ISMRM & SMRT Virtual Conference & Exhibition

08-14 August 2020

www.ismrm.org | www.smrt.org



Welcome

FROM THE ISMRM 28TH ANNUAL MEETING 2020 PROGRAM CHAIR

Douglas C. Noll, Ph.D. Program Chair, ISMRM Annual Meeting 2020

As program chair of the ISMRM Annual Meeting Program Committee (AMPC), it is an honor and great pleasure to welcome you to the 2020 ISMRM & SMRT Virtual Conference & Exhibition. While our route to this meeting took some unexpected turns, the meeting is jam-packed with the features that our members have come to expect and which make the annual ISMRM and SMRT meetings fantastic: including cuttingedge clinical and technical educational courses, stimulating named lectures and plenary sessions, and scientific sessions that will have, as always, the very best of magnetic resonance in medicine research.

The conversion to a virtual meeting necessitated some changes to limit "live" content to a few hours each day, both for time zone reasons and to accommodate those who may not be able to dedicate more time when working from home. The main meeting maintains the familiar one-week structure with plenary sessions, awards ceremonies, and named lectures throughout the week. However, new this year for the virtual conference, all scientific and educational content will be available for asynchronous viewing starting on 24 July 2020 with dedicated spaces for comments, questions, and answers. For the week of the actual meeting, we will have live sessions to allow attendees to "Meet the Teachers" for educational sessions and interact with presenters in "Live Q&A" for oral scientific sessions. On Friday, we are also introducing Highlights Sessions, where you can hear a recap of some of the most exciting science, as well as a special session on COVID-19. Recordings of these sessions will also be available for viewing promptly afterward for those who are not able to be present during the live portions. Lastly, there will be a new poster browsing area that will allow attendees to peruse posters at their leisure.

Our named lectures will be delivered by three of our most distinguished members. The Lauterbur Lecture will be delivered on Sunday by Dr. Peter Basser, who will give his perspective on the technology and role of diffusion MRI in his talk "Diffusion MRI: Looking Backward, Looking Forward." On Tuesday, Dr. David Brunner will present his cutting-edge work in the NIBIB New Horizons Lecture entitled "MR Platforms for an Information Age." Finally, the Mansfield Lecture will be delivered on Thursday by Dr. P. Ellen Grant, who will share her wealth of knowledge on "Imaging the First 1000 Days of Life: Challenges and Opportunities." In addition, ISMRM President Lawrence Wald has selected Eric Betzig, Ph.D., to present this year's Presidential Lecture on Wednesday. Dr. Betzig was awarded the 2014 Nobel Prize in Chemistry for "the development of super-resolved fluorescence microscopy."

The AMPC has put together a great set of plenary and educational sessions. The plenary sessions, as usual, will happen during the week of the Virtual Meeting with a wide variety of timely topics: "MR-Guided Radiation Therapy (MRgRT): See What You Treat," "Translating to Translate: Fostering Collaborations Between Basic & Clinician Scientists," "Bringing MRI to Low-Resource Areas," and "MRI in Patients with Implantable Electronic Devices."

The outstanding selection of educational courses for the 2020 Virtual Meeting is the culmination of 18 months of planning by the AMPC overseen by Vice-Chair Nicole Seiberlich. Together, they have organized over 94 educational sessions with over 367 lectures (180+ hours!) on topics ranging from basic principles of MRI physics, to hands-on machine learning, to advanced clinical applications of MRI. Nicole started several new initiatives, including setting up small task forces to organize courses around some neglected topics, specifically Pre-Clinical Imaging and Value of MRI. The breadth and depth of the Educational program are unparalleled and provide the best in MR education anywhere in the world. CME credits will be available for a subset of educational courses, and self-assessment modules will again be available for our American M.D. members who need them for board certification purposes.

This meeting will also have a virtual Exhibition Hall where attendees can meet (virtually, of course) with our corporate partners, vendors, and other exhibitors. This meeting will also have a number of special programs, Young Investigator presentations, and Member-Initiated Symposia, which have been designed and presented by you, the membership. Secret Sessions are also back, organized by and aimed towards earlycareer investigators in the society, though anyone is welcome to attend. You won't find details in the program (it's a secret – well, sort of...), so ask your friends or check social media for where to find them.

One can't imagine this meeting coming together without the flexibility and responsiveness of the AMPC, the ISMRM office, the moderators, the presenters, and of course, the attendees! On behalf of the AMPC and ISMRM, I welcome you our Virtual Conference and Exhibition. Enjoy the meeting!



Welcome

FROM THE SMRT 29TH ANNUAL MEETING 2020 PROGRAM CHAIR

Claire Mulcahy, M.MRT., B.Appl.Sc. Program Chair, SMRT Annual Meeting 2020

As Chair of the SMRT Annual Meeting Program Committee (AMPC), it is my great honor to welcome you to the ISMRM & SMRT Virtual Conference & Exhibition.

Current world events mean that this year's meeting will be delivered for the first time as a fully virtual conference and exhibition. Whilst addressing this challenge, I am proud to announce that one of our priorities has been to use this as an opportunity to improve access to the world's premier educational and scientific MRI meeting for our global membership. We have transformed our in-person meeting into a virtual event that showcases through on-demand meeting materials and 'Live Q&A' events both the depth and expertise of our membership. We have transitioned our four-day SMRT meeting into a seven-day, around-the-clock multilingual event in alliance with the ISMRM meeting and provided amazing value with an ISMRM & SMRT program that now includes >5000 presentations, >120 live Q&A sessions, 50 CME credits, and 25 hours of target courses for CE credits. Additionally, for the benefit of our global membership, we have delivered the program in Coordinated Universal Time (UTC).

This year's SMRT program 'celebrates the translation of scientific and technical advances into clinical practice,' the aim being to highlight and communicate recent MR advances for improving MR services and patient care. In addition, and for the first time, this year all meeting registrations have full access to both ISMRM and SMRT meeting content—providing you with a rare opportunity to learn from, and network with, the very best in our industry. All scientific and educational content can be accessed now so that you can review content and comment and/or leave questions for the authors. During the live portion of the conference (8-14 August), each of the SMRT-focused educational forums will feature interactive question-and-answer (Q&A) sessions and/or panel discussions with the expert speakers and moderators.

On 8 August, 2019-2020 SMRT President Shawna Farguharson will officially open the meeting with welcoming remarks prior to the broadcast of the plenary and keynote presentations. Throughout the week, multiple live SMRT Q&A sessions on topics such as MR Safety, Neuro, MSK, Body, Cardiac, Contrast, Advanced Imaging Techniques, and Management, will be hosted and should not be missed. Special highlights of the meeting include the plenary presentation from Professor Pek Lan Khong, "The Importance of Bridging the Gap between Scientific Advance & Clinical Translation"; an exciting keynote talk from Professor Mark Griswold, "Holographic Visualization of Human Anatomy"; and the SMRT President's Lecture by Professor P. Ellen Grant on "Fetal and Neonatal Imaging: Importance, Lessons Learned, Needs." All speakers are renowned world leaders in their field, and we are fortunate to have them present at our Annual Meeting.

Tuesday, 11 August, ushers in the new 2020-2021 SMRT President with the gavel being passed to Nancy Beluk during the SMRT Business Meeting and Awards live session. This session will include the presentation of awards for the 2020 SMRT President's Award, JAK Award, Research and Clinical Abstract Award winners, and the presentations for the prestigious SMRT Achievement Awards to honor extraordinary contributions to the SMRT from our members. Congratulations to all 2020 award winners; it is a huge achievement to receive an international award for your work and career contributions!

Seizing the opportunity to expand our program this year, we have incorporated a number of new initiatives, including the SMRT MRI Masterclass and the SMRT International Clinical Sessions. The SMRT Masterclass feature a series of lectures focused on "The Essentials of MR Physics" provided by Dr. Martin Graves and associated live Q&A sessions. Dr. Graves is a world-renowned expert in MR physics education. These masterclasses are a fantastic opportunity to revise your MR physics knowledge and/or ask the questions you have always wanted answered. The SMRT International Clinical Sessions aim to provide clinically focused educational sessions relevant to different regions around the world. As a meeting first, they will be multi-lingual sessions hosted by ISMRM & SMRT members from China, Japan, Greece, Brazil, South America, Australia, New Zealand, North America, Great Britain, and Ireland.

I am also delighted to announce that, with the support of ISMRM, we will, for the first time, be delivering an SMRT Member-Initiated Symposium (MIS) at the ISMRM Annual Meeting with the live Q&A session on Friday, 14 August. The title of this year's MIS is "The 'Captain of the Ship' in MRI: Does the Doctrine Apply?" We hope the live session will foster dialogue amongst MRI professionals from both ISMRM and SMRT—so be sure to show support for the SMRT and join the discussion!

Of course, this meeting could not happen without the support of our corporate partners, vendors, and other exhibitors. To complement hours of quality educational content at your fingertips, make sure you visit the virtual Exhibition Hall that will be open at times to cater to attendees in multiple time zones. Be sure to support the exhibitors and get a glimpse of what is state-of-the-art in our field.

Finally, I would like to thank the AMPC, the SMRT Policy Board, Executive Board, ISMRM AMPC Chair Doug Noll & Vice-Chair Nicole Sieberlich, presenters, moderators, and the ISMRM/SMRT Central Office for their generous contributions of knowledge, time, and spirit this past year. I feel privileged to be able to share this meeting with you, at last! Thank you for attending; we hope that you enjoy the program and our globally connected community at the 29th International SMRT Annual Meeting!

