

# POSITION DESCRIPTION

## **Department of Anatomy and Physiology**

Faculty of Medicine, Dentistry and Health Sciences

# **Research Fellow**

POSITION NO	0057175
CLASSIFICATION	Level A
WORK FOCUS CATEGORY	Research Focused
SALARY	\$77,171- \$104,717 p.a (pro rata for part-time)
SUPERANNUATION	Employer contribution of 17%
WORKING HOURS	Full-time (FTE 1.0)
BASIS OF EMPLOYMENT	Fixed term position available for 12 months
OTHER BENEFITS	http://about.unimelb.edu.au/careers/working/benefits
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	Prof Christine Wells
	Tel +61 3 834 43795 Email: wellsc@unimelb.edu.au
	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

# Acknowledgement of Country

The University of Melbourne would like to acknowledge and pay respect to the Traditional Owners of the lands upon which our campuses are situated, the Wurundjeri and Boon Wurrung peoples, the Yorta Yorta Nation, the Dja Dja Wurrung people. We acknowledge that the land on which we meet and learn was the place of age-old ceremonies, of celebration, initiation and renewal, and that the local Aboriginal peoples have had and continue to have a unique role in the life of these lands.

# **Position Summary**

The Research Fellow will work within the Wells Laboratory on the NHMRC funded Synnate program. The role will conduct supervised research using pluripotent stem cells to model macrophage biology. The role will also require the provision of support for research projects and programs within the laboratory, including administration and maintenance and use of information systems.

This position reports to Professor Christine Wells.

The School of Biomedical Sciences and its Departments foster a values-based culture of innovation and creativity to enhance the research performance of the University and to achieve excellence in teaching and research outcomes.

We invest in developing the careers and wellbeing of our students and staff and expect all to live by our Faculty Values of:

- Collaboration
- Compassion
- Respect
- Integrity
- Accountability

# 1. Key Responsibilities

### 1.1 RESEARCH AND RESEARCH TRAINING

- Demonstrate responsible and independent research towards the goals of the Synnate program, by developing research aimed at characterising training of myeloid cells in epithelial organoids.
- Work as a member of an interdisciplinary research team to further the broader research goals of the Wells laboratory.
- Develop and benchmark stem cell models of specialised human macrophages.
- Active contribution to data collection and analysis, including specialised genomic methods such as single-cell profiling and statistical analysis.
- Perform research experiments related to innate immune function including but not limited to techniques such as cell culture, molecular biology, RNA/protein extraction and analysis, flow cytometry and microscopy
- Contribute to the authorship of conference and seminar papers and publications, and represent the laboratory through conference attendance or presentations, and cross-institutional seminars where appropriate.

- Steady development of an academic research profile in human stem cell and myeloid biology.
- Contribute to publications arising from scholarship and research, such as publication of books and in peer reviewed journals
- Active participation in community engagement within the University of Melbourne undergraduate and outreach programs.
- Occasional contributions to teaching within the research field where appropriate

### 2. Selection Criteria

#### 2.1 ESSENTIAL

- PhD in cell biology or related field.
- Demonstrated experience and expertise in stem cell culture or human macrophage biology
- Demonstrated ability to use molecular methodologies to phenotype cultured human cells
- Demonstrated ability to apply research methodologies and quantitative/qualitative data analysis, including but not limited to flow cytometry, quantitative PCR, ELISAs, Western blots.
- A proven ability to work with senior researchers to help design, perform and analyse experiments in a timely manner.
- Demonstrated ability to articulate scholarly research through public presentations.
- Demonstrated excellent verbal and written communication skills for effective research collaboration and engagement.
- The capacity to maintain accurate and detailed laboratory records and to develop outstanding written and verbal communication skills
- Demonstrated ability to manage competing priorities and excellent time management skills.

#### 2.2 DESIRABLE

- Experience in phosphoproteomics
- Bioinformatics experience
- Understanding of single cell analysis platforms

### 2.3 SPECIAL REQUIREMENTS

A willingness to work outside of normal hours (eg occasional weekends and evenings) where the completion of laboratory experiments is deemed necessary.

