MAGNETIC RESONANCE IMAGING

104[™] Scientific Assembly and Annual Meeting Radiological Society of North America McCormick Place, Chicago

November 25-30 Meeting.RSNA.org #RSNA18



Accreditation and Designation Statements

The Radiological Society of North America (RSNA®) is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

The RSNA designates this live activity for a maximum of **99.25** *AMA PRA Category 1 Credits*[™]. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

The Commission on Accreditation of Medical Physics Education Program (CAMPEP) has approved the direct transfer of *AMA PRA Category 1 Credit*[™] to MPCEC on a credit-for-credit basis for medical physicists.

Corporate Symposium

Please refer to each course description in the online program to determine if CME credit is offered for the session. Instructions on claiming credit will be provided during the course. CME credit for the Corporate Symposiums will be provided through a third party provider and not through RSNA.

Walk Through The Week

SATURDAY, NOV 24, 2018 12:00-2:00 PM

Educational Courses

AAPM/RSNA Physics Tutorial Session 1
Session SPPH01.....E351

SUNDAY, NOV 25, 2018

10:45 AM-12:15 PM

Science Session with Keynote: Cardiac (Nonischemic Cardiomyopathies) Session SSA04
Chest (Emphysema/COPD) Session SSA05E451A
Science Session with Keynote: Gastrointestinal (Radiomics) Session SSA07N226
Science Session with Keynote: Gastrointestinal (Crohn's Disease and Small Bowel) Session SSA08N227B
Genitourinary (Multi-Parametric Prostate MRI) Session SSA10
Genitourinary (Gynecologic Malignancy) Session SSA11 N230B
Molecular Imaging (Brain) Session SSA13
Musculoskeletal (Bone Marrow and Neoplasms) Session SSA14
Musculoskeletal (Lower Extremity) Session SSA15
Neuroradiology (White Matter Diseases: Beyond Bright T2) Session SSA18

2:00-3:30 PM

Educational Courses	
Update on Imaging in Dementia Course RC105E45	1A
Abbreviated/Faster MRI Abdominal Pelvic Protocols Course RC109	CD
Anatomical MR Imaging for Radiotherapy Planning and Guidance Course RC122	٩B

MONDAY, NOV 26, 2018

7:15-8:15 AM

8:00-10:00 AM

Educational Courses	
Prostate MRI (Hands-on)	
Course RCA21	i01AB

8:30-10:00 AM

Educational Courses Evolving Imaging Methods for the Cancer Patient - Part 1 (Interactive Session) Course MSAS21
Case-based Review of Magnetic Resonance (Interactive Session) Course MSCM21 S100AB
Molecular Imaging Symposium: Basics of Molecular Imaging Course MSMI21
MR Angiography: 2018 Update Course RC212
Emerging Technology: Elastography - Update 2018 Course RC217 S504CD
Whole-body MRI for Oncologic Decision Making in Bone Disease Course RC218
Functional MR Imaging for Tumor Targeting in Radiotherapy Course RC222
MRI Safety Issue for Implants, Devices, and Contrast: Update 2018 (Interactive Session) Course RC229N228
Course RC227 NZ20

8:30 AM-12:00 PM

Educational Courses
Musculoskeletal Series: Knee MRI
Course RC204E451B

Neuroradiology Series: Brain Tumors
Course RC205 S406B

9:00-10:30 AM

Corporate Symposium

Perspectives in MR Contrast Use: What You Should Know for Your Practice: Presented by Northwest Imaging Forums, educational grant provided by Bracco Diagnostics, Inc. Session CS21S101AB

10:30 AM-12:00 PM

Educational Courses	
Case-based Review of Magnetic Resonance (Interact	ive
Session)	
Course MSCM22	S100AB
Molecular Imaging Symposium: Oncologic MI Applica Course MSMI22	
Rectal MRI - Bring Your Own Device (Hands-on)	S404CD

