Job description and selection criteria

Job title	Statistician / Data Scientist
Division	Medical Sciences
Department	Paediatrics
Location	Oxford Vaccine Group, CCVTM, Churchill Hospital, Oxford
Grade and salary	Grade 6: £34,982 - £40,855 per annum (with a discretionary range to £44,382 per annum)
Hours	Full-time (Flexible working arrangements may be considered)
Contract type	Fixed-term (2 years or until 30 September 2027, whichever is earliest)
Reporting to	Senior Management including: Prof Merryn Voysey, Prof Daniel O'Connor and Prof Xinxue Liu
Vacancy reference	176550
Additional information	*Applications are to be made online, please see the advert for the closing date.*

Principal Investigator / supervisor	Prof Merryn Voysey, Prof Daniel O'Connor and Prof Xinxue Liu
Project team	Oxford Vaccine Group
Project web site	http://www.ovg.ox.ac.uk/
Funding partner	The funds supporting this research project are provided by Lassa-CEPI

The role

The post holder will join a large group of researchers at the Oxford Vaccine Group, conducting major national and international studies of vaccines for children and adults.

We seek a self-motived Statistician/Data Scientist/Bioinformatician with an interest in vaccines or infectious diseases, to join our large team of bioinformaticians, epidemiologists and statisticians.

This position will suit a candidate with background in either medical statistics, health data science, bioinformatics, or computational biology, with projects adjusted to suit the skills and research focus of the applicant. We have multiple projects available supported by a current team of 12 people. Projects range from early phase clinical trials of new vaccines to multi-omics approaches to elucidating protective immune responses to vaccines.

Applicants at grade 6 would be expected to have a Masters degree in one of the above disciplines, and training would be provided to expand your skills and experience.

The post holder will be responsible for drafting peer reviewed publications from their work with the opportunities to lead as first author and present findings at relevant conferences. Additionally, there will be opportunity to attend further training in statistical or bioinformatics methods. For selected candidates who are successful in this role, there is the potential to apply for a future PhD position as part of their role within the department with an 80% reduction in fees, subject to departmental approval.

To succeed in this post you will have excellent communication skills and a commitment to writing high quality manuscripts which present important scientific findings with clarity. Strong analytical skills, an enquiring and flexible attitude, and an interest in working collaboratively with researchers from different disciplines will also be important components for success.

Flexible working
This post is offered all full time with an opportunity for partial remote working. Flexible working arrangements may be considered.

Responsibilities
- Conduct detailed analysis of datasets for assigned studies;
  - o For those with a bioinformatics focus this may include using various classification and/or feature selection approaches to down-select a small set of promising biomarkers from a larger dataset or analysing multi-sample datasets from proteomics and RNA-seq studies.
  - o For those with a statistics focus, linear or logistic regression models and standard statistical methods for analysing data from clinical trials or observational studies would be required.
- Develop statistical analysis plans for studies and contribute or the planning of day to day work.

- Develop or tailor analytical tools and resources appropriate to the work such as programming code in R or other coding platforms.

- Write up statistical analysis and results or contribute to peer reviewed publications, presentations and other means of disseminating results.

- Attend scientific conferences, seminars, meetings, and training as appropriate.

- Develop or tailor analysis tools and resources in collaboration with members of the research team, to streamline analysis pipelines.

- Identify and troubleshoot technical or scientific problems, working collaboratively with database experts and scientific programmers.

- Contribute ideas and communicate effectively with database experts and scientific programmers.
- Participate in the wider work of the Oxford Vaccine Group, such as journal clubs, weekly meetings, such as the Big Data Cub, and the training and development of junior staff.

Selection criteria

Essential
- A degree in a relevant subject and a post-graduate degree in Mathematics, Statistics, Bioinformatics, Computational Biology, or a related subject.
- Demonstrable experience, ability and practical success in statistics or bioinformatics.
- Proficiency in the use of statistical programming languages.
- Demonstrable ability to organise and prioritise work efficiently whilst delivering results to the required standard and to an agreed schedule.
- Ability to draft sections of reports or manuscripts for publication and present statistical results at conferences or to internal groups.
- Strong communication skills, including the ability to communicate statistical/computational concepts clearly to a non-statistical audience.
- Ability to work well in a multi-disciplinary team.
- Ability to work to tight deadlines calmly and efficiently.
- Commitment to training and developing new skills and methods where needed.

Desirable
- A PhD (or equivalent) in a relevant scientific subject such as statistics, bioinformatics, data science, or computational biology.
- Previous research experience analysing clinical or immunological datasets.
- Proven track record of contributing to publications.

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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. If you have previously worked for the University we will also verify key information such as your dates of employment and reason for leaving your previous role with the department/unit where you worked. 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

Additional security pre-employment checks

This job includes duties that will require additional security pre-employment checks:

- A satisfactory basic Disclosure and Barring Service check due to the nature of this position working with highly sensitive data.
- University security screening (e.g. identity 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 spin-outs, 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 www.ox.ac.uk/about/organisation.

