

<b>Job title</b>	Postdoctoral Researcher - SARS-CoV-2 evolutionary genomics
<b>Division</b>	Medical Sciences
<b>Department</b>	Nuffield Department of Medicine
<b>Location</b>	Pandemic Sciences Institute, Li Ka Shing Centre for Health and Information Discovery, Old Road Campus, Headington, Oxford, OX3 7LF
<b>Grade and salary</b>	Grade 7: Salary in range £37,524 - £45,763 per annum (pro rata). This is inclusive of a pensionable Oxford University Weighting of £1,500 per year (pro rata).
<b>Hours</b>	Full time
<b>Contract type</b>	Fixed-term contract until 31 July 2025 Funding is provided by the Li Ka Shing Foundation
<b>Reporting to</b>	Dr Katrina Lythgoe (Associate Professor)
<b>Vacancy reference</b>	175402

<b>Hybrid arrangements</b> <b>working</b>	<b>The successful person will need to work on site for a minimum of 3 days per week</b>
<b>Additional information</b>	This role meets the eligibility requirements for a Skilled Worker Certificate of Sponsorship under UK Visas and Immigration legislation. Therefore, the Nuffield Department of Medicine welcomes applications from international applicants who require a visa.
<b>About us</b>	<ul style="list-style-type: none"> <li>University of Oxford - <a href="http://www.ox.ac.uk/about/organisation">www.ox.ac.uk/about/organisation</a></li> <li>Nuffield Department of Medicine (NDM) - <a href="https://www.ndm.ox.ac.uk">https://www.ndm.ox.ac.uk</a></li> <li>Unit - <a href="http://www.psi.ox.ac.uk">www.psi.ox.ac.uk</a></li> </ul>
<b>What we offer</b>	<a href="https://hr.admin.ox.ac.uk/staff-benefits">https://hr.admin.ox.ac.uk/staff-benefits</a> <ul style="list-style-type: none"> <li>An excellent contributory pension scheme</li> <li>38 days annual leave</li> <li>A pensionable Oxford University Weighting allowance of £1,500 per annum (pro rata)</li> <li>A comprehensive range of childcare services</li> <li>Family leave schemes</li> <li>Cycle loan scheme</li> <li>Discounted bus travel and Season Ticket travel loans</li> <li>Membership to a variety of social and sports clubs</li> <li>A welcoming and diverse community</li> </ul>

<b>Research topic</b>	SARS-CoV-2 evolutionary genomics
<b>Principal Investigator / supervisor</b>	Katrina Lythgoe
<b>Project web site</b>	<a href="https://www.bdi.ox.ac.uk/Team/katrina-lythgoe">https://www.bdi.ox.ac.uk/Team/katrina-lythgoe</a>
<b>Funding partner</b>	The funds supporting this research project are provided by the Li Ka Shing Foundation
<b>Recent publications</b>	<a href="https://www.nature.com/articles/s41586-024-07029-4">https://www.nature.com/articles/s41586-024-07029-4</a> <a href="https://www.science.org/doi/full/10.1126/science.abg0821">https://www.science.org/doi/full/10.1126/science.abg0821</a>

## The role

We are inviting applications for a postdoctoral scientist to work on the transmission dynamics of SARS-CoV-2 using a very large dataset of more than 100,000 viral genomes generated as part of the Office for National Statistics Covid Infection Survey. The project will involve the analysis of whole-genome deep-sequencing data collected as part of the Office for National Statistics Covid Infection Survey, with a focus on using sequence data to infer transmission. You will work within Dr Katrina Lythgoe's Ecology and Evolution of Viruses Research Group at the Big Data Institute. You will have a background in the evolutionary analysis of viral sequence data, with strong bioinformatic and coding skills. Opportunities will be provided for training and support for future career development. The position is available immediately until 31st July 2025 with the possibility of extension.

## Responsibilities

You will:

- Develop working hypotheses with the support of the group leader and other members of the group.
- Develop new, and adapt existing, analysis methods to better understand within-host SARS-CoV-2 evolution and transmission
- Contribute and develop ideas for new research projects.
- Carry out collaborative projects with colleagues in partner institutions and research groups.
- Participate in the dissemination of this work via presentations at academic meetings and conferences.
- Prepare manuscripts for publication, including writing the first draft and preparing figures.
- Maintain computer software and websites as required.
- Act as a source of scientific information and advice to other members of the group.
- Contribute to other tasks within the group that fall within the remit of the funded project.
- 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 PhD in viral evolution and genomics.
- A keen interest in the research described here, and the aptitude to learn about SARS-CoV-2 biology.
- Knowledge in population genetics, phylogenetics, and the analysis of sequence data.
- Strong analytical and quantitative skills and excellent problem-solving abilities.
- Expertise in at least one programming language or mathematical platform (C, Python, JAVA, PERL, R, Matlab etc.).
- Excellent communication skills, including the ability to write for publication, present research proposals and results, and represent the research group at meetings.
- Previous experience of contributing to scientific publications or presentations.
- Ability to independently lead a research project, to work collaboratively with others, and to work to deadlines.

### Desirable

- Specialist knowledge in one or more of population genetics, phylogenetics, and the analysis of sequence data.
- Track record of publication in leading international scientific journals.

## 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/](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

## 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](mailto:recruitment@ndm.ox.ac.uk)

To return to the online application at any stage, please go to: [www.recruit.ox.ac.uk](http://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 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: <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.

