**2019 Annual Meeting  
Program-at-a-Glance  
*Last updated:***

|  |
| --- |
| **Jump to a Day:** [**Sat 11 May**](https://www.ismrm.org/19/19program.htm#Saturday)[**Sun 12 May**](https://www.ismrm.org/19/19program.htm#Sunday)[**Mon 13 May**](https://www.ismrm.org/19/19program.htm#Monday)[**Tue 14 May**](https://www.ismrm.org/19/19program.htm#Tuesday)[**Wed 15 May**](https://www.ismrm.org/19/19program.htm#Wednesday)[**Thu 16 May**](https://www.ismrm.org/19/19program.htm#Thursday) |

**Color Key:**

**Body**

**Molecular • Spectroscopy**

**Cardiovascular**

**Cross-Cutting & Emerging Tech­nologies**

**Diffusion • Perfusion • fMRI**

**Musculoskeletal**

**Neuro**

**Physics & Engineering**

**Digital Posters**

**Power Pitches**

**Member-Initiated Symposia**

**Plenary Sessions**

**Study Groups**

**Scientific Sessions**

**Corporate Events**

***Search the Program-at-a-Glance:  
Coming Spring 2019***

[**[https://www.ismrm.org/19/SMRT.Logo.2016.jpg](https://www.ismrm.org/smrt/19m)*Looking for the SMRT Annual Meeting for Technologists & Radiographers? Click here!***](https://www.ismrm.org/smrt/19m)

|  |  |
| --- | --- |
| **FRIDAY • 10 May 2019** | **Onsite Registration Opens 14:00-20:00** |
| ***Pick up your meeting materials early & avoid the weekend lines!*** | |

|  |  |
| --- | --- |
| **[Navigation: Back to Meeting Home](https://www.ismrm.org/19m/)[Navigation: TopNavigation: Previous Day](https://www.ismrm.org/19/19program.htm#paagtop)[Navigation: Next Day](https://www.ismrm.org/19/19program.htm#Sunday) SATURDAY • 11 May 2019** | **Registration Hours: 06:30-18:30** |
| **Saturday • Morning Sessions** | |
| |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | **Educational Session**  [**Diffusion & Microstructure: Fundamentals**](https://www.ismrm.org/19/program_files/WE05.htm) | **Educational Session**  [**MR Image-Guided Therapy**](https://www.ismrm.org/19/program_files/WE07.htm) | **Educational Session**  [**MRI Systems Engineering**](https://www.ismrm.org/19/program_files/WE02.htm) | **Educational Session**  [**Basic MR Spectroscopy**](https://www.ismrm.org/19/program_files/WE06.htm) | **Educational Session**  [**Cutting-Edge Techniques in Body MRI**](https://www.ismrm.org/19/program_files/WE03.htm) | **Educational Session**  [**Physics for Physicists**](https://www.ismrm.org/19/program_files/WE01.htm) | **Educational Session**  [**Humans Learning to Do Machine Learning Right**](https://www.ismrm.org/19/program_files/WE08.htm) | **Educational Session**  [**fMRI: Back to Basics**](https://www.ismrm.org/19/program_files/WE04.htm) | | **08:00-11:30 Room 512A-H** | **08:00-11:30 Room 513A-C** | **08:00-11:30 Room 516AB** | **08:00-11:30 Room 516C-E** | **08:00-11:50 Room 518A-C** | **08:00-11:30 Room 520A-F** | **08:00-12:00 Room 710A** | **08:00-11:25 Room 710B** | | |
| ***LUNCH BREAK: 12:15 – 13:15*** | |
| **Saturday • Afternoon Sessions** | |
| |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | **Educational Session**  [**Diffusion & Microstructure: Frontiers**](https://www.ismrm.org/19/program_files/WE05.htm) | **Educational Session**  [**Hyperpolarized MR Spectroscopic Imaging**](https://www.ismrm.org/19/program_files/WE11.htm) | **Educational Session**  [**MRI Systems Engineering**](https://www.ismrm.org/19/program_files/WE02.htm) | **Educational Session**  [**Myelin**](https://www.ismrm.org/19/program_files/WE12.htm) | **Educational Session**  [**Hepatobiliary & Imaging of Prostate Cancer**](https://www.ismrm.org/19/program_files/WE09.htm) | **Educational Session**  [**Physics for Physicists**](https://www.ismrm.org/19/program_files/WE01.htm) | **Educational Session**  [**Statistical Analysis for Imaging Studies**](https://www.ismrm.org/19/program_files/WE13.htm) | **Educational Session**  [**Physiology & Hemodynamics**](https://www.ismrm.org/19/program_files/WE10.htm) | | **13:30-17:00 Room 512A-H** | **13:30-16:40 Room 513A-C** | **13:30-17:00 Room 516AB** | **13:30-17:00 Room 516C-E** | **13:30-16:55 Room 518A-C** | **13:30-17:00 Room 520A-F** | **13:30-17:00 Room 710A** | **13:30-16:40 Room 710B** | | |

