, supported by our excellent professional services staff.

The Department's research excellence has been recognised both collectively, through success in REF 2021, and individually. Awards include Fellowships of the Royal Society to Christl Donnelly and Alison Etheridge; FMedSci and the Zoological Society of London's Frink Award to Christl Donnelly; the Royal Statistical Society Guy Medal in Bronze to Chris Holmes, and the Guy Medal in Silver to Arnaud Doucet; the Weldon Memorial Prize, the Francis Crick Prize Lecture, and the Genetics Society Balfour Prize to Simon Myers. Arnaud Doucet, Alison Etheridge, Christina Goldschmidt, Gesine Reinert and Judith















Rousseau are all Fellows of the Institute of Mathematical Statistics, and Alison Etheridge is a former President. Christl Donnelly is the Vice President for External Affairs of the Royal Statistical Society.

The Department is home to Oxford University Statistical Consulting, which provides comprehensive statistical consultancy services to both internal departments and external businesses. It operates across a wide range of sectors, and offers experience in all aspects of data-based research. The service includes two Research Software Engineers who take new and existing software platforms from the Oxford Protein Informatics Group, and provide support to industry to maximise their impact.

The Department of Statistics offers an undergraduate degree (BA or MMath) in Mathematics and Statistics and an MSc in Mathematical Science (OMMS), both joint with the Mathematical Institute, and an MSc in Statistical Science, as well as a lively and stimulating environment for postgraduate researchers (DPhil or MSc by Research). The Department is involved in four Centres for Doctoral Training (CDTs): the EPSRC CDT in Modern Statistics and Statistical Machine Learning (led by Imperial), the EPSRC CDT in Sustainable Approaches to Biomedical Science: Responsible and Reproducible Research, the EPSRC CDT in Mathematics of Random Systems (with the Mathematical Institute and Imperial), and the EPSRC CDT in Health Data Science (with the Big Data Institute). The Department is also part of the National Academy for PhD Training in Statistics, which provides training in fundamental areas of Statistics and Applied Probability. Our graduate students go on to varied careers, the most popular being academia (45%) and the technology (nearly 30%) and finance sectors.

The Department maintains close links with interdisciplinary centres such as the Wellcome Centre for Human Genetics and the Big Data Institute. Many Faculty have associations with the Alan Turing Institute (the Turing), the UK's national centre for data science, in which Oxford is a founding partner, and Chris Holmes is Programme Director for Health and Medical Sciences at the Turing.

The Department of Statistics holds a silver Athena Swan award to recognise advancement of gender equality: representation, progression and success for all.

For more information please visit: www.stats.ox.ac.uk.

#### The Mathematical, Physical and Life Sciences Division

The Mathematical, Physical, and Life Sciences (MPLS) Division is one of the four academic divisions of the University. Oxford is widely recognised as one of the world's leading science universities and the MPLS Division is home to our non-medical sciences, with nine academic departments that span the full spectrum of the mathematical, computational, physical, engineering and life sciences, and undertake both fundamental research and cutting-edge applied work. Our research tackles major societal and technological challenges — whether developing new energy solutions or improved cancer treatments, understanding climate change processes, or helping to preserve biodiversity, and is increasingly focused on key interdisciplinary issues. We collaborate closely with colleagues in Oxford across the medical















sciences, social sciences and humanities, and with other universities, research organisations and industrial partners across the globe in pursuit of innovative research geared to address critical and fundamental scientific questions.

The disciplines within the MPLS Division regularly appear at the highest levels in rankings, including the Times Higher Education and QS world rankings. Nationally, the quality of the Division's research outputs and environment, and the resulting impact, was recognised through strong performances in the UK Research Excellence Framework in both 2014 and 2021.

MPLS is proud to be the home of some of the most creative and innovative scientific thinkers and leaders working in academe. Our senior researchers have been awarded some of the most significant scientific honours and we have a strong tradition of attracting and nurturing the very best early career researchers who regularly secure prestigious fellowships and faculty positions. MPLS continues in its work to support diversity in its staffing, seeing that it will bring benefits to all, and we are pleased to note that all academic departments in the Division hold Athena Swan Awards.

