Research Fellow in Neuroimaging

POSITION NO 0032904

CLASSIFICATION Level A

SALARY $80,258 - $108,906 p.a. (pro rata for part-time)

SUPERANNUATION Employer contribution of 17%

WORKING HOURS Full time

BASIS OF EMPLOYMENT Fixed term (12 months)

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
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Please do not send your application to this contact

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**

The Department of Psychiatry undertakes leading research that aims to improve understanding and treatment of mental disorders across the lifespan. A particular focus of research within the Translational Neurobiology stream is to investigate the relationship between the brain, biology and behaviour in mental illness, including psychotic illness and adolescent-onset mental health disorders. An important aspect of this research is to understand these relationships from a developmental and biopsychosocial framework, including how typical and atypical brain development both affects, and is affected by, the emergence of mental illness, the environment, and biological and psychosocial factors.

We are seeking to appoint a Research Fellow to analyse, compare and visualise brain neuroimaging data derived from magnetic resonance imaging (MRI) scans, with the aim of understanding how a range of biological and environmental factors influence and interact with brain developmental processes to confer risk for mental illness. To achieve this, the Research Fellow will work on several projects being led by the Translational Neurobiology group as well as publicly available datasets such as the UK Biobank and Adolescent Brain Cognitive Development study.

The Research Fellow will be located in Australia’s leading biomedical research hub and based within the Translational Neurobiology and Systems Neuropsychiatry groups. The Research Fellow will have access to state-of-the-art research facilities, including supercomputing resources and some of largest neuroimaging datasets in the world. This is a research position, with expectations to develop an active research track record, through conference presentations, peer-reviewed publications and submission of proposals for research funding. The Research Fellow will be expected to assist with the co-supervision of postgraduate research students. The Research Fellow will be committed to inter-disciplinary research and ideally have some experience in one or more of the following areas: MRI data analysis; magnetic resonance spectroscopy (MRS) analysis, neuropsychiatry and/or neuroscience.

The incumbent will primarily report to Associate Professor Vanessa Cropley, as well as Professor Andrew Zalesky and will be located in the Alan Gilbert Building at the University of Melbourne and will be required to be present at this location during typical working hours.
1. **Key Responsibilities**

1.1 **RESEARCH AND RESEARCH TRAINING**

- Participate in research independently and as a member of a research team.
- Produce high quality publications arising from scholarship and research.
- Source, coordinate and manage multi-disciplinary collaborations to ensure the successful completion of the research objectives.
- Provide adequate research supervision, guidance and training to postgraduate students and other members of the research team.

1.2 **LEADERSHIP AND SERVICE**

- Effective training of research support staff where required.
- Identify sources of funding to support individual or collaborative projects.
- Effective demonstration and promotion of University values, including diversity and inclusion, and high standards of ethics and integrity.
- Perform 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**

- A PhD in neuroscience or commensurate discipline.
- Strong evidence of ability and desire to build an academic research career trajectory.
- Good level of statistical and programming expertise and experience in R, MATLAB and/or similar computing environments. Experience with various neuroimaging and computing programs such as FSL, Freesurfer and SPM.
- Demonstrated excellent verbal and written communication skills for effective research collaboration and engagement.
- Experience in using initiative and working with minimal supervision to achieve project objectives.
- Ability to work both independently and as part of a multidisciplinary team.
- Track record of peer reviewed publications (or equivalent).

2.2 **DESIRABLE**

- Experience in magnetic resonance spectroscopy analysis would be highly valued.
- Knowledge of neuropsychiatric disorders through prior clinical experience or research.

2.3 **OTHER JOB-RELATED INFORMATION**

- Occasional work out of ordinary hours.
- This position requires the incumbent to hold a current and valid Working with Children Check.
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 DEPARTMENT OF PSYCHIATRY

http://psychiatry.unimelb.edu.au

The Department of Psychiatry at the University of Melbourne was established in the 1960s. It is one of the largest Departments in the Melbourne Medical School. There are about 120 academic and professional staff, 140 honorary staff and 50 students pursuing research degrees from Honours, Masters, and PhD programs. A further 240 students are enrolled in graduate coursework programs, including the flagship Master of Psychiatry program. The Department plays a key role in the medical curriculum of the graduate Doctor of Medicine (MD) program, providing rotations in mental health for medical students and teaching in other sections of the course. The Department also offers opportunities for students undertaking research projects in the MD course.
The Department is located across a broad reach of Melbourne, including teaching and research units at Austin Health, Royal Melbourne Hospital, St Vincent's Health, Northern Health and Western Health. The Department also has units at two private hospitals: Albert Road Clinic (Ramsay Health Care) and The Melbourne Clinic (Healthscope).

