







Dear Colleagues, Friends and Industry Partners,

Welcome to the 14th Interventional MRI Symposium (iMRI), October 17-18, 2024, at The Graduate Hotel in Annapolis, Maryland, United States. Similar to the last gathering provides the 2022 Leipzig, the symposium opportunity for interventional MRI community to interact with opinion leaders and innovators in the field, meet old friends and develop new collaborations to expand our field. This event is jointly organized by the Johns Hopkins University and University of Leipzig in collaboration with the Brigham & Women's Hospital/Harvard Medical School. The iMRI Symposium provides an ideal platform for researchers, clinicians, healthcare professionals, and students alike to present their latest results. Sessions with both technical and clinical topics are composed of lectures by invited speakers and proffered scientific papers. New this year, is the Power Pitch session, to compliment the traditional poster session. The meeting is endorsed by the ISMRM (International Society for Magnetic Resonance in Medicine) and the ESMRMB (European Society for Magnetic Resonance in Medicine and Biology). We hope you enjoy Annapolis and everything the conference has to offer!

Local Chairs Organizing Committee,

Clifford Weiss, MD, FSIR, FCIRSE

Cefford RWessin

Professor of Radiology, Radiological Science and Biomedical EngineeringDivision of Interventional Radiology Johns Hopkins School of Medicine Baltimore, Maryland, United States cweiss@ihmi.edu

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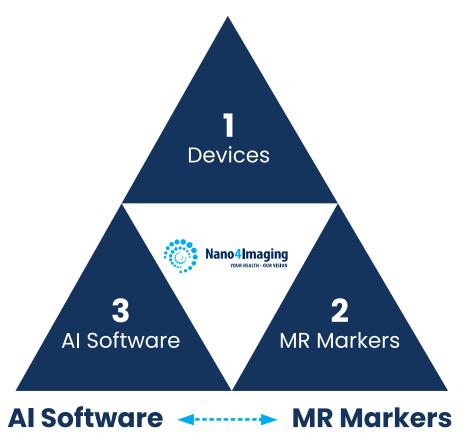
Dara Kraitchman, VMD, PhD

Professor of Radiology and Radiological Science and Molecular and Comparative Pathobiology Division of MR Research Johns Hopkins School of Medicine Baltimore, Maryland, United States dkraitc1@jhmi.edu



Revolutionizing Radiology

trackr.











MR in Therapy

MR-guided interventional strategies are essential to reduce treatment-related complications and help improve clinical outcomes. By expanding precision diagnostic imaging to interventional therapy, MR enables radiation-free visualization, localization, and targeted treatment of critical

structures. MR in Therapy contributes to early disease intervention and promotes patient-centric healthcare solutions.

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iMRI

14TH INTERVENTIONAL MRI SYMPOSIUM

Let's chart the path together

At Cook Medical, we stand on the shoulders of this incredible community. Today, we are committed to developing the tools, technologies, and resources needed to fully integrate MRI into the interventional space.



Come and visit our booth









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 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 welcome you to the 14th Interventional MRI Symposium 2024 in Annapolis, Maryland, United States. 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 program will be composed of lectures from both invited speakers and proffered papers. The focus of the symposium is the use of magnetic resonance imaging for the planning, control, and monitoring of surgical and radiological interventions.

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 mitigate relevant conflicts of interest prior to this educational activity. Detailed disclosure will be made prior to presentation of the education.

NOTICE ABOUT OFF-LABEL USE PRESENTATIONS

The Johns Hopkins School of Medicine/14th Interventional MRI Symposium may include presentations on drugs or devices, or use of drugs or devices, that have not been approved by the Food and Drug Administration (FDA) or have been approved by the FDA for specific uses only. The FDA has stated that it is the responsibility of the physician to determine the FDA clearance status of each drug or device he or she wishes to use in clinical practice.

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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.