10:30 AM-12:00 PM

Scientific Papers Sessions Cardiac (Myocardial Ischemia and Viability (MRI): I) Session SSC02S502AB
Science Session with Keynote: Gastrointestinal (LiRADS) Session SSC05N228
Gastrointestinal (Liver Diffuse Disease, Fibrosis) Session SSC06 N229
Science Session with Keynote: Musculoskeletal (Body Composition) Session SSC10 S102CD
Neuroradiology/Head and Neck (Trauma Imaging: Picking Up the Pieces) Session SSC11S402AB
Physics (MR: New Techniques, Systems, Evaluation) Session SSC12 N226
Vascular Interventional (Prostate and Uterine Embolization) Session SSC15

12:00-12:20 PM

Showcase Presentations

Machine Learning Theater: Al Improves Imaging Workflow for MR and PET Exams: Faster, Safer, and Smarter: Presented by Subtle Medical

Session ML23 . . . Machine Learning Showcase North Hall

3:00-4:00 PM

Scientific Papers Sessions Cardiac (MRI: General Topics) Session SSE04 N226
Gastrointestinal (Advanced Imaging Texture Analysis) Session SSE09S404CD
Musculoskeletal (Upper Extremity) Session SSE15 N228
Musculoskeletal (Metal Artifact Reduction Techniques) Session SSE16 N227B
Neuroradiology (Epilepsy Imaging) Session SSE19E352
Pediatrics (Oncology and Nuclear Medicine) Session SSE21
Physics (MR: Diffusion and Susceptibility Imaging) Session SSE24S504CD
Science Session with Keynote: Radiation Oncology (Gynecologic Cancers) Session SSE25

4:30-6:00 PM

Educational Courses
Special Interest Session: Imaging Cognition 2018: Addiction
Session SPSI22 E353C
Special Interest Session: High-value MRI: Updates from the
February 2018 ISMRM-RSNA Co-provided Workshop
Session SPSI23 E450B

TUESDAY, NOV 27, 2018

7:15-8:15 AM

Educational Courses

8:00-10:00 AM

Educational Courses
Prostate MRI (Hands-on)
Course RCA31......S401AB

8:30 AM-12:00 PM

Educational Courses
Cardiac Series: Emerging Cardiovascular MR and CT Imaging
Techniques
Course RC303 E350

Genitourinary Series: Prostate MRI in the PI-RADS Era: Detection, Diagnosis and MRI Guided/Targeted Interventions Course RC307
Breast Series: MRI Course RC315 Arie Crown Theater
8:30–10:00 AM Educational Courses Radiology Safety: Effective Strategies in Patient Care (Interactive Session) Course MSAS31
Pulmonary Vascular Imaging Course RC301S104B
Challenging Cases in Body Oncologic Imaging (Interactive Session) Course RC318
Role of MR Imaging in Cancer Staging and Treatment Course RC320S403B
Functional MR Imaging for Normal Tissue Response Assessment in Radiotherapy Course RC322
MR Imaging of Rectal Cancer Before and After Therapy and Recent Advances in Imaging (Interactive Session) Course RC329N227B
10.30 AM 12.00 PM

10:30 AM-12:00 PM

Scientific Papers Sessions Gastrointestinal (Advanced Liver MR Imaging Techniques) Session SSG05
Nuclear Medicine (Gastrointestinal Oncology Nuclear Imaging) Session SSG09S505AB
Neuroradiology (Brain Tumors: Looking Beyond the Obvious) Session SSG10 E353A
Neuroradiology (Molecular Neuroimaging: From Diffusion to Beyond) Session SSG11E351
Radiation Oncology (CNS Malignancies) Session SSG15

12:30-1:30 PM

Lunch and Learns

Session LL22 S403A
(invite-only)
Contrast Documentation Considerations: Presented by Bayer
of Class Label Updates and Medication Guides and Current
Lunch and Learn: Gadolinium Based Contrast Agents: Review

