

Introduction to Cranial Neurosurgery and Advanced Radiosurgery

Cleveland Clinic Gamma Knife Center

Cleveland, Ohio



Radiosurgery with Cone Beam C.T.

February 12-16

April 9-13

May 7-11

June 25-29

October 8-12

December 3-7

Radiosurgery

August 20-24

Upgrade Courses For Those With Prior Radiosurgery Training

February 14-15

April 11-13

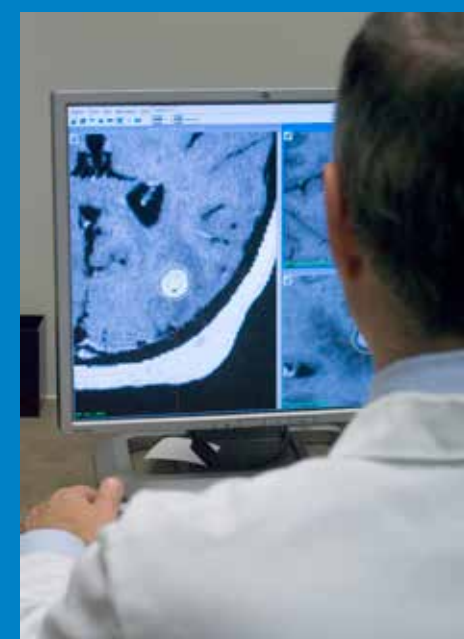
May 9-11

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Learning Objectives

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

Course Location

The radiosurgery course is held in the Cleveland Clinic Gamma Knife Center located in the Taussig Cancer Center, Room CA- LL-63.

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 hands-on sessions with experts experienced in radiosurgery. At the conclusion of the week, participants will receive a certificate of course attendance.

Introductory Course Target Audience

Neurosurgeons, medical physicists, radiation oncologists, neurotologyngolists, dosimetrists, radiation therapists who have little or no experience with radiosurgery.

Upgrade Course

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

Upgrade Course Target Audience

Neurosurgeons, medical physicists, radiation oncologists, neurotologyngolists and other health care professionals EXPERIENCED IN RADIOSURGERY.



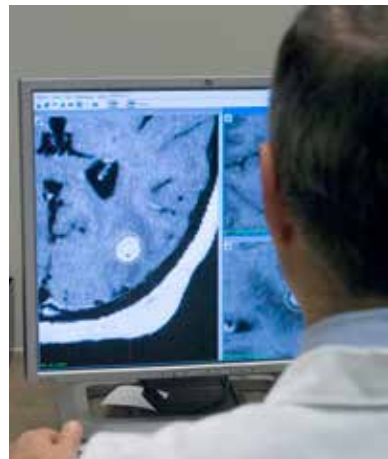
Accreditation For Physicians*

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 for Category 2 credit.

** Actual hours will vary depending on each course's final schedule.*



Program Directors

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Director, Gamma Knife Center

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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	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	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	Radiosurgery and Benign Tumors
Intro	10:15	Break
Intro	10:30	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 Treatment Planning/Treatment Workflow
Intro	3:30	Break
Intro	3:45	Hands-on Treatment Planning/Treatment Workflow
	5:00	Adjourn



Wednesday

PARALLEL SESSION	Upgrade	7:35	Welcome and Introductions – S7 Conf Room
	Upgrade	7:55	Features and Benefits
	Upgrade	8:40	Stereotactic Frame – Changes to Application and Use
	Upgrade	8:55	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 Treatment Planning/Treatment Workflow
	Both	9:30	Break

Group	Time	Presentation
Both	9:45	Hands-on Safety Clearance Procedures Quality Assurance Emergency Procedures
Both	10:45	Hands-on Treatment Planning/Treatment Workflow
Both	11:30	TPS Administration
Both	12:00	Working Lunch Hands-on 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 Treatment Planning/Treatment Workflow
Both	10:30	Break
Both	10:45	Stereotactic Image Distortion and Historical Errors
Both	11:30	Advanced Features of the Planning Software
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 Treatment Planning/Treatment Workflow
Both	5:15	Adjourn
Both	6:00 Van pick up at hotel	Group Dinner at Local Restaurant

Friday

Both	7:45	System Nuances
Both	8:15	Coding and Reimbursement – or – Commissioning
Both	9:00	Break
Both	9:15	Hands-on Treatment Planning/Treatment Workflow
Both	12:00	Course Review
Both	1:00	Course Evaluation and Presentation of Certificates
Both	1:30	Adjourn

Time will be allotted for Questions & Answers during each lecture and demonstration.

Introduction to Cranial Neurosurgery and Advanced Radiosurgery

Cleveland Clinic Gamma Knife Center
Cleveland, Ohio

**To register contact Martha Tobin at tobinm@ccf.org
or 216-445-3449**

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December 3-7

Upgrade from prior radiosurgery training

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Radiosurgery

August 20-24

Tuition

Introduction to Cranial Neurosurgery (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.)

Advanced Radiosurgery (3 days)

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

Attendance at this radiosurgery 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 older radiosurgery units. In order to take the Upgrade Course, prior training on a radiosurgery unit is required.



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 you have received confirmation from the course manager that the course will be held. This is a separate confirmation from the confirmation you receive when registering online. In the event a course must be cancelled due to low enrollment, a full refund will be issued.

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

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

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 216.445.3449 at least two weeks prior to the activity.