# RESEARCH FELLOW

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<tr>
<th><strong>DEPARTMENT/UNIT</strong></th>
<th>School of Psychological Sciences, Psychology</th>
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<td><strong>FACULTY/DIVISION</strong></td>
<td>Faculty of Medicine, Nursing and Health Sciences</td>
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<tr>
<td><strong>CLASSIFICATION</strong></td>
<td>Level A</td>
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<tr>
<td><strong>DESIGNATED CAMPUS OR LOCATION</strong></td>
<td>Clayton campus</td>
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## 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](http://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](http://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’ 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](http://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](http://www.monash.edu/turner-institute/research).
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.

We seek a talented, dynamic post-doctoral researcher to join the Neural Systems and Behaviour Lab in the Turner Institute for Brain and Mental Health. The appointee will work on integrating computational models with experimental neuroimaging data with the goal of understanding the structure and function of large-scale brain networks. The research will combine elements of graph theory and network science, biophysical modelling, data science, machine learning, bioinformatics, genetics, and cognitive and clinical neuroscience to understand neuroimaging data acquired in humans and model organisms.

The successful candidate will have strong quantitative and programming skills and an excellent, nationally competitive track record. The appointee will be expected to work collaboratively as part of a larger, multidisciplinary team, providing analysis support for other team members, and assisting in the supervision of students and other researchers. The appointee will work under the supervision of Professor Alex Fornito.

**Reporting Line:** The position reports to Professor and Theme Lead of the Brain Mapping and Modelling Research Program at the Turner Institute

**Supervisory Responsibilities:** This position will assist in the supervision of various research staff and students within the Neural Systems and Behaviour Lab

**Financial Delegation:** Not applicable

**Budgetary 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 their research project(s)

6. Conduct of advanced research procedures, particularly in the domain of computational modelling of brain imaging data, as well as work on experimental design and/or the operation of advanced laboratory and technical equipment;

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. Co-supervision of students and other researchers

9. Advice within the field of the staff member’s research to postgraduate students

10. Other duties as directed from time to time
KEY SELECTION CRITERIA

Education/Qualifications

1. The appointee will have:
   
   • A PhD in Physics, Mathematics, Engineering, Computer Science, or related discipline 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. Excellent written communication and verbal communication skills with proven ability to produce clear, succinct reports and documents

5. A demonstrated awareness of the principles of confidentiality, privacy and information handling

6. Evidence of capacity to work constructively and collaboratively as part of a multidisciplinary team, and with colleagues, internal and/or external, in furthering the aims of the School

7. Demonstrated computer literacy and proficiency in the production of high level work using software such as Microsoft Office applications and specified university software programs, with the capability and willingness to learn new packages as appropriate

8. Strong quantitative and programming skills (particularly Matlab, python, and/or C++)

9. Expertise in one or more of the following: graph theory/network science, calculus, numerical and computational modelling of biophysical systems, model fitting and optimization, machine learning, computational neuroscience, and/or bioinformatics

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

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.