



Maximal Safe Brain Tumor Resection: Intraoperative Visualization and the Connectome Conference

Virtual Meeting on December 6 - 7, 2021

Program Co-Chairs:
Steven Brem, MD
Constantinos G. Hadjipanayis, MD, PhD

Day One – Monday, December 6, 2021, 1:00 - 6:05pm EST

1:00pm – 1:05pm EST	Welcome and Introduction	Steven Brem, Constantinos G. Hadjipanayis, Scientific Co-Chairs
1:05pm – 1:25pm	Intraoperative Tumor Visualization: Seeing is Believing	Constantinos G. Hadjipanayis, Icahn School of Medicine at Mount Sinai
1:25pm – 1:45pm	5-ALA for FGR and Treatment of Brain Tumors: Current Approaches	Walter Stummer, University of Muenster, Germany
1:45pm – 2:05pm	5-ALA Fluorescence-Guided Surgery of CNS Tumors and Improved Intraoperative Detection	Georg Widhalm, Medical University of Vienna, Austria
2:05pm – 2:25pm	Photodynamic Therapy in the Management of Glioblastomas	Nicolas Reyns, University Hospital, Lille, France
2:25pm – 2:35pm	Q&A	<i>Four previous presenters</i>
2:35pm – 2:40pm	BREAK	
2:40pm – 3:00pm	Fluorescein-Guided Resection of High-Grade Gliomas	Francesco Acerbi, University of Milano, Italy
3:00pm – 3:20pm	Optimizing Maximal Safe Brain Tumor Resection with Tozuleristide	Amy Lee, University of Washington
3:20pm – 3:40pm	Near-infrared Fluorescent Visualization of Brain Tumors	John Lee, University of Pennsylvania
3:40pm – 3:50pm	Q&A	<i>Three previous presenters</i>
3:50pm – 3:55pm	BREAK	
3:55pm – 4:15pm	Near-infrared EGFR Targeted Fluorophores and Fluorescence-Guided Surgery	Gordon Li, Stanford University
4:15pm – 4:35pm	5-ALA Sonodynamic Therapy in Recurrent Glioblastoma Patients	Nader Sanai, Barrow Neurological Institute
4:35pm – 4:55pm	Intraoperative Brain Tumor Detection with Stimulated Raman Histology	Daniel Orringer, New York University
4:55pm – 5:15pm	<i>In Situ</i> Brain Tumor Detection Using the Sentry System	Kevin Petrecca, Montreal Neurological Institute-Hospital
5:15pm – 5:35pm	Development of Intraoperative Confocal Laser Endomicroscopy	Mark Preul, Barrow Neurological Institute
5:35pm – 5:45pm	Q&A	<i>Five previous presenters</i>
5:45pm – 5:50pm	Oral Abstract FLGS-04: Fluorescence lifetime imaging (FLIm) is a dye-free, high sensitivity approach for fluorescence guided surgery in high-grade and low-grade gliomas	Orin Bloch, University of California Davis, Sacramento

5:50pm – 5:55pm	Oral Abstract FLGS-05: Maximal safe glioma resection using high resolution exoscope with 5-ALA-induced fluorescence	Kuniaki Saito, Kyorin University Faculty of Medicine, Tokyo
5:55pm – 6:00pm	Oral Abstract ITVT-01: 5-ALA PDT and Targeting MEK/ERK Signaling Elicits Synergistic Antitumor Effects in Diffuse Midline Glioma	Gabrielle Price, Icahn School of Medicine
6:00pm – 6:05pm	Oral Abstract ITVT-05: Intraoperative Ultrasound Guidance Improves Resection in Gliomas – Results from a Single Centre Propensity Matched Comparative Cohort Analysis of 2D vs Navigated 3D Ultrasound in 500 Gliomas	Aliasgar Moiyadi, Tata Memorial Centre and ACTREC, Mumbai
6:05pm	CLOSING REMARKS	

