



DEPARTMENT OF BIOCHEMISTRY

Summary	
Job title	Senior Research Assistant and Lab manager
Division	Medical Sciences
Department	Biochemistry
Location	Dorothy Crowfoot Hodgkin Building, South Parks Road, Oxford
Grade and salary	Grade 7: £36,024 - £44,263 per annum
Hours	Full time (37.5 hours per week)
Contract type	Fixed Term Contract for up to 18 months
Reporting to	Professor Simon Draper and Dr Kirsty McHugh
Vacancy reference	170029
Additional information	Whilst the role is a grade 7 position, we would be willing to consider candidates with potential but less experience who are seeking a development opportunity, for which an initial appointment would be at grade 6 (£32,332 – £38,205 per annum) with the responsibilities adjusted accordingly. This would be discussed with applicants at interview/appointment where appropriate.

The role

Professor Simon Draper's research group has developed new candidate vaccines for blood-stage malaria.

Over the last fifteen years Prof Simon Draper's research group have been conducting Phase 1 and 2 clinical trials to evaluate the safety and immunogenicity of these vaccines in healthy volunteer subjects in the UK, including experimental malaria challenge studies to test vaccine efficacy. Eleven vaccine candidates, including viral vectors, recombinant proteins and a virus-like particle, have been translated into Phase 1 and 2 clinical trials to evaluate the safety and immunogenicity in healthy volunteer subjects in the UK and Africa, including experimental malaria challenge studies to test vaccine efficacy.

The group's translational activity is grounded in a strong programme of preclinical work seeking to develop the next generations of vaccines. Historically, our principal focus has been upon the development



of malaria vaccines, including replication-deficient viral vector platforms. More recently, we have developed programmes using recombinant protein and nanoparticle or virus-like particle approaches and are diversifying our work to use the platforms we have developed to produce monoclonal antibodies (mAbs) for various applications. We have initiated programmes to isolate recombinant human mAbs from vaccinated volunteers to interrogate the human B cell response to vaccination and to characterise critical epitopes on antigenic targets of interest. The high-throughput (HT) characterisation of these large antibody panels, that we can now carry out using cutting-edge HT-SPR, is enabling us to better understand vaccine-induced antibody responses and guides in the selection of candidate mAbs for potential therapeutic development.

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.

This is a Senior Research Assistant and Lab Management role (50:50 split) in Simon Draper's research group to provide core support for the work in the preclinical development of malaria vaccines and antibody therapeutics and to be responsible for overseeing the daily management of the group's lab activities. The role will be varied, but will include being responsible for the mammalian and insect cell culture stocks, assisting in the production of proteins and antibodies as required by the group, and the maintenance and stocking of the main lab, tissue culture rooms, and protein/antibody production facilities. Management responsibilities will include overseeing the biological safety of the laboratory, and documentation governance for the non-clinical work including SOPs, risk assessments and COSHH.

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 and lab management are essential. Experience in bacteria cell culture and protein and antibody production would be highly desirable. You will be highly organised, have good interpersonal skills and be able to interact productively and collaboratively with other team members. Proven experience in a laboratory environment, good communication skills and the ability to work as part of a team are essential.

The position will be based at the Dorothy Crowfoot Hodgkin Building, Department of Biochemistry, South Parks Road, Oxford.

For more information about the group, see: <u>https://draperlab.web.ox.ac.uk/</u>.

Responsibilities

Scientific/Technical Responsibilities

- To participate in the research programme led by Prof Simon Draper to develop novel vaccines for malaria.
- To assist with production of protein-based vaccines and monoclonal antibodies as required
- To be responsible for overseeing the daily housekeeping of the laboratory area and performing tasks including solution preparation, stock control of laboratory consumables, collecting goods from stores and general laboratory management.
- To be responsible for the maintenance and stocking of the main lab, tissue culture rooms, and protein/antibody production facilities.
- To be responsible for maintaining mammalian and insect cell cultures, and to provide the group with cells as requested.

- To be responsible for the biological safety of the laboratory, including document management system oversight and annual review.
- 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.
- To coordinate monthly lab cleaning rotas and perform any other comparable duties as may be required to ensure the efficient running of the laboratory.
- Documentation governance including SOPs, risk assessments and COSHH as well as training records.

Communication

- To participate in and contribute directly to scientific discussions with other members of the research group and collaborators on the project.
- To maintain confidentiality regarding research data when interacting with non-collaborating 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.

Further Responsibilities

- To always act in the interests of the Department 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 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.

Selection criteria

Essential selection criteria

- 1. A degree in a relevant biological subject.
- 2. Experience of cell culture and aseptic technique particularly mammalian and insect cell culture.
- 3. Experience in lab management and written safety documentation (Risk Assessments, COSHH, SOPs).

- 4. Experience of using databases to organise samples and lab stocks.
- 5. Ability to carry out experimental work carefully and safely demonstrating good laboratory practice.
- 6. Willingness to support the team in all aspects of daily work.
- 7. Self-motivated, technically competent and capable of working independently in a laboratory.
- 8. Excellent communication, and interpersonal skills, and ability to work effectively with others.
- 9. Good documentation and computer skills (Excel, PowerPoint and Word).
- 10. Ability to research complex issues and interpret, analyse, and present scientific data and write factual reports.

