Position Description – Research Assistant

Position Details

Position Title: Research Assistant

College/Portfolio: STEM College

School/Group: School of Science

Campus Location: Based at the city campus but may be required to work and/or be based at other campuses of the University.

Classification: Academic Level A

Employment Type: Fixed Term (Research)

Time Fraction: 1.0

RMIT University

RMIT is a multi-sector university of technology, design and enterprise with more than 96,000 students and close to 10,000 staff globally. The University's mission is to help shape the world through research, innovation and engagement, and to create transformative experiences for students to prepare them for life and work.
https://www.rmit.edu.au/about
https://www.universitiesaustralia.edu.au/university/rmit-university/

Our three main campuses in Melbourne are located in the heart of the City, Brunswick and Bundoora. Other locations include Point Cook, Hamilton and Bendigo, two campuses in Vietnam (Hanoi and Ho Chi Minh City) and a centre in Barcelona, Spain. RMIT is a truly global university.
https://www.rmit.edu.au/about/our-locations-and-facilities

We are also committed to redefining our relationship in working with, and supporting, Indigenous self-determination. Our goal is to achieve lasting transformation by maturing our values, culture, policy and structures in a way that embeds reconciliation in everything we do. We are changing our ways of knowing, working and being to support sustainable reconciliation and activate a relationship between Indigenous and non-Indigenous staff, students and community. Our three campuses in Melbourne (City, Brunswick and Bundoora campuses) are located on the unceded lands of the people of the Woi Wurrung and Boon Wurrung language groups of the eastern Kulin Nation.

Why work at RMIT University

Our people make everything at the University possible. We encourage new approaches to work and learning, stimulating change to drive positive impact. Find out more about working at RMIT University, what we stand for and why we are an Employer of Choice.
https://www.rmit.edu.au/careers

We want to attract those who will make a difference. View RMIT's impressive standings in university rankings.
https://www.rmit.edu.au/about/facts-figures/reputation-and-rankings

STEM College

The STEM College holds a leading position and expertise in the science, technology, engineering, mathematics and health (STEM) fields. We are uniquely positioned to influence and partner with industry, as never before.

STEM College is a community of exceptional STEM researchers, teachers, inventors, designers and game-changers, supported by talented professional staff. We offer higher education programs across all STEM disciplines at the Bachelor, Master and PhD levels, and ensure our students experience an education that is work-aligned and life-changing.

The College is renowned for its exemplary research in many STEM areas including advanced manufacturing and design; computing technologies; health innovation and translational medicine; nano materials and devices; and sustainable systems. Our brilliant researchers attract funding from government and industry sources.

Industry is at the heart of what we do. It ensures our research has real world impact, and our students are truly work-ready. Under the leadership of DVC STEM College & Vice President, Digital Innovation, we have established new hubs of industry-connected digital innovation and endeavour and are engaging with global STEM organisations at scale.

Our diversity and shared values empower our work, and we are proud of the College's inclusive, caring culture. We offer a safe, dynamic work environment, and support every member of our community to achieve their potential. The College appointed Victoria's first ever Dean of STEM, Diversity & Inclusion in 2020, and this role drives gender equity, diversity and inclusion strategies across the College.

STEM College employs 1,000 staff who deliver onshore and offshore programs to approximately 20,000 students.

We are here to positively impact the world and create the next generation of STEM leaders.
www.rmit.edu.au/seh

School of Science

The School of Science delivers excellence in applied research and education, engaging in strong impactful industry partnerships and producing skilled, industry-ready graduates.

The School employs over 120 academic and 60 FTE research staff across five academic Disciplines (Applied Chemistry and Environmental Sciences; Biosciences and Food Technology; Geospatial Sciences, Mathematical Sciences; Physics).

The School has a diverse research portfolio across science and mathematics with international research excellence in quantum science technologies, advanced materials chemistry and catalysis solutions and in water science, systems and sustainability; in addition to emerging strengths in geospatial technologies, mathematics and future food technologies. Annual research income for the School is around $20 million and the School has just under 400 Higher Degree by Research students.

The School delivers high-quality applied, authentic and active industry-engaged education and teaching to over 2,600 undergraduate- and postgraduate-taught students across 10 ongoing undergraduate and 8 postgraduate programs, in addition to offshore partnerships and delivery, including in China and Vietnam.

