

MRI / CT UPDATE

October 25-29, 2010

*The Fairmont Copley Plaza
Boston, Massachusetts*

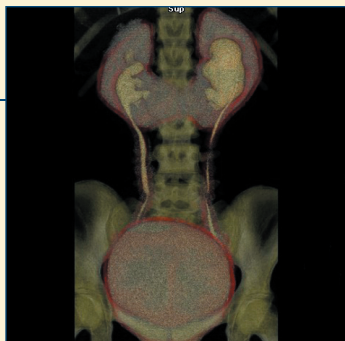
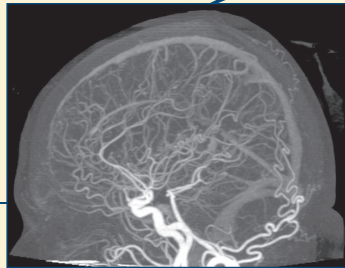


Brigham and Women's Hospital
Department of Radiology

Course Directors
Stuart G Silverman, MD
Hiroto Hatabu, MD, PhD
Srini Mukundan, PhD, MD



Harvard Medical School
Department of Continuing Education



COURSE DESCRIPTION

This is the 33rd offering of our highly acclaimed annual, postgraduate course that emphasizes clinical MRI and CT of the entire body, including neuroradiology. It is designed for practitioners using MRI and multi-detector CT, and those who wish to learn the latest applications from experts. The basic format of the course is didactic lecture style. The first two and a half days of the course (Monday, Tuesday, and Wednesday morning) cover Body, including, chest, abdomen, pelvis, cardiovascular, breast and musculoskeletal imaging; second two days (Wednesday afternoon, Thursday and Friday morning) cover Neuro Imaging. The Neuro Imaging curriculum spans the complete spectrum from spine, to brain, to head and neck/ENT. The Neuro Imaging curriculum is directed toward the practicing radiologist, with emphasis on the translation of advanced techniques and technologies to the clinical domain. Each morning session (Wednesday-Friday) will begin with a case conference during the continental breakfast. One can register for the entire five-day course (including the Body and Neuro sections) or only for the Body or Neuro Imaging components.

OBJECTIVES

At the conclusion of this course, participants will be provided with

- Up-to-date information on the latest MRI and CT techniques for both body and neuroradiologic applications, many of which will be directly applicable in the clinic.
- Sufficient background to manage an MRI or CT facility and gain insight into the way experienced radiologists perform and interpret these examinations.
- Focus-sessions on Spine and ENT imaging will cover major clinical gamuts in these disciplines.

COURSE DIRECTORS

Stuart G Silverman, MD: Professor of Radiology, Harvard Medical School; Director, Division of Abdominal Imaging and Intervention, Director, CT Scan and Cross-Sectional Interventional Radiology, Brigham and Women's Hospital

Hiroto Hatabu, MD, PhD: Associate Professor of Radiology, Harvard Medical School; Clinical Director, MRI Program, Medical Director, Center for Pulmonary Functional Imaging, Department of Radiology, Brigham and Women's Hospital

Srinivasan Mukundan, Jr, PhD, MD: Associate Professor of Radiology, Harvard Medical School; Section Head of Neuroradiology, Brigham and Women's Hospital, Adjunct Associate Professor of Biomedical Engineering and Chemistry, Duke University, Durham, NC

GUEST FACULTY

Marco Essig, MD, PhD: Assistant Medical Director, Department of Radiology, Professor of Radiology, Heidelberg Medical School, Head of MRI and Neuroradiology, German Cancer Research Center, Heidelberg, Germany

Michael Macari, MD: Associate Professor of Radiology, NYU Medical Center; Section Chief of Abdominal Imaging, Vice Chair of Operations, Department of Radiology, NYU, New York, NY

Justin Massengale, MD: Assistant Professor of Neurosurgery, Boston University School of Medicine; Department of Neurosurgery, Boston Medical Center, Boston, MA

Charles S White, MD: Professor of Radiology and Medicine, Chief of Thoracic Radiology, Department of Diagnostic Radiology, University of Maryland School of Medicine, Baltimore, MD

HARVARD MEDICAL SCHOOL FACULTY

Philip M Boiselle, MD: Associate Professor of Radiology; Director of Thoracic Imaging, Associate Radiologist-in-Chief of Administrative Affairs, Beth Israel Deaconess Medical Center

Charles Cho, MD, MBA: Instructor in Radiology; Neuroradiology Section, Brigham and Women's Hospital