Desirable selection criteria

Experience of any of the following areas would be highly desirable.

- 1. A further degree to MSc level in a relevant discipline.
- 2. Experience in molecular biology and bacterial cell culture.
- 3. Experience of antibody ELISA assays.
- 4. Experience in protein purification.
- 5. Previous practical experience with AKTA systems using different chromatographic techniques.
- 6. Previous practical experience characterizing proteins and mAbs using SDS-PAGE, western blot, dot blot and mass spectrometry.
- 7. Working knowledge of document management systems such as iPassport.

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: <u>https://www.jobs.ox.ac.uk/pre-employment-checks</u>

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:



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 spinouts, 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.

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>.

Department of Biochemistry

The Department of Biochemistry in Oxford was established in 1920 and is now one of the largest in Europe. Situated in an attractive area close to the University Parks and River Cherwell, the Department is housed in the University Science Area and is currently undergoing a major expansion programme centred on the recently completed and award-winning New Biochemistry Building. The Science Area includes the Radcliffe Science Library and the Natural History Museum, and is conveniently located for easy access to the town centre and colleges.

The department includes research laboratories working in the areas of Cell Biology, Development and Genetics; Chromosomal and RNA Biology; Infection and Disease Processes; Microbiology and Systems Biology; and Structural Biology and Molecular Biophysics. It is particularly well equipped with an extensive computer network, all the basic hardware essential in today's research, together with an excellent range of state-of-the-art specialist equipment.

For more information please visit: http://www.bioch.ox.ac.uk/

The University of Oxford is a member of the <u>Athena SWAN Charter</u> and holds an institutional Bronze Athena SWAN award. The Department of Biochemistry is strongly committed to equality and valuing diversity and we operate a flexible working policy for all staff. The Department holds a departmental Silver Athena SWAN award to recognise advancement of gender equality: representation, progression and success for all.

Centre for Clinical Vaccinology and Tropical Medicine, Churchill Hospital, Oxford

The clinical activities of the Draper Group are undertaken at the Centre for Clinical Vaccinology and Tropical Medicine (CCVTM) which is a purpose-built centre on the Churchill Hospital site. CCVTM is a multi-disciplinary unit which houses physicians, nurses, clinical trial project managers and

administrators from a number of other University of Oxford Research Groups, including the Oxford Vaccine Group.

For more information see: <u>https://www.ovg.ox.ac.uk/about/contact-us</u>

Medical Sciences Division

The Medical Sciences Division is an internationally recognized centre of excellence for biomedical and clinical research and teaching, and the largest academic division in the University of Oxford. It includes 15 clinical departments and 5 non-clinical departments.

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: <u>http://www.ox.ac.uk/divisions/medical_sciences.html</u>

How to apply

Applications are made through our online recruitment portal. Information about how to apply is available on our Jobs website <u>https://www.jobs.ox.ac.uk/how-to-apply</u>.

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 recruitment@bioch.ox.ac.uk

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 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: <u>https://compliance.admin.ox.ac.uk/job-applicant-privacy-policy</u>. The University's Policy on Data Protection is available at: <u>https://compliance.admin.ox.ac.uk/data-protection-policy</u>.

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** of 30 September before the 70th birthday. The justification for this is explained at: <u>https://hr.admin.ox.ac.uk/the-ejra.</u>

For **existing** employees on these grades, any employment beyond the retirement age is subject to approval through the procedures: <u>https://hr.admin.ox.ac.uk/the-ejra.</u>

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.

The University's Policy on Information Security Awareness

The information security awareness training is <u>compulsory</u> for all University staff; and as part of our responsibility as a Department, **ALL** employees of the Department will be required to complete the <u>online information security awareness module</u>, which provides a combination of information, case studies and links to additional resources relating to information security. You will be expected to complete this course as part of your induction process, on your first day working in the Department of Biochemistry. This training will also need to be completed in order to successfully complete your probationary period.

In order to ensure that we are compliant and up-to-date with the information security awareness training, we need to ensure that all staff members have completed the latest course, which may be accessed from the Information Security's website by using the following link:

https://www.infosec.ox.ac.uk/guidance-policy/training-and-awareness

You will also be required to undertake this course on an annual basis, in order to satisfy the security awareness training requirements of the University's Information Security Policy.

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 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 <u>https://welcome.ox.ac.uk/</u>

There is also a visa loan scheme to cover the costs of UK visa applications for staff and their dependants. 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

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

Oxford Research Staff Society (OxRSS)

A society run by and for Oxford University research staff. It offers researchers a range of social and professional networking opportunities. Membership is free, and all researchers employed by Oxford University are welcome to join. Subscribe at <u>researchstaff-subscribe@maillist.ox.ac.uk</u> to join the mailing list to find out about upcoming events and other information for researchers, or contact the committee on <u>committee@oxrss.ox.ac.uk</u>. For more information, see <u>www.ox.ac.uk/oxrss</u>, Twitter @ResStaffOxford, and Facebook <u>www.facebook.com/oxrss</u>.