



### Summary

Job title	Postdoctoral Research Associate in Ribosome biogenesis dysregulation in cancer
Division	Medical Sciences
Department	Department of Biochemistry
Location	Dorothy Crowfoot Hodgkin Building, South Parks Road, Oxford
	Grade 7: £41,997 - £46,913 per annum
Grade and salary	Salary inclusive of a pensionable Oxford University Weighting of £1,500 per year
Hours	Full time (37.5 hours per week)
Contract type	Fixed-term for 3 years in the first instance
Reporting to	Professor Faraz Mardakheh
Vacancy reference	178464

Research topic	Ribosome biogenesis dysregulation in cancer
Principal Investigator / supervisor	Professor Faraz Mardakheh
Project team	Mardakheh lab
Project web site	www.mardakhehlab.info
Funding partner	The funds supporting this research project are provided by Cancer Research UK
Recent publications	<ul> <li>Khoroshkin MS, Buyan A, Dodel M, Navickas A, Yu J, Trejo F, Doty A, Baratam R, Zhou S, Lee SB, Joshi T, Garcia K, Choi B, Miglani S, Subramanyam V, Modi H, Carpenter C, Markett D, Corces R, Mardakheh FK , Kulakovskiy IV , Goodarzi H  (2024) Systematic Identification of Post-Transcriptional Regulatory Modules. <u>Nature Communication</u> 15:7872.</li> <li>Dodel M, Guiducci G, Dermit M, Krishnamurthy S, Alard EL, Capraro F, Stojic L , Mardakheh FK (2024). TREX reveals proteins that bind to specific RNA regions in living cells. <u>Nature Methods</u> 21:423-434.</li> </ul>







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• Azman MS, Alard EL, Dodel M, Capraro F, Faraway R, Dermit M, Fan W, Chakraborty A, Ule J, Mardakheh FK⊠. (2023) An ERK1/2-driven RNA-binding switch in nucleolin drives ribosome biogenesis and pancreatic tumorigenesis downstream of RAS oncogene. <u>EMBO Journal</u> 42:e110902.
<ul> <li>Dermit M, Dodel M, Lee FCY, Azman MS, Schwenzer H, Jones JL, Blagden SP, Ule J, Mardakheh FK <sup>[2]</sup>. (2020) Subcellular mRNA localization regulates ribosome biogenesis in migrating cells. <u>Developmental Cell</u> 55 (3), 298-313. E10.</li> </ul>

# The role

Reporting to the Principal Investigator (Faraz Mardakheh). The post holder is a member of Mardakheh group with responsibility for carrying out research for a CRUK-funded programme on understanding and exploiting ribosome biogenesis dysregulation in cancer. The post holder provides guidance to less experienced members of the research group, including postdocs, research assistants, technicians, and PhD and project students.

# Responsibilities

- 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.
- Contribute ideas for the research project.
- Collaborate in the preparation of scientific reports and journal articles and occasionally present papers and posters.
- Use specialist scientific equipment in a laboratory environment.
- Participate in Mardakheh group meetings and lab retreats through presenting the research findings as well as providing feedback on the research of other group members.
- 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 internal and external meetings/seminars.
- Carry out collaborative projects with colleagues in partner institutions, and research groups.
- Teach or undertake ad-hoc paid teaching (this may include lecturing, demonstrating, small group teaching, tutoring of undergraduates and graduate students and supervision of projects).
- Embed the principles of mutual respect, equality, diversity, inclusivity and sustainability in all aspects of your work; undertake training as and when asked to do so.

# Selection criteria

# Essential selection criteria

- 1. Hold, or be close to completion, of a PhD/DPhil, together with relevant in-depth experience in the field of RNA biology.
- 2. Possess sufficient laboratory experience in basic molecular biology, biochemistry, and cell biology skills.
- 3. Ability to manage own academic research and associated activities.
- 4. Previous experience of contributing as an author to primary research publications.
- 5. Ability to contribute ideas for new directions of research.
- 6. Excellent communication skills, including the ability to write for publications and research proposals, and present results at scientific meetings as talks and posters.
- 7. Ability to work as part of a research team.
- 8. Ability of accurate laboratory record keeping.

