

POSITION DESCRIPTION

Position Title	Senior Technical Officer		
Organisational Unit	Faculty of Health Sciences		
Functional Unit	Psychology (Melbourne)		
Nominated Supervisor	Professor		
Classification	HEW 7		
CDF Level	CDF1	Position Number	10609863
Attendance Type	Full Time	Date reviewed	21-FEB-2025

ABOUT AUSTRALIAN CATHOLIC UNIVERSITY

Mission Statement: *Within the Catholic intellectual tradition and acting in Truth and Love, Australian Catholic University is committed to the pursuit of knowledge, the dignity of the human person and the common good.*

An ACU education builds on the Catholic understanding of faith and reason working together in pursuit of knowledge and promotion of human dignity and the common good.

An ACU education seeks to transform lives and communities. Students are challenged to look beyond the classroom, solve real-world problems, develop their own search for meaning and cultivate strong professional ethics. They are invited to stand up for people in need and causes that matter.

ACU is open to all. As is common with great Catholic institutions the world over, the university is inclusive and supportive of everyone, every day – regardless of their faith or tradition.

ACU is a young university making a serious impact. Ranked in the top two per cent of universities worldwide and in the top 10 Catholic universities, we're also a leader in employability with 94 per cent of our graduates employed. The university has seven campuses around Australia, a campus in Rome, Italy, and an online campus – ACU Online.

ACU has four faculties, and several research institutes and directorates. We believe our number one asset is our people. It's the character, enthusiasm and dedication of our staff that make this a university like no other. All our staff contribute to the achievement of our goals set out in ACU's Vision 2033 and aim to provide high-quality services with a strong focus on service excellence.

To be agents of change in the world, we all need to see life through the eyes of others. We believe that our role as a university is to inspire and equip people to make a difference – and that means cultivating their ability to act and think empathetically.

The structure to support this complex and national university consists of:

- Vice-Chancellor and President
- Provost and Deputy Vice-Chancellor (Academic)
- Chief Operating Officer
- Deputy Vice-Chancellor (Research and Enterprise)

- Deputy Vice-Chancellor (Education)
- Vice President and Director (Mission and Identity)

ABOUT THE FACULTY OF HEALTH SCIENCES

The Faculty of Health Sciences comprises three schools:

- Allied Health
- Behavioural and Health Sciences
- Nursing, Midwifery and Paramedicine

There are currently approximately 14,000 students (EFTSL) and 520 (FTE) staff in the faculty under the disciplines: occupational therapy, speech pathology, social work, exercise science, exercise physiology, nutrition science, biomedical science, nursing, midwifery, paramedicine, physiotherapy, psychology and public health. The Faculty is represented across seven ACU campuses.

The Faculty's current research priorities focus on Cardiovascular Disease and Metabolism, Health Services Research, Nutrition, Sports Performance and Rehabilitation, Psychology and Mental Health.

An expanding portfolio of postgraduate courses is also available in coursework and research. Many postgraduate courses within the Faculty have been developed in conjunction with industries in order to meet specific needs of the professions and industry. Some postgraduate units are offered in flexible learning mode by online study. All students have professional and clinical experience that is supervised by specially qualified practitioners. Catholic hospitals and other public, private and specialty organisations, as well as schools and the health and sports industry, are involved with preparing for promoting and offering this valued and essential experience.

The goals of the Faculty are closely linked to and emanate from the Mission of the University. The areas of achievement by the Faculty include the key areas of teaching and learning, research and scholarship, community engagement in addition to specific objectives regarding internationalisation, quality and resource management. It has well-established procedures for evaluating performance and ensuring quality which involve students and representatives of the various statutory registration authorities and professional organisations, as well as recent graduates and employers.

Further information about the Faculty can be found at:

<https://www.acu.edu.au/about-acu/faculties-directorates-and-staff/faculty-of-health-sciences>

ABOUT NATIONAL SCHOOL OF BEHAVIOURAL AND HEALTH SCIENCES

The National School of Behavioural and Health Sciences is located on seven of the University's campuses: Brisbane, Blacktown, Strathfield, North Sydney, Canberra, Melbourne and Ballarat.

The School is currently responsible for delivery of programs in six professional disciplines:

- Biomedical Science
- Exercise Physiology
- Exercise Science
- Nutrition Science
- Public Health
- Psychology

Further information about the School can be found at:

<https://www.acu.edu.au/about-acu/faculties-directorates-and-staff/faculty-of-health-sciences/school-of-behavioural-and-health-sciences>

ABOUT THE HEALTHY BRAIN AND MIND RESEARCH CENTRE

The Healthy Brain and Mind Research Centre aims to advance knowledge critical to improving mental health, performance and well-being. Mental health and developmental disorders have significant negative impacts upon the mortality and social participation of the most vulnerable members of the community and are among the most urgent global challenges of the 21st century. The Centre seeks to make significant contributions to mental health, participation and well-being by integrating cutting edge research expertise and technology spanning neuroscience, addiction science, clinical psychology, developmental psychology, and rehabilitation science to improve the understanding, prevention and treatment of mental health and developmental disorders. The Healthy Brain and Mind Research Centre includes a program of research focused on the Neuroscience of Addiction and Mental Health.