Mary E Cunnane, MD: Instructor in Radiology; Assistant in Radiology, Massachusetts Eye and Ear Infirmary; Assistant in Radiology, Division of Neuroradiology, Massachusetts General Hospital

Hugh D Curtin, MD: Professor of Radiology; Chief of Radiology, Massachusetts Eye and Ear Infirmary

Fiona Fennessy, MD, PhD: Assistant Professor of Radiology; Dana-Farber Cancer Institute, Brigham and Women's Hospital

Glenn C Gaviola, MD: Instructor in Radiology; Division of Musculoskeletal Imaging and Intervention, Director, Fellowship in Musculoskeletal Imaging and Intervention, Brigham and Women's Hospital

Victor H Gerbaudo, PhD: Lecturer on Radiology; Director, Nuclear Medicine and Molecular Imaging Program; Senior Administrative Director, Noninvasive Cardiovascular Imaging and Cardiac Stress Programs, Brigham and Women's Hospital

Liangge Hsu, MD: Assistant Professor of Radiology; Neuroradiology Section, Brigham and Women's Hospital

Andetta R Hunsaker, MD: Assistant Professor of Radiology; Director, Division of Thoracic Radiology, Brigham and Women's Hospital

Ramin Khorasani, MD, MPH: Associate Professor of Radiology; Vice Chairman, Department of Radiology, Director, Center for Evidence-Based Imaging, Brigham and Women's Hospital

Roman A Klufas, MD: Instructor in Radiology; Neuroradiology Section, Brigham and Women's Hospital

Thomas C Lee, MD: Instructor in Radiology; Neuroradiology Section, Brigham and Women's Hospital

Theresa C McCloud, MD: Professor of Radiology; Director of Education; Associate Radiologist-in-Chief, Division of Thoracic Imaging, Massachusetts General Hospital

Tracey A Milligan, MD: Assistant Professor of Neurology; Epilepsy Division, Department of Neurology, Brigham and Women's and Faulkner Hospitals

Koenraad J Morteale, MD: Associate Professor of Radiology; Associate Director, Division of Abdominal Imaging and Intervention, Director, Abdominal and Pelvic MRI, Medical Director, CME, Brigham and Women's Hospital

Sughra Raza, MD: Assistant Professor of Radiology; Associate Director Breast Imaging, Director, Women's Imaging Program, Director, Clinical Breast MRI, Brigham and Women's Hospital

Cheryl A Sadow, MD: Instructor in Radiology; Division of Abdominal Imaging and Intervention, Brigham and Women's Hospital

V Anik Sahni, MD: Instructor in Radiology; Division of Abdominal Imaging and Intervention, Brigham and Women's Hospital

Paul B Shyn, MD: Instructor in Radiology; Division of Abdominal Imaging and Intervention, Brigham and Women's Hospital

Kirstin M Shu Small, MD: Instructor in Radiology; Division of Musculoskeletal Imaging, Brigham and Women's Hospital

Stacy E Smith, MD: Lecturer on Radiology; Section Head and Barbara Weissman Chair, Musculoskeletal Imaging, Brigham and Women's Hospital

Aaron Sodickson, MD, PhD: Assistant Professor of Radiology; Assistant Director of Emergency Radiology, Brigham and Women's Hospital

Clare M C Tempny, MD: Professor of Radiology; Ferenc Jolesz, Chair of Radiology Research, Vice Chair, Radiology Research, Director, Clinical Focused Ultrasound, Department of Radiology, Brigham and Women's Hospital

Barbara N Weissman, MD: Professor of Radiology; Vice Chair of Radiology, Radiology Residency Program Director, Brigham and Women's Hospital

Geoffrey S Young, MD: Instructor in Radiology; Neuroradiology Section, Brigham and Women's Hospital

Amir A Zamani, MD: Associate Professor of Radiology; Neuroradiology Section, Brigham and Women's Hospital

MONDAY, OCTOBER 25

7:00 Registration/Continental Breakfast

BODY IMAGING

7:55 Welcome and Introduction *Silverman*

Moderator: Dr Silverman

HOT TOPICS IN ABDOMINAL IMAGING

8:00 CT Protocols: How to Reduce Radiation Exposure and Optimize Contrast Enhancement *Sodickson*

