



# 14<sup>th</sup> Interventional MRI Symposium

October 17-18, 2024  
The Graduate Hotel  
Annapolis, Maryland



*This activity is endorsed by:*





# 14<sup>th</sup> Interventional MRI Symposium

## DESCRIPTION

Over the past two decades image-guided therapies have expanded into every organ system and disease state. Interventional MRI (iMRI) has become vital to current multimodality image-guided therapies and also provides an entirely new platform for novel therapies.

In light of the rapid developments in the field and due to the success of the 13th iMRI Symposium 2022 in Leipzig, we would like to cordially invite you to attend the 14th Interventional MRI Symposium 2024 in Annapolis, Maryland, USA. The Interventional MRI Symposium is a cutting-edge platform for researchers, clinicians, and other healthcare specialists to present their latest results and interact with international leaders and innovators in the field. The current program will be composed of lectures from both invited speakers and proffered papers. We encourage all professionals working in the field of interventional MRI to submit scientific abstracts to this symposium. The focus of the iMRI Symposium is the use of magnetic resonance imaging for the planning, control, and monitoring of surgical and radiological interventions. In particular, the topics of the 2024 iMRI symposium include interventional MRI systems, hybrid designs, instrumentation, MR pulse sequences, visualization techniques and data processing, navigation techniques, robotics, MR thermometry, thermal ablation techniques, MR guided biopsies, molecular imaging, MR guidance of cellular therapies, and targeted drug delivery.

## WHO SHOULD ATTEND

The target audience includes: Academic/Research, Cardiology, Diagnostic Radiology, Engineering, Interventional Radiology, MRI, MRI Physics, Nuclear Radiology, Neurosurgery, Radiology, Radiologic Technologist.

## OBJECTIVES

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

- Explain the underlying concepts and related methods in interventional and intraoperative MRI.
- List specific indications and applications for different clinical questions.
- Identify the advantages and limitations of interventional MRI approaches.
- Describe key research areas and clinical findings.
- Evaluate trends and developments within the field.

## POLICY ON PRESENTER AND PROVIDER DISCLOSURE

It is the policy of the Johns Hopkins School of Medicine that the presenter and provider globally disclose conflicts of interest. The Johns Hopkins School of Medicine OCME has established policies in place to identify and mitigate relevant conflicts of interest prior to this educational activity. Detailed disclosure will be made prior to presentation of the education.

# GENERAL INFORMATION

## GENERAL INFORMATION

### REGISTRATION

October 17, 2024 | 7:15 – 8:00 a.m.

### FEES

**REGISTRATION CUT-OFF DATE: October 11, 2024**

Register Online:

<https://hopkinscme.cloud-cme.com/aph.aspx?P=5&EID=46059>

|   | Early Bird Rate<br>by 9/1/2024 | Standard Fee<br>After 9/1/2024<br>and before<br>10/11/2024 | Late Fee<br>After 10/11/2024 |
|---|--------------------------------|--|------------------------------|
| Physicians  | \$600                          | \$650  | \$700                        |
| Nurses/<br>Scientists/<br>Other Allied<br>Health<br>Professionals | \$500                          | \$550  | \$600                        |
| Students/<br>Residents/<br>Fellows                                | \$300                          | \$350  | \$400                        |

**Methods of Payment:** Learners must register and submit full payment prior to the start of the activity. On-site payments can only be accepted if made by learners via credit card through the online portal by 5:00 p.m. ET on the first day of the activity.

Early bird registration is available for registrations received prior to 5:00 p.m. ET on September 1, 2024.

The registration fee includes instructional materials, continental breakfasts, refreshment breaks and lunches and a dinner.

You will receive a confirmation by e-mail. If you have not received it by **October 11, 2024**, call (410) 502-9636 to confirm that you are registered.

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 **October 11, 2024**. 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 October 11, 2024. No refunds will be made thereafter. Transfer of registration to another Johns Hopkins activity in lieu of cancellation is not possible.

## SOCIAL EVENT

A complimentary dinner reception for registrants and faculty will be held Thursday evening, October 17, 2024 at 6:30 p.m. Guests are invited to attend at an additional charge of \$100. Please indicate your attendance when registering.