CREDIT DESIGNATION

ACCREDITATION FOR THE VIRTUAL MEETING

To assist the schedules of our attendees, instead of offering scheduled accredited live events, we have taken recordings from the virtual meeting and created enduring materials. You will simply need to watch the videos, answer some questions, and print a certificate of credit. Certificates will be available for each individual course or a cumulative certificate listing all possible courses and which ones you've completed for the whole event. Accredited events will be available on 08 August 2020, but preliminary viewing is available on 24 July 2020 with all recorded content.

To receive certificates of credit, log into our learning management system and see all courses available to attendees. These courses will not be available for credit to non-registrant members until 2021.

Preliminary numbers of credit available:

Please note: 1 hour = 1 credit

AMA PRA Category 1 Credit™	Self-Assessment Module Credit (SA-CME)	Category A Credit	Continuing Professional Development through ASMIRT
54 hours	54 hours	25 hours	25 hours
108 half-hour videos	108 half-hour videos	50 half-hour videos	50 half-hour videos

The International Society for Magnetic Resonance in Medicine is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

The Society for MR Radiographers & Technologists (SMRT), A Section of the ISMRM, is recognized by the American Registry of Radiologic Technologists (ARRT) as a Recognized Continuing Education Evaluation Mechanism (RCEEM). CPD credit endorsement is through the Australian Society of Medical Imaging and Radiation Therapy (ASMIRT) CPD Accreditation, the Royal Australian and New Zealand College of Radiologists (RANZCR), the New Zealand Institute of Medical Radiation Technology (NZIMRT), and the College of Radiographers (CPD NOW), United Kingdom.

VIRTUAL SESSION ETIQUETTE

STATEMENT ON INCLUSIVITY

The ISMRM embraces and values the diversity of all its community regardless of age, race, ethnicity, nationality, culture, gender, gender identity, sexual orientation, disability, religion and socioeconomic status. It is our mission to ensure that everyone working in our field has equal and fair opportunities to contribute.

ANTI-HARASSMENT AND NON-DISCRIMINATION STATEMENT

We stand together against harassment and discrimination. Respectful and professional behavior within the ISMRM is expected at all times. All members are responsible for making the Society a safe, inclusive environment where every individual feels valued, respected and able to do their best work. Every member of our community should feel empowered to speak up without fear if they experience or observe behavior that violates these core values. Any incidents occurring at ISMRM activities should be brought to the attention of the Society's leadership and will be appropriately addressed.

GAMIFICATION RULES

DAILY RAFFLE

Here is your chance to win lots of fun nostalgic ISMRM & SMRT prizes! Winning has never been so easy. Just visit the Virtual Exhibition during the following hours and you will be automatically entered to win:

SMRT Hall: Saturday 22:00-23:00 UTC & Sunday 14:00-15:45 UTC ISMRM Halls: Monday-Thursday 10:00-12:00 UTC & 16:00-18:00 UTC

1 winner will be drawn at each Virtual Exhibition time slot.

Prizes include:

- \$25 Starbucks gift card
- Kangaroo & joey stuffed toy
- Koala charger
- ISMRM socks (limited quantities)
- Eyeglass cleaning cloths (2)
- Tumbler
- Umbrella
- Luggage tags (2)
- Notepads & pens

WIN BIG!

Earn points by vising booths, leaving a business card and attending any live Q&A session during the virtual meeting! Keep your eyes on the Leader Board, located in te lobby, to see if you are in one of the top 3 spots.

How to accrue points:

Visit a booth	10 points
Leave a business card in an exhibitor's booth	30 points
Attend any live Q&A session	60 points

- 1st place: Waived registration to the ISMRM & SMRT Annual Meeting & Exhibition, 15-20 May 2021, in Vancouver, Canada
- 2nd place: Free Membership for one year
- 3rd place: Kindle E-Reader

Thank You to our Corporate Members

GOLD CORPORATE MEMBERS







GE Healthcare





BRONZE CORPORATE MEMBERS







ASSOCIATE CORPORATE MEMBERS



ZV zurich med tech

Thank you to the **ISMRM RESEARCH & EDUCATION FUND** for support of trainee stipends.

SATURDAY, 08 AUGUST

Live Parallel Q&A Sessions

How It Works: During these sessions, authors are to be online and available to answer questions about their presentations. All presentations are pre-precorded and available to watch *two weeks before* the meeting begins, as well as during the meeting. No presentations are to be played during these sessions.

14:00-14:30 UTC				
Live Q&A: Meet the Teachers	Live Q&A: Meet the Teachers	Live Q&A: Meet the Teachers	Live Q&A: Meet the Teachers	SMRT Live
Met & Unmet Needs in Musculoskeletal Imaging I	Joint MICCAI-ISMRM Session: Synergies Between Our Societies in Data Acquisition, Image Reconstruction & Analysis	MRI & Epilepsy: Diagnosis & Treatment of the Epileptogenic Zone	MR Physics for Scientists I	Welcome Address, Plenary & Keynote Q&A 1
14:30-15:00 UTC				
Live Q&A: Meet the Teachers	Live Q&A: Meet the Teachers	Live Q&A: Meet the Teachers	Live Q&A: Meet the Teachers	SMRT Live
Met & Unmet Needs in Musculoskeletal Imaging II	Molecular Imaging	Neuroinflammation	MR Physics for Scientists II	Continued from above session
15:00-15:30 UTC				
Live Q&A: Meet the Teachers	Live Q&A: Meet the Teachers	Live Q&A: Meet the Teachers	Live Q&A: Meet the Teachers	SMRT Live
Common Challenges in Body MRI	Advanced Spectroscopy	Gliomas	MR Systems Engineering	Continued from above session
15:30-16:00 UTC				
Live Q&A: Meet the Teachers	Live Q&A: Meet the Teachers	Live Q&A: Meet the Teachers	Live Q&A: Meet the Teachers	SMRT Live
Liver: Best Practices, Challenges & Emerging Solutions	l Did Not Know MRS Can Do That!	fMRI Across Spatial & Temporal Scales	MRI RF Systems	Continued from above session
16:00-16:30 UTC				
Live Q&A: Meet the Teachers	Live Q&A: Meet the Teachers	Live Q&A: Meet the Teachers	Live Q&A: Meet the Teachers	SMRT Live: Clinical Focus Session
No Way to Treat a Lady: Breast & Female Reproductive Organ Cancers	Machine Learning: Everything You Want to Know	Nuts & Bolts of fMRI & Its Clinical Applications	Multi-Coil B0 Field Modelling & Systems	2020 Update: Fundamentals of Safety Issues Panel Discussion 1
16:30-19:00 UTC	Break			
19:00-19:45 UTC	SMRT: Clinical-Research Focus Session: Clinical Applications of Neuro Imaging Advances Q&A 1			
19:45-20:30 UTC	SMRT: Clinical Focus Session: MR Contrast: An Update on MRI Contrast Panel Discussion 1			
20:30-22:00 UTC	Break			
22:00-23:00 UTC	SMRT VIrtual Exhibition			
23:00-00:30 UTC	Break			

SUNDAY, 09 AUGUST

00:30-01:15 UTC	SMRT: Clinical Focus Session: Cardiac Forum: Function & Quantification Q&A 1	
01:15-02:00 UTC	SMRT: Clinical Focus Session: Body Imaging: How to Get a Better Body Panel Discussion 1	
02:00-06:00 UTC	Break	
06:00-06:45 UTC	SMRT Masterclass with Martin Graves: Session 1: The Essentials of MR Physics: The Sights & Sounds of MRI Q&A	
06:45-07:30 UTC	SMRT: Clinical Focus Session: Management Forum: Creating Efficiencies in Workflow Panel Discussion 1	
07:30-11:00 UTC	Break	
10:00-11:00 UTC	SMRT Broadcast: President's Lecture: Fetal & Neonatal Imaging: A Story About Nudging Trajectories in a Positive Direction	
11:00-11:45 UTC	SMRT President's Lecture: P. Ellen Grant Q&A 1	
11:45-12:30 UTC	SMRT: Clinical-Research Focus Session: Advanced Neuro Imaging: Advances in MR Imaging & Translation Q&A 1	
12:30-14:00 UTC	Break	

Live Parallel Q&A Sessions

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14:00-14:30 UTC				
Live Q&A: Meet the Teachers	Live Q&A: Meet the Teachers	Live Q&A: Meet the Teachers	Live Q&A: Meet the Teachers	SMRT Live
Perfusion MRI	Brainstem, Cerebellum & Basal Ganglia/Thalamus: Hodology & Connectivity	Signal Enhancement: The Power & the Glory	Data Acquisition & Image Reconstruction I	SMRT Virtual Exhibition
14:30-15:00 UTC				
Live Q&A: Meet the Teachers	Live Q&A: Meet the Teachers	Live Q&A: Meet the Teachers	Live Q&A: Meet the Teachers	SMRT Live
Diffusion: Encoding & Acquisition	Cardiovascular MRI: The Heart	How to Conduct the "Ideal" In Vivo Preclinical MR Experiment	Data Acquisition & Image Reconstruction II	SMRT Virtual Exhibition
15:00-15:30 UTC				
Live Q&A: Meet the Teachers	Live Q&A: Meet the Teachers	Live Q&A: Meet the Teachers	Live Q&A: Meet the Teachers	SMRT Live
Diffusion: Micro & Macro	Cardiovascular MRI: The Vasculature	Multi-Parameter Quantification	RF Coils & Demo	SMRT Virtual Exhibition (until 15:45)

Opening Session • 15:45-16:45 UTC

15:45 UTC	Welcome	Lawrence L. Wald, Ph.D., 2019-2020 ISMRM President
Lauterbur Lecture		
16:00 UTC	Diffusion Tensor MRI: Looking Backward, Looking Forward	Peter J. Basser, Ph.D
16:45 UTC	Adjourn	

16:45-23:00 UTC	Break
23:00-23:45 UTC	SMRT: Focus Session: Plenary & Keynote Q&A 2
23:45-00:30 UTC	SMRT President's Lecture: P. Ellen Grant Panel Discussion 2
00:30-04:00 UTC	Break