8:30 Dual Energy CT: Applications in the Abdomen *Macari*

9:00 PET/CT: Current Applications in the Abdomen *Shyn*

9:30 Diffusion Weighted MR Imaging in the Abdomen *Sahni*

10:00 Questions and Answers

10:10 Coffee Break

ABDOMEN I

10:30 CT and MRI of Focal Liver Masses *Macari*

11:00 Imaging and Management of Cystic Pancreatic Masses *Mortele*

11:30 MRI of the Bowel *Macari*

12:00 Questions and Answers

12:15 Lunch Recess

ABDOMEN II

1:30 MRI of the Biliary Tree *Mortele*

2:00 How to Read CT Colonography *Macari*

2:30 MDCT Urography *Silverman*

3:00 Questions and Answers

3:10 Coffee Break

ABDOMEN III

3:30 CT and MRI of Cystic Renal Masses *Silverman*

4:00 CT and MRI of Adrenal Masses *Khorasani*

4:30 CT and MRI of Solid Renal Masses *Silverman*

5:00 Questions and Answers

5:10 Adjourn

TUESDAY, OCTOBER 26

7:15 Continental Breakfast

PELVIC MRI

Moderator: Dr Hatabu

7:55 Morning Announcements *Hatabu*

8:00 MRI of the Female Pelvis - Benign Diseases *Fennesy*

8:30 MRI of the Female Pelvis - Malignant Diseases *Sadow*

9:00 MRI of the Prostate Gland *Tempany*

9:30 MRI of the Non-Prostate Male Pelvis *Sadow*

10:00 Questions and Answers

10:10 Coffee Break

THORACIC IMAGING (INCLUDING BREAST AND HEART)

10:30 MRI of Breast *Raza*

11:00 Pulmonary Embolism *Hunsaker*

11:30 Diffuse Lung Disease *Hatabu*

12:00 Questions

12:15 Lunch Recess

1:30 ED Chest Pain Evaluation:

Where does Coronary CTA fit in? *White*

2:00 State-of-Art Airway Imaging *Boiselle*

2:30 Cardiac MRI: Overview *White*

3:00 Questions

3:10 Break

3:30 Imaging of Solitary Pulmonary Nodule *White*

4:00 PET/CT of Lung Cancer *Gerbaudo*

4:30 **Special Lecture** - Lung Cancer Imaging: New Aspects of Staging and New Staging Classification *McLoud*

5:10 Questions and Answers

5:15 Adjourn

WEDNESDAY, OCTOBER 27

7:00 Continental Breakfast

MUSCULOSKELETAL IMAGING

7:10 Morning Announcements *Mukundan*

Moderator: Dr Weissman

7:15 Morning Cases *Weissman*

7:50 Insufficiency Fractures *Weissman*

8:15 Hip *Smith*

8:45 Knee *Gaviola*

9:30 Foot and Ankle *Smith*

10:15 Coffee Break

10:30 Shoulder *Small*

11:00 Elbow *Smith*

11:30 Wrist *Smith*

12:00 Questions and Answers

12:15 Lunch Recess

12:30 Registration - Neuro Imaging Portion Only

SPINE IMAGING

Moderator: Dr Cho

1:30 Lumbar Spine Nomenclature *Mukundan*

2:15 Non-Tumoral Spine *Klufas*

2:45 Tumoral Spine *Zamani*

3:15 Coffee Break

3:30 Percutaneous Spine Intervention *Cho*

4:15 Clinical Correlation: Modern Minimally

Invasive Spine Surgery, with

Radiographic Correlation

Massengale

5:00 Questions and Answers

5:10 Adjourn

THURSDAY, OCTOBER 28

7:00 Continental Breakfast

NEURORADIOLOGY GAMUTS

7:10 Morning Announcements *Mukundan*

Moderator: Dr Mukundan

7:15 Morning Cases *Lee*

8:00 MRI in Dementia *Essig*

8:45 Stroke Imaging Update *Young*

9:30 Coffee Break

9:45 CNS Infections *Hsu*

10:30 Demyelinating Disease *Zamani*

11:15 Clinical Correlation: Modern Diagnosis and Treatment of Epilepsy, How Imaging Helps *Milligan*

