



RESEARCH FELLOW

DEPARTMENT/UNIT	School of Psychological Sciences
FACULTY/DIVISION	Medicine Nursing and Health Sciences
CLASSIFICATION	Level B
DESIGNATED CAMPUS OR LOCATION	Clayton campus

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 **Monash School of Psychological Sciences** is ranked among the best in the world. Our School's mission is to develop students and research outcomes that make significant contributions to improving the lives of others globally. Our overarching vision is to make significant and long-lasting impact that changes the world around us, beginning in infancy and across the lifespan. Drawing on the expertise of our staff and the University's unique research platforms and technology, our mission is to sustain and build on Monash's position with world-class research and teaching in Psychology.

For more information about us and the work we do, please visit www.monash.edu/medicine/psych.

Housed within the School of Psychological Sciences, the Turner Institute for Brain and Mental Health is a world-leading institute dedicated to making significant contributions to basic and translational research, clinical care, and research training in brain and mental health. The Institute represents the largest grouping of cognitive and clinical neuroscientists in Australia and Asia Pacific.

To learn more, please visit www.monash.edu/turner-institute/research.

Our research team within Experimental Neuropsychology Research Unit (ENRU) focus on rare neurodegenerative disorders, such as Huntington's disease (HD) and Friedreich ataxia (FA). With respect to FA, we have established research collaborations across the Melbourne network, including with the Murdoch Children's Research Institute, Monash Health, and Monash Biomedical Imaging. We have a strong focus on utilising neuroimaging to map brain, spinal cord and cognitive dysfunction in FA, in an effort to improve early detection of disease and to uncover sensitive biomarkers of disease progression. Findings from this research will provide researchers and pharmacological companies with a suite of neuroimaging tools that will improve the sensitivity of outcome measures in clinical trials and thus enhance the development of therapeutic intervention.

FA is a progressive neurodegenerative genetic disorder that results in a range of symptoms including incoordination, muscle weakness, speech problems and heart disease. The affected person becomes increasingly affected by symptoms and eventually loses their capacity to walk. There is currently a large international push to identify a compound or an intervention that could at least halt, or optimistically cure this life shortening condition. As part of this push large-scale, comprehensive natural history neuroimaging studies are lacking in FA and are urgently needed.

Monash University is the lead partner in a global study (TRACK-FA) to track brain and spinal cord changes in people with FA, with a view to identify early markers of disease progression that can be incorporated into future clinical trials as soon as possible. TRACK-FA aims to improve understanding of the natural history of FA (specifically related to changes in the brain and spinal cord), validate neuroimaging markers in FA to deliver a set of trial-ready biomarkers and to develop a comprehensive database to facilitate ongoing community research and discovery. TRACK-FA is a collaboration between six international sites, including Monash University (Australia), University of Minnesota (USA), Aachen University (Germany), University of Campinas (Brazil), University of Florida (USA), and the Children's Hospital of Philadelphia (USA), sponsored by the Friedreich's Ataxia Research Alliance (FARA) in the USA, as well as leading industry partners globally. Participant enrolment in TRACK-FA commenced in early 2021, with the Melbourne site testing its first participant in April.

POSITION PURPOSE

An exciting opportunity exists for a Level B Research Fellow to join the TRACK-FA team. A Level B research-only academic is expected to carry out independent and/or team research within the field in which they are appointed and to carry out activities to develop their research expertise relevant to the particular field of research.

The Level B Research Fellow will lead the analysis of human structural and susceptibility MRI in neurological diseases as part of this multisite, international study. They will independently drive data analysis activities, with conceptual-level support and general guidance from other members of the research team. The Level B 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, and reporting academic and industry stakeholders. Supervision of graduate students and research assistants will also be required.

TRACK-FA is funded until December 2025, and contracts for this position will be issued on a 12-month basis and based on overall performance in the role.

Reporting Line: The position reports to Professor Nellie Georgiou-Karistianis (Coordinating Principal Investigator of TRACK-FA)

Supervisory Responsibilities: This position provides direct supervision to students and research assistants as needed

Financial Delegation: Not applicable

Budgetary Responsibilities: Not applicable

KEY RESPONSIBILITIES

Specific duties required of the Level B research-only academic may include:

1. The conduct of research either as a member of a team or independently and the production of conference and seminar papers and publications from that research
2. Leading high level imaging analyses (e.g., human structural and susceptibility MRI), producing and maintaining relevant computer scripts/code, developing research strategy, and managing reporting. These tasks will be undertaken independently and in conjunction with local and international research teams
3. Supervision of research-support staff involved in the staff member's research
4. Guidance in the research effort of junior members of research-only Academic staff in their research area
5. Contribution to the preparation or, where appropriate, individual preparation of research proposal submissions to external funding bodies
6. Involvement in professional activities including, subject to availability of funds, attendance at conferences and seminars in the field of expertise
7. Administrative functions primarily connected with their area of research
8. Occasional contributions to the teaching program within the field of the staff member's research
9. Co-supervision or, where appropriate, supervision of major honours or postgraduate research projects within the field of the staff member's area of research
10. 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
11. Other duties as directed from time to time

KEY SELECTION CRITERIA

Education/Qualifications

1. The appointee will have:
 - A doctoral qualification in neuroscience, biomedical engineering, electrical or computer engineering, medical physics or a related discipline.

Knowledge and Skills

2. Familiarity and competence with human structural and/or susceptibility MRI analysis methods and standard neuroimaging tools (e.g., FSL, SPM, ANTS, etc)
3. Demonstrated excellence in written and verbal academic communication and research productivity, as demonstrated through a track record of refereed research publications and conference participation
4. Competency in computer literacy, including coding skills in one or more of Python, R, MATLAB, Bash, or similar, and the capability to efficiently learn new software packages and data analysis approaches as necessary
5. Experience in successfully supervising, mentoring and coaching to support the development of research staff and/or a demonstrated trajectory of leadership capability
6. Experience in supervising and working with major honours or postgraduate students within the discipline

7. The ability to work both independently in a research environment and as part of an inter-disciplinary research team
8. High level organisational skills, with demonstrated capacity to establish and achieve goals
9. A demonstrated capacity to work in a collegiate manner with other staff in the workplace, and in collaborative teams

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
- A current satisfactory Working With Children Check is required

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.