MONDAY, 10 AUGUST

04:00-04:45 UTC	SMRT: Clinical-Research Focus Session: Clinical Applications of Neuro Imaging Advances Q&A 2	
04:45-05:30 UTC	SMRT: Clinical Focus Session: MR Contrast: An Update on MRI Contrast Panel Discussion 2	
05:30-09:00 UTC	Break	
09:00-09:45 UTC	SMRT Masterclass with Martin Graves: Session 2: The Essentials of MR Physics: The X-Factor Q&A	
09:45-10:30 UTC	SMRT: Clinical Focus Session: 2020 Update: Fundamentals of MR Safety Issues Panel Discussion 2	
10:00-12:00 UTC	ISMRM Virtual Exhibition	

11:00-12:00 UTC

Siemens Healthineers Gold Corporate Symposium

Plenary Session • 12:00-13:30 UTC			
12:00 UTC	ISMRM Awards Junior Fellows, Senior Fellows, Gold Medals & Distinguished Service Medals	Lawrence L. Wald, Ph.D., 2019-2020 ISMRM President	
MR-Guided Radiation Therapy (MRgRT): See What You Treat Organizers: Peng Hu, Riccardo Lattanzi, Robert Witte			
12:30 UTC	Overview of MRgRT	Bas Raaymakers, Ph.D.	
12:50 UTC	Clinical Applications of MR-Based Radiation Treatment Planning	Carri Glide-Hurst, Ph.D., DABR. FAAPM	
13:10 UTC	Motion Management in MRgRT	Paul Keall, Ph.D.	
13:30 UTC	Adjourn		

Live Parallel Q&A Sessions

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MONDAY, 10 AUGUST

16:00-18:00 UTC	ISMRM Virtual Exhibition	
19:00-19:45 UTC	SMRT Masterclass with Martin Graves: Session 3: The Essentials of MR Physics: k-Space, the Final Frontier Q&A 1	
19:45-20:30 UTC	SMRT: Clinical Focus Session: Management Forum: Creating Efficiencies in Workflow Panel Discussion 2	
20:30-23:20 UTC	Break	
23:20-00:00 UTC	SMRT: President's Award, JAK Award, Research & Clinical Abstract Award 1st, 2nd, 3rd Q&A	

ISMRM KEYNOTE SPEAKERS



Presidential Lecture Windows into the Secret Lives of Cells Eric Betzig, Ph.D.



Lauterbur Lecture Diffusion MRI: Looking Backward, Looking Forward Peter J. Basser, Ph.D.





Mansfield Lecture Imaging the First 1000 Days of Life: Challenges & Opportunities P. Ellen Grant, M.D.

NIBIB New Horizons Lecture MR Platforms for an Information Age David O. Brunner, Ph.D.



SMRT Plenary Bridging the Gap in Clinical Translation of Quantitative Imaging Biomarkers Pek-Lan Khong

SMRT KEYNOTE SPEAKERS



SMRT Keynote Speaker SMRT Keynote: Holographic Visualization of Human Anatomy: A 2020 Update Mark Griswold



SMRT President's Lecture The Past, Present, and Future of MRI in Fetal and Neonatal Imaging P. Ellen Grant, M.D.

TUESDAY, 11 AUGUST

00:00-00:40 UTC	SMRT: Business Meetings & Awards	
00:40-08:00 UTC	Break	
06:00-07:00 UTC	Special Corporate Event Philips APAC MR Symposium By Invitation Only	
08:00-08:45 UTC	SMRT International Clinical Session: European Forum: Title TBA (Greek & English) Q&A	
08:45-09:30 UTC	SMRT Masterclass with Martin Graves: Session 3: The Essentials of MR Physics: k-Space, the Final Frontier Q&A 2	
10:00-12:00 UTC	ISMRM Virtual Exhibition	

Plenary Session • 12:00-13:30 UTC			
12:00 UTC	NIBIB New Horizons Lecture: MR Platforms for an Information Age	David O. Brunner, Ph.D.	
Translating to Translate: Fostering Collaborations Between Basic & Clinician Scientists Organizers: Vikas Gulani, Chistoph Juchem, Tim Leiner			
12:30 UTC	Value of Translation	Thomas Grist, M.D., F.A.C.R.	
12:50 UTC	Learning Each Other's Language: Sometimes We Literally Speak Two Languages	Laura M. Schreiber, Ph.D., M.B.A.	
13:10 UTC	Aligning the Incentives	Garry E. Gold, M.D.	
13:30 UTC	Adjourn		

13:30-13:45 UTC

Break

Live Parallel Q&A Sessions

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13:45-14:30 UTC				
Live Q&A: Signal Modelling fMRI/Diffusion/Perfusion	Live Q&A: Neuro 3 Brain Tumours	Live Q&A: Body 2	Live Q&A: ARA 1	Live Q&A: Molecular/MRS 2 Other Nuclei MRI & MRS to Study Metabolism
Hemodynamic Modelling of fMRI/Diffusion/Perfusion Modelling ASL Perfusion Signals Simulation of Diffusion Microstructure: Non-Diffusion	Brain Tumour: Metabolic & Biomarker Imaging Brain Tumour: Quantitative MR Imaging Emerging AI Applications in Neuro-Oncology	Thoracic/Lung MRI Thoracic MRI Pulmonary Power Lung MRI: Getting Started	Managing Motion & Artifacts Keep Still: Managing Motion in the Body Mind Your Head: Managing Motion in the Brain	Biophysics & Metabolism Studied with Imaging & Spectroscopy of Non- Hyperpolarized X-Nuclei X-Nuclei MRS/MRI Simultaneous or Interleaved MRS & X-Nuclei
14:30-15:15 UTC				
Live Q&A: Contrast Mechanisms 3 CEST, MT, Zero-TE & Relaxometry	Live Q&A: Neuro 4 Acquisition & Processing in Neuro	Live Q&A: Body 3	Live Q&A: ARA 2 Novel Pulse Sequences & Reconstruction Techniques	Live Q&A: Molecular/MRS 3 MRS & Molecular Imaging, Development & Applications
Chemical Exchange & Magnetisation Transfer:	Novel Neuroimaging Techniques	Breast	Novel Acquisition & Reconstructions	Cancer Imaging: Machine Learning
Mechanisms & Applications Contrast Mechanisms: Acquisition & Fitting Methods	Neuroimaging Techniques: Acquisition & Processing 1 Neuroimaging Techniques:	Placenta Female Pelvis	RF Pulses & Pulse Sequences Data Sampling & Spatial Encoding Techniques	Cancer Imaging: Non-Proton & Exogenous Contrast Advanced Cancer Imaging
Polovomotry & Zoro TE	Acquisition & Proessing 2		J	

TUESDAY SCHEDULE CONTINUED ON NEXT PAGE

TUESDAY, 11 AUGUST

15:15-16:00 UTC Live Q&A: Educational Live Q&A: ARA 3 Live Q&A: Neuro 5 **Physics & Engineering** System Imperfections, **CSF Flow & Glymphatic** Live Q&A: Body Educational Live Q&A: Molecular/MRS 4 Fundamentals of MRI Physics Imaging Artifacts & More Body Hyperpolarized MR & Engineering I Glymphatic System & CSF Flow Measuring & Correcting Rectal Cancer Hyperpolarized 13C Fundamentals of MRI Physics System Imperfections Metabolic Imaging for & Engineering II Benign Pelvic Diseases Imaging Perivascular Spaces Mitigating Sample-Induced Clinical Research Fundamentals of MRI Physics in the Brain Artifacts DWI in the Body New Frontiers in & Engineering III Machine Learning: Artifact Correction, Quantification & Emerging Methods for Hyperpolarization The Heart of the Liver Imaging the Glyphatic Fundamentals of MRI Physics System Reconstruction & Engineering IV GE Healthcare Gold Corporate Symposium 16:00-17:00 UTC Presentations Followed by Live Q&A with Speakers

16:00-18:00 UTC	ISMRM Virtual Exhibition
21:00-21:45 UTC	SMRT Masterclass with Martin Graves: Session 4: The Essentials of MR Physics: Field of Dreams Q&A
21:45-22:30 UTC	SMRT: Clinical Focus Session: Cardiac Forum: Function & Quantification Panel Discussion 2
22:30-02:30 UTC	Break

Access superior MR education and groundbreaking MR science. Visit the

ISMRM E-Library

Browse thousands of on-demand video recordings and other educational materials from past workshops and annual meetings. Membership not required!

