



Harvard Medical School
Department of Continuing Education

Joint Program in Nuclear Medicine



CLINICAL NUCLEAR MEDICINE

PET/CT, MRI and Image Fusion



May 8-11, 2006

*Boston Marriott Long Wharf
Boston, Massachusetts, USA*

PROGRAM DIRECTOR

S Ted Treves, MD

PROGRAM COMMITTEE

Leonard P Connolly, MD

Marcelo F Di Carli, MD

Frederic H Fahey, DSc

Masanori Ichise, MD

J Anthony Parker, MD, PhD

Annick D Van den Abbeele, MD

and the faculty of

The Joint Program in Nuclear Medicine

Harvard Medical School

Beth Israel Deaconess Medical Center

Brigham and Women's Hospital

Children's Hospital Boston

Dana-Farber Cancer Institute

Massachusetts General Hospital

VA Boston Healthcare System

Technologists/Sonographers:

These lectures are pending approval for CE credit by the ASRT

COURSE DESCRIPTION

The program was prepared to reflect the enormous impact of multimodality imaging and image registration and fusion in the practice of Nuclear medicine. PET and PET/CT and image fusion are influencing diagnosis, treatment planning and follow up of oncologic, neurologic and cardiologic disorders. With the introduction of PET/CT devices, multimodality imaging and correlation are playing a prominent role. Beyond "hardware" image registration, mainly PET/CT, improvements in software and computer technology, multimodality imaging has been expanded to include image registration and fusion of MRI, SPECT, PET and CT. The availability of multiple 3D image sets from multiple modalities are inducing increasing collaboration between nuclear medicine physicians and radiologists of several subspecialties for interpenetration and reporting. Multimodality imaging poses implications and challenges affecting in regards to coding and billing that still need to be worked out.

Guest faculty and members of the faculty of Harvard Joint Program in Nuclear Medicine will update physicians, scientists, and technologists on valuable techniques that can be immediately applied to the clinical practice of nuclear medicine. Specialists in CT, MRI and other imaging techniques will join nuclear medicine specialists to review how collaborative work is being carried out to facilitate the assessment of functional and anatomical relationships. In addition, the faculty will provide glimpses on new and emergent methodologies that are likely to become part and parcel of the practice of nuclear medicine.

OBJECTIVE

The 30th annual course will review established and emerging applications of nuclear medicine with emphasis on multimodality imaging. Attendees will enhance their knowledge and skills in ways that can be immediately applied to the practice of nuclear medicine. The course will enable participants to improve their performance and interpretation of nuclear medicine studies and to introduce important new techniques into their clinical practices.

GUEST FACULTY

Steven Burrell, MD, FRCPC: Assistant Professor of Radiology, Director, Nuclear Medicine Residency Program, Dalhousie University Faculty of Medicine, Staff Physician, Department of Radiology, Queen Elizabeth II Health Sciences Centre, Halifax, Nova Scotia, Canada

Homer A Macapinlac, MD: Associate Professor of Nuclear Medicine, Chairman ad-interim, Department of Nuclear Medicine, University of Texas, MD Anderson Cancer Center, Houston TX

Kenneth A McKusick, FACR, FACNP: CPT Advisory Committee, Member SNM, Chair, Nuclear Medicine, APC Task Force, South Orleans, MA

Christopher J Palestro, MD: Professor of Nuclear Medicine and Radiology, Albert Einstein College of Medicine; Director, Nuclear Medicine, Long Island Jewish Medical Center, New Hyde Park, NY

Ronald L Van Heertum, MD: Professor of Radiology, Vice Chairman, Department of Radiology, Director, Kreitchman PET Center, College of Physicians and Surgeons, Columbia University; Director, Division of Nuclear Medicine, New York-Presbyterian Hospital, Columbia University Medical Center, New York, NY

Alan D Waxman, MD: Director, Nuclear Medicine, Co-Chair, Department of Imaging, Clinical Professor of Radiology, University of Southern California, Cedars-Sinai Medical Center, Los Angeles, CA

Harvey A Ziessman, MD: Professor of Radiology, Director, Nuclear Medicine Imaging, Johns Hopkins University, Baltimore, MD

