Nuclear Medicine has long been recognized as the imaging modality that can best assess function and the results of events that occur at a molecular level. The increased understanding of genomic and specific molecular mechanisms is now being more widely applied in clinical situations. The goal of this program is to discuss how nuclear molecular imaging can increase the effectiveness of many studies performed daily in both academic and community hospital imaging centers. Johns Hopkins faculty and visiting experts will present their experience with PET/CT and SPECT/CT and illustrate their results with studies from their patient populations. There will be ample time for questions and discussion following each presentation.

WHO SHOULD ATTEND
This program will be especially applicable to nuclear medicine physicians and radiologists who interpret nuclear medicine studies as well as those who treat patients with radioactive isotopes. The program will also be appropriate for technologists and others interested in using current state-of-the-art nuclear medicine techniques.

OBJECTIVES
After attending this activity, the participant will demonstrate the ability to:
• Interpret nuclear medicine studies with greater confidence.
• Recognize new ways to obtain quantitative data.
• Discuss different nuclear medicine treatment options available to patients for variety of disease states, including emerging techniques.

Enhance Patient Care with Nuclear Medicine and Molecular Imaging
March 10-11, 2017

Johns Hopkins University School of Medicine
Thomas B. Turner Building, Baltimore, Maryland
Director: Martin Pomper, MD, PhD

This activity has been approved for AMA PRA Category 1 Credits™.
Nuclear Medicine has long been recognized as the imaging modality that can best assess function and the results of events that occur at a molecular level. The increased understanding of genomic and specific molecular mechanisms is now being more widely applied in clinical situations. The goal of this program is to discuss how nuclear molecular imaging can increase the effectiveness of many studies performed daily in both academic and community hospital imaging centers. Johns Hopkins faculty and visiting experts will present their experience with PET/CT and SPECT/CT and illustrate their results with studies from their patient populations. There will be ample time for questions and discussion following each presentation.

WHO SHOULD ATTEND
This program will be especially applicable to nuclear medicine physicians and radiologists who interpret nuclear medicine studies as well as those who treat patients with radioactive isotopes. It will also be useful for referring physicians who want to learn more about state-of-the-art and emerging nuclear medicine studies. The program will also be appropriate for technologists and others interested in using current state-of-the-art nuclear medicine techniques.

OBJECTIVES
After attending this activity, the participant will demonstrate the ability to:
• Interpret nuclear medicine studies with greater confidence.
• Recognize new ways to obtain quantitative data.
• Discuss different nuclear medicine treatment options available to patients for various disease states, including emerging techniques.

Other Credit
The Johns Hopkins University has approved this activity for 14 contact hours for non-physicians.

Policy on Speaker and Provider Disclosure
It is the policy of the Johns Hopkins University School of Medicine that the speaker and provider globally disclose conflicts of interest. The Johns Hopkins University School of Medicine OCME has established policies in place that will identify and resolve all conflicts of interest prior to this educational activity. Detailed disclosure will be made in the instructional materials.

To Register or For Further Information
(410) 502-9634
(864) 512-7088
www.facebook.com/HopkinsCME
(410) 951-2959
cmeenet@jhmi.edu
http://twitter.com/HopkinsCME
www.facebook.com/HopkinsCME
"NEW! Check out our mobile app CloudCME."
Organization Code: HopkinsCME
For website and CloudCME mobile app technical difficulties, email: cmetechsupport@jhmi.edu
For general information, the direct link for this CME activity web page is: https://hopkinscme.cloud-cme.com/aph.aspx?P=5&EID=6640
There will be 10 minutes for questions and discussion following each 20 minute presentation.

**SYLLABUS**

The syllabus will be accessible online and via your mobile device in the Cloud App prior to the activity.

**HOTEL AND TRAVEL INFORMATION**

**Pier Hotel**

720 Falling Brooke Road
Baltimore, Maryland 21205
FAX: (410) 539-2000
Web Site: http://thepier5.com

**The Pier 5**

711 Eastern Avenue (410) 539-2000
(866) 583-4162

**The John Hopkins Bayview Medical Center**

700 North Bond Street, Suite 600
Baltimore, Maryland 21202
FAX: (410) 783-1469
Web Site: http://www.jhbc.edu

**Reservations**

To receive the special group rate of $173, single or double, plus tax. Check-in time is 4:00 p.m. Check-out time is 12:00 noon.

