Job description and selection criteria

<table>
<thead>
<tr>
<th>Job title</th>
<th>Postdoctoral Research Scientist – Metabolism &amp; Organelle Biogenesis (Wellcome Trust Pathfinder)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Division</td>
<td>Medical Sciences</td>
</tr>
<tr>
<td>Department</td>
<td>Nuffield Department of Medicine (NDM)</td>
</tr>
<tr>
<td>Location</td>
<td>Structural Genomics Consortium, Old Road Campus Research Building, Headington, Oxford</td>
</tr>
<tr>
<td>Grade and salary</td>
<td>Grade 7: £31,076 - £38,183 per annum</td>
</tr>
<tr>
<td>Hours</td>
<td>Full time</td>
</tr>
<tr>
<td>Contract type</td>
<td>Fixed-term for 18 months in the first instance</td>
</tr>
<tr>
<td>Reporting to</td>
<td>Associate Professor Wyatt W. Yue</td>
</tr>
<tr>
<td>Vacancy reference</td>
<td>130179</td>
</tr>
<tr>
<td>Funding partner</td>
<td>The funds supporting this research project are provided by Wellcome trust</td>
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</table>

The role

The Metabolic & Rare Diseases group at the SGC University of Oxford combines structural, biochemical, and chemical biology approaches to dissect molecular mechanisms and develop therapeutic concepts of genetic diseases. In collaboration with Precision Biosciences Inc, the group is launching a project, funded by a Wellcome Trust Pathfinder award, on structure-based engineering of meganucleases for therapeutic genome editing in trinucleotide repeat disorders.

You should have an excellent background in protein biochemistry and structural biology. Experience in purification, crystallization and structure determination of protein-nucleic acid complexes will be required. You should have an excellent academic or industrial track record, and be able to work as part of a team that involves frequent interaction with scientists at Precision Biosciences. You will be expected to start by Q3 2017.
Responsibilities

- Molecular biology, protein expression and chromatography to yield highly purified proteins
- Crystallization screening and optimization for X-ray diffraction
- Structure determination of enzymes and their ligand/nucleic acid complexes
- Enzyme characterization by ligand binding (e.g. ITC), electrophoretic mobility shift, and endonuclease assays
- Documentation and dissemination of research results, and effective communication with scientists at SGC Oxford and collaborator’s team at Precision Biosciences
- Any other relevant duties as reasonably associated with the post which may be required from time to time.

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 / Safety-critical duties
See: www.admin.ox.ac.uk/personnel/recruit/preempcheck/compulsorychecks/medical

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
- Regular Manual handling

Selection criteria

Essential selection criteria

- A Ph.D (or be near completion) with proven academic or industrial track record in protein biochemistry and/or structural biology.
- Proven track record in protein purification and crystallization.
- Experience in x-ray structure determination.
- Experience in protein-nucleic acid characterization using binding and activity assays.
- Demonstrable strong interpersonal, oral and written communication skills.
- The ability to work closely with others as part of a multi-disciplinary team.

Desirable selection criteria

- Experience in working with industry
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.ox.ac.uk/about/jobs/supportandtechnical/) 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: [www.ndm.ox.ac.uk/athena-swan](http://www.ndm.ox.ac.uk/athena-swan)

**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/](http://www.thesgc.org/scientists/groups/oxford/)

**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 should explain 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. *(Customise this statement to confirm the document(s) you would like the applicant to attach, but make sure that you keep the reference to PDF. See section 1.4 of QRG)*
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](http://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/](http://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/](http://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/](http://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](http://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](http://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/](http://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/](http://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/](http://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](http://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](http://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/](http://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/](http://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](http://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/](http://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/](http://www.admin.ox.ac.uk/personnel/staffinfo/benefits/).