

8th Annual Innovative Approaches to Brain Tumor Management Friday, February 10, 2023 AGENDA

- 7:30 a.m. Registration & Breakfast
- 7:55 a.m. Welcome & Announcements Zachary N. Litvack, M.D. & Kester Phillips, M.D. & Charles Cobbs, M.D.

8 a.m. Surgical Biopsy of Challenging Neoplastic Skull Base Lesions (virtual) Alon Orlev, M.D.

Objectives:

- Describe examples of challenging extra-ordinary skull base lesions
- Identify the surgical complexity of attaining adequate tissue for diagnosis
- Determine contemporary minimally invasive surgical approaches for neoplastic skull base lesions

8:15 a.m. Q&A

8:20 a.m. Complication Avoidance & Management in Endonasal Surgery (virtual) Garni Barkhoudarain, M.D.

Objectives:

- Describe how to prevent common peri-operative complications associated with endonasal endoscopic surgery
- Identify how to manage carotid artery injury during and after endonasal endoscopic surgery
- Determine minor complications that can occur in patients undergoing endonasal operations

8:35 a.m. Q&A

8:40 a.m. Diagnostic and Treatment Innovations in Leptomeningeal Carcinomatosis (LMC) *(virtual)*

Na Tosha N. Gatson, M.D., Ph.D., FAAN **Objectives:**

- Identify and utilize tools for diagnosis of LMC with accuracy
- Apply effective approaches for treatment of LMC
- 8:55 a.m. Q&A

9 a.m. Validation of a Bicistronic CAR to Overcome intratumoral Heterogeneity in GBM (virtual)

Zev Binder, M.D., Ph.D. Objectives:

- Describe how to target heterogeneity limits successful immunotherapy
- Recognize treatment strategies to overcome target heterogeneity

9:15 a.m. Q&A

9:20 a.m. Implementing Validated Functional Precision Medicine in the Clinical Care of HGG Patients (virtual) Tesa Desrochers, Ph.D.

	Objectives:
	Describe functional precision medicine in oncology
	 Evaluate functional precision medicine applications Identify how functional precision medicine utilization in oncology can impact HGG
	clinical treatment and patient outcomes.
9:35 a.m.	Q&A
9:40 a.m.	Investigating the Impact of Cytomegalovirus on Glioblastoma in Mouse Models (virtual) Sean Lawler, Ph.D. Objectives:
	Describe the impact of cytomegalovirus on glioblastoma growth
	 Identify the potential of anti-viral therapies for glioblastoma Determine the impact of therapy on cytomegalovirus replication
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9:55 a.m.	Q&A
10 a.m.	Breaks & Exhibits (not for CME credit)
10:10 a.m.	Transient Blood-Brain Barrier Disruption for the Treatment of Brain Tumors (virtual) Michael Canney, M.D. Objective:
	 Describe the role of the blood-brain barrier in limiting the penetration of therapeutics for the treatment of brain tumors
10:25 a.m.	Q&A
10:30 a.m.	 Surgically Targeted Radiation for Brain Tumors Using Gamma Tile Roby Ryan, M.D. Objectives: Describe the role for surgically targeted radiation in primary and recurrent brain tumors
10:45 a.m.	Q&A
10:50 a.m.	Reprogramming Natural Killer Cells for Immunotherapy of Glioblastoma (<i>virtual</i>) Sandro Matosevic, Ph.D. Objectives:
	Describe emerging therapeutic modalities for GBM based on adoptively-transferred immune cells
	 Identify the principles behind how the efficacy and anti-GBM responses elicited by natural killer cells can benefit GBM therapy
	 Determine how natural killer cells can be engineered to effectively and specifically target GBM
11:05 a.m.	Q&A
11:10 a.m.	Parenteral Curcumin Treatment of GBM: Consecutive Case Series Leanna Standish, ND, Ph.D. Objectives:
	 Describe the multiple molecular targets of curcumin Identify survival data in GBM patients receiving adjuvant IV curcumin

11:25 a.m. Q&A

11:30 a.m. Agent-Based Computational Modeling of Glioblastoma Predicts That Stromal Density is Central to Oncolytic Virus Efficacy (pre-recorded) Ralph Puchalski, Ph.D. Objectives:

- Identify treatment options based on oncolytic viruses
- Describe how tumor cell dynamics can be modeled for prediction of therapeutic efficacy

11:45 a.m. Q&A

11:50 a.m. Novel Approaches to Enhancing GBM Immunogenicity for Immunotherapy Charles Cobbs, M.D.