EVALUATIONS AND CERTIFICATE OF ATTENDANCE

Following the activity, each attendee will be able to access the post-activity evaluation via the **My CME** section after signing in at https://hopkinscme.cloud-cme.com. The evaluation must be completed by December 2, 2024 in order to receive your certificate of attendance. The evaluations are most helpful to us in planning future programs, and we appreciate your comments and suggestions. We ask you to evaluate each speaker.

EMERGENCY TELEPHONE NUMBER

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.







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Reviewed & Approved by: General Counsel, Johns Hopkins Medicine (4/1/03) (Updated 4/09, 3/14, 9/16 and 9/22/20)







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Rollins School of Public Health
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Clare Tempany, MD

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7:00-8:00		REGISTRATION, BREAKFAST, AND VISIT EXHIBITS	
8:00-8:15	M-01	WELCOME, INTRODUCTION, AND GOALS Clifford Weiss, Dara Kraitchman, Clare Tempany, Thomas Kahn, Jonathan Lewin	
8:15-9:00	K-01	KEYNOTE LECTURE: Ferenc Jolesz Memorial Lecture Introduction: Jonathan Lewin MR and MR-Guided Interventions: The Prostate Story Clare Tempany (Harvard Medical School), Boston, MA, United States	
9:00-9:15	0-01	SESSION I (9:00am - 9:30am) TECHNOLOGY - GENERAL Introduction: Clifford Weiss 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	
9:30-9:35	M-02	SESSION II (9:30am - 10:25am) TECHNOLOGY - POWER PITCHES Moderators: Clifford Weiss/Dara Kraitchman 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 Düx, Frank Wacker and Bennet Hense Hannover, Germany	en
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, Octob	er 17, 2024 (continued)	
10:00-10:05 PP-0	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-0	Automatic 3D Localization of Passively Marked Needles using Under-Sampled Radial Positive Contra Imaging and nnU-Net Germen Wennemars, Jonas Faust, Andre Aichert, Nathan Ooms, Jesse Roll, Joshua Krieger and Florian Maier Erlangen, Germany/Enschede, The Netherlands	ast
10:10-10:15 PP-0	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-0	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	
11:00-11:15 O-03	SESSION III (11:00am - 12:05pm) MR THERMOMETRY AND ABLATION Moderator: Frank Wacker 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	S
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	n







THURSDAY, Octobe	r 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 Break - 15 Minute Break to Grab Lunch and Return to General Session LUNCH SYMPOSIUM: Siemens Healthineers 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 - 5:50pm) PROSTATE
3:25-3:40 O-09	Moderator: David Woodrum/Jurgen Futterer 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,	Octobe	er 17, 2024 (continued)
4:50-5:00	0-16	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
5:00-5:10	0-17	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
5:10-5:20	0-18	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
5:20-5:30	0-19	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
5:30-5:40	0-20	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
5:40-5:50	0-21	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
6:30 8:30		Reception Trophy Room Restaurant 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'ouevres, signature drinks, billiards, shuffleboard, and more!







FRIDAY, Oct	ober 18	3, 2024
8:00-8:30	K-02	KEYNOTE LECTURE Introduction: Clifford Weiss ARPA-H Mission and Funding Opportunities: Let's Talk about Lymphatics Kimberley Steele, (Advanced Research Projects Agency for Health) Washington, DC, United State
		SESSION VI (8:30am - 9:30am) NEURO Moderator: Jonathan Lewin
8:30-8:45	0-22	Recent Progress on MR Thermometry Kagayaki Kuroda (Tokai University), Hiratsuka, Japan
8:45-9:00	0-23	10 Years of MRg-LITT in Functional Neurosurgery: Most Useful Uses Robert Gross (Rutgers), Newark, NJ, 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
10:00-10:10	O-27	SESSION VII (10:00am - 10:40am) WOMEN'S HEALTH Moderator: Clare Tempany 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	0-29	Technical and Clinical Efficacy of MRI-Guided High Intensity Focused Ultrasound (MRgHIFU) for the Treatment of Uerine 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







