21st Annual
Brain Tumor Update

10th Annual
Symposium on Brain and Spine Metastases

November 2-3, 2019
The Cosmopolitan of Las Vegas
21st Annual
Brain Tumor Update

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About the Course

About the Symposium
This symposium is designed to improve competence to assess and treat patients with brain tumors or brain and spine tumor metastases, especially as it relates to comparing treatments for brain and spine metastases, evaluating new technologies, treating sellar and parasellar brain tumors, and assessing and treating gliomas, with the overall goal of improving outcomes in these patient populations. The Brain Tumor Partners in Care Session is designed to guide the attendees clinical practice through understanding the metastatic brain tumor patient experience. Experts will present on topics relating to the management of patients with brain metastases including pathophysiology, clinical management, psychosocial implications & planning for end-of-life with a focus session on lung cancer & brain metastasis.

Target Audience
Neurosurgeons, Radiation Oncologists, Medical Oncologists, Neuro-oncologists, Neurologists, Physician Assistants, Nurse Practitioners, Nurses and allied healthcare professionals who work with patients with tumors.

Objectives
At the completion of this activity, the participant will be able to:

• Compare and contrast the available options for treating spinal tumor metastases, including radiosurgery, radiofrequency ablation, laser interstitial thermal therapy, and minimally invasive surgery.
• Debate the issues comparing surgery vs radiosurgery and preoperative radiosurgery vs postoperative radiation therapy for single or multiple brain metastases.
• Describe the evidence supporting use of new therapeutic approaches for brain metastases including immunotherapy and targeted therapy.
• Critically appraise technological innovations in imaging and surgery for brain tumor management.
• List the various types of sellar and parasellar brain tumors and describe criteria for selecting the best radiosurgery and surgery options.
• Describe advances in genomics, imaging, neuropathology, and medical management of gliomas.
• Review the pathophysiology, assessment, clinical implications, standard of care and advances in treatments of patients with metastatic brain tumors.
• Identify the holistic needs of the brain metastasis patient from pre-diagnosis to end-of-life.

Call For Papers
Abstracts will be solicited for electronic poster presentations. Electronic posters will be on display during breaks and lunch. Poster participants will be notified of acceptance as well as poster format and content requirements on or before October 4, 2019.

Abstract Requirements
• **Deadline date:** September 27, 2019. One entry per presenter.
• Submit your abstract as a Word document to Brigid Walters at walterb4@ccf.org
• 300 word limit

Register online at [www.ccfcme.org/BrainMets19](http://www.ccfcme.org/BrainMets19)
Cleveland Clinic Symposium Co-Directors

Manmeet Ahluwalia, MD, FACP
Director, Brain Metastasis Research Program
Rose Ella Burkhardt Brain Tumor and Neuro-Oncology

Gene Barnett, MD, MBA
Director, Rose Ella Burkhardt Brain Tumor and Neuro-Oncology Center

Ajit Krishnaney, MD
Vice Chair, Department of Neurosurgery
Associate Director, Center for Spine Health

Pablo Recinos, MD
Section Head, Skull Base Surgery
Rose Ella Burkhardt Brain Tumor and Neuro-Oncology Center