ABOUT THE NEUROSCIENCE OF ADDICTION AND MENTAL HEALTH PROGRAM

Addiction is highly prevalent and has devastating effects on the lives of 35 million people globally. This program aims to resolve a deep evidence gap on the mechanisms of vulnerability and recovery in addiction and related mental health problems. The overarching focus of this program is to map the clinical, cognitive and brain mechanisms that predate and predict the onset of addiction, substance use behaviours, and related mental health problems (e.g. depression, anxiety, psychosis), the factors that exacerbate brain and mental health harms in people with addiction, and to pave the way for new strategies to recover these harms. To achieve our aims, we use next-generation multimodal brain imaging tools, longitudinal neuroimaging consortia, large cohort studies, and carefully-controlled experiments including behavioural and pharmacological interventions. Ultimately, this Program will generate new high-quality evidence to transform neuroscientific theories of addiction, and to inform the identification of prevention and treatment targets. Our vision is to alleviate the devastating impact of addiction on the lives of those affected, their families, and the broader society.

POSITION PURPOSE

The Senior Technical Officer will join a high-quality research team. The overarching role will be to provide high-level technical support to researchers in the Neuroscience of Addiction and Mental Health Program. This includes providing technical expertise with the design of neuroscientific experiments and computer and fMRI tasks to assess cognitive performance and brain function; analysis of behavioural and complex multimodal neuroimaging data; providing technical expertise relating to testing equipment, MRI data management, analysis software, methods techniques and computer systems; and providing technical support for research-related activities such as manuscript preparations, grant submissions, and publications as required.

KEY RESPONSIBILITIES

Introduction

A number of frameworks and standards express the University's expectations of the conduct, capability, participation and contribution of staff. These are listed below:

- ACU's [Vision 2033](#)
- [Catholic Identity and Mission](#)
- [Code of Conduct for all staff](#)
- [ACU Capability Development Framework](#)
- [ACU Staff Enterprise Agreement 2022-2025](#)
- [ACU Staff Reconciliation Action Plan](#)

The [Capability Development Framework](#) describes the core competencies needed in all ACU staff to achieve the university's strategy and supports its mission.

Responsibility	Scope
Design and implement automated pipelines for processing of behavioral and multimodal and multi-site MRI data using relevant software (e.g. SPM, FSL, Matlab, Python) and manage the analyses of MRI data ensuring accuracy of results in a timely manner.	The position mainly contributes to activities; outcomes and goals within their immediate team or work unit
Computer programming and use of technical equipment to run neuroscientific experiments to support the Program projects and data analysis (e.g. Presentation, C, C++, Matlab, python, E-Prime).	The position mainly contributes to activities; outcomes and goals within their immediate team or work unit
Provide technical and research expertise for the operation and maintenance of equipment for neuroimaging and cognitive testing.	The position mainly contributes to activities; outcomes and goals within their immediate team or work unit
Lead the preparation and submission of research grants and manuscripts, and provide technical support and advice for preparing manuscripts, research presentations and grant applications and for other relevant Program research activities.	The position mainly contributes to activities; outcomes and goals within their immediate team or work unit
Manage training and continual support to users of research tools, technical equipment and systems, and resolve relevant hardware and software issues.	The position mainly contributes to activities; outcomes and goals within their immediate team or work unit
Advice on system and process improvements to ensure best research practices are implemented in the Program.	The position mainly contributes to activities; outcomes and goals within their immediate team or work unit

HOW THE ROLE OPERATES

The position will need to seek approval from their supervisor before making changes to processes and procedures.
The position is expected to identify and recommend improvements to their supervisor before implementation.

The position seeks and creates business opportunities for the organisation by liaising with a range of external stakeholders.

This position does not have managerial responsibilities.

SELECTION CRITERIA

Qualifications, skills, knowledge and experience:	• Qualification - Completion of an undergraduate qualification with relevant research and or technical experience. • Skill - Demonstrated computer programming experience (e.g. with MATLAB, Python, C, C++) to enable reliable cognitive and neuroimaging testing. • Knowledge - A strong track record and desire to pursue excellent research using multimodal neuroimaging methods, techniques and relevant software (e.g. Freesurfer, MRTrix, SPM / FSL). • Skill - Highly motivated and enthusiastic with demonstrated ability to provide high-quality supervision and training, support to users; to problem-solve relevant hardware, software and system issues; and to design systems for effective data processing, sharing and storage. • Experience - Experience with data analysis, statistical methods and research gold-standards in psychology, cognitive neuroscience or related fields. • Experience - Experience with the lead of and the technical contributions to articles for publication in high-quality scientific journals and funding applications and capture. • Experience - Demonstrated planning, organisational and problem-solving skills. • Qualification - Desirable: Post graduate studies in a relevant field such as neuroimaging, computational modelling, psychology, neuroscience, computer science, or engineering.
Core Competencies:	• Demonstrate confidence and courage in achieving ACU's Mission, Vision and Values by connecting the purpose of one's work to ACU's Mission, Vision and Values. • Work collaboratively internally and externally to ACU to capitalise on all available expertise in pursuit of excellence. • Coach and develop self and others through setting clear expectations, managing performance and developing required capabilities to establish a culture of learning and improvement. • Take personal accountability for achieving the highest quality outcomes through understanding the ACU context, self-reflection, and aspiring to and striving for excellence. • Plan work activity, prioritise time and resources using established ACU processes and technology to achieve optimum efficiency and effectiveness.
Essential Attributes:	Demonstrated commitment to cultural diversity and ethical practice principles and demonstrated knowledge of equal employment opportunity and workplace health and safety, appropriate to the level of the appointment.

Working with Children and vulnerable adults check	This role does not require a Working with Children Check.
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REPORTING RELATIONSHIPS

For further information about the structure of the University, refer to the Organisation Chart
<https://www.acu.edu.au/about-acu/leadership-and-governance/leadership/organisational-structure>

