Job description and selection criteria

<table>
<thead>
<tr>
<th>Job title</th>
<th>Research Assistant in Cell Based High Throughput Screening</th>
</tr>
</thead>
<tbody>
<tr>
<td>Division</td>
<td>Medical Science Division</td>
</tr>
<tr>
<td>Department</td>
<td>Nuffield Department of Medicine</td>
</tr>
<tr>
<td>Location</td>
<td>Target Discovery Institute (TDI), NDM Research Building, Headington, Oxford, OX3 7FZ</td>
</tr>
<tr>
<td>Grade and salary</td>
<td>Grade 7: £32,236 - £39,609 per annum</td>
</tr>
<tr>
<td>Hours</td>
<td>Full time</td>
</tr>
<tr>
<td>Contract type</td>
<td>Fixed-term for until November 2019</td>
</tr>
<tr>
<td>Reporting to</td>
<td>Head of Cellular Screening Facility</td>
</tr>
<tr>
<td>Vacancy reference</td>
<td>137267</td>
</tr>
<tr>
<td>Research topic</td>
<td>Cellular High Throughout Screening</td>
</tr>
<tr>
<td>Principal Investigator / supervisor</td>
<td>Daniel Ebner</td>
</tr>
<tr>
<td>Project team</td>
<td>NPSC/PDi</td>
</tr>
<tr>
<td>Project web site</td>
<td><a href="http://npsc.ac.uk/pdi">http://npsc.ac.uk/pdi</a></td>
</tr>
<tr>
<td>Funding partner</td>
<td>The funding is support is provided by a Public Private Partnership</td>
</tr>
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</table>

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.
Nuffield Department of Medicine

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/

Target Discovery Institute (TDI) & British Heart Foundation Centre for Cardiovascular Target Discovery
This is a new initiative (a >£20M program) by the University of Oxford dedicated to the accurate ascertainment and initial validation of drug targets, and is directed by Professor Peter Ratcliffe FRS, Head Nuffield Department of Medicine. Partners in the Target Discovery Institute include:

- Nuffield Department of Medicine
- Department of Cardiovascular Medicine and BHF Centre of Research Excellence (BHF Centre for Cardiovascular Target Discovery)
- Department of Radiation Oncology and Biology
- Ludwig Cancer Institute
- Kennedy Institute of Rheumatology
- Structural Genomics Consortium
- Department of Chemistry.

The Target Discovery Institute is based in the Nuffield Department of Medicine Research Building (NDMRB). The components include the following:

- High-throughput cell-based screening facility (managed by Daniel Ebner, making available liquid handling robotics, multimodal plate readers, high-content screening microscopy, core siRNA, shRNA and small molecule libraries)
- Proteomics facility (Dr Benedikt Kessler)
- Chemical Biology
- Medicinal Chemistry (Dr Paul Brennan)
- Cell-based assay development program (Prof. Shoumo Bhattacharya) in the WTCHG.
- Medicinal chemistry and chemical biology programs (Prof. Chris Schofield, Dr Angela Russell)

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

About the National Phenotypic Screening Centre
NPSC is a world-class facility for automated, high content, phenotypic screening. The goal of the NPSC is to bring advances in industrial drug screening capabilities to academic investigators. NPSC is a partnership between the Universities of Dundee, Edinburgh and Oxford. The project was established with an £8M infrastructure award from the Scottish Funding Council to the Scottish Universities Life Science Alliance (SULSA). NPSC operates as an open centre and aims to collaborate globally to develop the physiologically-relevant assays from biologists who are keen to achieve impact by seeing their best research ideas translated from the lab into the drug discovery pipeline. www.npsc.ac.uk
Nuffield Department of Medicine

About Phenotypic Screening
A phenotype is one or more observable features or traits that report changes in a biological system or its reaction its environment. Simply-put, phenotypic screening is the systematic identification of agents (such as small molecules, biological molecules or genetic mutations) that alter a phenotype. Phenotypic changes underlay most diseases, whether this is a cancer cell undergoing uncontrolled cell division, a motor neuron that fails to connect to muscle tissue, or the complex defects seen in the brain of a patient with schizophrenia. Phenotypic screening uses a range of techniques to measure changes in biological systems, the backbone of phenotypic screening relies on exploiting automated, high-content microscopy. High-content screening technologies are used to identify molecules with a particular biological effect in cell-based or tissue-based assays. High content phenotypic profiling allows a systems level approach to drug discovery that embraces the complexity of disease biological. Phenotypic screening approaches show promise in potentially improving success rates of drug development.

