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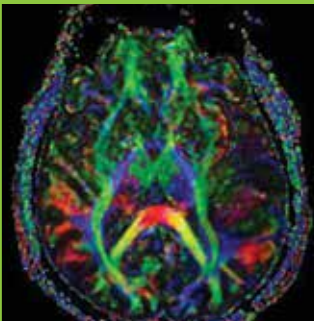
# 2017 Magnetic Resonance Imaging:

## National Symposium

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### Designated for SA-CME

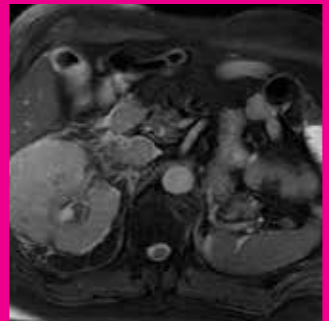
**MRI of the  
Head & Spine**  
13.0 Hours



**Musculoskeletal  
MRI**  
9.0 Hours



**MRI of the  
Body & Heart**  
7.5 Hours



*27.5 AMA PRA Category 1 Credit(s)<sup>TM</sup>*

Release Date: September 1, 2017

**ESI** Educational  
Symposia

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## About This CME Teaching Activity

This CME series provides a practical teaching course for those who order, perform or interpret magnetic resonance imaging studies. The program is organized in such a way to allow subscribers to purchase all or a subsection of the program. Three focused segments provide a comprehensive yet practical review and update on the clinical applications of MRI. The series begins by focusing on the head and spine, moves into the musculoskeletal system and concludes with cardiovascular and body applications.

## Target Audience

This CME activity is designed to educate diagnostic imaging physicians who supervise and interpret MRI/MRA studies. It should also be useful for referring physicians who order these studies so that they might gain a greater appreciation of the strengths and limitations of clinically relevant MRI exams.

## Scientific Sponsor

Educational Symposia

## Accreditation

**Physicians:** Educational Symposia is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

Educational Symposia designates this enduring material for a maximum of 27.5 *AMA PRA Category 1 Credit(s)*<sup>™</sup>. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

**SA-CME:** Credits awarded for this enduring activity are designated "SA-CME" by the American Board of Radiology (ABR) and qualify toward fulfilling requirements for Maintenance of Certification (MOC) Part II: Lifelong Learning and Self-assessment.

All activity participants are required to pass a written or online test with a minimum score of 70% in order to be awarded credit. (Exam materials, if ordered, will be sent with your order.) All course participants will also have the opportunity to critically evaluate the program as it relates to practice relevance and educational objectives.

**AMA PRA Category 1 Credit(s)<sup>™</sup> for this activity may be claimed until August 31, 2020.**

This CME activity was planned and produced by Educational Symposia,  
a leader in change to diagnostic Imaging since 1975.

This activity was planned and produced in accordance with the ACCME Essential Areas and Elements.

## Educational Objectives

At the completion of this CME teaching activity, you should be able to:

- Discuss the expanding role of MR in medical imaging.
- Optimize MRI protocols and techniques.
- Utilize MRI to evaluate neurological, musculoskeletal, body and breast pathology.
- Review MRI safety updates

