

Job title	Postdoctoral Researcher in experimental tumour models
Division	Medical Sciences
Department	Nuffield Department of Medicine (NDM), Ludwig Institute for Cancer Research
Location	Old Road Campus Research Building, Headington, Oxford, OX3 7DQ and Wellcome Trust Centre for Human Genetics, Roosevelt Drive, Oxford, OX3 7BN
Grade and salary	Grade 7: £32,817 – 40,322 per annum
Hours	Full time
Contract type	Fixed-term, 3 years in the first instance
Reporting to	Professor Simon Leedham and Professor Xin Lu
Vacancy reference	144757
Additional information	Funded by Ludwig Institute for Cancer Research

The role

The successful applicant will work with research groups at the Wellcome Trust Centre and Ludwig Institute for Cancer Research to develop and enhance experimental tumour models, with a focus on state-of-the-art organoid and syngeneic or xenograft models. The aim is to identify novel insights into cancer initiation and develop new cancer therapeutic strategies.

The post-holder will apply these new models to a variety of applications including, but not limited to: novel agent preclinical drug testing; and investigating interactions between cancer-initiating cells and their environment, such as microbiota and cancer-causing pathogens.



Responsibilities

- Following training, you will develop and optimise mouse colonoscopic submucosal injection techniques for orthotopic xenograft models, alongside development of syngeneic models and reliable models of metastasis. You will work alongside PI's to apply these models in a range of experimental applications.
- You will manage your own academic research and administrative activities. This involves small scale project management, to co-ordinate multiple aspects of work to meet deadlines.
- To test hypotheses and analyse scientific data from a variety of sources, reviewing and refining working hypotheses as appropriate
- You will carry out colorectal cancer research, including sample preparation, genotyping, mutation screening, planning crosses, mouse drug administration, making transgenics, undertaking basic procedures of husbandry, cell culture, lentiviral transfection, tissue preparation and analysis and functional assays.
- Use specialist scientific equipment in a laboratory environment.
- 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 new research projects.
- Collaborate in the preparation of scientific reports and journal articles and occasionally present papers and posters.
- You will liaise with collaborators, clinicians and pathologists, to obtain samples and information.
- 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.
- Write up work in a laboratory book on a daily basis, keeping detailed, accurate and comprehensible records of experimental plans and work.
- Participate and support public engagement activities on behalf of the Centre, working with the Centre's Public Engagement and Communications Officer, which is anticipated to be around 2 days per year.

Pre-employment screening

All offers of employment are made subject to standard pre-employment screening, as applicable to the post.

If you are offered the post, you will be asked to provide proof of your right-to-work, your identity, and we will contact the referees you have nominated. You will also be asked to complete a health declaration (so that you can tell us about any health conditions or disabilities so that we can discuss appropriate adjustments with you), and a declaration of any unspent criminal convictions.

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/.

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 (OHS), and the offer of employment will be subject a successful outcome of this assessment.

The hazards or safety-critical duties involved are as follows:

- 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:



Additional security pre-employment checks

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

- University security screening (eg identity checks)

Selection criteria

Essential selection criteria

- A PhD (or close to completion) in Molecular Biology, Cell Biology or other relevant subject.
- A personal home office licence (or equivalent qualification for your country of residence).
- Experience of maintaining mouse colonies.
- Cell culture experience.
- Experience of standard molecular and cell biology techniques.
- The ability to work well independently or as part of a team
- Demonstrable ability to organise and prioritise work efficiently whilst delivering results to the required standard and agreed schedule.

Desirable selection criteria

- Experience in mouse xenograft and/or syngeneic models.
- Experience in using orthotopic tumour models for drug testing.
- Experience in organoid culture.
- Knowledge of immunology

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

The Ludwig Institute for Cancer Research (LICR)

Research within the Ludwig Cancer Research, Oxford Branch is focused on studying signalling pathways that influence cancer initiation and progression, with a focus on infection, inflammation and cancer epigenetics. We aim to advance cancer prevention, early diagnosis and effective treatment.

The research groups at Ludwig Cancer Research, University of Oxford, have strong overlapping interests yet maintain diversity, enabling the effective sharing of ideas and technologies. By working together the scientists maximise their research potential.

The Oxford Branch currently employs approximately 120 staff at the Old Road Campus Research Building in Headington, Oxford, and has plans for further expansion over the coming 2-3 years.

For more information please visit: <http://www.ludwig.ox.ac.uk/>

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

http://www.ox.ac.uk/about_the_university/jobs/research/

http://www.ox.ac.uk/about_the_university/jobs/professionalandmanagement/

http://www.ox.ac.uk/about_the_university/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 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.

Please upload all documents **as PDF files** with your name and the document type in the filename.

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 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).

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 receive an automated email from our e-recruitment system 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: 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. 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+/.

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

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 www.admin.ox.ac.uk/personnel/staffinfo/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 www.sport.ox.ac.uk/oxford-university-sports-facilities.

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.

There is also 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/.

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 My Family Care, 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 www.admin.ox.ac.uk/personnel/staffinfo/benefits/family/mfc/.

Childcare

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 www.admin.ox.ac.uk/childcare/.

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/.

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.