

RESEARCH PROJECT TITLE: The role of proprioception in the control of reaching movement

EDUCATION LEVEL All levels (Master or doctoral students and post-doctoral researchers)

AREA OF EXPERTISE

Neurosciences
Neurophysiology
Sensorimotor systems
Motor Control
Neural circuits and systems
Modeling and simulation
Life sciences research related to human health and disease

DEPARTMENT

Département de Neurosciences , Université de Montréal
Programs of neurosciences or biomedical engineering

OFFER DETAILS:

The sensory-motor control labs (PI: Anatol Feldman). Main interests are the study of fundamental neural mechanisms underlying the control of action and perception in norm and pathology such as caused by stroke. Research is based on advanced theoretical framework (see Zhang et al. 2022, J Neurophysiol.). The posted research will address the question of the role of proprioception in adaptation of reaching arm movement to gravitational and other external forces. The project is funded by CRSNG and will be done in collaboration with Prof Mindy Levin (McGill). The project will involve healthy and post-stroke subjects. We seek highly motivated students from the fields of neuroscience, biomedical engineering, rehabilitation, or other related disciplines. Candidates must have a competitive CV to apply for provincial and national salary award competitions. Previous experiences with related experiments in humans as well as in programming in Matlab for analyses of EMG signals, kinematics, and computational neuroscience are strong assets. Candidates with diverse skills and career objectives will be considered. Our group offers a state of art environment for interdisciplinary research in the field of behavioral neuroscience, while considering individual interests and skills of the applicants. We are committed to provide equal opportunities to women and minorities and a supportive training setting to all members of our team. Come and join our team at the Université de Montréal!