Jack A Ziffer, PhD, MD: Chief, Department of Radiology, Baptist Hospital of Miami, Medical Director, Cardiac Imaging, Baptist Cardiac and Vascular Institute, Miami, FL

HARVARD MEDICAL SCHOOL FACULTY

Suhny Abbara, MD: Instructor in Radiology; Director, Non-invasive Cardiac and Vascular Imaging, Director of Education, Cardiac MR and CT Program, Massachusetts General Hospital

Russell A Blinder, MD: Associate Professor of Radiology; Director of Head and Neck and Neuroradiology, Dana-Farber Cancer Institute

Leonard P Connolly, MD: Assistant Professor of Radiology; Associate Director, Resident/Fellow Training, Joint Program in Nuclear Medicine, Staff Physician, Division of Nuclear Medicine, Children's Hospital Boston

Marcelo F Di Carli, MD, FACC: Associate Professor of Radiology; Chief, Nuclear Medicine/PET, Co-Director of Cardiovascular Imaging, Brigham and Women's Hospital

Pamela J DiPiro, MD: Assistant Professor of Radiology; Clinical Director of CT, Dana-Farber Cancer Institute

Kevin J Donohoe, MD: Assistant Professor of Radiology; Division of Nuclear Medicine, Beth Israel Deaconess Medical Center

Sharmila Dorbala, MBBS: Instructor in Radiology; Associate Director Nuclear Cardiology, Division of Nuclear Medicine, Brigham and Women's Hospital

David E Drum, MD, PhD: Clinical Associate Professor of Radiology; Staff Physician, Boston VA Healthcare System

Frederic H Fahey, DSc: Associate Professor of Radiology; Director of Nuclear Medicine/PET Physics, Division of Nuclear Medicine, Children's Hospital Boston

Fiona Fennessy, MD: Instructor in Radiology; Dana-Farber Cancer Institute, Brigham and Women's Hospital

Victor H Gerbaudo, PhD: Lecturer in Radiology; Director, of the Nuclear Medicine/PET-CT Program, Associate Director of the Joint Program in Nuclear Medicine Radiopharmacy, Brigham and Women's Hospital

Thomas H Hauser, M.D: Instructor in Medicine; Director of Nuclear Cardiology, Beth Israel Deaconess Medical Center

Masanori Ichise, MD, FRCPC: Associate Professor of Radiology; Director, Brain Molecular Imaging Program, Division of Nuclear Medicine, Brigham and Women's Hospital

Francine L Jacobson, MD, MPH: Assistant Professor of Radiology; Division of Thoracic Imaging, Brigham and Women's Hospital

J Anthony Parker, MD, PhD: Associate Professor of Radiology; Associate Director of Resident/Fellow Training in the Joint Program in Nuclear Medicine, Division of Nuclear Medicine, Beth Israel Deaconess Medical Center

Rachel A Powsner, MD: Lecturer on Radiology; Associate Professor of Radiology, Boston University Medical School; Section Head, Nuclear Medicine, Department of Radiology, Boston VA Healthcare System

Pablo R Ros, MD, MPH, FACR: Professor of Radiology; Executive Vice Chair and Associate Radiologist-in-Chief, Brigham and Women's Hospital, Chief, Division of Radiology, Dana-Farber Cancer Institute

Frank J Rybicki, MD, PhD: Assistant Professor of Radiology; Co-Director, Cardiovascular Imaging Section, Director, Applied Imaging Science Laboratory, Brigham and Women's Hospital

S Ted Treves, MD: Professor of Radiology and Director, Joint Program in Nuclear Medicine, Harvard Medical School; Chief, Division of Nuclear Medicine and Vice Chairman for Information Systems, Department of Radiology, Children's Hospital Boston; Executive Director for Nuclear Medicine Programs, Brigham and Women's Hospital

Annick D Van den Abbeele, MD: Associate Professor of Radiology; Clinical Director of Radiology; Director, Nuclear Medicine/PET, Dana-Farber Cancer Institute; Director, Nuclear Medicine Oncologic Program, Dana-Farber Cancer Institute and Brigham and Women's Hospital