|  |  |
| --- | --- |
| **[Navigation: Back to Meeting Home](https://www.ismrm.org/19m/)[Navigation: Top](https://www.ismrm.org/19/19program.htm#paagtop)[Navigation: Previous Day](https://www.ismrm.org/19/19program.htm#Saturday)[Navigation: Next Day](https://www.ismrm.org/19/19program.htm#Monday)SUNDAY • 12 May 2019** | **Registration Hours: 07:00-18:30** |
| **Sunday • Morning Sessions** | |
| |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | **Educational Session**  [**Basics of Molecular Dynamic Sensitive MRI; MT, CEST & Rotating Frame Relaxation**](https://www.ismrm.org/19/program_files/WE19.htm) | **Educational Session**  [**MSK Disease: Current Status & Potential Applications of Advanced Imaging**](https://www.ismrm.org/19/program_files/WE18.htm) | **Educational Session**  [**RF Coils**](https://www.ismrm.org/19/program_files/WE15.htm) | **Educational Session**  [**Neurofluids & Brain Lymphatics: From Bench to MRI**](https://www.ismrm.org/19/program_files/WE20.htm) | **Educational Session**  [**Vascular Educational**](https://www.ismrm.org/19/program_files/WE16.htm) | **Educational Session**  [**MRI Data Acquisition: Pulse Sequences**](https://www.ismrm.org/19/program_files/WE14.htm) | **Educational Session**  [**Open-Source Software Tools for MR Pulse Design, Simulation & Reconstruction**](https://www.ismrm.org/19/program_files/WE21.htm) | **Educational Session**  [**Basic Perfusion**](https://www.ismrm.org/19/program_files/WE17.htm) | | **08:00-12:00 Room 512A-H** | **08:00-11:50 Room 513A-C** | **08:00-11:30 Room 516AB** | **08:00-11:50 Room 516C-E** | **08:00-12:00 Room 518A-C** | **08:00-11:30 Room 520A-F** | **08:00-11:50 Room 710A** | **08:00-11:50 Room 710B** | | |
| ***LUNCH BREAK: 12:15 – 13:15*** | |
| **Sunday • Afternoon Sessions** | |
| |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | **Educational Session**  [**Gynecology & Bowel**](https://www.ismrm.org/19/program_files/WE25.htm) | **Educational Session**  [**MSK Disease: Current Status & Potential Applications of Advanced Imaging**](https://www.ismrm.org/19/program_files/WE18.htm) | **Educational Session**  [**RF Coils**](https://www.ismrm.org/19/program_files/WE15.htm) | **Educational Session**  [**CNS Tumors**](https://www.ismrm.org/19/program_files/WE26.htm) | **Educational Session**  [**Cardiac MR: Linking Physiology to Imaging**](https://www.ismrm.org/19/program_files/WE23.htm) | **Educational Session**  [**MRI Image Reconstruction: Nyquist & Non-Nyquist Techniques**](https://www.ismrm.org/19/program_files/WE22.htm) | **Educational Session**  [**Open-Source Software Tools for MR Pulse Design, Simulation & Reconstruction**](https://www.ismrm.org/19/program_files/WE21.htm) | **Educational Session**  [**Brain Connectivity: Structure & Function**](https://www.ismrm.org/19/program_files/WE24.htm) | | **13:30-16:40 Room 512A-H** | **13:30-15:40 Room 513A-C** | **13:30-16:00 Room 516AB** | **13:30-16:55 Room 516C-E** | **13:30-16:30 Room 518A-C** | **13:30-16:30 Room 520A-F** | **13:30-16:00 Room 710A** | **13:30-16:30 Room 710B** | | |
| |  |  |  | | --- | --- | --- | | **OPENING SESSION Plenary Hall - Room 517** | | | | **17:00** | **Welcome** | **Pia Maly Sundgren, M.D., Ph.D. & John Port, M.D., Ph.D.** | | **17:30** | **Lauterbur Lecture My Life in Magnetic Resonance: Sense & Serendipity** | **Peter van Zijl, Ph.D.** | | **18:15** | **Adjournment** | | | |
| |  |  |  | | --- | --- | --- | |  | **Opening Reception 18:30 – 20:00 Exhibition Hall** |  | | |

