### Job description and selection criteria

<table>
<thead>
<tr>
<th><strong>Job title</strong></th>
<th>Postdoctoral Research Scientist - Rabies Vaccine Development</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Division</strong></td>
<td>Medical Sciences</td>
</tr>
<tr>
<td><strong>Department</strong></td>
<td>Nuffield Department of Medicine (NDM), Jenner Institute</td>
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<tr>
<td><strong>Location</strong></td>
<td>Old Road/Churchill Hospital campus, Headington</td>
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<tr>
<td><strong>Grade and salary</strong></td>
<td>Grade 7: £31,076-£38,183 per annum. Depending on experience, this post may be offered at grade 6 with reduced duties</td>
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<tr>
<td><strong>Hours</strong></td>
<td>Full time; we would consider a suitably-qualified candidate who wishes to work 4 days per week</td>
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<tr>
<td><strong>Contract type</strong></td>
<td>Fixed-term, most likely for 24 months in the first instance</td>
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<tr>
<td><strong>Reporting to</strong></td>
<td>Dr Sandy Douglas</td>
</tr>
<tr>
<td><strong>Vacancy reference</strong></td>
<td>130580</td>
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<tr>
<td><strong>Additional information</strong></td>
<td>Security screening will be required for this post</td>
</tr>
<tr>
<td><strong>Research topic</strong></td>
<td>Clinical grade adenovirus-vector development for a novel rabies vaccine</td>
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<tr>
<td><strong>Principal Investigator / supervisor</strong></td>
<td>Dr Sandy Douglas</td>
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<tr>
<td><strong>Project team</strong></td>
<td>Rabies vaccines and vaccine thermostabilisation</td>
</tr>
<tr>
<td><strong>Project web site</strong></td>
<td><a href="http://www.jenner.ac.uk/dr-sandy-douglas">http://www.jenner.ac.uk/dr-sandy-douglas</a></td>
</tr>
<tr>
<td><strong>Funding partner</strong></td>
<td>The funds supporting this research project are provided by the UK Medical Research Council (MRC) and the UK Department for International Development (DFID)</td>
</tr>
</tbody>
</table>
The role

We are seeking to appoint a Postdoctoral Research Scientist to develop a method for clinical-grade manufacturing of an adenovirus-vectored vaccine against rabies. This role will be important in translating academic research into outcomes that could improve the lives of millions of people, through both the rabies vaccine itself and the impact of this work on the production of other vaccines. Rabies remains a significant global health challenge, with approximately 1.5 million people treated for possible exposure and 59,000 deaths annually; while adenovirus-vectored vaccines against other established and emerging diseases are also being developed at the Jenner Institute.

The novel rabies vaccine, initially developed by a collaborating group and further developed by Dr Douglas and colleagues, has shown excellent results in pre-clinical studies (see PMID 24503087). Unlike current human rabies vaccines, our candidate achieves protection with a single dose. The MRC and DFID have provided £2.2million funding for the development, production and Phase I clinical trial of this vaccine.

You will have lead responsibility for improving the process of adenovirus-vectored vaccine production. This will involve working with experts in various aspects of molecular biology, cellular biology, and regulation to design and execute experimental work. Anticipated areas of focus include virology, bioreactors, fast protein liquid chromatography (FPLC) and good manufacturing process (GMP). We recognise that few individuals will have expertise in all of these areas. A track record in related areas and an eagerness to learn new skills will be of most importance, as you will be able to apply your existing expertise while developing new knowledge and skills in these areas.

You will be based at the Jenner Institute, Old Road Campus, Headington. You will work to develop this key element of the project and your own career with support from a senior team comprising Dr Sandy Douglas (the grant PI), Dr Adam Ritchie (project manager), and members of the Clinical BioManufacturing Facility (CBF).

This post would be particularly suited to you if you have an interest in seeing academic research translated into better health outcomes. If you have a strong academic record and an interest in exploring future career options in industry, or experience in industry and a desire to spend time in a more academic setting, this role at the interface between academia and industry may be especially appealing. This post would suit someone who wishes to work 4 or 5 days per week.

Informal enquiries about this post can be addressed to: adam.ritchie@ndm.ox.ac.uk.

Responsibilities

- Lead process development work to optimise conditions for production of adenovirus-vectored vaccines for clinical use. This will include:
  - analysing scientific data from a variety of sources;
  - testing, reviewing and refining working hypotheses;
  - experimental design, execution, analysis and reporting;
  - adapting existing scientific techniques;
  - developing new techniques and protocols;
  - using both in vitro and in vivo experimental systems;
- Manage your research activities to meet objectives and deadlines;
- Develop and maintain documentation in accordance with GMP requirements;
- Contribute ideas for new research projects and develop ideas for generating research income;
- Act as a source of information and advice for other members of the group, as well as academic and industrial partners;
- Collaborate in the preparation of scientific reports and journal articles and occasionally present papers and posters;
- Attend scientific meetings, seminars, and training as appropriate;
- Carry out any other duties as required by Dr Douglas which are commensurate with the nature of the role and the grade of this post.

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:

- Work with allergens, e.g.: in vivo;
- Work with hazardous chemicals.

**Additional security pre-employment checks**

This job includes the following duties which will require additional security pre-employment checks:

A satisfactory Disclosure Scotland, UELS, or a full or basic financial check due to lab work/handling sensitive data.

