

# System identification of intrinsic and reflex contributions to the control of posture and movement. CIHR Grant: FRN-81280

## Experiment: Reflex changes during anticipatory postural adjustments preceding voluntary arm movements in standing humans

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### Subject Information & Consent Form

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- These experiments are designed to study the neuromuscular mechanisms involved in controlling the ankle during the execution of tasks that destabilize posture. The experimental procedure involves:
  - The execution of 350-400 voluntary arm raises by a subject, when cued by a visual signal.
  - Measurement of the electrical activity of the ankle and deltoid muscles using surface electrodes applied with a standard technique.
  - A small displacement of the right foot about its axis of rotation by a rotary actuator.
  - A comfortable padded splint cast attached to the right forearm to measure arm position.
- Individual experiments will last for no longer than 3 hours. Subjects are to be given regular rest periods in 5 min intervals. During rest periods, the subject will be asked to sit down in a chair and relax.
- The forces applied to the foot will be no larger than those encountered during normal running or jumping.
- Subjects may withdraw from the experiment at any time and will suffer no personal consequences as result.

I, \_\_\_\_\_, voluntarily consent to participate in the research project entitled “Reflex changes during anticipatory postural adjustments preceding voluntary arm movements in standing humans ” conducted by Mr. Siddharth Vedula (514-398-4400 ext. 00425) and Dr. Robert E. Kearney (514-398-6736) of the Department of Biomedical Engineering, McGill University.

I understand that the information obtained from this research may be published. However, my right to privacy will be retained and my involvement with the project will be kept confidential.

The procedures as set out in the accompanying information sheet have been explained to me and I understand what is expected of me and the benefits and risks involved.

My participation in the project is voluntary.

I acknowledge that I have the right to question any part of the procedure and that I can withdraw at any time without this being held against me.

Signed by Subject: \_\_\_\_\_ Date: \_\_\_\_\_

Signed by Investigator: \_\_\_\_\_ Date: \_\_\_\_\_

Name of Witness: \_\_\_\_\_

Signed by Witness: \_\_\_\_\_ Date: \_\_\_\_\_