Going Global

The North American Gamma Knife Consortium = The International Gamma Knife Research Foundation

2015 Meeting
June 26 – 28, 2015
Cleveland, OH

Meeting Directors
Gene Barnett, MD
Jason Sheehan, MD, PhD

In Joint Providership
Cleveland Clinic
Description:
The second North American Gamma Knife Consortium Meeting and the Gamma Knife Perfexion™ Upgrade Course will be held in Cleveland from June 26-28, 2015. A follow-up to the inaugural 2011 meeting held in Pittsburgh, it is designed to increase scientific knowledge-base and levels of evidence related to the use of the Leksell Gamma Knife. An international faculty of pioneers and leaders will present and discuss their clinical advances and innovative therapies.

In order to expand our international relationships, the North American Gamma Knife Consortium (NAGKC) has evolved to become the International Gamma Knife Research Foundation (IGKRF).

Meeting Highlights:
• One-day Gamma Knife Perfexion Upgrade Training Course
• Complimentary and Competing Technologies
• Controversies
• Complex Cases
• Clinical Trials Update
• The Registry Project

Key Topics:
• Brain Metastases
• Gliomas
• Pituitary Tumors
• Skull-base Meningiomas
• Vestibular Schwannomas
• Psychiatric Indications
• Trigeminal and Other Neuralgias
• Radiation Necrosis
• AVMs
• Staged Radiosurgery Treatments for Brain Metastases
• Advanced Neuro-Imaging
• Targeted Chemotherapy and SRS
• CT and MRI Guided Radiosurgery Procedures
• Multi-Session Radiosurgery
• Craniopharyngiomas

Target Audience:
Neurosurgeons, Radiation Oncologists, Radiologists, Neurotologists, Medical Physicists, Researchers, Business Managers, Resident/Fellow Physicians, Nurses and Physician Assistants

Call For Abstracts:
Abstracts for poster presentation now being accepted through April 15, 2015. Posters will be on display throughout the meeting on June 27 & 28. Notification of acceptance, presentation details and poster size will be sent on or before May 15, 2015. Awards will be presented for the best overall abstract and for young investigators (under 30 years).

Objectives:
1. Explain the current evidenced based medicine approaches for radiosurgery in brain metastasis, gliomas, and parasellar tumor patients
2. Describe commonly employed radiosurgical approaches for patients with brain metastasis, gliomas, arteriovenous malformations and parasellar tumors that go beyond those rigorously supported by evidence based medicine
3. Discuss and design methods to achieve a more scientific assessment of currently utilized radiosurgical approaches
4. Distinguish clinical, translational, and basic science advancements that may yield answers for currently unresolved questions in Gamma Knife radiosurgery.
5. Identify modern neuro-imaging techniques for detecting radiosurgical induced complications.
6. Recognize the full range of radiosurgical complications, methods to detect and treat complications, and techniques that can be employed to lessen or avoid complications.
7. Apply cutting edge approaches in stereotactic radiosurgery

Web address: www.ccfcme.org/NAGKC15
June 27-28 Gamma Knife Consortium Meeting Location
Cleveland Public Library
325 Superior Ave E, Cleveland, OH 44114

June 26 Gamma Knife Perfexion Upgrade Course Location
Cleveland Clinic Gamma Knife Center, Cleveland, OH

Lodging & Parking
Hyatt Regency Cleveland Hotel at the Arcade
420 East Superior Ave., Cleveland, Ohio, USA 44114
Telephone: 216.575.1234 or 1.888.421.1442

Visit the hotel link at www.ccfmce.org/NAGKC15 to reserve your room online or call the hotel directly at 216.575.1234 or 1.888.421.1442 and ask for the Cleveland Clinic NAGKC group rate of $149 plus 16.5% tax, per night. Hotel reservations are separate from the meeting registration and are the responsibility of the participant. The cut-off date for the special rate is Friday, June 5, 2015 (pending availability). The Hyatt Regency Cleveland Hotel is located 12 miles NE from Cleveland Hopkins International Airport.

Valet parking is available at the Hyatt Hotel for $18/day and $24/overnight.

Registration/Refund Policy
Registration – Register by May 15 to receive the early registration rate. Register at www.ccfmce.org/NAGKC15. Online registration deadline is Tuesday, June 23, 2015 at 5:00 PM EST. To register after June 23, please contact Martha Tobin at 216.445.3449 or tobinm@ccf.org.

Cancellation – In case of cancellation, a $50 cancellation fee will be deducted from your refund. Written notification of your cancellation is required in order to process your refund. NO REFUNDS WILL BE ISSUED AFTER June 23.

