Radcliffe Department of Medicine

UNIVERSITY OF OXFORD

Oxford Centre for Diabetes, Endocrinology and Metabolism

Summary

Job title	Postdoctoral research assistant
Division	Medical Science Division
Department	Radcliffe Department of Medicine (RDM) - Oxford Centre for Diabetes, Endocrinology and Metabolism (OCDEM)
Location	OCDEM, Churchill Hospital, Headington, Oxford, OX3 7LE
Grade and salary	Grade 7: £36,024 - £44,263 per annum
Hours	Full time
Contract type	Fixed-term until 5th April 2025
Reporting to	Professor Patrik Rorsman
Vacancy reference	170486
Additional information	

Research topic	Experimental diabetes research
Principal Investigator / supervisor	Professor Patrik Rorsman
Project team	Rorsman group
Project web site	https://www.rdm.ox.ac.uk/about/our-divisions/oxford-centre-for-diabetes-endocrinology-and-metabolism/oxford-centre-for-diabetes-endocrinology-and-metabolism-research/rorsman-group
Funding partner	The funds supporting this research project are provided by the Helmsley Trust and the UKRI (MRC)
Recent publications	PMID: 38127123 PMID: 37494670 PMID: 34787082

Athena Swan Silver Award · Race Equality Charter Bronze Award · Stonewall SILVER EMPLOYER 2022 · OXFORD LIVING WAGE · We are a Living Wage Employer

The role

We are seeking a Postdoctoral Research Scientist within the Transgenic / Genome Engineering Core Research Group at the Wellcome Centre for Human Genetics at the University of Oxford, an internationally leading research centre focussed on unravelling the genetic basis of multifactorial disease. The group uses CRISPR/Cas9 site-specific nucleases to engineer the genome, providing a means to attribute function to genes, general model systems to understand human genetic disease and understand the significance of genetic variation. With focus on exploring the contribution of alpha- and delta- cells to the hormonal defects associated with Type 1 Diabetes (T1D). The project is a close collaboration between the Wellcome Centre for Human Genetics and the Oxford Centre for Diabetes, Endocrinology and Metabolism.

You will be a member of an inter-departmental research team with responsibility for generating two genetically modified mouse lines, encoding genetically encoded Ca2+ sensors. The project will involve state-of-the-art genome engineering techniques and will involve the gene editing of the non-obese diabetic mouse model. These research tools will allow sophisticated imaging techniques to be used to assess cellular defects in vivo in a mouse model of T1D.

You will have experience in working with and phenotyping genetically manipulated mouse models, ideally with knowledge of diabetic mouse models, and an enthusiasm to apply state-of-the-art CRISPR techniques for model development. You must have excellent technical laboratory skills and be highly self-motivated with strong communication skills.

Responsibilities

- Participate in the MRC funded research project led by Prof. Patrik Rorsman
- Undertake laboratory work as required in molecular and cellular biology.
- Undertake laboratory work with mouse models
- Manage own academic research and administrative activities. This involves small scale project management, to co-ordinate multiple aspects of work to meet deadlines
- Adapt existing and develop new scientific techniques and experimental protocols
- Test hypotheses and analyse scientific data from a variety of sources, reviewing and refining working hypotheses as appropriate
- Develop ideas for generating research income, and present detailed research proposals to senior researchers
- Collaborate in the preparation of scientific reports and journal articles and occasionally present papers and posters
- Use specialist scientific equipment in a laboratory environment
- Act as a source of information and advice to other members of the group on scientific protocols and experimental techniques.
- Represent the research group at external meetings/seminars, either with other members of the group or alone.
- 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

Selection criteria

Essential selection criteria

- Hold a PhD (or close to completion) in a Biomedical discipline.
- Understanding of CRISPR/Cas9 technology, construct cloning and mouse breeding protocols
- Expertise in molecular biology and genotyping techniques

- Experience in working with sophisticated genetically modified mouse models, for example conditional alleles, ideally in a diabetes related field.
- Experience in working studying diabetes at the whole pancreas and isolated islet levels
- Expertise in hormone assays
- Proven experience in scientific project management.
- Evidence of ability to conduct and complete high-quality research both independently and in collaboration.
- Ability to communicate results effectively, both informally and formally, and in oral and written form.
- Excellent communication skills both written and oral

Desirable selection criteria

- Embryo microinjection or microsurgical techniques
- Imaging technologies
- Experience in histology and immunohistochemistry

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. If you have previously worked for the University we will also verify key information such as your dates of employment and reason for leaving your previous role with the department/unit where you worked. 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:
https://www.jobs.ox.ac.uk/pre-employment-checks

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:

- Lone Working
- Working with Ionising Radiation
- Working with blood, human products and human tissues
- 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:

- Manual handling

Additional security pre-employment checks

This job includes duties that will require additional security pre-employment checks:

- University security screening (eg identity checks)

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 spin-outs, 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 www.ox.ac.uk/about/organisation.

