

## PRESS RELEASE

## Great Lakes NeuroTechnologies Secures \$1.7 Million to Develop Continuous Dyskinesia Monitoring Technology for Parkinson's Disease

**05 Mar 2013: Valley View, OH – Great Lakes NeuroTechnologies (GLNT)** announced today that they are launching commercialization and clinical studies to validate a system for objective, continuous monitoring of dyskinesias associated with Parkinson's disease. The study is being funded by a \$1,743,051 Phase II Small Business Innovative Research grant from the National Institutes of Health (NIH), National Institute on Aging. The technology will be developed and commercialized at Great Lakes NeuroTechnologies [ <http://www.glneurotech.com> ] with clinical validation studies completed at The University of Rochester, Johns Hopkins University, and Albany Medical College.

Parkinson's disease (PD) is a neurodegenerative disorder affecting over six million people worldwide. Individuals with PD can be affected by tremor, slowed movements, rigidity, and gait abnormalities. After chronic use, common therapies to treat motor symptoms often cause a side effect known as dyskinesias, which are involuntary and irregular rapid movements. Severe dyskinesias can cause patient exhaustion, fatigue, social isolation, and depression, as well as increased healthcare costs. A major target of new therapy development aims to minimize dyskinesia side effects for Parkinson's. "As new therapies emerge to better control or delay the onset of dyskinesias, it's important that innovative monitoring and assessment technologies keep pace to gage treatment efficacy", said Thomas Mera, Product Development Manager at GLNT and Principal Investigator on this program. "Providing a quantitative, patient-worn system to continuously monitor and capture motor fluctuations should provide great value for optimizing treatment strategies and evaluating patient outcome in clinical trials." Traditional strategies for assessing dyskinesia include subjective clinical rating scales and patient diaries. "While clinical rating scales have proved useful, clinicians cannot be continuously present, or at patient homes", explained Mr. Mera. "Additionally, patient journals have been associated with compliance and reliability concerns for clinical studies. Objective motion sensors provide an opportunity to standardize patient monitoring where their symptoms matter most to them."

Specifically, the NIH-funded program will develop a patient-worn system of motion sensors that can continuously assess the presence and severity of dyskinesias as a patient goes about their daily activities. The wireless sensing system will be developed for integration into GLNT's existing Kinesia technology platform [ <http://www.glneurotech.com/kinesia/> ] which already provides discrete assessments of Parkinson's symptoms. The technology integrates wireless patient sensing with a home-based tablet that transfers patient reports over a broadband link to a cloud server. The target markets for the technology include clinicians optimizing existing treatments, or pharmaceutical companies during clinical trials to evaluate new treatments. The two year program will focus on two specific development stages. Year 1 will focus on technology development including sensor development, patient ergonomics, and technology integration. Year 2 will then utilize that technology in a multi-site clinical trial to validate and compare with traditional dyskinesia measurement tools, and also demonstrate improved patient care when integrating continuous dyskinesia monitoring at patient homes.



**FOR IMMEDIATE RELEASE**

Mr. Mera thanks the National Institute on Aging for funding the Phase II NIH SBIR project (R44AG044293).

### **About Great Lakes NeuroTechnologies**

[Great Lakes NeuroTechnologies](http://www.glneurotech.com) [ <http://www.glneurotech.com> ] 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.

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