EDITH COWAN UNIVERSITY

PROJECT DETAILS

Project Title:

Cognitive and Neural Mechanisms of Motor Learning: Behavioural, Perturbational, and Correlational Investigations

Project Summary:

Aims: This project investigates the neural and cognitive mechanisms underlying the learning of motor skills (motor learning). This project will employ behavioural methods designed to isolate component processes of motor learning, perturbational methods (such as pharmacological drug manipulations) to establish causal mechanisms, and correlational techniques (electroencephalography) to characterize brain changes during motor learning.
Significance & impact: By combining these methodologies, we will attain better understanding of the cognitive and neural bases of motor skill acquisition. This will form the basis of improved, evidence-based practice across diverse skill training contexts (e.g., movement rehabilitation, training in high-performance sports, aviation training, etc).

Preferred Applicant Skillset:

The applicant will have an undergraduate degree and honours in psychology, and experience with experimental psychology and cognitive neuroscience techniques. In addition, the candidate should have strong scientific writing skills within the discipline of experimental psychology and/or cognitive neuroscience.

Internship opportunity:

While no formal internship agreement is currently in place, the candidate will have access to collaborative research networks and clinical partnerships, including opportunities at Fiona Stanley Hospital. This will provide exposure to translational research applications and clinical populations, enhancing the research experience and career development opportunities.

Primary Contact:

Li-Ann Leow

+61 420 206 033

l.leow@ecu.edu.au