**EVALUATION AND OUTCOMES SURVEY**

A survey will be sent to all physician attendees to evaluate the activity and individual presentations and identify future educational needs. Upon completion of the evaluation, the learner must attest to the number of hours in attendance. Credits earned will be added to the learner’s transcript and immediately available for print.

A limited block of sleeping rooms has been reserved for your convenience and will be available on a first-come, first-served basis. The Pier 5 Hotel is located on the Inner Harbor and is fully compliant with the ADA and all other applicable regulations.

**EVALUATION DEADLINE**

On March 10-11, 2017, direct emergency calls to the Hopkins emergency desk phone (410) 955-2763.

**AmeriCanS with disAbilitIES act**

The Johns Hopkins University School of Medicine fully complies with the legal requirements of the ADA and the rules and regulations thereof. Please notify us if you have any special needs.
Saturday, March 11, 2017

7:30 - 8:15 Continental Breakfast

8:15 - 8:35 Radiopharmaceutical Therapy: How We Use It
Dana Y. Song

8:45 - 9:05 Precision Medicine in the Context of Radiopharmaceutical Therapy
George Sgouros

9:15 - 9:35 PSMA Radioligand Therapy (PRLT) of Metastatic Prostate Cancer (mCRPC)
Richard P. Baum

9:45 - 10:00 BREAK

10:00 - 10:20 PET in Management of Lung Cancer
Mark B. Som Javadi

10:30 - 10:50 Peptide Receptor Radiotherapy in Neuroendocrine Tumors
Richard P. Baum

11:00 - 11:20 Break

11:30 - 11:50 Think Like Your Patient: How We Use It
Kahn Kian

12:00 - 12:20 PET for Monitoring Immuno-oncology
Heather A. Jacene

12:30 - 1:15 LUNCH

1:15 - 1:35 PET Imaging of Breast Cancer: Clinical and Biologic Insights
David A. Mankoff

1:45 - 2:05 Bacteria-Specific Imaging to Diagnose and Monitor Infections
Sanjay K. Jain

2:15 - 2:35 PET/CT: Key Indications and Pitfalls
Peter L. Choyke

2:45 - 3:05 Molecular Imaging in Clinical Trials
David A. Mankoff

3:15 - 3:30 BREAK

3:30 - 3:50 The Role of PET in Neuro-Oncology
Jonathan E. McGonagle

4:00 - 4:50 Therapy with Radioactive Microspheres
Kelvin Hong

4:50 - 5:00 Summary and Adjourn

You will receive an email notification to complete the evaluation form and to attest to the number of hours in attendance. The registration desk will remain open during conference hours.

The Johns Hopkins University School of Medicine takes responsibility for the content, quality and scientific integrity of this CME activity.

This schedule is subject to change.

REGISTRATION FORM

Course Number 80040497/6640

Enhance Patient Care with Nuclear Medicine and Molecular Imaging

March 10-11, 2017

To Register: Online: https://hopkinscme.cloud-cme.com/aph.aspx?P=5&EID=6640

By fax: (866) 510-7088
By phone: (410) 502-9634

Or mail this form to the Johns Hopkins University, Office of Continuing Medical Education, 720 Rutland Avenue, Room 20, Baltimore, Maryland 21205-2195.

Include e-check or credit card information below.

FULL PAYMENT IS REQUIRED PRIOR TO THE START OF ACTIVITY.

I am a Johns Hopkins speaker for this activity.

Please type or print clearly:

- last name
- first name
- m.i.

- highest degree
- specialty
- Hopkins faculty/staff #: JHED-#

LACPES: Specialty Participation:
- ACR: basic or advanced
- MGH: basic or advanced
- ACR: basic or advanced

Address:
- street
- city, state, ZIP
- country

- daytime telephone
- fax number
- e-mail (required)

- Check here if you wish to receive e-mail notices about upcoming CME activities.

- I plan to stay at the Pier 5 Hotel in Baltimore, Maryland.

What do you hope to learn by attending this activity?

Please notify us if you have any special needs.

Registration Fees:
- Physicians: $600
- Residents*/Fellows*/Nurses/NPs/PAs/Allied Health Professionals: $500

*with verification of status

The registration fee includes instructional materials and food and beverage. For registrations received after 5:00 p.m. ET on March 4, 2017, include a $50 late fee. On-site registrations are payable only by credit card.

Total amount $.

Payment Type:

- JHU Faculty/Staff Only: If you are using your Tuition Remission Benefit or an ION budget, please upload your fully completed and approved form in the payment section of the online activity link above.


