



Job title	Postdoctoral Researcher in Clinical Sample Collections for Infectious Disease Translational Immunology
Division	Medical Sciences
Department	Nuffield Department of Medicine
Location	CAMS Oxford Institute, Building for Molecular Physiology, Roosevelt Drive, Old Road Campus, Oxford, OX3 7BN
Grade and salary	Grade 7: Salary in range £36,024 - £39,347 per annum
Hours	Full time
Contract type	Fixed-term contract until 30 April 2026 Funding is provided by the CAMS Core Grant
Reporting to	Professor Tao Dong
Vacancy reference	170973

Additional information	This role meets the eligibility requirements for a Skilled Worker Certificate of Sponsorship or a Global Talent Visa under UK Visas and Immigration legislation. Therefore, the Nuffield Department of Medicine welcomes applications from international applicants who require a visa.
About us	<ul style="list-style-type: none"> University of Oxford - www.ox.ac.uk/about/organisation Nuffield Department of Medicine (NDM) - https://www.ndm.ox.ac.uk Unit - https://www.camsoxford.ox.ac.uk/
What we offer	https://hr.admin.ox.ac.uk/staff-benefits <ul style="list-style-type: none"> An excellent contributory pension scheme 38 days annual leave 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

Research topic	Infectious disease translational immunology
Principal Investigator / supervisor	Professors Julian Knight and Tao Dong, Dr Alexander Mentzer
Project team	Professor Julian Knight, Professor Tao Dong, Professor Gavin Screaton, Dr Alexander Mentzer
Recent publications	Peng, Y., Felce, S.L., Dong, D., Penkava, F., Mentzer, A.J., Yao, X., Liu, G., Yin, Z., Chen, J.-L., Lu, Y., et al. (2022). An immunodominant



	<p>NP/B*07:02 cytotoxic T cell response controls viral replication and is associated with less severe COVID-19 disease. <i>Nat. Immunol.</i> 23, 50-61.</p> <p>Peng, Y., Mentzer, A.J., Liu, G., Yao, X., Yin, Z., Dong, D., Dejnirattisai, W., Rostron, T., Supasa, P., Liu, C., et al. (2020). Broad and strong memory CD4+ and CD8+ T cells induced by SARS-CoV-2 in UK convalescent individuals following COVID-19. <i>Nat. Immunol.</i> 21, 1336-1345.</p> <p>Mentzer, A.J., O'Connor, D., Bibi, S., Chelysheva, I., Clutterbuck, E.A., Demissie, T., Dinesh, T., Edwards, N.J., Felle, S., Feng, S., et al. (2023). Human leukocyte antigen alleles associate with COVID-19 vaccine immunogenicity and risk of breakthrough infection. <i>Nat. Med.</i> 29, 147-157.</p> <p>Ahern, D.J., Ai, Z., Ainsworth, M., Allan, C., Allcock, A., Angus, B., Ansari, M.A., Arancibia-Cárcamo, C.V., Aschenbrenner, D., Attar, M., et al. (2022). A blood atlas of COVID-19 defines hallmarks of disease severity and specificity. <i>Cell</i> 185, 916-938.e58.</p> <p>Dejnirattisai, W., Huo, J., Zhou, D., Zahradník, J., Supasa, P., Liu, C., Duyvesteyn, H.M.E., Ginn, H.M., Mentzer, A.J., Tuekprakhon, A., et al. (2022). SARS-CoV-2 Omicron-B.1.1.529 leads to widespread escape from neutralizing antibody responses. <i>Cell</i> 185, 467-484.e15.</p>
--	---

The role

Applications are invited for the role of Postdoctoral Researcher in Clinical Sample Collections for Infectious Disease Translational Immunology. You will work across a vibrant and productive collaborative group focussed on understanding the role of specific components of the human immune system in detecting and eradicating infections with a wide range of pathogens. The work has a central focus building on the successes realised during the COVID-19 pandemic, and preparing for future waves through a deeper understanding of the immune system and understanding how to use this information for clinical benefit.