|  |  |
| --- | --- |
| **[Navigation: Back to Meeting Home](https://www.ismrm.org/19m/)[Navigation: Top](https://www.ismrm.org/19/19program.htm#paagtop)[Navigation: Previous Day](https://www.ismrm.org/19/19program.htm#Sunday)[Navigation: Next Day](https://www.ismrm.org/19/19program.htm#Tuesday) MONDAY • 13 May 2019** | **Registration Hours: 06:30-18:30 Exhibition Hall Hours: 10:00-17:00 Digital Poster Hall Hours: 07:00-20:30** |
| **MONDAY • SUNRISE EDUCATIONAL SESSIONS 07:00 – 08:00** | |
| |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | **Educational Session**  [**fMRI in the Clinic**](https://www.ismrm.org/19/program_files/SM04.htm) | **Educational Session**  [**Imaging Without Gadolinium: ASL**](https://www.ismrm.org/19/program_files/SM07.htm) | **Educational Session**  [**Multinuclear Imaging & Spectroscopy: Electrolytes (Sodium & Beyond)**](https://www.ismrm.org/19/program_files/SM05.htm) | **Educational Session**  [**Preclinical MRI: Methods & Applications: Neuroimaging**](https://www.ismrm.org/19/program_files/SM03.htm) | **Educational Session**  [**Quantitative MRI: Relaxometry**](https://www.ismrm.org/19/program_files/SM08.htm) | **Educational Session**  [**Cardiovascular MR of the Future: Hardware**](https://www.ismrm.org/19/program_files/SM02.htm) | **Educational Session**  [**Advanced MSK MRI Acquisition & Post-Processing: Machine Learning**](https://www.ismrm.org/19/program_files/SM06.htm) | **Educational Session**  [**Why Do My Body Images Look So Bad?**](https://www.ismrm.org/19/program_files/SM01.htm) | | **Room 510A-D** | **Room 511BCEF** | **Room 512A-H** | **Room 513A-C** | **Room 513D-F** | **Room 516AB** | **Room 516C-E** | **Room 518A-C** | | |
| ***BREAK: 08:00 – 08:15*** | |
| **MONDAY • MORNING SESSIONS 08:15 – 10:15** | |
| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Power Pitch Session *(no CME credit)***  **Lung Power**  **Power Pitch Theatre A Exhibition Hall** | **Power Pitch Session *(no CME credit)***  **Artificial Intelligence Neuro**  **Power Pitch Theatre B Exhibition Hall** | **Power Pitch Session *(no CME credit)***  **Pediatric: Ain't Misbehaving on Purpose**  **Power Pitch Theatre C Exhibition Hall** | **Digital Poster Session *(no CME credit)***  **Musculoskeletal; MR Engineering**  **Exhibition Hall** | **Study Group Business Meetings Room 511A *(no CME credit)*** | **Study Group Business Meetings Room 511D *(no CME credit)*** | |  |  | |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Combined Educational & Scientific Session**  [**MRS to CEST & What Is In-Between**](https://www.ismrm.org/19/program_files/M03.htm) | **ISMRM-SMRT Joint Forum**  [**Chasing Speed & Spatial Resolution: At What Point Is Enough?**](https://www.ismrm.org/19/program_files/M02.htm) | **Combined Educational & Scientific Session**  [**Multimodal fMRI: From Animal to Human**](https://www.ismrm.org/19/program_files/M04.htm) | **Member-Initiated Symposium *(no CME credit)***  **Frontiers in Magnetic Resonance Imaging Biomarkers of Renal Disease: Where Imaging Sciences, Big Data, Physiology & Medicine Meet** | **Member-Initiated Symposium *(no CME credit)***  **STOP Looking: Ultra-High Field Killer Apps Found** | | **Room 510A-D** | **Room 710A** | **Room 710B** | **Room 513A-C** | **Room 516AB** |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Scien­tific Session**  **Microstructure: Approaching Cellular Complexity** | **Scien­tific Session**  **Freeze It: Managing Motion in MRI** | **Scien­tific Session**  **Traumatic Brain Injury** | **Scien­tific Session**  **Advances in Flow Imaging** | **Scien­tific Session**  **Female Pelvis** | **Scien­tific Session**  **Young Investigator Awards** | | **Room 511BCEF** | **Room 512A-H** | **Room 513D-F** | **Room 516C-E** | **Room 518A-C** | **Room 520A-F** | | |
| ***BREAK: 10:15 – 10:30*** | |
| |  |  |  | | --- | --- | --- | | **PLENARY SESSION Plenary Hall - Room 517** | | | | **10:30** | **ISMRM Awards: Junior Fellows, Senior Fellows, Gold Medals & Distinguished Service Medals** | **Pia Maly Sundgren, M.D., Ph.D., ISMRM 2018-2019 President** | | **Disruptors Organizers: Elna-Marie Larsson, Daniel Sodickson, Kei Yamada & Xin Yu** | | | | **11:15** | **Introduction** | **Daniel K. Sodickson, M.D., Ph.D.** | | **11:20** | **Disruptors to the Way We Gather Data** | **Andrew G. Webb, Ph.D.** | | **11:38** | **Disruptors to the Way We Visualize Data** | **Mark A. Griswold, Ph.D.** | | **11:57** | **Disruptors to the Way We Interpret Data** | **Hedvig Hricak, M.D., Ph.D., Dr.h.c.** | | **12:15** | **Adjournment** | | | |
| ***LUNCH BREAK: 12:15 – 13:45*** | |
| |  |  |  | | --- | --- | --- | |  | **Gold Corporate Symposium GE Healthcare *(no CME credit)* 12:30 – 13:30 Plenary Hall - Room 517** |  | | |
| **MONDAY • AFTERNOON SESSIONS 13:45 – 15:45** | |
| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Power Pitch Session *(no CME credit)***  **Myelin Imaging in Sickness & Health**  **Power Pitch Theatre A Exhibition Hall** | **Power Pitch Session *(no CME credit)***  **MSK**  **Power Pitch Theatre B Exhibition Hall** | **Power Pitch Session *(no CME credit)***  **Cutting Edge CEST**  **Power Pitch Theatre C Exhibition Hall** | **Digital Poster Session *(no CME credit)***  **Body Young Investigator Awards**  **Exhibition Hall** | **Study Group Business Meetings Room 511A *(no CME credit)*** | **Study Group Business Meetings Room 511D *(no CME credit)*** | | **Pediatric MR 13:45-14:45** | **MR Safety 13:45-14:45** | |  | **MR Elastography 14:45-15:45** |  |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Combined Educational & Scientific Session**  **[Mapping the Liver](https://www.ismrm.org/19/program_files/M07.htm)** | **Educational Session**  [**Cardiac Microstructure**](https://www.ismrm.org/19/program_files/M05.htm) | **Educational Session**  **[Idiopathic Normal Pressure Hydrocephalus: The Role of MRI](https://www.ismrm.org/19/program_files/M06.htm)** | **Member-Initiated Symposium *(no CME credit)***  **Open Source Initiative for Perfusion Imaging** | **Member-Initiated Symposium *(no CME credit)***  **MRI of the Placenta & Fetus: Challenges & Opportunities** | | **Room 510A-D** | **Room 512A-H** | **Room 516C-E** | **Room 513A-C** | **Room 516AB** |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Scien­tific Session**  **Fiber Orientations & Tractography** | **Scien­tific Session**  **MRS/MRSI: Application** | **Scien­tific Session**  **Neuropsychiatry & Psychoradiology** | **Scien­tific Session**  **Cutting-Edge Advances in Cancer Imaging** | **Scien­tific Session**  **fMRI: Multimodal** | **Scien­tific Session**  **B0 Field Management & Shimming** | | **Room 511BCEF** | **Room 513D-F** | **Room 518A-C** | **Room 520A-F** | **Room 710A** | **Room 710B** | | |
| ***BREAK: 15:45 – 16:00*** | |
| **MONDAY • EVENING SESSIONS 16:00 – 18:00** | |
| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Power Pitch Session *(no CME credit)***  **Diffusion MRI: Acquisition, Reconstruction & Artefact Correction**  **Power Pitch Theatre A Exhibition Hall** | **Power Pitch Session *(no CME credit)***  **Frontiers of Neuro Techniques**  **Power Pitch Theatre B Exhibition Hall** | **Power Pitch Session *(no CME credit)***  **Molecular & Metabolic Imaging**  **Power Pitch Theatre C Exhibition Hall** | **Digital Poster Session *(no CME credit)***  **Cardiovascular; MR Spectroscopy**  **Exhibition Hall** | **Study Group Business Meetings Room 511A *(no CME credit)*** | **Study Group Business Meetings Room 511D *(no CME credit)*** | | **MR of Cancer 16:00-17:00** | **Psychiatric MR Spectroscopy & Imaging 16:00-17:00** | | **Detection & Correction of Motion in MRI & MRS 17:00-18:00** |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Educational Session**  **[Diverse Perspectives on Imaging-Based Diagnosis of HCC](https://www.ismrm.org/19/program_files/M08.htm)** | **Educational Session**  **[Functional & Dynamic MR Imaging of Peripheral Joints & Spine](https://www.ismrm.org/19/program_files/M09.htm)** | **Educational Session**  **[MR Physics & Techniques for Clinicians](https://www.ismrm.org/19/program_files/M01.htm)** | **Member-Initiated Symposium *(no CME credit)***  **Frontiers & Challenges in Rodent Brain Imaging** | **Member-Initiated Symposium *(no CME credit)***  **Non-Contrast Cardiac MR Assessment of Ischemic Heart Disease** | | **Room 516 C-E** | **Room 511BCEF** | **Room 710A** | **Room 513A-C** | **Room 516AB** |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Scien­tific Session**  **Novel MR & MR-Compatible Technology** | **Scien­tific Session**  **Breast** | **Scien­tific Session**  **Neurovascular** | **Scien­tific Session**  **What's New in the Spinal Cord?** | **Scien­tific Session**  **Quantitative Parameter Mapping** | **Scien­tific Session**  **QSM & ETM** | | **Room 512A-H** | **Room 513D-F** | **Room 510A-D** | **Room 518A-C** | **Room 520A-F** | **Room 710B** | | |