We have around 7,300 full and part-time students (including approximately 3,400 graduate students) and play a major role in training the next generation of leading scientists. Oxford's international reputation for excellence in teaching is reflected in its position at the top of the major league tables and subject assessments. MPLS academics educate students of high academic merit and potential from all over the world. Through a mixture of lectures, practical work and the distinctive college tutorial system, students develop their ability to solve diverse mathematical, scientific and engineering problems.

MPLS is dedicated to bringing the wonder and potential of science to the attention of audiences far beyond the world of academia. We have a strong commitment to supporting public engagement in science through initiatives including the Oxford Sparks portal (<a href="www.oxfordsparks.ox.ac.uk">www.oxfordsparks.ox.ac.uk</a>) and a large variety of outreach activities; these are crucial activities given so many societal and technological issues demand an understanding of the science that underpins them. We also bring the potential of our scientific efforts forward for practical and beneficial application to the real world and our desire, aided by the work of Oxford University Innovation and Oxford Sciences Innovation, is to link our best scientific minds with industry and public policy makers.

For more information about the MPLS division, please visit: <a href="https://www.mpls.ox.ac.uk">www.mpls.ox.ac.uk</a>

#### How to apply

Applications are made through our e-recruitment system and you will find all the information you need about how to apply on our Jobs website <a href="https://www.jobs.ox.ac.uk/how-to-apply">https://www.jobs.ox.ac.uk/how-to-apply</a>.

Your application will be judged solely on the basis of how you demonstrate that you meet the selection criteria stated in the job description.

Applicants should ask their referees to send their letters of reference directly to the HR Administrator by email to <a href="https://example.com/hr@stats.ox.ac.uk">https://example.com/hr@stats.ox.ac.uk</a> by the closing date quoting the vacancy reference 168775.















You will be asked to upload a CV and a supporting statement. The supporting statement must explain how you meet each of the selection criteria for the post using examples of your skills and experience. This may include experience gained in employment, education, or during career breaks (such as time out to care for dependants).

Please upload all documents as PDF files with your name and the document type in the filename.

All applications must be received by **midday** UK time on the closing date stated in the online advertisement.

## Information for priority candidates

A priority candidate is a University employee who is seeking redeployment because they have been advised that they are at risk of redundancy, or on grounds of ill-health/disability. Priority candidates are issued with a redeployment letter by their employing department(s).

If you are a priority candidate, please ensure that you attach your redeployment letter to your application (or email it to the contact address on the advert if the application form used for the vacancy does not allow attachments).

### If you need help

 $\label{prop:prop:prop:special} \mbox{Application FAQs, including technical troubleshooting advice is available at:} \\$ 

https://staff.web.ox.ac.uk/recruitment-support-fags

Non-technical questions about this job should be addressed to the recruiting department directly (hr@stats.ox.ac.uk)

To return to the online application at any stage, please go to: <a href="www.recruit.ox.ac.uk">www.recruit.ox.ac.uk</a>.

Please note that you will receive an automated email from our online recruitment portal to confirm receipt of your application. **Please check your spam/junk mail** if you do not receive this email.

# Important information for candidates

#### **Data Privacy**

Please note that any personal data submitted to the University as part of the job application process will be processed in accordance with the GDPR and related UK data protection legislation. For further information, please see the University's Privacy Notice for Job Applicants at:















https://compliance.admin.ox.ac.uk/job-applicant-privacy-policy. The University's Policy on Data Protection is available at: https://compliance.admin.ox.ac.uk/data-protection-policy.

#### The University's policy on retirement

The University operates an Employer Justified Retirement Age (EJRA) for very senior research posts at grade RSIV/D35 and clinical equivalents E62 and E82, which with effect from 1 October 2023 will be 30 September before the 70<sup>th</sup> birthday. The justification for this is explained at: https://hr.admin.ox.ac.uk/the-ejra.

