2017 INTERNATIONAL GAMMA KNIFE RESEARCH FOUNDATION MEETING

A New Era in Biologics and Radiosurgery
a CME-certified course

FRIDAY, JUNE 23, 2017

Jordan Medical Education Center
3400 Civic Center Blvd, Philadelphia, PA 19104

Register online at PennMedicine.org/IGKRF2017
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OVERVIEW

The fourth International Gamma Knife Research Foundation Meeting is designed to increase scientific knowledge-base and levels of evidence related to the use of Gamma Knife. An international faculty of pioneers and leaders will present and discuss clinical advances and innovative therapies.

WHO SHOULD ATTEND

This symposium is designed for neurosurgeons, radiation oncologists, medical oncologists, radiologists, neurotologists, medical physicists, researchers, business managers, resident/fellow physicians, nurses and physician assistants.

LOCATION AND PARKING

Jordan Medical Education Center, 3400 Civic Center Blvd, Philadelphia, PA, is located on the 5th Floor of the South Tower of the Perelman Center for Advanced Medicine. For public transportation, directions, and Parking information, go to PennMedicine.org/Perelman/visitor_info. Parking is available at the 3600 Civic Center Boulevard Parking Garage. Parking fees are not covered.

Most conference materials will be available online. Please bring your electronic device to view presentations in real time.

LODGING

Below are local hotels that offer Penn Rates for visitors. For other locations visit VisitPhilly.com/Hotels.

The Inn at Penn, a Hilton Hotel (.5 mile from Jordan Education Center and the location of the board meeting) 3600 Sansom St, Philadelphia, PA 19104 • theinnatpenn.com

Club Quarters Hotel Philadelphia (1.5 miles from Jordan Education Center)
1628 Chestnut Street, Philadelphia, PA 19103 • clubquartershotels.com/philadelphia

The Logan Philadelphia, Curio Collection by Hilton (1.5 miles from Jordan Education Center) One Logan Square, Philadelphia, PA 19103 • theloganhotel.com

Hotel reservation is separate from the meeting registration and is the responsibility of the participant.
At the completion of this course, participants should be able to:

- Explain current concepts of immunotherapy for primary and metastatic tumors in the brain.
- Discuss the role of radiosurgery as an immune modulator for treatment of intracranial neoplasm.
- Identify research opportunities in immunotherapy that can be conducted with Gamma Knife radiosurgery.

- Describe the current state of intracranial lesioning in the brain as a therapeutic option for patients with functional disorders and tumors - including focused ultrasound, laser thermocoagulation and Gamma Knife radiosurgery.
- Identify opportunities of synergy with invasive and noninvasive lesioning techniques.

- Define the biologic rationale of radiosurgery and clinical evidence in treatment of benign tumors: meningiomas and pituitary adenomas.
- Describe and review current radiosurgery options for vascular pathology including aneurysms, AVMs, and to propose potential future clinical trials.

- Describe imaging outcomes after Gamma Knife radiosurgery.
- Discuss the current role of informatics in medicine and identify the potential applications for outcome metrics as they relate to Gamma Knife radiosurgery.

- Identify the current clinical evidence as it relates to Gamma Knife ICON and its functionality.
- Distinguish the role of proton and photons in stereotactic radiosurgery as they relate to the introduction of the Gamma Knife ICON for radiosurgical treatment.
AGENDA  FRIDAY JUNE 23, 2017

7:00 am  Breakfast

7:30 am  Welcome and Introductions

7:45 am  SCIENTIFIC SESSION 1: OVERVIEW OF IMMUNOTHERAPY & POTENTIATION WITH RADIOSURGERY
Moderators: Jonathan Knisely, MD and Inga Grills, MD

Introduction to Immunotherapy – What Do I Need to Know?
Laura Johnson, PhD

RADVAX – Radiation and its Potentiation of Immunotherapy & Possible Mechanisms of Resistance
Amit Maity, MD

Response and Resistance to Radiation and Immune Checkpoint Blockade in Mice
Andy J. Minn, MD, PhD

Targeted/Immunotherapy & Molecular Profiling – State-of-the-art in Cancer Care
Manmeet Ahluwalia, MD

Interaction of Targeted/Immunotherapy & Gamma Knife Radiosurgery
Veronica Chiang, MD

Immune Checkpoint & Radiosurgery
Michael Lim, MD

10:00 am  Break

10:00 am  POSTER PRESENTATIONS ON MALIGNANT TUMORS & IMMUNOTHERAPY

10:30 am  SCIENTIFIC SESSION 2: OVERVIEW OF LESIONING IN 2017 – CURRENT STATUS & FUTURE
Moderators: Lilyana Angelov, MD & Anthony Kaufmann, MD