WWW.ISMRM.ORG/ELIBRARY

WEDNESDAY, 12 AUGUST

02:30-03:15 UTC	SMRT International Clinical Session: Asia-Pacific Forum: Advanced Neuro Imaging from Research to Clinical Applications (Australian National Chapter) Q&A
03:15-04:00 UTC	SMRT International Clinical Session: Asia-Pacific Forum: COVID-19 Infection Control & the Imaging of Specialty Techniques Including MRCP & Cervical Cancer (Chinese & English) Q&A
04:00-08:00 UTC	Break
08:00-08:45 UTC	SMRT International Clinical Session: Asia-Pacific Forum: New Zealand: From Applications to Quantification (New Zealand National Chapter) Q&A
08:45-09:30 UTC	SMRT Masterclass with Martin Graves: Session 4: The Essentials of MR Physics: Fields of Dreams Q&A 2
09:30-10:00 UTC	Break
10:00-12:00 UTC	ISMRM Virtual Exhibition

Plenary Session • 12:00-13:30 UTC

Windows into the Secret Lives of Cells		12:00 UTC	Presidential Lecture: Windows into the Secret Lives of Cells	Eric Betzig, Ph.D.
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Bringing MRI to Low-Resource Areas Organizers: Christopher Filippi, Vikas Gulani, Peng Hu, Corree Laule, Daniel Margolis, Ronald Ouwerkerk			
12:30 UTC	Addressing the MRI Expertise Gap: The Tanzania Interventional Radiology Initiative Training Model	Frank Minja, M.D.	
12:50 UTC	Life at the Bottom: Millitesla MRI in the 21st Century	Matthew Rosen, Ph.D.	
13:10 UTC	Easier, Lower-Cost MRI to Conquer the Whole World	Rajesh Harsh, M.Sc.	
13:30 UTC	Adjourn		

13:30-13:45 UTC

Break

Live Parallel Q&A Sessions

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13:45-14:30 UTC				
Live Q&A: Beyond Ejection Fraction CV CMR for Cardiac Function Beyond Ejection Fraction: Cardiac Physiology & Function: More Than Cardiac Ejection Fraction CMR for Cardiac Function Beyond Ejection Fraction: Myocardial Strain Imaging CMR for Cardiac Function Beyond Ejection Fraction: Phase-Contrast for Evaluation of Cardiac Function CMR for Cardiac Function Beyond Ejection Fraction: Relationships Between Function & Myocardial Remodelling	Live Q&A: Molecular/MRS Educational MRS Non-Gadolinium-Based Exogenous Contrast Agents Body MRS: Cancer Body MRS: Non-Cancer Deep Learning in MRS (I)	Live Q&A: Body 4 Prostate MRI Prostate Prostate MRI: Easy as PI-RADS	Live Q&A: Diffusion 1 Microstructure Modelling & Validation Diffusion: Microstructure Modelling Microstructure: Validation Diffusion & Microstructure: Modelling & Validation	Live Q&A: Engineering 1 RF Technologies future Receive Array Technology RF Components & Coils Novel RF Approaches
14:30-15:15 UTC				
Live Q&A: CV 1 Machine Learning & Tissue Characterisation in CMR Machine Learning in	Live Q&A: Neuro 6	Live Q&A: Body 5 Machine Learning, Imaging Optimization & Cancer	Live Q&A: Diffusion 2 Diffusion Modelling, Tractography & Application	Live Q&A: ARA 4 Advances in Quantitative MRI Advances in MR
Cardiovascular Imaging Cardiovascular Machine Learning: Image Processing	Psychoradiology & Al Update on Schizophrenia	Machine Learning in Body MRI Image Optimization &	Microstructure: What Scales Are You Probing? Orientation modelling &	Fingerprinting Quantitative Multi- Parameter Mapping
& Beyond CMR Tissue Characterisation		Innovation Body Trunk Cancer	Fibre Tractography Diffusion: Applications	Quantitative Relaxation Parameter Mapping: Better, Faster, Stronger

WEDNESDAY SCHEDULE CONTINUED ON NEXT PAGE

WEDNESDAY, 12 AUGUST

15:15-16:00 UTC				
Live Q&A: Educational Preclinical Cutting-Edge Primers on Preclinical Imaging: Neuroscience Cutting-Edge Primers on Preclinical Imaging: The 3 I's: Inflammation, Infection & Immuno-Oncology Cutting-Edge Primers on Preclinical Imaging: Cancer Cutting-Edge Primers on Preclinical Imaging: Cardiac Preclinical Imaging Advances	Live Q&A: Neuro 7 Neurodegeneration 2 Neurodegeneration Imaging & Spectroscopy of Traumatic Brain Injury Epilepsy	Live Q&A: Body 6 MRI of the Kidneys Kidney Renal MRI: Past, Present & Future	Live Q&A: Diffusion 3 Diffusion Acquisition & Reconstruction Diffusion: Acquisition Diffusion: Acquisition, Reconstruction & Processing Diffusion: Reconstruction & Artefact Correct	Live Q&A: ARA 5 Machine Learning for Image Reconstruction Machine Learning for Image Reconstruction Machine Learning Reconstruction of Dynamic Acquisition Hands-On Deep Learning
16:00-16:30 UTC	ISMRM Business Meeting			
16:00-17:00 UTC		Philips Healthcare Gold	Corporate Symposium	
16:00-18:00 UTC	ISMRM Virtual Exhibition			
21:00-21:45 UTC	SMRT Masterclass with Martin G	raves: Session 5: The Essentials of N	MR Physics: Compare & Contrast (2&A 1
21:45-22:30 UTC	SMRT: Clinical Focus Session: Bo	dy Imaging: How to Get a Better B	ody Panel Discussion 2	
22:30-02:30 UTC	Break			

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THURSDAY, 13 AUGUST

02:30-03:15 UTC	SMRT: Clinical-Research Focus Session: Advanced Neuro Imaging: Advances in MR Imaging & Translation Q&A 2
03:15-04:00 UTC	SMRT: Clinical-Research Focus Session: MSK Forum: Advances in MSK Imaging Q&A
04:00-08:00 UTC	Break
08:00-08:45 UTC	SMRT International Clinical Session: Asia-Pacific Forum: A Bridge from Basic to Clinical Research by Japanese MR Technologists (Japanese & English) Q&A
08:45-09:30 UTC	SMRT Masterclass with Martin Graves: Session 5: The Essentials of MR Physics: Compare & Contrast Q&A 2
09:30-10:00 UTC	Break
10:00-12:00 UTC	ISMRM Virtual Exhibition

Plenary Session • 12:00-14:05 UTC			
12:00 UTC	Young Investigators Award Presentations	Tim Leiner, M.D., Ph.D., 2020-2021 ISMRM President	
MRI in Patients with Implan Organizers: Vikas Gulani, Peng H	table Electronic Devices J, Tim Leiner, Yunhong Shu, Claude Sirlin		
12:10 UTC	MRI & Cardiovascular Implantable Electronic Devices (CIEDs): Best Practices	Pamela Woodard, M.D.	
12:30 UTC	The Risks of MRI & Cardiovascular Implantable Electronic Devices: Separating Truth from Fiction	Robert Russo, M.D., Ph.D., FACC	
12:50 UTC	MRI & Other Implantable Electronic Devices: Best Practices	Kagayaki Kuroda, Ph.D.	
13:10 UTC	Closing Remarks	Tim Leiner, M.D., Ph.D., 2020-2021 ISMRM President	
13:20 UTC	Mansfield Lecture: Imaging the First 1000 Days of Life: Challenges & Opportunities	P. Ellen Grant, M.D.	

14:20-15:05 UTC

Break

Live Parallel Q&A Sessions

How It Works: During these sessions, authors are to be online and available to answer questions about their presentations. All presentations are pre-precorded and available to watch *two weeks before* the meeting begins, as well as during the meeting. No presentations are to be played during these sessions.



THURSDAY SCHEDULE CONTINUED ON NEXT PAGE

THURSDAY, 13 AUGUST

15:50-16:35 UTC				
Live Q&A: MSK 3 Emerging Clinical Applications in Musculoskeletal MRI Emerging Clinical Applications in Musculoskeletal MR Imaging: Whole-Body Musculoskeletal Imaging Emerging Clinical Applications in Musculoskeletal MR Imaging: Neuromuscular Imaging Emerging Clinical Applications in Musculoskeletal MR Imaging: Osteoarthritis Emerging Clinical Applications in Musculoskeletal MR Imaging: Imaging of Tendinopathy	Live Q&A: Neuro 10 Brain-Gut Axis & Al in Neuroimaging The Brain-Gut Axis: Imaging the Superorganism Al Applications in Neuroimaging: High Novelty & Impact Emerging Applications of Al in Neuroimaging	Live Q&A: CV 4 Cardiovascular Techniques Myocardial Perfusion & Function MRA & Atherosclerosis Imaging Velocity & Flow	Live Q&A: fMRI 2 Multimodal fMRI Multimodal Imaging of Brain Function fMRI in Animal Models Mechanisms of Resting- State fMRI	Live Q&A: Hands-On Physics & Engineering Physics & Engineering EM Simulations in MRI Hands-On: Making Custom Electronics Hands-On: Pulse Sequence & RF Pulse Design Hands-On: Image Reconstruction
16:00-18:00 UTC	ISMRM Virtual Exhibition			
17:00-18:00 UTC		Canon/Olea Gold Co	orporate Symposium	

	Tresentations Followed by Live Cox with Speakers		
Г			
18:00-19:30 UTC	Break		
19:30-20:15 UTC	SMRT International Clinical Session: South American Forum: Special Considerations in Paediatric MRI (Spanish & English) Q&A		
20:15-21:00 UTC	SMRT Masterclass with Martin Graves: Session 6: The Essentials of MR Physics: The Fast & the Furious Q&A		
21:00-00:00 UTC	Break		

