



1. Promoting Brain Plasticity During Sub-Acute Stroke: The Interactive Role of Exercise and Genotype

Principal Investigator: **Dr. Marc Roig, McGill University**

Designated CPSR Co-PI: Dr. Janice Eng (*University of British Columbia*)

Co-investigators: Dr. Ada Tang (*McMaster University*), Dr. Marilyn MacKay-Lyons (*Dalhousie University*), Dr. Damian Bailey (*University of South Wales*), Dr. Nick Giacomantonio (*Dalhousie University*), Mikkel Malling Beck (*McGill University*)

Collaborator: Dr. Alexander Thiel (*McGill University*)

Brief Project Description: This study aims to investigate the impact of cardiovascular exercise on brain excitability after stroke using non-invasive brain stimulation and whether genetic profile is influential.

2. SUPER: PerSonalized Upper Extremity Rehabilitation for persons with moderate and severe impairments due to stroke

Principal Investigator: **Dr. Philippe Archambault, McGill University**

CPSR Designated Co-PI: Dr. Heidi Sveistrup (*University of Ottawa*)

Co-investigators: Dr. Mindy Levin (*McGill University*), Dr. Marie-Helene Milot (*University of Sherbrooke*)

Collaborators: Dr. Dahlia Kairy (*University of Montreal & CRIR*), Michael Trivino (*Jewish Rehabilitation Hospital & CRIR*)

Brief Project Description: This study aims to assess feasibility of using brain biomarkers in a personalized combination rehabilitation approach involving robotics, virtual reality and neuromuscular electrical stimulation to improve motor recovery in individuals with moderate/severe stroke.
