



POSITION DESCRIPTION

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

Research Assistant in the Therapeutics Discovery and Vascular Function Group Obstetrics and Gynaecology

POSITION NO	0058620
CLASSIFICATION	Level A
SALARY	\$83,468 - \$113,262 p.a
SUPERANNUATION	Employer contribution of 17%
WORKING HOURS	Full-time (1.0 FTE)
BASIS OF EMPLOYMENT	Fixed term for 12 months Fixed term contract type: Externally funded contract employment
OTHER BENEFITS	http://about.unimelb.edu.au/careers/working/benefits
HOW TO APPLY	Online applications are preferred. Go to http://about.unimelb.edu.au/careers , select the relevant option ('Current Staff' or 'Prospective Staff'), then find the position by title or number.
CONTACT FOR ENQUIRIES ONLY	Professor Natalie Hannan Email nhannan@unimelb.edu.au <i>Please do not send your application to this contact</i>

For information about working for the University of Melbourne, visit our website:
about.unimelb.edu.au/careers

Acknowledgement of Country

The University of Melbourne acknowledges the Traditional Owners of the unceded land on which we work, learn and live: the Wurundjeri Woi Wurrung and Bunurong peoples (Burnley, Fishermans Bend, Parkville, Southbank and Werribee campuses), the Yorta Yorta Nation (Dookie and Shepparton campuses), and the Dja Dja Wurrung people (Creswick campus).

The University also acknowledges and is grateful to the Traditional Owners, Elders and Knowledge Holders of all Indigenous nations and clans who have been instrumental in our reconciliation journey.

We recognise the unique place held by Aboriginal and Torres Strait Islander peoples as the original owners and custodians of the lands and waterways across the Australian continent, with histories of continuous connection dating back more than 60,000 years. We also acknowledge their enduring cultural practices of caring for Country.

We pay respect to Elders past, present and future, and acknowledge the importance of Indigenous knowledge in the Academy. As a community of researchers, teachers, professional staff and students we are privileged to work and learn every day with Indigenous colleagues and partners.

Position Summary

Located at the Mercy Hospital for Women, in the Department of Obstetrics and Gynaecology, this research scientist will undertake research in the field of therapeutic discovery and vascular function in obstetric diseases research. They will be part of a dynamic group conducting exciting studies aimed at developing new treatments and diagnostics for major complications of pregnancy, working across basic research and industry based developments towards therapeutic and diagnostic development for preeclampsia, fetal growth restriction, spontaneous preterm birth and diagnostics to prevent stillbirth.

The research assistant will demonstrate dynamic and active support in all facets of the teams research, with a commitment to excellence in research. A commitment to education and training via occasional supervision of Research Higher Degree and Honours students. Administrative duties commensurate with the position will also be required and it is expected the candidate will contribute to the collegial and intellectual life of the Department of Obstetrics and Gynaecology, and to the Mercy Hospital for Women. This position will report to Professor Natalie Hannan.

We invest in developing the careers and wellbeing of our students and staff and expect all our people to live by our Faculty values of collaboration and teamwork, compassion, respect, integrity and accountability.

1. Key Responsibilities

1.1 RESEARCH AND RESEARCH TRAINING

Contribute to the research effort of the Therapeutics Discovery and Vascular Function Group by:

- ▶ Undertaking experiments in animal models of pregnancy, including administration of intraperitoneal, subcutaneous and intravenous injections, animal monitoring and record keeping.