|  |  |
| --- | --- |
| **[Navigation: Back to Meeting Home](https://www.ismrm.org/19m/)[Navigation: Top](https://www.ismrm.org/19/19program.htm#paagtop)[Navigation: Previous Day](https://www.ismrm.org/19/19program.htm#Monday)[Navigation: Next Day](https://www.ismrm.org/19/19program.htm#Wednesday) TUESDAY • 14 May 2019** | **Registration Hours: 06:30-18:00 Exhibition Hall Hours: 10:00-17:00 Digital Poster Hall Hours: 07:00-20:30** |
| **TUESDAY • SUNRISE EDUCATIONAL SESSIONS 07:00 – 08:00** | |
| |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | **Educational Session**  [**Connectivity for Clinical Study**](https://www.ismrm.org/19/program_files/STu04.htm) | **Educational Session**  [**Imaging Without Gadolinium: CEST**](https://www.ismrm.org/19/program_files/STu07.htm) | **Educational Session**  **[Multinuclear Imaging & Spectroscopy: Hyperpolarized 13C Use in Clinical Research & Trials](https://www.ismrm.org/19/program_files/STu05.htm)** | **Educational Session**  **[Preclinical MRI: Methods & Applications: Contrast & Probes](https://www.ismrm.org/19/program_files/STu03.htm)** | **Educational Session**  **[Quantitative MRI: Diffusion & Flow](https://www.ismrm.org/19/program_files/STu08.htm)** | **Educational Session**  **[MRI in Liver Transplantation](https://www.ismrm.org/19/program_files/STu01.htm)** | **Educational Session**  **[Advanced MSK MRI Acquisition & Post-Processing: Rapid Imaging](https://www.ismrm.org/19/program_files/STu06.htm)** | **Educational Session**  **[Cardiovascular MR of the Future: Software](https://www.ismrm.org/19/program_files/STu02.htm)** | | **Room 510A-D** | **Room 511BCEF** | **Room 512A-H** | **Room 513A-C** | **Room 513D-F** | **Room 516AB** | **Room 516C-E** | **Room 518A-C** | | |
| ***BREAK: 08:00 – 08:15*** | |
| **TUESDAY • MORNING SESSIONS 08:15 – 10:15** | |
| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Power Pitch Session *(no CME credit)***  **The Aging Brain**  **Power Pitch Theatre A Exhibition Hall** | **Power Pitch Session *(no CME credit)***  **Diffusion: Applications**  **Power Pitch Theatre B Exhibition Hall** | **Power Pitch Session *(no CME credit)***  **Task-Based fMRI & fMRI Acquisition Methods**  **Power Pitch Theatre C Exhibition Hall** | **Digital Poster Session *(no CME credit)***  **Cancer; Acquisition, Reconst. & Analysis; Spectroscopy & Non-Proton MR; Neuro**  **Exhibition Hall** | **Study Group Business Meetings Room 511A *(no CME credit)*** | **Study Group Business Meetings Room 511D *(no CME credit)*** | | **Molecular & Cellular Imaging 08:15-09:15** |  | | **Perfusion 09:15-10:15** | **Musculoskeletal MR 09:15-10:15** |  |  |  |  |  | | --- | --- | --- | --- | | **Combined Educational & Scientific Session**  [**MRS of Lipids & Fatty Acids**](https://www.ismrm.org/19/program_files/Tu02.htm) | **Combined Educational & Scientific Session**  [**Prostate MRI: New Acquisition & Post-Processing Techniques**](https://www.ismrm.org/19/program_files/Tu03.htm) | **Member-Initiated Symposium *(no CME credit)***  **Advances in MRI-Guided Radiotherapy of Cancer** | **Member-Initiated Symposium *(no CME credit)***  **Beyond Space & Time: The Power of Extra Dimensions in MRI** | | **Room 512A-H** | **Room 516C-E** | **Room 513A-C** | **Room 516AB** |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | **Scien­tific Session**  **Pediatrics: Image Acquisition** | **Scien­tific Session**  **Brain Tumor Vascular** | **Scien­tific Session**  **Myocardial Tissue Characterization** | **Scien­tific Session**  **MRI of Normal Musculoskeletal Physiology, Exercise & Biomechanics** | **Scien­tific Session**  **Imaging Myelin+** | **Scien­tific Session**  **RF Arrays & the Elements Within** | **Scien­tific Session**  **MRI: Overcoming Our Imperfections** | | **Room 510A-D** | **Room 511BCEF** | **Room 513D-F** | **Room 518A-C** | **Room 520A-F** | **Room 710A** | **Room 710B** | | |
| ***BREAK: 10:15 – 10:30*** | |
| |  |  |  | | --- | --- | --- | | **PLENARY SESSION Plenary Hall - Room 517** | | | | **10:30** | **NIBIB New Horizons Lecture Translational Research for MR Application of Nanotechnology: Beyond Imaging** | **Seung Hong Choi, M.D., Ph.D.** | | **Machine Learning: From Basics to the Clinic Organizers: Ivana Drobnjak, Jongho Lee, Tim Leiner & Bernd Wintersperger** | | | | **11:00** | **Machine Learning in Medical Imaging** | **Jong Chul Ye, Ph.D.** | | **11:20** | **Machine Learning in Clinical Practice** | **Bradley J. Erickson, M.D., Ph.D.** | | **11:40** | **How Machine Learning Can Supercharge Scientific Discovery** | **Tal Arbel, Ph.D.** | | **12:00** | **Adjournment** | | | |
| ***LUNCH BREAK: 12:00 – 13:30*** | |
| |  |  |  | | --- | --- | --- | |  | **Gold Corporate Symposium Philips Healthcare *(no CME credit)* 12:15 – 13:15 Plenary Hall - Room 517** |  | | |