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10:40-10:55 O-31	SESSION VIII (10:40am - 11:40am) MUSCULOSKELETAL Moderator: Jan Fritz Pediatric MRI-Guided Musculoskeletal Interventions Roberto Blanco-Sequeiros (Turku University Hospital) Turku, Finland
10:55-11:10 O-32	MR-Guided Thermal 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 11:55-1:10	LUNCH Break- 15 Minute Break to Grab Lunch and Return to General Session LUNCH SYMPOSIUM: Cook Medical
1:10-1:25 O-36	SESSION IX (1:10pm - 2:45) CARDIAC Moderators: Dara Kraitchman/Paul Bottomley 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, Oct	tober 18	3, 2024 (continued)	
2:15-2:25	0-41	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	0-43	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	
3:00-3:10	0-44	SESSION X (3:00pm - 4:00pm) HEPATIC Moderator: Thomas Kahn 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 Puhr-Westerheide, Moritz Wildgruber, Jens Ricke and Max Seidensticker	
3:10-3:20	O-45	Munich, Germany 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 Wacke Lena Sophie Becker, Julian Magnus Wilhelm Glandorf and Bennet Hensen Hannover/Magdeburg, Germany	
3:30-3:40	0-47	MR Guided Catheter-Based Radiotherapy/Brachytherapy of Liver Tumours: First Experience and Feasibility Alireza Haghpanah, Matthias Philipp Fabritius, Olaf Dietrich, Daniel Puhr-Westerheide, Vanessa Franziska Schmidt, Stefanie Corradini, Jens Ricke, Osman Öcal and Max Seidensticker Munich, Germany	
3:40-3:50	0-48	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 Puhr-Westerheide, Vanessa F. Schmidt, Jens Ricke and Osman Öcal Munich, Germany	







FRIDAY, Oct	ober 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
		SESSION XI (4:00pm - 5:10pm) ROBOTICS
4:00-4:15	O-50	Moderators: Nobuhiko Hata/Harald Busse Customized, Patient-Specific Robotic Systems for Image-Guided Interventions Jaydev Desai (Georgia Institute of Technology) Atlanta, GA, United States
4:15-4:30	0-51	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	0-53	Pilot Clinical Study of MRI-Guided Prostate Biopsy Using a 4DoF Robotic Device Pedro Moreira, Mariana Bernardes, John Grimble, 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 Tempany, 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 Tempony Jonathan Lowin Thomas Kahn
		Clare Tempany, Jonathan Lewin, Thomas Kahn
5:30		ADJOURN







9:30 - 10:25 a.m. on Thursday, October 17, 2024

POWER PITCHES #1-10

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 Düx, 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	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-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
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
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
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
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







POSTERS: TECHNOLOGY (#11-34)

14th Interventional MRI Symposium | October 17 – 18, 2024 | The Graduate Hotel, Annapolis, MD, 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 Intraprocedural 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 Poster Rescinded

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 Ahmac and Orlando Simonetti Columbus, OH, United States	I
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 and Venkatesh Krishnasamy Birmingham, AL, United States	Roll
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 Ladand 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 Neggers, Petar Petrov, Sven Gerritsen, Dan Sunnarborg, Alfredo Higueras, Antoni Gurguí 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	
	POSTERS: MR THERMOMETRY AND ABLATION (# 35-48)	
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	t
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	τ
		C







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
	POSTERS: PROSTATE (# 49-68)
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 Tempany 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
	POSTERS: NEURO (# 69-70)
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
	POSTERS: WOMEN'S HEALTH (# 71-72)
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
	POSTERS: MSK (# 73)
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
	POSTERS: CARDIO (# 74)
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
	POSTERS: LIVER (# 75-81)
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 Nijsen Nijmegen, The Netherlands







P-77	A Review of MRI Guided Targeted Liver Mass Biopsies
1-77	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
1-73	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
. 01	Thermometry
	Aiming Lu, Scott Thompson, Daniel Adamo and David Woodrum
	Rochester, MN, United States
	POSTERS: ROBOTIC (# 82-83)
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.







