

#### FOR IMMEDIATE RELEASE

# The University of Rochester and Great Lakes NeuroTechnologies launch new clinical study to develop ambulatory dyskinesia assessment system

Cleveland, OH – August 15, 2011 – **Great Lakes NeuroTechnologies' KinetiSense** motion sensor technology will be used in a clinical study to capture and quantify dyskinesias (involuntary, irregular movements) caused by Parkinson's disease (PD) medication. PD motor symptoms including tremor and bradykinesia are typically treated with levodopa. However, chronic treatment can induce involuntary dyskinesias and have a significant effect on quality of life. Approximately 30% of patients exhibit levodopa-induced dyskinesias (LID) within 5 years of treatment and 59-100% by 10 years. Medication dose amount and frequency are adjusted in the doctor's office based on the patient's retrospective experience at home. A pilot study will be conducted through an NIH-funded program in collaboration with the **University of Rochester** to develop a patient-worn system designed for home use to automatically detect and rate dyskinesia events during activities of daily living.

The **University of Rochester** will use **Great Lakes NeuroTechnologies'** (<a href="www.GLNeurotech.com">www.GLNeurotech.com</a>) wireless motion capture device, **KinetiSense**, to capture body movement typical of dyskinesia over the course of a levodopa dose cycle. **KinetiSense** integrates inertial motion sensing for a wide variety of motion analysis research applications. Three orthogonal accelerometers and gyroscopes provide three dimensional motion data. The wireless accelerometers and gyroscopes in the **KinetiSense** unit can be placed on any area of the body to measure the linear acceleration and angular velocity of body-mounted sensor movements. The study principle investigator at **Great Lakes NeuroTechnologies**, Thomas Mera, MS, believes that

"Current tools available to clinicians lack the ability to accurately quantify dyskinesia severity and that leveraging **KinetiSense** technology will provide clinicians with the ability to capture dyskinesias at home and throughout the day while they are occurring. Furthermore, this innovative research will lead to advances in PD treatment and improving patient outcomes."

### **About Great Lakes NeuroTechnologies**

Great Lakes NeuroTechnologies is committed to pioneering innovative biomedical technologies to serve research, education, and medical communities, improving access to medical technology for diverse populations, and positively impacting quality of life for people around the world.

## About Great Lakes NeuroTechnologies KinetiSense™

KinetiSense is a compact wireless device that integrates inertial motion sensing and electromyography for a wide variety of motion analysis research applications. Three orthogonal accelerometers and gyroscopes provide three dimensional motion data while two channels of EMG record muscle activity.

### **Media Contact**

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