

Program Agenda

Windkessel and Intracranial Thermodynamics Symposium

Friday, October 23rd, 2026 • 7am to 3:15pm

7:00 am	Registration and Continental Breakfast
8:00 am	Introduction -Raphael Davis, MD Professor & Chairman of Neurosurgery; Co-Director, Neurosciences Institute Renaissance School of Medicine at Stony Brook University
8:15 am	The Windkessel Theory of Hydrocephalus Michael Egnor, MD , Course Director; Professor of Neurosurgery and Pediatrics, Director of Pediatric Neurosurgery, Neurological Surgery Residency Program Director. Renaissance School of Medicine at Stony Brook University
9:00 am	Windkessel, Starling and Cadence: Studies on Pulsatility and Cerebral Blood Flow Mark G. Luciano, MD, PhD Professor of Neurosurgery, Director of Hydrocephalus and Cerebral Fluid Center, The Berry-Brem Professor in Neurosurgery. Johns Hopkins University School of Medicine
9:30 am	The Cerebral Windkessel from an Engineering Perspective Petar Djuric, PhD , Distinguished Professor, Department of Electrical and Computer Engineering Stony Brook University
10:00 am	Questions and Open discussion
10:15 am	Break
10:30 am	Origin and Interest of Pulsatilities of CSF Olivier Baledent, PhD Maître de Conférences, Medical Image Processing Department, Université de Picardie Jules Verne (UPJV) in Amiens, France
11:00 am	MRI-based Quantification of Spinal CSF Pulse Wave Velocity: A Potential Indicator of Spinal Compliance Bryn Martin, PhD, P.E. - Adjunct Associate Professor, Dept. of Chemical & Biological Engineering University of Idaho, ID
11:30 am	Tackling Hydrocephalus Patient Priorities Through Engineering Monica Chau, PhD , Chief Scientific Officer, Hydrocephalus Association
12:00 pm	Questions and Open discussion
12:15 pm	Lunch
1:00 pm	Measurement and Correction of Windkessel Imbalance in Hydrocephalus Michael Egnor, MD , Course Director; Professor of Neurosurgery and Pediatrics, Director of Pediatric Neurosurgery, Neurological Surgery Residency Program Director. Renaissance School of Medicine at Stony Brook University
2:00 pm	Panel Discussion with the Experts “What Causes Hydrocephalus: A Problem of Pulsatility or CSF Absorption?”
3:15 pm	Closing Address Michael Egnor, MD