

Job title	Postdoctoral Scientist - Gonococcal Vaccine Group
Division	Medical Sciences
Department	Nuffield Department of Medicine
Location	Jenner Institute, Old Road Campus Research Building, Roosevelt Drive, Headington, Oxford, OX3 7DQ
Grade and salary	Grade 7: Salary in range £36,024 - £44,263 per annum (pro rata)
Hours	Full time
Contract type	Fixed-term contract until 10 April 2025, in the first instance. Funding is provided by the CARB-X
Reporting to	Gonococcal Vaccine Project Principal Investigator
Vacancy reference	170521

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.jenner.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	Development of a Gonococcal Outer Membrane Vesicle Vaccine from Lead Optimization to Phase 1 Clinical Trial
Principal Investigator / supervisor	Professors Adrian Hill & Calman MacLennan
Project team	Gonococcal Vaccine Project

Project web site	https://www.jenner.ac.uk/
Funding partner	The funds supporting this research project are provided by CARB-X

The role

This role presents the opportunity for an ambitious Postdoctoral Scientist to play a lead part in various scientific initiatives within the Gonococcal Vaccine Project at the Jenner Institute, University of Oxford. As well as supporting the ongoing preclinical development of a novel outer membrane vesicle (OMV)-based vaccine against gonorrhoea, the position will focus on studies to better understand mechanism of immunity and identify correlates of project against gonorrhoea. The focus of these activities is to help guide the onward development trajectory of our novel vaccine candidate into first-in-human studies and beyond. This is an opportunity to be a key part of the team with the aim of understanding the basis of the protective immunity to gonorrhoea and translating findings to vaccine development.

The Gonococcal Vaccine Project is based at the Jenner Institute, University of Oxford, and utilizes a novel outer membrane vesicle (OMV) technology to develop a vaccine against gonorrhoea. Similar technological approaches have been applied to the development of licensed vaccines against *Neisseria meningitidis* and OMV vaccines are in development against other Gram-negative bacteria. Our vaccine has successfully passed the lead optimisation stage and the project has been awarded substantive funding from CARB-X ('Combating Antibiotic-Resistant Bacteria') to move into the 'IND-enabling' stage. The project will develop an OMV-based vaccine through to GMP production and Phase 1 trial and stage gates have been set within the CARB-X grant to access subsequent funding for transition into the Phase 1 clinical trial. Gonorrhoea is a major cause of sexual and reproductive disease globally and a major driver of antimicrobial resistance worldwide. It disproportionately affects low- and middle-income countries. There is a pressing unmet need for a vaccine against gonorrhoea. With increasing levels of anti-microbial resistance, the emergence of untreatable gonorrhoea is a real threat. The project could lead to significant impact in this important area of global health.

Responsibilities

You will:

- Organise and conduct studies on human and animal samples to understand the immunological basis of protection against gonorrhoea.
- Develop processes, assays and methodologies to probe immune responses to gonococcal infection and vaccination with candidate gonococcal vaccines. In particular:
 - Developing and optimizing assays to measure immune response to gonococcus;
 - Using these assays to explore the immune response to gonococcus "*in vivo*";
 - Interaction with the vaccine development team;
 - Liaising with external partners, particularly with regards to human immunological studies.
- Contribute to shaping the group's research plans by leading scientifically and operationally on novel exploratory clinical immunology readouts.
- Train other members of the group on relevant specialist methodologies as required.
- Contribute knowledge and expertise to other group research priorities.
- Supervise students.
- Actively collaborate with external partners.
- Write research articles for peer-reviewed journals to describe findings, as well as present data at internal/external seminars and conferences.

- 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.

All employees will have to ensure that their work in the laboratory is conducted safely at all times and, in particular, that work is undertaken following the appropriate health and safety policies and procedures for the particular area, without compromise to their own safety or that of others who may be affected.

Selection criteria

Essential

- A PhD (or close to completion) in immunobiology or a subject relevant to immunobiology.
- Experience of microbiology.
- A publication record appropriate for stage of career.
- Experience of development of methodologies in immunology and microbiology.
- Ability to research complex issues and interpret, analyse, and present scientific data and write factual reports.
- Well-developed organisation skills to be able to manage a project effectively.
- Ability to plan and manage a research project.
- Ability to work with a high degree of independence.
- Excellent communication, and interpersonal skills, and ability to work effectively with others.

Desirable

- Experience in vaccine immunology and development.
- Clinical experience.
- Experience of managing a research budget.
- Experience of making grant applications.

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:

- Lone Working
- Regular manual handling
- Working with infectious pathogens (hazard group 2/3) - Hazard Group 3 pathogens
- Working with blood, human products and human tissues
- Work with allergens, Eg laboratory animals, pollen, dust, fish or insects etc.
- Work with any substance which has any of the following pictograms on their MSDS:



- Travel outside of Europe or North America on University Business

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
- University security screening (eg identity 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

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.