For **existing** employees on these grades, any employment beyond the retirement age is subject to approval through the procedures: <a href="https://hr.admin.ox.ac.uk/the-ejra.">https://hr.admin.ox.ac.uk/the-ejra.</a>

There is no normal or fixed age at which staff in posts at other grades have to retire. Staff at these grades may elect to retire in accordance with the rules of the applicable pension scheme, as may be amended from time to time.

#### **Equality of opportunity**

Entry into employment with the University and progression within employment will be determined only by personal merit and the application of criteria which are related to the duties of each particular post and the relevant salary structure. In all cases, ability to perform the job will be the primary consideration. No applicant or member of staff shall be discriminated against because of age, disability, gender reassignment, marriage or civil partnership, pregnancy or maternity, race, religion or belief, sex, or sexual orientation.















# Benefits of working at the University

## **Employee benefits**

University employees enjoy 38 days' paid holiday, generous pension schemes, travel discounts, and a variety of professional development opportunities. Our range of other employee benefits and discounts also includes free entry to the Botanic Gardens and University colleges, and discounts at University museums. See <a href="https://hr.admin.ox.ac.uk/staff-benefits">https://hr.admin.ox.ac.uk/staff-benefits</a>

### **University Club and sports facilities**

Membership of the University Club is free for all University staff. The University Club offers social, sporting, and hospitality facilities. Staff can also use the University Sports Centre on Iffley Road at discounted rates, including a fitness centre, powerlifting room, and swimming pool. See <a href="https://www.sport.ox.ac.uk/">www.club.ox.ac.uk/</a> and <a href="https://www.sport.ox.ac.uk/">https://www.sport.ox.ac.uk/</a>.

#### Information for staff new to Oxford

If you are relocating to Oxfordshire from overseas or elsewhere in the UK, the University's Welcome Service website includes practical information about settling in the area, including advice on relocation, accommodation, and local schools. See <a href="https://welcome.ox.ac.uk/">https://welcome.ox.ac.uk/</a>

There is also a visa loan scheme to cover the costs of UK visa applications for staff and their dependants. See <a href="https://staffimmigration.admin.ox.ac.uk/visa-loan-scheme">https://staffimmigration.admin.ox.ac.uk/visa-loan-scheme</a>

#### Family-friendly benefits

With one of the most generous family leave schemes in the Higher Education sector, and a range of flexible working options, Oxford aims to be a family-friendly employer. We also subscribe to the Work+Family Space, a service that provides practical advice and support for employees who have caring responsibilities. The service offers a free telephone advice line, and the ability to book emergency back-up care for children, adult dependents and elderly relatives. See <a href="https://hr.admin.ox.ac.uk/my-family-care">https://hr.admin.ox.ac.uk/my-family-care</a>

The University has excellent childcare services, including five University nurseries as well as University-supported places at many other private nurseries.

For full details, including how to apply and the costs, see <a href="https://childcare.admin.ox.ac.uk/">https://childcare.admin.ox.ac.uk/</a>

#### **Disabled staff**

We are committed to supporting members of staff with disabilities or long-term health conditions. For further details, including information about how to make contact, in confidence, with the University's Staff Disability Advisor, see <a href="https://edu.admin.ox.ac.uk/disability-support">https://edu.admin.ox.ac.uk/disability-support</a>

#### Staff networks















The University has a number of staff networks including the Oxford Research Staff Society, BME staff network, LGBT+ staff network and a disabled staff network. You can find more information at <a href="https://edu.admin.ox.ac.uk/networks">https://edu.admin.ox.ac.uk/networks</a>

# The University of Oxford Newcomers' Club

The University of Oxford Newcomers' Club is an organisation run by volunteers that aims to assist the partners of new staff settle into Oxford, and provides them with an opportunity to meet people and make connections in the local area. See <a href="https://www.newcomers.ox.ac.uk">www.newcomers.ox.ac.uk</a>.