#### 2.4 LEADERSHIP AND SERVICE

Actively participate at School and/or Faculty meetings and with guidance, contribute to planning activities or committee work to support capacity-building in the School/discipline.

- Active involvement in laboratory meetings. Perform administrative and operational duties as directed, related to the conduct of safe laboratory practices, the ordering of consumables and lab ware and to perform technical tasks in the laboratory.
- Effective training of research support staff where required.
- 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 5.

#### 2.5 RESPONSIBILITY AND COMPLIANCE

- Maintain a sound knowledge of current University Policy and Procedures, and reliably follow these or provide compliant advice to others;
- Reliably follow communications protocols and/or policies as appropriate.
- Occupational Health and Safety (OH&S) and Environmental Health and Safety (EH&S) responsibilities as outlined in Section 5.
- Behavioural Expectations All staff are expected to maintain the following behaviours:
  - Treat everyone equitably; act fairly with staff and demonstrate respect for diversity
  - Be an effective team player who is cooperative and gains the trust and support of staff, peers and clients through collaboration.
  - Create ethics applications and report to the ethics committees

# 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:

https://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 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

### 5.2 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.

### 5.3 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 https://about.unimelb.edu.au/strategy/governance

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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.

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# 6. Other Information

#### 6.1 ORGANISATION UNIT

### Dept of Anatomy & Physiology Link

The Department of Anatomy and Physiology has only recently come into fruition and is an amalgamation between the Departments of Anatomy and Neuroscience and Physiology. Both Departments have long and illustrious history and have come together to produce a Department with a remarkable breadth and depth in research expertise that underpin our key research themes of neuroscience, metabolism and cardiovascular sciences, muscle biology, and cell biology. The increase in critical mass of our researchers will also help position the department as a key partner for Medical Research Future Foundation (MRFF) and other large-scale grant applications relating to chronic, developmental, and degenerative diseases. The goal of the combined department is to remain at the forefront of scientific research aimed at understanding the structure and function of the human body in health and disease, employing novel and imaginative research methods.

We are widely recognised for our innovation in teaching, both through the development of online resources and in the use of active learning approaches in face-to-face teaching.

Constant review and refinement of the curriculum and educational methods ensures that we best prepare students for scientific independence as they enter graduate and postgraduate professional and research careers.

Our synergies in teaching extending beyond award programs to custom education programs focused on health professionals and industry. The former Department of Anatomy and Neuroscience had already initiated the *Melbourne Academy of Surgical Anatomy* in 2020, which has potential to be the largest of its kind in the southern hemisphere, underpinned by one of the largest donor programs in the country established to support the teaching and study of anatomy.

Physiology brings its considerable experience in the digital learning space. By combining expertise, it is envisioned that the Department of Anatomy and Physiology will be able to develop custom programs for health professionals and industry relevant to priority health challenges, such as cardiorespiratory and metabolic disorders.

Our Department also hosts the Australian Phenomics Network Histopathology and Organ Pathology Service, providing detailed histological phenotyping and digital scanning of data from mutant mice. Our researchers are in the Triradiate Medical Building and the Melbourne Brain Centre, and have access to excellent research facilities, including confocal and live cell imaging microscopes, laser capture dissection, tissue culture, histology, electrophysiology and molecular biology.

#### 6.2 SCHOOL OF BIOMEDICAL SCIENCES

#### https://biomedicalsciences.unimelb.edu.au/

The School of Biomedical Sciences is one of the most prominent and diverse Schools in the Faculty of Medicine, Dentistry & Health Sciences and is comprised of three Departments - Anatomy and Physiology, Biochemistry and Pharmacology, and Microbiology and Immunology.

The School is situated on the University's Parkville Campus and is part of the largest biomedical precinct in the southern hemisphere, providing access to world class research facilities for staff and students.

The School fosters a values-based culture of innovation and creativity to achieve research and teaching excellence.