Job description and selection criteria

<table>
<thead>
<tr>
<th>Job title</th>
<th>Vaccinologist – specialising in virus-like particles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Division</td>
<td>Medical Sciences</td>
</tr>
<tr>
<td>Department</td>
<td>Nuffield Department of Medicine (NDM) Jenner Institute</td>
</tr>
<tr>
<td>Location</td>
<td>Old Road Campus Research Building, Headington, Oxford</td>
</tr>
<tr>
<td>Grade and salary</td>
<td>Grade 7: £32,236 -£34,189 per annum</td>
</tr>
<tr>
<td>Hours</td>
<td>Full time</td>
</tr>
<tr>
<td>Contract type</td>
<td>Fixed-term (funding available for 24 months from 1st April 2019 in the first instance)</td>
</tr>
<tr>
<td>Reporting to</td>
<td>Prof Sarah Gilbert and Dr Alexandra Spencer</td>
</tr>
<tr>
<td>Vacancy reference</td>
<td>139685</td>
</tr>
<tr>
<td>Research topic</td>
<td>Vaccine Development</td>
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<tr>
<td>Principal Investigator / supervisor</td>
<td>Prof Sarah Gilbert and Dr Alex Spencer</td>
</tr>
<tr>
<td>Project team</td>
<td>Vax-Hub</td>
</tr>
<tr>
<td>Project web site</td>
<td><a href="http://www.jenner.ac.uk/">www.jenner.ac.uk/</a></td>
</tr>
<tr>
<td>Funding partner</td>
<td>EPSRC</td>
</tr>
<tr>
<td>Recent publications</td>
<td>K. Collins et al. Sci Reports 2017; 7:46621. PMID: 28422178</td>
</tr>
</tbody>
</table>

The role

VaxHub is a consortium led by the University of Central London (UCL) and Oxford to improve key challenges in vaccine manufacturing. One of the technologies to be developed further is the use of virus-like particles to deliver antigens from pathogens such as *Plasmodium falciparum* malaria.

The pre-erythrocytic malaria group at the Jenner Institute, University of Oxford, is focused on the development of vaccines against the sporozoite and liver-stage forms of malaria, using two
different vaccine platforms. We are currently developing virus-like-particles to induce high levels of antibodies against sporozoite antigens, while viral-vectored vaccines are developed to induce high levels of cell-mediated immunity against liver-stage malaria antigens.

We are seeking an enthusiastic and motivated scientist with previous experience in vaccine production, particularly of proteins or virus-like particles as part of the wider VaxHub collaboration with UCL. The project will involve assessing potential improvements to one of the leading clinical-stage malaria vaccines, R21 (Collins et al.) Experience with in vivo studies in small pre-clinical models would be an advantage but is not essential. Good interpersonal skills and the ability to work as part of a team are essential in order to make a strong contribution to the project.

**Responsibilities**

- To generate various virus-like particle vaccines for *in vivo* testing of immunogenicity and efficacy.
- Test hypotheses and analyse scientific data from a variety of sources, reviewing and refining working hypotheses as appropriate and presenting results to senior members of the group.
- To supervise and train junior staff in molecular biology, protein expression and purification.
- Act as a source of information and advice to other members of the group and Institute on scientific protocols and experimental techniques.
- Collaborate in the preparation of scientific reports and journal articles and reports.
- To attend appropriate scientific seminars, training opportunities and meetings in the Centre and University.
- To be responsible with others for the daily housekeeping of the laboratory area and performing any other comparable duties as may be required to ensure the efficient running of the laboratory
- To be responsible with others for the biological safety of the laboratory.

**Hazard-specific / Safety-critical duties**

This job includes the following hazards or safety-critical activities which will require successful pre-employment health screening through our Occupational Health Service before the successful candidate will be allowed to start work:

- Lone Working
- Working with infectious pathogens (hazard group 2)
- Work with allergens, Eg laboratory animals, pollen, dust, fish or insects etc.
Selection criteria

Essential selection criteria

- A PhD/DPhil in a relevant area related to vaccine design or pre-clinical stage vaccine production (e.g. protein production, immunology, virology).
- Experience generating, producing and testing protein-based or virus-like particle-based vaccines.
- Extensive experience in molecular biology and aseptic cell culture.
- The ability to learn new techniques, troubleshoot techniques and apply them to a high standard within the remit of the project.
- Excellent communication skills, including the ability to write for publication, present research proposals and results, and represent the research group at meetings.
- Good interpersonal skills, with demonstrated ability to work closely with others as part of a team, while taking personal responsibility for assigned tasks.
- A good relevant publication record.

Desirable selection criteria

- Experience with / knowledge of formulation of biological products, especially vaccines
- Background knowledge of vaccines, vaccination and disease prevention.
- Experience of yeast (Pichia) protein expression
- Prior laboratory experience in immunological techniques to assess immune responses in pre-clinical models such as ELISA.
- Able to learn quickly and apply new knowledge to development of laboratory techniques.
- Experience with in vivo studies.
- Holder of a home office personal licence or willingness to obtain one.

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. Income from external research contracts in 2015/16 exceeded £537.4m and we rank first in the UK for university spin-outs, with more than 130 companies created to date. We are also recognised as leaders in support for social enterprise.

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

**Medical Sciences**

The Medical Sciences Division is an internationally recognized centre of excellence for biomedical and clinical research and teaching.