Invited Speakers (A-K)	Affiliations	Town, Country	
Aimee Armstrong	Nationwide Children's Hospital	Columbus, OH, United States	
Geertruida Bijvoet	Department of Cardiology, Cardiovascular Research Institute Maastricht, Maastricht University Medical Center	Maastricht, The Netherlands	
Roberto Blanco- Sequeiros	Department of Radiology, Turku University Hospital	Turku, Finland	
Harald Busse	Department of Diagnostic and Interventional Radiology, University Hospital Leipzig	Leipzig, Germany	
Jaydev Desai	Georgia Institute of Technology	Atlanta, GA, United States	
Jan Fritz	Department of Radiology, Division of Musculoskeletal Radiology, New York University Grossman School of Medicine	New York, NY, United States	
Jurgen Futterer	Department of Medical Imaging, Radboud Institute for Health Sciences, Radboud University Medical Centre	Nijmegen, The Netherlands	
Afshin Gangi	Imagerie Interventionnelle, University Hospital Strasbourg/Department of Interventional Radiology, King's College Hospital, Guy's and St Thomas' National Health Service Foundation Trust	Strasbourg, France/London, U	
Robert Gross	Department of Neurosurgery, Rutgers Health	Newark, NJ, United States	
Nobuhiko Hata	Brigham and Women's Hospital, Harvard Medical School	Boston, MA, United States	
Erica Koepsel	Department of Interventional Radiology, University of Wisconsin-Madison	Madison, WI, United States	
Aravindan Kolandaivelu	Division of Cardiology, Johns Hopkins University School of Medicine	Baltimore, MD, United States	
Kagayaki Kuroda	Department of Human and Information Science, School of Information Science and Technology, Tokai University	Hiratsuka, Japan	







Invited Speakers (L-Z)	Affiliations	Town, Country
Kurt Lehner	Department of Neurosurgery, Johns Hopkins University School of Medicine	Baltimore, MD, United States
Kimberley Steele	Advanced Research Projects Agency for Health (ARPA-H)	Washington, DC, United States
Clare Tempany	Department of Radiology, Brigham and Women's Hospital, Harvard Medical School	Boston, MA, United States
Frank Wacker	Department of Radiology, Hannover Medical School	Hannover, Germany
David Woodrum	Department of Radiology, Mayo Clinic Rochester	Rochester, MN, United States
Yueyong Xiao	First Medical Center, Chinese PLA General Hospital	Beijing, China







Presenting Authors	Affiliations	Town, Country
(Adamo-Chopra)	, timations	Town, country
Daniel Adamo	Department of Radiology, Mayo Clinic Rochester	Rochester, MN, United States
Eric Anttila	MED Institute	West Lafayette, IN, United State
Matthew Augustine	Department of Radiology, Mayo Clinic Rochester	Rochester, MN, United States
_	Department of Radiology, Mayo Clinic Rochester	Rochester, MN, United States
Devin Barker	Department of Radiology, Mayo Clinic Rochester	Rochester, MN, United States
Angela Bathke		Hannover/Magdeburg, German
Othmar Belker	Institute of Diagnostic and Interventional Radiology, Hannover Medical School/Research Campus STIMULATE, Otto-von-Guericke University	Trainiover/iviagaesurg, German
Mariana Bernardes	Brigham and Women's Hospital, Harvard Medical School	Boston, MA, United States
Roberto Blanco Sequeiros	Department of Radiology, Turku University Hospital	Turku, Finland
Michael Bock	Department of Diagnostic and Interventional Radiology, Division of Medical Physics, University Medical Center, University of Freiburg	Freiburg, Germany
Elodie Breton	Université de Strasbourg, CNRS, INSERM	Strasbourg, France
Wyger Brink	Magnetic Detection and Imaging Group, TechMed Centre, University of Twente	Enschede, The Netherlands
Kenneth Buckwalter	University of Michigan, Ann Arbor	Ann Arbor, MI, United States
Ilona Cazorla-Morales	Department of Neurosurgery, Hackensack Meridian School of Medicine	Nutley, New Jersey
Baoying Chen	Key Laboratory of Synthetic and Natural Functional Molecule of the Ministry of Education, College of Chemistry and Materials Science, Northwest University/Imaging Diagnosis and Treatment Center, Xi'an International Medical Center Hospital	Xi'an, China
Hui Chen	Department of Diagnostic and Interventional Radiology, Hannover Medical School	Hannover, Germany
Rajiv Chopra	Texas Prostate LLC	Dallas, TX, United States