Objectives:

- Determine key factors that prevent checkpoint inhibitor immunotherapy from working in GBM
- Describe some of the inhibitory molecules in the GBM tumor microenvironment that inhibit T-cell killing
- Identify novel approaches to improving immunogenicity in GBM

12:05 p.m. Q&A

12:10 p.m. Lunch Break & Exhibits (not for CME credit)

12:30 p.m. Recent Development in Radiotherapeutic Management of Brain Metastasis Byung-Han Rhieu, M.D. Objectives:

- Describe the recent emerging developments in external bean radiotherapy applications for brain metastasis
- Identify the clinical rationale and limitations

12:45 p.m. Q&A

12:50 p.m. Treatment of Adult Medulloblastoma (virtual) Edina Komlodi-Pasztor, M.D., Ph.D. Objectives:

- Describe the diagnosis of adult medulloblastoma
- Outline the management of adult medulloblastoma
- 1:05 p.m. Q&A

1:10 p.m. Metabolomics in Glioblastoma (virtual) Orwa Aboud, M.D., Ph.D. Objectives:

- Explore the role of metabolomics in the field of oncology
- Describe the role of metabolomics in glioblastoma diagnosis.
- Identify the potential use of metabolomics in glioblastoma treatment evaluation

1:30 p.m.	 Advanced Preclinical Brain Tumor Models: Role of the Neurosurgeon (virtual) Analiz Rodriguez, M.D., Ph.D. Objectives: Define the importance of tissue preservation Define functional precision medicine Describe how to improve intraoperative systems at their hospital
1:45 p.m.	Q&A
1:50 p.m.	 Use of Blue Light Endoscopy Assistance for Intrinsic Brain Tumors (virtual) Gabriel Zada, M.D., MS, FAANS, FACS Objectives: Describe various optical imaging modalities for intrinsic brain tumor resection Identify the evolving role of 5-ALA and blue light endoscopy for intrinsic brain tumors
2:05 p.m.	Q&A
2:10 p.m.	Course Wrap Up
2:15 p.m.	Adjourn

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1:25 p.m.

Q&A

ESTEEMED FACULTY

Charles Cobbs, M.D.

Course Co-Chair Director, Ben & Catherine Ivy Center Swedish Neuroscience Institute Seattle, Washington

Zachary N. Litvack, M.D., FAANS, FACS Course Co-Chair

Director, Skull Base & Minimally Invasive Neurosurgery Swedish Neuroscience Institute Seattle, Washington

Kester Phillips, M.D. Course Co-Chair Neuro-oncologist Ben & Catherine Ivy Center Seattle, Washington

Orwa Aboud, M.D. (virtual)

Assistant Professor University of California Davis Sacramento & California

Zev Binder, M.D., Ph.D. (virtual)

Research Assistant Professor University of Pennsylvania Philadelphia, Pennsylvania

Tesa Desrochers, Ph.D. (virtual)

Chief Scientific Officer Kiyatec, Inc. Greenville, South Carolina

Garni Barkhoudarian, M.D. (virtual) Neurosurgeon

Pacific Neuroscience Institute Santa Monica, California

Michael Canney, Ph.D. (virtual) Chief Scientific Officer Carthera Denver, Colorado

Na Tosha N. Gatson, M.D., Ph.D., FAAN (virtual)

Medical Director, Neuro-Oncology Banner MD Anderson Cancer Center; Associate Professor; University of Arizona College of Medicine, Geisinger Commonwealth School of Medicine Phoenix, Arizona

Edina Komlodi-Pasztor, M.D., Ph.D. (virtual)

Assistant Professor of Neurology, Director of Neuro-Oncology MedStar Georgetown University Hospital, Lombardi Comprehensive Cancer Center Washington, DC

Sandro Matosevic, Ph.D. (virtual)

Assistant Professor Purdue University West Lafayette, Indiana

Ralph Puchalski, Ph.D. (pre-recorded)

Lab Scientist Ben & Catherine Ivy Center Swedish Neuroscience Institute Seattle, Washington

Analiz Rodriguez, M.D., Ph.D. (virtual)

Associate Professor, Director of Neurosurgical Oncology

Sean Lawler, Ph.D. (virtual)

Associate Professor Brown University Providence, Rohde Island

Alon Orlev, M.D. (virtual)

Neurosurgeon Rabin Medical Center Israel

Byung-Han Rhieu, M.D.

Radiation Oncologist Swedish Hospital Seattle, Washington

Robert Ryan, M.D. Neurosurgeon University of Arkansas for Medical Sciences Little Rock, Arkansas

Leanna Standish, ND, Ph.D.

Co-Director AIMS Institute AIMS Institute Seattle, Washington Virginia Mason Seattle, Washington

Gabriel Zada, M.D., MS, FAANS, FACS (virtual)

Professor of Neurological Surgery USC Keck School of Medicine Los Angeles, California