*No special educational preparation is required for this CME activity.*

## Faculty

### **Jalal B. Andre, M.D., DABR(R)**

*Director of Neurological MRI, Harborview Medical Center*

*Associate Member, Head Injury Prevention and Research Center*

*Associate Medical Staff of Seattle Cancer Care Alliance*

*Assistant Professor of Radiology*

*University of Washington*

*Seattle, WA*

### **Mark H. Awh, M.D.**

*President*

*Radsources*

*Brentwood, TN*

### **James Y. Chen, M.D.**

*Associate Professor*

*Program Director, Neuroradiology Fellowship*

*University of California, San Diego*

*San Diego VA Medical Center*

### **Robert R. Edelman, M.D.**

*Professor of Radiology*

*Feinberg School of Medicine,*

*Northwestern University*

*Chairman of Radiology*

*NorthShore University HealthSystem*

*Evanston, IL*

### **Scott D. Flamm, M.D., M.B.A.**

*Professor of Radiology*

*Cleveland Clinic Lerner College of Medicine of Case*

*Western Reserve University*

*Head, Cardiovascular Imaging*

*Imaging, and Heart & Vascular Institutes*

*Cleveland Clinic*

*Cleveland, OH*

### **Wende N. Gibbs, M.D.**

*Assistant Professor of Neuroradiology*

*Department of Radiology*

*University of Southern California, Keck School of Medicine*

*Los Angeles, CA*

### **Charles P. Ho, M.D., Ph.D.**

*Director of Imaging Research*

*Steadman Philippon Research Institute*

*Vail, CO*

### **Blake A. Johnson, M.D., FACR**

*Medical Director*

*Center for Diagnostic Imaging*

*Minneapolis, MN*

### **Russell N. Low, M.D.**

*Medical Director*

*Sharp and Children's MRI Center*

*San Diego, CA*

### **William B. Morrison, M.D.**

*Consultant for Philadelphia Eagles, Phillies, Flyers*

*Professor of Radiology*

*Director, Musculoskeletal Radiology Division Department of Radiology*

*Thomas Jefferson University*

*Philadelphia, PA*

### **Haydee Ojeda-Fournier, M.D.**

*Associate Professor of Clinical Radiology*

*Medical Director, Breast Imaging Section*

*University of California, San Diego*

*La Jolla, CA*

### **Jeffrey J. Peterson, M.D.**

*Professor of Radiology*

*Vice Chair Diagnostic Radiology*

*Program Director Radiology Residency*

*Mayo Clinic Florida*

*Jacksonville, FL*

### **John D. Reeder, M.D., FACR**

*Director of Imaging*

*Proscan Imaging Maryland*

*Columbia, MD*

### **Cynthia S. Santillan, M.D., FSAR**

*Associate Professor of Radiology*

*Chief of Body Imaging Division*

*Director of Body Computed Tomography*

*University of California, San Diego*

### **Lawrence N. Tanenbaum, M.D., FACR**

*Vice President and Medical Director East Region*

*Director of CT, MR and Advanced Imaging*

*RadNet, Inc.*

*New York, NY*

## MRI of the Head & Spine Subset 1-7

### Session 1

Perspectives on Imaging: Quality, Innovation,  
Patient Centric

*Lawrence N. Tanenbaum, M.D., FACR*

Intracranial Hemorrhage:

