Conference Cochairs:
Nada Jabado, McGill University, Montréal, QC, Canada
Jeremy N. Rich, University of Pittsburgh, Pittsburgh, PA
Michael D. Taylor, Texas Children’s Hospital and Baylor College of Medicine, Houston, TX

CONFERENCE PROGRAM

THURSDAY, OCTOBER 19

Registration
4:00 pm-8:00 pm | Minneapolis Grand Ballrooms Foyer

Welcome and Introduction
6:30 pm-6:40 pm | Minneapolis Grand Ballroom ABC

Jeremy N. Rich, University of Pittsburgh, Pittsburgh, PA
Michael D. Taylor, Texas Children’s Hospital, Baylor College of Medicine, Houston, TX

Opening Keynote Address
6:40 pm-7:30 pm | Minneapolis Grand Ballroom ABC

6:40-6:45
Introduction of Keynote Speaker
Nada Jabado, McGill University, Montréal, QC, Canada
Not CME-eligible

6:45-7:30
(Re)emerging Principles of Curative Cancer Therapy: Will the Rules Apply to GBM?
William G. Kaelin Jr., Dana Farber Cancer Institute, Boston, MA
CME-eligible

Opening Reception
FRIDAY, OCTOBER 20

Continental Breakfast
7:00 am-8:00 am | Minneapolis Grand Ballroom D

Plenary Session 1: Novel therapeutic modalities
8:00 am-10:00 am | Minneapolis Grand Ballroom ABC
Session Chair: Duane A. Mitchell, University of Florida
CME-eligible

8:00-8:30  Cellular immunotherapy targeting malignant brain tumors
Duane A. Mitchell, University of Florida, Gainesville, FL

8:30-9:00  GD2-CAR T Cells for Diffuse Midline Gliomas
Crystal Mackall, Stanford University, Stanford, CA

9:00-9:30  CAR T Cells for glioblastoma: lessons learned and road ahead
Christine E. Brown, City of Hope, Duarte, CA

9:30-10:00 Targeting clonal heterogeneity in treatment-refractory Glioblastoma
with novel and empiric immunotherapies
Sheila K. Singh, McMaster Children’s Hospital, Ontario, Canada

Break
10:00 am-10:30 am | Minneapolis Grand Ballrooms Foyer

Plenary Session 2: Tumor immunology and microenvironment
10:30 am-12:00 pm | Minneapolis Grand Ballroom ABC
Session Chair: Peter Siegel, McGill University
CME-eligible

10:30 -11:00  Brain tumors hijack neuronal mechanisms to thrive
Frank A. Winkler, German Cancer Research Center, Heidelberg, Germany

11:00 -11:30 Decoding the language of tumor-neuron crosstalk in glioma
11:30 -12:00  Distinct immune landscapes characterize highly and minimally invasive brain metastases
Peter Siegel, McGill University, Montréal, QC, Canada

Patient Navigation Luncheon
12:00 pm-1:00 pm | Minneapolis Grand Ballrooms D

Brain Tumor Network Session: Commitment to Connection: How Patient Navigation Can Support the Neuro-Oncology Community
12:30 pm-1:30 pm | Minneapolis Grand Ballroom D
Session Chair: Jeremy N. Rich, University of Pittsburgh
Not CME-eligible

12:30  Welcome & Introduction
Jeremy N. Rich, University of Pittsburgh, Pittsburgh, PA

12:40  Panel Discussion
Clark Chen, University of Minnesota, Minneapolis, MN
Courtney Burnett, HealthPartners, MN
Jill Wyant, Madison Air, Minneapolis, MN

1:20pm  Q&A

Break
1:30 pm-2:00 pm | Minneapolis Grand Ballrooms Foyer

Plenary Session 3: Tumor metabolism
2:00 pm-4:00 pm | Minneapolis Grand Ballrooms ABC
Session Chair: Sameer Agnihotri, University of Pittsburgh
CME-eligible

2:00-2:30  Targeting metabolic complexity in glioblastoma stem cells
Jeremy N. Rich, University of Pittsburgh, Pittsburgh, PA

2:30-3:00  Targeting hallmarks of brain tumors with metabolic vulnerabilities
Sameer Agnihotri, University of Pittsburgh, Pittsburgh, PA
3:00-3:30  Oncometabolism in childhood brain cancer
Sriram Venneti, University of Michigan, Ann Arbor, MI

Break
4:00 p.m.- 4:15 p.m.