We are 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: www.medsci.ox.ac.uk

**Nuffield Department of Clinical Medicine (NDM)**

The Nuffield Department of Clinical Medicine (NDM) is one of the largest departments of the University of Oxford and is part of the Medical Sciences Division, with responsibility for a significant part of the teaching of clinical students within the Medical School. The Department also has a substantial research programme which requires high quality administrative management.

NDM has significant financial turnover and complexity, resulting from its diverse research portfolio, its geographical spread and its close links with NHS funding and strategic teams involved in the development and delivery of increasingly integrated clinical research platforms.

. **fostering your career in science**

For more information please visit: www.ndm.ox.ac.uk/home

The University of Oxford is a member of the [Athena SWAN Charter](https://www.ox.ac.uk/about/organisation) and holds an institutional Bronze Athena SWAN award. The Nuffield Department of Medicine holds a Silver Athena SWAN award to recognise advancement of gender equality: representation, progression and success for all.

For more information please visit: https://www.ndm.ox.ac.uk/working-for-ndm/aboutndmatheneswan/
The Jenner Institute

The Jenner Institute was founded in November 2005 to develop innovative vaccines against major global diseases. Uniquely it focuses both on diseases of humans and livestock and tests new vaccine approaches in parallel in different species. A major theme is translational research involving the rapid early-stage development and assessment of new vaccines in clinical trials.

For more information please visit: department website http://www.jenner.ac.uk/

How to apply

Before submitting an application, you may find it helpful to read the ‘Tips on applying for a job at the University of Oxford’ document, at
http://www.ox.ac.uk/about_the_university/jobs/research/
http://www.ox.ac.uk/about_the_university/jobs/professionalandmanagement/
http://www.ox.ac.uk/about_the_university/jobs/supportandtechnical/

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. Please provide details of two referees and indicate whether we can contact them now.

You will also 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.

All applications must be received by midday 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 departments.

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).

Should you experience any difficulties using the online application system, please email recruitment.support@admin.ox.ac.uk. Further help and support is available from www.ox.ac.uk/about_the_university/jobs/support/. To return to the online application at any stage, please go to: www.recruit.ox.ac.uk.

Please note that you will be notified of the progress of your application by automatic emails from our e-recruitment system. Please check your spam/junk mail regularly to ensure that you receive all emails.
Important information for candidates

Pre-employment screening

Please note that the appointment of the successful candidate will be subject to standard pre-employment screening, as applicable to the post. This will include right-to-work, proof of identity and references. We advise all applicants to read the candidate notes on the University’s pre-employment screening procedures, found at: www.ox.ac.uk/about/jobs/preemploymentscreening/.

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: www.admin.ox.ac.uk/councilsec/compliance/gdpr/privacynotices/job/. The University’s Policy on Data Protection is available at: www.admin.ox.ac.uk/councilsec/compliance/gdpr/universitypolicyondataprotection/.

The University’s policy on retirement

The University operates an Employer Justified Retirement Age (EJRA) for all academic posts and some academic-related posts. From 1 October 2017, the University has adopted an EJRA of 30 September before the 69th birthday for all academic and academic-related staff in posts at grade 8 and above. The justification for this is explained at: www.admin.ox.ac.uk/personnel/end/retirement/acrelretire8+/.

For existing employees, any employment beyond the retirement age is subject to approval through the procedures: www.admin.ox.ac.uk/personnel/end/retirement/acrelretire8+/.

From 1 October 2017, there is no normal or fixed age at which staff in posts at grades 1–7 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.

Information Security

Information is critical to The University of Oxford operations and failure to protect information increases the risk of financial and reputational losses. NDM is committed to protecting information, in all its forms, from loss of confidentiality, integrity and availability. Users are required to complete information security awareness training and are responsible for making informed decisions to protect the information that they process. Wilful failure to comply with the policy and baseline will be treated extremely seriously by the University and may result in enforcement action on The Nuffield Department of Clinical Medicine and/or an individual. For full details please see University Information Security Policy and Implementation Guidance.
Benefits of working at the University

University Club and sports facilities
The University Club provides social, sporting and hospitality facilities. It incorporates a bar, café and sports facilities, including a gym. 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 and www.sport.ox.ac.uk/oxford-university-sports-facilities.

Information for international staff (or those relocating from another part of the UK)
If you are relocating to Oxfordshire from overseas, or elsewhere in the UK, the University's International Staff website includes practical information related to moving to and settling in Oxford such as advice on immigration, relocation, accommodation, or registering with a doctor. See: www.internationalstaffwelcome.admin.ox.ac.uk/

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 to settle into Oxford and to provide them with an opportunity to meet people in the area. See www.newcomers.ox.ac.uk/

Childcare
The University has excellent childcare services with 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 www.admin.ox.ac.uk/childcare.

Family-friendly benefits
The University subscribes to My Family Care (www.admin.ox.ac.uk/personnel/staffinfo/benefits/family/mfc/) and staff are eligible to register for emergency back-up childcare and adultcare services, a 'speak to an expert' phone line and a wide range of guides and webinars through a website called the Work + Family space.

Disabled staff
We are committed to supporting members of staff with disabilities or long-term health conditions. Please visit www.admin.ox.ac.uk/eop/disab/staff for further details including information about how to make contact, in confidence, with the University’s Staff Disability Advisor.

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 www.admin.ox.ac.uk/eop/inpractice/networks/

Other benefits
Staff can enjoy a range of other benefits such as free visitor access to the University's colleges and the Botanic Gardens as well as a range of discounts. See www.admin.ox.ac.uk/personnel/staffinfo/benefits