



Gamma Knife® Perfexion™ Radiosurgery Training Course

Cleveland, Ohio



2013 Course Dates

Introductory Courses

- March 4–8
- May 20–24
- August 19–23
- October 7–11
- December 9–13

Upgrade Courses

- March 6–8
- May 22–24
- August 21–23
- October 9–11
- December 11–13

Visit our website at:

<http://clevelandclinic.org/gammaknife>



Learning Objectives

1. Identify the basic principles and biophysics of Gamma Knife® radiosurgery and how they apply to day-to-day patient treatment.
2. Review the clinical indications, parameters of treatment, and outcomes of Gamma Knife® radiosurgery.
3. Recognize radiation safety issues and principles, as well as become familiar with the emergency procedures as they pertain to the Gamma Knife® Perfexion™.
4. Apply the principles of stereotactic frame application, imaging, and use of Gamma Knife® Perfexion™ treatment hardware.

Course Descriptions

Introductory Course

This education experience provides an opportunity to expand the practitioner's range of treatment options to include this precise form of stereotactic radiosurgery. The course will provide Leksell GammaPlan® PFX™ hands-on sessions with experts experienced in Gamma Knife® radiosurgery. At the conclusion of the week, participants will receive a certificate of course attendance.

Introductory Course Target Audience

Neurosurgeons, medical physicists, radiation oncologists, neurotology-gologists, dosimetrists, radiation therapists, and nurses who have little or no experience on the Gamma Knife® Perfexion™.

Upgrade Course

This educational experience provides an opportunity to extend the experienced Gamma Knife® practitioner's range of treatment options to include this more advanced form of stereotactic radiosurgery. Participants will become familiar with the new features of Gamma Knife® Perfexion™ when upgrading from previous models. At the conclusion of the three days, participants will receive a certificate of course attendance.

Upgrade Course Target Audience

Neurosurgeons, medical physicists, radiation oncologists, neurotology-gologists and other health care professionals EXPERIENCED IN USING THE GAMMA KNIFE®.



Accreditation For Physicians

The Cleveland Clinic Foundation Center for Continuing Education is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

The Cleveland Clinic Foundation Center for Continuing Education designates this live activity for a maximum of 36.25 *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 Council on Continuing Medical Education for Category 2 credit.



Program Directors

Gene H. Barnett, MD

Director, Gamma Knife Center

Professor and Director, Cleveland Clinic Rose Ella Burkhardt Brain Tumor and Neuro-Oncology Center

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Gennady Neyman, PhD

Cleveland Clinic Lead Gamma Knife Physicist

Program Co-Director, Gamma Knife Center

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.



Monday

Group	Time	Presentation
Intro	8:45	Welcome and Introductions
Intro	9:00	Evolution of Gamma Knife to Perfexion™ Features and Benefits
Intro	9:45	Stereotactic Frame – Application and Use
Intro	10:30	Break
Intro	10:45	Basic Principles of Radiosurgery
Intro	11:30	Radiosurgery for Gliomas
Intro	12:15	Lunch at IC North Coast Café Restaurant
Intro	1:30	Radiosurgery for Brain Mets
Intro	2:30	Radiosurgery Physics
Intro	3:15	Break
Intro	3:30	Functional Neurosurgery
Intro	4:15	Perfexion™ Planning Strategy
Intro	5:15	Adjourn
Intro	6:00 Van pick up at hotel	Group Dinner at Local Restaurant

Tuesday

Group	Time	Presentation
Intro	7:45	Basic Radiobiology
Intro	8:30	Current Indications: Clinical Evidence and Utilization
Intro	9:15	Gamma Knife Radiosurgery and Benign Tumors
Intro	10:15	Break
Intro	10:30	Hands-on Perfexion™ Technical Description: Technical Description (lecture) Radiation Unit Patient Positioning System Control System
Intro	11:30	Calibration and Practical Physics
Intro	12:15	Lunch
Intro	12:30	Planning Demonstration
Intro	2:00	“Mock” Treatment According to Plan/Treatment Demonstration (Actual Case)
Intro	2:30	Hands-on Leksell GammaPlan PFX and Perfexion™ Treatment Planning Treatment Workflow
Intro	3:30	Break
Intro	3:45	Hands-on Leksell GammaPlan PFX and Perfexion™ Treatment Planning Treatment Workflow
	5:00	Adjourn



Wednesday

PARALLEL SESSION	Upgrade	7:35	Welcome and Introductions – S7 Conf Room
	Upgrade	7:55	Evolution of Gamma Knife to Perfexion™ Features and Benefits
	Upgrade	8:40	Stereotactic Frame – Changes to Application and Use
	Upgrade	8:55	Perfexion™ Planning Strategy
	Upgrade	9:05	LGP software
	Upgrade	9:30	Return to GK Center
	Intro	7:30	Frame Application and Frame Geometry
	Intro	7:45	Hands-on Leksell GammaPlan PFX and Perfexion™ Treatment Planning Treatment Workflow
	Both	9:30	Break

