





| Job title | Research Assistant – Protein and Antibody Production |
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| Division | Medical Sciences |
| Department | Nuffield Department of Medicine (NDM), Jenner Institute |
| Location | Old Road Campus Research Building, Headington, Oxford, OX3 7DQ |
| Grade and salary | Grade 6: £29,176 – 34,804 per annum |
| Hours | Full time |
| Contract type | Fixed-term (externally funded post, initially for 20 months; extension may be offered subject to further funding) |
| Reporting to | Professor Simon J Draper |
| Vacancy reference | 144602 |
| Additional information | This post will require security screening. This position is funded by US Aid, Wellcome Trust and European Commission |

The role

This is a Research Assistant role to work on the preclinical development of malaria vaccines. The role will be varied and provide core support to the research group led by Prof Simon Draper, in particular assisting with sterile cell culture, cloning, protein vaccine production, antibody production and protein characterisation.

The Draper Group at the Jenner Institute is focussed upon the design and development of malaria vaccines that induce high-level protective antibody-mediated immune responses. Over the past 8 years, the group has taken 9 novel vaccines from preclinical development into first-inman Phase I and/or Phase II clinical trials, and has a number of further products currently in development.

The group's translational activity is underpinned by a strong programme of preclinical work, seeking to design and validate future generations of vaccines. Previously, our principal focus has been upon the development of malaria vaccines using replication-deficient viral vector platforms. In more recent years, we have developed programmes using recombinant protein and nanoparticle approaches, and are diversifying our work to use the platforms we have developed to produce monoclonal antibodies for various applications. All antibodies are









assessed for anti-parasite activity using a neutralisation assay against malaria parasites maintained in culture.

The group seeks to exploit the opportunities created by its work to gain insights both into pathogen biology and host immune responses which may assist with the development of future vaccine and immunotherapeutic approaches. Recent examples include studies of the mechanism of malaria parasite neutralisation by novel strain-transcending monoclonal antibodies and working with structural biologists to design improved vaccine immunogens. We aim to adopt a collaborative approach to our projects and are keen to interact with others within the University, nationally and internationally in order to apply the most appropriate and powerful techniques to our work.

The group has a strong record of attracting external grant funding, a strong publication record, and has expanded significantly in recent years. We aim to foster scientific excellence within a friendly, open and free-thinking environment.

We now require a Research Assistant to provide core support to the Draper group, in particular assisting with sterile cell culture, cloning, protein vaccine production, antibody production and protein characterisation. We are particularly looking for a motivated individual with a relevant degree in the area of biomedical science or a similar related field. Previous experience of sterile cell culture, cloning, protein and antibody production and characterisation would be desirable.

You will be highly organised, have good interpersonal skills and be able to interact productively and accurately with other team members. Previous laboratory experience, good communication skills and the ability to work as part of a team are essential.

The position will be based at the Jenner Institute Laboratories, at the University's Old Road Campus in Headington.

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

Responsibilities

- To participate in the research programme led by Prof Simon Draper to develop novel malaria vaccines.
- To assist with production of protein based vaccines.
- To assist with production of monoclonal antibodies.
- To assist with DNA cloning and transfection related tasks as required.
- To assist with the maintenance and stocking of the tissue culture and protein production facility.
- To prepare all the necessary reagents for immunological and protein production assays.
- To undertake sterile cell culture and other similar related tasks as required.
- To liaise, report results and coordinate with industrial and/or academic collaborators as required.
- To operate laboratory equipment used for all aspects of immunology/vaccine/ protein/mAb development.
- To interpret results and to present to members of the Draper Group, and the Jenner Institute.

Communication

- To communicate with Prof Simon Draper and other members of the group as required, ensuring that they are kept fully up to date with progress in the research project.
- To help prepare scientific papers for publication, present the research at scientific meetings and contribute to the Jenner website.

- To participate in and contribute directly to scientific discussions with other members of the research group and external collaborators.
- To maintain confidentiality regarding research data when interacting with noncollaborating researchers.

Education and training

- To attend appropriate scientific seminars, training opportunities and meetings in the Institute and University.
- To participate in the education and training of other staff as necessary and appropriate.
- Once trained the post holder's performance will be continually monitored to ensure that the required standard of accuracy and efficiency is maintained.

Other General Responsibilities

- To act at all times in the interests of the Institute to ensure good laboratory practice.
- To be accountable for personal professional conduct within the project.
- To undertake such other duties as may be required from time to time that are commensurate with the grade and responsibilities of this post.
- To ensure that work in the laboratory is conducted safely and, in particular, that work is undertaken using appropriate safety procedures and in the dedicated areas.
- To accord due regard to the University Equal Opportunities and Data Protection policies.
- To 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

Pre-employment screening

All offers of employment are made subject to standard pre-employment screening, as applicable to the post.

If you are offered the post, you will be asked to provide proof of your right-to-work, your identity, and 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 so that we can discuss appropriate adjustments with you), and a declaration of any unspent criminal convictions.

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/.

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 (OHS), and the offer of employment will be subject a successful outcome of this assessment.

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

- 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:



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 due to

Essential selection criteria

- A degree in a subject relevant to biomedical science.
- Relevant laboratory experience including: Molecular biology, purifying proteins, cell culture.
- Experience of using databases to organise samples and lab stocks.
- Ability to carry out experimental work carefully and safely demonstrating good laboratory practice.
- Willingness to support the team in all aspects of daily work.
- Self-motivated, technically competent and capable of working independently in a laboratory.
- Excellent communication, and interpersonal skills, and ability to work effectively with others.
- Good documentation and computer skills (Excel, PowerPoint and Word).
- Ability to research complex issues and interpret, analyse, and present scientific data and write factual reports.

Desirable selection criteria

- A further degree to MSc level in a relevant discipline.
- Laboratory management experience.
- Previous practical experience with Akta systems using different chromatographic techniques.
- Previous practical experience characterizing proteins and mAbs using SDS-PAGE, western blot, dot blot and mass spectrometry.
- Previous practical experience of aseptic technique particularly mammalian and insect cell culture

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 cuttingedge. Oxford is one of Europe's most entrepreneurial universities. Income from external research contracts in 2016/17 exceeded £564m and we rank first in the UK for university spinouts, 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 <u>www.ox.ac.uk/about/organisation</u>.

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)...fostering your career in science

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.

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. For more information please visit: <u>http://www.ndm.ox.ac.uk/home</u>

The Nuffield Department of Clinical Medicine has been presented with a Departmental Athena SWAN Silver award in recognition of the commitment made to promote gender equality through our organisational and cultural practices and our efforts to improve the working environment for both men and women. For more information please see our Departmental Athena SWAN pages: 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. 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 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).

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

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: 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. 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: <u>www.admin.ox.ac.uk/personnel/end/retirement/acrelretire8+/</u>.

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.

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 <u>www.admin.ox.ac.uk/personnel/staffinfo/benefits</u>.

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 and www.club.ox.ac.uk and www.sport.ox.ac.uk/oxford-university-sports-facilities.

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 <u>www.welcome.ox.ac.uk</u>. There is also a visa loan scheme to cover the costs of UK visa applications for staff and their dependents. See <u>www.admin.ox.ac.uk/personnel/permits/reimburse&loanscheme/</u>.

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 My Family Care, 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 www.admin.ox.ac.uk/personnel/staffinfo/benefits/family/mfc/.

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 www.admin.ox.ac.uk/childcare/.

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 www.admin.ox.ac.uk/eop/disab/staff.

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 <u>www.admin.ox.ac.uk/eop/inpractice/networks/</u>.

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 <u>www.newcomers.ox.ac.uk</u>.