



**JOHNS HOPKINS**  
M E D I C I N E

Office of Continuing Medical Education  
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*18th Annual*  
**HOT TOPICS IN  
MR IMAGING**  
*for the Technologist*

**February 24-25, 2018**

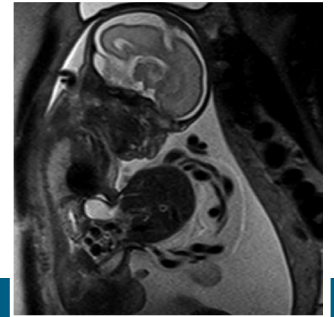
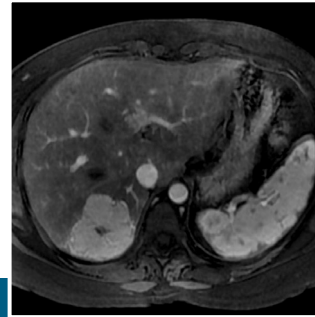
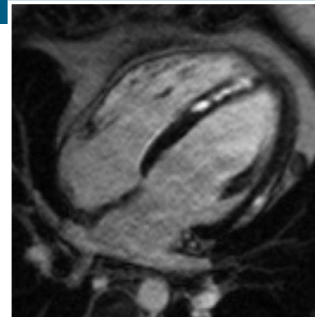
**CONTINUING MEDICAL EDUCATION**

**The Russell H. Morgan  
Department of Radiology and Radiological Science**  
Presents

*18th Annual*

# HOT TOPICS IN MR IMAGING

*for the Technologist*



**February 24-25, 2018**

Thomas B. Turner Building  
Baltimore, Maryland

Activity Director: **Ihab R. Kamel, MD, PhD**



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M E D I C I N E

## DESCRIPTION

The field of MRI is rapidly changing. Significant improvements have been made in safety in the MRI environment, including contrast administration safety. In addition, the role of novel PET/MR machines continues to evolve and could potentially change the way we practice imaging. The role of Breast MRI in screening high risk patients continues to grow and technologists need to be comfortable with performing these imaging studies. It is crucial that technologists and other radiology staff receive updates and education in the latest MRI technology, not only to maintain their national license requirement but to be able to provide the best care to patients and properly address safety issues with MRI. The one way to accomplish these goals is to provide an annual CME-type imaging seminar where we can select leaders in the field of MRI to discuss the changes, and how these changes impact the delivery of patient care.

## WHO SHOULD ATTEND

This activity is intended for MRI Technologists and Radiologists.

## OBJECTIVES

After attending this activity, the participant will demonstrate the ability to:

- Restate basic knowledge of underlying principles of MRI.
- Define and apply the increasing role of MRI in imaging the bowel.
- Define and apply the increasing role of cardiac MRI in clinical practice.
- Discuss newer applications that widen the scope of clinical MRI including "fast" imaging.

## CREDIT DESIGNATION STATEMENT

### American Healthcare Radiology Administrators

This activity has been approved by AHRA, the approving RCEEM: The Association for Medical Imaging Management for a maximum of 14.25 Category A, ARRT continuing education credits. *You must attend each session in its entirety to obtain credit. No partial session credit will be awarded.*

### 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.

## General Information

### REGISTRATION

Saturday, February 24, 2018 • 7:15 a.m.

### LOCATION

Thomas B. Turner Building  
Johns Hopkins University School of Medicine  
720 Rutland Avenue, Baltimore, Maryland 21205

The Turner Building is located on Rutland Avenue at Monument Street. Directions and campus parking information are available on our website under the contact us link: <https://HopkinsCME.cloud-cme.com>. Handicapped parking is available in the nearby Rutland Garage. **Johns Hopkins is smoke-free.**

**Complimentary parking is available in the Washington Street Garage.**

### FEES

**REGISTRATION CUT-OFF DATE: February 18, 2018**

**Register Online at:**

<https://hopkinscme.cloud-cme.com/aph.aspx?P=5&EID=11020>

**Methods of Payment:** We require full payment prior to the start of the activity. On-site payments by credit card only. Early bird registration is available for registrations received prior to 5:00 p.m. ET on **January 8, 2018**. The registration fee includes, continental breakfasts, refreshment breaks and lunches.