Lesioning with Focused Ultrasound
Howard Eisenberg, MD

Laser Thermocoagulation (LITT) for Primary Tumors
Shabbar Danish, MD

Laser Thermocoagulation (LITT) for Radiation Necrosis
Gene Barnett, MD

Gamma Knife Ablation Dose Rate & Implications for Lesioning
John Y. K. Lee, MD

11:30 am  Lunch

POSTER PRESENTATIONS ON LESIONING
12:30 pm  
SCIENTIFIC SESSION 3: OVERVIEW OF BENIGN TUMORS & VASCULAR  
Moderators: Goldie Kurtz, MD & Roberto Martinez-Alvarez, MD  
Biology of Stereotactic Radiosurgery for Benign Tumors  
Joshua Silverman, MD, PhD  
Meningioma Consortium Meeting Update  
Gelareh Zadeh, MD, PhD  
Overview of the Management of Pituitary Adenomas  
Jason Sheehan, MD, PhD  
Possible Clinical Trial for GK in Thrombosis of Residual Aneurysms S/P Coiling  
James McInerney, MD  
POSTER PRESENTATIONS ON BENIGN TUMOR RADIOSURGERY

1:30 pm  
SCIENTIFIC SESSION 4: AFTER GAMMA KNIFE – NOW WHAT?  
Moderators: Hideyuki Kano, MD & Heyoung McBride, MD  
Imaging Evaluation of Response to Therapy  
Deepak Sampathu, MD, PhD  
Penn Informatics, Software Platforms/Alternatives to Registries for Follow-Up  
Peter Gabriel, MD  
Liquid Tumor Biopsy as a Means of Following Response to Radiosurgery  
Jay Dorsey, MD, PhD  
Registry Update  
Douglas Kondziolka, MD  
POSTER PRESENTATION

2:30 pm  
Coffee break

CONCURRENT BREAKOUT SESSIONS:

2:45 pm - 5:00 pm  
HANDS ON TRAINING  
BASIC AND ADVANCED RADIOSURGERY PLANNING-MULTIPLE PLATFORMS  
Lilyana Angelov, MD  
Shabbar Danish, MD  
Proton: Myth Versus Reality  
Michelle Alonso-Basanta, MD, PhD  
Panel Discussion: Pros & Cons of ICON Technology  
L. Dade Lunsford, MD  
Josh Silverman, MD, PhD  
James Yu, MD  
3:45 pm  
IGKRF Clinical Trials Update – Prospective, Retrospective & Future  
Moderators: L. Dade Lunsford, MD & Ron Warnick, MD  
Bevacizumab for GBM  
Ajay Niranjan, MD, MBA  
5:00 pm  
Adjourn

FRIDAY EVENING  
Dinner Reception at the Barnes Foundation  
2025 Benjamin Franklin Parkway, Philadelphia, PA 19130  
The Barnes Foundation was established by Albert C. Barnes in 1922 to “promote the advancement of education and the appreciation of the fine arts and horticulture.”  
Dine and immerse yourself in one of the finest collections of post-impressionist and early modern paintings.
REGISTRATION

- Physicians: $300
- Fellows, nurses, physician assistants and other healthcare professionals: $100
- Medical students and residents: no charge with appropriate ID
- Registration fee includes breakfast, lunch, dinner Friday night for registrants, and access to course materials. Parking fees are not covered.
- For additional information please contact Jamie Burrell at jamie.burrell@uphs.upenn.edu.

Register online at PennMedicine.org/IGKRF2017

ACCREDITATION AND DESIGNATION OF CREDIT

ACCREDITATION
The Perelman School of Medicine at the University of Pennsylvania is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

DESIGNATION OF CREDIT
The Perelman School of Medicine at the University of Pennsylvania designates this live activity for a maximum of 7.75 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

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 7.75 Category 1 credits for completing this activity.

DISCLOSURES
The Perelman School of Medicine at the University of Pennsylvania, Office of Continuing Medical Education, adheres to the ACCME Standards for Commercial Support. Faculty disclosure information will be made available in the conference materials and syllabi. Faculty members are also expected to disclose to participants any discussion of off-label and/or investigational use of pharmaceutical products or devices within their presentations.

CANCELLATION POLICY
The University reserves the right to cancel or postpone any course due to unforeseen circumstances. In the event of cancellation or postponement, the University will notify all pre-registrants but is not responsible for any related costs or expenses to participants, including cancellation fees assessed by hotels, airlines and travel agencies. In order to process refunds for conference withdrawals, we must receive cancellation in writing by May 2, 2017.

SERVICES FOR THE DISABLED
If special arrangements are required for an individual with a disability to attend this meeting, please contact Jamie Burrell at jamie.burrell@uphs.upenn.edu., no later than May 5, 2017.