1:30-3:00 PM

Educational Courses	
Essentials of Neuro Imaging	
Course MSES33 S1	00AB

3:00-4:00 PM

Scientific Papers Sessions Breast Imaging (Monitoring Response to Treatment) Session SSJ01
Breast Imaging (US Advanced Applications)
Session SSJ02 E353C
Cardiac (Myocardial Disease) Session SSJ03E353A
Science Session with Keynote: Cardiac (Oncology) Session SSJ04 E260
Science Session with Keynote: Chest (Thoracic MRI) Session SSJ05S404AB
Gastrointestinal (Hepatocellular Carcinoma Response Imaging) Session SSJ07
Gastrointestinal (Pancreas Imaging) Session SSJ08S102CD
Science Session with Keynote: Genitourinary (Benign Gynecologic Disease) Session SSJ10
Genitourinary (Scrotum and Bladder) Session SSJ11S403A
Molecular Imaging (Novel Multi-Modal Applications) Session SSJ14S505AB
Musculoskeletal (Muscle, Tendon and Nerve) Session SSJ16
Science Session with Keynote: Nuclear Medicine (Chest/ Breast Oncology Nuclear Imaging)
Session SSJ17 S504CD
Neuroradiology (Artificial Intelligence in Neuroimaging) Session SSJ18E451B
Neuroradiology (Movement Disorders: Moving Fast and Moving Slow) Session SSJ19
Physics (Image Reconstruction) Session SSJ22N227B
Vascular Interventional (Spine and Bone Intervention) Session SSJ26

4:30-6:00 PM

Educational Courses Nonischemic Cardiomyopathies: New Role of Cardiac MRI Course RC403E350
Imaging of the Colorectum Course RC409E352
Peripheral Artery Disease: CTA and MRA Course RC412
The Neoadjuvant Patient Course RC415
Emerging Technology: 3D Joint Imaging Course RC417S505AB
Tips, Tricks and Pitfalls in Body Oncological Imaging: Experts Tell All
Course RC418 N229
Imaging Cancer in the Cirrhotic Liver: What We Need to Know (Interactive Session)
Course RC429

WEDNESDAY, NOV 28, 2018

7:15-8:15 AM

Educational Courses

Hot Topic Session: Fast MSK MR Imaging
Session SPSH40 E450A

8:00-9:00 AM

Educational Courses
ASRT@RSNA 2018: Ultrasound versus MRI for Imaging of the
Female Pelvis
Course MSRT41 N230B

8:00-10:00 AM

Educational Courses	
Prostate MRI (Hands-on)	
Course RCA41	401AB

8:30-10:00 AM

Educational Courses Essentials of Temporal Bone Imaging Course RC506E451A
Head and Neck PET/CT: Clinical Approach Course RC511
BI-RADS Interactive Challenge (Interactive Game) Course RC515 N227B
Emerging Technology: PET/MRI Update 2018 Course RC517

Metabolic Tumor Imaging: Current and Beyond Course RC518	,
The Abbreviated Liver MRI Imaging Protocol Course RC529 S102CD	

8:30 AM-12:00 PM

Educational Courses Musculoskeletal Series: Shoulder MRI Course RC504
Neuroradiology Series: Stroke Course RC505 E450A
Vascular Series: MR Angiography: New Techniques and Their Application Course RC512
Pediatric Series: Pediatric Radiology Course RC513

10:30 AM-12:00 PM

10:30 AM-12:00 PM

Scientific Papers Sessions Cardiac (CT, MRI and PET: General Topics) Session SSK03
Science Session with Keynote: Gastrointestinal (Colorectal Imaging) Session SSK06S502AB
Genitourinary (Renal Masses) Session SSK09N226
Genitourinary (PI-RADS) Session SSK10
Molecular Imaging (New Tracers) Session SSK12
Musculoskeletal (Advances in MR Imaging) Session SSK13
Neuroradiology (Functional Neuroimaging) Session SSK16
Physics (MR: Applications) Session SSK17

12:30-1:30 PM

Lunch and Learns

Lunch and Learn: Thinking Faster, Safer, & Smarter: How You Can Use AI to improve MR and PET Imaging Efficiency, Patient Satisfaction, and Safety: Presented by Subtle Medical (invite-only)

Session LL33 S403B

3:00-4:15 PM

Educational Courses
BOOST: Advanced Techniques in Image-guided Therapy
(Interactive Session)
Course MSR044

