

PROJECT DETAILS

Project Title:

Examining the cognitive and neural mechanisms of prediction in motor learning.

Project Summary:

Motor learning requires learning to predict what action to perform and when to act. This project investigates the neural mechanisms underlying these aspects of motor learning, by using electroencephalography (EEG). We will examine how the brain encodes and updates these two distinct but interrelated forms of learning, as well as how musical training sharpens such learning. Findings will inform how music-based interventions can be incorporated into movement rehabilitation protocols in neurodevelopmental conditions, with broad implications for motor recovery and healthy ageing.

Preferred Applicant Skillset:

We are looking for a self-motivated PhD candidate with a strong willingness to learn, excellent organization, problem-solving, and project management skills. Experience with, and knowledge of human cognitive neuroscience testing is desirable.

Primary Contact:

Dr Li-Ann Leow.

l.leow@ecu.edu.au

+61 8 6304 3139