AGENDA

7:00 am  Log-in to Virtual Conference - Visit Virtual Exhibit Hall

7:30 am  Educational Meeting Begins - Welcome and Introductions
  Steven Brem, MD – Chief, Neurosurgical Oncology
  M. Sean Grady, MD – Director, Neuroscience Service Line
  Daniel Yoshor, MD – Chairman, Neurosurgery
  Lawrence N. Shulman, MD – Deputy Director Abramson Cancer Center

SPECIAL PRESENTATION

7:40 am  From Icarus to Aequanimitas, Revisited
  Joseph C. Maroon, MD, FACS – Professor of Neurosurgery
  Former President of the Congress of Neurological Surgeons
  Author of the book, Square One: A Simple Guide to a Balanced Life

SCIENTIFIC SESSION 1:
New Concepts And Innovative Technologies
MODERATOR:  Arati Desai, MD

8:10 am  The 2016 WHO Classification and the Role of Integrated Molecular Profiling in the Diagnosis of Malignant Gliomas
  MacLean Nasrallah, MD, PhD – Pathology & Laboratory Medicine

8:30 am  Clinically Useful Next Generation Sequencing in Glioblastoma
  Jennifer JD Morrissette, PhD – Pathology & Laboratory Medicine

8:40 am  Advanced Neuroimaging of Brain Tumors:
  Radiogenomics, predictive biomarkers, and response assessment
  Suyash Mohan, MD, PDCC – Radiology

9:00 am  Overview of PET Imaging for Primary and Secondary Brain Tumors
  Seyed Ali Nabavizadeh, MD – Radiology

A VIRTUAL MEETING AT PennMedicine.org/Abramson/Brain2020
9:20 am  Seeing Beyond the Visible: Fluorescent imaging of brain tumors
John Y. K. Lee, MD, MSCE – Neurosurgery

9:50 am  Immunotherapy for Brain Tumors - Advances in CAR T-Cell Therapy for Glioblastoma
Donald M. O’Rourke, MD – Neurosurgery

10:10 am  Break/Visit Virtual Exhibits and Experts

SCIENTIFIC SESSION 2:
Progress In the Treatment of Malignant Brain Tumors
MODERATOR: Robert A. Lustig, MD, FACR

10:30 am  Advances in Brain Mapping of Brain Tumors
Alexandra Golby, MD – Neurosurgery

11:00 am  Advances in the Treatment of Gliomas
Susan Chang, MD – Neuro-Oncology

11:30 am  Medical and Symptom Management of Patients with Brain Tumors
Amy A. Pruitt, MD – Neurology

11:45 am  Seizure Management for Brain Tumor Survivors: Current concepts
Kathryn A. Davis, MD, MTR – Neurology

12:00 pm  Primer on COVID-19
Kathleen M. Murphy, MD – Infectious Diseases

12:15 pm  COVID-19 and Cancer
Previously recorded conversation from 9/30/2020 as part of the Cancer and COVID-19: Update from Penn's Abramson Cancer Center - a CME-accredited conference (to view in entirety click here)
Anthony S Fauci, MD – Director, National Institute of Allergy and Infectious Diseases (NIAID)
Charu Aggarwal, MD, MPH – Medical Oncology
Robert H. Vonderheide, MD, DPhil – Director, Abramson Cancer Center
12:20 pm  Break/Visit Virtual Exhibits and Experts

SCIENTIFIC SESSION 3: Advances in Precision Surgery, Medical and Radiation Oncology – Survivorship of Patients With Brain Tumors
MODERATOR: Suyash Mohan, MD, PDCC

1:00 pm  Integrating New Technologies in the Treatment of Malignant Brain Tumors, from LITT to Connectomics - Oncofunctional Optimization
Steven Brem, MD – Neurosurgery

1:30 pm  Circulating Tumor DNA in Glioblastoma
Stephen Bagley, MD, MSCE – Hematology Oncology

1:50 pm  Anti-Angiogenic Therapy and Current Clinical Trials
Arati Desai, MD – Medical Oncology

2:15 pm  Advances in Radiation Therapy for Patients with Brain Tumors
Goldie A. Kurtz, MD – Radiation Oncology

2:35 pm  Targeted Therapy for Brain Metastases (Melanoma, Breast and Lung Cancer): Principles and progress
Tara C. Mitchell, MD – Medical Oncology

2:55 pm  Stories of Patient Survivors: Navigating the health care system, finding information, clinical trials, innovation, and hope
Elizabeth Heisler, PA-C – Neurosurgery
Eleanor Miller, MSN, RN, OCN, CBCN – Neuro Oncology

3:15 pm  CME Concludes
Special Town Hall Meeting with Dr. Steven Brem for Patients, Caregivers, and Family Members
Steven Brem, MD – Neurosurgery

4:00 pm  Town Hall Concludes
Overview
The purpose of this educational activity is to provide a review of new treatment options in neuro-oncology, including surgical techniques, and intraoperative imaging, along with, radiation and systemic therapies that have improved patient outcomes. Sessions will feature the latest advances in state-of-the-art care for practicing clinicians treating patients with brain tumors. Cutting-edge topics in precision medicine, including genetic, translational, and clinical research will also be featured. Activity format will provide significant opportunity for interaction with expert faculty and other attendees with the aim of implementing new standards of patient care. Participants will leave with up-to-date, practical information which will have immediate clinical application, as well as technical and scientific background on the current state, and where the latest scientific advances may take the field.