Presenting Authors (Dai-Horstmann)	Affiliations	Town, Country	
Qing Dai	Department of Radiological Sciences, David Geffen School of Medicine, UCLA	Los Angeles, CA, United States	
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Kai Ding	Department of Radiation Oncology, Johns Hopkins University School of Medicine	Baltimore, MD, United States	
Fang Dong	Siemens Healthineers AG	Erlangen, Germany	
Daniel Markus Düx	Department of Diagnostic and Interventional Radiology, Hannover Medical School/Research Campus STIMULATE, Otto-von-Guericke University	Hannover/Magdeburg, Germany	
David Ekrem	Department of Radiology, Mayo Clinic Rochester	Rochester, MN, United States	
Matthias Philipp Fabritius	Department of Radiology, University Hospital, Ludwig Maximilian University Munich	Munich, Germany	
Jonas Faust	Faculty of Physics and Astronomy, Ruprecht-Karls- Universitaet Heidelberg/Siemens Healthineers AG	Heidelberg/Erlangen, Germany	
Jacynthe Francoeur	Department of Mechanical Engineering, Johns Hopkins University	Baltimore, MD, United States	
Jurgen Futterer	Department of Medical Imaging, Radboud Institute for Health Sciences, Radboud University Medical Centre	Nijmegen, The Netherlands	
Ali Ganjizadeh	Department of Radiology, Mayo Clinic Rochester	Rochester, MN, United States	
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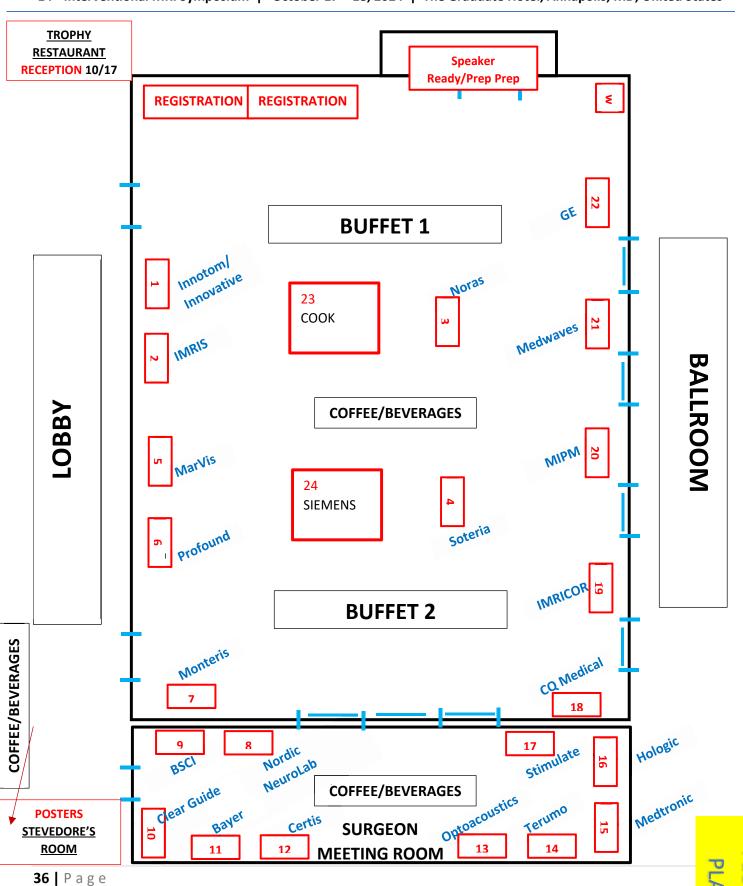
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