



14th Interventional MRI Symposium

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



This activity is endorsed by:





14th 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 by 9/1/2024	Standard Fee After 9/1/2024 and before 10/11/2024	Late Fee After 10/11/2024
Physicians	\$600	\$650	\$700
Nurses/ Scientists/ Other Allied Health Professionals	\$500	\$550	\$600
Students/ Residents/ 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

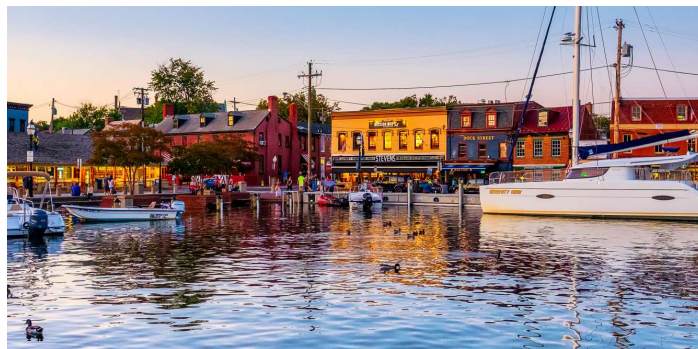
Website: <https://www.graduatehotels.com/annapolis/>

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 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.

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



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MEETING CHAIRS AND ORGANIZING COMMITTEE

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Associate Professor of Radiology
Mayo Clinic
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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.	WELCOME, INTRODUCTION, GOALS, AND KEYNOTE LECTURE
9:00 a.m. - 10:05 a.m.	SESSION I: General Issues – Technology
10:30 a.m. - 12:20 p.m.	SESSION II: Cardiovascular

AFTERNOON

12:25 p.m. - 1:45 p.m.	LUNCH SYMPOSIUM: Siemens Healthineers
1:45 p.m. - 3:00 p.m.	SESSION III: Poster Presentations <i>Presenters expected to remain with their poster throughout the session to engage in discussion.</i>
3:30 p.m. - 5:40 p.m.	SESSION IV: Prostate
6:30 p.m. - 8:30 p.m.	DINNER RECEPTION 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.	INTRODUCTION AND KEYNOTE LECTURE
8:45 a.m. - 10:10 a.m.	SESSION V: Neuro
10:40 a.m. - 12:25 p.m.	SESSION VI: MR Thermometry/ Focused Ultrasound/Ablation

AFTERNOON

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

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
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Geertruida Petronella Bijvoet, MD, PhD

Cardiologist
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Maastricht, The Netherlands

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THURSDAY, October 17, 2024

7:00-8:00		REGISTRATION, BREAKFAST, AND VISIT EXHIBITS
8:00-8:15	M-01	WELCOME, INTRODUCTION, AND GOALS Clifford Weiss, Dara Kraitchman, Clare Tempny, Thomas Kahn, Jonathan Lewin
		<u>KEYNOTE LECTURE: Ferenc Jolesz Memorial Lecture</u> <i>Introduction: Jonathan Lewin</i>
8:15-9:00	K-01	MR and MR-Guided Interventions: The Prostate Story Clare Tempny (Harvard Medical School), Boston, MA, United States
		<u>SESSION I (9:00am - 9:30am) TECHNOLOGY - GENERAL</u> <i>Introduction: Clifford Weiss</i>
9:00-9:15	O-01	Technical Assistance and Guiding Devices for Percutaneous MRI Interventions Harald Busse (University Hospital Leipzig), Leipzig, Germany
9:15-9:30	O-02	MRI-Guided Abdominal Interventions – Results from the Research Campus STIMULATE Frank Wacker (Hannover Medical School), Hannover, Germany
		<u>SESSION II (9:30am - 10:25am) TECHNOLOGY - POWER PITCHES</u> <i>Moderators: Clifford Weiss/Dara Kraitchman</i>
9:30-9:35	M-02	Intro to Power Pitches: The Rules Dara Kraitchman (Johns Hopkins University), Baltimore, MD, United States
9:35-9:40	PP-01	MR Thermometry with a Deep-Learning Reconstruction Sherry Huang, Xinzeng Wang, Marc R Lebel, Nastaren Abad, Jayant Sakhardande, Ye Liang, Chris Brace, Shane Wells, Steve Hushek, Desmond Tb Yeo and James H Holmes Royal Oak, MI, United States
9:40-9:45	PP-02	Effectiveness of Fat Suppression Methods on the Accuracy of Proton-Resonance Frequency Shift (PRFS) MR Thermometry Anne Josset, Jonathan Vappou, Ounay Ishak, Paolo Cabras and Élodie Breton Strasbourg, France
9:45-9:50	PP-03	Touchless MRI Scanner Control: Multi-Agent Collaboration Based on LLMs for Voice Control with User Confirmation Process Hui Chen, Marcel Gutberlet, Moritz Gutt, Othmar Belker, Daniel Dux, Frank Wacker and Bennet Hensen Hannover, Germany
9:50-9:55	PP-04	MR Cavitation Imaging: A New Method for Monitoring Non-Thermal Ultrasound Therapies Ounay Ishak, Elodie Breton, Paolo Cabras, Erik Dumont, Anne Josset, Benoit Larrat, Anthony Novell and Jonathan Vappou Strasbourg, France
9:55-10:00	PP-05	Development and Optimization of Clinical Workflow for MRI-guided Interventions with Augmented Reality Pavel Yarmolenko, Van Lam, Rajan Purnima, Martin Hossbach, Alican Demir, Pezhman Foroughi, Pranav Bajaj, Samuel Skinner, Kevin Cleary, Ranjith Vellody and Karun Sharma Washington, DC, United States

THURSDAY, October 17, 2024 (continued)

