

Job Description

Job title	(Senior) Statistical Consultant
Division	Mathematical, Physical and Life Sciences
Department	Statistics
Location	24-29 St Giles', Oxford, OX1 3LB
Grade and salary	Grade 8: £48,235 - £57,255 (with a discretionary range to £62,407) per annum
Hours	Full time
Contract type	Permanent
Reporting to	Senior Academic with relevant expertise, currently Prof Windmejier
Vacancy reference	179779
Additional information	This role is 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 made to a Statistical Consultant role at grade 7 (£38,674-£46,913 per annum with a discretionary range to £51,059) with the responsibilities adjusted accordingly. This would be discussed with applicants at interview/appointment where appropriate.

Job description

The role

The post holder will play a key role in end-to-end provision of the Department's <u>Statistical Consulting Unit</u>, which may include: liaising with clients across a range of sectors to understand their needs in the domain of statistics and data analysis; formulating and providing bespoke solutions to their statistical problems; interpreting and delivering the results of the statistical analysis, as well as developing appropriate code; contributing to the design and delivery of













training when required. Typical requests may involve developing statistical analysis plans and performing power calculations; reviewing statistical output, identifying potential problems and advising on/applying appropriate statistical methods (e.g. descriptive and correlational analysis; generalised linear models, structural equation models, multilevel models, non-linear models); experimental and observational study design; measurement scale. If possible, we would like to hire someone with artificial intelligence/machine learning skills.

The postholder will be expected to engage with a broad range of stakeholders across private and public sectors to promote the Department's Statistical Consultancy Services and proactively identify new opportunities for service provision. In addition to targeting external clients, the postholder will provide statistical advice and consultancy to University staff and researchers, and actively engage with other Departments, acting as an ambassador for good statistical practice.

The post holder will report to a senior academic with relevant expertise, currently Prof Windmejier. They will work closely with the other senior statistical consultant in the unit on strategic planning and development of the service's activities. The post holder will mentor students and postdoctoral researchers undertaking consultancy. External consultancy contracts will be managed in conjunction with Oxford University Innovation.

The post holder will contribute to the academic life of the department, including advising on overall scientific and management matters and sitting on Departmental committees.

Responsibilities/duties

- Provide statistical advice, analysis and interpretation of results to external organisations and researchers from other University of Oxford Departments; deliver high-quality reports and client presentations.
- Work closely with the other senior consultant in the unit to further the growth of the Department's provision of statistical consultancy services, managing and monitoring team resources and income flows, and helping determine the service's strategic direction over the next three to five years.
- Support with the development and delivery of teaching on statistical consultancy and the
 use of statistics to both internal and external clients across a range of disciplines, when
 required.
- Promote and facilitate excellence in statistical practice across the University, including conducting pro bono work for central University units.
- Promote the Department's consultancy services nationally and internationally; represent the Department at client-facing meetings and engage with sponsors, stakeholders, national agencies, professional bodies and appropriate networks.













- Work with Oxford University Innovation to manage and deliver contracts with external clients; liaise with clients and proactively identify new opportunities and potential projects.
- Develop ideas for generating further income based on outcomes of consultancy.
- Serve on Departmental committees, advising on scientific and management matters for the Department; be involved in the Department's outreach and public engagement activities.
- Provide mentoring and supervision for students involved in consultancy services.
- Participate in the administration of the Department as and when requested by the Head of Department.

Selection criteria

Essential

- Hold a Doctorate (or have equivalent research or professional experience) in Statistics or a related field with post-qualification statistical client-facing consultancy experience
- Possess broad knowledge of applied statistics and statistical software
- Evidence of an ability to communicate engagingly both in writing and orally, and to explain statistical concepts to non-technical clients and audiences
- Excellent interpersonal skills
- Strong track record of projects and consultancy activities with other Departments of the University of Oxford and/or external clients. (An appointment at Grade 7 could be made on the basis of less experience of projects and/or consultancy.)
- Strong programming skills
- A commitment to promoting equality, diversity and inclusion in statistics.

Desirable

- Knowledge and experience of applied artificial intelligence/machine learning
- Experience of collaborations at national and international level
- Chartered Statistician (CStat) qualification
- Expertise in using R /or Stata. Additional software expertise, e.g. in Python, is desirable
- Experience of managing a budget

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. Income from external research contracts in 2016/17 exceeded £564m and we rank first in the UK for university spin-outs, with more than 130 companies created to date. 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 www.ox.ac.uk/about/organisation.

