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| **Position Title:** | **Postdoctoral Fellow in Auditory Cognitive Neuroscience** |
| **Classification:** | Academic Level A |
| **Position Number** | 7007737 |
| **Reporting to title & establishment / position No.:** | Associate Professor  7005865 |
| **School/Office:** | MARCS Institute |
| **Division:** | Research and Development |
| **Employment Type:** | Fixed Term – 2 Year, with the possibility of a once-only 2-year extension |

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| **Context** *(context of the division and office/school in which the position operates)***:** |
| The University of Western Sydney is a major urban university spread over six campuses in Greater Western Sydney, a region of great opportunity, diversity, challenge and growth. The University is culturally diverse, with 2,500 staff and 40,000 students drawn from Australia and around the world. UWS aims to ‘bring knowledge to life’ and to make a difference to the lives of its students and communities and the economic and social potential of the region.  The ***MARCS Institute*** is a vibrant interdisciplinary research institute of the University of Western Sydney. The MARCS Institute comprises around 80 staff including academics, postdoctoral fellows, doctoral students, and excellent administration and technical support staff; and houses extensive state-of-the-art labs and technical facilities.  Research at the MARCS Institute is conducted in five interdisciplinary research programs: Music Cognition & Action, Speech & Language, Bioelectronics & Neuroscience, Multisensory Processing, and Human Machine Interaction. MARCS is involved in a range of research collaborations and industry partnerships and the MARCS team includes members and collaborators from Medicine, Neuroscience, Computer Science, Engineering, Mathematics, Linguistics, Psychology, Education, Music, and Communication Arts.  The Postdoctoral Fellowship in Auditory Cognitive Neuroscience will be situated in the Music Cognition & Action research program at the MARCS Institute. Members of the Music Cognition & Action research program possess expertise in topics including:  - Sensorimotor synchronisation, entrainment, and rhythm perception and production  - Developing and modelling ensemble skills and joint action  - Neurocognitive mechanisms for perception-action coupling  - Perceiving loudness and its relation to affect  - Improvising and creating dance and music  - Associative learning including action and dance sequences |

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| **Position Purpose** *(brief statement outlining why the role exists)***:** | |
| A Postdoctoral Research Fellow in Auditory Cognitive Neuroscience is sought to join the Music Cognition & Action research program in the MARCS Institute at UWS.  The position is associated with an Australian Research Council (ARC) Future Fellowship awarded to Associate Professor Peter Keller at MARCS. The grant provides funding for a 4-year project entitled “*Psychological and neurophysiological mechanisms underlying human interaction in musical contexts”.* The aim of the project is to investigate the behavioural and neural mechanisms that underpin an individual’s ability to synchronize with others during musical activities such as ensemble performance. These mechanisms will be examined by studying relationships between performance on sensorimotor synchronization tasks, social variables (e.g. personality), and brain structure and function in naturalistic and laboratory settings.  The Postdoctoral Research Fellow will use Magnetic Resonance Imaging (MRI) to investigate individual differences in brain structure and function related to sensorimotor synchronization skills in ensemble musicians and non-musicians in the context of cross-sectional and longitudinal training studies.  The Postdoctoral Research Fellowship is offered as a two-year fixed term contract, with the possibility of a once-only two-year extension.  The successful applicant will have demonstrated research experience in cognitive neuroscience, specifically neuroimaging, with a desirable focus on auditory temporal processing, sensorimotor integration, human motor control, or a related topic. The successful applicant will have knowledge of anatomical and functional MRI data acquisition and analysis techniques for estimating structural, functional, and effective connectivity between brain regions. | |
| **Dimensions** *(these relate to the scope of the role)***:** | |
| **Number of direct reports:** | 1 |
| **Titles of direct reports:** | Research Assistant |
| **Number of indirect reports:** | There are no indirect reports to this position |

