

Job Description and Selection Criteria

Job title	Postdoctoral Research Assistant in Rhinoceros Ovarian Culture
Division	Medical Sciences
Department	Nuffield Department of Women's & Reproductive Health
Location	Level 3, Women's Centre, John Radcliffe Hospital, Headington, Oxford, OX3 9DU
Grade and salary	Grade 7: £32,236 to £39,609 (with a discretionary range to £43,267) per annum
Hours	Full-time (<i>applications for flexible working arrangements are welcomed and will be considered in line with business needs, including the potential for part-time working</i>)
Contract type	Fixed Term for 3 years (two positions available)
Reporting to	Dr Suzannah Williams
Vacancy reference	138055



The Post

The aim of this project is to further our understanding of rhinoceros follicle development using fixed ovarian tissues and to develop techniques to develop rhinoceros eggs from cryopreserved ovarian tissues.

Many species of rhinoceros are critically endangered with just two females remaining of the Northern White Rhino. Therefore, it is critical to develop fertility preservation techniques for rhinos, however, very little is known about ovarian function in these species. Dr Williams has obtained ovarian tissue from Southern White Rhinos for analysis. Dr Williams has a collaboration with Prof. Thomas Hildebrandt from the Leibniz Institute for Zoo and Wildlife Research (Berlin, Germany).

Overview of the role

This position represents an exciting new direction of research in Dr Williams' group into rhino fertility preservation. The focus of Dr Williams' group to date has been on analysing ovarian function using mouse and sheep models with the aim of developing clinical treatments for human fertility preservation, which her group recently initiated with the establishment of human ovarian tissue culture. The robust platform of established techniques using multiple systems has enabled Dr Williams to add fertility preservation for the rhinoceros to her programme of research. The two successful applicants for the two 3-year positions are expected to work together with the anticipation of achieving the goal of generating rhino eggs in vitro.

Reporting to Dr Suzannah Williams, the post holders will be members of her research group with responsibility for the analysis of fixed ovarian rhino tissue as well as developing techniques to grow rhino eggs in vitro and in vivo with subsequent analysis of follicle function and egg quality. The focus is to establish culture techniques to develop mature rhino ovarian follicles from primordial follicles in cryopreserved ovarian tissue. Although rhino tissue culture is not established in the Williams group, culture of mouse and human tissue is and the applicant will be expected to develop protocols for rhino ovary culture using the literature from related species.

The successful candidates will join a highly motivated interdisciplinary team of scientists and clinical researchers working in the field of ovarian function. They will benefit from state-of-the-art facilities and opportunities available at the University of Oxford.

The successful applicants will need to contribute to protocol design and optimisation. Field trips to collect additional material are anticipated. The post holders will be responsible for generating and analysing data and presenting the results in the form of lectures at conferences and generating papers for publication in scientific journals. The post holders are expected to work as integrated members of the Williams team, but with a high degree of autonomy, taking responsibility for managing their time such that results are produced according to a reasonable, mutually agreed schedule.

Responsibilities

- Manage own academic research and administrative activities. This involves project management, to co-ordinate multiple aspects of work to meet deadlines.

- 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.
- Take responsibility for the planning, execution, and recording of high quality research, ensuring the validity and reliability of data at all times.
- Maintain accurate and up-to-date records of all findings, and to make these available to other members of the team.
- Communicate effectively with Dr Williams, the team, and beyond.
- Contribute ideas for new research projects.
- Develop ideas for generating research income through grant applications, 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.
- Carry out collaborative projects with colleagues in partner institutions, and research groups.
- Actively participate in meetings at group and cross-departmental levels.
- Maintain an up-to-date awareness of relevant publications in the area of research and incorporate the findings into the programme of research as appropriate.
- Initiate, prepare and submit publications relevant to own research project, and aid the preparation of other publications.
- Assist in writing reports for the research sponsor.
- Comply with local, departmental and university-wide safety regulations.
- Provide guidance to less experienced members of the research group, including other postdocs, research assistants, technicians, and doctoral students, with the opportunity to teach and/or supervise project students.
- Contribute to the day to day running of the team and undertake any other reasonable tasks as required.

This post may involve travelling to obtain tissues for research as appropriate, and some working outside of normal working hours (including weekends) if the requirements of the project demand.

Key goals for the first 6-12 months

1. Demonstrate function of the rhino ovarian tissue by xenotransplantation into mice
2. Carry out experiments to optimise culture of rhino ovarian tissue beginning with current established protocols
3. Analyse follicle development in fixed ovarian tissues
4. Analyse follicle development of transplanted tissues
5. Analyse follicle development of cultured tissues

Key relationships

The project will be led by Dr Suzannah Williams (Principal Investigator of group researching Ovarian Physiology in Health and Disease; Lead for Ovarian Fertility Preservation for Future Fertility Trust) with assistance from experienced lab personnel.