- 10:00-10:05 PP-06 **Low Field Interventional MRI: Advancing Image-Guided Catheter Procedures in a Preclinical Model**
Jurgen Futterer, Florian Maier, Joshua Krieger, Natan Ooms and Jesse Roll
Nijmegen, The Netherlands
- 10:05-10:10 PP-07 **Automatic 3D Localization of Passively Marked Needles using Under-Sampled Radial Positive Contrast Imaging and nnU-Net**
Germen Wennemars, Jonas Faust, Andre Aichert, Nathan Ooms, Jesse Roll, Joshua Krieger and Florian Maier
Erlangen, Germany/Enschede, The Netherlands
- 10:10-10:15 PP-08 **The Interventional MRI Suite: From a Research Prototype Towards Product**
Jouke Smink, Sascha Krüger, Steffen Weiss, Ronald Holthuizen and Joby John Best, The Netherlands
- 10:15-10:20 PP-09 **Improved MRI Guided Interventions at 0.55T: Real-time Interactive Imaging with Deep Learning Reconstruction**
Pan Su, Florian Maier, Sophia Cui, Marcel Dominik Nickel, Himanshu Bhat and Jianing Pang
Malvern, PA, United States
- 10:20-10:25 PP-10 **MRI-compatible In-Bore Ultrasound and Photoacoustic Imaging for Image-Guided Intervention**
Ryo Murakami, Yang Wang, Ryosuke Tsumura, Christopher Nicz, Nobuhiko Hata, Gregory Fischer and Haichong Zhang
Worcester, MA, United States
- 10:25-11:00 **COFFEE BREAK AND VISIT EXHIBITS**
- SESSION III (11:00am - 12:05pm) MR THERMOMETRY AND ABLATION**
Moderator: Frank Wacker
- 11:00-11:15 O-03 **Percutaneous MRI-Guided Cryoablation for Osteoid Osteoma**
Yueyong Xiao (Chinese PLA General Hospital)
Beijing, China
- 11:15-11:25 O-04 **Automatic Volumetric Temperature Regulation During In Vivo MRI-guided Laser-Induced Thermotherapy (MRg-LITT) with Multiple Laser Probes**
Manon Desclides, Valéry Ozenne, Pierre Bour, Thibaut Faller, Guillaume Machinet, Christophe Pierre, Julie Carcreff, Stéphane Chemouny and Bruno Quesson
Pessac, France
- 11:25-11:35 O-05 **MR-Guided Vagal Cryoablation for the Treatment of Obesity in a Canine Model - Preliminary Results**
Arun Kamireddy, Clifford R Weiss, Cheri Rice, Evelyn Ivkov, Eun Ji Shin, Robert A Anders and Dara L Kraitchman
Baltimore, MD, United States
- 11:35-11:45 O-06 **First Experience with MR Thermometry and Assessment of the Ablation Zone in Microwave Ablation of a Bioprotein Phantom on a 0.55T Scanner**
Othmar Belker, Thomas Gerlach, Axel Joachim Krafft, Florian Maier, Martin Requardt, Dominik Horstmann, Georg Rose, Oliver Speck, Frank Wacker, Bennet Hensen and Marcel Gutberlet
Hannover/Magdeburg, Germany

THURSDAY, October 17, 2024 (continued)

- 11:45-11:55 O-07 **MR-Guided Ablation for Vascular Malformations of the Plantar Foot: A Single-Center Experience**
 Ali Ganjizadeh, Scott Thompson, Setayesh Sotoudehnia, Daniel Adamo, Juna Musa, Aiming Lu, Emily Bendel and David Woodrum
 Rochester, MN, United States
- 11:55-12:05 O-08 **MR-Thermometry at Subzero Temperatures with a FLORET Readout in Ex-Vivo Bovine Liver**
 Moritz Gutt, Othmar Belker, Julienne Scheller, Frank Wacker, Marcel Gutberlet and Bennet Hensen
 Hannover, Germany
- 12:05-1:30 **LUNCH SYMPOSIUM:** Siemens Healthineers
- 1:30-3:00 **SESSION IV POSTER PRESENTATIONS – Stevedores Room**
Presenters expected to remain with their poster throughout the session to engage in discussion.
- 3:00-3:25 **COFFEE BREAK AND VISIT EXHIBITS**
- SESSION V (3:25pm - 6:00pm) PROSTATE**
Moderator: David Woodrum/Jurgen Futterer
- 3:25-3:40 O-09 **MR-Guided Prostate Interventions: Nijmegen Experience**
 Jurgen Futterer (Radboud University Medical Centre)
 Nijmegen, The Netherlands
- 3:40-3:55 O-10 **MR-Guided Prostate Interventions: Cryoablation**
 Erica Koepsel (University of Wisconsin-Madison)
 Madison, WI, United States
- 3:55-4:10 O-11 **MR Guided Focal Therapies for Native Prostate Cancer**
 David Woodrum (Mayo Clinic Rochester)
 Rochester, MN, United States
- 4:10-4:20 O-12 **In-Bore MRI-Guided Ureteral Stent Placement During Prostate Cancer Cryoablation: A Case Series**
 Sydney Whalen, David Woodrum, Scott Thompson, Dan Adamo, Derek Lomas and Lance Mynderse
 Chicago, IL, United States
- 4:20-4:30 O-13 **Efficacy and Safety of MRI-Guided Trans-Perineal Cryoablation in the Treatment of Primary Prostate Cancer: A Prospective Study**
 Setayesh Sotoudehnia, Lance Mynderse, Scott Thompson, Aiming Lu, Angela Bathke, Ali Ganjizadeh, Juna Musa, Daniel Adamo and David Woodrum
 Rochester, MN, United States
- 4:30-4:40 O-14 **MR-Guided Cryoablation of Seminal Vesicles: A 10-Year Experience**
 Ali Ganjizadeh, Lance Mynderse, Setayesh Sotoudehnia, Aiming Lu, Angela Bathke, Juna Musa, Matthew Augustine, Bradley Erickson and David Woodrum
 Rochester, MN, United States
- 4:40-4:50 O-15 **Deep Learning-Assisted Ablative Margin Analysis for MR-Guided Prostate Cryoablation: Feasibility and Initial Retrospective Evaluation**
 Daan Schouten, Yvonne Wimper, Jurgen Fütterer and Christiaan Overduin
 Nijmegen, The Netherlands

THURSDAY, October 17, 2024 (continued)