Jeffrey T Yap, PhD: Assistant Professor of Radiology; Senior Diagnostic Physicist, Division of Nuclear Medicine, Dana-Farber Cancer Institute

MONDAY, MAY 8

NUCLEAR CARDIOLOGY

7:55	Welcome and Introduction	<i>Treves</i>
<i>Moderator: Di Carli</i>		
8:00	SPECT Myocardial Perfusion Imaging: Radiotracers and Protocols	<i>Hauser</i>
8:30	Questions	
8:35	Advances in Pharmacological Stress Testing	<i>Dorbala</i>
9:05	Questions	
9:10	Systematic Interpretation and Reporting of SPECT Myocardial Perfusion Imaging	<i>Ziffer</i>
9:40	Questions	
9:45	Break	
<i>Moderator: Di Carli</i>		
10:00	PET Myocardial Perfusion Imaging: Radiotracers and Protocols	<i>Dorbala</i>
10:30	Questions	
10:35	Evaluation of the Patient with Heart Failure: Imaging Options for Assessing Ischemia and Viability	<i>Di Carli</i>
11:10	Questions	
11:15	Fundamentals of Cardiac CT: Principles of Imaging and Instrumentation	<i>Rybicki</i>
11:45	Questions	
11:50	Lunch Recess	
<i>Moderator: Dorbala</i>		
12:50	Coronary CT: Do it like a Pro	<i>Rybicki</i>
1:20	Questions	
1:25	Systematic Interpretation of CT Coronary Angiography	<i>Abbara</i>
1:55	Questions	
2:00	Clinical Applications of Cardiac MDCT	<i>Ziffer</i>
2:40	Questions	
2:45	Hybrid Cardiac SPECT and PET/CT Imaging	<i>Di Carli</i>
3:25	Questions	
3:30	Break	
<i>Moderator: Di Carli</i>		
3:45	Read with the Experts: Common and Challenging Cases	<i>All</i>
5:15	Adjourn	

TUESDAY, MAY 9

NUCLEAR ONCOLOGY

8:00	Introduction	<i>Treves</i>
<i>Moderator: Yap</i>		
8:05	Introduction to PET/CT	<i>Yap</i>
8:35	Questions	
8:40	PET/CT in GI Malignancies	<i>Van den Abbeele</i>
9:10	Questions	
9:15	MR/CT of GI Malignancies	<i>Ros</i>
9:45	Questions	
9:50	Break	
<i>Moderator: Van den Abbeele</i>		
10:05	PET/CT in Male and Female Pelvic Malignancies	<i>McKusick</i>
10:35	Questions	
10:40	MR/CT in Male and Female Pelvic Malignancies	<i>Fennessy</i>
11:10	Questions	
11:15	PET/CT in Breast Cancer	<i>Waxman</i>
11:45	Questions	
11:50	MR/Mammography of Breast Cancer	<i>DiPiro</i>
12:20	Questions	
12:25	Lunch Recess	
<i>Moderator: Treves</i>		
1:35	PET/MR/CT of Head and Neck Cancers	<i>Blinder</i>
2:05	Questions	

TUESDAY, MAY 9 (cont'd)

2:10	PET/CT in Head and Neck Cancers	<i>Burrell</i>
2:40	Questions	
2:45	Break	
<i>Moderator: Van den Abbeele</i>		
3:00	MR/CT in Chest Malignancies	<i>Jacobson</i>
3:30	Questions	
3:35	PET/CT of Chest Malignancies	<i>Gerbaudo</i>
4:05	Questions	
4:10	Interesting PET/CT Cases	<i>Van den Abbeele</i>
4:55	Questions	
5:00	Adjourn	

