



Conference Cochairs:

Stephen J. Bagley, University of Pennsylvania, Philadelphia, Pennsylvania

Michelle Monje, Stanford University, Stanford, California

Mario L. Suvà, Harvard Medical School, Broad Institute of MIT and Harvard, Boston, Massachusetts

MONDAY, MARCH 23, 2026

Registration

3:00 p.m. - 8:00 p.m. | Grand Ballroom Foyer

Welcome and Opening Keynotes

5:00-6:15 p.m. | Grand Ballroom Salon HIJ

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| 5:00 – 5:05 | Welcome from Co-Chairs
Michelle Monje, Stanford University, Stanford, California |
| 5:05 – 5:10 | Introduction of Keynote Speaker 1
Michelle Monje |
| 5:10 – 5:40 | How to target malignant neural networks in brain cancer
Frank Winkler
Heidelberg University, Heidelberg, Germany |
| 5:40 – 5:45 | Introduction of Keynote Speaker 2
Mario Suvà
Massachusetts General Hospital, Boston, Massachusetts |
| 5:45 – 6:15 | The role of injury programs in gliomagenesis
Simona Parrinello
University College London (UCL) Cancer Institute, London, United Kingdom |

Panel Discussion: Novel Concepts in Brain Cancer

6:15 - 7:15 p.m. | Grand Ballroom Salon HIJ

Session Chair: Stephen Bagley, University of Pennsylvania, Philadelphia, Pennsylvania

Panelists:

- Mario L. Suvà, Harvard Medical School, Broad Institute of MIT and Harvard, Boston, Massachusetts
- Michelle Monje, Stanford Hospital, Stanford, California
- Simona Parrinello, University College London (UCL) Cancer Institute, London, United Kingdom
- Frank Winkler, Heidelberg University, Heidelberg, Germany



Reception | Poster Session A

7:15 p.m. – 9:15 p.m. | Grand Ballroom Salon G

TUESDAY, MARCH 24, 2026

Breakfast

7:00 a.m. – 8:30 a.m. | Grand Ballroom Salon KL

Plenary Session 1: The Neuroscience of Gliomas

8:30 – 10:00 a.m. | Grand Ballroom Salon HIJ

Session Chair: Michelle Monje, Stanford Hospital, Stanford, California

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| 8:30 – 8:35 | Introduction by Session Chair |
| 8:35 – 8:55 | Neuronal activity drives glioma growth
Michelle Monje |
| 8:55 – 9:15 | Synaptic signaling drives tumor-mediated immune remodeling in glioma
Benjamin Deneen
Baylor College of Medicine, Houston, Texas |
| 9:15 – 9:35 | Breaking the conversation: Therapeutics to interrupt tumor–neuron interactions
Shawn Hervey-Jumper
University of California San Francisco, San Francisco, California |
| 9:35 – 10:00 | Q&A and Discussion |

Break

10:00 a.m. – 10:15 a.m.

Plenary Session 2: Advances in NeuroImmunoOncology

10:15 a.m. – 11:40 a.m. | Grand Ballroom Salon HIJ

Session Chair: Tyler E. Miller, Case Western Reserve University School of Medicine, Cleveland, Ohio

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| 10:15 – 10:20 | Introduction by Session Chair |
| 10:20 – 10:40 | Redefining and targeting immunosuppressive myeloid cells in brain tumors
Tyler E. Miller |
| 10:40 – 11:00 | Pediatric low-grade gliomas repurpose neuron-OPC dependencies to control tumor growth |



David Gutmann
Washington University School of Medicine in St. Louis, Michigan

11:00 – 11:20 **Targeting tumor-associated peptide - major histocompatibility complexes in glioblastoma**

Lukas Bunse
DKFZ German Cancer Research Center, Heidelberg, Germany

11:20 – 11:40 Q&A/Discussion

Lunch on Own

11:40 p.m. – 1:00 p.m.

Plenary Session 3: Cellular Therapies for Nervous System Tumors

1:00 p.m. – 2:30 p.m. | Grand Ballroom Salon HIJ

Session Chair: Stephen J. Bagley, University of Pennsylvania, Philadelphia, Pennsylvania

1:00 – 1:05 Introduction by Session Chair

1:05 – 1:25 **Interplay between infused and endogenous immune system: Implications for next-generation CAR-T engineering for GBM**

Donald O'Rourke,
University of Pennsylvania, Philadelphia, Pennsylvania

1:25 – 1:45 **Targeting the TGF β Axis to improve CAR T cell therapy for glioblastoma**

Christine Brown
City of Hope National Medical Center, Duarte, California

1:45 – 2:05 **Cell state-directed CAR-T cell therapies for glioma**

Christopher Mount
Massachusetts General Hospital, Boston, Massachusetts

2:05 – 2:30 Q&A/Discussion

Break

2:30 p.m. – 2:45 p.m.

Plenary Session 4: Brain Borders and CNS Trafficking

2:45 p.m. – 4:15 p.m. | Grand Ballroom Salon HIJ

Session Chair: Jonathan Kipnis, Washington University School of Medicine in St. Louis, St. Louis, Missouri

2:45 – 2:50 Introduction



- 2:50 – 3:10 **Ungating barriers to the trafficking of tumor biomarkers and therapeutics in infiltrating CNS tumors**
Graeme F. Woodworth
University of Maryland, Baltimore, Maryland
- 3:10 – 3:30 **Brain borders as a key neuroimmune interface**
Jonathan Kipnis
- 3:30 – 3:50 **Lipid nanoparticles for overcoming biological barriers to mRNA delivery to the brain**
Michael John Mitchell
University of Pennsylvania, Philadelphia, Pennsylvania
- 3:50 – 4:15 Q&A/Discussion

Break

4:15 p.m. – 4:30 p.m.