4:50-5:00	O-16	<p>MR-Active Needle Guides with Wireless Metasurface Coils for Transperineal Prostate Interventions Robert Kowal, Lucas Knull, Max Joris Hubmann, Ivan Vogt, Daniel Düx, Marcel Gutberlet, Bennet Hensen, Frank Wacker, Oliver Speck and Holger Maune Magdeburg, Germany</p>
5:00-5:10	O-17	<p>Feasibility of Rapid Balanced SSFP Sequence for Intraprocedural Identification of In-Bore Biopsy Targets Christian Peter, Alexander Schaudinn, Constantin Ehrengut, Jonna Ludwig, Toni Franz, Lars-Christian Horn, Nicolas Linder, Jens-Uwe Stolzenburg, Harald Busse and Timm Denecke Leipzig, Germany</p>
5:10-5:20	O-18	<p>Feasibility of MRI-Guided In-Bore Prostate Biopsies at 0.55T Tejinder Kaur, Yun Jiang, Nicole Seiberlich, Hero Hussain, Shane Wells, John Wei, Elaine Caoili and Vikas Gulani Ann Arbor, MI, United States</p>
5:20-5:30	O-19	<p>Moving iMRI from the Hospital to the Community: First Experience and Technical Feasibility of Delivering MRI-Controlled Prostate Ablation in a Mobile MRI Rajiv Chopra, Ben Leung, Alexandria Childs, Robert Staruch, Michael Cookson and Kelly Stratton Dallas, TX, United States</p>
5:30-5:40	O-20	<p>Prospective Analysis of Outcomes in MRI-Guided Prostate Cryoablations Using Novel Tools and Methods Mohammad Raza, Thomas Lilieholm, Walter Block and Erica Knavel Koepsel Madison, WI, United States</p>
5:40-5:50	O-21	<p>KalmanNet Using POD: Real-Time Denoising of 3D MR Thermometry During MR-Guided Prostate HIFU Simon Schröer, Inga Peters, Susanne Hellms, Dominik Horstmann, Othmar Belker, Moritz Gutt, Daniel Düx, Frank Wacker, Bennet Hensen and Marcel Gutberlet Hannover, Germany</p>
6:30-8:30		<p>Reception - Trophy Room Restaurant <i>Faculty and Registrants, please join us for an evening of connecting while enjoying the playful spins on comfort food staples in this throwback restaurant/bar reserved specially for our conference. Featuring heavy hors d'oeuvres, signature drinks, billiards, shuffleboard, and more!</i></p>

FRIDAY, October 18, 2024

8:00-8:30	K-02	<u>KEYNOTE LECTURE</u> ARPA-H Mission and Funding Opportunities: Let's Talk about Lymphatics Kimberley Steele, (Advanced Research Projects Agency for Health) Washington, DC, United States <u>SESSION VI (8:30am - 9:45am) NEURO</u> <i>Moderator: Jonathan Lewin</i>
8:30-8:45	O-22	Recent Progress on MR Thermometry Kagayaki Kuroda (Tokai University), Hiratsuka, Japan
8:45-9:00	O-23	10 Years of MRg-LITT in Functional Neurosurgery: Most Useful Uses Robert Gross (Rutgers), Atlanta, GA, United States
9:00-9:15	O-24	Interventional MR Neurography: Applied Precision Medicine Jan Fritz (New York University), New York, NY, United States
9:15-9:30	O-26	Progress in MR-Guided Convection Enhanced Delivery for Circuit-Specific Gene Therapy Kurt Lehner (Johns Hopkins University School of Medicine) Baltimore, MD, United States
9:30-10:00		COFFEE BREAK AND VISIT EXHIBITS <u>SESSION VII (10:15am - 10:55am) WOMEN'S HEALTH</u> <i>Moderator: Clare Tempny</i>
10:00-10:10	O-27	MR-Guided Percutaneous Microwave Coagulation of Small Breast Tumors Kangan Li, Winxin Cao and Yue Wang Shanghai, China
10:10-10:20	O-28	The Comparison of the Clinical and Pathological Characteristics of Magnetic Resonance Guided Vacuum-Assisted Biopsy and Core Needle Biopsy in Breast Diagnosis Dang Yanli, Nie Pin, Liu Rumei and Chen Baoying Xi'an, China
10:20-10:30	O-29	Technical and Clinical Efficacy of MRI-Guided High Intensity Focused Ultrasound (MRgHIFU) for the Treatment of Uterine Fibroids – A Prospective, Single Arm, Single Center Study Gaber Komar, Antti Viitala, Kirsi Joronen, Anna Yanovskiy, Saara Otonkoski, Ida Lehtonen, Teija Sainio and Roberto Blanco Sequeiros Turku, Finland
10:30-10:40	O-30	Clinical Considerations and Experience with an Interdisciplinary MR-HIFU Program for Patients with Symptomatic Uterine Fibroids Maximilian Stietzel, Jakob Leonhardi, Mireille Martin, Christiane Weisgerber, Romy Handzel, Sylvia Stark, Bahriye Aktas, Andreas Melzer, Harald Busse, Sebastian Ebel, Holger Gössmann and Timm Denecke Leipzig, Germany

FRIDAY, October 18, 2024 (continued)
SESSION VIII (10:40am - 11:40am) MUSCULOSKELETAL

Moderator: Jan Fritz

10:40-10:55	O-31	Pediatric MRI-Guided Musculoskeletal Interventions Roberto Blanco-Sequeiros (Turku University Hospital) Turku, Finland
10:55-11:10	O-32	MR-Guided Ablation Afshin Gangi (University Hospital Strasbourg/King's College London) Strasbourg, France/London, UK
11:10-11:20	O-33	Repairing Meniscal Tears and Tendon Ruptures via MRI-Guided, Minimally Invasive Interventions: A Trend-Setting, Low-Risk and Cost-Saving Technique Johann Wolfgang Rechmeier and Liliana Rechmeier Bad Neuenahr, Germany
11:20-11:30	O-34	Comparative Study of MRI and CT Guiding for Cryoablation of Bone Tumors Yingtian Wei Beijing, China
11:30-11:40	O-35	MR Guided Nerve Hydrodissection During Cryoablation of Desmoid Tumors Vipul Sheth, Sharmila Sewell, Pejman Ghanouni and Ryan Brunsing Stanford, CA, United States
11:40-11:55		LUNCH Break- 15 Minute Break to Grab Lunch and Return to General Session
11:55-1:10		LUNCH SYMPOSIUM: Cook Medical
<u>SESSION IX (1:10pm - 2:45) CARDIAC</u>		
<p><i>Moderators: Dara Kraitchman/Paul Bottomley</i></p>		
1:10-1:25	O-36	MR-Guided Cardiac Electrophysiological Interventions Geertruida Bijvoet (Maastricht University) Maastricht, The Netherlands
1:25-1:40	O-37	MRI-Guided Ablation of Cardiac Arrhythmia: Where Are We Now? Aravindan Kolandaivelu (Johns Hopkins University School of Medicine) Baltimore, MD, United States
1:40-1:55	O-38	Low-Field MRI for Cardiac Intervention Guidance Aimee Armstrong (Nationwide Children's Hospital) Columbus, OH, United States
1:55-2:05	O-39	Where is the Future of MR Interventions: Next Steps David Woodrum, Florian Maier, Jesse Roll, Elyssia Wellington, Nathan Ooms and Joshua Krieger Rochester, MN, United States
2:05-2:15	O-40	Interventional Molecular MRI of Myocardial Ischemia in a Pig Model Simon Reiss, Timo Heidt, Alexander Maier, Constantin von Zur Muhlen and Michael Bock Freiburg, Germany

FRIDAY, October 18, 2024 (continued)