## SYLLABUS

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

## CALL FOR ABSTRACTS

Submission deadline is July 1, 2024.



## HOTEL AND TRAVEL INFORMATION

### The Graduate Hotel

126 West Street

Annapolis, Maryland 21401

Phone: +1 (410) 263-7777

Website: <https://www.graduatehotels.com/annapolis/>

**Hotel Registration Cut-Off Date:** September 24, 2024

**Hotel Rate:** \$279.00

**Hotel Reservation Link:** [JHUCME at Graduate Annapolis](#)

Step inside Graduate Annapolis and find yourself immersed in local history, legends and Navy traditions, as creative interiors and college nostalgia come together for a stay that's undeniably Annapolis. Located in the city's Arts District, just a short stroll from the U.S. Naval Academy, St. John's College and Chesapeake Bay, our hotel is your perfect home base for exploring this scenic harbor town. Self and valet parking are available for an additional fee. Check in time is 4:00 p.m. Check out time is 11:00 a.m.



## AROUND TOWN — LEARN MORE TRAVEL INFORMATION

**By Air:** Annapolis is served by three major airports:

- Baltimore/Washington International Thurgood Marshall Airport (BWI) in Maryland—*about 45 minutes away*
- Dulles International Airport (IAD) in Northern Virginia—*1.5 hours away*
- Ronald Reagan National Airport (DCA) in Northern Virginia—*1 hour away*

**Ground Transportation:** If you don't have access to a car, local app-based ride-sharing (UBER/LYFT) and taxi services are available.

Please contact the front desk for assistance in arranging taxi or limo services to the airport.

Super shuttle offers one way or round trip van service for travelers at a reasonable rate.

Reservation can be made online at [www.supershuttle.com](http://www.supershuttle.com) or call +1 (800) 258-3826.

# GENERAL INFORMATION

## EMERGENCY CALLS

On October 17 – 18, 2024, direct emergency calls to +1 (410) 263-7777 and ask that a message be sent to the Johns Hopkins registration desk. Messages will be posted for participants.

## AMERICANS WITH DISABILITIES ACT

The Johns Hopkins 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.

## SPONSORSHIP OPPORTUNITIES

Click [HERE](#) to download our sponsorship prospectus.

Visit our website <https://hopkinscme.cloud-cme.com/aph.aspx?P=5&EID=46059>, or scan this QR code for sponsorship opportunities.

Contact: Laura Friend, CME Lead Coordinator, email: [lfriend1@jhmi.edu](mailto:lfriend1@jhmi.edu)



## ACKNOWLEDGEMENT

We wish to acknowledge the following companies that have provided or pledged an educational grant in support of this activity. Additional sponsors are pending and will be added. Check our website for the most current listing of sponsors.

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### SESSION SPONSOR



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### EXHIBITORS



### OTHER



## TO REGISTER OR FOR FURTHER INFORMATION

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E-mail the Office of CME .....[cmenet@jhmi.edu](mailto:cmenet@jhmi.edu)

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For general information, please visit the activity webpage at <https://hopkinscme.cloud-cme.com/aph.aspx?P=5&EID=46059>



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<https://hopkinscme.cloud-cme.com/about/help>

# MEETING CHAIRS AND ORGANIZING COMMITTEE

## MEETING CHAIRS:

### **Thomas Kahn, MD**

Professor of Radiology  
Department of Diagnostic and Interventional Radiology  
University of Leipzig  
Leipzig, Germany

### **Jonathan S. Lewin, MD, FACP**

Professor of Radiology, Biomedical Engineering, and Neurosurgery  
Emory School of Medicine  
Professor of Health Policy and Management  
Rollins School of Public Health  
Atlanta, Georgia, USA

### **Clare Tempany, MD**

Ferenc Jolesz MD Professor of Radiology  
Harvard Medical School  
Center Director  
National Center for Advanced Technologies Image  
Guided Therapy  
Vice-Chair of Radiology Research  
Brigham & Women's Hospital  
Boston, Massachusetts, USA

