

Exercise Intensity Matters: An Opportunity to Promote Neurorecovery and Cardiovascular Health in Stroke

Location: Hamilton, Ontario and Laval, Quebec

Description: This project compares two 12-week exercise programs, High-Intensity Interval Training (HIIT) and Moderate-Intensity Continuous Training (MICT), studying their effects on brain and heart health, mobility, and psychosocial outcomes. We'll use non-invasive techniques to examine neuroplasticity and various assessments to measure heart health and fitness levels. We'll also explore participants' enjoyment, motivation, walking speed and endurance. The exercise program uses a recumbent stepper (NuStep) that is adaptive and works both arms and legs. We'll measure outcomes at the beginning, after 12 weeks, and at an 8-week follow-up.

Language: English and French

Eligibility: We are recruiting individuals between 6 months and 5 years post-stroke and between 40 and 80 years old. No restrictions on language or gender.

Participant requirements: The length of the study is 20 weeks long. This includes a 12-week exercise program which is followed by an 8-week follow-up period. During the 12-week program, participants exercise 3 days per week between Monday to Friday. Each session is between 30-60 minutes. Each participant will undergo assessment at the start of the program, at 12-weeks, and 20 weeks. Each assessment takes 2 hours to complete.

Institution: **McMaster University**

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