- 2:15-2:25 O-41 **In-Vitro MR-Guided Venous Stenting with a Novel MR-Compatible Delivery System**
 Lisa Regler, Simon Reiss, Niklas Verloh, Klaus Düring, Wibke Uller and Michael Bock
 Freiburg, Germany
- 2:25-2:35 O-42 **Development and Evaluation of MR-Compatible Bioptomes for MR-Guided Endomyocardial Biopsy**
 Senta Schauer, Christina Unterberg-Buchwald, Michael Schmid, Johannes Uihlein and
 Angelika Svetlove
 Dettingen an der Erms, Germany
- 2:35-2:45 O-43 **Selective Segmental Renal Artery Embolization Under 0.55T:
 Real-Time Navigation, Visualization, and Confirmation in a Porcine Model**
 Nathan Ooms, Eric Brandner, Jesse Roll, Ruth Anderson, Joshua Krieger, Patrick Sutphin
 and Sanjeeva Kalva
 West Lafayette, IN/Boston, MA, United States
- 2:45-3:00 **COFFEE BREAK AND VISIT EXHIBITS**
- SESSION X (3:00pm - 4:00pm) HEPATIC**
Moderator: Thomas Kahn
- 3:00-3:10 O-44 **Clinical Benefits of MRI-Guided Freehand Biopsy of Small Focal Liver Lesions in
 Comparison to CT Guidance**
 Vanessa F. Schmidt, Osman Öcal, Matthias P. Fabritius, Olaf Dietrich, Daniel Pühr-Westerheide,
 Moritz Wildgruber, Jens Ricke and Max Seidensticker
 Munich, Germany
- 3:10-3:20 O-45 **The Clinical Application of MR-Guided Percutaneous Microwave Ablation in the
 Treatment of Hepatic Malignant Tumors**
 Tiezhu Li, Baoying Chen and Zhou Liu
 Xi'an, China
- 3:20-3:30 O-46 **MR-Guided Liver Ablation for Small (<1.5cm) and Very Small (<1cm) Liver Tumors**
 Daniel Markus Düx, Marcel Gutberlet, Dominik Horstmann, Simon Schröer, Othmar Alexander Belker,
 Moritz Gutt, Seben Sena Yerdelen, Hui Chen, Daniel Luca Reimert, Kristina Imeen Ringe, Frank Wacker,
 Lena Sophie Becker, Julian Magnus Wilhelm Glandorf and Bennet Hensen
 Hannover/Magdeburg, Germany
- 3:30-3:40 O-47 **MR Guided Catheter-Based Radiotherapy/Brachytherapy of Liver Tumours:
 First Experience and Feasibility**
 Alireza Haghpanah, Matthias Philipp Fabritius, Olaf Dietrich, Daniel Pühr-Westerheide,
 Vanessa Franziska Schmidt, Stefanie Corradini, Jens Ricke, Osman Öcal and Max Seidensticker
 Munich, Germany
- 3:40-3:50 O-48 **Correlation Between Real-Time Thermometry and Postprocedural Ablation Zone in
 MRI-Guided Microwave Ablation of Liver Tumors**
 Max Seidensticker, Olaf Dietrich, Sergio Lentini, Pierre Bour, Valéry Ozenne, Florian Maier,
 Matthias Philipp Fabritius, Daniel Pühr-Westerheide, Vanessa F. Schmidt, Jens Ricke
 and Osman Öcal
 Munich, Germany

FRIDAY, October 18, 2024 (continued)

3:50-4:00	O-49	Efficacy and Safety of MRI-Guided Cryoablation for Primary and Metastatic Liver Lesions Setayesh Sotoudehnia, Ali Ganjizadeh, Aliza Mushtaq, Lance Mynderse, Scott Thompson, Aiming Lu, Daniel Adamo and David Woodrum Rochester, MN, United States
<u>SESSION XI (4:00pm - 5:10pm) ROBOTICS</u> <i>Moderators: Nobuhiko Hata/Harald Busse</i>		
4:00-4:15	O-50	Customized, Patient-Specific Robotic Systems for Image-Guided Interventions Jaydev Desai (Georgia Institute of Technology) Atlanta, GA, United States
4:15-4:30	O-51	Advancing Autonomy in Medical Robotics: Applications in and Beyond MRI-Guided Interventions Nobuhiko Hata (Brigham and Women’s Hospital) Boston, MA, United States
4:30-4:40	O-52	MRI-Compatible Low Profile Robots for Needle-Based Procedures with a Focus on Bone Biopsy Kevin Cleary, Charles Dumoulin, Gang Li, Jan Fritz, Yue Chen, Iulian Iordachita, Dan Stoianovici and Karun Sharma Washington, DC, United States
4:40-4:50	O-53	Pilot Clinical Study of MRI-Guided Prostate Biopsy Using a 4DoF Robotic Device Pedro Moreira, Mariana Bernardes, John Grimbble, Nicusor Iftimia, Kemal Tuncali, Jesung Park and Junichi Tokuda Boston, MA, United States
4:50-5:00	O-54	MRI-Guided Robotic Prostate Biopsy with Autonomous “Lane Keeping” Assist Mariana C. Bernardes, Pedro Moreira, Lezcano Dimitri, Lori Foley, Kemal Tuncali, Clare Tempny, Jin Seob Kim, Nobuhiko Hata, Iulian Iordachita and Junichi Tokuda Boston, MA, United States
5:00-5:10	O-55	MRI-Compatible Stereotactic Robot for Minimally Invasive Brain Interventions Gang Li, Atharva Paralikar, Pavel Yarmolenko, Ayush Nankani, Wolfgang Loew, Charles Dumoulin, Kevin Cleary, Chima Oluigbo and Reza Monfaredi Washington, DC, United States
5:10-5:30	M-03	POSTER AWARDS AND CONCLUSION Clare Tempny, Jonathan Lewin, Thomas Kahn
5:30		ADJOURN