- ION Form: http://hopkinscme.edu/migration/ionrequest.pdf

Payment Method:
- e-Check:
- Credit Card:
  - VISA
  - MASTERCARD
  - DISCOVER
  - AMEX

Billing Zip Code: Security Code:

Name on Card:

Signature and Date:
Enhance Patient Care with Nuclear Medicine and Molecular Imaging

Director
Martin G. Pomper, MD, PhD
William R. Brady Professor of Radiology and Radiological Science
Division of Nuclear Medicine and Molecular Imaging
Department of Radiology and Radiological Science
Johns Hopkins University School of Medicine

Guest Speakers
Richard P. Baum, MD, PhD
Chairman and Clinical Director
Department of Nuclear Medicine / Center for PET/CT
Zentralklinik Bad Berka
Theranostics Center for Molecular Radiotherapy and Imaging
Bad Berka, Germany

Rob Beanlands, MD, FRCP, FACC
Professor of Cardiology and Radiology
Vered Chair and Chief
Division of Cardiology
National Cardio PET Centers
University of Ottawa Heart Institute
Ottawa, Canada

Frank M. Bengel, MD
Professor and Director, Department of Nuclear Medicine
Harvard Medical School
Boston, Massachusetts

Peter L. Choyke, MD, FACR
Program Director, Molecular Imaging
Senior Investigator and Head of Imaging Section
National Cancer Institute
Bethesda, Maryland

Heather A. Jacene, MD
Assistant Professor of Radiology
Harvard Medical School and Dana Farber Cancer Institute
Boston, Massachusetts

Val J. Lowe, MD, FACS
Professor of Radiology
Diploma of Nuclear Medicine
The Mayo Clinic
Rochester, Minnesota

David A. Mankoff, MD, PhD
Professor of Radiology
Chief, Division of Nuclear Medicine and Molecular Imaging
University of Pennsylvania
Philadelphia, Pennsylvania

Jonathan E. McConathy, MD, PhD
Assistant Professor and Director
Division of Molecular Imaging and Therapeutics
University of Alabama at Birmingham
Birmingham, Alabama

Richard L. Wahl, MD
Assistant Professor of Radiology
Chairman, Department of Radiology
Director, Molecular Imaging Institute
St. Louis, Missouri

Co-Director
Julia W. Buchanan, BS
Division of Radiology and Radiological Science
Division of Nuclear Medicine and Molecular Imaging
Johns Hopkins Hospital School of Medicine

Johns Hopkins Speakers
David S. Cooper, MD
Professor of Medicine
Division of Endocrinology and Metabolism

Kelvin Hung, MD
Assistant Professor of Radiology and Radiological Science
Division of Cardiometabolic and Interventional Radiology
Division Chief, Vascular and Interventional Radiology
Director, Interventional Radiology Center
Chair, Fellowship Program

Sanjay K. Jain, MD
Assistant Professor of Pediatrics
Infectious Disease Division.
Center for Infection and Inflammation
Imaging Research

Mehrdad S. Javadi, MD
Assistant Professor of Radiology and Radiological Science
Division of Nuclear Medicine and Molecular Imaging
Director, Clinical Operations

Chiadikaobi U. Onyike, MD
Assistant Professor of Psychiatry and Behavioral Sciences
Director, Johns Hopkins Frontotemporal Dementia and Young-Onset Dementias Clinic

Kenneth J. Pienta, MD
Professor of Urology

Steven P. Rowe, MD, PhD
Assistant Professor of Radiology and Radiological Science
Division of Nuclear Medicine

Thomas H. Schindler, MD
Assistant Professor of Medicine and Radiology and Radiological Science
Director, Cardiovascular Imaging Research

Lilja B. Solnes, MD
Assistant Professor of Radiology and Radiological Science
Division of Nuclear Medicine

Daniel Y. Song, MD
Assistant Professor of Radiation Oncology and Molecular Radiation Sciences

Zsolt Szabo, MD, PhD
Professor of Radiology and Radiological Science
Division of Nuclear Medicine

Gordon F. Tomasselli, MD
Professor of Medicine
Division of Cardiology

Dyan F. Wong, MD, PhD
Professor of Radiology
Division of Nuclear Medicine

Harvey A. Ziesel, MD
Professor of Radiology and Radiological Science
Division of Nuclear Medicine

Richard L. Wahl, MD
Assistant Professor of Radiology
Chairman, Department of Radiology
Director, Molecular Imaging Institute
St. Louis, Missouri

