"Therapeutic Targeting of Brain Cancer Stem Cells: A Personalized Medicine Approach to Treatment-Resistant Brain Cancer".
September 5, 2019
7:00 AM - 8:00 AM

Target Audience
This program has been designed for Neurological Surgery

Series Educational Objectives
After participating in this regularly scheduled series, participants should be able to:
1 Incorporate new and changing neurosurgical clinical practice guidelines into routine care.
2 Identify initiatives in improving quality of care delivery and newly implement or continue to implement quality of improvement measures in neurosurgical practice.
3 Conceptualize and describe the importance of health care policies, health system performance, and patient experiences in neurosurgery

Session Educational Objectives
After completing this educational activity, participants should be able to:
1 Discuss how intra-tumoral heterogeneity at the genomic and functional levels complicates our ability to find tractable therapeutic targets for patients with recurrent GBM
2 Review the application of new multi-omic profiling technology to the study of GBM modelling of recurrence, toward the definition of new therapeutic targets

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.

Designation of Credit
Physicians: Penn Medicine designates this live activity for a maximum of 1.00 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Nurses: This activity is for 1.00 contact hours.

Pharmacists: This activity is not approved for pharmacy contact hours

PAs: AAPA accepts certificates of participation for educational activities certified for AMA PRA Category 1 Credit™ from organizations accredited by ACCME or a recognized state medical society. PAs may receive a maximum of 1.00 Category 1 credits for completing this activity.

Acknowledgement of Commercial Support*
None

For more information, please contact
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Check your transcript online at https://upenn.cloud-cme.com
Disclosure of Relevant Financial Relationships and Unapproved Uses of Products

It is policy at Penn Medicine Office of Continuing Medical and Interprofessional Education for individuals who are in a position to control the content of an educational activity to disclose to the learners all relevant financial relationships that they have with any commercial interest that provide products or services that may be relevant to the content of this continuing education activity. For this purpose, we consider relationships of the person involved to include financial relationships of a spouse or partner.

The intent of this policy is to ensure that Penn CME/CE certified activities promote quality and safety, are effective in improving medical practice, are based on valid content, and are independent of control from commercial interests and free of commercial bias. Peer review of all content was conducted for all faculty presentations whose disclosure information was found to contain relationships that created a conflict of interest relevant to the topic of their presentation. In addition, all faculty were instructed to provide balanced, scientifically rigorous and evidence-based presentations.

The staff in the Office of Continuing Medical and Interprofessional Education (CME and IPCE), have disclosed that they have no relevant financial relationships with any commercial interests related to the content of this educational activity. Any peer reviewer with a potential conflict of interest will recuse themselves from the peer review process.

<table>
<thead>
<tr>
<th>Name of individual</th>
<th>Individual's role in activity</th>
<th>Name of commercial interest/Nature of relationship</th>
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</thead>
<tbody>
<tr>
<td>Eileen Maloney Wilensky, MSN, ACNP</td>
<td></td>
<td>Nothing to disclose</td>
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<tr>
<td>Susan Small, none</td>
<td>Activity Coordinator</td>
<td>Nothing to disclose</td>
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<tr>
<td>Gordon Baltuch, MD, PhD</td>
<td>Course Director</td>
<td>Nothing to disclose</td>
</tr>
<tr>
<td>Kalil Abdullah, MD</td>
<td>Other Planning Committee Member</td>
<td>Nothing to disclose</td>
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<tr>
<td>M. Sean Grady, MD</td>
<td>Other Planning Committee Member</td>
<td>Nothing to disclose</td>
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<tr>
<td>Eric Hudgins, MD, PhD</td>
<td>Other Planning Committee Member</td>
<td>Nothing to disclose</td>
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<tr>
<td>Matthew Piazza, MD</td>
<td>Other Planning Committee Member</td>
<td>Nothing to disclose</td>
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<tr>
<td>Sheila Singh, MD</td>
<td>Faculty</td>
<td>Board Member-Empirica Therapeutics-Brain Cancer Therapeutics</td>
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Relevant 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.