NONDISCRIMINATION STATEMENT
The University of Pennsylvania values diversity and seeks talented students, faculty and staff from diverse backgrounds. The University of Pennsylvania does not discriminate on the basis of race, color, sex, sexual orientation, gender identity, religion, creed, national or ethnic origin, citizenship status, age, disability, veteran status or any other legally protected class status in the administration of its admissions, financial aid, educational or athletic programs, or other University administered programs or in its employment practices. Questions or complaints regarding this policy should be directed to the Executive Director of the Office of Affirmative Action and Equal Opportunity Programs, Sansom Place East, 3600 Chestnut Street, Suite 228, Philadelphia, PA 19104-6106; or (215) 898-6993 (Voice).
MEETING FACULTY

COURSE CHAIRS

John Y. K. Lee, MD  
Associate Professor, Neurosurgery  
Perelman School of Medicine at the University of Pennsylvania

Michelle Alonso-Basanta, MD, PhD  
Helene Blum Assistant Professor, Radiation Oncology  
Perelman School of Medicine at the University of Pennsylvania

MEETING FACULTY

Manmeet Ahluwalia, MD  
Dean and Diane Miller Family Endowed Chair in NeuroOncology, Cleveland Clinic

Zarina Ali, MD  
Assistant Professor, Neurosurgery  
Perelman School of Medicine at the University of Pennsylvania

Lilyana Angelov, MD  
Head of the Section of Spinal Radiosurgery, Neurological Surgery, Cleveland Clinic

Gene Barnett, MD  
Director, Burkhardt Brain Tumor and Neuro-Oncology Center and Cleveland Clinic Gamma Knife Center

Veronica Chiang, MD  
Associate Professor, Neurosurgery and of Therapeutic Radiology, Yale University

Shabbar Danish, MD  
Chief, Neurosurgical Oncology, Robert Wood Johnson Medical School, Rutgers University

Jay Dorsey, MD  
Assistant Professor, Radiation Oncology, Perelman School of Medicine at the University of Pennsylvania

Howard Eisenberg, MD  
R.K. Thompson Professor and Chair, Neurosurgery, University of Maryland School of Medicine

Peter Gabriel, MD  
Assistant Professor, Radiation Oncology  
Chief Oncology Informatics Officer, Perelman School of Medicine at the University of Pennsylvania

Inga Grills, MD  
Associate Professor, Radiation Oncology, Oakland University Wm Beaumont SOM

Laura Johnson, PhD  
Adjunct Assistant Professor, Pathology and Laboratory Medicine, Perelman School of Medicine at the University of Pennsylvania

Hideyuki Kano, MD  
Research Associate Professor, Neurological Surgery, University of Pittsburgh

Anthony Kaufmann, MD  
Associate Professor, Neurosurgery  
University of Manitoba, Canada

Jonathan Knisely, MD  
Associate Professor, Radiation Oncology, Hofstra Northwell School of Medicine

Douglas Kondziolka, MD  
Professor, Neurosurgery and Radiation Oncology  
NYU Langone Medical Center

Goldie Kurtz, MD  
Assistant Professor, Radiation Oncology, Perelman School of Medicine at the University of Pennsylvania

Michael Lim, MD  
Associate Professor, Neurosurgery, Johns Hopkins University

L. Dade Lunsford, MD  
Lars Lekell Professor and Distinguished Professor, Neurological Surgery, University of Pittsburgh

Amit Maity, MD  
Associate Professor, Radiation Oncology, Perelman School of Medicine at the University of Pennsylvania

Heyoung McBride, MD  
Medical Director, Radiation Oncology, Lovelace Health System

Roberto Martinez Alvarez, MD, PhD  
Neurosurgeon, Ruber International Hospital, Madrid, Spain

Andy Minn, MD, PhD  
Assistant Professor, Radiation Oncology, Perelman School of Medicine at the University of Pennsylvania

James McInerney, MD  
Professor, Neurosurgery, Penn State Health

Ajay Niranjan, MD, MBA  
Professor, Neurological Surgery, University of Pittsburgh

Deepak Sampathu, MD, PhD  
Assistant Professor, Clinical Radiology, Perelman School of Medicine at the University of Pennsylvania

Jason Sheehan, MD, PhD  
Professor, Neurological Surgery, University of Virginia Health System

Joshua Silverman, MD, PhD  
Assistant Professor, Radiation Oncology and Neurosurgery, NYU Langone Medical Center

Ronald Warnick, MD  
Professor, Neurosurgery and Radiation Oncology, University of Cincinnati College of Medicine

James Yu, MD  
Associate Professor, Therapeutic Radiology, Yale University

Gelareh Zadeh, MD, PhD  
Associate Professor, Surgery, University of Toronto
CALL FOR ABSTRACTS

ABSTRACTS FOR POSTER PRESENTATION NOW BEING ACCEPTED THROUGH MARCH 31, 2017.

To submit an abstract visit PennMedicine.org/IGKRF2017

Poster Presentations Notification of acceptance and presentation details will be sent on or before April 21, 2017.

Awards will be presented for the best overall abstract and for young investigators (under 30 years).

ABSTRACT REQUIREMENTS

- Deadline for Submission: March 31, 2017
- 2500 characters limit
- Must include introduction, methods, results and conclusion