Radcliffe Department of Medicine (RDM)

The Radcliffe Department of Medicine (RDM) within the Medical Sciences Division is one of the largest departments in the University of Oxford. Headed by Professor Keith Channon, RDM is a multi-disciplinary department which aims to tackle some of the world's biggest health challenges by integrating innovative basic biology with cutting edge clinical research. The Department was formed in 2012 and comprises:

- The Division of Cardiovascular Medicine (CVM)
- The Investigative Medicine Division (IMD)
- The Nuffield Division of Clinical Laboratory Sciences (NDCLS)
- The Oxford Centre for Diabetes, Endocrinology and Metabolism (OCDEM)
- The majority of research groups from the MRC Weatherall Institute of Molecular Medicine (WIMM)

The Department has internationally renowned programmes in a range of areas, including cardiovascular sciences, diabetes and endocrinology, immunology, haematology and pathology. Our work is underpinned by excellence in molecular medicine, stem cell biology, genomics and clinical laboratory science.

The Department employs in the region of 535 staff, has around 140 postgraduate research students and has an annual turnover of around £63m, of which £42m is externally funded grants and contracts.

RDM supports a culture that is inclusive and supportive of all members, including those with caring responsibilities and those who work flexibly for other reasons. We are proud to be a family friendly department, and are committed to creating a working environment that offers opportunities for working parents/carers to achieve their professional goals and develop their careers without having a detrimental effect on family life. To support this, we have a range of family friendly policies and practices including maternity, paternity and adoption leave, shared parental leave and unpaid parental leave, flexible/part-time working and scheduling meetings within core hours (9.30 a.m. -2.30 p.m.). Many of our staff work flexibly, with arrangements managed informally or formally.

The University of Oxford is a member of the Athena SWAN Charter and holds an institutional Bronze Athena SWAN award. RDM holds a departmental Silver Athena SWAN award in recognition of our efforts to introduce organisational and cultural practices that promote gender equality in SET to create a better working environment for both men and women

For more information on the Department please visit:
www.rdm.ox.ac.uk

Oxford Centre for Diabetes, Endocrinology and Metabolism (OCDEM)

The Oxford Centre for Diabetes, Endocrinology and Metabolism (OCDEM) is a pioneering centre which combines clinical care, research and education in diabetes, endocrine and metabolic diseases. By promoting world-class research, it aims to enhance understanding of these diseases, and to accelerate the search for new treatments and cures. Patients attending OCDEM are provided with a first class integrated care service.

The centre is fitted with top quality integrated laboratories and facilities for basic science and clinical research, and brings together the research and clinical expertise of groups investigating a wide range of related diseases at Oxford University. OCDEM conducts teaching and research in the context of clinical care and expedites the translation of research findings into clinical practice.

OCDEM has been awarded support from the NIHR Oxford Biomedical Research Centre, a government-funded partnership between the Oxford University Hospitals NHS Trust and the University of Oxford, to support translational research in diabetes. The goal of the BRC is to foster innovation to improve healthcare; it supports translational research that demonstrates direct patient benefit. A secondary aim is to establish the NHS as an internationally recognised centre of research excellence, by improving research, healthcare education and training.
For more information, please visit: www.ocdem.ox.ac.uk

How to apply

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

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 2 referee and indicate whether we can contact them now.

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 *(ocdem.personnel@ndm.ox.ac.uk)*

To return to the online application at any stage, please go to: www.recruit.ox.ac.uk.

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

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: https://hr.admin.ox.ac.uk/the-ejra.

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

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.

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 https://welcome.ox.ac.uk/

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 www.newcomers.ox.ac.uk.

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 researchstaff-subscribe@maillist.ox.ac.uk to join the mailing list to find out about upcoming events and other information for researchers, or contact the committee on committee@oxrss.ox.ac.uk. For more information, see www.ox.ac.uk/oxrss, Twitter @ResStaffOxford, and Facebook www.facebook.com/oxrss.