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 and the North American Gamma Knife Consortium. 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 18.25 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.

Faculty Disclosure
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.

Special Needs
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 Monet Smith at 216.444.9380 at least two weeks prior to the activity.

For additional information: Ms. Martha Tobin – 800.223.2273 ext. 53449 / (e-mail) tobinm@ccf.org / (fax) 216.445.4527

Gamma Knife Perfexion Upgrade Course
Friday, June 26, 2015

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<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Faculty</th>
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<tbody>
<tr>
<td>10:00am</td>
<td>Registration</td>
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<tr>
<td>10:30</td>
<td>Welcome and Introductions</td>
<td>Gene Barnett</td>
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<tr>
<td>10:45</td>
<td>Evolution of Gamma Knife to Perfexion™ Features and Benefits</td>
<td>Gene Barnett</td>
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<tr>
<td>11:30</td>
<td>Stereotactic Frame – Changes to Application and Use</td>
<td>Gene Barnett</td>
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<tr>
<td>11:45</td>
<td>Perfexion™ Planning Strategy</td>
<td>Gene Barnett</td>
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<tr>
<td>12:00</td>
<td>GP PFX Software</td>
<td>Susan Lohman</td>
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<td>12:30pm</td>
<td>Lunch Break</td>
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<tr>
<td>12:45</td>
<td>Hands-On Perfexion™ Safety</td>
<td>Gennady Neyman</td>
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<td>Clearance Procedures</td>
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<td>Quality Assurance</td>
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<td>Emergency Procedures</td>
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<tr>
<td>1:45</td>
<td>TPS Administration</td>
<td>Gennady Neyman</td>
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<tr>
<td>2:15</td>
<td>“Mock” Treatment According to Plan/Treatment Demonstration (Actual Case)</td>
<td>Gennady Neyman</td>
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<tr>
<td>2:45</td>
<td>Use of Non Stereotactic Images: Pre-plan, Follow up and Retreatment</td>
<td>Susan Lohman</td>
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<tr>
<td>3:30</td>
<td>GK10 Optional Module</td>
<td>Susan Lohman</td>
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<tr>
<td>4:00</td>
<td>Case Planning</td>
<td>Faculty</td>
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<tr>
<td>6:00</td>
<td>Adjourn</td>
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</tbody>
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Meeting Faculty

**Meeting Directors**

**GENE BARNETT, MD**  
Director, Rose Ella Burkhardt Brain Tumor and Neuro-Oncology Center,  
Vice Chair, Neurological Surgery  
Cleveland Clinic

**JASON SHEEHAN, MD, PhD**  
Professor of Neurological Surgery, Professor of Radiation Oncology, Professor of Neuroscience,  
Gamma Knife Center Co-Director, Riverside-UVa  
Gamma Knife Co-Director  
University of Virginia

**Scientific Program Committee**

**MANMEET AHLUWALIA, MD**  
Director, Brain Metastasis Program, Rose Ella Burkhardt Brain Tumor and Neuro-Oncology Center  
Cleveland Clinic

**SAM CHAO, MD**  
Section Head, Center for Cerebral Radiation Necrosis  
Cleveland Clinic

**JOHN SUH, MD**  
Chairman, Radiation Oncology  
Cleveland Clinic

**North American Gamma Knife Consortium Chairman**

**L. DADE LUNSFORD, MD**  
Lars Lekell Professor and Distinguished Professor, Director, Center for Image-Guided Neurosurgery, University of Pittsburgh Medical Center

**Invited Speakers**

**MICHELLE ALONSO-BASANTA, MD, PhD**  
Helene Blum Assistant Professor  
University of Pennsylvania

**LILYANA ANGELOV, MD**  
Head, Section of Spine Tumors  
Rose Ella Burkhardt Brain Tumor and Neuro-Oncology Center  
Cleveland Clinic

**IGOR BARANI, MD**  
Clinical Research Director and Vice Chair,  
Department of Radiation Oncology  
University of California San Francisco

**VERONICA CHIANG, MD**  
Associate Professor of Neurosurgery and of Therapeutic Radiology  
Yale University

**JOHN FLICKINGER, MD**  
Professor of Radiation Oncology and Neurological Surgery  
University of Pittsburgh Medical Center

**HIDEYUKI KANO, MD, PhD**  
Research Assistant Professor of Neurological Surgery, Director of Clinical Research at the Center for Image-Guided Neurosurgery  
University of Pittsburgh Medical Center