Across learning and teaching and research, the School partners actively with industry and external stakeholders in Australia and internationally, delivering innovation, research translation and providing knowledge and real-world solutions for societal good and to enhance sustainable development. The School is strongly committed to promoting and enhancing diversity and inclusion and seeks also to activate and develop its commitment to reconciliation.

Details of the School can be found at:
https://www.rmit.edu.au/about/schools-colleges/science

Position Summary

The Research Fellow will work predominantly in the research team of Dr Amy Gelmi and will undertake collaborative research with other groups within the School and Research Institutes. The Research Fellow is required to undertake research activities in line with the University's research strategy.

This position will carry out independent and team research which has a significant impact in the area of bionanotechnology and regenerative medicine, acknowledged at a national level as being influential in expanding the knowledge in this discipline. The position is funded through an ARC Discovery Project entitled "Understanding Transient Cellular Response to Electrical Stimulation (DP250101190)" and will focus on the development of cutting-edge techniques to study live cell response to electrical stimulation at high spatial and temporal resolution. A key responsibility will be to develop and apply advanced bioinformatics pipelines to interrogate stem cell biology using multi-omics approaches, including RNA sequencing, proteomics, and secretomics datasets. The role involves integrative data analysis, interpretation of complex molecular profiles, and collaboration with experimental researchers to uncover mechanisms regulating stem cell function and fate.

The successful candidate will be actively supported in advancing their academic career through mentorship in competitive grant writing and opportunities to contribute to, and lead, fellowship and project grant applications. They will receive guidance in developing independent research directions, building collaborations, and establishing a strong track record to support future academic progression.

The Research Fellow's role is primarily to plan, develop and engage in high quality research projects that are aligned with the University's research focus areas. The Research Fellow will embed their research expertise into the life of the School through the development of high-quality, productivity driven research networks across RMIT and with local and national, internal and external partners. Research Fellows will be expected to engage in high quality research projects, and to produce high quality outputs.

Reporting Line

Reports to: Chief Investigator, Understanding Transient Cellular Response to Electrical Stimulation

Organisational Accountabilities

RMIT University is committed to the health, safety and wellbeing of its staff. RMIT and its staff must comply with a range of statutory requirements, including equal opportunity, occupational health and safety, privacy and trade practice. RMIT also expects staff to comply with its policy and procedures, which relate to statutory requirements and our ways of working.

Appointees are accountable for completing training on these matters and ensuring their knowledge and the knowledge of their staff is up to date.

Key Accountabilities

1. Conduct research/scholarly activities under limited supervision either independently or as a member of a team including: publishing and presenting research outputs at conferences and research forums; contributing to external research funding submissions; participating in supervision of higher degree by research candidates.
2. May undertake limited teaching and supervision at undergraduate levels as required.
3. Undertake administration related to the position.
4. Undertake 10% teaching and learning program appropriate to areas of expertise.

5. Exhibit a values-based approach to academic and professional activities including commitment to 'Responsible Practice' recognising, interpreting, and acting upon multiple principles and values including reconciliation, cultural safety, ethical responsibility, diversity and inclusion, in all activities and relationships.

Key Selection Criteria

Essential

- Expertise in tissue engineering and regenerative medicine, ideally working with human mesenchymal stromal/stem cells, and/or induced pluripotent stem cells.
- Expertise in bioinformatics, including RNA-sequencing, proteomics, secretomics, and pipeline development.
- Evidence of research outputs including publications, conference contributions and/or technical reports in the field.
- Ability to work autonomously whilst displaying a strong commitment to work in a team environment, including the demonstrated ability to confidently and effectively work with colleagues, project team leaders, and industry partners.
- Demonstrated ability to meet deadlines and effectively manage varying workloads and respond to changing priorities as required.
- Demonstrated high level of written and oral communication skills.

Preferable

- Experience in eukaryotic cell culture/tissue culture.
- Nanoscale characterisation expertise including Electron Microscopy and/or Atomic Force Microscopy.
- Electroactive biomaterial experience, including electrochemical characterisation and synthesis.
- Expertise with advanced graphing and/or data analysis software (Prism, Origin Pro, Matlab etc)
- Success in research funding and/or experience in grant development and writing.
- A good understanding of appropriate statistical analysis techniques.

Qualifications

Mandatory: PhD in Biology/Biotechnology/Chemistry/Biomedical Engineering with experience in mammalian cell culture.

Note: Appointment to this position is subject to passing a Working with Children Check and other checks as required by the specific role. Maintaining a valid Working with Children Check is a condition of employment at RMIT.