



RESEARCH FELLOW

DEPARTMENT/UNIT	Department of Neurosciences, Central Clinical School
FACULTY/DIVISION	Faculty of Medicine, Nursing and Health Sciences
CLASSIFICATION	Level A
DESIGNATED CAMPUS OR LOCATION	The Alfred Centre

ORGANISATIONAL CONTEXT

Everyone needs a platform to launch a satisfying career. At Monash, we give you the space and support to take your career in all kinds of exciting new directions. You'll have access to quality research, infrastructure and learning facilities, opportunities to collaborate internationally, as well as the grants you'll need to publish your work. We're a university full of energetic and enthusiastic minds, driven to challenge what's expected, expand what we know, and learn from other inspiring, empowering thinkers. Discover more at www.monash.edu.

The **Faculty of Medicine, Nursing and Health Sciences**, is the largest faculty at Monash University, and offers the most comprehensive suite of professional health training in Victoria. We consistently rank in the top 40 universities worldwide for clinical, pre-clinical and health sciences. We want to improve the human condition. That is our vision - it has no expiration date. Through academic health centres, other translational models and by educating the healthcare workforce of the future, our staff, students and alumni directly improve quality of life. Setting the global health care agenda, the Faculty aspires to lead in all areas of research activity and influence local, national and international policy to improve health and social outcomes and health inequalities. We've made a major impact in the world of medical research and become globally recognised for our quality education of over 41,000 doctors, nurses, and allied health professionals. We are ambitious and aim to maintain our position as a leading international medical research university. We're recognised for the breadth and depth of our research, for our commitment to translational research, for the quality and scale of our research capability, and as a thriving biotechnology hub. To learn more about the Faculty, please visit www.monash.edu/medicine.

The **Central Clinical School (CCS)** encompasses 10 clinical departments and multiple research centres. It is located at the Alfred Hospital precinct in Melbourne, known as AMREP (Alfred Medical Research and Education Precinct). The school is involved in teaching students from both the Faculty of Medicine, Nursing and Health Sciences and the Faculty of Science and its teaching and research is conducted at Alfred Health, Cabrini, Epworth Richmond, Peninsula Health and at Clayton.

The **Department of Neuroscience**, within CCS, in strong partnership with the Alfred Health [Department of Neurology](#), Neurosurgery, Radiology and Psychiatry, has 17 different research groups and over 140 staff and students. We do basic and clinical neuroscience research and research training relevant to a broad range of neurological and related disciplines, including epilepsy, multiple sclerosis and other neuroinflammatory conditions, neuroophthalmology, headache and pain, neuroimaging, neuromuscular disorders, Parkinson's

Disease, dementing disorders, neurocognitive and neuropsychiatric disorders, brain tumours, stroke and traumatic brain injury/spinal cord injury.

The **Integrated Bioinformatics Research in Artificial Intelligence and Neuroimaging (iBRAIN)** research unit, under the leadership of Prof Meng Law and Dr Ian Harding, focuses on using clinical and preclinical imaging, bio-fluid, and cognitive markers for understanding the expression and progression of neurodegenerative diseases, including tracking brain health in ongoing clinical trials.

POSITION PURPOSE

A Level A research-only academic is expected to contribute towards the research effort of the University and to develop their research expertise through the pursuit of defined projects relevant to the particular field of research.

The Research Fellow will take responsibility for the analysis of human structural, diffusion, and/or susceptibility MRI, alongside opportunities to develop skills in PET and MR-PET fusion analyses, as part of ongoing research studies and clinical trials in neurological diseases. The applicant will have a PhD in neuroscience, biomedical engineering, electrical and computer systems engineering, medical physics or related discipline with expertise in MRI data analysis. The Research Fellow will have access to career and research grant proposal development support, and will be expected to actively drive the preparation and submission of research publications. Supervision of graduate students and research assistants may also be required.

Reporting Line: The position reports to Professor and Group Leader in the iBRAIN Research Unit

Supervisory Responsibilities: Not applicable

Financial Delegation: Not applicable

Budgetary Responsibilities: Not applicable

KEY RESPONSIBILITIES

Specific duties required of a Level A research-only academic include:

1. The conduct of research under limited supervision as both a member of a team and, where appropriate, independently and the production of conference abstracts and publications from that research
2. Involvement in professional activities including attendance at conferences and seminars in the field of expertise (subject to availability of funds and travel permissibility)
3. Limited administrative functions primarily connected with the area of research of the academic
4. Development of a limited amount of research-related material for teaching or other purposes with appropriate guidance from other staff
5. Occasional contributions to teaching in relation to their research project(s)
6. Attendance at meetings associated with research or the work of the organisational unit to which the research is connected and/or at departmental, school and/or faculty meetings and/or membership of a limited number of committees
7. Co-contributions to the supervision of undergraduate and postgraduate research students within the field of the staff member's research
8. Conduct of advanced research procedures, including specialist data analysis activities
9. Other duties as directed from time to time

KEY SELECTION CRITERIA

Education/Qualifications

1. The appointee will have:
 - a PhD in neuroscience, biomedical engineering, medical physics, bioinformatics, or related discipline with formal training in MRI data analysis from a recognised university, or equivalent qualifications and research experience in the area

Knowledge and Skills

2. Ability to solve complex problems by using discretion, innovation and the exercise diagnostic skills and/or expertise
3. Well-developed planning and organisational skills, with the ability to prioritise multiple tasks and set and meet deadlines
4. A demonstrated awareness of the principles of confidentiality, privacy and information handling
5. A demonstrated capacity to work in a collegiate manner with other staff in the workplace
6. Familiarity and competence with structural, diffusion, and/or susceptibility neuroimaging analysis methods.
7. Excellent written and verbal academic communication and research productivity, as demonstrated through a track record of refereed research publications and conference participation
8. Competency in computer literacy, including at least basic coding skills in one or more of Python, R, MATLAB, Bash, or similar, and the capability and willingness to learn new software packages and data analysis approaches as necessary

OTHER JOB RELATED INFORMATION

- Travel to other campuses of the University may be required
- There may be a requirement to work additional hours from time to time
- There may be peak periods of work during which taking of leave may be restricted

GOVERNANCE

Monash University expects staff to appropriately balance risk and reward in a manner that is sustainable to its long-term future, contribute to a culture of honesty and integrity, and provide an environment that is safe, secure and inclusive. Ensure you are aware of and adhere to University policies relevant to the duties undertaken and the values of the University. This is a standard which the University sees as the benchmark for all of its activities in Australia and internationally.