Job title	Statistician
Division	Medical Sciences
Department	Nuffield Department of Medicine
Location	Big Data Institute, Li Ka Shing Centre for Health and Information Discovery, Old Road Campus, Headington, Oxford, OX3 7LF
Grade and salary	Grade 6: Salary in range £34,982 - £38,674 per annum (pro rata). This is inclusive of a pensionable Oxford University Weighting of £1,500 per year (pro rata).
Hours	Full time
Contract type	Fixed-term contract for 12 months Funding is provided by Novartis
Reporting to	Dr Habib Ganjgahi, Senior Research Fellow
Vacancy reference	176601

Additional information	This role meets the eligibility requirements for a Skilled Worker Certificate of Sponsorship under UK Visas and Immigration legislation.
About us	• University of Oxford - www.ox.ac.uk/about/organisation • Nuffield Department of Medicine (NDM) - https://www.ndm.ox.ac.uk • Unit – www.bdi.ox.ac.uk
What we offer	https://hr.admin.ox.ac.uk/staff-benefits • An excellent contributory pension scheme • 38 days annual leave • A pensionable Oxford University Weighting allowance of £1,500 per annum (pro rata) • A comprehensive range of childcare services • Family leave schemes • Cycle loan scheme • Discounted bus travel and Season Ticket travel loans • Membership to a variety of social and sports clubs • A welcoming and diverse community

The role

We are seeking an enthusiastic Researcer to join the Big Data Institute reporting to Dr. Habib Ganjgahi, your aim will be to develop computationally sacalable methods for anylysing functional magnetic resonace (fMRI) imagine date, you will also design and simulation study to validate the models and apply the model to real data.

You will develop a scalable hierarchical Bayesian model that takes into account spatial dependency and sparsity of fMRI data, extend the threshold free cluster enhancement to boost spatial specificity of voxel-wise analyses of brain imaging data and apply the developed model to UKBiobank data. You will also conduct simulation studies to validate the model.

Responsibilities

You will:

- Check, validate and clean data.
- Develop new variant of threshold free cluster enhancement statistics to boost spatial specificity of voxel-wise analyses of brain imaging data.
- Provide and conduct statistical analysis plans for studies and undertake day to day planning of work
- Develop or tailor analytical tools and resources appropriate to the work in collaboration with members of the research team
- Develop a scalable method for analysing fMRI data that does variable selection and models spatial dependency of data.
- Provide validation plans for developed methods using simulation studies and undertake day to day planning of work.
- Build and develop reproducible analytical tools that can be shared with applied researchers
- Identify and troubleshoot technical or scientific problems.
- Write up the developed methods and results which may be used for relevant sections of manuscripts, presentations and other means of disseminating results.
- Attend scientific seminars, meetings and training as appropriate.
- Contribute ideas and communicate effectively with database experts and scientific programmers
- Participate in and support the public engagement and widening access activities of the Department and the University. This is anticipated to be not more than 2 days per year.
- Undertake mandatory training as required by the University, Division and Department. The specific list of training courses may change from time-to-time, in response to both legal and internal University requirements.

Selection criteria

Essential

- Hold a Masters Degree in Mathematics, Statistics, Computing, or a related subject
- Demonstrated experience and ability in statistics
- Proficiency in the use of statistical programming languages
- Ability to draft section of manuscripts for publication and present statistical results at conferences

- Demonstrated ability to organise and prioritise work efficiently whilst delivering results to the required standard and to an agreed schedule

Desirable

- Previous research experience

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

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 https://www.jobs.ox.ac.uk/how-to-apply.

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.

As part of your application you will be asked to provide details of two 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). 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. Please note using a long file name may prevent you from uploading your documents.

- http://www.ox.ac.uk/about_the_university/jobs/research/

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 recruitment@ndm.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 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 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.