Enhance Patient Care with Nuclear Medicine and Molecular Imaging
Saturday, March 11, 2017
7:30 - 8:15 Continental Breakfast

Enhance Patient Care with Nuclear Medicine and Molecular Imaging
Saturday, March 11, 2017
7:30 - 8:15 Continental Breakfast

Oncology: Radiopharmaceutical Therapy
8:15 - 8:35 Radiopharmaceutical Therapy: How We Use It
Daniel Y. Song
8:45 - 9:05 Precision Medicine in the Context of Radiopharmaceutical Therapy
George Sparos
9:15 - 9:35 PSMA Radioligand Therapy (PRLT) of Metastatic Prostate Cancer (mCRPC)
Richard P. Baum
9:45 - 10:00 BREAK

Oncology: Therapy and Therapeutic Monitoring
10:00 - 10:20 Radiodine Therapy of Hyperthyroidism and Differentiated Thyroid Cancer
David S. Cooper
10:30 - 10:50 Peptide Receptor Radiotherapy in Neuroendocrine Tumors
Richard P. Baum
11:00 - 11:20 Therapy with Radioactive Microspheres
Kahn Hong
11:30 - 11:50 The Role of PET in Neuro-Oncology
Jonathan E. McGonigley
12:00 - 12:20 PET for Monitoring Immunotherapy
Heather A. Jacobs
12:30 - 15:15 LUNCH

Interesting Applications of Molecular Imaging
1:15 - 1:35 Bacteria-Specific Imaging to Diagnose and Monitor Infections
Sanjay K. Jain
1:45 - 2:05 PET/MBI: Key Indications and Pitfalls
Peter L. Choyke
2:15 - 2:35 Molecular Imaging in Clinical Trials
David A. Mandell
2:45 - 3:05 Keeping Your Practice Robust
Vel J. Laws
3:15 - 3:30 BREAK
3:30 - 4:30 Interesting PET and PET/CT Cases
Mehrbod Som Javadi and Lilja B. Solnes
4:30 SUMMARY and ADJOURN

You will receive an email notification to complete the evaluation form and to attest to the number of hours in attendance. The registration desk will remain open during conference hours.

The Johns Hopkins University School of Medicine takes responsibility for the content, quality and scientific integrity of this CME activity.

This schedule is subject to change.

REGISTRATION FORM
Course Number 80040497/6440
Enhance Patient Care with Nuclear Medicine and Molecular Imaging
March 10-11, 2017

To Register: Online: https://hopkinscme.cloud-cme.com/aph.aspx?P=5&EID=6640
By fax: (866) 510-7088 By phone: (410) 502-9634
Or mail this form to the Johns Hopkins University, Office of Continuing Medical Education, 720 Rutland Avenue, Room 20, Baltimore, Maryland 21205-2195.

FULL PAYMENT IS REQUIRED PRIOR TO THE START OF ACTIVITY.

I am a Johns Hopkins speaker for this activity.

Please type or print clearly:

last name
first name
m.i.
highest degree
primary specialty
Hopkins faculty/staff
JHED ID

For Physicians Only: NPI – 10 digits
State License #
State of License

mailing address
city
state
ZIP
country
daytime telephone
fax number
e-mail (required)

Check here if you wish to receive e-mail notices about upcoming CME activities.

I plan to stay at the Pier 5 Hotel in Baltimore, Maryland.
What do you hope to learn by attending this activity?

Please notify us if you have any special needs.

Registration Fees:

□ Physicians .................................................................................................................. $600

□ Residents* / Fellows* / Nurses* / PhD / PA / Allied Health Professionals .................. $500

* with verification of status

The registration fee includes instructional materials and food and beverage. For registrations received after 5:00 p.m. ET on March 4, 2017, include a $50 late fee. On-site registrations are payable only by credit card. Check here if you wish to receive e-mail notices about upcoming CME activities.

Total amount $.

Payment Type:

JHU Faculty/Staff Only: If you are using your Tuition Remission Benefit or an ION budget, please upload your fully completed and approved form in the payment section of the online activity link above.