**Selection criteria**

**Essential selection criteria**

- A DPhil/PhD or (be near completion) in the biological or medical sciences;
- An ability to plan and carry out biological laboratory work to the highest standards, using both *in vivo* and *in vitro* systems;
- Experience of sterile mammalian cell culture;
- The ability to learn and apply new techniques and technologies;
- The ability to manage your research activities;
- The ability to maintain excellent standards of documentation;
- Skills in problem-solving and critical thinking;
- 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 and ability to work effectively with others.

**Desirable selection criteria**

- Laboratory skills including the use of bioreactors, membrane-based separation techniques (e.g. tangential flow filtration), and/or FPLC techniques including ion exchange and size-exclusion chromatography;
- Prior exposure to GMP biomanufacturing;
- A background in virology or immunology;
- Experience and/or interest in translational research, the bioprocess/biopharmaceutical industries, vaccine development and/or global health.
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, and in providing all of our staff with a welcoming and inclusive workplace that supports everyone to develop and do their best work. Recognising that diversity is a great strength, and 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 2014/15 exceeded £522.9m and ranked first in the UK for university spin-outs, with more than 130 spin-off 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](http://www.ndm.ox.ac.uk/home)

The University of Oxford is a member of the [Athena SWAN Charter](http://www.athenawan.org/) 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/](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/](http://www.jenner.ac.uk/)

**Clinical BioManufacturing Facility**

The Clinical BioManufacturing Facility, part of the Jenner Institute, is the University of Oxford’s Medicines and Healthcare Products Regulatory Agency (MHRA)-approved GMP (Good Manufacturing Practice) manufacturing facility, where the basic research into vaccines and potential advanced therapies can be translated into the manufacture of novel vaccines classed as Investigational Medicinal Products (IMPs) for use in first in human clinical trials.

The CBF has over 20 years’ experience producing biological IMPs according to GMP for early phase clinical trials. It has a Manufacturer’s Authorisation for Investigational Medicinal Products (MIA IMPs) from the MHRA. The CBF has manufactured almost 20 novel vaccines for first-in-man studies, as vaccines for infectious disease and cancer therapy and has supported over 60 clinical trials.

For more information please visit: [http://www.cbf.ox.ac.uk/home](http://www.cbf.ox.ac.uk/home)

**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 [www.ox.ac.uk/about/jobs/supportandtechnical/](http://www.ox.ac.uk/about/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 will form an important part of the selection process and should explain why you are interested in this post and how you meet 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/.
The University’s policy on retirement

The University operates an employer justified retirement age for all academic and academic-related posts (grade 6 and above), for which the retirement date is the 30 September immediately preceding the 68th birthday. The justification for this is explained at: www.admin.ox.ac.uk/personnel/end/retirement/revisedejra/revaim/.

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

There is no normal or fixed age at which support staff in posts at grades 1–5 have to retire. Support staff may retire once they reach the minimum pension age stipulated in the Rules of the pension scheme to which they belong.

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

Training and Development
A range of training and development opportunities are available at the University. Further details can be found at www.ox.ac.uk/staff/working_at_oxford/training_development/index.html.

For research staff only: Support for Research Staff
There is a particularly wide range of support for career development for research staff. Please visit www.ox.ac.uk/research/support-researchers to find out more.

Pensions
The University offers generous occupational pension schemes for eligible staff members. Further details can be found at www.admin.ox.ac.uk/finance/epp/pensions/pensionspolicy/.

Information for international staff (or those relocating from another part of the UK)
A wealth of information is available on the University’s International Staff website for staff who are relocating to Oxford from abroad, at www.admin.ox.ac.uk/personnel/staffinfo/international/.

The University of Oxford Newcomers’ Club
The Newcomers’ Club is aimed at helping partners of newly-arrived visiting scholars, graduate students and academic members of the University to settle in and to meet people in Oxford.

Transport schemes
The University offers a range of travel schemes and public transport travel discounts to staff. Full details are available at www.admin.ox.ac.uk/estates/ourservices/travel/.

University Club and University Sports Facilities
The University Club provides social, sporting and hospitality facilities. It incorporates a Club bar, a cafe and sporting facilities, including a gym. See www.club.ox.ac.uk for all further details.

University staff can use the University Sports Centre at discounted rates, and have the chance to join sports clubs. Please visit www.sport.ox.ac.uk/oxford-university-sports-facilities.

Childcare and Childcare Vouchers
The University offers quality childcare provision services at affordable prices to its employees. For full details about the services offered, please visit www.admin.ox.ac.uk/childcare/. NB: Due to the high demand for the University’s nursery places there is a long waiting list.

The University also offers nursery fee payment schemes to eligible staff as an opportunity to save tax and national insurance on childcare costs. Please visit www.admin.ox.ac.uk/childcare.

Disabled staff
The University is committed to supporting members of staff with a disability or long-term health condition and has a dedicated Staff Disability Advisor. Please visit www.admin.ox.ac.uk/eop/disab/staff for further details.

BUPA - Eduhealth
Bupa Eduhealth Essentials private medical insurance offers special rates for University of Oxford staff and their families www.eduhealth.co.uk/mini-site/.

All other benefits
For other benefits, such as free entry to colleges, the Botanic Gardens and staff discounts offered by third party companies, please see www.admin.ox.ac.uk/personnel/staffinfo/benefits/.