| **TUESDAY • AFTERNOON SESSIONS 13:30 – 15:30** | |
| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Power Pitch Session *(no CME credit)***  **Flow & Vessel Imaging**  **Power Pitch Theatre A Exhibition Hall** | **Power Pitch Session *(no CME credit)***  **Machine Learning Reconstruction Unleashed**  **Power Pitch Theatre B Exhibition Hall** | **Power Pitch Session *(no CME credit)***  **Other Nuclei MR: Looking at Other Resonances**  **Power Pitch Theatre C Exhibition Hall** | **Digital Poster Session *(no CME credit)***  **Neuro**  **Exhibition Hall** | **Study Group Business Meetings Room 511A *(no CME credit)*** | **Study Group Business Meetings Room 511D *(no CME credit)*** | | **Current Issues in Brain Function 13:30-14:30** | **PET/MR 13:30-14:30** | | **Quantitative MR 14:30-15:30** |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Educational Session**  **[Motion Correction with External Sensors](https://www.ismrm.org/19/program_files/Tu04.htm)** | **Combined Educational & Scientific Session**  [**Muscle Imaging**](https://www.ismrm.org/19/program_files/Tu05.htm) | **Educational Session**  **[Hands-On: From Ideal World to Real-World Engineering Issues](https://www.ismrm.org/19/program_files/Tu06.htm)** | **Member-Initiated Symposium *(no CME credit)***  **Ultrahigh Field MR Safety: Increasing Access and Expanding Applications** | **Member-Initiated Symposium *(no CME credit)***  **Mapping the Brain at Multiple Scales: Bridging the Gap Between Microscopic, Mesoscopic & Macroscopic Studies of Brain Structure & Connectivity** | | **Room 510A-D** | **Room 518A-C** | **Room 710A** | **Room 513A-C** | **Room 516AB** |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Scien­tific Session**  **Interrogating the Tumor Microenvironment** | **Scien­tific Session**  **MRS/MRSI Analysis** | **Scien­tific Session**  **Demyelination in the Spinal Cord: MS, NMO & ALS** | **Scien­tific Session**  **fMRI: Physiology** | **Scien­tific Session**  **Novel CEST & MT Preclinical Investigations** | **Scien­tific Session**  **Diffusion MRI: Signaling Representation & Modelling** | | **Room 511BCEF** | **Room 512A-H** | **Room 513D-F** | **Room 516C-E** | **Room 520A-F** | **Room 710B** | | |
| ***BREAK: 15:30 – 15:45*** | |
| **TUESDAY • EVENING SESSIONS 15:45 – 17:45** | |
| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Power Pitch Session *(no CME credit)***  **Hot Topics in Engineering**  **Power Pitch Theatre A Exhibition Hall** | **Power Pitch Session *(no CME credit)***  **New Developments in Cancer Imaging & Spectroscopy**  **Power Pitch Theatre B Exhibition Hall** | **Power Pitch Session *(no CME credit)***  **Breast**  **Power Pitch Theatre C Exhibition Hall** | **Digital Poster Session *(no CME credit)***  **Neuro**  **Exhibition Hall** | **Study Group Business Meetings Room 511A *(no CME credit)*** | **Study Group Business Meetings Room 511D *(no CME credit)*** | | **Hyperpolarized Media MR 15:45-16:45** | **MR in Drug Research 15:45-16:45** | | **Cardiac MR 16:45-17:45** | **MR Spectroscopy 16:45-17:45** |  |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Combined Educational & Scientific Session**  [**Improved Motion Correction & Effective Free-Breathing Approaches**](https://www.ismrm.org/19/program_files/Tu07.htm) | **Educational Session**  [**Advanced Imaging of Cartilage-Bone Interactions**](https://www.ismrm.org/19/program_files/Tu08.htm) | **Educational Session**  **[MR Physics & Techniques for Clinicians](https://www.ismrm.org/19/program_files/Tu01.htm)** | **Member-Initiated Symposium *(no CME credit)***  **More than Simply Iron: MRI for Cellular Iron Mapping in the Human Brain** | **Member-Initiated Symposium *(no CME credit)***  **Imaging the Biomechanical Properties of Tissue: Pathways to Improving Clinical Value** | | **Room 513A-C** | **Room 518A-C** | **Room 710A** | **Room 513D-F** | **Room 516AB** |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Scien­tific Session**  **Laminar & Columnar fMRI** | **Scien­tific Session**  **Dementia** | **Scien­tific Session**  **Pediatrics: Fetal & Neonatal** | **Scien­tific Session**  **Pancreas: Quantitative Tissue Properties & MRCP** | **Scien­tific Session**  **Microstructure: Validation Using Complementary Methods** | **Scien­tific Session**  **Machine Learning for Image Reconstruction** | | **Room 510A-D** | **Room 511BCEF** | **Room 512A-H** | **Room 516C-E** | **Room 520A-F** | **Room 710B** | | |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | **Bronze Corporate Evening Symposium Hitachi Medical Systems *(no CME credit)* 18:00 – 19:00 Room 513 A-C** |  | **Bronze Corporate Evening Symposium [Olea Medical](https://www.ismrm.org/19/files/Olea-adv-CEST-ISMRM-2019.pdf) *(no CME credit)* 18:00 – 19:00 Room 518 A-C** |  | | |

