

9th Annual Innovative Approaches to Brain Tumor Management

Hybrid Course

Friday, February 9, 2024

AGENDA

- 7:30 a.m. Registration & Breakfast**
- 7:55 a.m. Welcome & Announcements**
Zachary N. Litvack, M.D., Charles Cobbs, M.D. & Alipi Bonm, M.D., Ph.D.
- 8 a.m. Clinical Trial with Pembrolizumab in Relapsed GBM Patients**
Robert Prins, Ph.D.
Objectives:
- Identify the rationale for neoadjuvant treatment with immune checkpoint blockade in recurrent GBM patients
 - Illustrate pharmacodynamic biomarkers for neoadjuvant immune checkpoint blockade that correlate with survival
- 8:15 a.m. Q&A**
- 8:20 a.m. Oncolytic Immuoactivation Clinical Trials for GBM**
Nino Chiocca, M.D.
Objectives:
- Identify basic concepts of oncolytic viral therapy
 - Illustrate the role of viral gene delivery in immune activation
- 8:35 a.m. Q&A**
- 8:40 a.m. DNA Methylation Profiling as a Clinical Diagnostic Tool for CNS Tumors**
PJ Cimino, M.D., Ph.D.
Objectives:
- Illustrate the utility of DNA methylation profiling in CNS tumor diagnosis
 - Explain the limitations of potential pitfalls of DNA methylation profiling
- 8:55 a.m. Q&A**
- 9 a.m. A Phase I Clinical Trial of Personalized High Throughput Drug Screening for Up Front Treatment of Glioblastoma**
Parvi Hothi, Ph.D.
Objectives:
- Identify high throughput drug screening
 - Describe how cancer stem cells are good targets in GBM
- 9:15 a.m. Q&A**

- 9:20 a.m. The Roles of Social Worker in Management of Glioblastoma Patient Care**
Brenda Autobee-Bigalk, MSW, LICSW
Objectives:
- Demonstrate key roles for social workers in GBM care
 - Identify how family dynamics impact GBM patients
- 9:35 a.m. Q&A**
- 9:40 a.m. Human endogenous retrovirus K contributes to a stem cell niche in glioblastoma**
Ashish H. Shah, M.D.
Objectives:
- Describe what HERV's are
 - Illustrate implications of HERV-K expression in GBM
- 9:55 a.m. Q&A**
- 10 a.m. Breaks & Exhibits** *(not for CME credit)*
- 10:10 a.m. Glioblastoma Brain Slice Culture and Potential Role in Identifying Glioblastoma Immune Activating Molecules**
Charles Cobbs, M.D.
Objectives:
- Describe the role of a GBM slice culture in immunotherapy
 - Describe key concepts in making cold tumors hot
- 10:25 a.m. Q&A**
- 10:30 a.m. "Imaging Endpoint Strategies for Early & Later Stage Clinical Trials in Recurrent GBM"**
Benjamin Ellingson, Ph.D.
Objectives:
- Describe key imaging characteristics of GBM progression
 - Illustrate unique imaging aspects of GBM in clinical trials
- 10:45 a.m. Q&A**
- 10:50 a.m. Potential Role of CRISPR for Treating Glioblastoma**
John Liu, M.D., Ph.D.
Objectives:
- Identify key genes involved in GBM progression
 - Describe how CRISPR can inactivate tumor driven genes
- 11:05 a.m. Q&A**

- 11:10 a.m. Extracellular Vesicles for Delivery of mRNA for Glioblastoma Treatment**
Betty Kim, M.D., Ph.D., FRCSC, FAANS
Objectives:
- Describe EV as a delivery system
 - Illustrate the potential of mRNA therapy for brain tumors
- 11:45 a.m. Q&A**
- 11:50 a.m. Metabolic Imaging of Brain Tumors**
Susan Chang, M.D.
Objectives:
- Illustrate how key metabolic pathways of brain tumors can drive tumor biology
 - Describe imaging techniques in brain tumor management
- 12:05 a.m. Q&A**
- 12:10 p.m. Lunch Break & Exhibits** *(not for CME credit)*
- 12:40 p.m. Augmented Reality in Neuro-Oncology** *(not for CME credit)*
Stephen Monteith, M.D.
- 12:45 p.m. Q&A**
- 12:50 p.m. Update on Endoscopic Skull Base** *(not for CME credit)*
Alon Orlev, M.D.
- 1:05 p.m. Q&A**
- 1:10 p.m. Breaks & Exhibits** *(not for CME credit)*
- 1:40 p.m. Preclinical Modeling for Improved Drug Delivery & Immunotherapeutic Approaches to Glioblastoma**
Sean Lawler, Ph.D.
Objectives:
- Explain pre-clinical modeling for drug delivery in GBM
 - Illustrate immunotherapeutic approaches to GBM
- 1:55 p.m. Q&A**
- 2:00 p.m. "Living Drugs" - Changing the Way We Treat Patients with Brain Cancer**
Rajiv Khanna, M.D.
Objectives:
- Describe T-cell targets for GBM
 - Illustrate how CMV targeting can impact GBM
- 2:15 p.m. Q&A**

2:20 p.m. "Molecular Targeted Therapy for Glioma"

Alipi Bonm, M.D., Ph.D.

Objectives:

- Describe therapies for targeted molecular glioma
- Illustrate therapy types to treat molecular glioma

2:35 p.m. Q&A

2:40 p.m. "A Novel Mechanism of T Cell Antitumor Immunity"

Peter Fecci, M.D., Ph.D.

Objectives:

- Identify the traditional role of MHC in T cell activation and target killing
- Illustrate the role of the NKG2D-NKG2DL axis in mediating a novel mechanism of T cell killing

2:55 p.m. Q&A

3:00 p.m. Adjourn

ESTEEMED FACULTY

Charles Cobbs, M.D.

Course Co-Chair

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Alon Orlev, M.D. (virtual)

Neurosurgeon
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