## CHAIRS ORGANIZING COMMITTEE:

### **Clifford Weiss, MD, FSIR, FCIRSE**

Professor of Radiology, Radiological Science and Biomedical  
Engineering  
Division of Interventional Radiology  
Johns Hopkins School of Medicine  
Baltimore, Maryland, USA  
cweiss@jhmi.edu

### **Dara Kraitchman, VMD, PhD**

Professor of Radiology and Radiological Science and Molecular and  
Comparative Pathobiology  
Division of MR Research  
Johns Hopkins School of Medicine  
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## ORGANIZING COMMITTEE:

### **Harald Busse, PhD**

Senior Lecturer of Experimental Radiology  
Department of Diagnostic and Interventional Radiology  
University of Leipzig  
Leipzig, Germany

### **Jan Fritz, MD**

Associate Professor of Radiology  
Department of Radiology  
Director of Magnetic Resonance Imaging (MRI)  
Section Chief Musculoskeletal (MSK) Imaging Section  
NYU Grossman School of Medicine  
New York, New York, USA

### **Hata Nobuhiko, PhD**

Professor of Radiology  
Department of Radiology  
Harvard Medical School  
Boston, Massachusetts, USA

### **Georg Rose, PhD**

Professor of Medical Engineering  
Chair of Medical Imaging  
Director of the Research Campus STIMULATE  
Otto-Von-Guericke-University Magdeburg  
Magdeburg, Germany

### **Frank K. Wacker, MD**

Professor and Chairman  
Department of Radiology  
Imaging Unit, Clinical Research Center Hannover  
Hannover Medical School  
Hannover, Germany

### **David A. Woodrum, MD, PhD**

Associate Professor of Radiology  
Mayo Clinic  
Department of Radiology  
Rochester, Minnesota, USA

## THURSDAY, OCTOBER 17, 2024

### MORNING

|                         |  |
|-------------------------|--|
| 7:00 a.m. - 8:00 a.m.   | REGISTRATION, BREAKFAST and EXHIBITS                     |
| 8:00 a.m. - 9:00 a.m.   | <b>WELCOME, INTRODUCTION, GOALS, AND KEYNOTE LECTURE</b> |
| 9:00 a.m. - 10:05 a.m.  | <b>SESSION I: General Issues – Technology</b>            |
| 10:30 a.m. - 12:20 p.m. | <b>SESSION II: Cardiovascular</b>                        |

### AFTERNOON

|                        |  |
|------------------------|--|
| 12:25 p.m. - 1:45 p.m. | <b>LUNCH SYMPOSIUM: Siemens Healthineers</b>   |
| 1:45 p.m. - 3:00 p.m.  | <b>SESSION III: Poster Presentations</b><br><i>Presenters expected to remain with their poster throughout the session to engage in discussion.</i> |
| 3:30 p.m. - 5:40 p.m.  | <b>SESSION IV: Prostate</b>  |
| 6:30 p.m. - 8:30 p.m.  | <b>DINNER RECEPTION</b><br>Graduate Hotel Trophy Room Restaurant   |

## FRIDAY, OCTOBER 18, 2024

### MORNING

|                         |  |
|-------------------------|--|
| 7:15 a.m. - 8:00 a.m.   | REGISTRATION, BREAKFAST and EXHIBITS                           |
| 8:00 a.m. - 8:45 a.m.   | <b>INTRODUCTION AND KEYNOTE LECTURE</b>                        |
| 8:45 a.m. - 10:10 a.m.  | <b>SESSION V: Neuro</b>  |
| 10:40 a.m. - 12:25 p.m. | <b>SESSION VI: MR Thermometry/ Focused Ultrasound/Ablation</b> |

### AFTERNOON

|                        |   |
|------------------------|---|
| 12:25 p.m. - 1:45 p.m. | <b>LUNCH SYMPOSIUM: Cook Medical</b>    |
| 1:45 p.m. - 2:40 p.m.  | <b>SESSION VII: Musculoskeletal I</b>   |
| 3:15 p.m. - 4:10 p.m.  | <b>SESSION VIII: Musculoskeletal II</b> |
| 4:10 p.m. - 5:15 p.m.  | <b>SESSION IX: Robotics</b>             |
| 5:15 p.m. - 5:30 p.m.  | <b>POSTER AWARDS</b>                    |
|                        | <b>CONCLUSION</b>                       |
|                        | <b>ADJOURNMENT</b>                      |

You will receive an email notification to complete the evaluation form to obtain your certificate of attendance. The registration desk and exhibit hall will remain open during conference hours.