**ANTHONY KAUFMANN, MD**  
Associate Professor, Section of Neurosurgery, Director, Center for Cranial Nerve Disorders,  
Co-Director, Centre for Cerebrovascular Disease,  
Co-Director, Winnipeg Centre for Gamma Knife Surgery, Supervisor, Intra-Operative Monitoring Program  
University of Manitoba

**JONATHAN KNISELY, MD**  
Associate Professor, Hofstra North Shore-LIJ  
School of Medicine  
North Shore University Hospital

**JUSTIN CHENG-CHIA LEE, MD**  
Attending Physician, Department of Surgery  
Taipei Veteran General Hospital

**SUSAN LOHMAN, RN, CNOR**  
Elektra Instruments

**SIMON LO, MD**  
Associate Professor, Radiation Oncology, CWRU  
School of Medicine  
University Hospitals of Cleveland

**ROBERTO MARTINEZ, MD**  
Department of Functional Neurosurgery and Gamma Knife Radiosurgery, Ruber International Hospital, Madrid, Spain

**MICHAEL MCDERMOTT, MD**  
Co-Director, Gamma Knife Radiosurgery  
University of Pittsburgh Medical Center

**GENNADY NEYMAN, PhD**  
Staff, Radiation Oncology  
Cleveland Clinic

**AJAY NIRANJAN, MD**  
Director, UPMC-Brain Mapping Center (MEG)  
University of Pittsburgh Medical Center

**DAVID HC PAN, MD**  
Professor of Surgery  
Taipei Medical University Shuang

**ANDREW PARSA, MD, PhD**  
Michael J. Marchese Chair in Neurosurgery, Professor in Neurological Surgery and Neurology  
Northwestern

**DANIEL PIEPER, MD**  
Director & Chief of Skullbase Surgery, Beaumont Hospital  
Michigan Head and Spine Institute

**STEVEN RASMUSSEN, MD**  
Mary E. Zucker Professor of Psychiatry and Human Behavior, Chair of Psychiatry and Human Behavior  
Brown University

**Call For Abstracts**

Abstracts for poster presentation now being accepted through April 15, 2015. Posters will be on display throughout the meeting on June 27 & 28. Notification of acceptance, presentation details and poster size will be sent on or before May 15, 2015. Awards will be presented for the best overall abstract and for young investigators (under 30 years).

**Abstract Requirements**

- Deadline for Submission: April 15, 2015. One entry per presenter.
- 250 word limit. Include an Introduction, Methods, Results, and Conclusion
- Send via email to tobinmi@ccf.org

Web address: www.ccfcme.org/NAGKC15
North American Gamma Knife Consortium  
Going Global  
June 27-28, 2015

Proposed Agenda & Invited Speakers

Friday, June 26, 2015

12:45-6:00 pm  
**Gamma Knife Perfexion Upgrade Course**  
*at Cleveland Clinic GK Center*

6:30-9:00 pm  
Welcome Reception/Early Registration  
*at Hyatt Regency Hotel*

Saturday, June 27, 2015

8:00 am  
Welcome/Introductions:  
**Gene Barnett & Jason Sheehan**

8:15  
**Brain Metastases**  
*John Suh*

8:40  
**Gliomas**  
*Ajay Niranjan*

9:05  
**Pituitary Tumors**  
*John Flickinger*

9:30  
**Skull Base Meningiomas**  
*Michael McDermott*

9:55  
Break/Exhibits

10:20  
**Vestibular Schwannomas**  
*Jonathan Knisely*

10:45  
**Psychiatric Indications**  
*Steven Rasmussen*

11:10  
**Trigeminal and other Neuralgias**  
*Anthony Kaufmann*

11:35  
**Radiation Necrosis**  
*Veronica Chiang*

12:00  
Lunch Break

1:00 pm  
AVMs  
*Rob Martinez*

1:20  
**Staged Radiosurgery Treatments for Brain Metastases**  
*Lilyana Angelov*

1:35  
**Advanced Neuro-Imaging**  
*Volodymyr Statsevych*

2:00  
**Targeted Therapy and SRS**  
*Manmeet Ahluwalia*

2:25  
**CT and MRI Guided Radiosurgery Procedures**  
*Simon Lo*

2:50  
Break/Exhibits

3:10  
**Multi-Session Radiosurgery**  
*Igor Barani*

3:30  
**Craniopharyngiomas**  
*David HC Pan*

3:45  
**Clinical Trials**  
Session Chairs:  
**Just in Lee & Rafael Rodriguez-Mercado**