WEDNESDAY, MAY 10

7:55	Introduction	<i>Treves</i>
<i>Moderator: Donohoe</i>		
8:00	Lymphoscintigraphy	<i>Donohoe</i>
8:30	Questions	
8:35	PET/CT: Site Planning and Dosimetric Considerations	<i>Fahey</i>
9:15	Questions	
9:20	Non-Osseous Infection	<i>Palestro</i>
10:00	Questions	
10:05	Break	
<i>Moderator: Connolly</i>		
10:20	PET Artifacts	<i>Waxman</i>
11:05	Questions	
11:10	New Agents for Imaging Infection	<i>Palestro</i>
11:50	Questions	
11:55	Lunch Recess	
<i>Moderator: Drum</i>		
1:05	Genitourinary Nuclear Medicine	<i>Ziessman</i>
1:50	Questions	
1:55	Musculoskeletal Infections	<i>Palestro</i>
2:40	Questions	
2:45	Break	
<i>Moderator: Treves</i>		
3:00	Seizures, Alzheimers, and Neurodegenerative Diseases	<i>Van Heertum</i>
3:45	Questions	
3:50	SPECT and PET of the Dopine System in Movement Disorders	<i>Ichise</i>
4:20	Questions	
4:25	Brain Tumors	<i>Van Heertum</i>
4:55	Questions	
5:00	Adjourn	

THURSDAY, MAY 11

7:55	Introduction	<i>Treves</i>
<i>Moderator: Parker</i>		
8:00	Topics in Radionuclide Therapy	<i>Parker</i>
8:40	Questions	
8:45	Coding and Billing for PET/CT	<i>McKusick</i>
9:25	Questions	
9:30	Hepatobiliary Nuclear Medicine	<i>Ziessman</i>
10:10	Questions	
10:15	Break	
<i>Moderator: Treves</i>		
10:35	Gastrointestinal Nuclear Medicine	<i>Ziessman</i>
11:15	Questions	
11:20	General Nuclear Medicine Cases	<i>Powsner</i>
11:50	Questions	
11:55	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, make it payable to Harvard Medical School and mail with the completed registration form to: **Harvard Medical School, Department of Continuing Education, PO Box 825, Boston, MA 02117-0825**. If paying by credit card, fax the completed registration form to (617) 384-8686, register online at www.cme.hms.harvard.edu, or mail it to the above address. **Telephone registrations are 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 e-mail: hms-cme@hms.harvard.edu. Upon receipt of registration, a confirmation letter will be mailed to the address listed on the form.

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

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.

COURSE LOCATION

All sessions will be held at the Boston Marriott Long Wharf, 296 State Street, Boston, MA, (617) 227-0800.

ONLINE INFORMATION

To register or view course information online, visit Harvard Medical School Department of Continuing Education's home page: www.cme.hms.harvard.edu

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

Learn more about The Joint Program for Nuclear Medicine (JPNM). Visit the JPNM Web site: <http://www.jpnm.org>

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 **Clinical Nuclear Medicine** course for a maximum of 25 category 1 credits toward the AMA Physician's Recognition Award. Each physician should claim only those credits that he/she actually spent in the educational activity.

The American Medical Association has determined that physicians not licensed in the US who participate in this CME activity are eligible for AMA PRA category 1 credit.

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

ACCOMMODATIONS

Hotel rooms in Boston are limited. You are urged to make your reservations early. A limited number of rooms have been reserved at the **Boston Marriott Long Wharf, 296 State Street, Boston, MA, (617) 227-0800** until **April 14, 2006**. Please specify that you are enrolled in the **Clinical Nuclear Medicine** course to receive a reduced room rate.

Clinical Nuclear Medicine
May 8-11, 2006

Class #262545

Physicians: \$795 (USD)
Reduced Fee for Residents*/Fellows in Training*
Technologists: \$495 (USD)

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

Please Print Clearly

Last First Middle Initial

Degree

Street

City State Zip Code

Daytime Phone Fax Number

Email Address Please check if you wish to be excluded from receiving email notices of future Harvard Medical School, Department of Continuing Education programs

Professional School Attended Year of Graduation

Profession

Principal Specialty Board Certified: Yes ___ No ___

Organization Affiliation

Form of Payment *(please check one)*

Check is enclosed:

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

Registrations paid by credit card can be faxed to 617-384-8686, mailed to the above address, or registered online at www.cme.hms.harvard.edu.

Bill my credit card: VISA MASTERCARD

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Tuition Fee: \$ _____

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