

## POSITION DESCRIPTION

Department of Obstetrics and Gynaecology  
Melbourne Medical School  
Faculty of Medicine, Dentistry & Health Sciences

### Postdoctoral Research Fellow – Translational therapeutics and diagnostics for pregnancy complications.

#### POSITION NO

CLASSIFICATION	Level A or Level B  Level of appointment will be commensurate with the qualifications and relevant experience of the successful appointee
SALARY	Level A \$75,289 - \$102,163 p.a.  Level B \$107,547 - \$127,707 p.a.
SUPERANNUATION	Employer contribution of 9.5%
EMPLOYMENT TYPE	Full Time for 12 months, with the possibility of extending the contract.
OTHER BENEFITS	<a href="http://about.unimelb.edu.au/careers/working/benefits">http://about.unimelb.edu.au/careers/working/benefits</a>
HOW TO APPLY	Online applications are preferred. Go to <a href="http://about.unimelb.edu.au/careers">http://about.unimelb.edu.au/careers</a> , under 'Job Search and Job Alerts', select the relevant option ('Current Staff' or 'Prospective Staff'), then find the position by title or number.
CONTACT FOR ENQUIRIES ONLY	Dr Fiona Brownfoot Tel 0418 130 139 Email <a href="mailto:fiona.brownfoot@unimelb.edu.au">fiona.brownfoot@unimelb.edu.au</a>

*Please do not send your application to this contact*

For information about working for the University of Melbourne, visit our websites:

[about.unimelb.edu.au/careers](http://about.unimelb.edu.au/careers)  
[joining.unimelb.edu.au](http://joining.unimelb.edu.au)

## ***Position Summary***

The purpose of this role is to join a research project run by Dr Fiona Brownfoot looking at developing diagnostics and therapeutics for placental disease (<https://findanexpert.unimelb.edu.au/profile/623083-fiona-brownfoot>). The lab utilises human placental samples and cells to identify placental disease pathways and develop novel diagnostics and therapeutics. Using mouse models of placental disease we explore the effect of different therapies. This candidate will work collaboratively with a multidisciplinary team of clinicians, scientists and engineers exploring novel therapies for preeclampsia and fetal growth restriction.

## ***1. Key Responsibilities***

It is anticipated the candidate will build a research career under the guidance of Dr Fiona Brownfoot.

### **1.1 RESEARCH & RESEARCH TRANSLATION**

- ▶ To design, set up and run experiments in consultation with the principal investigator.
- ▶ To undertake *in vitro* experiments utilising primary human placental tissues and cells including both observational and functional studies.
- ▶ To undertake *in vivo* studies in mice including working with genetically modified lines, surgical procedures, injections and gavage, and tail cuff measurements.
- ▶ Undertaking key techniques in the laboratory including siRNA experiments, qRT-PCR, ELISA, western blot and immunohistochemistry
- ▶ To contribute to writing, submission and revision of papers to appropriate peer reviewed journals.
- ▶ Contributing to the preparation or drafting of grant applications for research funding
- ▶ To prepare progress reports on research for funding bodies as required.
- ▶ Participation in group meetings and discussions
- ▶ To keep up to date with the relevant literature in the field.

### **1.2 ENGAGEMENT**

- ▶ Highly motivated, reliable, proactive and enthusiastic individual wanting a career in science
- ▶ Work collaboratively with team members to further research projects
- ▶ Can clearly present their own research in written or oral form
- ▶ Has evidence of giving presentations and writing papers/reports
- ▶ Excellent ability to work in a team
- ▶ Can assist with building collaborations to further research projects.

## ***2. Selection Criteria***

### **2.1 ESSENTIAL**

- ▶ PhD in related fields such as medicine, health sciences, or biomedical science
- ▶ Experience with cell culture, observational and functional experiments, and gene targeting experiments.
- ▶ Experienced in performing *in vivo* experiments with rodents including working with genetically modified lines and surgical procedures.
- ▶ Experience with standard molecular techniques including qRT-PCR, western blot, immunohistochemistry, ELISA.
- ▶ Can work independently to a high standard, makes decisions and shows persistence in solving difficult research problems.
- ▶ Has a track record of research achievement
- ▶ Excellent organisation skills

## 2.2 SPECIAL REQUIREMENTS

Laboratory researchers are required to be fully immunized against Tetanus and Hepatitis B

- ▶ This position requires the incumbent to work flexible hours when necessary, including after hours and weekend work. Work hours may be flexible provided the needs of the projects are met.

**Applicants must have valid Australian work rights to apply for this role. Visa sponsorship is not available for this position.**

### Qualification Verification

An appointment to this position is subject to the verification of the highest academic qualification from the conferring institution.

## 3. *Equal Opportunity, Diversity and Inclusion*

The University is an equal opportunity employer and is committed to providing a workplace free from all forms of unlawful discrimination, harassment, bullying, vilification and victimisation. The University makes decisions on employment, promotion and reward on the basis of merit.