Day Two – Tuesday, December 7, 2021, 1:00 - 6:00pm EST

1:00pm – 1:05pm EST	Welcome and Introduction	Steven Brem, Constantinos G. Hadjipanayis, Scientific Co-Chairs
1:05pm – 1:25pm	Deciphering Connectomics: A Rosetta Stone for Neurosurgery and Neuro-Oncology	Steven Brem, University of Pennsylvania
1:25pm – 1:50pm	The Human Connectome Project: Lessons Learned	Matthew Glasser, Washington University, St. Louis
1:50pm – 2:10pm	The Human Structural Connectome in Health and Disease: Deciphering the Key Neural Networks Vital to Neuro-Oncology	Ragini Verma, University of Pennsylvania
2:10pm – 2:35pm	Connectomics and Glioma Surgery- Specific Tracts and Specific Approaches - Functional Recovery	Michael Sughrue, Prince of Wales Private Hospital, Australia
2:35pm – 2:45pm	Q&A	<i>Four previous presenters</i>
2:45pm – 2:50pm	BREAK	
2:50pm – 3:15pm	Brain Connectomics Applied to Neuro-Oncology: From Traditional Surgical Strategy to a Meta-Network Approach	Hugues Duffau, Montpellier University Medical Center, France
3:15pm – 3:40pm	Integration of functional MRI, Electrical Stimulation, and New Modalities for Brain Mapping and Decision Making in Glioma Surgery	Alexandra Golby, Brigham and Women’s Hospital
3:40pm – 4:05pm	Subcortical White Matter Pathway Mapping and How it Influences Extent of Resection	Mitchel Berger, University of California, San Francisco
4:05pm – 4:15pm	Q&A	<i>Three previous presenters</i>
4:15pm – 4:20pm	BREAK	
4:20pm – 4:40pm	Connectomics and Precision Medicine: The Future of Tractography and Liquid Biopsy	Steven Kalkanis, Ian Y. Lee, Houtan Noushmehr, Henry Ford Health System
4:40pm – 5:00pm	Tractography for Risk Assessment and Prognostication: Identifying Preoperative Language Tracts and Predicting Postoperative Functional Recovery	Shawn Hervey-Jumper, University of California, San Francisco
5:00pm – 5:20pm	Synaptic and Electrical Integration of Glioma into Neural Circuits	Michelle Monje, Stanford University
5:20pm – 5:30pm	Q&A	<i>Three previous presenters</i>

5:30pm – 5:35pm	Oral Abstract CNTM-05: Left hemisphere gliomas induce a plastic bi-hemispheric language network further characterized by lobe specific glioma data	Matthew Ramsey, Northwestern University Feinberg School of Medicine
5:35pm – 5:40pm	Oral Abstract CNTM-04: Alterations in structural connectomic properties associated with neurocognitive changes following glioma resection	Kyle Noll, University of Texas, MD Anderson Cancer Center
5:40pm – 5:45pm	Oral Abstract CNTM-02: Regulation of glioma-network integration by tumor mediated secretion of TSP-1	Mikias Negussie, University of California, San Francisco
5:45pm – 5:50pm	Oral Abstract CNTM-03: Functional connectivity networks in patients with brain tumors and vascular lesions in the occipital cortex	Katharina Rosengarth, University Hospital of Regensburg
5:50pm – 5:55pm	Oral Abstract IOTG-01: Computational Neurosurgery in Brain Tumors: A paradigm shift on the use of Artificial Intelligence and Connectomics in pre- and intra-operative imaging.	Antonio Di Ieva, Computational NeuroSurgery (CNS) Lab, Sydney
5:55pm – 6:00pm	Oral Abstract TWMP-02: Supplementary motor area syndrome in glioma surgery - towards a classification system based on clinical and imaging data	Mehmet Salih Tuncer, Charité-Universitätsmedizin, Berlin
6:00pm	CLOSING REMARKS AND ADJOURN	