**UQ Summer Research Project Description - 2026**

*Please use this template to create a description of each research project, eligibility requirements and expected deliverables. Project details can then be uploaded to each faculty, school, institute, and centre webpage prior to the launch of the program.*

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| **Project title:** | **The cognitive basis of creative thought: A neuropsychological investigation** |
| **Hours of engagement & delivery mode** | 6 weeks, on-site, 36hrs/week12 January - 20 February 2026 |
| **Description:** | Creative thought - the ability to generate novel and appropriate ideas - is fundamental to human advances throughout history and adaptive daily functioning. Despite universal interest in creativity, we are still far from understanding its cognitive and neural bases. Currently, creativity has typically been studied as a distinct cognitive ability with its own neural mechanisms. In the parallel and yet unconnected approach, neuropsychology and cognitive neuroscience evidence has suggested that the generation, evaluation and selection of novel and adaptive ideas are supported by neurocognitive mechanisms underlying controlled retrieval and flexible manipulation of acquired knowledge.This is an ARC-funded project that examines the cognitive basis of creative thought through the lens of cognitive neuroscience. By analysing neuropsychological data from healthy younger and older participants, we aim to characterise how semantic cognition, controlled episodic memory retrieval, and executive control functions contribute to creative idea generation.  |
| **Expected learning outcomes and deliverables:** | The scholar will gain hands-on experience in neuropsychological data processing, including data entry, scoring, and management of standardised assessments. They will be trained in advanced statistical analysis, including principal components analysis (PCA) to identify latent cognitive factors underpinning creative thought. They will also conduct group comparisons and correlational analyses linking cognitive factors to creative performance. Finally, they will be asked to produce written report and oral presentation at the end of their project. |
| **Suitable for:** | This project is open to applications fromstudentswith a background in psychology only. Limited to3rd – 4th year students. |
| **Primary Supervisor:** | Prof. Gail Robinson and Dr Melody Chan |
| **Further info:** | For further enquiry, please contact Dr Chan via email (melody.chan@uq.edu.au).  |