Spotlight on Proffered Talks I
4:15 pm-5:45 pm | Minneapolis Grand Ballrooms ABC
Session Chair: Sriram Venneti, University of Michigan
CME-eligible

4:15-4:30  Beta-adrenergic blockade licenses the use of immunotherapy in primary brain tumors and brain metastases
Selena Lorrey, Duke University, Durham, NC

4:30-4:45  Uncovering novel therapeutic avenues for glioma by exploring the functional interplay of FGFR1, p53, and ribosome biogenesis
Mikael Lindström, Karolinska Institutet, Stockholm, Sweden

4:45-5:00  In vivo genome-wide CRISPR/Cas9 screens conducted in an immunocompetent mouse model of glioblastoma identify novel in vivo tumor liabilities and potential mechanisms of resistance to chimeric antigen receptor T-cell (CAR-T) therapy
Catherine Koch, MIT, Boston, MA

5:00-5:15  Targeting EPHB2/ABL1 restores anti-tumor immunity in a preclinical model of ependymoma
Taylor Uccello, Massachusetts General Hospital and Harvard Medical School, Boston, MA

5:15-5:30  CAR T-cell motility response to interstitial fluid flow and tumor microenvironment
Gabriela Geraldo Mendes, Virginia Tech University, Roanoke, VA

5:30-5:45  The role of tumor microenvironment in metastasis and relapses of medulloblastoma using immunocompetent mouse models
Niusha Khazaei, McGill University, Montreal, QC, Canada

Lightning Talks I
5:45 pm-6:00 pm | Location
Session Chair: Jeremy N. Rich, University of Pittsburgh
CME-eligible

5:45-5:48  Introduction by Dr. Rich

5:49-5:51  Phase II trial evaluating the association of peripheral blood immunologic response and therapeutic response to immune checkpoint inhibition in patients with newly diagnosed glioblastoma and gliosarcoma
Matthew Watowich, National Cancer Institute, Bethesda, MD [A019]

5:52-5:54  A new international program to accelerate novel therapeutics for brain tumors: presenting the brain tumor research novel therapeutics accelerator
Charlotte Aitken, Tessa Jowell Brain Cancer Mission, London, United Kingdom [A034]

5:55-5:56  Testing neuro-oncology tenets: are MRI findings and symptoms different with true progression compared with immunotherapy-related treatment effect in patients with primary brain tumors?
Emma Byrne, National Cancer Institute, Bethesda, MD [A044]

Poster Session A / Reception
6:00 pm-8:00 pm | Minneapolis Grand Ballroom D

SATURDAY, OCTOBER 21

Continental Breakfast
7:00 am-8:00 am | Minneapolis Grand Ballroom D

Plenary Session 4: Epigenetics and epitranscriptomics
8:00 am-10:00 am | Minneapolis Grand Ballrooms ABC
Session Chair: Marco Gallo, Texas Children’s Hospital and Baylor College of Medicine
CME-eligible

8:00-8:30  Oncohistones: how to co-opt chromatin architecture to regulate developmental transcriptional programs
Nada Jabado, McGill University, Montréal, Quebec City, Canada

8:30-9:00  Elucidating the genetic alterations that predispose to the development and malignant progression of IDH-mutant glioma
Daniel Schramek, Lunenfeld-Tanenbaum Research Institute, Toronto, Ontario, Canada

9:00-9:30  Rearrangements and the 3D genome
Rameen Beroukhim, Dana-Farber Cancer Institute, Boston, MA

9:30-10:00  KMT2D suppresses SHH-driven medulloblastoma progression and metastasis
Alexandra Joyner, Memorial Sloan Kettering Cancer Center, New York, NY

Break
10:00 am-10:30 am | Minneapolis Grand Ballrooms Foyer

Second Keynote Address
10:30 am-11:15 am | Minneapolis Grand Ballrooms ABC

10:30-10:32  Introduction of Keynote Speaker
Michael D. Taylor, Texas Children’s Hospital and Baylor College of Medicine, Houston, TX
Not CME-eligible

10:32-11:15  Metabolic reprogramming and cancer progression in patients
Ralph J. DeBerardinis, University of Texas Southwestern, Dallas, TX
CME-eligible

Special Lecture
11:15 am-11:45 am | Minneapolis Grand Ballrooms ABC
CME-eligible

ZIC1: A Context Dependent Medulloblastoma Driver in the Rhombic Lip
Michael D. Taylor, Texas Children’s Hospital and Baylor College of Medicine, Houston, TX

