POSITION DESCRIPTION

Postdoctoral Researcher

Position Summary

The Postdoctoral Researcher will be responsible for helping develop and coordinate behavioural imaging projects within an ARC Laureate program on Cognitive Resilience and Ageing led by Professor Kaarin Anstey at the UNSW School of Psychology. The Postdoctoral Researcher will work with the team to develop, pilot and run a large functional MRI study investigating cognitive and sensory ageing in healthy adults aged 50+ years and will develop skills to assist the team with smaller sub-studies using fNIRS. This role will assist with participant engagement, data collection, processing, data analysis and preparation of manuscripts for publication.

The Postdoctoral Researcher reports to Professor Anstey and has no direct reports.

Accountabilities

Specific accountabilities for this role include:

- Assist with developing study protocols, documentation, piloting, and implementing data collection involving task and resting state fMRI protocols for studying cognitive and sensory ageing in older adults.

- Work closely with Imaging Facility staff (MRI), technical support staff (fNIRS), and the research team to set up and implement cognitive ageing imaging projects using fMRI or wireless portable fNIR. Develop expertise in associated software, helping with sequence design/cap configuration, and managing data acquisition, pre-processing, quality control, analysis and visualisation.

- Assist with research reporting and analysis, including posters, manuscripts and presentations for scientific meetings and/or grant submissions.
• Conduct research in cognitive ageing as part of a team, using the Laureate study datasets as well as secondary analysis of open access neuroimaging datasets, including leading some areas of the project where the opportunity arises and where appropriate.
• Assist with data collection and handling during participant sessions for the Laureate program studies, including assisting with data transfer and de-identification.
• Engage in regular training related to MR safety, technical skills, data processing and analysis, as well as in research ethics, data privacy and research integrity as required.
• Align with and actively demonstrate the UNSW Values in Action: Our Behaviours and the UNSW Code of Conduct.
• Cooperate with all health and safety policies and procedures of the university and take all reasonable care to ensure that your actions or omissions do not impact on the health and safety of yourself or others.

Skills and Experience
• A PhD in Cognitive Neuroscience, Psychology, or a related discipline, and/or relevant work experience.
• Excellent knowledge of brain anatomy and cognition and an interest in cognitive and/or sensory ageing and dementia in addition to an emerging track record in the area or interest in developing expertise in this area.
• Demonstrated expertise in the design and running of cognitive neuroimaging studies using task and resting state fMRI methods including data processing and analysis.
• Demonstrated excellent data analytic and academic writing skills, with a track record of publications relative to opportunity.
• Demonstrated experience in designing and running experimental cognitive studies using software such as PsychoPy/Python, Presentation, Psychtoolbox/MATLAB.
• Evidence of highly developed interpersonal and organisational skills in addition to experience with project management, working with research participants, and familiarity with research ethics.
• Proven commitment to proactively keeping up to date with discipline knowledge and developments and capacity to develop expertise in other neuroimaging methods (i.e., fNIRS).
• Demonstrated ability to work in a team, collaborate across disciplines and build effective relationships.
• An understanding of and commitment to UNSW’s aims, objectives and values in action, together with relevant policies and guidelines.
• Knowledge of health and safety responsibilities and commitment to attending relevant health and safety training.

Pre-employment checks required for this position
• Verification of qualifications

About this document
This Position Description outlines the objectives, desired outcomes, key responsibilities, accountabilities, required skills, experience and desired behaviours required to successfully perform the role.

This template is not intended to limit the scope or accountabilities of the position. Characteristics of the position may be altered in accordance with the changing requirements of the role.