



Nuffield Department of Medicine

Job title	Postdoctoral Scientist Protein Production
Division	Medical Sciences Division
Department	Alzheimer's Research UK Oxford Drug Discovery Institute (ODDI), Nuffield Department of Medicine
Location	NDM Research Building & Old Road Campus Research Building, Old Road Campus, Roosevelt Drive, Oxford.
Grade and salary	Grade 7: £31,604 - £38,833 p.a
Hours	Full Time
Contract type	Fixed term until August 31 st 2020
Reporting to	Head of Biology & Principal Investigator Biotechnology
Vacancy reference	XXXXXX

Research topic	Protein production
Principal Investigator / supervisor	John Davis
Project team	Alzheimer's Research UK Oxford Drug Discovery Institute (ODDI)
Project web site	http://aruk-oddi.medsci.ox.ac.uk/home
Funding partner	Alzheimer's Research UK funds the Oxford Drug Discovery Institute to establish drug discovery projects with the aim of developing new approaches for the treatment of Alzheimer's disease and other neurodegenerative diseases that cause dementia

Introduction

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 2016/17 exceeded £564m 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)... 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: <http://www.ndm.ox.ac.uk/home>

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:

<https://www.ndm.ox.ac.uk/working-for-ndm/aboutndmatheneswan/>

Alzheimer's Research UK Oxford Drug Discovery Institute

The Alzheimer's Research UK Oxford Drug Discovery Institute (Oxford DDI) is part of a new, world-class, network of three drug discovery units sponsored by Alzheimer's Research UK. This initiative is based on juxtaposing high quality drug discovery expertise alongside academic scientists possessing deep understanding of patients, disease mechanisms and model systems. The intent is to translate the cutting edge academic science into drug discovery and

prosecute projects from target to lead status, and beyond. The focus will be on novel targets in the dementia therapeutic area.

Located in the Nuffield Department of Medicine Research Building on the Old Road Campus, Headington, Oxford, the Oxford DDI is ideally placed. It is co-located within the Target Discovery Institute alongside the Oxford branch of the UK-National Phenotypic Screening Centre and is in close proximity to the Structural Genomics Consortium, other Oxford University research departments and major hospitals. A wide range of collaborative interactions have been initiated, upon which the Oxford DDI's activities will be built and expanded. <http://aruk-oddi.medsci.ox.ac.uk/home>

The Oxford DDI is led by the CSO, Dr John Davis and supported by Lead Academic Scientists, Prof. Simon Lovestone and Prof. Chas Bountra. The unit has resources for up to thirty scientists, including both biologists and medicinal chemists, reporting to a Head of Biology and Head of Chemistry, respectively.

Structural Genomics Consortium (SGC)

The Structural Genomics Consortium (SGC), a not-for-profit, public-private partnership funds pre-competitive research that contributes to new hypotheses in understanding and treating human disease, and the subsequent identification of new targets for drug discovery. The SGC supports pioneering research at the University of Oxford (UK), University of Toronto (Canada), University of Campinas (Brazil), and University of North Carolina (USA). The reagents and knowledge related to human proteins that the SGC supports are made openly accessible to researchers around the world to accelerate the discovery of new medicines in order to bring potentially life-saving drugs to market faster and at a lower cost.

SGC Oxford, a part of the Nuffield Department of Clinical Medicine, receives funding from public, charitable and private sector organisations such as the European Commission, UK Research Councils, Wellcome Trust, and pharmaceutical companies. Research in SGC Oxford is focused on the production and characterisation of the 3-dimensional structures of soluble and of integral membrane proteins, the discovery of selective chemical probes that can modulate protein function, and the development of target enabling packages that transform genetic hits into starting points for drug discovery. SGC Oxford shares its research outputs through collaborations with researchers worldwide.

For more information please visit: <http://www.thesgc.org/scientists/groups/oxford/>

Job description

Overview of the role

The ARUK Oxford Drug Discovery Institute (ODDI) is seeking an experienced Postdoctoral Scientist in protein biochemistry and molecular biology, who will join a larger team carrying out research into new targets for dementia, with a focus on Alzheimer's disease. The successful candidate will be primarily responsible for producing proteins for the project and will have excellent knowledge and experience of expressing human proteins in bacterial and eukaryotic expression systems, and of protein purification from large scale cultures. The candidate will report to the Head of Biology, and will work as part of a team with multiple milestones; therefore, they must have the confidence and ability to communicate and collaborate effectively. As the position is placed in SGC laboratories in the Biotech Group, the person will have to interact with Dr. Nicola Burgess-Brown, where training and support will be provided by Nicola and her team.

Responsibilities/duties

The primary responsibilities are:

- Expression of human proteins in bacteria, baculovirus/insect and mammalian cells.
- Purification of proteins from large scale (1–10 litres) cultures using ÄKTA-Xpress/purifier systems.
- Design and perform cloning and mutagenesis experiments as and when required for the projects.
- Management and supply of protein stocks for biochemical (enzymatic) and biophysical assays and medium-throughput screening of compound libraries.
- Maintain an electronic laboratory notebook according to ODDI guidelines.
- Order supplies, be aware of laboratory inventory and maintain laboratory equipment and lab cleanliness.
- Participate to project meetings, provide protein biochemistry advice and if opportunities arise lead early stage projects.
- Effective communication on a day-to-day basis, in formal written reports, and in oral presentations is required.
- Represent the ODDI in collaborative interactions, at conferences and at outreach programmes.

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.

Hazard-specific 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 2/3)

- Regular manual handling
- Work with any substance which has any of the following pictograms on their MSDS:



Selection criteria

Essential

- A PhD (or equivalent) with proven academic or industrial track record in protein biochemistry
- Previous experience in cloning and mutagenesis
- Demonstrable experience in protein expression in bacterial and eukaryotic expression systems
- Experience in large scale protein purification from bacterial and eukaryotic cells
- Evidence of practical ingenuity, an ability to troubleshoot, and a willingness to develop new laboratory capability
- A flexible attitude, with the ability to work with little supervision managing multiple tasks in a milestone-oriented project
- Able to independently plan and manage a research project
- Excellent oral presentation and written communication skills including experience of writing scientific reports and manuscripts
- Excellent communication and teamwork skills

Desirable

- Experience in leading early stage projects in a matrix team by designing protein production strategies as required, and the ability/knowledge to coordinate other project activities to advance projects to the next milestone
- Experience in biochemical/biophysical assay development
- Past experience of compound screening
- Crystallography

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 <https://www.ox.ac.uk/about/jobs/research/>

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.

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.

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 sporting 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