



We are seeking individuals with Parkinson's Disease for a study investigating the impact of multimodal non-invasive neuromodulation and intensive physical therapy on balance. This study will compare the effectiveness of a 2-week intervention of physical therapy alone to physical therapy + neurostimulation on balance in individuals with Parkinson's Disease.

Neurostimulation includes two different non-invasive devices:

- The first is the Portable Neuromodulation Stimulator (PoNS™). The use of the PoNS™ device in this study is investigational. Brain stimulation via the PoNS™ device stimulates two cranial nerves connected to the tongue, and is thought to aid in neuroplasticity.
- Galvanic Vestibular Stimulation (GVS) delivers a mild electrical current to the vestibular nerves located directly underneath the skin behind your ears. Similar to PoNS™ stimulation, GVS is thought to aid in neuroplasticity.

The use of the PoNS™ and GVS devices in this study is investigational.

Participants will have continued access to their unique PoNS™ device after study completion.

ELIGIBILITY

You may qualify as a study participant if:

• You have a diagnosis of idiopathic Parkinson's Disease

PARTICIPATION

- Approximately 4-weeks including:
 - Screening and baseline visit
 - Intervention:
 - Two 90min sessions per day
 - 5 days per week for 2 weeks

LOCATION

The study requires you to participate in-person at the **Surrey Neuroplasticity Clinic** (located at City Centre 1, 13737 96th Avenue, Unit 204, Surrey, BC)

INVESTIGATORS

Dr. Ryan D'Arcy, PhD, PlEng Dr. Martin McKeown, MD