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| **Major Responsibilities** | | **Accountabilities**  *(ways to measure success of major responsibilities)* | |
| **Research**   * Conduct research on the neural correlates of sensorimotor synchronization using Magnetic Resonance Imaging (MRI), including designing, setting up, running and analysing, and writing up experiments. * Involvement in scholarly and professional activities, including regularly publishing high quality articles in recognised journals and attendance at conferences and seminars. * Participation in supervision of undergraduate students and Masters or Doctoral Higher Degree Research (HDR) students. * Deliver research seminars within the Institute and the University. * Participate in collaborative research work including contributing to the preparation of applications for external research funding   **Other**   * Contribute to the research excellence of the Music Cognition and Action research program and the MARCS Institute. * Facilitate and maintain good communication with students and staff. * Participate in administration and attendance at meetings as required within the Institute. * Actively pursue personal professional development, and provide opportunities for mentoring and development of junior staff and students. * Contribute to relevant governance and professional bodies as leader and member. * Contributions to the University’s teaching program in accordance with the University Workplan Policy | | * Meet the delivery of milestones set out in the funding agreement. * Prepare manuscripts for publication, reports relevant to the funding agreement, and present research at national and international conferences, seminars etc. * Supervise or co-supervise undergraduate student Summer Projects, Honours students, and/or Higher Degree Research students. * Present research results in the MARCS colloquium series and contribute to units in the Master of Research degree and in the School of Social Sciences & Psychology | |
| **Work Health & Safety Requirements** | All staff are required to:   * Exercise due diligence with regards to Work Health and Safety * Acquire and maintain up-to-date knowledge of Work Health and Safety matters of the University including:   + An understanding of Universities operations including hazards and risks associated with those operations * Oversight of the implementation of Work Health and Safety systems within the business including:   + The allocation of appropriate resources to enable hazards and risks to be identified and eliminated or minimised in a timely manner * Monitor and review health and safety risks, management practices, incidents and accidents * Consult with workers and WHS Committees on work health & safety matters. * Complete University WH&S training and development modules | |
| **University Expectations** | All staff are expected to:   * Contribute to the efficient and effective functioning of their team or work unit in order to meet University objectives. This includes demonstrating appropriate and professional workplace behaviours in accordance with the Code of Conduct, providing assistance to team members if required and undertaking other key responsibilities or activities as directed by one’s supervisors; * Participate in the cyclical Career Planning Development Process, which includes an annual review of their performance against agreed operational and performance objectives set in COMPASS; * Perform their responsibilities in a manner which reflects and responds to continuous improvement; and * Read, understand and comply with all University policies and procedures. | |
| **Key Relationships to Position**  *(can include Committees and organisations)* | | **Purpose of Relationship**  *(e.g. to provide direction or advice; to share information; to receive direction or advice etc)* | | |
| **Internal** *(within UWS)***:**   * Institute Director and Director of Research * Institute Manager * Music Cognition & Action Research Program Leader * Associate Professor Peter Keller * Colleagues in the research program, the Institute, and across the University | | * Receive advice and seek approval for expenditure and travel approval * Receive advice on matters relating to the administration of the Institute and seek approval for expenditure * Receive advice and seek independent mentoring as required * Receive direction and report progress to direct supervisor * Gain and share knowledge with colleagues within the unit and across the University | | |
| **External** *(outside UWS)***:**   * Associate Professor Simon Lewis, The Brain and Mind Research Institute at the University of Sydney * Conferences | | * Receive advice on accessing and using MRI facility * Deliver oral presentations to relevant conferences | | |

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| **Key Challenges of the Position:** |
| * The role does not have direct line authority so needs to achieve outcomes though effective influencing skills, personal credibility and demonstrating rigour through good practice approaches and methodologies * The occupant will need to have the ability to multi-task and manage on-going requests by the supervisor and funding agency * The delivery of outcomes and milestones as set out in the funding agreement * The negotiation of access to shared equipment and infrastructure in a busy environment in order to deliver scientific objectives * The role will require the appointee to operate independently and with significant autonomy |

| **Delegations Exercised**  *(i.e. decisions within position’s authority, including formal delegations)* | **Recommendations Expected**  *(i.e. where the position does not have authority to make decision but is to provide input or recommendations)* |
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| * This position does not have formal delegations. |  |

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| **Selection Criteria** *(including required knowledge, skills and experience for position)***:** |
| * A PhD in Cognitive Neuroscience, Experimental Psychology, or a related discipline. * Demonstrated experience of independent research in cognitive neuroscience, specifically structural and functional Magnetic Resonance Imaging with human participants. * Established track record of quality peer reviewed publications and conference presentations in the area of cognitive neuroscience. * Excellent oral and written communication skills; excellent interpersonal skills and the ability to work collegially and effectively in a team. * Demonstrated experience in conducting laboratory-based research in cognitive neuroscience. * Interest in or experience researching music cognition or auditory perception and motor production more generally. * Knowledge of developing research reports either as part of a team or individually. * Capacity to contribute to the supervision of Honours and Higher Degree Research students. * A demonstrated understanding of the principles of equal opportunity, equity and occupational health and safety and the willingness and capacity to implement equal opportunity, equity and occupational health and safety plans and programs. |
| **Organisational Chart** *(optional)***:** |
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| **Position description approved by:** | |  |
| **Date position description last reviewed:** | |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  |  | **/** |  |  | **/** |  |  | | |