**Registration Fees:**

#### EARLY-BIRD POSTMARKED BEFORE 1/8/2018

	Two Day Fee	One Day Fee
Physicians .....	\$470	\$235
Residents*/Fellows*/Technologists/ Allied Health Professionals .....	\$270	\$135

#### POSTMARKED AFTER 1/8/2018

	Two Day Fee	One Day Fee
Physicians .....	\$490	\$245
Residents*/Fellows*/Technologists/ Allied Health Professionals .....	\$290	\$145

\*with verification of status

You will receive a confirmation by e-mail. If you have not received it by February 18, 2018, call (410) 502-9634 to confirm that you are registered. A transcript of attendance will be emailed to you no later than 30 days post activity.

The Johns Hopkins University reserves the right to cancel or postpone any activity due to unforeseen circumstances. In this event, the University will refund the registration fee but is not responsible for travel expenses. Additionally, we reserve the right to change the venue to a comparable venue. Under such circumstances registrants will be notified as soon as possible.

### LATE FEE AND REFUND POLICY

A \$50 late fee applies to registrations received after 5:00 p.m. ET on **February 18, 2018**. A handling fee of \$50 will be deducted for cancellation. An additional fee may apply for cancellation of other events, including workshops and social activities. Refund requests must be received by fax or mail by **February 18, 2018**. No refunds will be made thereafter. Transfer of registration to another Johns Hopkins activity in lieu of cancellation is not possible.

### SYLLABUS

All registrants will receive a flash drive with the slides and paper for note-taking. This is included in the cost of your registration. The syllabus will be accessible online and via your mobile device in the CloudCME App prior to the activity.

### SOCIAL EVENT

A complimentary reception for registrants and faculty will be held Saturday, February 24, 2018 immediately following the general session. Please indicate your attendance on the registration form if you plan to participate.

NOTE: The commercial support received is solely for the educational component of this activity and will not be used to support this social event.

### EMERGENCY CALLS

On February 24 and 25, direct emergency calls to the Hopkins registration desk, (410) 955-3673. Messages will be posted for participants.

### HOTEL INFORMATION

**Pier 5 Hotel** (866) 583-4162  
711 Eastern Avenue (410) 539-2000  
Baltimore, Maryland 21202 FAX: (410) 783-1469  
Web Site: [www.harbormagic.com](http://www.harbormagic.com)

### HOTEL RESERVATION CUT-OFF DATE: JANUARY 29, 2018

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 nestled on its own pier directly on the water, next to the National Aquarium and behind the Power Plant entertainment complex. The Pier 5 is just steps away from all the excitement of the Inner Harbor. Make your reservation online at <http://group.curiocollection.com/JHU-CME> (group code is JHMJ) or call the hotel directly, (410) 539-2000 or (877) 207-9047, and specify that you are attending the Johns Hopkins **18th Annual Hot Topics in MR Imaging for the Technologist** course to receive the special group rate of \$139, single or double, plus tax. Check-in time is 4:00 p.m. Check-out time is 12:00 noon.

### EVALUATION AND CREDIT

Post activity, an online evaluation form will be available to attendees to evaluate the activity and individual presentations and identify future educational needs. To receive ARRT credit, all attendees must submit their attendance verification forms onsite prior to their departure with all claimed session codes. You will receive your certificate via email within 30 days post activity.