3:00-4:00 PM

Scientific Papers Sessions

Cardiac (Anatomy) Session SSM03 S102CD
Cardiac (Arrhythmia and Electrophysiology) Session SSM04 S103AB
Gastrointestinal (Gallbladder and Bile Ducts) Session SSM09S503AB
Informatics (Quantitative Imaging) Session SSM12 E353B
Musculoskeletal (Novel Signs and Patterns) Session SSM15 E450B
Neuroradiology (Advances in Neuro MRI) Session SSM18
Radiation Oncology (Genitourinary) Session SSM22E261

3:30-5:00 PM

Educational Courses

RSNA/ESR Sports Imaging Symposium: Postoperative	
Imaging of Sports Injuries	
Course MSSR44	.E352

4:30-6:00 PM

Educational Courses

Visualization on Pediatric Ultrasound?
Session SPSC43 N226
Controversy Session: Gadolinium for MR Examination: To Give or Not to Give
Session SPSC44 N228
Controversy Session: CTA or MRA? Session SPSC45

THURSDAY, NOV 29, 2018 7:15-8:15 AM

Educational Courses

Neuro Nightmares: Headscratchers from Overnight (Casebased Competition)
Session SPDL50.....E451B

8:00-10:00 AM

Educational Courses
Prostate MRI (Hands-on)
Course RCA51......S401AB

8:30-10:00 AM

Educational Courses Cardiac Imaging for Transcatheter Intervention Planning Course RC603
Chronic Pelvic Pain: Added Value of MRI in Endometriosis, Fibroids, and Pelvic Floor Relaxation Course RC607S402AB
Advanced Breast Imaging Technologies Course RC615E451A
Emerging Technologies: Prostate Cancer Imaging & Management - Update 2018 Course RC617
Quantitative MR Imaging and Clinical Applications (Interactive Session) Course RC629

10:30 AM-12:00 PM

Scientific Papers Sessions

Breast Imaging (Abbreviated MRI, Ultrafast Imaging and Artificial Intelligence) Session SSQ01
Cardiac (Great Vessels and Cardiopulmonary Disease) Session SSQ02S404AB
Science Session with Keynote: Cardiac (Coronary Artery Disease: CT and MR Techniques) Session SSQ03S404CD
Chest (Functional Lung Imaging/Dual-Energy CT/Radiation Dose Reduction) Session SSQ05
Gastrointestinal (General Abdominal Imaging) Session SSQ06 E350

Genitourinary (Functional Renal Imaging) Session SSQ09 S103CE
Genitourinary (New Techniques in Prostate Imaging and Intervention) Session SSQ10
Molecular Imaging (Musculoskeletal, Gastrointestinal, Cardio) Session SSQ12
Musculoskeletal (Arthritis and Cartilage) Session SSQ13
Nuclear Medicine (Technical Innovations and Emerging Opportunities) Session SSQ14
Neuroradiology (Dots and Dashes: Image Analysis in Neuroradiology) Session SSQ15
Neuroradiology (Cervicocranial Vascular Imaging) Session SSQ16S504AE

2:30-4:00 PM

Educational Courses
Rectal MRI - Bring Your Own Device (Hands-on)
Course RCA54

3:00-4:00 PM

Educational Courses
Hot Topic Session: Immunotherapy for Cancer-A Demanding
New Imaging Frontier
Session SPSH54

4:30-6:00 PM

Educational Courses
Imaging of Thoracic Neoplasms: Update 2018 (Interactive
Session)
Course RC701 E450A
Emerging Technology: Imaging of Dementias Course RC717
Pancreaticobiliary MR Imaging (Interactive Session) Course RC729S404CD
MR Imaging-guided Breast Biopsy (Hands-on) Course RC750 E260

FRIDAY, NOV 30, 2018

8:30-10:00 AM

Educational Courses
MR Imaging in the Thorax
Course RC803 E353C

Six Common Difficult Problems in GI and GU MRI: The Experts' Approach
Course RC829......E351

9:30 AM-12:30 PM

Educational Courses

10:30 AM-12:00 PM

Scientific Papers Sessions Chest (Thoracic Malignancy) Session SST02 E350
Gastrointestinal (Advanced MRI Techniques) Session SST03E352
Genitourinary (Imaging of Pregnancy) Session SST04 E260
Musculoskeletal (Spine) Session SST05E351
Nuclear Medicine (Abdomen and Pelvis Nuclear Imaging) Session SST06 E261
Neuroradiology/Head and Neck (Head and Neck Imaging: Back to the Future) Session SST07
Pediatrics (Neuroradiology) Session SST08 E263