Spotlight on Proffered Talks II
11:45 am-12:45 pm | Minneapolis Grand Ballrooms ABC
Session Chair: Michael E. Pacold, NYU Langone Health
CME-eligible
11:45-12:00  **Modeling epigenetic lesions that cause gliomas**  
Gilbert Rahme, Dana-Farber Cancer Institute, Boston, MA

12:00-12:15  **H3.3K27M diffuse midline gliomas are sensitive to SWI/SNF chromatin remodeler degradation**  
Mateus Mota, University of Michigan, Ann Arbor, MI

12:15-12:30  **Associations between PM 2.5, vegetation density and childhood brain tumors: a case-control registry-based study from Texas 1995-2011**  
Lindsay Williams, University of Minnesota, Minneapolis, MN

12:30-12:45  **Asc1lb progenitor-specific RB conditional inactivation in zebrafish models rare CNS primitive neuroectodermal tumors**  
Maura McGrail, Iowa State University, Ames, IA

**Lunch on own**  
12:45 pm-2:15 pm

**Plenary Session 5: 3D genomes and spatial sequencing**  
2:15 pm-3:45 pm | Minneapolis Grand Ballrooms ABC  
*Session Chair: Claudia Kleinman, McGill University*  
*CME-eligible*

2:15-2:45  **3D genomes in childhood brain cancers**  
Marco Gallo, Texas Children’s Hospital and Baylor College of Medicine, Houston, Texas

2:45-3:15  **Epigenome engraving of cellular lineage in childhood high-grade gliomas**  
Claudia Kleinman, McGill University, Montreal, QC, Canada

3:15-3:45  **Deep learning-based virtual brain tumors for virtual clinical trials**  
Richard J. Gilbertson, University of Cambridge, Cambridge, England

**Lightning Talks II**  
3:45 pm-4:00 pm | Minneapolis Grand Ballrooms ABC  
*Session Chair: Nada Jabado, McGill University*  
*CME-eligible*

3:45-3:47  **Introduction by Dr. Jabado**
3:48-3:50 Clinico-genomic characteristics of breast cancer brain metastasis: a multi-institutional analysis from AACR Project GENIE BPC
Hannah Fuchs, Memorial Sloan Kettering Cancer Center, New York, NY

3:51-3:53 Establishment of patient-derived brain metastasis initiating cells as a novel preclinical model of breast cancer metastatization
Stefania Faletti, Istituto Europeo di Oncologia, Milan, Italy

3:54-3:56 CHD5 suppresses glioblastoma by inhibiting MYC
Xueqin Sherine Sun, Cold Spring Harbor Laboratory, New York, NY

Poster Session B/ Reception
4:00 pm-6:00 pm | Minneapolis Grand Ballroom D

SUNDAY, OCTOBER 22

Continental Breakfast
7:00 am-8:00 am | Minneapolis Grand Ballroom D

Plenary Session 6: Emerging molecular targets
8:00 am-9:30 am | Minneapolis Grand Ballrooms ABC
Session Chair: Joseph F. Costello, University of California, San Francisco
CME-eligible

8:00-8:30 Targeted therapies in childhood brain tumors; what can we learn from MAPK targeting in low grade glioma
Darren Hargrave, University College London Great Ormond Street Hospital, London, United Kingdom

8:30-9:00 Methylation-based diagnostics of CNS neoplasms
Kenneth D. Aldape, National Institute of Health, Bethesda, Maryland

9:00-9:30 Immortal and evolving: The formative years of tumor cells
Joseph F. Costello, University of California, San Francisco, San Francisco, CA
Break
9:30 am-9:45 am | Minneapolis Grand Ballrooms Foyer

Plenary Session 7: Brain metastasis
9:45 am-11:30 am | Minneapolis Grand Ballrooms ABC
Session Chair: Priscilla K. Brastianos, Harvard Medical School/MGH
CME-eligible

9:45-10:15 Metabolic reprogramming in leptomeningeal metastasis
Adrienne A. Boire, Memorial Sloan Kettering Cancer Center, New York, NY

10:15-10:45 In search of precision medicine approaches for central nervous system metastases: from bench to bedside (and back to bench)
Priscilla K. Brastianos, Harvard Medical School/Massachusetts General Hospital, Boston, MA

10:45-11:15 Metabolic dependencies of brain metastases
Michael E. Pacold, NYU Langone Health, New York, NY

11:15-11:30 Brain metastases roadmap reveals conserved regulatory dynamics rooted in dormant tumor cells
Remi Klotz, University of Maryland School of Medicine, Baltimore, MD

Closing Remarks
11:30 -11:35 am

Closing remarks
Michael D. Taylor, Texas Children’s Hospital and Baylor College of Medicine, Houston, TX