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FRIDAY, 14 AUG	JST				
00:00-00:45 UTC	SMRT International Clinical Sessi Principles (North American Natio	SMRT International Clinical Session: North American Forum: MRI Safety Is for Everyone, All the Time: Fundamental to Advanced Principles (North American National Chapter) Q&A			
00:45-01:30 UTC	SMRT International Clinical Sessi Q&A	on: South American Forum: Intracra	anial Vessel Wall MRI: Do's, Don'ts	& Why (Portuguese & English)	
Highlights & Special Session	ons 1				
00:00-00:45 UTC					
Highlights Session Contrast Mechanisms	Highlights Session Neuro 1	Highlights Session Body 1	Highlights Session ARA 1	Highlights Session Molecular/MRS	
00:45-01:30 UTC					
Highlights Session fMRI	Highlights Session Neuro 2	Highlights Session Body 2	Highlights Session ARA 2	Highlights Session Cancer	
01:30-02:15 UTC					
Highlights Session Diffusion	Highlights Session Pediatrics	Highlights Session MSK	Highlights Session Interventional, Engineering & Safety	Highlights Session CV	
02:15-04:15 UTC		Special Session COVID-19: Past, Present, but What Possible Future?			
02:15-08:00 UTC	Break				
08:00-08:45 UTC	SMRT International Clinical Sessi	on: European Forum: Introduction	to Cardiac MRI (British & Irish Natio	onal Chapter) Q&A	
08:45-09:30 UTC	SMRT Masterclass with Martin Gr	aves: Session 7: The Essentials of N	MR Physics: You Say "Artifact," I Sa	y "Artefact" Q&A 2	
09:30-12:00 UTC	Break				
Member-Initiated Symposi	a				
12:00-12:30 UTC	New Innovations & Alternatives 1	to Conventional Contrast Agents	"The Captain of the Ship in M	RI": Does the Doctrine Apply?	
12:30-13:00 UTC	A Window Through the Ages: Advanced Mapping of Brain Development from Neonate to Adolescence Sustainable MRI: Pathways to a Carbon-Neutral Research Society				
13:00-13:30 UTC	Artificial Intelligence Enabling Cardiovascular Magnetic Resonance Imaging How Open Should Our Science Be?				
Highlights & Special Session	ons 2				
14:00-14:45 UTC					
Highlights Session Contrast Mechanisms	Highlights Session Neuro 1	Highlights Session Body 1	Highlights Session ARA 1	Highlights Session Molecular/MRS	
14:45-15:30 UTC					
Highlights Session fMRI	Highlights Session Neuro 2	Highlights Session Body 2	Highlights Session ARA 2	Highlights Session Cancer	
15:30-16:15 UTC					
Highlights Session Diffusion	Highlights Session Pediatrics	Highlights Session MSK	Highlights Session Interventional, Engineering & Safety	Highlights Session CV	
16:15-18:15 UTC		Special Session COVID-19: Past, Present, but What Possible Future?			
18:15 UTC	Adjournment				

See you next year in Vancouver!

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www.ismrm.org

The International Society for Magnetic Resonance in Medicine is an international, nonprofit, scientific association whose purpose is to promote communication, research, development, and applications in the field of magnetic resonance in medicine and biology and other related topics and to develop and provide channels and facilities for continuing education in the field. Its multidisciplinary membership of over 9,000+ consists of clinicians, physicists, engineers, biochemists, radiographers, technologists and industry professionals. In addition to its large annual meeting, the Society holds year-round educational and scientific workshops, virtual meetings and publishes two journals, Magnetic Resonance in Medicine and the Journal of Magnetic Resonance Imaging. It also sponsors 28 study groups on specific areas of scientific interest and chapters based on geographical location. The ISMRM is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

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Piezo Sonic ultrasonic Motor is a kind of rotary motor but totally different from conventional electromagnetic motor. The ultrasonic motor with no magnets and no coils actuate without generating magnetic field. Features of Piezo Sonic Ultrasonic Motor:

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- Completely non-magnetic motor (Series N) available. Good for MRI magnetic field application.
- High torque at low speed
- Highest torque to hold position at zero power - No backlash
- No reduction gear required
- Accurate position control by direct driv
- Compact, light weight
- Silent movement
- Long life compared to conventional ultrasonic motor

LMT Medical Systems GmbH

Maria-Goeppert-Str. 5 • Lubeck 23562 Germany Telephone: +49 451 580 980 • Email: info@lmt-medcialsystems.com www.lmt-medicalsystems.com/en/

LMT Medical Systems GmbH is based in Luebeck, Germany and is specialized in the development of MRI Accessories such as the MR Diagnostics Incubator System nomag® IC ADVANCED and miscellaneous multi channel MR-coils for 20 years.

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With the nomag® IC ADVANCED, MR images of newborns and premature babies can be produced gently and free from complications. Radiologists, pediatricians and nurses are considerably relieved of their workload and costs are optimized. Due to the high demand of miscellaneous MR-Coils for particular examinations and research, LMT is also specialized in developing different coils for MRI.

More information is available at www. Imt-medicalsystems.com.

Magnetica Ltd

4/55 Links Ave North • Eagle Farm, Queensland 4009 Australia Telephone: +61 7 3188 5445 • Email: duncan.stovell@magnetica.com www.magnetica.com

Magnetica Limited is an Australian MedTech company, specialising in:

• the development and delivery of high-performance, compact dedicated MRI systems; and

• MRI sub-systems and accessories for use with OEM systems.

Our focus is upon superconducting magnets, gradient coils and Radio Frequency (RF) coils for clinical, pre-clinical and research applications.

We hold a suite of patents in relation to our

unique magnet, gradient and RF coil designs, providing enhanced performance and competitive advantage to our customers. Together with our knowledge and technologies, we enable compact and lighter weight MRI system solutions that improve workflow and ensure high-quality scanning is available close to the patient point-of-care.

MRI systems utilising Magnetica technologies:

• assist Clinicians to access superior diagnostic performance and workflow in conventional clinical, remote, disaster, sports and defence

settings; and

• enable Patients to benefit from an enhanced clinical experience.

We design and supply coils to meet bespoke customer requirements, operating across a range of field strengths. Our in-house design and manufacturing capabilities, underpinned by our ISO 13485:2016 certified Quality Management System, ensure we deliver optimal customer outcomes.

2021 ISMRM WORKSHOPS New Dates Announced!

ISMRM Workshop on Low Field MRI

21-23 July 2021 Bethesda, MD, USA

ISMRM Workshop on Motion Detection & Correction

31 August-03 September 2021 Oxford, England, UK

> ISMRM Workshop on Renal MRI

10-12 September 2021 Philadelphia, PA, USA

ISMRM Workshop on Cancer Imaging: From Discovery to Diagnosis

02-05 November 2021 San Diego, CA, USA



Also coming in 2021...

ISMRM Workshop on Diffusion MRI: From Research to Clinic ISMRM Workshop on MR Safety: From Physics & Physiology to Policies & Practice ISMRM Career Development Workshop

Visit www.ismrm.org for details on more future workshops!

EXHIBITOR INFORMATION

Mediso, Ltd.

3 Laborc Street • Budapest 1037 Hungary

Telephone: + 36 1 399 3032 • Email: sales@mediso.com • www.mediso.com

Mediso works in the field of nuclear medicine since 1990 with a profile of development, manufacturing, selling and servicing molecular imaging multi-modality devices. The company offers complete solutions from hardware design to evaluation and quantification software for clinical patient care and preclinical research. Mediso has a leader position in the preclinical nuclear imaging market with 250+ commissioned preclinical cameras around the world. Beyond the market leading nanoScan PET/CT and SPECT/CT, Mediso launched the world's first integrated PET/MRI and SPECT/MRI systems. Further on 3T and 7T cryogen-free magnets and PET insert have been added to the product line, resulting in the largest install base of integrated PET/MRI systems.

Products are sold directly or through a network of distributors with over 1500 imaging systems for clinical and preclinical imaging operating in 98 countries around the globe.

Metrolab Technology SA

CH. DU Pont Du Centenaire 110 • Plan-Les-Duates 1228 Switzerland Telephone: +41 22 884 3311 • Email: contacts@metrolab.com www.metrolab.com

Metrolab is the world leader for instruments to measure magnetic field strength with a very high degree of precision.

MR Shim

Burkhardt+Weber Str. 59 • Reutlingen, BW Germany 72760 Telephone: +49 0 159 0101 9282 • Email: info@mrshim.de www.mrshim.de

MR Shim GmbH is a medical device manufacturing company focused on magnetic field homogeneity for MRI applications. Our products are made with the principle that medical devices should:

- Be intuitive and easy-to-use,
- Be robust and safe,
- And bring value to the user.

During many years of research in MRI, the founders saw that the potential of high field

MRI could not be fully realised with poor magnetic field homogeneity. From this experience, the company MR Shim was founded.

With our end-to-end B0 shimming solutions, customers can achieve artifact-free MR imaging and spectroscopy. Our products are compatible with all field strengths, all MRI vendors, both animal and human applications, and for different body applications (e.g. neuro, abdominal, etc.).

We improve magnetic field stability using

arrays of small, local shim coils. Our digital shim amplifiers can be used for real-time updating and field correction. We are constantly improving our products with the latest state-of-the-art technologies.

Our products can currently be used for investigational purposes, and we are additionally in the process of acquiring regulatory approval for CE certification and will thereafter apply for FDA approval. In doing so, our products will be available for use in clinical environments.



MR Solutions, Ltd

Ashbourne House • Guildford, Surrey GU3 1LR England Telephone: +0 1 483 906305 • Email: katie.tre-vett@mrsolutions.com www.mrsolutions.com

MR SOLUTIONS GROUP develops and manufactures innovative imaging solutions for the research industry. The company offers a large range of products for MR, CT, PET and SPECT. All scanners are interchangeable between each other for multi-modality imaging.

The company is the worldwide leader in highfield cryogen-free MR based on its proprietary dry magnet technology. The MRS*DRYMAG product line delivers MR up to 9.4T and a bore size up to 42 cm. Advanced coils and software tools for pulse sequence programming are

also available.

The magnet technology has exclusive features such as rotating the system to 90° and the ability to ramp the field of the magnet up and down within minutes. Helium lines and shielded rooms are not required which keeps the installation costs extremely low.

PET/MR imaging is possible up to 9.4T simultaneously. PET and SPECT scanners are dissociable within a few minutes from the MR and can be plugged straight onto the CT. This avoids the need for numerous scanners and large rooms. Four models of PET/CT's and CT's are available: a Benchtop, two high resolution models and a very large bore for 12 kg animals. MR SOLUTIONS can refurbish and enhance all components from any MR system. MR Solutions also manufactures compatible gradients.

MR Solutions holds the prestigious Queen's awards 2019, 2017 & 2016, the innovation award from the Institute of Physics and is the winner in the global R&D 100 awards.