Posters and Exhibits Discussions

(CME is available when the author is present for discussion during the lunch period)

SUNDAY, NOV 25, 2018

12:30-1:00 PM Scientific Posters

1:00-1:30 PM

Scientific Posters

1:00–1:30 PM

MONDAY, NOV 26, 2018

12:15–12:45 PM

Scientific Posters

Chemical Exchange Saturation Transfer MR Imaging for Mediastinal Masses: Phantom Study and Clinical Cases PH211-SD-MOA2......Station #2 Diagnostic Performance of Intravoxel Incoherent Motion Diffusion-Weighted Imaging in the Assessment of the Dynamic Status of Myocardial Microvascular Circulation CA210-SD-MOA1....Station #1 Eliminating Susceptibility Induced Hyperintensities in Ultra High Field T1w MPRAGE Brain Images PH213-SD-MOA4....Station #4 Unmodified, Autologous Adipose Tissue Derived Regenerative Cells Improve Cardiac Function, Structure and

Revascularization in a Porcine Model of Chronic Myocardial Infarction

CA215-SD-MOA6 Station #6

Use of KZ-Space in Multislice MRI for Sub-mm Through-Plane Resolution

PH217-SD-MOA8..... Station #8

12:15-12:45 PM

Education Exhibits

Factors Affecting MRI Accuracy in Evaluating of Neoadjuvant Therapy Response in Breast Cancer: A Pictorial Review with Radiopathological Correlation

BR177-ED-MOA8..... Station #8

Mentorship in Radiology: It Doesn't Have to Be All Greek to You

HP008-EB-MOA Hardcopy Backboard

Probably Benign Assessment on Breast MRI: Appropriate and Inappropriate Utilization

BR181-ED-MOA12Station #12

12:45-1:15 PM

Scientific Posters

Therapeutic Nipple Sparing Mastectomy (NSM): Tumor-To-Nipple Distance (TND) on Preoperative MRI as Useful Variable in Surgical Patient Selection and Outcomes

BR236-SD-MOB2 Station #2

TUESDAY, NOV 27, 2018

12:15-12:45 PM

Scientific Posters

Differential Subsampling with Cartesian Ordering (DISCO) with Respiratory Triggering versus Conventional Liver Acquisition with Volume Acquisition (LAVA): A Multiple-Reader Preference Study

GI361-SD-TUA7..... Station #7

Histological Whole-Slide Imaging for Invasive Breast Cancer: A Novel Technique to Obtain Quantitative Parameters Correlating with the Apparent Diffusion Coefficient

BR244-SD-TUA4 Station #4

Pre-Treatment Prediction of Pathologic Complete Response to Neoadjuvant Chemotherapy in Node-Positive Breast Cancer Patients: A Breast MRI Radiomics Pilot Study

BR243-SD-TUA3..... Station #3

12:15-12:45 PM

Education Exhibits

Quantitative MRI Radiomics in Breast Cancer: Tumor Perfusion and Heterogeneity

BR009-EB-TUA..... Hardcopy Backboard

12:45-1:15 PM

Scientific Posters

WEDNESDAY, NOV 28, 2018

12:15-12:45 PM

Scientific Posters

 Peritumoral Fat Content Correlates with Histologic Prognostic Factors in Breast Carcinoma: Iterative Decomposition of Water and Fat with Echo Asymmetry and Least-Squares Emission (IDEAL) Study

BR256-SD-WEA3 Station #3

12:45-1:15 PM

Scientific Posters

THURSDAY, NOV 29, 2018

12:15-12:45 PM

Scientific Posters

Comparison between Abbreviated Protocol (AB-MR) and Full Diagnostic Protocol (FD-MR) in the Characterization of Lesions Detected by Breast MRI: A Multi-reader Study BR272-SD-THA6.....Station #6 Free Breathing Abdominal MRI: Preliminary Experience with In-Table Respiratory Gating