Specifically, this collaboration involves research groups including Professor Tao Dong (T-cell immunology), Professor Gavin Screaton (B-cell and monoclonal antibody development), Professor Julian Knight (translational genomics) and Dr Alexander Mentzer (infection immunogenetics), who have worked to understand the relationship between the human host and infectious pathogens, and using this information to develop improved outcomes for patients. Examples of outputs have included descriptions of immune signatures correlating with severe infection, novel antibody detection systems, and monoclonal antibodies that may be used in future pandemics. This collaboration has functioned effectively as part of a wider local, national and international effort to help control the COVID-19 pandemic and looks to develop this capacity to ensure an effective response to the next pandemic when necessary.

The role will be embedded within the COI, and work between the primary research groups, working with other postdoctoral scientists and students where you will be expected to oversee existing sample collections, monitor ongoing scientific projects using these samples, and plan future sample collections. You will be supported by working closely with colleagues in the primary affiliated research groups and by the Research services team within the University, facilitating sharing of expertise together with access to necessary platforms and core support. This will allow you to develop your skills in a highly supportive and stimulating environment, working with scientists who are at the cutting-edge of current advances in translational immunology.



Responsibilities

You will:

- Manage established sample collections including cataloguing and ethical and logistical oversight as samples are used in various approved sub-projects including reviewing and refining working hypothesis.
- Be Involved in design and undertake targeted immunology experiments using historically and contemporaneously collected samples.
- Design and ethically approval of new sampling strategies to target established or emerging infections such as influenza, respiratory syncytial virus or other unknown pathogens.
- Work as part of an interdisciplinary team involving close liaison with members of the Dong, Knight, Sreaton and Mentzer groups, and collaborators.
- Work closely with the group heads and keep them up-to-date with progress, difficulties in the research aim and help develop new scientific techniques.
- Help in the supervision, education and training of staff and students as necessary and appropriate. Act as a source of information and advise to other members of the group.
- Plan and monitor project deadlines. Multi-task and prioritise your own workload. Work with other members of the laboratory on related projects and manage own academic research and administrative activities.
- Keep detailed, accurate and comprehensible records of your work, aid in writing of reports and new grant applications and contribute to the publication of research findings in international peer-reviewed journals.
- Contribute ideas for new research projects and develop ideas for generating research income. Participate in laboratory meetings and discussion of the aims and objectives of the group's work. Keep up to date with developments in the relevant fields.
- Collaborate in the presentation of scientific reports and journal articles and occasionally present papers and posters.
- 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/DPhil (or close to completion) in immunology, genetics, bioinformatics, molecular biology or a related field.
- A demonstrable interest in the research described herein.
- Experience in standard immunology, molecular biology and genomics laboratory techniques.
- Experience of working with biological samples from humans.
- Experience in sample and/or data management.
- Research experience in immunology or a related field.
- Excellent analytical and quantitative skills with a proven ability to think critically about scientific analysis in order to ensure robust results.
- Demonstrable high level of communication skills both written and oral.
- Ability to organise and prioritise work efficiently delivering results to required standard and to an agreed schedule.



- Evidence of problem-solving, working with accuracy, self-motivation and integrity.
- Ability to work effectively within a team.
- Experience of supervision involving students and or junior team members.

Desirable

- Experience of lab management
- Experience of working on clinical studies including Good Clinical Practice (GCP) and human research ethics applications.
- A strong publication record including substantive peer-reviewed 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>

Hazard-specific / Safety-critical duties

This job includes hazards or safety-critical activities. If you are offered the post, you will be asked to complete a health questionnaire which will be assessed by our Occupational Health Service, and the offer of employment will be subject a successful outcome of this assessment.

The hazards or safety-critical duties involved are as follows:

- Night working (11pm-6am)
- Lone Working
- Working with infectious pathogens (hazard group 2/3) - Hazard Group 3 pathogens
- Working with blood, human products and human tissues
- Travel outside of Europe or North America on University Business
- Standard manual handling



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

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.