|  |  |
| --- | --- |
| **[Navigation: Back to Meeting Home](https://www.ismrm.org/19m/)[Navigation: Top](https://www.ismrm.org/19/19program.htm#paagtop)[Navigation: Previous Day](https://www.ismrm.org/19/19program.htm#Tuesday)[Navigation: Next Day](https://www.ismrm.org/19/19program.htm#Thursday) WEDNESDAY • 15 May 2019** | **Registration Hours: 06:30-18:00 Exhibition Hall Hours: 10:00-17:00 Digital Poster Hall Hours: 07:00-20:30** |
| **WEDNESDAY • SUNRISE EDUCATIONAL SESSIONS 07:00 – 08:00** | |
| |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | **Educational Session**  [**Microstructure for Clinical Use**](https://www.ismrm.org/19/program_files/SW04.htm) | **Educational Session**  [**Imaging Without Gadolinium: Diffusion MRI**](https://www.ismrm.org/19/program_files/SW07.htm) | **Educational Session**  **[Multinuclear Imaging & Spectroscopy: Non-Hyperpolarized Energetics 13C, 31P](https://www.ismrm.org/19/program_files/SW05.htm)** | **Educational Session**  **[Preclinical MRI: Methods & Applications: Other Animal Imaging Modalities](https://www.ismrm.org/19/program_files/SW03.htm)** | **Educational Session**  **[Quantitative MRI: Quantitative Susceptibility Mapping](https://www.ismrm.org/19/program_files/SW08.htm)** | **Educational Session**  **[Post-PI-RADS: Prostate MRI in the Post-Treatment Setting](https://www.ismrm.org/19/program_files/SW01.htm)** | **Educational Session**  **[Advanced MSK MRI Acquisition & Post-Processing: Fat Suppression & Quantification](https://www.ismrm.org/19/program_files/SW06.htm)** | **Educational Session**  **[Cardiovascular MR of the Future: Data Processing](https://www.ismrm.org/19/program_files/SW02.htm)** | | **Room 510A-D** | **Room 511BCEF** | **Room 512A-H** | **Room 513A-C** | **Room 513D-F** | **Room 516AB** | **Room 516C-E** | **Room 518A-C** | | |
| ***BREAK: 08:00 – 08:15*** | |
| **WEDNESDAY • MORNING SESSIONS 08:15 – 10:15** | |
| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Power Pitch Session *(no CME credit)***  **Machine Learning Unleashed 2**  **Power Pitch Theatre A Exhibition Hall** | **Power Pitch Session *(no CME credit)***  **Mix All Physical Properties With Water and Shake Well**  **Power Pitch Theatre B Exhibition Hall** | **Power Pitch Session *(no CME credit)***  **Emerging Body Imaging Technologies & Their Translation**  **Power Pitch Theatre C Exhibition Hall** | **Digital Poster Session *(no CME credit)***  **Diffusion; MR Value**  **Exhibition Hall** | **Study Group Business Meetings Room 511A *(no CME credit)*** | **Study Group Business Meetings Room 511D *(no CME credit)*** | | **MR Flow & Motion Quantitation 08:15-09:15** | **Reproducible Research 08:15-09:15** | |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Educational Session**  [**CMR in Kidney Failure: Non-Contrast Imaging**](https://www.ismrm.org/19/program_files/W04.htm) | **Combined Educational & Scientific Session**  [**Psychoradiology for Neuropsychiatric Disorders**](https://www.ismrm.org/19/program_files/W02.htm) | **Educational Session**  **[Cutting-Edge MR Spectroscopic Imaging](https://www.ismrm.org/19/program_files/W03.htm)** | **Member-Initiated Symposium *(no CME credit)***  **MRI in Breast Cancer: From Bench to Bedside & Beyond** | **Member-Initiated Symposium *(no CME credit)***  **Completing the Circle: Moving Multi-Parametric Neuro MRI into Clinical Practice & Trials** | | **Room 512A-H** | **Room 513D-F** | **Room 520A-F** | **Room 513A-C** | **Room 516AB** |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Scien­tific Session**  **Hyperpolarized C13 Imaging** | **Scien­tific Session**  **MR Safety: PNS & RF Heating** | **Scien­tific Session**  **Stroke** | **Scien­tific Session**  **Blood Brain Barrier, Glymphatics & CSF Flow** | **Scien­tific Session**  **New Pulses & Encoding Schemes** | **Scien­tific Session**  **Diffusion MRI: Acquisition & Reconstruction** | | **Room 510A-D** | **Room 511BCEF** | **Room 516C-E** | **Room 518A-C** | **Room 710A** | **Room 710B** | | |
| ***BREAK: 10:15 – 10:30*** | |
| |  |  |  | | --- | --- | --- | | **PLENARY SESSION Plenary Hall - Room 517** | | | | **10:30** | **Presidential Lecture When Stress Rules** | **Håkan Arheden, M.D., Ph.D.** | | **Connecting MRI to Other Branches of Science Organizers: Nivedita Agarwal & Dmitry Novikov** | | | | **11:00** | **Connecting MRI to Neurophysiology: Collective Brain Dynamics** | **Michael Breakspear, Ph.D., M.B.B.S.** | | **11:20** | **Connecting MRI to Applied Mathematics: Fluid Dynamics of the Blood & Lymph Flow** | **Eleuterio F. Toro, Ph.D.** | | **11:40** | **Connecting MRI to Molecular Engineering: Genetically Encoded MR Reporters** | **Mikhail G. Shapiro, Ph.D.** | | **12:00** | **Adjournment** | | | |
