SPRING-ing into the next generation of neuromodulation

**What are we doing?**

The SPRING (Stanford Parkinson’s Research In Neuromodulation for Gait) study will investigate the safety and feasibility of the first study of closed loop deep brain stimulation with the next generation neurostimulator, the Summit™ RC+S (Medtronic Inc.) for impaired gait and freezing of gait in Parkinson's disease. We hope to advance patient-specific responsive neuromodulation and improve quality of life for people living with Parkinson's disease.

**Where are we going?**

Other future directions are to understand the intersection of cognitive impairment and gait disorders and freezing of gait, using novel augmented reality interventions and dual tasking while recording synchronized neural and behavioral activity, with the goal to develop an innovative program in neuromodulation for cognitive impairment in people with Parkinson's disease.