MR Solutions has offices and support staff all across the world.

In Silico We Trust



www.zmt.swiss

www.thebsite



Neos Biotec

Sancho el Fuerte, 29 • Pamplona 31007 Spain Telephone: +34 607 431 450 • Email: info@neosbiotec.com www.neosbiotec.com

Neos Biotec is the MRI coil supplier for your research.

With almost 10 years of presence in the market, Neos Biotec is proud to provide customized RF coil designs to suit the most demanding preclinical imaging and spectroscopy applications.

Neos Biotec does not only build excellent performance RF coils, but also provides advice and support throughout the entire research process: from experiment design and coil set-up specification to hardware commissioning and imaging tests.

In addition to our portfolio of standard off-theshelf coils, Neos Biotec's strongest point is the development of unique RF coilsets for challenging imaging needs. We kindly invite you to visit our booth to show you the details of our latest coil developments: • High sensitivity X-nuclei coils for small animals

• Mouse and rat brain open coils, with optimized SNR and workflow, compatible with electrophysiology and optogenetics implants

- Multiple configuration receive arrays
- Volumetric receive arrays

We will also be very happy to discuss about your existing or future coil needs.

NIRx

Gustav-Meyer-Allee 25 • 13355 Berlin, Germany Telephone: +49 30 81 45 35 99 4 • Email: sales@nirx.net www.nirx.net

NIRx has established itself as a leading provider of research solutions for near-infrared spectroscopy (NIRS). At NIRx, we design and manufacture innovative NIRS devices and software. We integrate devices, software, and more into user-friendly and powerful research solutions. Our team of scientific consultants focuses on providing you and your team with training and outstanding support so you can focus on your research. Our fNIRS solutions are invented, designed, and manufactured in Berlin Germany, supported by an international team of scientists in Europe and North America, and distributed by a network of excellent local distributors worldwide. Website: www.nirx.net

Email: sales@nirx.net

Facebook: https://www.facebook.com/nirxneuroimaging/

Twitter: https://twitter.com/NIRx_NIRS



Nova Medical, Inc. (Wilmington, MA, USA), a leader in high field RF coil engineering, provides high performance coils for both medium and high field MR systems. Our standard products

Nova Medical, Inc.

150 West Street, Suite 201 • Wilmington MA 01887 USA Telephone: +1 978 988 5553 www.novamedical.com

include multi-channel whole brain arrays for 3T and 7T, volume transmit solutions for 7T, and our eight channel transmit, thirty-two channel receive system for brain imaging at 7T. Please come by and see our latest offerings, including our FDA approved 3T 32 Channel Head Coil.

ODU-USA Inc.

300 Camarillo Ranch Road, Suite A • Camarillo, CA 93012 USA Telephone: +1 805 484 0540 • Email: stephen.zierhut@odu-usa.com www.odu-usa.com

ODU Group: global representation with perfect connections

The ODU Group is one of the world's leading suppliers of connector systems, employing 2,300 people around the world. In addition to its company headquarters in Mühldorf am Inn (Germany), ODU also has an international distribution network and production sites in Sibiu/Romania, Shanghai/China and Tijuana/ Mexico. ODU combines all relevant areas of expertise and key technologies including design and development, machine tooling and special machine construction, injection, stamping, turning, surface technology, assembly and cable assembly. The ODU Group sells its products globally through its sales offices in Denmark, England, France, Germany, Italy, Sweden, the US, China, Korea and Japan, as well as through numerous international sales partners. ODU connectors ensure a reliable transmission of power, signals, data and media for a variety of demanding applications including medical technology, military, communications and security, automotive, industrial electronics, and measurement and testing.



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- Outstanding sensitivity
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7T 1Tx32Rx Head Coil

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- High Efficiency Local TX
- Superb cortical and central brain SNR
- Multi-plane acceleration
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7T 8TX32RX Head Coil

- Parallel Transmit with eight fully independent TX channels
- CP Efficiency similar to Nova 1TX
- High performance 32RX for best SNR and parallel imaging capability
- B1 Field correction optimizes
 7T image contrast and sensitivity
- Available on all platforms

EXHIBITOR INFORMATION



Olea Medical

93 Avenue des Sorbiers • La Ciotat, 13600 France Telephone: + 33 4 4271 2420 www.olea-medical.com

Olea Medical®, a provider of advanced MR and CT imaging post-processing, designs and markets a suite of innovative medical imaging applications, Olea Sphere®, significantly improving diagnostic process and follow-up assessment.

The company has established a strong credibility, through the domestication of cutting-edge technology, and partnerships with leading institutions worldwide.

With proprietary Bayesian algorithms and optimization methods applied to medical imaging, today Olea Medical® is the recognized leader in standardized, vendor-neutral, advanced MR quantitative and qualitative image post-processing.

Covering both morphologic and functional imaging, Olea Medical® post-processing solutions bring complex mathematics into clinical practice for easy access to accurate and robust biomarkers allowing enhanced diagnostic confidence and response-to-treatment assessment.

Olea Medical®'s applications are compliant with the DICOM standard and Windows or Linux operating systems. Olea Sphere® runs on any standard off-the-shelf workstation or it can be used through thin deployment. It maintains the traceability of patient data, through an automatic logout mode, a total connectivity and compatibility with LDAP and Microsoft Active Directory.

The Phantom Laboratory

PO Box 511 • Salem, NY 12865 USA Telephone: +1 518-692-1190 • Email: stalter@phantomlab.com www.phantomlab.com

The Phantom Laboratory, manufactures dependable, high-precision phantoms and innovative custom solutions for medical imaging and radiation therapy.

Our newest MR offerings include the Magphan® RT and the Magphan EMR162. Both phantoms measure QA parameters including geometric distortion, uniformity, slice thickness, resolution, SNR, and laser alignment. The torso-sized Magphan RT is designed to evaluate image quality and image distortion in MRI scanners used for torso imaging. This large modular phantom is ideal for Radiotherapy planning and MR guided surgery applications. The Magphan EMR162 measures image quality and distortion in a 18cm spherical housing ideal for use in head coils.

Both these phantoms come with 2 years of Smári Cloud-based, automated analyses. The Smári system offers a suite of features that range from options on report formatting, database storage of results, trend analysis and an API that allows users to extend the system with custom analyses.

The Smári service is also available with other Magphan Quantitative Image Phantoms, including the EMR151 used in the ADNI study since 2006.

We also manufacture phantoms for CT, SPECT, Digital Breast Tomosynthesis, radiosurgery,

specialized phantoms for OEM applications and custom phantoms.

Our pride of workmanship and our comprehensive quality system ensure that our products meet the highest standards of quality and precision. The Phantom Laboratory is FDA registered and ISO 13485:2003 certified.



Philips Healthcare

Amstelplein 2 Breitner Center • Amsterdam, 1070 MX The Netherlands Telephone: + 31 20 59 77777 www.philips.com

Royal Philips (NYSE: PHG, AEX: PHIA) is a leading health technology company focused on improving people's health and enabling better outcomes across the health continuum from healthy living and prevention, to diagnosis, treatment and home care. Philips leverages advanced technology and deep clinical and consumer insights to deliver integrated solutions. Headquartered in the Netherlands, the company is a leader in diagnostic imaging, image-guided therapy, patient monitoring and health informatics, as well as in consumer health and home care. Philips generated 2018 sales of EUR 18.1 billion and employs approximately 80,000 employees with sales and services in more than 100 countries.



Ingenia Ambition 1.5T

MR services. Helium-free.

The Philips Ingenia Ambition offers cutting-edge MR imaging techniques to help you excel clinically every day. Based on its new, revolutionary fully sealed BlueSeal magnet, the solution lets you experience more productive¹ helium-free MR operations.

Get superb image quality even for challenging patients, and perform your MRI exams up to 50% faster with Compressed SENSE acceleration for all anatomies in both 2D- and 3D scanning².

Fast overall exam-time is achieved by simplifying patient handling at the bore with the touchless guided patient setup. There's always a way to make life better.



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1. Compared to the Ingenia 1.5T ZBO magnet. 2. Compared to Philips scans without Compressed SENSE

Polarean Inc.

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Polarean supplies tools and products to enable hyperpolarized gas MRI research in lungs and other organs. Hyperpolarized xenon MRI offers a fundamentally new, non-invasive means of imaging lung structure and function, which could be used for early diagnosis, more detailed characterization of regional function, and monitoring of disease progression and therapeutic response. Hyperpolarized xenon is used in conjunction with multi-nuclear MRI to enable 3-dimensional breath-hold imaging of pulmonary physiology and function. With its high speed and resolution, absence of ionizing radiation, and use of inhaled gases that are not metabolized, Polarean's hyperpolarized xenon technology is inherently non-invasive and suited for repeated and frequent use. Polarean's product line includes the complete toolkit required to produce hyperpolarized xenon onsite by trained personnel and perform imaging for clinical and preclinical research, associated quality controls including phantoms and polarization measurement, ongoing training and service, as well as supplying consumables, e.g. xenon gas blend. Polarean's products are currently used by research institutions worldwide, and are sold for research and investigational applications only as efforts to obtain regulatory approval are underway.

Contact Polarean to learn how you can expand your pulmonary research and add new capabilities to your magnetic resonance program. Existing and new users are encouraged to inquire about service plans, training programs, equipment upgrade options and regulatory support services available through Polarean.

Prodrive Technologies

Science Park Eindhoven 5501 • EM, Son 5692 The Netherlands Telephone: + 31 402676200 • Email: contact@prodrive-technologies.com www.prodrive-technologies.com

Creating meaningful technologies that make the world work

Prodrive Technologies specializes in creating meaningful and turnkey healthcare solutions with an exceptional price-performance ratio, from concept to post-sales support and everywhere in between, lowering the total cost of ownership.

