Position description

Research Fellow

Department/Unit	School of Psychological Sciences
Faculty/Division	Faculty of Medicine, Nursing and Health Sciences
Classification	Level A
Work location	Clayton campus
Date document created or updated	13 October 2016

Organisational context

Monash is a university of transformation, progress and optimism. Our people are our most valued asset, with our academics among the best in the world and our professional staff revolutionising the way we operate as an organisation. For more information about our University and our exciting future, please visit www.monash.edu

The **Faculty of Medicine, Nursing & Health Sciences (MN&HS)** is the University's largest research faculty. World class researcher's work across disciplines including laboratory based medical science, applied clinical research, and social and public health research. The Faculty is home to a number of leading medical and biomedical research institutes and groups, and has contributed to advances in many crucial areas. Our expertise in life sciences and biomedicine is recognised both nationally and internationally.

From a teaching perspective, our education curriculum covers a range of disciplines, including medicine, nursing, radiography & medical imaging, nutrition & dietetics, paramedic studies, biomedical sciences, physiotherapy, occupational therapy, behavioural neurosciences and social work. We take pride in delivering outstanding education in all courses, in opening students to the possibilities offered by newly discovered knowledge and in providing a nurturing and caring environment. To learn more about the Faculty, please visit www.med.monash.edu.au/

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' unique research platforms and technology, our mission is to sustain and build on Monash's position with world-class research and teaching in Psychology. To learn more about the School, please visit http://www.med.monash.edu.au/psych/

The newly established **Monash Institute of Cognitive and Clinical Neurosciences** (housed within the School of Psychological Sciences) will provide an exceptional research environment for discoveries that change of our understanding of the brain. Through excellent research and training, a wide network of international partners, and strong industry engagement MICCN will lay the foundation for a pipeline of discovery in areas of critical importance of the human brain and see that knowledge translated into the clinic, the workplace and the community. The team has access to innovative neuroimaging databases (i.e., IMAGE-HD and IMAGE-FRDA) that have been acquired through NHMRC funded projects and where multi-modal MR brain imaging has been utilised to better understand brain structure and function in disease. The Institute represents the largest grouping of cognitive and clinical neuroscientists in Australia and Asia-Pacific. To learn more about the Institute, please visit http://www.monash.edu/neuro-institute

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 incumbent will be a dynamic post-doctoral researcher to join our team which focuses on disease progression in neurodegenerative disorders, such as Huntington's disease and Friedreich ataxia.

The Research Fellow will be responsible for using these existing databases (especially on Friedreich ataxia) to conduct high-level scientific research focused on developing novel methodologies for analysing brain network connectivity with diffusion and functional MRI and integrating these techniques with other (e.g., genetic, behavioural, clinical) data to address both basic and applied neuroscientific questions.

The successful appointee will utilise their expertise in neuroimaging analysis, strong quantitative and programming skills, as well as a nationally competitive track record relative to opportunity. They will be responsible for leading and supporting other team members in terms of image analysis, writing papers for publication, submitting their own fellowship/other grant applications, and assisting in the supervision of students and other researchers. The appointee will work under the supervision of the relevant team Professor, as well as other relevant clinicians and researchers.

Reporting Line: The position reports to the Professor under general direction

Supervisory responsibilities: Not applicable

Financial delegation and/or budget responsibilities: Not applicable

Key responsibilities

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

1. The conduct of research under limited supervision either as a member of a team or, where appropriate, independently and the production or contribution to the production of conference and seminar papers and publications from that research

2. Involvement in professional activities including, subject to availability of funds, attendance at conferences and seminars in the field of expertise

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 her/his research project(s)

6. Experimental design and operation of advanced laboratory and technical equipment or conduct of advanced research procedures

7. 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

8. Providing advice within the field of the staff member's research to postgraduate students

9. Co-supervision of students and other researchers working as part of our team

Key selection criteria

Education/Qualifications

1. The incumbent should possess:

   - A PhD in Psychology, Biomedical Engineering, Computational Neuroscience or a related field
   - An equivalent combination of relevant experience and/or education/training

Knowledge and Skills

2. High-level expertise in computational image analysis to coordinate and conduct all high-level analyses across a range of multi-imaging techniques (e.g., MRI, DTI, fMRI, SWI) both cross-sectionally and longitudinally

3. Demonstrated ability to run MR imaging analysis in SPM, FSL, or other Image analysis tools

4. Evidence of expertise in research design and ability to meet project timelines and deadlines

5. Evidence of strong research resultant in publications, conference papers, reports or professional or technical contributions resultant in evidence of research ability

6. Demonstrated ability to secure funding through external research granting bodies, or professional service

7. Excellent organisational and record keeping skills, with a demonstrated capacity to establish and achieve goals

8. Demonstrated oral and written communication skills and capacity to work in a collegiate manner with other staff and students in the workplace

9. High degree of innovation, dedication and creativity as a researcher

10. Willingness to learn new techniques/concepts

Other job related information

- Travel (e.g. to other campuses of the University) may be required
- Out of hours work (including evenings, weekends and public holidays) may be required
- There may be peak periods of work during which the taking of leave may be restricted
- Flexibility to increase work fraction as required

Legal compliance

Ensure you are aware of and adhere to legislation and University policy relevant to the duties undertaken, including: Equal Employment Opportunity, supporting equity and fairness; Occupational Health and Safety, supporting a safe workplace; Conflict of Interest (including Conflict of Interest in Research); Paid Outside Work; Privacy; Research Conduct; and Staff/Student Relationships.