Ausschreibung für einen Praktikumsplatz für Masterstudierende an der University of Queensland in Brisbane, Australien.

University of Queensland,
Faculty of Health and Behavioural Science:

“We are seeking interns who are interested in gaining research experience in the Centre for Sensorimotor Performance.

Project Plan:
Effective movement is achieved through motor learning, either by motor sequence learning (e.g., learning multiple components of a tennis serve), or by motor adaptation (adapting movements to unfamiliar dynamics, e.g., learning the relationship between a steering wheel and car motion). We move to obtain rewards. Rewards should thus affect all forms of motor learning. The project tests the idea that universal reward-dependent processes consolidates distinct forms of motor learning. Dopamine, the neurotransmitter necessary for processing reward, is thought to initiate the consolidation of new memories, but a causal relationship between reward and consolidation has never been shown in motor learning.

Study 1 tests how reward affects consolidation of both sequence learning and sensorimotor adaptation, by pharmacologically disrupting dopamine balance in the brain. Participants learn either motor adaptation or motor sequence learning, and then either ingest pharmacological products that will disrupt brain dopamine balance, or placebo. We predict Levodopa will impair consolidation (evidenced in poorer learning at retest), in both forms of learning. Study 2 extends Study 1 by additionally testing how interference from one type of learning to the other alters reward-dependent consolidation of each learning, thus demonstrating that reward modulates universal processes common to both types of learning.

Your role:
You will be directly involved in collecting behavioural data. We collect extensive data about movements (either using force-transducer, robotic arm (i.e., the vBOT), digitizing tablet, etc). This project offers you the opportunity to acquire advanced skills in motor control research and neuroscience research.

This project is open to applications from students taking courses/active interests in psychology, cognitive neuroscience, motor control, and human movement. Conscientiousness and initiative are particularly valued.

Bei Interesse bitte wenden an:

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