TR Form: http://benefits.jhu.edu/documents/trfacandstaff.pdf

ION Form: http://hopkinscme.edu/migration/ionRequest.pdf

□ e-Check: Routing #

□ Credit Card:

□ VISA

□ MASTERCARD

□ DISCOVER

□ AMEX

Account #

Exp. Date

Billing Zip Code

Security Code

Name on Card

Signature and Date
Enhance Patient Care with Nuclear Medicine and Molecular Imaging

March 10-11, 2017
Johns Hopkins University
School of Medicine
Baltimore, Maryland

Director: Martin Pomper, MD, PhD
William R. Brody Professor of Radiology and Radiological Science
Director, Division of Nuclear Medicine and Molecular Imaging
Department of Radiology and Radiological Science
Johns Hopkins University School of Medicine

Guest Speakers
Richard P. Baum, MD, PhD
Chairman and Clinical Director, Department of Nuclear Medicine / Center for PET/CT
Zentralklinik Bad Berka
Theranostics Center for Molecular Radiotherapy and Imaging
Bad Berka, Germany

Rob Beanlands, MD, FRCPC, FACC
Professor of Cardiology and Radiology
Vered Chair and Chief, Division of Cardiology
Director, National Cardiac PET Centre
University of Ottawa Heart Institute
Ottawa, Canada

Frank M. Bengel, MD
Professor and Director, Department of Nuclear Medicine
Hannover Medical School
Hannover, Germany

Peter L. Choyke, MD, FACR
Program Director, Molecular Imaging
Senior Investigator and Head of Imaging Section
National Cancer Institute
Bethesda, Maryland

Heather A. Jacene, MD
Assistant Professor of Radiology
Harvard Medical School and Dana Farber Cancer Institute
Senior Physician and Clinical Director, Nuclear Medicine/PET-CT
Harvard Medical School
Boston, Massachusetts

Val J. Lowe, MD, FACS
Professor of Radiology
Division of Nuclear Medicine
The Mayo Clinic
Director, Mayo Clinic Molecular Imaging
Director, Imaging Program in the Mayo Clinic Comprehensive Cancer Center
Rochester, Minnesota

David A. Mankoff, MD, PhD
Professor of Radiology
Chief, Division of Nuclear Medicine and Molecular Imaging
University of Pennsylvania
Philadelphia, Pennsylvania

Jonathan E. McConathy, MD, PhD
Associate Professor and Director, Division of Molecular Imaging and Therapeutics
University of Alabama at Birmingham
Birmingham, Alabama

Richard L. Wahl, MD
Elizabeth Mallinckrodt Professor of Radiology
Chairman, Department of Radiology
Director, Mallinckrodt Institute of Radiology
St. Louis, Missouri

Co-Director
Julia W. Buchanan, BS
Department of Radiology and Radiological Science
Division of Nuclear Medicine and Molecular Imaging
Johns Hopkins University School of Medicine

Johns Hopkins Speakers
David S. Cooper, MD
Professor of Medicine
Division of Endocrinology and Metabolism
Kelvin Hong, MD
Assistant Professor of Radiology and Radiological Science
Division of Cardiovascular and Interventional Radiology
Division Chief, Vascular and Interventional Radiology
Director, Interventional Radiology Center
Director, Fellowship Program
Sanjay K. Jain, MD
Associate Professor of Pediatrics
Infectious Diseases Director, Center for Infection and Inflammation Imaging Research
Mehrbod Som Javadi, MD
Assistant Professor of Radiology and Radiological Science
Division of Nuclear Medicine and Molecular Imaging
Director, Clinical Operations
Chiadikaobi U. Onyike, MD
Associate Professor of Psychiatry and Behavioral Sciences
Director, Johns Hopkins Frontotemporal Dementia and Young-Onset Dementias Clinic
Kenneth J. Pienta, MD
Professor of Urology
Steven P. Rowe, MD, PhD
Assistant Professor of Radiology and Radiological Science
Division of Nuclear Medicine
Thomas H. Schindler, MD
Associate Professor of Medicine and Radiology and Radiological Science
Director, Cardiovascular Nuclear Medicine
Lilja B. Solnes, MD
Assistant Professor of Radiology and Radiological Science
Division of Nuclear Medicine
George Sgouros, PhD
Professor of Radiology and Radiological Science, Oncology, and Radiation Oncology
Daniel Y. Song, MD
Associate Professor of Radiation Oncology and Molecular Radiation Sciences
Zsolt Szabo, MD, PhD
Professor of Radiology and Radiological Science
Division of Nuclear Medicine
Gordon F. Tomaselli, MD
Professor of Medicine
Division of Cardiology
Dean F. Wong, MD, PhD
Professor of Radiology
Division of Nuclear Medicine, Psychiatry and Behavioral Sciences
Harvey A. Ziessman, MD
Professor of Radiology and Radiological Science
Division of Nuclear Medicine