Development opportunities

This position has a clear aim that requires clear thinking, good organisational skills and the ability to work to deadlines. In return you will be fully supported in your studies with an emphasis on training and productivity. This involves weekly discussions with Dr Williams, being part of an outgoing enthusiastic team, being provided with opportunities to improve your communication abilities and present your findings at conferences, and authorship on publications resulting from these studies.

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

Selection criteria

Applications will be judged only against the criteria that are set out below. *Applicants should ensure that their application shows very clearly how their skills and experience meet these criteria.*

Essential

1. Passion and enthusiasm for conservation
2. Hold a PhD/DPhil (or near completion) or equivalent professional experience in a biological subject
3. Possess considerable experience and specialist knowledge in at least one of the following:
 - a) Highly skilled in tissue/organ/organoid/scaffold/cell culture techniques
 - b) Mouse handling and surgery with current home office PIL
4. Flexibility to learn new skills and develop novel approaches for analysis

5. Ability to work independently within a dynamic multi-disciplinary team, balancing own work with contributing to all aspects of ensuring the smooth running of the team
6. Self-motivated and with good organisation and time management skills; ability to manage own academic research and associated activities and work effectively under pressure and deadlines
7. Experience of contributing to publications/presentations
8. Ability to contribute ideas for new research projects and research income generation
9. Excellent verbal and written communication skills including a) the ability to communicate results effectively in writing and verbally with colleagues in any discipline; and b) the ability to write for publication, present research proposals and results, and represent the research group at meetings
10. The ability to concentrate on precise, focused tasks with close attention to detail
11. Fluent user of appropriate computer software (e.g. Excel, Word, PowerPoint, Prism, etc.)

Desirable

1. Experience of independently managing a discrete area of a research project
2. Experience of actively collaborating in the development of research articles for publication
3. Currently hold a Home Office Personal License with experience of working with mice
4. Experienced in surgical techniques in mice, or equivalent
5. Highly skilled in the culture of ovarian tissues or ovarian follicles
6. Microdissection skills
7. Highly skilled in histological sample preparation and analysis
8. Considerable experience of multiple lab techniques (e.g. IHC, PCR, *in situ* hybridisation, western blotting, etc.)

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/professionalandmanagement/

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 three 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 note that if you do not upload a supporting statement, we will be unable to consider your application.

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 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.

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.

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

Nuffield Department of Women's & Reproductive Health (NDWRH)

The Nuffield Department of Women's & Reproductive Health (NDWRH) is one of the largest and most successful academic departments in the world in its field. There are approximately 160 people working in the department, including senior academic staff, research support staff, clerical and technical staff, and graduate students (including clinicians) carrying out research towards a higher degree. There are also a number of visiting researchers from many parts of the world. The average annual income is approximately £10 million, of which over 75% comes from outside sources.

NDWRH encompasses multi-disciplinary research across the full spectrum of women's health. Our work has four overarching themes; Cancer, Global Health, Maternal & Fetal Health and Reproductive Medicine & Genetics. We focus on genetic studies, the dissection of molecular, biochemical and cellular mechanisms underlying normal and aberrant reproductive tissue function, and clinical studies in women's health, assisted reproduction and pregnancy, as well as growth and development across the first 1000 days of life.

The department also now includes The George Institute for Global Health, whose mission is to increase access to quality health care for millions of people worldwide - with a particular focus on vulnerable women in resource-poor settings.

The clinical and laboratory programmes are based in the Women's Centre, John Radcliffe Hospital; Weatherall Institute of Molecular Medicine; Winchester House, and the Big Data Institute, and there are collaborations with the School's Institutes, the University's Science Departments and with researchers outside Oxford, in both the UK and abroad, especially in low-middle income countries.

For more information please visit: www.wrh.ox.ac.uk

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

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

The University Club provides social, sporting and hospitality facilities. It incorporates a bar, café and sporting facilities, including a gym. 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 (or those relocating from another part of the UK)

If you are relocating to Oxfordshire from overseas, or elsewhere in the UK, the University's International Staff website includes practical information related to moving to and settling in Oxford such as advice on immigration, relocation, accommodation, or registering with a doctor.

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

Disabled staff

We are committed to supporting members of staff with disabilities or long-term health conditions. Please visit www.admin.ox.ac.uk/eop/disab/staff for further details including information about how to make contact, in confidence, with the University's Staff Disability Advisor.

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/

Other benefits

Staff can enjoy a range of other benefits such as free visitor access to the University's colleges and the Botanic Gardens as well as a range of discounts.

See www.admin.ox.ac.uk/personnel/staffinfo/benefits