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; Econometrics 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. Alison Etheridge was appointed Dame Commander of the Order of the British Empire in the 2025 New Years Honours. Awards include Fellowships of the Royal Society to Christl Donnelly and Alison Etheridge; Fellowship of the British Academy to Frank Windmeijer; FMedSci and the Zoological Society of London's Frink Award to Christl Donnelly; the Royal Statistical Society Guy Medal in Bronze to Chris Holmes; the Weldon Memorial Prize, the Francis Crick Prize Lecture, and the Genetics Society Balfour Prize to Simon Myers. Alison Etheridge, Christina Goldschmidt and Gesine Reinert are all Fellows of the Institute of Mathematical Statistics, and Alison Etheridge is a former President. Alison Etheridge was also elected as a member of the American Academy of Arts and Sciences.

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 five 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), the EPSRC CDT in Health Data Science (with the Big Data Institute) and the recently launched Fundamentals of AI CDT which is funded by the Ellison Institute of Technology. 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 well-established connections 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.

The Department also enjoys close links with the Ellison Institute of Technology, a newly established company which combines cutting-edge research and commercial capability, to drive scientific breakthroughs through creating sustainable companies. Chris Holmes, Professor of Biostatistics, is the Director of AI for EIT, and Gil McVean, Principal Scientist for the Pathogen Progamme, also has a joint appointment with the Department of Statistics as Professor of Statistical Genetics.













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. The disciplines within the MPLS Division regularly appear at the highest levels in world rankings and the REF 2021 results highlighted the quality of its research, the environment in which it is conducted, and the impact it has.

The MPLS Division is home to the non-medical sciences at Oxford and its 9 academic departments span the full spectrum of the mathematical, computational, physical, engineering and life sciences, and undertake both fundamental research and cutting-edge applied work. Research in MPLS 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. MPLS Division also includes Begbroke Science Park — the only science park wholly owned and managed by Oxford University. It stands at the forefront of innovative collaboration; a place where science and industry meet. 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 appear at the highest levels in world rankings, with Oxford's mathematical, physical and life sciences research regularly identified as one of the most significant recipients of grant funding in Europe.

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, including the most recent award of a Nobel Prize for Physics 2020 to Sir Roger Penrose. Within MPLS we are as focused on the next generation as we are on those who have gone before, having 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 everyone. All academic departments in the Division hold Athena Swan Awards (The Athena Swan Charter encourages and recognises commitment to advancing the careers of women in science, technology, engineering, maths and medicine employment in higher education and research.)













We have around 7,400 full and part-time students (including approximately 3,500 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 major 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 and Science Together programme. These are complemented by 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 Science Enterprises, is to link our best scientific minds with industry and public policy makers.

For more information about the MPLS division, please visit: www.mpls.ox.ac.uk

How to apply

Before submitting an application, you may find it helpful to read the 'Tips on applying for a job at the University of Oxford' document, at www.ox.ac.uk/about/jobs/supportandtechnical/.

If you would like to apply, click on the **Apply Now** button on the 'Job Details' page and follow the on-screen instructions to register as a new user or log-in if you have applied previously. Please provide details of two referees and indicate whether we can contact them now.

You will also 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).

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

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

All applications must be received by **midday** 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 departments.

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)

Should you experience any difficulties using the online application system, please email recruitment.support@admin.ox.ac.uk. Further help and support are available from www.ox.ac.uk. To return to the online application at any stage, please go to: www.recruit.ox.ac.uk.

Please note that you will be notified of the progress of your application by automatic emails from our e-recruitment system. **Please check your spam/junk mail** regularly to ensure that you receive all emails.

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: www.admin.ox.ac.uk/councilsec/compliance/gdpr/privacynotices/job/. The University's Policy on Data Protection is available at: www.admin.ox.ac.uk/councilsec/compliance/gdpr/universitypolicyondataprotection/.

The University's policy on retirement

The University operates an Employer Justified Retirement Age (EJRA) for all academic posts and some academic-related posts. The University has adopted an EJRA of 30 September before the 69th birthday for all academic and academic-related staff in posts at **grade 8 and above**. The justification for this is explained at: www.admin.ox.ac.uk/personnel/end/retirement/acrelretire8+/.

For **existing** employees, any employment beyond the retirement age is subject to approval through the procedures: www.admin.ox.ac.uk/personnel/end/retirement/acrelretire8+/.

There is no normal or fixed age at which staff in posts at **grades 1–7** 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 www.admin.ox.ac.uk/personnel/staffinfo/benefits.

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 www.club.ox.ac.uk and www.sport.ox.ac.uk/oxford-university-sports-facilities.

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 www.welcome.ox.ac.uk. There is also a visa loan scheme to cover the costs of UK visa applications for staff and their dependents. See www.admin.ox.ac.uk/personnel/permits/reimburse&loanscheme/.

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 My Family Care, 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 www.admin.ox.ac.uk/personnel/staffinfo/benefits/family/mfc/.

Childcare

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 www.admin.ox.ac.uk/childcare/.

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 www.admin.ox.ac.uk/eop/disab/staff.

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 www.admin.ox.ac.uk/eop/inpractice/networks/.

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 www.newcomers.ox.ac.uk.