### 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.*

# PROGRAM

## SATURDAY, FEBRUARY 24, 2018

7:15 – 7:55	Registration and Continental Breakfast
7:55 – 8:00	<b>Welcome and Conference Goals</b>
8:00 – 8:30	<b>Cardiac MRI: The Basics</b> Stefan Zimmerman, MD
8:30 – 9:00	<b>Phase Contrast Cardiac MRI: From 2D to 4D</b> Linda Chu, MD
9:00 – 9:30	<b>Managing Common MRI Artifacts</b> Stefan Zimmerman, MD
9:30 – 10:00	<b>Imaging the Female Pelvis</b> Linda Chu, MD
10:00 – 10:30	Refreshment Break
10:30 – 11:00	<b>MR Enterography</b> Linda Chu, MD
11:00 – 11:30	<b>MRI of the Prostate</b> Atif Zaheer, MD
11:30 – 12:00	<b>MRI in Staging Rectal Cancer</b> Ihab R. Kamel, MD, PhD
12:00 – 12:30	<b>Lipid Imaging in Body Applications</b> Atif Zaheer, MD
12:30 – 12:45	<b>Questions and Answers</b>
12:45 – 1:30	Lunch
1:30 – 3:30	<b>MR Safety Considerations for Patients with Devices</b>
1:30 – 1:50	<b>Introduction</b> Ihab R. Kamel, MD, PhD
1:50 – 2:10	<b>Device Screening</b> Michael Jacobs, PhD
2:10 – 2:30	<b>Medtronic Device Safety</b>
2:30 – 2:50	<b>St. Jude Medical Device Safety</b>
2:50 – 3:10	<b>Biotronik Device Safety</b>
3:10 – 3:30	<b>Questions and Answers</b>
3:30 – 5:00	Welcome Reception

## SUNDAY, FEBRUARY 25, 2018

7:15 – 8:00	Registration and Continental Breakfast
8:00 – 8:30	<b>High Risk Screening Breast MRI</b> Susan Harvey, MD
8:30 – 9:00	<b>MRI in Liver Transplantation</b> Ihab R. Kamel, MD, PhD
9:00 – 9:30	<b>MRI-Guided Breast Biopsy</b> Susan Harvey, MD
9:30 – 10:00	<b>Introduction to Pediatric Neuroradiology</b> Bruno Soares, MD
10:00 – 10:30	Refreshment Break
10:30 – 11:00	<b>Pediatric Head and Spine Trauma</b> Bruno Soares, MD
11:00 – 11:30	<b>Functional MR Imaging in the Brain</b> Haris Sair, MD
11:30 – 12:00	<b>Imaging of the Macrocephalic Child</b> Bruno Soares, MD
12:00 – 12:30	<b>Advanced White Matter Imaging</b> Haris Sair, MD
12:30 – 12:45	<b>Questions and Answers</b>
12:45 – 1:30	Lunch
1:30 – 2:00	<b>MRI of the Knee</b> Laura Fayad, MD
2:00 – 2:30	<b>Optimizing MRI Protocols for MSK</b> Jan Fritz, MD
2:30 – 3:00	<b>MRI of the Elbow and Wrist</b> Laura Fayad, MD
3:00 – 3:30	<b>MARS MRI at 1.5T and 3T</b> Jan Fritz, MD
3:30	Adjourn

You will receive an email notification to complete the evaluation form. 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.*

### TO REGISTER OR FOR FURTHER INFORMATION

Register Online	<a href="https://hopkinscme.cloud-cme.com/aph.aspx?P=5&amp;EID=11020">https://hopkinscme.cloud-cme.com/aph.aspx?P=5&amp;EID=11020</a>
Register by Phone	(410) 502-9634
Register by Fax	(866) 510-7088
Confirmation/Certificates	(410) 502-9634
General Information	(410) 955-2959
E-mail the Office of CME	<a href="mailto:cmenet@jhmi.edu">cmenet@jhmi.edu</a>

Follow us on Twitter: <http://twitter.com/HopkinsCME>  
Facebook: <http://www.facebook.com/HopkinsCME>

For general information, the direct link for this CME activity web page  
<https://hopkinscme.cloud-cme.com/aph.aspx?P=5&EID=11020>

**NEW!** Check out our mobile app **CloudCME**.  
*Organization Code: HopkinsCME*



Sponsoring Department Website: <http://www.hopkinsmedicine.org/radiology/>

For website and CloudCME mobile app technical difficulties,  
email: [cmetechsupport@jhmi.edu](mailto:cmetechsupport@jhmi.edu)

### ACKNOWLEDGEMENT

Applications for commercial support from health care related industries are pending. A complete list of contributors will be provided in the syllabus. Please note that commercial support received is solely for the educational component of the activity and will not be used to provide food and beverage.

