## Program Agenda

## **New Horizons in Functional Neurosurgery**

Friday, September 17, 2021 • 7 am to 3:15 pm

7 am Registration and Continental Breakfast
 8 am Welcome Address

 Chuck Mikell, MD, Course Director; Clinical Assistant Professor of Neurosurgery, Renaissance School of Medicine at Stony Brook University; Co-Director, Stony Brook Parkinson's and Movement Disorders Center

8:15 am Deterministic Cortical Dynamics: The Aftermath of Extended Injuries to Thalamocortical Circuitry Sima Mofakham, PhD, Course Co-Director; Assistant Professor of Neurosurgery, Renaissance School of Medicine at Stony Brook University

8:45 am Thalamic Neuromodulation to Restore Conscious Decision-Making During Seizures
Jason Gerrard, MD, PhD, Assistant Professor of Neurosurgery and of Neuroscience, Yale University;
Chief, Functional Neurosurgery and Chief, Trauma Neurosurgery, Yale New Haven Hospital

9:15 am Focused Ultrasound for Children: Adult Lessons Learned
Travis Tierney, MD, PhD, FAANS, Staff Neurosurgeon, Catholic Health Initiatives (CHI) St. Mary's
(Nebraska City, NE)

9:45 am Questions and Open Discussion

10 am Break

10:30 am Connectomic Deep Brain Stimulation: Research, Translational, and Clinical Work
Chengyuan Wu, MD, MSBmE, Associate Professor, Neurological Surgery & Radiology, Thomas Jefferson
University; Co-Director, Integrated Magnetic Resonance Imaging Center and Fellowship Director,

Stereotactic and Functional Neurosurgery, Division of Epilepsy and Neuromodulation Neurosurgery, Sidney Kimmel Medical College at Thomas Jefferson University

11 am Development of a Phase-Dependent Stimulation Technique

 $\textbf{William "Stan" Anderson, MA, MD, PhD,} \ Associate \ Professor of \ Neurosurgery, \ Johns \ Hopkins \ School$ 

of Medicine, Johns Hopkins University

11:30 am Repairing Cortical Circuitry Using Transplanted Human Brain Organoids

**Isaac Chen, MD,** Assistant Professor of Neurosurgery, Presbyterian Medical Center of Philadelphia and Veteran's Administration Medical Center, Perelman School of Medicine at University of Pennsylvania

12 pm Questions and Open Discussion

12:15 pm Lunch

1 pm Update on Electrophysiology of Brain Injury

**Chuck Mikell, MD,** Course Director; Clinical Assistant Professor of Neurosurgery, Renaissance School of Medicine at Stony Brook University; Co-Director, Stony Brook Parkinson's and Movement Disorders Center

1:30 pm A New Model of Hydrocephalus

Michael Egnor, MD, Professor of Neurological Surgery and Pediatrics, Director of Pediatric Neurosurgery,

Program Director, Neurological Surgery Residency and Director of Research of Education,

Renaissance School of Medicine at Stony Brook University

2 pm Updates on Neuromodulation for Depression

Lucian Manu, MD, Clinical Assistant Professor of Psychiatry and Behavioral Health and Director of

Neuromodulation, Renaissance School of Medicine at Stony Brook University

2:30 pm Questions and Open Discussion

3 pm Closing Address

Chuck Mikell, MD