- ▶ Participating in research independently and as a member of the research team.
 - Coordinating research projects investigating novel therapeutics for major complications of pregnancy.
- ▶ Undertaking molecular techniques in the laboratory relating to therapy development and understanding of diseases of pregnancy (such as qRT-PCR, immunohistochemistry, ELISA, western blot and cell/tissue culture) and to analyse data using software (e.g. GraphPad Prism).
- ▶ Dissection and preparation of animal and human tissues, isolation of cells from tissue samples.
- ▶ To perform histological and immunohistochemistry/fluorescence stains on placental sections, and to analyse the patterns of staining with light and fluorescent microscopy.
- ▶ Contribute to the maintenance of laboratory equipment, inventories, and infrastructure. Attendance and participation in meetings as required (including PC2 lab user meetings, OH&S, OGTR).
- ▶ Participate in the training of new staff and students into the laboratory and ensure OH&S requirements are adhered to.
- ▶ Be computer literate and able to contribute to data collection and analysis, using specialised programs for qualitative/quantitative data assessment (such as Word, Excel, PowerPoint, Prism, SPSS and ImageJ).
- ▶ Developing protocols and optimise laboratory experiments, particularly animal models of pregnancy complications.
- ▶ Contribute to publications including peer reviewed journals and book chapters
- ▶ Assist in the preparation of data and documents for grant applications and ethics applications.
- ▶ To maintain accurate documentation and record keeping of research, laboratory consumables/reagents, and to help to prepare orders, and keep the laboratory tidy and clean.

1.2 LEADERSHIP AND SERVICE

- ▶ Effective training of research support staff where required.
- ▶ Participate in community and professional activities related to the relevant disciplinary area.
- ▶ Effective demonstration and promotion of University values including diversity and inclusion and high standards of ethics and integrity.
- ▶ Occupational Health and Safety (OH&S) and Environmental Health and Safety (EH&S) responsibilities as outlined in section 4.

2. Selection Criteria

2.1 ESSENTIAL

- ▶ Bachelor's degree (Honours or Masters) in a relevant area of medical or biological science.
- ▶ A minimum of 2 years' experience and sound knowledge of human biology.
- ▶ Extensive experience with small rodent models (including handling, administration of agents via injection, post-mortem tissue collection, tissue processing and histology. Surgical experience with mice or rats is highly desirable.

- ▶ Experience in the standard techniques of molecular and cell biology; with demonstrated ability to apply research methodologies (including immunohistochemistry, Western blotting, protein/RNA/DNA extraction, qRT-PCR, cell culture) and quantitative/qualitative data analysis.
- ▶ Demonstrate excellent verbal and written communication skills for effective research collaboration and engagement.
- ▶ High level of motivation and the capacity for flexibility and multi-tasking.
- ▶ A strong interest and commitment to producing leading international research.
- ▶ Well-developed interpersonal skills including demonstrated capacity to work as both a team member and independently.
- ▶ Demonstrated ability to collect and collate information accurately and reliably.
- ▶ Excellent organisational skills and the ability to undertake a range of tasks concurrently.

2.2 DESIRABLE

- ▶ Experience with bacterial cloning, plasmid DNA and viral vector preparation.
- ▶ Demonstrated potential to support the supervision/training of undergraduate, honours and Graduate research higher degree students where appropriate.
- ▶ Experience with ordering laboratory consumables and reagents (preferable to be adept with Quatzy).

2.3 OTHER JOB-RELATED INFORMATION

- ▶ This position requires the incumbent to hold a current and valid Working with Children Check and Police Check.
- ▶ The role may involve occasional work out of ordinary hours.

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 Advancing Melbourne strategy that addresses 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 Advancing Melbourne.

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/topics/responsibilities/>

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

5. Other Information

DEPARTMENT OF OBSTETRICS, GYNAECOLOGY AND NEWBORN HEALTH <https://medicine.unimelb.edu.au/school-structure/obstetrics-and-gynaecology>

The University Department of Obstetrics, Gynaecology and Newborn Health is responsible for teaching Obstetrics, Gynaecology and Neonatal Paediatrics, to MD medical students. Currently, each year approximately 330 medical students spend 6 weeks (across 6 rotations) attached to the Department during the third year of their medical course. In addition, there are graduate research students pursuing full-time or part-time research through the Department. These include Honours, Master of Biomedical Sciences and Doctor of Philosophy students. In Quarter 1 of 2024, there were approximately 38 graduate research students enrolled in the Department undertaking their PhD, including 4 under examination.

