



Position Description – Research Fellow

Position Details

Position Title:	Research Fellow
College/Portfolio:	STEM College
School/Group:	School of Health and Biomedical Sciences
Campus Location:	Based at the Bundoora campus but may be required to work and/or be based at other campuses of the University.
Classification:	Academic Level B
Employment Type:	Fixed Term, 3 years, (Research)
Time Fraction:	1.0FTE

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 Health and Biomedical Sciences

The School of Health and Biomedical Sciences comprises three Academic areas:

- Clinical Sciences
- Health Sciences
- Medical Sciences

Primarily based at the RMIT Bundoora campus, we undertake teaching and research across the disciplines of: Biomedical Science, Laboratory Medicine, Medical Radiations, Nursing, Osteopathy, Chiropractic, Chinese Medicine, Pharmacy, Pharmaceutical Science, Physiotherapy and Psychology.

The School's research was ranked as well above world standard in clinical science, complementary and alternative medicine, medical physiology, microbiology and pharmacology & pharmaceutical sciences, and above world standard in psychology, public health & health service and medical & health sciences. We have a strategic focus on chronic disease and integrative health care with globally distinctive research strengths in respiratory health, neuroinflammation, translational immunology and infection, cancer diagnostics and therapeutics, and cross-cutting themes of: Lifestyle Medicine, Digital Health, Indigenous Health, Ageing in Health & Disease, and Medical Devices, Diagnostics and Prognostics. Research and Learning and Teaching innovation within the School is supported by a world class simulated hospital, digital human anatomy facility, state-of-the-art equipment

and fully equipped laboratories and medical radiations facilities as well as a significant number of national and international partners.

Position Summary

Up to two postdoctoral positions are available to work on an NHRMC Development grant funded project to improve outcomes for cancer and/or cardiac disease patients using radiation therapy. The primary aim of this research is to develop real-time target tracking and/or dynamic imaging algorithms for implementation within radiotherapy and medical imaging.

Within our research program, you will perform grant funded research developing novel algorithms or building new dynamic imaging systems that account for patient motion (breathing, cardiac, etc.) during medical imaging and radiation therapy treatments.

At least one position will be offered to a researcher that has experience in deep learning and AI development and a willingness to apply these approaches in radiation therapy. The second position will be offered to a candidate with a desire to implement deep learning algorithms on clinical hardware (either developing new imaging hardware or implementing deep learning approaches on existing clinical systems).

Experience and interest in grant writing would be viewed favourably.

Reporting Line

Reports to: Professor Ricky O'Brien

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 high quality research individually or as part of a team including performing research projects within timelines and budget and ensuring compliance with quality and reporting requirements; publishing research results in high quality outlets; and assisting with supervising higher degree by research candidates.
2. Actively contribute to the development of research culture within the research team.
3. Contribute to grant applications.

Key Selection Criteria

1. A PhD in a relevant field (e.g., Medical Physics, Radiation Therapy, Computer Science, Engineering, Mathematics, Science, Physics, etc).
2. Emerging track record publishing in high quality journals (e.g., Medical Physics, IEEE, etc.).
3. Experience presenting at high quality conferences (e.g., AAPM, MICCAI, ICCV, CVPR, etc.).
4. Ability to build effective networks with colleagues through effective liaison with industry or hospital partners.
5. Excellent communications skills appropriate for interacting with higher degree by research candidates, staff and industry, together with a strong commitment to teamwork and multidisciplinary collaboration.
6. Contributing to a positive research culture within the research group.

Qualifications

Mandatory: PhD or equivalent¹ in relevant field.

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.

¹ Equivalence is defined in the exemption criteria at **Appointment of staff without Doctoral qualifications** instruction