Emerging Techniques and Applications

*Jalal B. Andre, M.D., DABR(R)*

Traumatic Brain Injury in Sports

*Blake A. Johnson, M.D., FACR*

### Session 2

Advanced Imaging of CNS Neoplasms:  
Pre-Operative Planning

*Lawrence N. Tanenbaum, M.D., FACR*

Arterial Spin Labeling: Emerging Techniques  
and Applications

*Jalal B. Andre, M.D., DABR(R)*

MR Imaging of Acute Stroke

*James Y. Chen, M.D.*

### Session 3

Imaging Evaluation of CNS Infections

*Blake A. Johnson, M.D., FACR*

MR Imaging of Hydrocephalus

*Wende N. Gibbs, M.D.*

Imaging Seizure Disorders

*James Y. Chen, M.D.*

### Session 4

Emergency Neuroimaging

*Jalal B. Andre, M.D., DABR(R)*

Imaging of Neuro Degenerative Disease

*Wende N. Gibbs, M.D.*

Skull Base Tumors

*Blake A. Johnson, M.D., FACR*

### Session 5

Imaging of Head and Neck Pathology

*Blake A. Johnson, M.D., FACR*

Optimized Imaging of the Instrumented Spine

*Lawrence N. Tanenbaum, M.D, FACR*

Degenerative Disorders of the Spine

*James Y. Chen, M.D.*

### Session 6

Spine Tumors: What the Surgeon  
Wants to Know

*Wende N. Gibbs, M.D.*

Diffusion Imaging of the Human Spine and  
Spinal Cord

*Jalal B. Andre, M.D., DABR(R)*

Spinal Cord and Intradural Abnormalities

*James Y. Chen, M.D.*

## Musculoskeletal MRI Subset 7-11

### Session 7

Imaging the Brachial and Lumbar-Sacral Plexus

*Wende N. Gibbs, M.D.*

MRI of the Cervical Spine - MSK Perspective

*William B. Morrison, M.D.*

Rheumatoid Arthritis and Seronegative Spondyloarthropathies

*Jeffrey J. Peterson, M.D.*

MRI of the Foot and Ankle

*Mark H. Awh, M.D.*

### Session 8

Experiences/Update in Sports MRI of the Shoulder

*Charles P. Ho, M.D., Ph.D.*

MRI of the Shoulder: Beyond the Cuff

*Mark H. Awh, M.D.*

MRI Evaluation of Pediatric Foot Pain

*John D. Reeder, M.D., FACR*

MRI of the Menisci

*Mark H. Awh, M.D.*

### Session 9

Experiences/Update in Sports MRI of the Knee

*Charles P. Ho, M.D., Ph.D.*

Posterolateral Corner of the Knee Made Simple

*William B. Morrison, M.D.*

Sports Imaging of the Hand and Finger

*Jeffrey J. Peterson, M.D.*

MRI Evaluation of Pediatric Elbow Pain

*John D. Reeder, M.D., FACR*

### Session 10

Experiences/Update in Sports Imaging of the Hip

*Charles P. Ho, M.D., Ph.D.*

Sports Imaging of the Wrist

*Jeffrey J. Peterson, M.D.*

MR Arthrography

*Jeffrey J. Peterson, M.D.*

Osteochondral Lesions:

What are They Really?

*William B. Morrison, M.D.*

### Session 11

Experiences/Update in MRI of Articular Cartilage and Imaging Biomarkers

*Charles P. Ho, M.D., Ph.D.*

Using Musculoskeletal MR Artifacts to Your Advantage and Suppressing the Ones You Don't Want

*William B. Morrison, M.D.*

## Body & Heart Subset 12-15

### Session 12

Cardiac MRI

*Robert R. Edelman, M.D.*

Practical Cardiac MRI: Left Ventricular and Valvular Function

*Scott D. Flamm, M.D., M.B.A.*

LI-RADS Fundamentals, Application and Updates

*Cynthia S. Santillan, M.D., FSAR*

Great Calls and Pitfalls in Body MRI - How to be the Hero and not the Goat!

*Russell N. Low, M.D.*

## Session 13

### MRI of the Kidneys

*Russell N. Low, M.D.*

### MR of the Liver: Vascular Abnormalities

*Cynthia S. Santillan, M.D., FSAR*

### Breast MRI Artifacts and Pitfalls

*Haydee Ojeda-Fournier, M.D.*

### MRI of Prostate Cancer

*Russell N. Low, M.D.*

## Session 14

### MR Angiography With and Without Contrast Agents

*Robert R. Edelman, M.D.*

### Practical Cardiac MRI: Viability Imaging as a Workhorse

*Scott D. Flamm, M.D., M.B.A.*

### Breast MRI in Screening, Staging and Diagnosis

*Haydee Ojeda-Fournier, M.D.*

### MR Enterography

*Cynthia S. Santillan, M.D., FSAR*

## Session 15

### MRI of the Pancreas

*Russell N. Low, M.D.*

### MRI/MRA of Thoracic Aortic Disease

*Scott D. Flamm, M.D., M.B.A.*

### Breast MRI as a Second-line Diagnostic Tool Following Inconclusive Clinical or Imaging Findings

*Haydee Ojeda-Fournier, M.D.*

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