We can do this because of our worldwide vertically-integrated operations, product creation, delivery and support. We have built in ways of optimizing, integrating and robotizing all aspects in an extremely efficient way; producing everything we need in-house. These are just some of the reasons why we've been able to build a competitive edge over all other providers of technical solutions, anywhere in the world.

The experience we have gained in the medical market over the past 20 years, combined with constructive input from users, customers and suppliers, serve as the foundation to create turnkey solutions that really matter.

Due to this approach we are recognized as a top tier supplier of high quality medical equipment to OEMs around the globe

We deliver solutions within a multitude of imaging modalities. For MRI in particular, Prodrive Technologies is a one-stop shop for several power components/systems required for MRI machines, lead by our NG-series product line of amplifiers; Shim, RF and Gradient.

PulseTeq Ltd

64-66 High Street • Chobham, Surrey, GU24 8AA, UK Telephone: +44 1276 856849 • Email: sales@pulseteq.com www.pulseteq.com

PulseTeq offers a wide range of RF coils for clinical research and preclinical applications.

The company will be showing its range of multinuclear coils, in particular receiver array coils with optional integrated transmit coils for hyperpolarized imaging, particularly carbon and xenon, sodium or fluorine imaging and for non-proton spectroscopy. Coils for all MR nuclei can be offered: 31P, 13C, 23Na, 19F, 3He, O17 and 129Xe.

These coils can be provided for applications in the brain, calf, thigh, liver, lungs or heart. Designs include multi-element X-nuclei coils and dual-tuned quadrature coils which are PET-MRI compatible. Coils for preclinical applications cover both birdcage coils and surface coils for hydrogen imaging and multinuclear applications. This includes a wide range of dual-tuned volume coils.

We look forward to seeing you on our booth at ISMRM2020.



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ABOUT UNITED IMAGING

At United Imaging, we develop and produce advanced medical products and IT solutions that cover the entire process of imaging diagnosis and treatment. Founded in 2011 with global headquarters in Shanghai, our company has subsidiaries and R&D centers across China, the United States, and other parts of the world. With a cutting-edge digital portfolio and a mission of broader access to healthcare for all, we help drive industry progress and bold change.

Random Walk Imaging

Naturvetarvagen 14 • Lund 223 62 Sweden Telephone: +46 70 752 2031 www.rwi.se

Random Walk Imaging make use of diffusion MRI in order to provide new specific imaging biomarkers for secure diagnosis and treatment follow-up, without using contrast fluids and invasive biopsies. We want to reduce long waiting times in diagnostic procedures, waiting times that are often devastating for patients, their families, and friends. The anxiety caused by not-knowing makes people live their lives as if they were already ill, with far reaching consequences for our health economy.

Since this development demands a truly multidisciplinary effort, we work closely with wellrenowned clinical researchers all over the world.

RAPID Biomedical GmbH

Kettelerstrasse 3-11 • Rimpar D-97222 Germany Telephone: +49 93 65 88 26 0 • Email: info@rapidbiomed.de www.rapidbiomed.de

RAPID Biomedical is proud of being the first company to have brought customized RF coils, many of which are individually designed, to the need of the scientific MR community. Through our high-level RF expertise and collaboration with the MR system manufacturers we offer full compatibility for all of our coil solutions whether standard or customized.

Over the last 20 years, RAPID has delivered over 1200 different coil designs to more than

30 countries. We have thorough experience in designing and manufacturing human and animal coils from low field (0.2T) MR scanners to UHF (21T) NMR systems with a range of 14 different nuclei (and counting). All coils are handmade in Rimpar, Germany.

Our current R&D work concentrates on coil packages for hyperpolarized nuclei, human 7T coils, dual tuned coils and multi array coils for parallel MRI both for human and for animal

studies.

Our sister company RAPID MR International (www.rapidmri.com) is situated in Columbus, Ohio to assist the needs of the North and South American communities.

We cordially invite you to visit our booth to discuss your next project with RAPID coil engineers and examine our coil solutions and MR results first hand.



At Siemens Healthineers, our purpose is to enable healthcare providers to increase value by empowering them on their journey towards expanding precision medicine, transforming care delivery, and improving patient experience, all enabled by digitalizing healthcare.

An estimated five million patients globally

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> everyday benefit from our innovative technologies and services in the areas of diagnostic and therapeutic imaging, laboratory diagnostics and molecular medicine, as well as digital health and enterprise services.

> Magnetic Resonance, a Business Line at Siemens Healthineers, offers innovative MRI

technologies with exceptional image quality, efficiency, and speed, while providing patient friendliness and investment protection. Equipped with these technologies and a very strong global collaboration network, we enable you to lead in MRI.

Skope

Gladbachstrasse 105 • 8044 Zurich, Switzerland Telephone: + 41 043 500 80 60 • Email: contact@skope.ch www.skope.swiss

Skope provides solutions which enable high integrity data for robust, fast and accurate MR imaging applied to MRI methods development, MRI in neuroscience and research-oriented neuroradiology.

The Dynamic Field Camera allows precise and powerful insights into the MR system operation to support the MR methods development user. An independent measure of the environment in the scanner bore speeds up prototyping and system development, shortening development cycles.

The Neuro[am is an integrated brain coil and field probe array, providing a single point, user-friendly solution to acquire sensitive and accurate measures of neural structure and function as required by the high-end imaging user.

Producing consistent, sensitive and reproduc-

ible MRI data with our solutions enables you to build a solid foundation to advance your fMRI and diffusion imaging as well as MR methods development.

Come discuss your applications with us to see how field monitoring can enable your application to make the leap in imaging performance! We look forward to seeing you at our virtual booth.

Exploring new frontiers in MRI, together.



At Siemens Healthineers, our purpose is to enable healthcare providers to increase value by empowering them on their journey towards expanding precision medicine. From latest advances in ultra-high-field 7T technology to deep dives into data sciences or new approaches in quantitative MRI: Supported by the best minds in the field, let us explore new frontiers in MRI, together. Meet us at the ISMRM to exchange on new ideas, innovations, and collaboration opportunities.

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EXHIBITOR INFORMATION

SpinTech, Inc.

30200 Telegraph Rd., Suite 140 • Bingham Farms, MI 48025 USA Telephone: +1 248 712 6789 • Email: ward.detwiler@spintechimaging.com www.spintechimaging.com

For clinicians and researchers alike, SpinTech is an essential MRI technology partner. SpinTech's STAGE software platform reduces time for comprehensive brain imaging by over 40% while providing enhanced visualization and quantification of neurological biomarkers critical for proper diagnosis and treatment that are often unseen by current technologies. Over 40 global research sites already rely on STAGE to advance their study of neurological disorders such as traumatic brain injury, stroke, dementia, Parkinson's, Multiple Sclerosis, tumors, and more.

Visit us at ISMRM to learn how SpinTech can help your organization drive the future of MR imaging.



Tesla Engineering Ltd Water Lane • Storrington, West Sussex, RH20 3EA United Kingdom

Telephone: +44 1903 743941 • Email: Sales@teslamagnets.com www.tesla.co.uk

Tesla Engineering Ltd. was founded 47 years ago to supply magnets for particle accelerators. Today, the Tesla group of companies has factories in the UK, the USA, and the Netherlands. The group has combined expertise in magnetics, composites, and precision manufacturing, and serves a wide range of well known customers in national and international laboratories (CERN, Fermilab, Brookhaven), and in several industries (MRI, Proton therapy, Radiotherapy, Semiconductor fabrication, Fusion). Tesla started manufacturing MRI gradient coils in 1985 and today is the world's leading independent supplier of gradient coils for clinical and pre-clinical MRI, shipping around 1,000 per year. In partnership with leading academic groups Tesla continues to design and manufacture state of the art research gradient coils. More recently, Tesla has been selected by a number of MRI system vendors as their strategic development partner. The first of these partnerships resulted in a new generation 7T 90cm UHF MRI magnet with shipments starting in April 2016.

Tesla's skills in cryogenics, electromagnets, superconducting magnets, and composites are being applied to a new range of products for the MRI industry, including specialised high field magnets for dedicated clinical applications.

Tourism Vancouver

Suite 210 - 200 Burrard Street • Vancouver, British Columbia, V6C 3L6 Canada Telephone: +1 604 682 2222 • Email: VisitVancouver@tourismvancouver.com www.tourismvancouver.com

Not too big, not too small. We like to think Vancouver is the perfect size; able to host world-class, large-scale events, yet maintain an intimate feel.

Which means you won't just be an attendee or a viewer, you'll be engaged and able to connect with like-minded talent from across the globe. It's not just what you'll experience here, but where that experience will take you.

We invite you and your colleagues to experience the ISMRM 29th Annual Meeting & Exhibition in Vancouver next May 2021.

VAN COU VER

VANCOUVER ISMRM 2021 - DON'T MISS IT!

Vancouver is the next host city for the ISMRM 2021 and we invite you all to come visit. Discover why many delegates love not only attending their meeting but extending for some vacation time. Vancouver is one of the worlds most walkable cities and has so much to explore.