The **Vision** of the Department is to improve health around the world through research, education and clinical training in obstetrics, gynaecology and newborn health, and its **Mission** as a values-led and unified department, is to nurture great people and big ideas in teaching and research to lead and improve health outcomes globally in obstetrics, gynaecology and newborn health.

The Department aims to provide high quality academic services 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 the Joan Kirner Women's and Children's at St. Albans (part of Western Health), the Northern Hospital in Epping (part of Northern Health), the St Vincent's and the Epworth Clinical Schools (and private hospitals) and the Ballarat Hospital and Goulburn Valley Hospital (Shepparton), both of which are linked to the [Department of Rural Health](#).

The Department is committed to establishing and maintaining a workplace culture consistent with the Faculty of Medicine, Dentistry and Health Sciences' values of **Respect, Accountability, Compassion, Collaboration and Teamwork, and Integrity**.

The Department of Obstetrics, Gynaecology and Newborn Health 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, infectious diseases, gynaecological oncology and reproductive biology. In 2023, the Department received Commonwealth grant funding of \$7.5m and State Government and Other grant funding of \$4.6m. The Department is also very successful in attracting philanthropic income to support its research endeavours and is very thankful for the generosity of its donors.

[Staff of the Department](#) include clinical academics, research fellows, research assistants and other research support personnel, administrative personnel and teaching staff associated with the various teaching hospitals involved in the delivery of the Department's graduate teaching programme. As of February 2024, the Department has 93 fixed term and continuing staff (headcount). The Department is also grateful for its 66 honorary staff who contribute to and help to successfully deliver the teaching and research activities of the Department.

The [origins](#) of the University of Melbourne Department of Obstetrics, Gynaecology and Newborn Health 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.

5.1 MELBOURNE MEDICAL SCHOOL

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

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 nine clinical departments (Clinical Pathology, 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.

5.2 FACULTY OF MEDICINE, DENTISTRY AND HEALTH SCIENCES

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

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 annual revenue is \$628m with approximately 55% of this income related to research activities.

The Faculty has a student teaching load in excess of 8,500 equivalent full-time students including more than 1,300 research higher degree students. The Faculty has approximately 2,195 staff comprising 642 professional staff and 1,553 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.

5.3 THE UNIVERSITY OF MELBOURNE

Established in 1853, the University of Melbourne is a leading international university with a tradition of excellence in teaching and research. The main campus in Parkville 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. With outstanding performance in international rankings, the University is at the forefront of higher education in the Asia-Pacific region and the world.

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 <http://about.unimelb.edu.au/careers..>

5.4 ADVANCING MELBOURNE

The University's strategic direction is grounded in its purpose. While its expression may change, our purpose is enduring: to benefit society through the transformative impact of education and research. Together, the vision and purpose inform the focus and scale of our aspirations for the coming decade.

Advancing Melbourne reflects the University's commitment to its people, its place, and its partners. Our aspiration for 2030 is to be known as a world-leading and globally connected Australian university, with our students at the heart of everything we do.

- We will offer students a distinctive and outstanding education and experience, preparing them for success as leaders, change agents and global citizens.
- We will be recognised locally and globally for our leadership on matters of national and global importance, through outstanding research and scholarship and a commitment to collaboration.

- We will be empowered by our sense of place and connections with communities. We will take opportunities to advance both the University and the City of Melbourne in close collaboration and synergy.
- We will deliver this through building a brilliant, diverse and vibrant University community, with strong connections to those we serve.

The means for achieving these goals include the development of the University of Melbourne's academic and professional staff and the capabilities needed to support a modern, world-class university. Those means require a commitment to ongoing financial sustainability and an ambitious infrastructure program which will reshape the campus and our contribution to the communities we engage with. This strategy, and the priorities proposed, is centred around five intersecting themes; place, community, education, discovery and global.

5.5 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.