Learning Objectives
Upon completion of this course, participants should be able to:

- Implement WHO classification of brain tumors and how molecular profiling affects diagnosis, MRI interpretation, prognosis and therapy of patients with gliomas
- List advances in the surgical treatment of brain tumors including the use of fiber tracking (DTI), awake craniotomy, brain mapping, laser thermocoagulation, and fluorescence IGS (image-guided surgery)
- Identify the role of immune system to defend against CNS malignancy including the new class of checkpoint inhibitors and the potential use of CAR-T cell therapy
- List the benefits and application of proton therapy for low-grade and malignant gliomas
- Identify the scientific rationale, practical application, and survival benefit of electric field therapy for malignant brain tumors
- Identify the rationale and potential for viral therapies for malignant gliomas
- List recent advances in anti-angiogenic therapy in the treatment of gliomas

Who Should Attend
This symposium is designed for neurosurgeons, neuro-oncologists, neurologists, radiologists, medical oncologists, radiation oncologists, primary care physicians, oncology nurses, and other healthcare professionals involved in the treatment of patients with brain tumors. Additionally, patients and their caregivers, family members, advocates and members of the public who may benefit from understanding current innovative approaches to brain tumor care are invited.

ACCREDITATION
In support of improving patient care, Penn Medicine is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.

A VIRTUAL MEETING AT PennMedicine.org/Abramson/Brain2020
DESIGNATION OF CREDIT

PHYSICIANS: Penn Medicine designates this live activity for a maximum of 6.75 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

NURSES: The program will award 6.75 contact hours.

PHYSICIAN ASSISTANTS: AAPA accepts certificates of participation for educational activities certified for AMA PRA Category 1 Credits™ from organizations accredited by ACCME or a recognized state medical society. PAs may receive a maximum of 6.75 Category 1 credits for completing this activity.

FACULTY
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Professor of Neurosurgery
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Activity Co-Directors
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Co-Director of Penn Brain Tumor Center
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Chief of Clinical Operations in the Department of Radiation Oncology
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Philadelphia, PA, USA

Suyash Mohan, MD, PDCC
Associate Professor of Radiology (Neuroradiology)
Perelman School of Medicine at the University of Pennsylvania/Penn Medicine
Philadelphia, PA, USA
**Guest Speakers**

**Susan M. Chang, MD**
Professor in Residence and Vice Chair of Neurological Surgery  
Lai Wan Kan Endowed Chair  
Director, Division of Neuro-Oncology  
Program Leader, UCSF Comprehensive Cancer Center  
Director, UCSF Neuro-Oncology Gordon Murray Caregiver Program  
Co-Director of the Sheri Sobrato Brisson Brain Cancer Survivorship Program  
Principal Investigator, Brain Tumor Research Center  
University of California San Francisco  
San Francisco, CA, USA

**Anthony S Fauci, MD**
Director, National Institute of Allergy and Infectious Diseases (NIAID)  
Chief, NIAID Laboratory of Immunoregulation  
National Institutes of Health, Bethesda, Maryland

**Alexandra Golby, MD**
Professor of Neurosurgery  
Professor of Radiology  
Director of Image-guided Neurosurgery  
Co-Director AMIGO (advanced multi-modality image-guided OR)  
Co-Director clinical fMRIHaley  
Distinguished Chair in the Neurosciences  
Harvard Medical School  
Boston, MA, USA

**Joseph C. Maroon, MD, FACS**
Clinical Professor, Heindl Scholar in Neuroscience  
University of Pittsburgh  
Pittsburgh, PA, USA

**Penn Speakers**

**Charu Aggarwal, MD, MPH**
Leslye M. Heisler Associate Professor for Lung Cancer Excellence  
Perelman School of Medicine at the University of Pennsylvania / Penn Medicine  
Philadelphia, Pennsylvania
Stephen Bagley, MD, MSCE  
Assistant Professor of Medicine (Hematology Oncology)  
Assistant Professor of Neurosurgery  
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Kathryn A. Davis, MD, MTR  
Assistant Professor of Neurology  
Medical Director, Epilepsy Monitoring Unit  
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Elizabeth Heisler, PA-C  
Neurosurgery  
Penn Medicine  
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Goldie A. Kurtz, MD  
Assistant Professor of Clinical Radiation Oncology  
Perelman School of Medicine at the University of Pennsylvania/Penn Medicine  
Philadelphia, PA, USA