The University is committed to all aspects of equal opportunity, diversity and inclusion in the workplace and to providing all staff, students, contractors, honorary appointees, volunteers and visitors with a safe, respectful and rewarding environment free from all forms of unlawful discrimination, harassment, vilification and victimisation. This commitment is set out in the University's People Strategy 2015-2020 and policies that address diversity and inclusion, equal employment opportunity, discrimination, sexual harassment, bullying and appropriate workplace behaviour. All staff are required to comply with all University policies.

The University values diversity because we recognise that the differences in our people's age, race, ethnicity, culture, gender, nationality, sexual orientation, physical ability and background bring richness to our work environment. Consequently, the People Strategy sets out the strategic aim to drive diversity and inclusion across the University to create an environment where the compounding benefits of a diverse workforce are recognised as

vital in our continuous desire to strive for excellence and reach the targets of Growing Esteem.

#### ***4. Occupational Health and Safety (OHS)***

All staff are required to take reasonable care for their own health and safety and that of other personnel who may be affected by their conduct.

OHS responsibilities applicable to positions are published at:

<http://safety.unimelb.edu.au/people/community/responsibilities-of-personnel>

These include general staff responsibilities and those additional responsibilities that apply for Managers and Supervisors and other Personnel.

#### ***5. Other Information***

##### **5.1 DEPARTMENT OF OBSTETRICS AND GYNAECOLOGY**

<http://www.obsgyn.unimelb.edu.au>

The University Department of Obstetrics and Gynaecology is responsible for teaching Obstetrics, Gynaecology and Neonatal Paediatrics, to undergraduate medical students. Currently, each year approximately 300 medical students spend 9 weeks attached to the Department during the fifth year of their medical course. In addition, there are a number of higher degree students pursuing full-time or part-time research through the Department. These include Advanced Medical Science, Doctor of Medicine, Master of Science and Doctor of Philosophy students.

The Vision of the Department is to be an internationally recognised centre of excellence for academic Obstetrics, Gynaecology and Neonatal Paediatrics, and its Mission is to provide a high quality academic service across a broad range of clinical, educational and research activities within its associated teaching hospitals, and especially at its major centres, the Royal Women's Hospital and the Mercy Hospital for Women.

Other associated teaching hospitals are Sunshine Hospital, Northern Hospital, Ballarat Hospital and Goulburn Valley Hospital (Shepparton). Sunshine and Northern Hospitals are part of the Northwest Academic Centre <http://www.nwac.unimelb.edu.au/> and Ballarat and Goulburn Valley are linked to the Rural Health Academic Centre <http://www.ruralhealth.unimelb.edu.au/>

The Department of Obstetrics and Gynaecology has a strong research base with a history of significant competitive grant funding success from external, peer reviewed, grant awarding bodies. Particular areas of current research strength include maternal fetal medicine, neonatal paediatrics, women's health, andrology, gynaecological oncology and reproductive biology.

Staff of the Department include clinical academics, research fellows, research assistants, administrative personnel and a large number of teaching associates associated with the various teaching hospitals involved in the Department's undergraduate teaching programme.

The origins of the University of Melbourne Department of Obstetrics and Gynaecology can be traced back to 1924, when the Victorian Branch of the British Medical Association

appointed a committee under the leadership of Dr J W Dunbar Hooper "to enquire into the condition of midwifery work" in Victoria.

## 5.2 MELBOURNE MEDICAL SCHOOL

The Melbourne Medical School (MMS) was established in 1862 and has a substantial international reputation for its leadership in teaching and training, health research, policy and practice. The MMS is committed to working with the communities we serve to improve health and advance health care. We will do this through our teaching, learning, research, clinical care and advocacy.

The MMS is composed of eight clinical departments (General Practice, Medical Education, Medicine and Radiology, Obstetrics and Gynaecology, Paediatrics, Psychiatry, Rural Health and Surgery) which are embedded within clinical health services throughout metropolitan Melbourne and rural Victoria.

The MMS delivers a suite of health-related graduate programs including the Doctor of Medicine (MD), the first professional entry Masters level medical program in Australia. The Melbourne MD delivers a fresh approach to medical training and creates a new benchmark in 21st century medical education.

The MMS is committed to improving the wellbeing of the community through the discovery and application of new knowledge. The research effort of the school is highly collaborative and spans basic to translational research and involves over 800 graduate researchers and 1000 academic staff.

The MMS also actively participates in the public debate and advocacy around key health issues and policy based on our values of commitment, integrity, compassion, respect and service.

Further information about the School is available at <https://medicine.unimelb.edu.au/>

## 5.3 FACULTY OF MEDICINE, DENTISTRY & HEALTH SCIENCES

The Faculty of Medicine, Dentistry & Health Sciences has an enviable research record and is the University of Melbourne's largest faculty in terms of management of financial resources, employment of academic and professional staff, teaching of undergraduate and postgraduate (including research higher degree) students and the conduct of basic and applied research. The Faculty's 2013 gross revenue was in excess of \$550M. Nearly 50% of this income relates to research activities.

