

## Job description and selection criteria

<b>Job title</b>	Postdoctoral Research Scientist in Outbreak Pathogens
<b>Division</b>	Medical Sciences
<b>Department</b>	Paediatrics
<b>Location</b>	Oxford Vaccine Group, Centre for Clinical Vaccinology and Tropical Medicine/ Institute of Developmental and Regenerative Medicine, Headington, Oxford
<b>Grade and salary</b>	Grade 7: £36,024 - £ 44,263 per annum (with a discretionary range to £48,350 per annum)
<b>Hours</b>	Full time
<b>Contract type</b>	Fixed-term (3 years initially)
<b>Reporting to</b>	Prof. Teresa Lambe OBE, Professor of Vaccinology & Immunology
<b>Vacancy reference</b>	168540
<b>Additional information</b>	<p>This role meets the criteria for a UK Skilled Worker visa</p> <p>Applications are to be made online, please see the advert for the closing date.</p> <p>This role is offered as a grade 7 position.</p>

<b>Research topic</b>	Vaccine design, preclinical testing and translation implementation of vaccines against emerging or outbreak pathogens
<b>Principal Investigator / supervisor</b>	Prof Teresa Lambe OBE
<b>Project team</b>	Emerging and Outbreak Pathogens
<b>Project web site</b>	<a href="https://www.ovg.ox.ac.uk/">https://www.ovg.ox.ac.uk/</a>
<b>Funding partner</b>	The funds supporting this research project are provided by CEPI and other partners

## The role

Vaccines are the mainstay of protection from infectious disease. Increased global interdependence and the ease of human, animal and trade movements facilitate spread of novel infectious pathogens. There is a clear need for vaccines that confer protective efficacy against remerging pathogens including Ebolavirus, Marburg virus, Junín virus and other viral haemorrhagic fevers. The Emerging Pathogens Vaccine programme based at Oxford Vaccine Group and part of the Pandemics Science Institute combines several novel approaches and established platform technologies to maximize the development of vaccines that can prevent disease caused by outbreak pathogens. In principle, we design new vaccines and progress them through an iterative process to advance them from bench to bedside with the main focus on safe, rapid translation of efficacious vaccines; as evidenced by the Oxford/AstraZeneca ChAdOx1 nCoV19/Vaxzevria. A number of our vaccines against viral haemorrhagic fevers have progressed through preclinical works and are currently being assessed in clinical trials.

The post holder you will join the team of Professor Teresa Lambe OBE, at the Oxford Vaccine Group, as part of the Pandemic Sciences Institute and will be responsible for carrying out vaccine research against viral haemorrhagic fevers. We are seeking an enthusiastic, motivated scientist to design and test a discrete number of vaccines which can prevent the next haemorrhagic fever outbreak caused by filoviruses or arenaviruses. This project will prioritise vaccines that can induce long-lived humoral and cellular immunity, particularly focusing on the development of vaccines that can confer heterologous protection. The post holder will provide guidance to less experienced members of the research group, including postdocs, research assistants, technicians, and PhD and project students.

You will have a background in vaccinology and ideally some experience working with preclinical assessment of vaccines including the generation of relevant assays for immunological assessment of candidate vaccines. We welcome candidates with experience in structural design and also with experience in translational research.

The successful candidate will have experience with immunological assays including but not limited to ELISAs, ELISpot, multiparameter flow cytometry, intracellular cytokine secretion (ICS), activation induced marker (AIM) assays.

You must have a proactive and adaptable approach to work and willingness to collaborate. You will have the opportunity to interact with other members of the Oxford Vaccine Group, including Prof Sir Andrew Pollard, Prof Daniela Ferreira, and other experts. You should thrive on scientific challenges associated with generating and analysing complex immunological data sets, be keen to learn, test and develop new analytical tools and methods. You must be capable of learning and working independently. Excellent record keeping, code and data management skills and the ability to meet deadlines are essential. You will be expected to document all work thoroughly, to provide manuscript-level reporting of interim and final analyses and results, and to substantially contribute to presentation preparation, grant and manuscript writing.

## Responsibilities

- We are seeking an enthusiastic, motivated scientist to join the Emerging Pathogens Vaccine group in the OVG/PSI. This post will have a particular emphasis on in vivo assessment of vaccine candidates against outbreak pathogens. The research will involve in vitro assessment of pre-clinical samples including ELISPOTs, immunofluorescence and sterile cell culture methodologies.
- Manage your own academic research and administrative activities. This involves small scale project management related to humoral and cellular immunity induced in the context of vaccination, natural infection and control human infection models, and to co-ordinate multiple aspects of work to meet deadlines.
- Adapt existing and develop new scientific techniques and experimental protocols in specialist methodologies and procedures.