See you at the ISMRM 2021 in Vancouver. tourismvancouver.com/meetings





ISMRM YOUNG INVESTIGATOR AWARDS FINALISTS



Maria Aristova, B.Sc. Standardized Evaluation of Cerebral Arteriovenous Malformations using Flow Distribution Network Graphs and Dual-venc 4D Flow MRI

W.S. MOORE AWARD



Kelly Jarvis, Ph.D. Parametric Hemodynamic 4D flow MRI maps for the Characterization of Chronic Thoracic Descending Aortic Dissection



Thierry Lefebvre, B.Sc. MRI Cine-Tagging of Cardiac-Induced Motion for Noninvasive Staging of Liver Fibrosis

I.I. RABI AWARD



Cheng-Chieh Cheng, Ph.D. Multi-Pathway Multi-Echo Acquisition and Contrast Translation To Generate a Variety of Quantitative and Qualitative Image Contrasts



Victor Han, B.Sc. Multiphoton Magnetic Resonance Imaging



Adam van Niekerk, Ph.D. Toward 'Plug and Play' Prospective Motion Correction for MRI by Combining Observations of the Time Varying Gradient and Static Vector Fields

SMRT JOHN A. KOVELESKI AWARD

Title	Author
FA Value After 1 Week Decompressive Surgery is a Prognostic Factor in Patients with CSM	Takumi Yokohama, B.Sc.(MR)

SMRT PRESIDENT'S AWARD					
Title	Author				
Using Novel Fat Water Separation Sequence to Quantify Intramyocardial Fat-Fraction	Xin Dong, (R)				

SMRT AWARD RECIPIENTS

RESEARCH FOCUS AWARDS

POSTERS		ORAL			
	Title	Author	Title		Author
1 st Place	Iron Overload Detection in Extra-Hepatic Organs on a High-Performance 0.55T Scanner	Christine Mancini, R.T.(R)(MR)	1 st Place	Utility of Susceptibility Map-Weighted Imaging for Enhanced Visual Identification of Subthalamic Nucleus at 3T: A Feasibility Study	Petronella Samuels, B.Sc.
2 nd Place	Performance of Automatic B0 Shim Modes for Brain MR Spectroscopy on 7T and 3T	Huijun Liao, B.Sc., ARMRIT	2 nd Place	Tracking basal ganglia volume in Parkinson's disease over 10 years with MRI	Nickolas J. Palmer, PG.Dip, MRI
3 rd Place	Fetal Cardiac Imaging Utilizing Retrospectively Gated 2D Radial MRI	Kristina Pelkola, R.T.(R)(MR)	3 rd Place	Development of the brain phantom for T1- and T2-weighted image showing image contrast and construction similar to those of in vivo MRI?	Kousaku Saotome, (RT)(MR) Ph.D.

CLINICAL FOCUS AWARDS

POSTERS		ORAL			
	Title	Author	Title		Author
1 st Place	Optimization of Metal Artifact Reduction (O-MAR) Imaging	Dave Hitt, M.Sc.	1 st Place	Utility of Susceptibility Map-Weighted Imaging for Enhanced Visual Identification of Subthalamic Nucleus at 3T: A Feasibility Study	Weiling Lee, B.Sc.
2 nd Place	Advances in Neonatal Brain MRI: 1.5T to 3T	Peik Yen Teh, M.Sc.	2 nd Place	Implementation of Safety Checklist and Protocols for scanning patients with whole body conditional DBS implants	Nancy Talbot, M.App.Sc.,MRT(MR)(R)
3 rd Place	Respiratory Pacing – A Low-Tech Solution to a Universal Struggle?	Jason Ortman, A.A.(MR)(R)	3 rd Place	Abbreviated breast MRI: How have we achieved it?	Angela Agostinelli, B.Appl.Sc.

SMRT FELLOW OF THE SOCIETY AWARD



Megan Sian Cromer, Ph.D., B.Appl.Sc.(Hons)

Megan obtained her degree in Medical Radiation Sciences from the University of Sydney, Australia, having completed an honours year in 1995. She has been employed at Westmead Hospital since leaving university. After gaining experience in general radiography and computed tomography, Megan began her career in MRI. She completed her Ph.D. in 2012, with the focus of her research in cartilage analysis in osteoarthritis utilizing MRI. She has been actively involved in facilitating and participating numerous research projects during her working career. Megan has been a member of the SMRT since 2006, when she attended her first Annual Meeting. She has made numerous poster, oral, and invited speaker presentations at Annual and Regional SMRT meetings. She has been an active member of the SMRT Policy Board as well as numerous committees and currently holds the position of SMRT ANZ Chapter Secretary. She actively promotes the SMRT in Australia through meeting organisation, meeting attendance, and mentorship of junior radiographers—encouraging them to submit abstracts and attend meetings. Her current role is Senior MRI Radiographer, responsible for the management of a busy MRI suite, encompassing clinical and research work on both 1.5T and 3T systems. Additionally, she has been a Casual Academic for the University of Sydney in their Master in MRI Imaging program.

SMRT CRUES-KRESSEL AWARD



Sonja "Sony" K. Boiteaux, MSRS, R.T.(R)(MR), MRSO

In 1997, Sony began her career as an MRI technologist on a 0.23T Lunar extremity scanner and continued to expand her clinical background performing stroke research studies and spectroscopy procedures, developing breast imaging protocols, and customizing musculoskeletal imaging protocols on 1.5T Siemens Magnetom and GE Signa and Horizon LX equipment. As a young MR technologist, she quickly realized that there was a great need for MR educational programs in colleges. In 2000, she began educating MR students as an adjunct professor at Palm Beach Community College (PBCC) in Palm Beach Gardens, Florida. This outlet provided her the opportunity to satisfy her desire to share her passion for the field of MR with others. Subsequently, she was offered a full-time faculty position and was granted tenure as an assistant professor in her post at PBCC. She maintained her clinical practice holding per diem positions at a major medical center as well as at a network of outpatient centers, which allowed her to gain experience on Hitachi & Philips equipment. In 2007, she became the MRI Health Educator for the Medical Imaging program at Emory University's School of Medicine in Atlanta, Georgia, and in 2009, she accepted an appointment as the Education Coordinator of the Diagnostic Imaging Program MRI Emphasis at The University of Texas MD Anderson Cancer Center in Houston, Texas. Since then, she has been elevated to a faculty role at MD Anderson, and as an assistant professor, she now serves as the MRI Associate Program Director, making her responsible for administration, curriculum development, didactic teaching, and clinical coordination of students in both the traditional Bachelor of Science degree program as well as the MRI Certificate program established for MD Anderson's Radiation Oncology Division to educate radiation therapists in MR. In these roles, she has educated hundreds of students from around the world to become entry-level and in-field technologists, practicing radiographers, and radiation therapists, and obtain their MR credential from the American Registry of Radiologic Technologists (ARRT.) She maintains patient care and scanning experience by supervising students during their internships at 17 various clinical affiliates of the program throughout the state of Texas, including a partnership with the Texas A&M University Veterinary Diagnostic Imaging Center. Sony believes that the mission of the SMRT to provide education, information, and research in MR is a critical component to the advancement of our profession worldwide. She is in eternal gratitude to her husband Evan and daughter Kylie for their support of all her efforts.

SMRT DISTINGUISHED SERVICE AWARD



James J. Stuppino, B.S., R.T.(R)(MR)

Jim has been a member of and actively involved in the SMRT since 1996. He was elected SMRT President from 2017-2018 and served on the ISMRM Board of Trustees from 2017-2018. As president, he was instrumental in helping develop the first web broadcast of the SMRT meeting from Singapore. During his presidency, he also worked with the ISMRM Program and Education Committees to develop the first three-day SMRT Annual Meeting. He also worked with the Board to oversee a re-launch of the eLearning center and develop two new member types: Affiliate and Early Career. He also worked to create a joint relationship with CAMRT to create multiple online educational seminars. Jim served his first term as a member of the SMRT Policy Board from 2001 to 2004 and was the Program Chair for the 13th Annual SMRT Meeting in Kyoto, Japan. While on the Policy Board, he served as the 2004 Regionals Committee Chair and served on the RCEEM Ad-Hoc Committee, Education Committee, and 2005 & 2006 Program committees. He was elected the technologist representative on the MRI Sub-Committee from the Joint Review Committee on Education in Radiologic Technology (JRCERT). The committee is responsible for review of program accreditation materials and makes accreditation recommendations to the full Board of Directors.

He served his second term on the SMRT Policy Board from 2012-2016 and was chosen by the SMRT president to serve as the Executive Member for 2013-2014 and 2014-2015. One of his responsibilities as Executive Member was to plan the ISMRM/SMRT joint forum. The 2014 topic was on PET/MRI, and the 2015 topic was on Whole Body DWI. He was instrumental in helping to acquire the SMRT. org web address to aid in developing better name recognition and a stronger web presence. Jim currently lectures at international, regional, and local chapter meetings for the SMRT and other prestigious organizations on all current topics dealing with human & veterinary MRI.

Jim currently is president and CEO of AnimalScan, LLC, & vice president of Warren Radiology MRI, LLC. Jim received his Bachelor of Science degree with a minor in management from College Misericordia in 1990. While attending College Misericordia, he received the Rho Tau Scholarship award for clinical excellence and was elected to the Phi Sigma Beta and Kappa Gamma Phi National Honor Societies. He was also elected to Who's Who among students in American Colleges and Universities. As president & CEO, Mr. Stuppino directly oversees all facility financial and business operations. He was actively involved with Siemens Medical Systems testing new hardware and software on both Open and High Field MR Systems. He co-authored multiple research projects. One entitled "MR Imaging of Exercise Skeletal Muscle: An Atlas of Functional Anatomy," won a cum laude award at the Radiologic Society of North America and was then published in the CMRS newsletter. It also earned an award at the Pennsylvania Radiologic Society. The August 1, 2001 Journal of Cancer published another of Jim's research projects entitled, "Improved Accuracy in Differentiating Malignant from Benign Mammographic Abnormalities." Currently, he and his company are working with the Marine Mammal Center in California to provide MR imaging of the California sea lions for detection of domoic acid toxicity. Jim has been actively involved in technologist education and lecturing. He has been an adjunct professor at College Misericordia in Dallas, PA, and Northampton Community College in Bethlehem, PA, teaching courses on preparation for the ARRT MRI Boards.



SMRT



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