**Please note:** The Physician Payments Sunshine Act was enacted by Congress to increase public awareness of financial relationships between drug and medical device manufacturers and physicians. In compliance with the requirements of this Act, the commercial supporter/s of this activity may require the Johns Hopkins University School of Medicine to report certain professional information (such as name, address, National Provider Identifier (NPI), and State License number) of physician attendees who receive complimentary food and beverage in conjunction with a CME activity. The commercial supporter is required to submit the collected data to the Centers for Medicare and Medicaid Services which will then publish the data on its website.

# SPEAKERS

## Activity Director

### Ihab R. Kamel, MD, PhD

Professor of Radiology, Radiological Science and Oncology  
Clinical Director, MRI

## Johns Hopkins Speakers

### Linda Chu, MD

Assistant Professor of Radiology and Radiological Science  
Diagnostic Imaging

### Laura Fayad, MD

Associate Professor of Radiology and Radiological Science  
Director, Musculoskeletal Radiology

### Jan Fritz, MD

Assistant Professor of Radiology and Radiological Science  
Diagnostic Imaging

### Susan Harvey, MD

Assistant Professor of Radiology and Radiological Science  
Director, Breast Imaging

### Michael Jacobs, PhD

Associate Professor of Radiology and Radiological Science

### Haris Sair, MD

Assistant Professor of Radiology, Radiological Science and Oncology  
Associate Director of Neuroradiology

### Bruno Soares, MD

Assistant Professor of Radiology and Radiological Science  
Pediatric Radiology and Pediatric Neuroradiology

### Atif Zaheer, MD

Associate Professor of Radiology and Radiological Science  
Diagnostic Imaging

### Stefan Zimmerman, MD

Associate Professor of Radiology and Radiological Science  
Director, Cardiac Imaging

## Registration Form

Course Number 80043956/11020

### 18th Annual Hot Topics in MR Imaging for the Technologist

February 24 – 25, 2018

#### To Register:

**Online:** <https://hopkinscme.cloud-cme.com/aph.aspx?P=5&EID=11020>

**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	primary specialty			Hopkins faculty/staff only JHED ID	
<b>For Physicians Only:</b>	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. \_\_\_\_\_

**Social Event:** *Please indicate your attendance.*

Yes, I will attend the Welcome Reception (included in registration fee).

#### Registration Fees:

**EARLY-BIRD** postmarked before 1/8/2018 **Two Day Fee** **One Day Fee**

Physicians .....\$470.....\$235

Residents\*/Fellows\*/Technologists/  
Allied Health Professionals .....\$270.....\$135

Indicate Day \_\_\_\_\_

Indicate Day \_\_\_\_\_

**REGULAR** postmarked after 1/8/2018 **Two Day Fee** **One Day Fee**

Physicians .....\$490.....\$245

Residents\*/Fellows\*/Technologists/  
Allied Health Professionals .....\$290.....\$145

\*with verification of status

Indicate Day \_\_\_\_\_

The registration fee includes food and beverage. For registrations received after 5:00 p.m. ET on **February 18, 2018**, include a \$50 late fee. On-site registrations are payable only by credit card.

**Payment Type:** Total amount \$ \_\_\_\_\_

**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/trffacandstaff.pdf>

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

**eCheck:** Routing # \_\_\_\_\_ Account # \_\_\_\_\_

**Credit Card:**  VISA  MASTERCARD  DISCOVER  AMEX

Card # \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ Exp. Date \_\_\_\_\_

Billing Zip Code \_\_\_\_\_ Security Code \_\_\_\_\_

Name on Card

Signature & Date