POSTERS

<u>ID #</u>	<u>Title</u> <u>Authors</u> <u>Town, Country</u>
PP-01	MR Thermometry with a Deep-Learning Reconstruction Sherry Huang, Xinzeng Wang, Marc R Lebel, Nastaren Abad, Jayant Sakhardande, Ye Liang, Chris Brace, Shane Wells, Steve Hushek, Desmond Tb Yeo and James H Holmes Royal Oak, MI, United States
PP-02	Effectiveness of Fat Suppression Methods on The Accuracy of Proton-Resonance Frequency Shift (PRFS) MR Thermometry Anne Josset, Jonathan Vappou, Ounay Ishak, Paolo Cabras and Élodie Breton Strasbourg, France
PP-03	Touchless MRI Scanner Control: Multi-Agent Collaboration Based on LLMs for Voice Control with User Confirmation Process Hui Chen, Marcel Gutberlet, Moritz Gutt, Othmar Belker, Daniel Dux, Frank Wacker and Bennet Hensen Hannover, Germany
PP-04	MR Cavitation Imaging: A New Method For Monitoring Non-Thermal Ultrasound Therapies Ounay Ishak, Elodie Breton, Paolo Cabras, Erik Dumont, Anne Josset, Benoit Larrat, Anthony Novell and Jonathan Vappou Strasbourg, France
PP-05	MRI-Compatible In-Bore Ultrasound and Photoacoustic Imaging for Image-Guided Intervention Ryo Murakami, Yang Wang, Ryosuke Tsumura, Christopher Nicz, Nobuhiko Hata, Gregory Fischer and Haichong Zhang Worcester, MA, United States
PP-06	Development and Optimization of Clinical Workflow for MRI-Guided Interventions with Augmented Reality Pavel Yarmolenko, Van Lam, Rajan Purnima, Martin Hossbach, Alican Demir, Pezhman Foroughi, Pranav Bajaj, Samuel Skinner, Kevin Cleary, Ranjith Vellody and Karun Sharma Washington, DC, United States
PP-07	Low Field Interventional MRI: Advancing Image-Guided Catheter Procedures in a Preclinical Model Jurgen Futterer, Florian Maier, Joshua Krieger, Natan Ooms and Jesse Roll Nijmegen, The Netherlands
PP-08	Automatic 3D Localization of Passively Marked Needles Using Under-Sampled Radial Positive Contrast Imaging and nnU-Net Germen Wennemars, Jonas Faust, Andre Aichert, Nathan Ooms, Jesse Roll, Joshua Krieger and Florian Maier Erlangen, Germany/Enschede, The Netherlands
PP-09	The Interventional MRI Suite: From A Research Prototype Towards Product Jouke Smink, Sascha Krüger, Steffen Weiss, Ronald Holthuizen and Joby John Best, The Netherlands

- PP-10 **Improved MRI Guided Interventions at 0.55T: Real-Time Interactive Imaging with Deep Learning Reconstruction**
Pan Su, Florian Maier, Sophia Cui, Marcel Dominik Nickel, Himanshu Bhat and Jianing Pang
Malvern, PA, United States
- P-11 **IR-UTE MRI Quantifies Fibrotic Radiation Injury In Hypoxic/Normalic Swine While PO2 Is Measured Non-Invasively Based On Implanted Oxytrack Sensors**
Kai Ding, Clifford Weiss, Arun Kamireddy, Khadija Sheikh, Akila Viswanathan, Daniel Song, Ravi Seethamraju, Junghoon Lee, Junichi Tokuda, Gregory Ekchian, Bruce Daniel, Kathy Gabrielson and Ehud Schmidt
Baltimore, MD, United States
- P-12 **Development of a Clinical MR Lymphangiography Service Utilizing A Hybrid Interventional MR Suite At Mayo Clinic Rochester: 2011 To Present**
Matthew Augustine, Devin Barker, Wayne Stenzel, Katie Gehling, Courtney Burke, Ang Bathke, Arnoley Abcejo, Christopher Favazza, Aiming Lu, Eric Stinson, Myungho In, David Woodrum, Michael Jundt, Christopher Reisenauer, Edwin Takahashi, Emily Bendel, Jeremy Collins and Scott Thompson
Rochester, MN, United States
- P-13 **Safety and Efficacy of Live Intraoperative Neuromonitoring During Interventional MRI Guided Ablation: A Retrospective Analysis**
Angela Bathke, Ali Ganjizadeh, Setayesh Sotoudehnia, Katie Gehling, Courtney Burke, Daniel Adamo, Scott Thompson, Aiming Lu, Matt Hoffman and David Woodrum
Rochester, MN, United States
- P-14 **Revolutionizing Radiological Research: LLMs for Rapid, Accurate Data Extraction from Clinical Reports**
Ali Ganjizadeh, Bardia Khosravi, Setayesh Sotoudehnia, Bradley Erickson, Lance Mynderse and David Woodrum
Rochester, MN, United States
- P-15 **Safety in Zone 4 of the Interventional MRI Suite during MR Cryoablation: An MR Technologist Perspective**
Devin Barker, Wayne Stenzel, Katie Gehling, Courtney Burke, Angela Bathke, Christopher Favazza, Aiming Lu, Myungho In, Eric Stinson, Scott Thompson, Lance Mynderse and David Woodrum
Rochester, MN, United States
- P-16 **Hydrogels Incorporating Ultrasmall Manganese Ferrite Nanoparticles as T1 Contrast Agent for Epidermal Localization in Magnetic Resonance Imaging**
Yao Feng, Huan Zhang, Kai Guo Zhu, Jin Tao Hu, Bao Ying Chen and Hai Ming Fan
Xi'an, China
- P-17 **MR-Guided Ex-Vivo Biospy of Sarcoma Using the GantryMate Assistance System**
Samantha Hickey, Simon Reiss, Balazs Bogner, Alexander Runkel and Michael Bock
Freiburg, Germany
- P-18 **Development Of In Vitro Phantoms For MRI-Guided Minimally Invasive Interventions**
Denis Gholami Bajestani, C. Martin Reich and Andreas Melzer
Leipzig, Germany