John Suh, MD
Chairman, Radiation Oncology

Keck School of Medicine of USC Symposium Co-Directors

Eric Chang, MD
Chair and Professor of Radiation Oncology

Steven Giannotta, MD
Chair and Professor of Neurological Surgery

Gabriel Zada, MD, MS
Associate Professor of Neurological Surgery

American Brain Tumor Association Symposium Co-Director

Kathy Lupica, MSN, CNP*
Cleveland Clinic

Faculty

Jay Acharya, MD
Keck School of Medicine of USC

Lilyana Angelov, MD
Cleveland Clinic

Frank Attenello, MD, MS
Keck School of Medicine of USC

Jean Arzbachcher, RN, MSN, APN, CNRN
University of Illinois

Jeffrey Bruce, MD
Columbia University

Samuel Chao, MD
Cleveland Clinic

Thomas C. Chen, MD, PhD
Keck School of Medicine of USC

Jennifer Eschbacher, MD
Barrow Neurological Institute

Kyle Hurth, MD, PhD
Keck School of Medicine of USC

Paul Kim, MD
Keck School of Medicine of USC

Varun Kshettry, MD
Cleveland Clinic

Michael Lim, MD
Johns Hopkins

Emily Lippert
American Brain Tumor Association

Nir Lipsman, MD, PhD
Sunnybrook Health Sciences Centre

John Liu, MD
Keck School of Medicine of USC

Mary Lovely, PhD, RN, CNRN
University of California, San Francisco

Alireza Mohammadi, MD
Cleveland Clinic

Erin Murphy, MD
Cleveland Clinic

Josh Neman, PhD
Keck School of Medicine of USC

David Peereboom, MD
Cleveland Clinic

Craig Pressley, MSW, LICSW, OSW-C
Beth Israel Deaconess Medical Center

Anandh Rajamohan, MD
Keck School of Medicine of USC

Raymond Sawaya, MD
MD Anderson Cancer Center

Glen Stevens, DO, PhD
Cleveland Clinic

Claudio Tatsui, MD
MD Anderson Cancer Center

Evan Thomas, MD, PhD
University of Alabama at Birmingham

Patrick Wen, MD
Dana-Farber Cancer Institute

Nicole Willmarth, PhD
American Brain Tumor Association

Jason Ye, MD
Keck School of Medicine of USC

*retired
Saturday, November 2, 2019

10th Annual Symposium on Brain and Spine Metastases
A five-minute Q&A will be included in each presentation.
9:00 am Registration/Continental Breakfast/Exhibits
10:00 am Welcome and Introductions – Gene Barnett

Spinal Tumors and Metastases – Moderator: Ajit Krishnaney
10:10 am Imaging of Spine Tumors – Anandh Rajamohan
10:30 am Spine Radiosurgery – Lilyana Angelov
10:50 am Role of Surgery in Spinal Metastases – Ajit Krishnaney
11:10 am Minimally Invasive Options for Spinal Metastases – John Liu
11:30 am LITT for Spinal Metastases – Claudio Tatsui
11:50 am Radiofrequency Ablation for Spinal Metastases – Jay Acharya
12:10 pm Faculty Panel – Case Discussion
12:30 pm Buffet Lunch

Brain Metastases – Moderators: Manmeet Ahluwalia and Eric Chang
1:30 pm Mechanism of Brain Metastases – Josh Neman
1:50 pm Debate: Surgery vs. Radiosurgery for Single Brain Met
Raymond Sawaya vs Eric Chang
2:10 pm Debate: Neoadjuvant Radiosurgery vs. Adjuvant Radiosurgery for
Brain Metastases – Erin Murphy vs Jason Ye
2:30 pm Refreshment Break/Exhibits/Posters
2:50 pm Immunotherapy for Brain Metastases – David Peereboom
3:10 pm Targeted Therapy – Manmeet Ahluwalia
3:30 pm New Approaches to Whole Brain Therapy – John Suh
3:50 pm FDA Workshop on Brain Metastases: The Next Steps – Patrick Wen
4:10 pm Debate: 4-pi LINAC Radiosurgery vs Cobalt-60 Based Radiosurgery for
Multiple Brain Metastases – Evan Thomas vs. Samuel Chao
4:30 pm Radiation Necrosis – Samuel Chao
4:50 pm Adjourn
6:00-8:00 pm Reception at Topgolf – Transportation will be provided

Saturday, November 2, 2019

ABTA 2019 Brain Tumor Partners in Care
A five-minute Q&A will be included in each presentation.
9:00 am Registration/Continental Breakfast/Exhibits
Moderator: Emily Lippert
10:00 am Welcome & Introductions – Emily Lippert
10:10 am About ABTA & Mets Initiative – Nicole Willmarth, Chief Mission Officer
10:30 am Overview of Brain Metastases – Kathy Lupica
11:10 am Update on Clinical Trials, Targeted Therapy and Immunotherapy for
Brain Metastases – David Peereboom
11:50 am Updates on Radiation Therapy for Brain and Spine Metastases
Samuel Chao
12:30 pm Buffet Lunch
Saturday, November 2, 2019 (continued)

**ABTA 2019 Brain Tumor Partners in Care**

1:30 pm  **Symptom Management**  – Jean Arzbaecher
2:00 pm  **Integrative Care**  – Glen Stevens
2:30 pm  **Refreshment Break/Exhibits/Posters**
2:50 pm  **Palliative Care and End of Life: Having Those Difficult Conversations**  – Glen Stevens
3:30 pm  **Psychosocial Support: Caring for Brain Tumor Patients and Their Families**  – Mary Lovely
4:10 pm  **Financial and Legal Resources for Brain Tumor Patients and Families**  – Craig Pressley
4:50 pm  **Evaluation and Adjourn**

6:00-8:00 pm  **Reception at Topgolf**  – Transportation will be provided

**Sunday, November 3, 2019**

**21st Annual Brain Tumor Update**

A five-minute Q&A will be included in each presentation.

