

School of Chemical and Biomedical Engineering Faculty of Engineering and Information Technology

Research Fellow in Engineering Frontier Medical Solutions

POSITION NO	0056381
CLASSIFICATION	Level A
SALARY	\$77,171 - \$104,717 (PhD entry Level A.6: \$97,558; pro rata for part- time)
SUPERANNUATION	Employer contribution of 17%
WORKING HOURS	Full-time
BASIS OF EMPLOYMENT	Fixed term for 3 years Applications for part-time or other flexible working arrangements will be welcomed and will be fully considered subject to meeting the inherent requirements of the position
OTHER BENEFITS	https://about.unimelb.edu.au/careers/staff-benefits
HOW TO APPLY	Online applications are preferred. Go to http://about.unimelb.edu.au/careers, select the relevant option ('Current Opportunities' or 'Jobs available to current staff'), then find the position by title or number.
CONTACT FOR ENQUIRIES ONLY	Prof. Andrea O'Connor Email a.oconnor@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 country throughout Australia. The University recognises the unique place held by Aboriginal and Torres Strait Islander peoples as the original custodians of country and their continued connection to the land, waterways, songlines and culture. The University respects all Aboriginal and Torres Strait Islander People and warmly embrace those students, staff, Elders and collaborators who identify as First Nations.

Commitment to Diversity and Inclusion

The Faculty of Engineering and Information Technology (FEIT) is committed to creating a diverse and inclusive environment that welcomes and values all people. We recognise that diversity is essential in contributing to the success of FEIT. Women, Aboriginal and Torres Strait Islanders, the LGBTIQ+ community, people living with disability and those from a culturally and linguistically diverse background, are strongly encouraged to apply.

Position Summary

We are seeking a highly motivated researcher with a PhD in biomedical, chemical or materials engineering or a related discipline, with excellent communication skills to work with collaborators across different disciplines and institutions. The Research Fellow will join the Tissue Engineering Group in the Department of Biomedical Engineering and the Aikenhead Centre for Medical Discovery (ACMD) to contribute to an innovative research program making a positive impact on medical care. The ACMD is Australia's first collaborative, hospital-based biomedical engineering research centre, located at St Vincent's Hospital, Melbourne.

The Research Fellow will work with the Shanahan Chair in Frontier Medical Solutions at the intersection of engineering, medicine and science to develop and implement innovative research strategies. They will work in multidisciplinary teams to address clinical and industry needs, focusing in the areas of biomaterials, tissue engineering and medical implants. Using their strong engineering skills, along with excellent communication and teamwork, they will contribute to delivering clinically and commercially applicable solutions to medical challenges.

The Research Fellow will develop and conduct research leading to the preparation and publication of research outcomes in high quality journals, presentations at conferences and to the public. They will be expected to be an active member of the Department of Biomedical Engineering and the ACMD and to support the development of new and existing collaborations with other researchers, clinicians and industry. They may undertake small amounts of teaching and research supervision directly related to the area of research.

1. Selection Criteria

1.1 ESSENTIAL

- A PhD in biomedical, chemical, or materials engineering or a related discipline.
- A demonstrated track record of both independent and team-based research.
- Excellent written and verbal communication skills, demonstrated by presentation of research results at conferences, seminars and through manuscript submissions.
- Experience in working with minimal supervision, and ability to prioritise tasks to achieve project objectives within timelines.
- Excellent interpersonal skills, including an ability to interact effectively with internal and external stakeholders from a range of disciplines.
- Skills and aptitude for experimental research in biomaterials and tissue engineering.

1.2 DESIRABLE

- Experience working productively in multidisciplinary teams, including with clinicians and industry.
- Experience in biomaterials and tissue engineering research, polymer processing, cell culture, materials characterisation techniques, experimental design and analysis.
- Awareness of manufacturing and regulatory requirements for translation of medical products.

- A record of applying for and attracting research funding.
- Experience in the supervision or co-supervision and mentoring of honours, Masters or PhD students.
- Experience in day-to-day laboratory management and oversight of OHS.

2. Key Responsibilities

The position description should be read alongside the Academic Career Benchmarks.

2.1 RESEARCH AND ADVANCEMENT OF DISCIPLINE

You are expected to significantly contribute towards the research efforts of the team and to develop your research expertise with an increasing degree of autonomy.