| ***LUNCH BREAK: 12:00 – 13:30*** | |
| |  |  |  | | --- | --- | --- | |  | **Gold Corporate Symposium Siemens Healthineers *(no CME credit)* 12:15 – 13:15 Plenary Hall - Room 517** |  | | |
| **WEDNESDAY • AFTERNOON SESSIONS 13:30 – 15:30** | |
| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Power Pitch Session *(no CME credit)***  **Myocardial Tissue Characterization**  **Power Pitch Theatre A Exhibition Hall** | **Power Pitch Session *(no CME credit)***  **Interventional & RF: Safety & Solutions**  **Power Pitch Theatre B Exhibition Hall** | **Power Pitch Session *(no CME credit)***  **Rapid-Fire Fingerprinting**  **Power Pitch Theatre C Exhibition Hall** | **Digital Poster Session *(no CME credit)***  **fMRI; Interventional MRI; Contrast Mechanisms**  **Exhibition Hall** | **Study Group Business Meetings Room 511A *(no CME credit)*** | **Study Group Business Meetings Room 511D *(no CME credit)*** | |  | **X-Nuclei Imaging 13:30-14:30** | |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Combined Educational & Scientific Session**  [**Cell Tracking & Molecular Imaging Using Exogenous Agents**](https://www.ismrm.org/19/program_files/W07.htm) | **Combined Educational & Scientific Session**  [**Stroke: Early Signs & Late Recovery**](https://www.ismrm.org/19/program_files/W05.htm) | **Junior Fellows Symposium**  **[MR from a Global Perspective: The Underrepresented Part of the MR Spectrum](https://www.ismrm.org/19/program_files/W06.htm)** | **Member-Initiated Symposium *(no CME credit)***  **RESONATE: Practical Approaches for Implementing Diversity, Equity & Inclusion in MRI Research** | **Member-Initiated Symposium *(no CME credit)***  **The Road to Consensus in Diffusion MRI: How Far Are We?** | | **Room 516C-E** | **Room 513A-C** | **Room 710A** | **Room 518A-C** | **Room 516AB** |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Scien­tific Session**  **Image Processing & Analysis** | **Scien­tific Session**  **Perfusion & Permeability** | **Scien­tific Session**  **Brain Tumor: CEST, MRS & Diffusion MRI** | **Scien­tific Session**  **Traumatic, Neoplastic & Degenerative Musculoskeletal Diseases** | **Scien­tific Session**  **Artificial Intelligence in Body MRI** | **Scien­tific Session**  **fMRI Functional Connectivity: Applications** | | **Room 510A-D** | **Room 511BCEF** | **Room 512A-H** | **Room 513D-F** | **Room 520A-F** | **Room 710B** | | |
| ***BREAK: 15:30 – 15:45*** | |
| **WEDNESDAY • EVENING SESSIONS 15:45 – 17:45** | |
| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Power Pitch Session *(no CME credit)***  **Brain Tumor**  **Power Pitch Theatre A Exhibition Hall** | **Power Pitch Session *(no CME credit)***  **fMRI Analysis: Task & Resting State**  **Power Pitch Theatre B Exhibition Hall** | **Power Pitch Session *(no CME credit)***  **Imperfections, Artifacts, Corrections, Oh My!**  **Power Pitch Theatre C Exhibition Hall** | **Digital Poster Session *(no CME credit)***  **Body; MR Safety; Spectroscopy & Non-Proton MR; Molecular Imaging**  **Exhibition Hall** | **Study Group Business Meetings Room 511A *(no CME credit)*** | **Study Group Business Meetings Room 511D *(no CME credit)*** | | **High Field Systems & Applications 15:45-16:45** | **Hyperpolarization Methods & Equipment 15:45-16:45** | |  |  |  |  |  |  |  | | --- | --- | --- | --- | | **Educational Session**  [**MR Physics & Techniques for Clinicians**](https://www.ismrm.org/19/program_files/W01.htm) | **Educational Session**  [**Non-Traditional Encoding Methods: To k-Space & Beyond**](https://www.ismrm.org/19/program_files/W08.htm) | **Member-Initiated Symposium *(no CME credit)***  **Deep Learning for Mapping of Electromagnetic Tissue Properties** | **Member-Initiated Symposium *(no CME credit)***  **IVIM MRI as a Non-Contrast Perfusion Imaging Modality: What to Expect** | | **Room 710A** | **Room 710B** | **Room 513A-C** | **Room 516AB** |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | **Scien­tific Session**  **Novel Pulse Sequences** | **Scien­tific Session**  **MRSI Acquisition & Reconstruction** | **Scien­tific Session**  **Neurodegeneration (Other than AD)** | **Scien­tific Session**  **MR-Guided Intervention** | **Scien­tific Session**  **MR Angiography & Vessel-Wall Imaging** | **Scien­tific Session**  **Prostate MR: Bench to Bedside** | **Scien­tific Session**  **Diffusion: Applications** | | **Room 510A-D** | **Room 511BCEF** | **Room 512A-H** | **Room 513D-F** | **Room 516C-E** | **Room 518A-C** | **Room 520A-F** | | |
| |  |  |  | | --- | --- | --- | |  | **ISMRM Business Meeting *(no CME credit)* 18:00-19:00 Room 516AB** |  |  |  |  |  | | --- | --- | --- | |  | **Equity, Diversity & Inclusion (EDI) Forum *(no CME credit)* 19:00-21:00 Room 518A-C** |  | | |