John Y. K. Lee, MD, MSCE  
Professor of Neurosurgery and Otorhinolaryngology: Head and Neck Surgery  
Medical Director, Gamma Knife Center  
Clinical Director, Center for Precision Surgery  
Perelman School of Medicine at the University of Pennsylvania/Penn Medicine  
Philadelphia, PA, USA

Eleanor Miller, MSN, RN, OCN, CBCN  
Neuro Oncology  
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Tara C. Mitchell, MD
Associate Professor of Medicine (Hematology Oncology)
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Jennifer JD Morrissette, PhD
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Kathleen M. Murphy, MD
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Assistant Professor of Clinical Pathology and Laboratory Medicine
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Donald M. O’Rourke, MD
John Templeton, Jr., M.D. Professor in Neurosurgery
Director, GBM Translational Center of Excellence, Abramson Cancer Center
Director, Human Brain Tumor Tissue Bank
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Robert H Vonderheide, MD, DPhil  
Director, Abramson Cancer Center  
John H. Glick Abramson Cancer Center's Director Professor  
Vice Dean for Cancer Programs, PSOM  
Vice President for Cancer Programs, UPHS  
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Daniel Yoshor, MD  
Charles Harrison Frazier Professor of Neurosurgery  
Chair, Department of Neurosurgery  
Vice President, Clinical Integration and Innovation  
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PLANNING COMMITTEE MEMBERS

Cynthia L Griffio, MS, RN  
Director, Communications and Education  
Penn’s Abramson Cancer Center

Barbara Lopez  
Associate Director, Education and Outreach  
Penn’s Abramson Cancer Center
DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS
Staff in the Office of Continuing Medical and Interprofessional Education at Penn Medicine (Belinda Rose, CHCP and Vaughn Wurst) and Planning Committee Members (Cynthia Griffo, MS, RN and Barbara Lopez) have reported that they have no relevant financial relationships with any commercial interest related to the content of this educational activity.

Faculty Name
The following faculty and planning committee members have disclosed that they have no relevant financial relationship with any commercial interests related to the content of this educational activity.

- Steven Brem, MD
- Susan Chang, MD
- Arati Desai, MD
- Anthony S Fauci, MD
- Alexandra Golby, MD
- M. Sean Grady, MD
- Elizabeth Heisler, PA-C
- Goldie A. Kurtz, MD
- Robert A. Lustig, MD, FACR
- Joseph C. Maroon, MD, FACS
- Eleanor Miller, MSN, RN, OCN, CBCN
- Suyash Mohan, MD, PDCC
- Kathleen M. Murphy, MD
- Maclean Nasrallah, MD
- Amy A. Pruitt, MD
- Lawrence N. Shulman, MD
- Daniel Yoshor, MD

The following faculty and planning committee members have reported the relevant financial relationships with commercial interests related to the content of this educational activity.

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<tr>
<th>Faculty Name</th>
<th>Name of Commercial Interest</th>
<th>Relationship</th>
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<tbody>
<tr>
<td>Charu Aggarwal, MD, MPH</td>
<td>AstraZeneca, Aventis, Bristol-Myers Squibb, Eli Lilly, Genentech, Merck</td>
<td>Consultant</td>
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<td>Stephen Bagley, MD</td>
<td>Bayer, Novocure, Eli Lilly, Guardant Health, Incyte Novocure, Tesaro</td>
<td>Advisor/Review Panel, Grants/Research Support</td>
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<td>Kathryn A. Davis, MD</td>
<td>Eisai, GW Pharmaceuticals, Eton Pharmaceuticals, Eisai, Epilepsy Co, SK Life Sciences, Liva Nova, Pfizer</td>
<td>Advisor/Review Panel, Grants/Research Support</td>
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<td>John Y.K. Lee, MD</td>
<td>Medtronic, Inc.</td>
<td>Stock Shareholder</td>
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<tr>
<td>Tara C. Mitchell, MD</td>
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<td>BioRad, Novartis AG</td>
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<td>Donald O’Rourke, MD</td>
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Relevant Financial Relationships: Financial relationships are those relationships in which the individual benefits by receiving a salary, royalty, intellectual property rights, consulting fee, honoraria, ownership interest (e.g. stocks, stock options or other ownership interest, excluding diversified mutual funds), or other financial benefit. Financial benefits are usually associated with roles such as employment, management position, independent contractor (including contracted research), consulting, speaking and teaching, membership on advisory committees or review panels, board membership and other activities from which remuneration is received or expected.
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