9:00 am  **Registration/Continental Breakfast/Exhibits**

**Technology and Brain Tumor Management**  – Moderator: Gene Barnett
9:30 am  **Confocal Endomicroscopy for Intraoperative Pathology**  – Jennifer Eschbacher
9:50 am  **Focused Ultrasound for Brain Tumor Management**  – Nir Lipsman
10:10 am  **LITT for the Treatment for Gliomas**  – Alireza Mohammadi
10:30 am  **Technological Advances in Parafascicular Surgery**  – Gabriel Zada

**Sellar and Parasellar Brain Tumors**  – Moderator: Steven Giannotta
10:50 am  **Management of Cavernous Sinus Meningiomas**  – Steven Giannotta
11:10 am  **Current Trends in Craniopharyngioma**  – Pablo Recinos
11:30 am  **Multi-modal approach for Pituitary Tumors**  – Gabriel Zada
11:50 am  **Complication Management of Pituitary Tumor Treatments**  – Pablo Recinos
12:10 pm  **Debate: Radiosurgery vs. Surgery for Recurrent Pituitary Tumors**  – Erin Murphy vs. Varun Kshettry
12:30 pm  **Exoscopes, Endoscopes, and Microscopes: A Critical Evaluation of New OR Technologies**  – Varun Kshettry
12:50 pm  **Lunch Buffet**

**Gliomas**  – Moderator: John Suh
1:50 pm  **Neuropathology**  – Kyle Hurth
2:10 pm  **Genomics for Gliomas**  – Frank Attenello
2:30 pm  **Imaging**  – Paul Kim
2:50 pm  **Refreshment Break/Exhibits/Posters**
3:10 pm  **Medical Management of Gliomas**  – Manmeet Ahluwalia
3:30 pm  **Convection Enhanced Delivery for Gliomas**  – Jeffrey Bruce
3:50 pm  **Immunotherapy for Gliomas**  – Michael Lim
4:10 pm  **Bench to Clinical Trial: Development of NEO212 for Metastatic Brain Cancer**  – Thomas C. Chen
4:30 pm  **Adjourn**
General Information

Location
The Cosmopolitan of Las Vegas
3708 S. Las Vegas Blvd.
Las Vegas, NV  89109
Telephone: 702.698.7000

Hotel Reservations
A block of rooms has been reserved at The Cosmopolitan of Las Vegas for a special meeting rate of $259. A daily resort fee of $30 plus the current room tax will be charged in addition to the room rate. To secure this rate, you must make your reservation by Friday, October 4, 2019. Contact the hotel reservations department by phone at 702.698.7575 or 855.435.0005 or online at https://book.passkey.com/go/SSCCF9. Please identify yourself as being part of the Cleveland Clinic meeting, Group Code SSCCF9, to obtain the special rate.

Americans with Disabilities Act
The Cleveland Clinic Foundation Center for Continuing Education fully intends to comply with the legal requirements of the Americans with Disabilities Act. If you need assistance, please notify Shana Spade at 216.444.9380 or spades@ccf.org at least two weeks prior to the activity.

Accreditation
This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of Cleveland Clinic Foundation Center for Continuing Education, Keck School of Medicine of USC and American Brain Tumor Association. The Cleveland Clinic Foundation Center for Continuing Education is accredited by the ACCME to provide continuing medical education for physicians.

The Cleveland Clinic Foundation Center for Continuing Education designates this live activity for a maximum of 11.25 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Participants claiming CME credit from this activity may submit the credit hours to the American Osteopathic Association for Category 2 credit.

American Board of Radiology – This symposium meets the ABR's criteria for a self-assessment activity in the ABR Maintenance of Certification program. Partial credit will be given.

American Academy of Nurse Practitioners (AANP) accepts AMA PRA Category 1 Credits™ from organizations accredited by the ACCME.

American Academy of Physician Assistants (AAPA) accepts certificates of participation for educational activities certified for AMA PRA Category 1 Credits™ from organizations accredited by the ACCME. Physician Assistants may receive a maximum of 11.25 hours of credit for completing these programs.

Faculty Disclosure Statement
The Cleveland Clinic Foundation Center for Continuing Education has implemented a policy to comply with the current Accreditation Council for Continuing Medical Education Standards for Commercial Support requiring resolution of all faculty conflicts of interest. Faculty declaring a relevant commercial interest will be identified in the activity syllabus.

Information
For additional information: contact Shana Spade – 800.223.2273 ext. 49380
(e-mail) spades@ccf.org
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Register Online At:
www.ccfcme.org/BrainMets19

**Symposium Registration Fee - Two Days**
Symposium fee includes registration materials, continental breakfasts, lunches, and reception.

<table>
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<th>Category</th>
<th>Fee</th>
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<tr>
<td>Physician/Surgeon</td>
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<tr>
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<td>Non-Physician</td>
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*Letter from program chairman or department chairman is required to receive the discounted Resident/Fellow registration.

**2019 ABTA Brain Tumor Partners in Care – Saturday, November 2 ONLY**
Non-Physician: $99

Registration and Cancellation Information

Register at [www.ccfcme.org/BrainMets19](http://www.ccfcme.org/BrainMets19). Deadline for registration for the symposium is 5:00 pm (EST), Friday, October 25, 2019. A request for a refund must be received by email by Friday, October 11, 2019. No refunds will be given after October 11, 2019. A $50 cancellation fee will be deducted from the refund for all cancellations.

**Please Note:** For questions about registration, please call 216.448.8710 or email cmeregistration@ccf.org.
In Joint Providership Present the

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