12:00 Questions and Answers

12:15 Lunch Recess

ADVANCED NEURO-IMAGING

Moderator: Dr Young

1:30 Diffusion Tensor Imaging: Beautiful Pictures to Clinical Utility *Essig*

2:15 Advanced Brain Tumor Imaging *Essig*

3:00 Questions and Answers

3:10 Coffee Break

3:30 CT Dose in Advanced Neuroimaging *Young*

4:15 Hot Topics in Neuroimaging *Mukundan*

5:00 Adjourn

FRIDAY, OCTOBER 29

7:00 Continental Breakfast

ENT IMAGING

7:25 Morning Announcements *Mukundan*

Moderator: Dr Lee

7:30 Morning Cases *Cunnane*

8:15 Temporal Bone I *Curtin*

9:00 Orbits *Mukundan*

9:30 Temporal Bone II *Curtin*

10:15 Coffee Break

10:30 Parapharyngeal Spaces *Curtin*

11:15 Paranasal Sinuses *Cunnane*

11:45 Questions and Answers

12:00 Adjourn

REGISTRATION INFORMATION

For specific tuition fees, see the registration form. All foreign payments must be made by a draft on a United States Bank or by Visa or Mastercard. If paying by check, please make payable to Harvard Medical School and mail with completed registration form to **Harvard Medical School Department of Continuing Education, PO Box 825, Boston, MA 02117-0825**. If paying by credit card, please register online at www.cme.harvard.edu/courses/mrict. **Telephone, fax or mail-in registration with credit card payment is not accepted.** Inquiries should be directed to the above address, made by phone: (617) 384-8600, Monday Friday, 10 AM to 4 PM (EST), or by email: hms-cme@hms.harvard.edu. Upon receipt of registration a confirmation will be mailed to the address listed on the form. Upon receipt of your registration form an email confirmation from the HMS-DCE office will be sent to you. Therefore, be sure to include an email address that you check daily/frequently. Your email address is used for critical information about the course including; registration confirmation, course evaluation and certificate.

Please note: Program changes/substitutions may be made without notice.

ACCREDITATION

Harvard Medical School is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

Harvard Medical School designates the Full Course for a maximum of 34.75 AMA PRA Category 1 Credit(s)[™], Body Imaging for a maximum of 19 AMA PRA Category 1 Credit(s)[™], and Neuro Imaging for a maximum of 15.75 AMA PRA Category 1 Credit(s)[™]. Each physician should only claim credit commensurate with the extent of their participation in the activity.

Technologists: These lectures are pending approval for CE credit by the ASRT.

REFUND POLICY

A handling fee of \$60 is deducted for cancellation. Refund requests must be received by mail or fax one week prior to the course. No refunds will be made thereafter.

ONLINE INFORMATION

To register or view course information online, visit Harvard Medical School Department of Continuing Education's home page:

www.cme.harvard.edu/courses/mrict

To ensure proper registration, please add the first three characters of the source code found at the bottom of the registration form.

ACCOMMODATIONS / COURSE LOCATION

Hotel rooms in Boston are limited. You are urged to make your reservations early. A limited number of rooms have been reserved at the **Fairmont Copley Plaza**, (800) 441-1414 or (617) 267-5300 until **October 3, 2010**. Please specify that you are enrolled in the **MRI/CT Update** course to receive a reduced room rate. You may also reserve your hotel reservations online via the dedicated booking website: <https://resweb.passkey.com/go/mrict2010>.

MRI/CT Update
October 25-29, 2010

Class # 301050

Full Course

Physicians \$895 (USD)
Residents*/Fellows in Training*/Technologists;
Allied Health Professionals: \$550 (USD)

Body Imaging

Physicians \$695 (USD)
Residents*/Fellows in Training*/Technologists;
Allied Health Professionals: \$450 (USD)

Neuro Imaging

Physicians \$675 (USD)
Residents*/Fellows in Training*/Technologists;
Allied Health Professionals: \$425 (USD)

**A letter of verification from Department Chair must accompany registration form for a reduced fee.*

CHECK IS ENCLOSED

Please make your check payable to *Harvard Medical School* and mail it with this registration form to: **HMS-DCE, PO Box 825, Boston, MA 02117-0825**

PLEASE PRINT CLEARLY - All Fields Required

First

Middle Initial

Last

Degree

Street

City

State

Zip Code

Daytime Phone

Fax Number

PLEASE NOTE: Your email address is used for critical information about the course including; registration confirmation, course evaluation and certificate. Please be sure to include an email address you check daily or frequently.

Email Address

Please check if you wish to be **excluded** from receiving email notices of future HMS-DCE programs

Professional School Attended

Year of Graduation

Profession

Primary Specialty (Physicians Only)

Board Certified: Yes ___ No ___

Organization Affiliation

Registrations paid by credit card may be made online at:
www.cme.hms.harvard.edu/courses/mrict

Online Registrants - to ensure proper registration, please add the first three characters of the source code found here: **Source Code: XZZ**