Sylvester Joins Glioma Connectome Project with Consortium of Leading Neurosurgery Centers

Neurosurgeons at Sylvester Comprehensive Cancer Center at the University of Miami Miller School of Medicine have joined the newly launched Glioma Connectome Project (GCP), a consortium of neurosurgery centers that will focus on advancing clinical research and treatment for patients with glioblastoma, an aggressive form of brain cancer.

Brain scans.

Their mission is to generate groundbreaking brain connectomics research to drive clinical and practice changes at
neurosurgical centers across the U.S. The initiative was announced on November 15 by StacheStrong, a non-profit devoted to raising funds and awareness for brain cancer research.

“Being a part of the GCP is a major step in understanding how to improve better long-term functionality in our brain cancer patients because we can now, for the first time, see complex brain connections that before were hidden,” said neurosurgeon Michael Ivan, M.D., M.B.S., who will lead the Glioma Connectome Project at Sylvester.

“As neurosurgeons we balance the importance of removing invasive brain tumors while maintaining normal brain function in each patient,” Dr. Ivan said. “This is often referred to as the onco-functional balance. As we make improvements in controlling cancer, we must equally look for ways to improve functional outcomes.”

**Global Interdisciplinary Effort**

The nascent field of connectomics is a global interdisciplinary effort to study brain connectivity, which has helped identify and understand individual brain networks responsible for functions such as language, emotion, and cognition. This new consortium will translate breakthrough neuroscience into real-world applications and potential new therapies for patients with glioblastoma and other types of brain cancer.

“This is a game-changing technology with the potential to improve the quality of life for brain tumor patients,” said Ricardo J. Komotar, M.D., professor of neurological surgery, program director of Sylvester’s Brain Tumor Initiative and a
collaborator in the Glioma Connectome Project.

In addition to Sylvester, the GCP consortium includes the University of Pennsylvania, Mount Sinai, the Henry Ford Health System, Northwestern University and the University of Nebraska Medical Center. The project will launch a series of prospective observational studies that harness large-scale multi-institution clinical data produced in the routine care of glioma patients.

**Promising New Study**

“We are excited to launch this consortium of leading institutions in the United States, to provide hope for patients diagnosed with brain cancer, and serve as a catalyst for change,” said Colin Gerner, President and Co-Founder of StacheStrong. “This promising new study brings together top neurosurgeons and neuroradiologists to better learn about brain connectomics to perform more successful glioma surgeries, as well as how to better treat and rehabilitate after surgery.”

The study will collect patient data from MRI scans to produce personalized brain maps. Harnessing machine-learning techniques and cutting-edge software, the project will be structured to maximize the quality and volume of data, while minimizing the time and resources needed from physicians and patients.

“The GCP is a critical effort to translate the breakthrough findings of connectomics into neurological care. It embodies the common cause of these leading institutions to properly equip physicians fighting this devastating disease,” said Dr.
Michael Sughrue, a global thought leader in connectomics and chief medical officer of Omniscient Neurotechnology.

About the Glioma Connectome Project

The Glioma Connectome Project is a consortium of leading brain tumor centers dedicated to studying and exploring the wiring of the human brain, or “connectome,” to further our understanding of the origins and progression of glioblastomas, as well as developing and evaluating surgical, radiation, medical and immunological therapies. The consortium’s objectives include improving current treatment paradigms, developing new biomarkers and endpoints in glioma therapy, measuring the benefits and risks of glioma therapy including surgery, radiation, chemotherapy, and electrical field therapy.

Content Type article