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.