Department of Paediatrics

The Department of Paediatrics is a world leader in child health research and hosts internationally renowned research programmes in drug development, gastroenterology, haematology, HIV, immunology, neuroimaging, neuromuscular diseases and vaccinology. Our work spans from early proof-of concept fundamental science, all the way up to its application in clinical settings.

We continue to shape the landscape of medical science through positively impacting the lives of millions of children from our global research programmes, academic resources, and commitment to success. Our broad research base positions the department in a pivotal role and subsequently a world leader in child health. With research facilitates in the UK and abroad, we work on a global scale, building a paediatric network in the medical science community. We are committed to inform and inspire external audiences worldwide through our public engagement and outreach activities.

In 2021, we successfully administered a grant value of £130,895,28 obtained through 168 projects. Our strong relationship with funding bodies have also been a contributor to the successes and milestones in children's health research. With strong support from the Wellcome Trust, NIH, Cancer Research UK, UKRI, MDUK, Bill & Melinda Gates Foundation, Academy of Medical Sciences and the NIHR, we have employed 360+ staff, researchers, and students. These figures continue to grow as we expand our activities to overcome the multitude of challenges within children's research health.

For more information please visit: http://www.paediatrics.ox.ac.uk/

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

Medical Sciences Division

We are an internationally recognized centre of excellence for biomedical and clinical research and teaching, and the largest academic division in the University of Oxford.
World-leading programmes, housed in state-of-the-art facilities, cover the full range of scientific endeavour from the molecule to the population. With our NHS partners we also foster the highest possible standards in patient care.

For more information please visit: http://www.medsci.ox.ac.uk/

How to apply

Applications are made through our online recruitment portal. Information about how to apply is available on our jobs website https://www.jobs.ox.ac.uk/how-to-apply.

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

As part of your application you will be asked to provide details of two/three referees and indicate whether we can contact them now.

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.

If you currently work for the University please note that:

- as part of the referencing process, we will contact your current department to confirm basic employment details including reason for leaving
- although employees may hold multiple part-time posts, they may not hold more than the equivalent of a full time post. If you are offered this post, and accepting it would take you over the equivalent of full-time hours, you will be expected to resign from, or reduce hours in, your other posts(s) before starting work in the new post.

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

Application FAQs, including technical troubleshooting advice is available at: https://staff.web.ox.ac.uk/recruitment-support-faqs

Non-technical questions about this job should be addressed to the recruiting department directly at recruitment@paediatrics.ox.ac.uk or using the contact details in the online advertisement.

To return to the online application at any stage, please go to: www.recruit.ox.ac.uk.

Please note that you will receive an automated email from our e-recruitment system 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** of 30 September before the 70th 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: https://hr.admin.ox.ac.uk/the-ejra.

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 including salary sacrifice schemes for bicycles and electric cars and other discounts. Staff can access a huge range of personal and professional development opportunities. See https://hr.admin.ox.ac.uk/staff-benefits.

Employee Assistance Programme

As part of our wellbeing offering staff get free access to Health Assured, a confidential employee assistance programme, available 24/7 for 365 days a year. Find out more https://staff.admin.ox.ac.uk/health-assured-eap.

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 https://www.sport.ox.ac.uk/.

Information for staff new to Oxford

If you are relocating to Oxfordshire from overseas or elsewhere in the UK, the University's Welcome Service includes practical information about settling in the area, including advice on relocation, accommodation, and local schools. See https://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 https://staffimmigration.admin.ox.ac.uk/visa-loan-scheme.

Family-friendly benefits

We are a family-friendly employer with one of the most generous family leave schemes in the Higher Education sector (see https://hr.web.ox.ac.uk/family-leave). Our Childcare Services team provides guidance and support on childcare provision, and offers a range of high-quality childcare options at affordable prices for staff. In addition to 5 University nurseries, we partner with a number of local providers to offer in excess of 450 full time nursery places to our staff. Eligible parents are able to pay for childcare through salary sacrifice, further reducing costs. See https://childcare.admin.ox.ac.uk/.

Supporting disability and health-related issues (inc menopause)

We are committed to supporting members of staff with disabilities or long-term health conditions, including those experiencing negative effects of menopause. Information about the University's Staff Disability Advisor, is at https://edu.admin.ox.ac.uk/disability-support. For information about how we support those going through menopause see https://hr.admin.ox.ac.uk/menopause-guidance.

Staff networks

The University has a number of staff networks including for research staff, BME staff, LGBT+ staff, disabled staff network and those going through menopause. Find out more at https://edu.admin.ox.ac.uk/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.

Research staff

The Researcher Hub supports all researchers on fixed-term contracts. They aim to help you settle in comfortably, make connections, grow as a person, extend your research expertise and approach your next career step with confidence. Find out more https://www.ox.ac.uk/research/support-researchers/researcher-hub.

Oxford's Research Staff Society is a collective voice for our researchers. They also organise social and professional networking activities for researchers. Find out more https://www.ox.ac.uk/research/support-researchers/connecting-other-researchers/oxford-research-staff-society.