- Contribute ideas for new research projects in the context of interrogating immune responses in human tissues.
- Develop ideas for generating research income, and present detailed research proposals to the research team.
- Collaborate in the preparation of scientific reports and journal articles and occasionally present papers and posters
- Use specialist scientific equipment in a laboratory environment.
- Keep detailed and comprehensible records of your work, preparing accurate reports that communicate results clearly and effectively, and ensure that project members are kept up to date with progress and any difficulties encountered.
- Act as a source of information and advice to other members of the group on scientific protocols and experimental techniques.
- Represent the research group at external meetings/seminars, either with other members of the group or alone.
- Carry out collaborative projects with colleagues in partner institutions, and research groups
- Participate in and support of the public engagement and widening access activities of the Department and the University.
- 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, or be close to completion of, a relevant PhD/DPhil in vaccinology or related immunological subjects.
- Possess sufficient specialist knowledge to design, plan, execute, analyse and present data from wet laboratory immunology experiments assessing vaccine candidates. Examples of techniques where you will be proficient include animal handling, ELISA, ELISpot, multiparameter flow cytometry, ICS, AIM assays
- Ability to manage own academic research by delivering high calibre analytical outputs and high degree of ambition and motivation.
- Previous experience of contributing to publications/presentations.
- Ability to contribute ideas for new research projects and research income generation, including a research budget.
- A responsible nature with a methodical and careful approach with the potential to plan and manage a research project, including a research budget.
- Excellent interpersonal skills and capacity to work collaboratively, including the ability to communicate results clearly and effectively by oral and written means, and to discuss scientific ideas.
- Willingness to contribute towards grant research proposals.

### Desirable

- Experience in generation and purification of protein antigens.
- Experience in the generation of monoclonal antibodies.
- Experience of working to GCP and Knowledge of Human Tissue Authority regulations.

## 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:

- Working with infectious pathogens (hazard group 2/3) - Hazard Group 3 pathogens
- Working with blood, human products and human tissues
- Work with any substance which has any of the following pictograms on their MSDS:



### Additional security pre-employment checks

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

- Enhanced Level Screening as this role includes conducting research involving animals (or working closely with such research); or with access to/ knowledge of the location of certain pathogens, toxins, irradiators.
- A satisfactory basic Disclosure and Barring Service check due to 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.

The University of Oxford has recently published their New Ways of Working framework to ensure professional service staff can continue to support the University's academic mission whilst working on site or remotely. For more information, please visit <https://hr.admin.ox.ac.uk/new-ways-of-working>

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](http://www.ox.ac.uk/about/organisation).

## The Oxford Vaccine Group

The Oxford Vaccine Group (OVG) is led by Andrew J Pollard, Professor of Paediatric Infection, and Immunity. Staff are based within a purpose-built centre on the Churchill Hospital site and form part of the Centre for Clinical Vaccinology and Tropical Medicine (CCVTM). The aim of OVG is to co-ordinate expertise in the study of microbial diseases and the immune response to microbes, to facilitate research on the development and implementation of vaccines. This may include new, improved or combined vaccines for the adult and paediatric population. Core group members include two Consultants in Vaccinology, a Director of Clinical Trials, a Senior Clinical Trials Manager, adult and paediatric clinical research fellows, adult and paediatric research nurses, project managers, QA manager, IT manager, and an administration team. The Infection and Immunity Laboratory includes post doctorate scientists, research assistants and DPhil students. Wider group members include professionals from a range of specialities including immunologists, microbiologists, statisticians, a community paediatrician, the local Health Protection team and a bioethicist. Recent studies carried out by the group include:

- Development and deployment of a licensed vaccine against COVID-19
- Vaccines against RSV
- Pneumococcal nasopharyngeal carriage epidemiology
- Meningococcal B vaccine development and evaluation
- Development of a typhoid challenge model

More information about OVG may be found at the website: <http://www.ovg.ox.ac.uk>.

## 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 facilities in the UK and abroad, we work on a global scale, building a paediatric network in the medical science community.

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 silver 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 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>.

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 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.

### 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](mailto: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](http://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**, 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.



# 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 <https://hr.admin.ox.ac.uk/staff-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](http://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 website 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

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 the Work+Family Space, 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 <https://hr.admin.ox.ac.uk/my-family-care> 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 <https://childcare.admin.ox.ac.uk/>

## 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 <https://edu.admin.ox.ac.uk/disability-support>

## 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 <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](http://www.newcomers.ox.ac.uk).