Postdoctoral Researcher: Neuromodulation for Post-Stroke Rehabilitation

Panaxium Inc. (https://panaxium.com/) is recruiting for a postdoctoral researcher in neuromodulation for post-stroke rehabilitation to support a Panaxium-sponsored research project in the Cook laboratory at the Queen’s University Centre for Neuroscience Studies (https://surgery.queensu.ca/administration/attending-staff/douglas-james-cook). This multidisciplinary academia-industry collaboration is investigating the use of cutting-edge cortical neuromodulation approaches, taking advantage of novel organic bioelectronic neural interface devices and the latest neuroimaging techniques, to treat post-stroke functional deficits utilizing non-human primate models of stroke. The primary focus of the current project will be on motor function but the long-term scope will include higher cognitive function recovery as well. MRI markers of physiology, network connectivity, and structural integrity will be used to provide a complete assessment of brain health and focal deficits, and neurobehavioral outcome measures will be collected using the Kinarm brain injury research robot (https://kinarm.com/). This research will explore and identify the underlying mechanisms of brain plasticity and functional recovery with the goal of developing innovative clinical products that dramatically improve the quality of life for stroke patients by restoring them to their full capacities.

The ideal candidate should hold a PhD in neuroscience, engineering, medicine, or a related discipline and have a strong background conducting neurological research with non-human primates, including electrophysiological recordings and motor rehabilitation protocols. The candidate must be highly motivated with a keen interest in human systems neuroscience, neuromodulation, and neuroimaging/signal analysis. Experience in invasive brain recording and stimulation methods, and programming and signal analysis is preferred.

The position is available immediately and will be based at Queen’s University in Kingston, Ontario, Canada but will involve significant interaction with Panaxium’s personnel in Toronto, Canada and Gardanne, France.

To apply, please send curriculum vitae and the names of three references to careers@panaxium.com. Applications will be considered as they are received. Only individuals deemed qualified will be contacted for an interview. Panaxium invites applications from all qualified individuals and is committed to employment equity and diversity.

About Panaxium

Founded in 2016, Panaxium is a rapidly growing bioelectronic medicine company aiming to fundamentally change the way neurological disease is treated by taking advantage of proprietary organic bioelectronic materials and devices to create neuromodulation solutions with improved functionality and biocompatibility. The company is comprised of a multidisciplinary team of scientists which includes world leaders in organic bioelectronics and experts in neuroscience, with our employees split between offices and R&D facilities in
Gardanne, France and Toronto, Canada and advisors and collaborators at leading academic and clinical institutions around the world.

**About Queen’s University and the Centre for Neuroscience Studies**

Queen’s University is one of the top universities in Canada, with a long history of discovery and innovation that has shaped our knowledge and helped to address some of the world’s deepest mysteries and most pressing questions, including issues of environmental protection, health care, and the development of advanced technologies. For more than 175 years, Queen’s has brought together and built synergies among leading researchers, scholars and innovators making a real and measured impact. Queen’s University has a highly integrated health research program which operates through the jointly coordinated offices of the Vice-Dean, Research in the Faculty of Health Sciences and Vice President, Health Sciences Research at the Kingston General Hospital. Together our institutions are committed to fostering an environment of transdisciplinary research in a number of biomedical areas and studies of population health and health services research.

At the forefront of discovery and innovation is the Centre for Neuroscience Studies (CNS) at Queen's University. A hub of multidisciplinary research and teaching aimed at improving our understanding of the brain, how it works and how new therapies and diagnoses can play an important role in the prevention and treatment of diseases like Parkinson’s, Alzheimer’s, Stroke, Obesity, Fetal Alcohol Spectrum Disorder, Schizophrenia, Behavioral Disorders, Depression to name a few.