- P-19 **A Fully Integrated Interactive Multiplanar Reformation (MPR) Tool for MR-Guided Interventions**
Fang Dong, Günter Armbrüster, Axel Joachim Krafft, Jun Xiong, Grzegork Kowalik, Reza Razavi, Kuberan Pushparajah, Sebastien Roujol and Florian Maier
Erlangen, Germany
- P-20 **Investigating the Feasibility of MR-Based Conductivity Measurement During Electroporation of Multi-Conductivity Agarose Phantom on a Clinical 1.5 T MRI**
Othmar Belker, Thomas Gerlach, Max Joris Hubmann, Noah Müller, Marcel Eisenmann, Georg Rose, Oliver Speck, Frank Wacker, Bennet Hensen and Marcel Gutberlet
Hannover, Germany
- P-21 **Need Of Real-Time And Precise Needle Shape Sensing For MRI-Guided Percutaneous Procedures**
Jacynthe Francoeur, Dimitri Lezcano, Yernar Zhetpissov, Pierre Lorre, Raman Kashyap, Samuel Kadoury, Junichi Tokuda and Iulian Iordachita
Baltimore, MD, United States
- P-22 **MRI Safety Considerations for iMRI Devices: Are New Standards Needed?**
David Gross, Eric Anttila, Grant Baker, Ben McAteer and Alan Leewood
West Lafayette, IN, United States
- P-23 **Demonstration of a Versatile, Fully Metal-Free Mechanical Holding Arm for Interventional MRI Procedures**
Robert Odenbach, Thomas Gerlach, Daniel Düx, Bennet Hensen, Marcel Gutberlet, Ivan Vogt, Frank Wacker and Georg Rose
Magdeburg, Germany
- P-24 **Demonstration of a Large Scale, Fully Metal-Free Tray-Platform for Instrument Support During Interventional MRI Procedures**
Robert Odenbach, Daniel Markus Düx, Thomas Gerlach, Bennet Hensen, Marcel Gutberlet, Frank Wacker And Georg Rose
Magdeburg, Germany
- P-25 **Demonstration of a Universal Cable-Management-System for MRI-Guided Interventions in Anesthesia**
Robert Odenbach, Daniel Markus Düx, Thomas Gerlach, Bennet Hensen, Marcel Gutberlet, Frank Wacker and Georg Rose
Magdeburg, Germany
- P-26 **Influence of Body Coil Drive Mode on the MR Safety of Interventional Devices**
Ali Özen, Oktay Algin and Michael Bock
Freiburg, Germany
- P-27 **Decreasing The MRI Order-To-Acquisition Time For Hospitalized Patients: The Impact Of An Intraoperative MRI Scanner**
Ilona Cazorla-Morales, Kenyon Gale, Rohit Prem Kumar, Francis Ruzicka, Lauren Smith, Michele DeVito and Hooman Azmi
Nutley, New Jersey, United States

- P-28 **Interventional MRI Opportunities and Considerations Regarding Low Field MRI Systems**
David Gross, Eric Anttila and Ben McAteer
West Lafayette, IN, United States
- P-29 **Enhanced Real-Time iCMR Device Visualization Using GRAPPA and DnCNN Denoising at Low Field**
Yixuan Liu, Yu Ding, Yingmin Liu, Chong Chen, Ning Jin, Axel Krafft, Florian Maier, Aimee Armstrong, Rizwan Ahmad and Orlando Simonetti
Columbus, OH, United States
- P-30 **Low Field MRI And Real Time Needle Guidance: A Novel Tool To Bridge The Experience Gap**
Yuzhou Liu, Junaid Raja, Nathan Ooms, Eric Brandner, Matthias Fabritius, Max Seidensticker, Joshua Krieger, Jesse Roll and Venkatesh Krishnasamy
Birmingham, AL, United States
- P-31 **Rapid CNN-Based Needle Localization for Automatic Slice Alignment in MR-Guided Interventions using 3D Under-sampled Radial White-Marker Imaging – Initial In-Vivo Results**
Jonas Faust, Nathan Ooms, Jesse Roll, Joshua Krieger, Axel Krafft, Daniel Polak, Peter Speier, Nicolas Behl, Mark Ladd and Florian Maier
Heidelberg/Erlangen, Germany
- P-32 **The MRTc MR Scanner Interface Applied In Interventional Applications In Cardiology, Neurology And Oncology**
Jouke Smink, Mani Yayapalan, Michel Jurrissen, Saurav Baidya, Bas Negggers, Petar Petrov, Sven Gerritsen, Dan Sunnarborg, Alfredo Higuera, Antoni Gurguá and Jorge Gonzalez
Best, The Netherlands
- P-33 **Improved Time-Resolved Visualization of Lymphatic Drainage During MR-Guided Lymphangiography**
David Ekrem, Wayne Stenzel, Christopher Favazza, Myungho In, Aiming Lu, David Woodrum, Jeremy Collins, Eric Stinson and Scott Thompson
Rochester, MN, United States
- P-34 **Initial Assessment of an Extended Reality Interface for MRI-Guided Interventions**
Irina Kramers, Roy Damgrave and Wyger Brink
Enschede, The Netherlands
- P-35 **Quantitative Iceball Temperature Mapping During Interventional Cryoablation Procedures with Novel Ultrashort TE Spiral-Readout MRI**
Spenser Waddle, Guruprasad Krishnamoorthy, Jacinta Browne, Juna Musa, Aiming Lu, Satayesh Sotoudehnia and David Woodrum
Rochester, MN, United States
- P-36 **MR-Guided Laser Ablation in Desmoid Tumor Treatment: A Novel Approach for Cases with Cold Hypersensitivity**
Setayesh Sotoudehnia, Scott Thompson, Aiming Lu, Angela Bathke, Ali Ganjizadeh, Juna Musa and David Woodrum
Rochester, MN, United States
- P-37 **MR Thermometry Study Of Rabbit Psoas Major Muscle Microwave Ablation**
Zhengyu Lin, Bing Zhang, Peishu Huang, Rui Guo and Bingyu Huang
Fuzhou, China

- P-38 **Novel Catheter-Based MR-Guided Microwave Ablation in Porcine Brain: Preliminary Safety and Efficacy Assessment**
Pierce Peters, Setayesh Sotoudehnia, Aiming Lu, Theodore Ormsby, Jamie Van Gompel and David Woodrum
Rochester, MN, United States
- P-39 **Efficacy, Safety, and Technical Success of MRI-Guided Percutaneous Cryoablation in Treating Metastatic Bony Lesions from Various Primary Cancers**
Setayesh Sotoudehnia, Lance Mynderse, Daniel Adamo, Aiming Lu, Angela Bathke, Ali Ganjizadeh, Juna Musa, Scott Thompson and David Woodrum
Rochester, MN, United States
- P-40 **Interventional MR Thermometry for Prostate Tumor Ablation via Quantitative T1 Mapping Using MR Fingerprinting and Deep Learning**
Florian Kehrein, Lothar R Schad and Frank G Zöllner
Mannheim, Germany
- P-41 **Electromagnetic Interference Modeling For Simultaneous Microwave Ablation And MRI**
Daniel Hernandez, Aiming Lu, Christopher P. Favazza, Eric G. Stinson, David A. Woodrum, Myung-Ho In and Kyoung-Nam Kim
Incheon, Korea/Rochester, MN, United States
- P-42 **Stars vs. Spirals: Comparison of Two Readouts for Proton Resonance Frequency Shift based 3D MR Thermometry in a Phantom Study of Abdominal Microwave Ablation**
Dominik Horstmann, Bennet Hensen, Othmar Belker, Daniel Düx, Thomas Gerlach, Gutt Moritz, Simon Schröer, Ivan Vogt, Frank Wacker and Marcel Gutberlet
Hannover, Germany
- P-43 **Reliable MRI Thermometry During Microwave Ablations: Influence of Target Temperature and Heating Duration in Animal Liver Ex-vivo**
Luigi Nardone, Olaf Dietrich, Alexander Sheng Ming Tan, Matthias Fabritius, Elif Öcal, Vanessa Schmidt, Jens Ricke and Max Seidensticker
Munich, Germany/Udine, Italy
- P-44 **3.0T MR-Guided Cryoablation In Metastatic Malignancy: The Initial Results In Clinical Routine**
Xiaobo Zhang, Yueyong Xiao and Xiao Zhang
Beijing, China
- P-45 **Immune Response to MR-Guided Cryoablation of Canine Osteosarcoma**
Dara Kraitchman, Michele Doucet, Arun Kamireddy, Kathleen Gabrielson, Cory Brayton and Brian Ladle
Baltimore, MD, United States
- P-46 **Investigation of a Water-Cooled Microwave Ablation System for MRI-Guided Ablation**
Aiming Lu, Scott Thompson, Daniel Adamo, Jim Elliott, Kelvin Wang, Cecilia Tao and David Woodrum
Rochester, MN, United States
- P-47 **Intraoperative Neurophysiological Monitoring During MRI-Guided Ablations: Safety and Workflow**
Aiming Lu, Kevin Treb, Christopher Favazza, Matt Hoffman, Scott Thompson, Tatsuya Oishi, Daniel Adamo, Myungho In, Eric Stinson and David Woodrum
Rochester, MN, United States