#### Desirable selection criteria

- 1. Experience of next generation RNA-sequencing sample preparation and data analysis.
- 2. Experience of mass spectrometry based proteomics sample preparation and data analysis.
- 3. Knowledge of the ribosome biogenesis field.
- 4. Experience of independently managing a discrete area of a research project.

# 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: <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:

- Lone Working
- Work in hot or cold environments
- Regular manual handling
- Working with category 3b or 4 lasers (laser safety class)
- 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:



# 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 <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: <u>http://www.bioch.ox.ac.uk/</u>

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.

# 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.

# 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 dependents)

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.

If you currently work for the University please note that:

- as part of the referencing process, we will contact your current department to confirm basic employment details including reason for leaving
- although employees may hold multiple part-time posts, they may not hold more than the equivalent of a full time post. If you are offered this post, and accepting it would take you over the equivalent of full-time hours, you will be expected to resign from, or reduce hours in, your other posts(s) before starting work in the new post.

# 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: <a href="https://staff.web.ox.ac.uk/recruitment-support-faqs">https://staff.web.ox.ac.uk/recruitment-support-faqs</a>

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

#### 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 70<sup>th</sup> 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 **compulsory** 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</u> <u>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, flexible working options, travel discounts including salary sacrifice schemes for bicycles and electric cars and other discounts. Staff can access a huge range of personal and professional development opportunities. See <a href="https://hr.admin.ox.ac.uk/staff-benefits">https://hr.admin.ox.ac.uk/staff-benefits</a>

#### Employee Assistance Programme

As part of our wellbeing offering staff get free access to Health Assured, a confidential employee assistance programme, available 24/7 for 365 days a year. Find out more <u>https://staff.admin.ox.ac.uk/health-assured-eap</u>

### University Club and sports facilities

Membership of the University Club is free for University staff. It 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 <a href="https://www.club.ox.ac.uk">www.club.ox.ac.uk</a> and <a href="https://www.sport.ox.ac.uk">https://www.sport.ox.ac.uk</a>.

#### Information for staff new to Oxford

If you are relocating to Oxfordshire from overseas or elsewhere in the UK, the University's Welcome Service includes practical information about settling in the area, including advice on relocation, accommodation, and local schools. See <a href="https://welcome.ox.ac.uk/">https://welcome.ox.ac.uk/</a>

There is also a visa loan scheme to cover the costs of UK visa applications for staff and their dependants. See <a href="https://staffimmigration.admin.ox.ac.uk/visa-loan-scheme">https://staffimmigration.admin.ox.ac.uk/visa-loan-scheme</a>

#### Family-friendly benefits

We are a family-friendly employer with one of the most generous family leave schemes in the Higher Education sector (see <a href="https://hr.web.ox.ac.uk/family-leave">https://hr.web.ox.ac.uk/family-leave</a>). Our Childcare Services team provides guidance and support on childcare provision, and offers a range of high-quality childcare options at affordable prices for staff. In addition to 5 University nurseries, we partner with a number of local providers to offer in excess of 450 full time nursery places to our staff. Eligible parents are able to pay for childcare through salary sacrifice, further reducing costs. See <a href="https://childcare.admin.ox.ac.uk/">https://childcare.admin.ox.ac.uk/</a>.

# Supporting disability and health-related issues (inc menopause)

We are committed to supporting members of staff with disabilities or long-term health conditions, including those experiencing negative effects of menopause. Information about the University's Staff Disability Advisor, is at <u>https://edu.admin.ox.ac.uk/disability-support</u>. For information about how we support those going through menopause see <u>https://hr.admin.ox.ac.uk/menopause-guidance</u>

# Staff networks

The University has a number of staff networks including for research staff, BME staff, LGBT+ staff, disabled staff network and those going through menopause. Find out more at <u>https://edu.admin.ox.ac.uk/networks</u>

#### The University of Oxford Newcomers' Club

The University of Oxford Newcomers' Club is 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>.

# Research staff

The Researcher Hub supports all researchers on fixed-term contracts. They aim to help you settle in comfortably, make connections, grow as a person, extend your research expertise and approach your next career step with confidence. Find out more <u>https://www.ox.ac.uk/research/support-researchers/researcher-hub</u>

Oxford's Research Staff Society is a collective voice for our researchers. They also organise social and professional networking activities for researchers. Find out more <u>https://www.ox.ac.uk/research/support-researchers/connecting-other-researchers/oxford-research-staff-society</u>