|  |  |
| --- | --- |
| **[Navigation: Back to Meeting Home](https://www.ismrm.org/19m/)[Navigation: Top](https://www.ismrm.org/19/19program.htm#paagtop)[Navigation: Previous Day](https://www.ismrm.org/19/19program.htm#Wednesday)[Navigation: Next Day](https://www.ismrm.org/19/19program.htm#closing) THURSDAY • 16 May 2019** | **Registration Hours: 06:30-18:00 Exhibition Hall Hours: 10:00-16:30 Digital Poster Hall Hours: 07:00-16:30** |
| **THURSDAY • SUNRISE EDUCATIONAL SESSIONS 07:00 – 08:00** | |
| |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | **Educational Session**  [**Beginner's Guide to Perfusion MRI**](https://www.ismrm.org/19/program_files/STh04.htm) | **Educational Session**  [**Imaging Without Gadolinium: Synthetic MRI**](https://www.ismrm.org/19/program_files/STh07.htm) | **Educational Session**  **[Multinuclear Imaging & Spectroscopy: Exploration of Fluorine-19 & Oxygen-17](https://www.ismrm.org/19/program_files/STh05.htm)** | **Educational Session**  **[Preclinical MRI: Methods & Applications: Future Challenges & Opportunities](https://www.ismrm.org/19/program_files/STh03.htm)** | **Educational Session**  **[Quantitative MRI: Electrical Property Mapping](https://www.ismrm.org/19/program_files/STh08.htm)** | **Educational Session**  **[Lung & PET/MR](https://www.ismrm.org/19/program_files/STh01.htm)** | **Educational Session**  **[Advanced MSK MRI Acquisition & Post-Processing: Quantitative Imaging](https://www.ismrm.org/19/program_files/STh06.htm)** | **Educational Session**  **[Cardiovascular MR of the Future: Challenges in the Multimodality Environment](https://www.ismrm.org/19/program_files/STh02.htm)** | | **Room 510A-D** | **Room 511BCEF** | **Room 512A-H** | **Room 513A-C** | **Room 513D-F** | **Room 516AB** | **Room 516C-E** | **Room 518A-C** | | |
| ***BREAK: 08:00 – 08:15*** | |
| **THURSDAY • MORNING SESSIONS 08:15 – 10:15** | |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Power Pitch Session *(no CME credit)***  **Microstructure Modelling & Validation**  **Power Pitch Theatre A Exhibition Hall** | **Power Pitch Session *(no CME credit)***  **Liver: Brief but Impactful**  **Power Pitch Theatre B Exhibition Hall** | **Digital Poster Session *(no CME credit)***  **Acquisition, Reconst. & Analysis**  **Exhibition Hall** | **Study Group Business Meetings Room 511A *(no CME credit)*** | **Study Group Business Meetings Room 511D *(no CME credit)*** | | **Interventional MR 08:15-09:15** | **Electro-Magnetic Tissue Properties 08:15-09:15** | |  |  |  |  |  |  |  | | --- | --- | --- | --- | | **Educational Session**  [**Stress & the Developing Brain**](https://www.ismrm.org/19/program_files/Th02.htm) | **Combined Educational & Scientific Session**  [**Simulations & Modeling: Closed-Form to Discrete**](https://www.ismrm.org/19/program_files/Th03.htm) | **Member-Initiated Symposium *(no CME credit)***  **Mapping BBB Permeability: From Contrast- to Noncontrast-Enhanced Imaging** | **Member-Initiated Symposium *(no CME credit)***  **Bayesian Inference in MRI** | | **Room 512A-H** | **Room 710A** | **Room 513A-C** | **Room 516AB** |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | **Scien­tific Session**  **Novel Neuroimaging Techniques** | **Scien­tific Session**  **fMRI: Preclinical** | **Scien­tific Session**  **Single-Voxel MRS Techniques** | **Scien­tific Session**  **Fetal & Placental MRI** | **Scien­tific Session**  **Myocardial Function & Deformation** | **Scien­tific Session**  **Deep Learning: Acquisition, Uncertainty & Prediction** | **Scien­tific Session**  **Advances in MR Fingerprinting** | | **Room 510A-D** | **Room 511BCEF** | **Room 513D-F** | **Room 516C-E** | **Room 518A-C** | **Room 520A-F** | **Room 710B** | | |
| ***BREAK: 10:15 – 10:30*** | |
| |  |  |  | | --- | --- | --- | | **PLENARY SESSION Plenary Hall - Room 517** | | | | **10:30** | **Young Investigators Award Presentation** | **Lawrence L. Wald, Ph.D., 2019-2020 ISMRM President** | | **Standardization in MRI: Why Is It So Challenging? Organizers: Mustafa Bashir & Qiyong Gong** | | | | **10:45** | **Standardization of Machines & Acquisition Schemes** | **Mitchell D. Schnall, M.D., Ph.D.** | | **11:05** | **Standardization of Data Formats & Post-Processing Methods** | **Vince D. Calhoun, Ph.D.** | | **11:25** | **Standardization of Clinical Interpretations: Psychoradiology Perspective** | **Liesbeth Reneman, M.D., Ph.D.** | |  | | | | **11:45** | **Special Session: Scientific Highlights of the ISMRM 27th Annual Meeting** | | | **12:15** | **Adjournment** | | | |
| ***LUNCH BREAK: 12:15 – 13:45*** | |
| |  |  |  | | --- | --- | --- | |  | **Silver Corporate Symposium** [**Canon Medical Systems Corporation**](https://www.ismrm.org/19/files/Canon.pdf) ***(no CME credit)* 12:30 – 13:30 Plenary Hall - Room 517** |  | | |
| **THURSDAY • AFTERNOON SESSIONS 13:45 – 15:45** | |
| |  |  |  | | --- | --- | --- | | **Digital Poster Session *(no CME credit)***  **Acquisition, Reconst. & Analysis; Contrast Mechanisms**  **Exhibition Hall** | **Study Group Business Meetings Room 511A *(no CME credit)*** | **Study Group Business Meetings Room 511D *(no CME credit)*** | | **MR in Radiation Therapy 13:45-14:45** | **Placenta & Fetus 13:45-14:45** | |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Educational Session**  [**Breast MRI: Current Topics & Future Directions**](https://www.ismrm.org/19/program_files/Th04.htm) | **Combined Educational & Scientific Session**  **[Mapping the Complementary Roles of Myelin & Microstructure in White Matter](https://www.ismrm.org/19/program_files/Th05.htm)** | **Combined Educational & Scientific Session**  **[Reproducible Research: Quest for the Ground Truth](https://www.ismrm.org/19/program_files/Th06.htm)** | **Member-Initiated Symposium *(no CME credit)***  **Combined Diffusion-Relaxometry Microstructure Imaging** | **Member-Initiated Symposium *(no CME credit)***  **MRI/S Biomarkers of Toxicity** | | **Room 512A-H** | **Room 516C-E** | **Room 710A** | **Room 513A-C** | **Room 516AB** |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Scien­tific Session**  **Molecular & Metabolic Imaging** | **Scien­tific Session**  **Machine Learning & Post-Processing in MSK** | **Scien­tific Session**  **Experimental Models of CNS Disease** | **Scien­tific Session**  **Liver** | **Scien­tific Session**  **fMRI Acquisition Methods** | **Scien­tific Session**  **Multidimentional Signal Encoding & Decoding** | | **Room 510A-D** | **Room 511BCEF** | **Room 513D-F** | **Room 518A-C** | **Room 520A-F** | **Room 710B** | | |
| ***BREAK: 15:45 – 16:00*** | |
| **THURSDAY • EVENING SESSIONS 16:00 – 18:00** | |
| |  |  |  | | --- | --- | --- | |  | **Study Group Business Meetings Room 511A *(no CME credit)*** | **Study Group Business Meetings Room 511D *(no CME credit)*** | | **Diffusion 16:00-17:00** | **MR Engineering 16:00-17:00** | | **White Matter 17:00-18:00** |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Combined Educational & Scientific Session**  [**Value of MRI**](https://www.ismrm.org/19/program_files/Th07.htm) | **Educational Session**  [**MR Physics & Techniques for Clinicians**](https://www.ismrm.org/19/program_files/Th01.htm) | **Educational Session**  [**Artifacts Game Show**](https://www.ismrm.org/19/program_files/Th08.htm) | **Member-Initiated Symposium *(no CME credit)***  **Advances in Psychoradiology** | **Member-Initiated Symposium *(no CME credit)***  **Targeting Alzheimer's Disease: Multiscale & Multimodal Imaging from Electrons to Neural Systems** | | **Room 512A-H** | **Room 710A** | **Room 710B** | **Room 513A-C** | **Room 516AB** |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Scien­tific Session**  **Quantitative Kidney Imaging** | **Scien­tific Session**  **Relaxometry: Measuring, Understanding & Using** | **Scien­tific Session**  **Preclinical Exploratory Body Methods** | **Scien­tific Session**  **Myocardial Perfusion** | **Scien­tific Session**  **Head & Neck** | **Scien­tific Session**  **Frontiers of Image Reconstruction** | | **Room 510A-D** | **Room 511BCEF** | **Room 513D-F** | **Room 516C-E** | **Room 518A-C** | **Room 520A-F** | | |
| ***BREAK: 18:00 – 18:15*** | |
| |  |  |  | | --- | --- | --- | | **CLOSING SESSION Plenary Hall - Room 517** | | | | **18:15** | **Closing Remarks** | **Lawrence L. Wald, Ph.D.** | | **18:30** | **Mansfield Lecture Predict – Then Act! Moving Towards Tailored Prevention** | **Christiane K. Kuhl, M.D., Ph.D.** | | **19:15** | **Adjournment** | | | |
| |  |  |  | | --- | --- | --- | |  | **Closing Party  19:30 – 22:00 Level 2, Room 210** |  | | |
| ***See you next year in Sydney!*** | |