- P-48 Cryoneedle Artifacts in MRI Associated with RF-Heating and Cryoneedle-Coil Interactions**
Aiming Lu, Kevin Treb, Scott Thompson, Daniel Adamo and David Woodrum
Rochester, MN, United States
- P-49 Clinical Application Value Of Magnetic Resonance-Guided Transperineal Targeted Prostate Biopsy**
Fenghai Liu, Kuan Li, Lei Zhang and Zhaoyang Huo
Cangzhou City, China
- P-50 Saline Displacement of Rectal Wall for Improved Margin During MRI-Guided Transurethral Ultrasound Ablation (TULSA)**
Setayesh Sotoudehnia, Ben Leung, Scott Thompson, Daniel Adamo, Ali Ganjizadeh, Lance Mynderse and David Woodrum
Rochester, MN, United States
- P-51 Evaluating Computed Diffusion for Guiding Prostate Cryoablation Procedures**
Juna Musa, Spencer Waddle, Lance Mynderse, Daniel Adamo, Scott Thompson, Aiming Lu, Setayesh Sotoudehnia, Ali Ganjizadeh and David Woodrum
Rochester, MN, United States
- P-52 In Vivo Magnetic Resonance Elastography for Imaging Prostate Anatomy in Patients with Prostate Cancer: A Feasibility**
Juna Musa, David Woodrum, Phillip Rossman, Kevin Glaser, Setayesh Sotoudehnia, Richard Ehman and Lance Mynderse
Rochester, MN, United States
- P-53 Combining Diagnostics and Intervention: The Role of Intraprocedural Cryosection During MRI-Guided Cryoablation for Recurrent Prostate Cancer**
Sydney Whalen, David Woodrum, Scott Thompson, Daniel Adamo and Lance Mynderse
Chicago, IL, United States
- P-54 Immediate Post-Ablation Perfused Volume Does Not Correlate with Clinical Outcomes in Transurethral Ultrasound Ablation of the Prostate for Localized Prostate Cancer**
Chandler Dora, David Sella, Ram Pathak, Satvik Kuravi and Gregory Frey
Jacksonville, FL, United States
- P-55 MR-Guided Cryoablation of Prostate Cancer Bone Metastases: A 7-Year Experience**
Ali Ganjizadeh, Aliza Mushtaq, Eugene Kwon, Lance Mynderse, Setayesh Sotoudehnia, Aiming Lu, Juna Musa, Daniel Adamo, Scott Thompson and David Woodrum
Rochester, MN, United States
- P-56 Prescreening Radiology and PET Reports for Prostate Cancer Recurrences Using a Large Language Model (LLM)**
Ali Ganjizadeh, Lance Mynderse, Setayesh Sotoudehnia, Aiming Lu, Scott Thompson, Daniel Adamo, Juna Musa, Angela Bathke, Bradley Erickson and David Woodrum
Rochester, MN, United States
- P-57 Clinical Evaluation Of A Transperineal Access Tool For MRI Guided Procedures**
Setayesh Sotoudehnia, David Woodrum, Scott Thompson, Daniel Adamo, Christopher Favazza, Aiming Lu, Pezhman Foroughi, Martin Hossbach, Alican Demir, Purnima Rajan, Kenny Harlan and Lance Mynderse
Rochester, MN, United States

- P-58 **Evaluation of MRI-Guided Transurethral Ultrasound Ablation (TULSA) for Treating Native Prostate Cancer**
Setayesh Sotoudehnia, Lance Mynderse, Abbey Goodman, Ben Leung, Devin Barker, Wayne Stenzel, Scott Thompson, Aiming Lu, Daniel Adamo and David Woodrum
Rochester, MN, United States
- P-59 **MRI-Guided Transurethral Ultrasound Ablation (TULSA) For Focal Ablation of Intermediate-Risk Prostate Cancer: Initial Post-Approval Experience**
Chandler Dora, David Sella, Ram Pathak, Satvik Kuravi, Gregory Frey and Luke Chung
Jacksonville, FL, United States
- P-60 **Cancer Detection Rates of Transrectal In-Bore Prostate Biopsies – Impact of Prostate Volume and Lesion Parameters**
Alexander Schaudinn, Harald Busse, Constantin Ehrengut, Nicolas Linder, Christian Peter, Jonna Ludwig, Toni Franz, Lars-Christian Horn, Jens-Uwe Stolzenburg and Timm Denecke
Leipzig, Germany
- P-61 **Temperature-Enhanced Delineation of the Lethal Ablation Zone in Prostate Cryoablation Treatment using UTE Spiral VIBE MRI**
Krish Parikh, Ravi Seethamraju, Ehud Schmidt, Kemal Tuncali, Clare Tempny and Junichi Tokuda
Boston, MA, United States
- P-62 **Focal Therapy Versus Standard of Care In Men With Prostate Cancer: A Study Protocol of A Randomized Trial To Study (Cost)Effectiveness And Quality Of Life**
Lauren te Molder, Michiel Sedelaar, Gerjon Hannink, Janneke Grutters, Martijn Boomsma, Martijn Meijerink, Tim van der Sluis, Harm van Melick, Olav van Aubel, Eelco Collette, Ruben van Waardhuizen, Maroeska Rovers and Jurgen Fütterer
Nijmegen, The Netherlands
- P-63 **Development and Feasibility Study of One-Stop Prostate Cancer Diagnosis and Early Focal Therapy**
Sang-Eun Song, Glen Morrell and Jeremy Burt
Akron, OH, United States
- P-64 **Implementation of an Outpatient Multidisciplinary Urology-Interventional Radiology Ablation Clinic For Treatment of Primary and Recurrent Focal Prostate Cancer at Mayo Clinic: Consultations and MRI-Guided Interventions During First Year of the Clinic**
Daniel Adamo, David Woodrum, Lance Mynderse, Derek Lomas and Scott Thompson
Rochester, MN, United States
- P-65 **Augmented Reality Improves Oncologic and Functional Outcomes in Robot-Assisted Radical Prostatectomy: A Meta-Analysis**
Leila Haghani and Ramin Shahid
New York, NY, United States
- P-66 **Image and Metadata Fusion for Automatic Classification of Prostate MR Series**
Deepa Krishnaswamy, Bálint Kovács, Stefan Denner, Steve Pieper, David Clunie, Christopher P Bridge, Tina Kapur, Klaus H Maier-Hein and Andrey Fedorov
Boston, MA, United States

