

GREAT LAKES NEUROTECHNOLOGIES AWARDED PATENT FOR SENSOR BASED CONTINUOUS PARKINSONS ASSESSMENT DURING DAILY ACTIVITIES

03 DEC 2013: Valley View, OH – Great Lakes NeuroTechnologies announced today they have received allowance of claims from the U.S. Patent Office for an application covering their system and method of continuous monitoring of motor symptoms associated with movement disorders such as Parkinson's disease. The claims cover a system and method including a continuously worn sensor to detect movement, trained algorithms for distinguishing voluntary movement from involuntary movement, and automated scoring of the severity of symptoms correlated in part to traditional clinician rating scales. Continuous monitoring of Parkinson's can capture daily fluctuation in disease states in ambulatory settings and patient homes. However, continuous assessment using movement sensors provides significant challenges as some activities may interfere with or mimic the actual movement disorder motor symptoms. Intelligent algorithms can differentiate normal movements from Parkinson's symptoms, as well as rate the severity of symptoms that are present.

Millions of people around the world are impacted by a growing incidence of movement disorders such as Parkinson's disease. Great Lakes NeuroTechnologies is committed to the commercialization of new medical technologies to visualize quantitative symptom response and improve patient access to care through telemedicine applications such as [Kinesia](http://www.glneurotech.com/Kinesia/) [<http://www.glneurotech.com/Kinesia/>]. "Much of our previous work has focused on remote assessment of Parkinson's symptoms during specific tasks completed at regular intervals during the day. Patients interact with a touchscreen tablet while wearing a motion sensor and following video instructions. While this provides high sensitivity measurement during known tasks, more continuous assessment also has significant advantages", says Chris Pulliam, PhD, Senior Biomedical Researcher. "Allowing a patient to comfortably wear a sensor and just go about their daily life can minimize burden and provide insight on symptoms during normal daily activities. The key however, is how to distinguish between whether someone is typing or has tremor, or if someone is folding the laundry or has dyskinesias. Over the last year, we have made great strides developing advanced algorithms for assessing motor symptoms during these everyday activities." Dr. Pulliam also thanked the National Institute on Aging for their continued support of these technologies, and more specifically for Phase II SBIR (5R44AG034708-03) which is currently supporting clinical validation of the technology at Rush University Medical Center and Baylor University.

This is the second allowance of important patent claims received by Great Lakes NeuroTechnologies in 2013. Their growing intellectual property portfolio is being fueled by a team of principal investigators with significant funding from the National Institute of Health. "Continuing to broaden our intellectual property and strengthening our pipeline of submitted applications will help protect both our domestic and international target markets", says Brian Kolkowski, PhD, Executive Vice-President and General Counsel. "The system, method, and intelligent algorithms behind our continuous monitoring technology represent a key feature for our company's strategic growth".



PRESS RELEASE

About Great Lakes NeuroTechnologies

Great Lakes NeuroTechnologies [<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.

Media Contact

Amelia Earhart, 216-361-5410 - aaearhart@GLNeuroTech.com

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