The Department’s research focuses on improving our understanding and treatment of mental health disorders across the lifespan. It covers a broad range of psychiatric research, including prediction and biomarker research, neuropsychiatry, psychopharmacology, neuroimaging, psychosocial research, economic evaluation, ethics, psychiatric epidemiology, and mental health service delivery.

5.2 MELBOURNE MEDICAL SCHOOL

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

Established in 1862, the Melbourne Medical School was the first school to graduate doctors in Australia. It is internationally renowned for global leadership in teaching and training, health research, policy and practice. The School is ranked 14th in the world (Times Higher Education World University Rankings 2022 for clinical, pre-clinical and health), has strong academic partnerships and ground-breaking collaborative research programs with leading public and private health services, as well as leading medical research institutes and centres in Australia and internationally.

The School spans all major fields of medicine and is comprised of 13 departments: Baker Department of Cardiometabolic Health, Clinical Pathology, Critical Care, General Practice, Infectious Diseases, Medical Education, Medicine, Obstetrics and Gynaecology, Paediatrics, Psychiatry, Radiology, Rural Health and Surgery. These departments are embedded within clinical health services throughout metropolitan Melbourne and rural Victoria. The school comprises almost 1000 academic and professional staff as well as more than 2725 honorary appointees from the health sector who contribute their time, knowledge, research and clinical expertise to the education of our students.

Teaching and learning

The School’s flagship degree, the professional entry masters-level MD, graduates doctors with the skills and knowledge required to serve the health system now and in the future. Responsive, modular, technology-enhanced learning underpins the state-of-the-art curriculum delivery. Continuous research and discovery options, and an ability to tailor the course, allows each student to gain deeper experience in areas of greatest interest. The School uses the Department of General Practice’s continually expanding network of general practitioners and primary healthcare providers in the community to ensure that MD students are also provided with quality community-based medical education.

The School’s Rural Pathway option within the MD will see training for the entire degree conducted in rural Victoria, with a $6.5 million expansion to teaching and accommodation facilities in Shepparton to house this.

The School has an ever-expanding portfolio of vocationally-oriented programs. These teach research skills, leadership and continuing professional development in specific disciplines. An emphasis on the clinician-scientist career trajectory – with training, support and ongoing career pathways at graduate and postgraduate levels – is central to the School’s development of future leaders in all aspects of healthcare, education, research and policy.

Research and impact

The School is committed to improving community wellbeing through the discovery and application of new knowledge. With annual research income of $120 million, the School’s research effort is highly collaborative, spanning basic and translational research. MMS has more than 600 higher degree by research candidates.
Current research themes include cancer, cardiometabolic health, child health, critical care, general practice, neuroscience, musculoskeletal health, women’s health and mental health. The School works closely with research institutes and health services to maximise the impact of our research and teaching programs, in order for medical advances to translate to healthcare delivery as rapidly and seamlessly as possible.

**Recruitment opportunities** Under the leadership of Head of School Professor John Prins, the School is undertaking exciting new developments, including a major review of the MD curriculum, an emphasis on both clinician-scientist career trajectories and innovation pathways (in partnership with affiliated health services, medical research institutes and foundations), as well as a reinvigorated focus on clinically relevant research. These initiatives are being enhanced by a number of recruitment opportunities (through retirements, resignations and recent funding acquisitions) for a range of leadership positions across the School. These positions present a wonderful opportunity for appointees to help drive the strategy, growth and continued excellence of Australia’s leading medical school.

### 5.3 FACULTY OF MEDICINE, DENTISTRY AND HEALTH SCIENCES

http://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 2010- gross revenue was in excess of $400M. Approximately 50% of this income relates to research activities.

The Faculty has a student teaching load in excess of 6,000 equivalent full-time students including more than 1,000 research higher degree students. The Faculty has approximately 1,600 staff comprising 500 professional staff and 1100 research and teaching staff.

### 5.4 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

### 5.5 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.

5.6 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