- P-67 **MRI-Guided Cryoablation Of Oligo-Metastatic Prostate Cancer To The Pelvic Lymph Nodes**
Aliza Mushtaq, David Woodrum, Scott Thompson, Daniel Adamo, Derek Lomas, Christopher Favazza, Aiming Lu and Eugene Kwon
Rochester, MN, United States
- P-68 **Mitigation of SpO2 Signal Distortion During MRI-Guided Transurethral Ultrasound Ablation of Prostate Tumors**
Aiming Lu, Devin Barker, Wayne Stenzel, Arney Abcejo, Myungho In, Ben Leung, Daniel Adamo, Scott Thompson and David Woodrum
Rochester, MN, United States
- P-69 **Quantifying Inter-region Variation in Hydraulic Parameters for Guiding Convection-Enhanced Delivery in the Brain with Diffusion Imaging**
Thomas Lilieholm, Douglas Dean, Raghu Raghavan, Martin Brady and Walter Block
Madison, WI, United States
- P-70 **Precise Targeting in Transcranial Focused Ultrasound Surgery: A Phantom Study**
Changsheng Mei, Chen Lin, Zixuan Wen and Nathan McDannold
Boston, MA, United States
- P-71 **MR-Guided Cryoablation for Persistent Uterine Fibroids Secondary to Myomectomy, Hysterectomy, and Embolization**
Sydney Whalen, Sarah Rassier, David Woodrum, Scott Thompson and Daniel Adamo
Chicago, IL, United States
- P-72 **Effects And Complications Of Magnetic Resonance Guided High Intensity Focused Ultrasound (MRgHIFU) In The Treatment Of Uterine Fibroids/Adenomyosis**
Lifang Wang, Tianju Jia, Chenchen Bing and Baoying Chen
Xi'an, China
- P-73 **Musculoskeletal Soft Tissue Biopsies at 0.55T**
Gunjan Malhotra Md, Kenneth Buckwalter Md Mba and Joel Morehouse Rt
Ann Arbor, MI, United States
- P-74 **An Anthropomorphic Phantom Based on MR-Visible Additive Manufacturing for Realistic Training and Optimization of MRI-guided Cardiac Interventions**
Sara Nuvoli, Quentin Sablé, Marco Götte, Giulio Dagnino, Dennis Kundrat and Wyger Brink
Enschede, The Netherlands
- P-75 **Impact Of MRI Texture Analysis On Complication Rate In MRI-Guided Liver Biopsies**
Hans-Jonas Meyer, Jakob Leonhardi, Sebastian Ebel and Timm Denecke
Leipzig, Germany
- P-76 **Personalized Holmium-166 Transarterial Radioembolization Of Hepatocellular Carcinoma Through MRI-Guidance: The EMERITUS-2 trial**
Meike van Wijk, Joey Roosen, Mark Arntz, Marcel Janssen, Tom Scheenen, Jurgen Futterer and Frank Nijssen
Nijmegen, The Netherlands

- P-77 A Review of MRI Guided Targeted Liver Mass Biopsies**
Daniel Adamo, Andrew Mason, Scott Thompson, Brian Welch, Aiming Lu and David Woodrum
Rochester, MN, United States
- P-78 MR- vs. CT-Guided Biopsy of Liver Lesions <20 mm to Optimize Clinical Success: A Concept Abstract of the Prospective, Randomized MR CORRECT Trial**
Vanessa F. Schmidt, Matthias Philipp Fabritius, Olaf Dietrich, Daniel Puhr-Westerheide, Moritz Wildgruber, Jens Ricke and Max Seidensticker
Munich, Germany
- P-79 MR-Guided Hepatic Microwave Ablation with Real-Time MRI Guidance and MR Thermometry: Initial Experience in an Oncopig Cancer Model**
Qing Dai, Glen Nyborg, Shu-Fu Shih, Janet Pham, David Lu, Jason Chiang and Holden Wu
Los Angeles, CA, United States
- P-80 Safety and Efficacy of MRI-Guided Percutaneous Microwave Ablation for Primary and Metastatic Liver Lesions**
Setayesh Sotoudehnia, Ali Ganjizadeh, Aliza Mushtaq, Lance Mynderse, Scott Thompson, Aiming Lu, Daniel Adamo and David Woodrum
Rochester, MN, United States
- P-81 MRI-Guided Microwave Ablation Of Hepatic Tumors Using Dual Applicators With EPI-Based Real-Time MR Thermometry**
Aiming Lu, Scott Thompson, Daniel Adamo and David Woodrum
Rochester, MN, United States
- P-82 ML-Based Online Needle Tracking For MRI-Guided Robotic Interventions**
Mariana C. Bernardes, Gopalaniruddh Tadinada, Kemal Tuncali, Ravi Seethamraju, Clare Tempany, Nobuhiko Hata and Junichi Tokuda
Boston, MA, United States
- P-83 MR-Conditional Robot for Liver Intervention**
Samuel Wilcox, Zhefeng Huang, Anthony Gunderman, Saikat Sengupta, Jay Shah, Aiming Lu, David Woodrum and Yue Chen
Atlanta, GA, United States

POSTER GUIDELINES – FOR POSTER AND POWER PITCH PRESENTERS ONLY:

Poster and Power Pitch presenters must bring physical posters to be displayed during our Poster Session on October 17, 2024, 1:30 p.m. - 3:30 p.m.

Please ensure your posters are 42 inches wide by 48 inches long and hung on your assigned poster board by 12:00 p.m. on October 17, 2024.

As a reminder, you will be expected to stand by your poster throughout the session. Posters should be removed by the afternoon break on October 18, 2024.