GI387-SD-THA7 Station #7

Prediction of Axillary Response by Monitoring with Ultrasound and MRI During and After Neoadjuvant Chemotherapy in Breast Cancer Patients BR268-SD-THA2 Station #2

12:15-12:45 PM

Education Exhibits

Neck Magnetic Resonance Angiography for Determination of Neointimal Coverage of the Stenting Site After Carotid Artery Stenting V171-ED-THA8

VII/I-ED-IHA0
Systematic Approach to Lesions Involving Nipple-Areolar
Complex Using MRI
BR212-ED-THA8 Station #8

19

12:45-1:15 PM

Scientific Posters

Influence of Fat Deposition on T1 Mapping of the Pancreas: Evaluation by Dual Flip Angle MR Imaging with and Without Fat Suppression

GI390-SD-THB2 Station #2

12:45-1:15 PM

Education Exhibits

SPACE NO. **EXHIBIT TITLE** BR012-EB-X Incidental Extra-Mammary Findings on Breast MRI: A Pictorial Illustration A Radiologist's Practical Guide to use of BR104-ED-X DWI during Breast MRI BR119-ED-X How to Identify Women Who Are Above Average Risk for Developing Breast Cancer: Retrospective Review of our Institution's First Year Experience After Implementing a Breast Cancer Risk Assessment Program in Breast Imaging BR129-ED-X A Standardized Approach and Lexicon for Effective Reporting of Breast Cancer MRIs Pre and Post-Neoadjuvant Chemotherapy BR137-ED-X What Radiologists Should Know About Artifacts in Breast MRI Out Witch the Old... Let 'Go with the New BR138-ED-X BI-RADS MRI Guide for the Resident BR140-ED-X Looking Beyond: Extramammary Findings in Breast MRI BR142-ED-X The Role of Diffusion Weighted Mr Imaging in Breast Lesions BR156-ED-X Breast Cancer MRI Staging: An Easy to Follow Algorithm BR159-ED-X MRI vs Pathology: Evaluation of Pathologic Complete Response of Breast Cancer Subtypes After Neoadjuvant Chemotherapy - Can We Avoid Breast Surgery in the Era of Personalized Medicine?

VISIT THE RSNA SHOP

Located in RSNA Connections Center

Take home great gifts for family and staff!



Clothing, Accessories and Souvenirs. Quantities are limited.



MKT446 TD



Get the most out of RSNA 2018

- 200+ live and on-demand sessions
- CME credit for live and select on-demand courses
- Cases of the Day, scientific presentations, education exhibits
- Access through April 30, 2019

Upgrade to the Deluxe Package to get Virtual Meeting.

To purchase, log into your registration account at **RSNA.org/Register**

VIRTUAL MEETING RSNA 2018 TOMORROW'S RADIOLOGY TODAY

RSNA QUALITY ESSENTIALS AND ADVANCED LEVEL QUALITY CERTIFICATES

- Earn a Quality Essentials Certificate (QEC) by scoring 80% or higher on the SAM test at any of the following quality sessions: MSQI31, MSQI32 and MSQI33 on Monday, November 26 (Room S406B).
- Learn more about online opportunities for earning QECs and how QECs can lead to an Advanced Level Quality Certificate at RSNA.org/Quality-Improvement.

QUALITY IMPROVEMENT REPORT WALKTHROUGH

Learning Center, Quality Improvement Reports

Join experts in quality improvement in radiology, as they walk through the QI reports, highlighting examples of great work and sound methodology. Bring your walking shoes and come prepared for an interactive session. Those who are interested in leading and publishing QI projects in the coming months and years will find this especially valuable.

WALKTHROUGH DATE:

Monday, November 26, 3 to 4 PM



Questions? Please email *quality@rsna.org* for more information.





FEATURES AND BENEFITS:

- Compatible with All MRI's GUARANTEED!
- Compact design with Human Factors Engineering.
- Multiple Listening Sources: Internet Streaming, CD, MP3, USB, BlueTooth, Auxiliary Input for other devices.
- Patented 8 Driver Transducer: a lifetime warranty.
- Patented MagnaCoil Headset System: Provides 30db of attenuation & fits in all coils.

Visit us for a sweet treat!





Patent Protected