Start Date: September 2014

A doctoral student position is available for a motivated individual interested in studying the skin’s role in proprioception and balance control; specifically how skin contributes to movement perception and to the modulation of postural muscles for standing balance and motor control. Cutaneous information from the foot sole and foot dorsum will be the focus of study; research will involve neurophysiological and biomechanical approaches such as microneurography, sensory stimulation and balance assessment through force and kinematic measures.

Current research interests in the lab include sensory neurophysiology with a focus on cutaneous contributions to perception, reflex modulation, and vestibular and cerebellar roles in postural control. The Laboratory is housed in the Department of Human Health and Nutritional Sciences at the University of Guelph and there will be opportunities for collaborative research projects both within Canada and internationally.

The lab is currently equipped with a microneurography room, an Optotrak system, an AMTI force platform, an 8-channel Bortec EMG system, a MagStim TMS system, many custom built vibration platforms, foot plates and foot pedals for proprioceptive and balance testing and various software packages (LabView, Spike, Signal, vibration view, Visual3D, Matlab).

The lab is currently funded by operating grants from NSERC and infrastructure grants through ERA and CFI. Students with a Master’s thesis in Neurophysiology, Biomechanics, Physiology or related fields with a strong research background are encouraged to apply. Ideal candidates will be competitive for and be required to apply for external stipend support through NSERC or CIHR.

Interested individuals should contact Dr. Leah Bent and include your unofficial transcript, your CV, and a statement of your research interests:

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