The Faculty has a student teaching load in excess of 7,500 equivalent full-time students including more than 1,000 research higher degree students. The Faculty has approximately 2,200 staff comprising 700 professional staff and 1,500 research and teaching staff.

The Faculty has appointed Australia's first Associate Dean (Indigenous Development) to lead the development and implementation of the Faculty's Reconciliation Action Plan (RAP), which will be aligned with the broader University – wide plan. To enable the Faculty to improve its Indigenous expertise knowledge base, the Faculty's RAP will address Indigenous employment, Indigenous student recruitment and retention, Indigenous cultural recognition and building partnerships with the Indigenous community as key areas of development.

Further information about the Faculty is available at <http://www.mdhs.unimelb.edu.au/>

## 5.4 THE UNIVERSITY OF MELBOURNE

The University of Melbourne is a leading international university with a tradition of excellence in teaching and research. With outstanding performance in international rankings, Melbourne is at the forefront of higher education in the Asia-Pacific region and the world. The University of Melbourne is consistently ranked among the world's top universities. Further information about our reputation and global ranking is available at [www.futurestudents.unimelb.edu.au/explore/about/reputation-rankings](http://www.futurestudents.unimelb.edu.au/explore/about/reputation-rankings)

Established in 1853, shortly after the founding of Melbourne, the University is located just a few minutes from the centre of this global city. The main Parkville campus is recognised as the hub of Australia's premier knowledge precinct comprising eight hospitals, many leading research institutes and a wide range of knowledge-based industries.

The University employs people of outstanding calibre and offers a unique environment where staff are valued and rewarded. Further information about working at The University of Melbourne is available at [about.unimelb.edu.au/careers](http://about.unimelb.edu.au/careers).

## 5.5 GROWING ESTEEM, THE MELBOURNE CURRICULUM AND RESEARCH AT MELBOURNE: ENSURING EXCELLENCE AND IMPACT TO 2025

- ▶ Growing Esteem describes Melbourne's strategy to achieve its aspiration to be a public-spirited and internationally-engaged institution, highly regarded for making distinctive contributions to society in research and research training, learning and teaching, and engagement. [www.growingesteem.unimelb.edu.au](http://www.growingesteem.unimelb.edu.au)
- ▶ The University is at the forefront of Australia's changing higher education system and offers a distinctive model of education known collectively as the Melbourne Curriculum. The new educational model, designed for an outstanding experience for all students, is based on six broad undergraduate programs followed by a graduate professional degree, research higher degree or entry directly into employment. The emphasis on academic breadth as well as disciplinary depth in the new degrees ensures that graduates will have the capacity to succeed in a world where knowledge boundaries are shifting and reforming to create new frontiers and challenges. In moving to the new model, the University is also aligning itself with the best of emerging European and Asian practice and well-established North American traditions.
- ▶ The University's global aspirations seek to make significant contributions to major social, economic and environmental challenges. Accordingly, the University's research strategy *Research at Melbourne: Ensuring Excellence and Impact to 2025* aspires to a significant advancement in the excellence and impact of its research outputs. <http://www.unimelb.edu.au/research/research-strategy.html>

The strategy recognises that as a public-spirited, research-intensive institution of the future, the University must strive to make a tangible impact in Australia and the world, working across disciplinary and sectoral boundaries and building deeper and more substantive engagement with industry, collaborators and partners. While cultivating the fundamental enabling disciplines through investigator-driven research, the University has adopted three grand challenges aspiring to solve some of the most difficult problems facing our world in the next century. These Grand Challenges include:

*Understanding our place and purpose* – The place and purpose grand challenge centres on understanding all aspects of our national identity, with a focus on Australia's 'place' in the Asia-Pacific region and the world, and on our 'purpose' or mission to improve all dimensions of the human condition through our research.

*Fostering health and wellbeing* – The health and wellbeing grand challenge focuses on building the scale and breadth of our capabilities in population and global health; on

harnessing our contribution to the 'convergence revolution' of biomedical and health research, bringing together the life sciences, engineering and the physical sciences; and on addressing the physical, mental and social aspects of wellbeing by looking beyond the traditional boundaries of biomedicine.

*Supporting sustainability and resilience* – The sustainability and resilience grand challenge addresses the critical issues of climate change, water and food security, sustainable energy and designing resilient cities and regions. In addition to the technical aspects, this grand challenge considers the physical and social functioning of cities, connecting physical phenomena with lessons from our past, and the implications of the technical solutions for economies, living patterns and behaviours.

Essential to tackling these challenges, an outstanding faculty, high performing students, wide collaboration including internationally and deep partnerships with external parties form central components of *Research at Melbourne: Ensuring Excellence and Impact to 2025*.

## 5.6 GOVERNANCE

The Vice Chancellor is the Chief Executive Officer of the University and responsible to Council for the good management of the University.

Comprehensive information about the University of Melbourne and its governance structure is available at [www.unimelb.edu.au](http://www.unimelb.edu.au).