Job description
Overview of the role
We are seeking a Research Assistant who will be responsible for independently leading research projects focussing on high throughput cell-based screening. You will be responsible for all steps of development, production and analysis of cell based high throughput screens with an emphasis on high content imaging across a broad range of diseases including cardiovascular, oncology and neurodegeneration to support the research of the NPCS/PDi within the TDI Cellular High Throughput Screening facility. Additionally, you will be responsible for assisting in the transfer of developed screens from collaborating laboratories to the facility. You will be a highly organized and productive member of a growing high throughput screening team responsible for developing and maintaining strict procedural protocols. We actively encourage scientists from all disease backgrounds, but with the necessary experience to apply.

Responsibilities/duties
Your main responsibility will be to both transfer and developed assays into the TDI Cellular Screening Facility with collaborating partners of the NPSC/PDi and independently lead research projects to develop, transfer from bench-top to high throughput platforms, produce and analyse high throughput cell based and high content imaging screens in the NPSC/PDi Cell Screening Facility within the TDI High Throughput Screening Facility.
Your duties will include:
- Independently develop novel, bench-top assay for high throughput screening
- Produce and analyse cell based high throughput screens and report results
- Write up and report results to funders and produce manuscripts for publication in peer-reviewed scientific journals
- Assist in writing proposals for future grant funding in the NPSC/PDi and TDI Cellular Screening facility
Assist in the transfer, validation and production of high throughput screens as part of a dynamic multi-pathology investigating research group
- Running, programming and maintaining liquid handling robotic instruments
- Day-to-day laboratory housekeeping – setting-up and clearing away equipment, re-ordering laboratory supplies and maintaining the laboratory in a clean and orderly fashion.

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:**
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
- Work with any substance which has any of the following pictograms on their MSDS:

![Pictograms]

**Selection criteria**

**Essential**
- A PhD or near to completion in cell biology, chemistry or a related field.
- Excellent academic track record, or an equivalent combination of training and experience.
- Professional experience in an industrial or academic research laboratory with an emphasis on cellular high throughput screening
- Proven ability to independently lead a scientific research project from bench-top to completion and publication (either manuscript or thesis)
- Ability to work independently using their own initiative, and also as part of a team, supporting colleagues where necessary
- Considerable experience using high throughput liquid handling work stations (i.e. – PerkinElmer Janus and LabCyte Echo)
- Considerable experience using high content imagers to acquire and analyse high content imaging data (i.e. – PerkinElmer Operetta and GE InCell6000)
- Background in cell biology, specifically, mammalian cell culture and transfections
- Highly organised, excellent attention to detail and the ability to work flexibly to manage their time and a varied workload under pressure to meet deadlines
Nuffield Department of Medicine

- Ability to manage in an organised manner the day-to-day running of a busy research facility while balancing multiple project simultaneously
- Excellent interpersonal and communication skills
- Fast learner and willing to learn new techniques
- Familiarity with the existing literature and research in the field
- Good IT skills and experience with Microsoft Office programmes and web searches

Desirable
- Experience in additional high throughput readouts including qPCR, FACS and plate readers
- Experience with siRNA, shRNA, cDNA and CRISPR techniques
- Knowledge of biochemical compound screening
- Microscopy experience

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)
Nuffield Department of Medicine

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
Membership of the University Club is free for all University staff. The University Club provides 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.sport.ox.ac.uk/oxford-university-sports-facilities.

Information for international staff
The University offers support and advice to international staff, including a visa loan scheme to cover the costs of UK visa applications for staff and their dependents. See www.admin.ox.ac.uk/personnel/permits/reimburse&loanscheme/.

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 www.welcome.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 service through which staff are eligible to register for emergency back-up childcare and adultcare services, a 'speak to an expert' advice service and a wide range of guides and webinars through a website called the Work+Family space. See: www.admin.ox.ac.uk/personnel/staffinfo/benefits/family/mfc/.

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 www.admin.ox.ac.uk/eop/inpractice/networks/.

Additional benefits

Staff can enjoy a range of other benefits and discounts, including free entry to the Botanic Gardens and University colleges, and discounts at University museums. See www.admin.ox.ac.uk/personnel/staffinfo/benefits.