Proffered Talks Session

4:30 p.m. – 6:00 p.m. | Grand Ballroom Salon HIJ

Session Chair: Stephen J. Bagley, University of Pennsylvania, Philadelphia, Pennsylvania

- 4:30-4:40 **Closed-loop sonothermogenetic Control of CAR T cells for precision Immunotherapy of Brain Tumors***
Costas Arvanitis
Georgia Institute of Technology, Atlanta, Georgia
- 4:40-4:50 **Microglia-derived extracellular vesicles in the crosstalk between glioblastoma and the periphery***
Irene Bertolini
The Wistar Institute, Philadelphia, Pennsylvania
- 4:50-5:00 **GPMB CAR-T cells target both glioblastoma and its immunosuppressive tumor microenvironment***
Sheila K. Singh
McMaster University, Hamilton, Ontario, Canada
- 5:00-5:10 **Mechanisms of cognitive impairment in children treated for brain tumors***
Noor Al Dahhan
The Hospital for Sick Children, Toronto, ON, Canada
- 5:10-5:20 **Telomere length heterogeneity shapes structural and amplification landscapes in IDH-mutant astrocytoma***



Maryam Jehangir
Translational Genomics Research Institute (TGen), Phoenix, Arizona

5:20-5:30 **Interactome-seq: A novel technology for mapping neuron-cancer synapses at single-cell resolution***

Boxuan Zhao
University of Illinois Urbana Champaign, Urbana, Illinois

5:30-5:40 **Investigating the effect of dopamine signaling on glioblastoma development***

Yaxu-Sofia Wang
The Hospital for Sick Children, Toronto, Ontario, Canada

5:40-5:50 **Microglia restrain malignant transformation during glioblastoma initiation***

Keon Woo Kim
Korea Advanced Institute of Science and Technology, Daejeon, Korea

5:50-6:00 **Estrogen induces a pro-tumoral phenotype shift in microglia that contributes to E2-unresponsive breast cancer brain metastasis***

Karen L.F. Alvarez-Eraso
University of Colorado AMC, Aurora, Colorado

Reception | Poster Session B

6:00 p.m. – 8:00 p.m. | Grand Ballroom Salon G

WEDNESDAY, MARCH 25, 2026

Breakfast

7:00 a.m. – 8:00 a.m. | Grand Ballroom Salon KL

Plenary Session 5: Next Generation Diagnostics and Biomarkers

8:00 a.m. – 9:30 a.m. | Grand Ballroom Salon HIJ

Session Chair: Craig Horbinski, The Mayo Clinic, Jackson, Florida

8:00 – 8:05 Introduction by Session Chair

8:05 – 8:25 **The present and future of methylation profiling in CNS tumors**
Craig Horbinski

8:25 – 8:45 **Developing multi-analyte liquid biopsy approaches for neuro-oncology**
Chetan Bettegowda
Johns Hopkins University School of Medicine, Baltimore, Maryland



8:45 – 9:05 **Amino acid PET in patients with brain tumors**
Norbert Galldiks
University of Cologne, Cologne, Germany

9:05 – 9:30 Q&A/Discussion

Break

9:30 – 9:45 a.m.

Plenary Session 6: Updates in Brain Metastases and Leptomeningeal Disease

9:45 a.m. – 11:15 p.m. | Grand Ballroom Salon HIJ

Session Chair: Adrienne Boire, Memorial Sloan Kettering Cancer Center, New York City, New York

9:45 – 9:50 Introduction

9:50 – 10:10 **Leptomeningeal metastasis interrupts metabolic homeostasis: Cognitive implications**
Adrienne Boire

10:10 – 10:30 **Neuronal dependencies of small cell lung cancer**
Humsa Venkatesh
Harvard Medical School/Brigham and Women's Hospital, Boston, Massachusetts

10:30 – 10:50 **Rewiring the CNS Niche: GABA Metabolic Plasticity and Blood–CSF Barrier Dynamics in Brain Metastasis**
Josh Neman
Keck School of Medicine, Los Angeles, California

10:50 – 11:25 Q&A/Discussion

Presentation of Appreciation Gifts to the Conference Cochairs

11:25-11:30 a.m. | Grand Ballroom Salon HIJ

Presented by: Adrienne Boire, Memorial Sloan Kettering Cancer Center, New York City, New York

Break

11:30 a.m. – 11:45 a.m.

Plenary Session 7: Solving Tumor Heterogeneity: Spatial and 3D Genomics

11:45 a.m. – 1:15 p.m. | Grand Ballroom Salon HIJ

Session Chair: Mario Suvà, Massachusetts General Hospital, Boston, Massachusetts



- 11:45 – 11:50 Introduction by Session Chair
- 11:50 – 12:10 **Single-cell and spatial genomic analysis of gliomas**
Mario Suvà
- 12:10 – 12:30 **Immortality and evolution, partners in the cancer crime**
Joseph F. Costello
UCSF Helen Diller Family Comprehensive Cancer Center, San Francisco,
California
- 12:30 – 12:50 **Shaping tumor cell plasticity and therapy resistance in glioblastoma**
Antonio Iavarone
University of Miami, Miami, Florida
- 12:50 – 1:15 Q&A/Discussion

Closing Remarks & Departure

1:15 p.m. | Grand Ballroom Salon HIJ

Mario Suvà

Massachusetts General Hospital, Boston, Massachusetts