Group	Time	Presentation
Both	9:45	Hands-On Perfexion™ Safety Clearance Procedures Quality Assurance Emergency Procedures
Both	10:45	Hands-on Leksell GammaPlan PFX and Perfexion™ Treatment Planning Treatment Workflow
Both	11:30	TPS Administration
Both	12:00	Working Lunch Hands-on Leksell GammaPlan PFX and Perfexion™ Treatment Planning Treatment Workflow
Both	2:00	Break
Both	2:15	Radiation Safety & NRC Regulations
Both	3:00	Use of Non Stereotactic Images: Pre-plan, Follow up and Retreatment
Both	3:45	Tour of Department of Radiation Oncology or van escorted Tour of Harvey Cushing grave & city tour
Both	5:00	Adjourn

Thursday

Group	Time	Presentation
Both	8:30	Hands-on Leksell GammaPlan PFX and Perfexion™ Treatment Planning Treatment Workflow
Both	10:30	Break
Both	10:45	Stereotactic Image Distortion and Historical Errors
Both	11:30	GK10 Optional Module
Both	12:00	Lunch
Both	12:30	radiosurgery for AVMs
Both	1:30	AVM Planning
Both	2:00	Nursing Issues
Both	2:45	Break
Both	3:00	Hands-on Leksell GammaPlan PFX and Perfexion™ Treatment Planning Treatment Workflow
Both	5:15	Adjourn
Both	6:00	Dinner at Local Restaurant
Van pick up at hotel		

Friday

Both	7:45	Gamma Knife System Nuances
Both	8:15	Coding and Reimbursement – or – Commissioning
Both	9:00	Break
Both	9:15	Hands-on Leksell GammaPlan PFX and Perfexion™ Treatment Planning Treatment Workflow Working Lunch
Both	12:00	Course Review
Both	1:00	Course Evaluation and Presentation of Certificates
Both	1:30	Adjourn

Leksell Gamma Knife® PERFEXION™ Training Course

For Office Use Only: 02010014
 Fee: _____ M.O.P. _____
 Date: _____ CXL/Fee: _____

I am registering for:

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**Register and pay online at
ccfcmc.org/gammaknife13**

First Name: _____ Last Name: _____ Degree: _____

Hospital & Department: _____ Specialty: _____

Mailing Address: _____

City, State, Zip: _____

Phone : _____ *Cell Phone: _____

Fax: _____

*E-Mail: _____

*Medical Specialty: _____

*Level of Experience with Conventional Stereotactic
Techniques

- None Some Experienced

*Stereotactic Radiosurgery

- None Some Experienced

*Date Perfexion™ was installed _____

*or scheduled to be installed _____

PLEASE NOTE: Sections with an * must be completed.

Tuition

Leksell Gamma Knife® PERFEXION™ Introductory Course (5 days)

- \$6,000 (For physicians and physicists. Includes course syllabus, breakfast & lunch each day, and two dinners.)
- \$3,000 (For radiation therapists and nurses. Includes course syllabus, breakfast & lunch each day, and two dinners.)

Leksell Gamma Knife® PERFEXION™ Upgrade Course (3 days)

- \$3,000 (Includes course syllabus, breakfast & lunch each day, and one dinner.)

Attendance at this Gamma Knife® Perfexion™ Radio-surgery course does not imply or confirm competency to perform stereotactic radiosurgery. A certificate of attendance will be awarded to those who participate in ALL of the lectures and hands-on practice.

This course does NOT provide training on Gamma Knife® B or C models.

*Acknowledgement of the above statements:

X _____
 (Must be signed to be accepted into the course.)

Cancellation policy prior to the course commencement:

Up to 21 days, \$500; from 21-14 days, 25% of the fee.

Up to 14-7 days, 50% refund prior to commencement of the course.

No refunds after 7 days but registration is transferable.

Minimum of five attendees required per course.

We recommend that you **do not make travel arrangements** until your registration is confirmed.

Payment: \$500 deposit is required at the time of registration.

Tuition must be paid in full prior to the start of the course.

Make checks payable to: Cleveland Clinic Educational Foundation

Registration payment by check should be mailed with this form to:

Cleveland Clinic Educational Foundation
 P.O. Box 931653
 Cleveland, OH 44193-1082

Payment Options – please check box

- Credit Card Wire Transfer Check

To pay by wire transfer, please contact Martha Tobin at 216.445.3449 or tobinm@ccf.org

This form may be faxed to: 216.445.9999

Questions? Contact Martha Tobin by phone, 216.445.3449, 800.223.2273, extension 53449 or by e-mail tobinm@ccf.org

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 Martha Tobin at 216.444.9380 at least two weeks prior to the activity.