A.  
**Retrospective Trials – Update of Datasets/Publications**

1.  
**Hideyuki Kano:** Chondrosarcoma/Pineal region tumors/Repeat SRS for AVMs/Glioschvanomaganglioma Neuralgia

2.  
**Jason Sheehan:** Facial Schwannoma/Hemangiopericytoma/Falk/convexity meningioma edema/AVM radiosurgery grading scale

3.  
**Ajay Niranjan:** Craniopharyngioma

4.  
**Justin Lee:** CS hemangioma

B.  
**Prospective Trials – Accrual, Issues, Centers, Proposed Trials**

1.  
**Ajay Niranjan** – 12-02: Multicenter Phase II Study of border zone SR with Bevacizumab chemotherapy in patients with recurrent or progressive glioblastoma multiforme and 14:01: Minocycline for ARE in brain metastasis

2.  
**Igor Barani** – 12-01: Randomized controlled study of outcomes inpatients with five or more brain metastases

3.  
**Hideyuki Kano** – 13-02: Staged stereotactic radiosurgery followed by embolization for large volume AVMs

4.  
**Manmeet Ahluwalia** – A Phase I trial of Afinib for SRS brain mets for patients with HER2 positive breast cancer and EGFR positive lung cancer with 1:4 brain metastases

5.  
**Daniel Pieper** – Beaumont proposal

5:00  
**Registry Report**  
*Joshua Silverman*

5:30  
Adjourn

5:30-7:00  
NAGKC Board Meeting at the Hyatt Regency Hotel

7:00-9:30  
Cocktails and Dinner at Cleveland Museum of Art

Sunday, June 28, 2015

8:15-9:15 am  
**Complimentary and Competing Technologies**

8:15-8:30  
Advances in SRS Software and Adaptive Hybrid Surgery – **Andrew Parsa**

8:30-8:45  
Advanced LINAC SRS – **Sam Chao**

8:45-9:00  
Laser Ablation – **Andrew Sloan**

9:00-9:15  
MR guided FUS – **Jason Sheehan**

9:15-9:55  
**Controversies: Protons vs Photons for SRS**

9:15-9:30  
Protons for SRS – **Michelle Alonso-Basanta**

9:30-9:45  
Photons for SRS – **Jonathan Knisely**

9:45-9:50  
**Michelle Alonso-Basanta** rebuttal

9:50-9:55  
**Jonathan Knisely** rebuttal

9:55-10:35  
**Controversies: Surgery vs Radiosurgery for Brain Mets**

9:55-10:10  
Surgery – **Michael Vogelbaum**

10:10-10:25  
Radiosurgery – **Michael Schulder**

10:25-10:30  
**Michael Vogelbaum** rebuttal

10:30-10:35  
**Michael Schulder** rebuttal

10:35  
Break/Exhibits

10:55  
Complex Cases Panel Discussion  
Moderators –  
**Gene Barnett, Jason Sheehan**

11:45  
NAGKC Becomes IGKRF – **L. Dade Lunsford**

12:00  
Meeting Adjourn
Registration Form

The North American Gamma Knife Consortium
Going Global

June 26 – 28, 2015
Cleveland, OH

Register online at www.ccfcme.org/NAGKC15

(Please type or print clearly)

Name ____________________________________________________________________  Degree_________________
First                    M.I. Last

Company  ________________________________________________________________________________________

Address  _________________________________________________________________________________________

City, State, Zip Code, Country  _______________________________________________________________________

Phone # _______________________________________ Fax # ____________________________________________

E-mail ______________________________________________________ Specialty ____________________________

Meeting Registration Fee (Check appropriate box)

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<thead>
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<th>Course Code</th>
<th>On or Before May 15</th>
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| June 26 Gamma Knife Perfexion Upgrade Course | $1000 | $1250 |

*Letter from program chairman or department chairman must accompany Resident/Fellow registration.

Fee includes registration materials, continental breakfasts, lunches, and the June 26 & 27 receptions.

☐ I require a vegetarian lunch

Make check payable: The Cleveland Clinic Educational Foundation

Mailing address:
The Cleveland Clinic Educational Foundation
PO Box 931653, Cleveland, OH 44193-1082

Cleveland Clinic recognizes the importance of protecting the privacy and security of information provided to us. Therefore, we are no longer requesting credit card data in writing, including on registration forms or faxes. If you would like to register using a credit card please go to www.ccfcme.org/NAGKC15 or call 216.448.0777 where it will be handled directly by a certified processor.

For questions concerning registering, email cmeregistration@ccf.org or call 216.448.0777.