- Under the guidance and support of Senior Academic staff, conduct internationally competitive research as a member of a research team.
- Produce written and oral project reports, publications in peer reviewed journals, conference presentations and patents to a high academic standard, as appropriate, arising from the research.
- Actively participate in research seminars and conferences to disseminate research findings as opportunities arise.
- Contribute to the preparation of research proposal submissions to internal or external funding bodies as required.
- Contribute to and assist in the co-supervision and training of research students at undergraduate, Masters and/or PhD level.
- Engage with relevant professional and industry bodies and stakeholders to foster collaborative partnerships.

2.2 ENGAGEMENT

- Effectively liaise with collaborators and external networks, showing excellent and timely communication.
- Actively support ACMD activities to build collaborations and identify potential new research directions for the centre.
- Actively participate in outreach activities relating to the research, including promotion of the research through media channels and advocacy groups.

2.3 LEADERSHIP AND SERVICE

- Actively participate in the research group, ACMD, and Departmental activities as required.
- Actively participate in laboratory management including meeting all OHS requirements.
- Undertake administrative functions and obligations primarily connected with the staff member's area of research.

2.4 OTHER JOB RELATED INFORMATION

- This position requires the incumbent to hold a current and valid Working with Children Check.
- Occasional work out of ordinary hours, travel, etc. may be required.

3. Other Information

3.1 DEPARTMENT OF BIOMEDICAL ENGINEERING

https://biomedical.eng.unimelb.edu.au/

The Department of Biomedical Engineering is a vibrant and rapidly growing department within Melbourne School of Engineering, working on some of the most challenging problems at the interface of engineering with life and medical sciences. The central aim of the Department is to apply interdisciplinary expertise and thinking to make new discoveries and provide innovative solutions that will improve healthcare and social wellbeing.

Our research covers a breadth of areas in biomaterials and tissue engineering; biomechanics and mechanobiology; bionics, biomedical imaging and neuroengineering; systems and synthetic biology. We have strong national and international linkages with industry, hospitals, research institutes, and universities.

We teach students within the Bioengineering Systems undergraduate majors in the Bachelor of Science and the Bachelor of Biomedicine, and offer two Masters programs: Master of Engineering (Biomedical) and Master of Engineering (Biomedical with Business).

SCHOOL OF CHEMICAL AND BIOMEDICAL ENGINEERING

https://eng.unimelb.edu.au/about/departments/school-of-chemical-and-biomedical-engineering

The School of Chemical and Biomedical Engineering encompasses both the Department of Chemical Engineering and the Department of Biomedical Engineering. This fusion of engineering disciplines provides a dynamic and interdisciplinary environment that is world leading in both research and teaching.

3.2 FACULTY OF ENGINEERING AND INFORMATION TECHNOLOGY

The Faculty of Engineering and Information Technology (FEIT) has been the leading Australian provider of engineering and IT education and research for over 150 years. We are a multidisciplinary School organised into three key areas; Computing and Information Systems (CIS), Chemical and Biomedical Engineering (CBE) and Electrical, Mechanical and Infrastructure Engineering (EMI). FEIT continues to attract top staff and students with a global reputation and has a commitment to knowledge for the betterment of society.

FEIT has never been better positioned as a global leader, anchored in the dynamic Asia Pacific region, creating and curating knowledge to address some of the world's biggest challenges. Through our students and our relationships with communities, we can not only respond to society's needs but anticipate and create engineering and IT solutions for the future.

https://eng.unimelb.edu.au/

https://eng.unimelb.edu.au/about/join-mse

Our ten-year strategy, FEIT 2025, is our School's commitment to bring to life the University-wide strategy Advancing Melbourne and reinforce the University of Melbourne's position as one of the best in the world.

To achieve our ambitions, we will continue to build new infrastructure to enable our teaching, research and engagement; we continue to recruit outstanding people from around the world; and we continue to attract high-quality students from across the globe who are at the heart of our enterprise.

3.3 AIKENHEAD CENTRE FOR MEDICAL DISCOVERY (ACMD)

ACMD is a bold initiative to create the first hospital-based, world-class health tech innovation Centre in Australia. It is a unique partnership of Australia's best universities, a tertiary hospital, medical research institutes, and a health services provider. These partners including the University of Melbourne bring a huge depth of knowledge and understanding, science and technology, and together with clinicians, entrepreneurs and investors we at the ACMD turn that scientific knowledge into practical impact.

https://www.acmd.org.au/

3.4 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

3.5 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.

3.6 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.

3.7 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

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.