# INVITED SPEAKERS

## **Aimee Armstrong, MD**

Professor of Pediatrics  
Director of Cardiac Catheterization & Interventional Therapies  
Nationwide Children's Hospital  
Ohio State University College of Medicine  
Columbus, Ohio, USA

## **Geertruida Petronella Bijvoet, MD, PhD**

Cardiologist  
Maastricht University Medical Center  
Maastricht, The Netherlands

## **Roberto Blanco-Sequeiros, MD, PhD**

Professor of Radiology  
Chairman of the Department of Radiology  
Turku University Hospital  
Turku, Finland

## **Harald Busse, PhD**

Senior Lecturer of Experimental Radiology  
Department of Diagnostic and Interventional Radiology  
University of Leipzig  
Leipzig, Germany

## **Jaydev Desai, PhD**

Associate Chair for Undergraduate Studies  
G.P. "Bud" Peterson and Valerie H. Peterson Professor in  
Pediatric Research  
Carol Ann and David D. Flanagan Distinguished Faculty Fellow  
Director, Georgia Center for Medical Robotics  
Associate Director, Institute for Robotics and Intelligent Machines  
Emory University  
Atlanta, Georgia, USA

## **Jan Fritz, MD**

Associate Professor  
Department of Radiology  
Director of Magnetic Resonance Imaging (MRI)  
Section Chief Musculoskeletal (MSK) Imaging Section  
NYU Grossman School of Medicine  
New York, New York, USA

## **Jurgen Futterer, MD, PhD**

Professor of Image-Guided Oncologic Interventions  
Department of Medical Imaging  
Radboud University Nijmegen Medical Center  
Nijmegen, Gelderland, The Netherlands

## **Afshin Gangi, MD, PhD**

Chairman of Radiology and Nuclear Medicine  
Imagerie Interventionnelle  
University hospital Strasbourg France  
Interventional Radiology  
King's College London  
Guy's and St Thomas's NHS  
London, United Kingdom

## **Robert Gross, MD, PhD**

Chair, Department of Neurosurgery  
Henry Rutgers Professor of Neurosurgery and  
Neuroscience and Cell Biology  
System Chair of Neurological Surgery  
Robert Wood Johnson School of Medicine and  
New Jersey Medical School of Rutgers University  
Senior Vice President for Neurosurgical Services  
Robert Wood Johnson Barnabus Health System  
Newark, New Jersey, USA

## **Nobuhiko Hata, PhD**

Professor of Radiology  
Department of Radiology  
Brigham and Women's Hospital  
Boston, Massachusetts, USA

## **Amy Jenkins, PhD**

Director of the Health Science Futures Mission Office  
Advanced Research Projects Agency for Health (ARPA-H)  
Washington, DC, USA

## **Erica Mary Knavel Koepsel, MD**

Assistant Professor of Radiology  
Department of Radiology  
University of Wisconsin  
Madison, Wisconsin, USA

## **AV Kolandaivelu, MD**

Assistant Professor of Medicine  
Division of Cardiology  
Johns Hopkins School of Medicine  
Baltimore, Maryland, USA

## **Kagayaki Kuroda, MD**

Professor  
Department of Human and Information Science  
School of Information Science and Technology  
Tokai University  
Hiratsuka, Japan

## **Arya Nabavi, PhD**

Professor of Neurosurgery  
Director of the Department of Neurosurgery  
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## **Clare Tempany, MD**

Ferenc Jolesz MD Professor of Radiology  
Harvard Medical School Center Director  
National Center for Advanced Technologies Image Guided Therapy  
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## **David Woodrum, MD**

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## **Yueyong Xiao, MD, PhD**

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