

## Enhance Recovery of Arm and Hand Function Post-Stroke

**Location:** Montreal and surrounding area.

**Number of participants:** 12

**Language:** English and French

**Description:** GoHand™ is a wearable device designed to help stroke patients regain arm and hand function by providing positive auditory feedback and performance tracking. The device uses principles of neurorehabilitation to promote repetitive, meaningful movement that supports long-lasting improvements in arm function through neuroplasticity. This project aims to fill two gaps in this field: effective interventions and methods of measuring outcomes that reflect real-world use of the arm. The device can be used on both dominant and non-dominant hands and is intended to help patients optimize arm and hand function, maintain independence, and improve their quality of life. The number of stroke survivors in Canada is expected to surpass half a million in under ten years, and poor arm and hand function is one of the most persistent motor sequelae of stroke. The GoHand™ sensor could potentially help fill this gap in care for stroke survivors.

### Eligibility:

- This sample will be drawn from people attending follow-up stroke clinics at the Montreal General Hospital who speak French and/or English.
- As this is a feasibility trial to test the GoHand™ device, 12 people will be recruited to estimate the efficacy potential of the GoHand™ device.
- Excluded participants are anyone that the stroke clinician seeing the patient at that clinical visit deems to have cognitive impairment that would prevent participation in the trial.
- To be included the participant had to be over 18 years of age and had a unilateral stroke in last 1 year.
- No other requirements are necessary.

### Participant requirements:

- Once eligible, the participants will be required to visit the Movement Laboratory at the Montreal General Hospital twice for an assessment of their hand function. The assessments will be 1-month apart to track progression. The duration of each session is about 1 hour to 1 hour and 30 minutes.
- Participants will be compensated \$30 per visit to cover travel/parking expenses and time to complete questionnaires.
- Participants will receive a weekly home or video visit to help with the GRASP program and use of the sensor.

**Institution:** McGill University

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