

A CME Teaching Activity

32<sup>nd</sup> Annual

# MRI UPDATES 2019

General MRI

Musculoskeletal MRI

Neuro MRI

Date of Original Release: Bi-Monthly Beginning In January 2019

## About This CME Teaching Activity

This CME teaching activity provides practical, timely, clinical information in MRI imaging. Pertinent lectures are selected so that subscribers receive the most up-to-date clinical information. Tips and techniques are stressed, as well as appropriate patient selection. The faculty members have been chosen for their teaching ability, as well as their expertise in MRI.

## 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.

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**AMA PRA Category 1 Credit(s)<sup>TM</sup>  
for these programs may be claimed until  
January 14, 2022.**

**Technologists:** No Category A CE credit is available for this series.

All activity participants are required to take a written or online test 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.

This CME teaching activity was planned and produced by Educational Symposia, the leader in diagnostic imaging education since 1975.

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

## Content & Shipping

The MRI Updates are available in the sub-specialties of General MRI, Neuro MRI and Musculoskeletal MRI. Each series is comprised of six DVDs. **You will receive one DVD every other month beginning in January 2019. International orders will be shipped in their entirety in November 2019.** These DVDs are yours to keep. There is no duplication of lectures among these series.

## From the Leader in MRI Education

MRI Updates are an exciting concept in medical education. These bi-monthly releases are designed to offer:

- Up-to-date, practical information essential for the practicing physician
- Outstanding, nationally known faculty selected for their excellence as teachers, as well as for their expertise in MRI
- Educational sessions at your convenience: watch when you please; review them as often as you wish; all are yours to keep
- DVDs are released throughout the year so that you will always be up-to-date

## For More Information . . .

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# MRI UPDATES 2019

## General MRI

### Target Audience

This CME teaching activity is primarily intended and designed to educate diagnostic imaging physicians. It should also be useful in educating referring physicians who order MRI procedures.

### Educational Objectives

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

- Apply state-of-the-art MRI/MRA techniques to clinical practice.
- Discuss the expanding role of advanced MR imaging applications.
- Utilize MRI to assess patients with gastrointestinal, genitourinary, cardiovascular, breast disorders.
- Explain the role of artificial intelligence and machine learning in medicine.

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

## Faculty

### Jalal B. Andre, M.D.

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University of Maryland Baltimore County  
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Director of Body MRI  
Director of Cancer Imaging Program  
Department of Radiology and Translational and Molecular Imaging  
Institute Icahn School of Medicine at Mount Sinai, New York  
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Associate Professor of Radiology  
Mayo Clinic College of Medicine  
Rochester, MN

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# MRI UPDATES 2019

## General MRI

### Program

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#### Program 1

Hepatobiliary MRI 2018

*Russell N. Low, M.D.*

MR Enterography

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

Breast MR Imaging of the High Risk Patient

*Stamatia V. Destounis, M.D., FACR*

#### Program 2

Implications of Motion Artifacts in Image Interpretation

*Jalal B. Andre, M.D.*

Update on MRI BI-RADS®

*Stamatia V. Destounis, M.D., FACR*

MRI of the Acute Abdomen

*Russell N. Low, M.D.*

#### Program 3

Diffusion and Perfusion: New Tools for Abdominal MRI

*Russell N. Low, M.D.*

Perianal MRI

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

Cancer Body MRI 2018:

How to See Subtle Tumors Other Tests Miss

*Russell N. Low, M.D.*

#### Program 4

MRI Imaging of the Post Treated Breast

*Stamatia V. Destounis, M.D., FACR*

Advances in Ultra High-Field MRI:

Clinical Opportunities and Challenges

*J. Pablo Villablanca, M.D., FACR*

AI Machine Learning: Introduction

*Eliot L. Siegel, M.D., FACR, FSIIM*

#### Program 5

MR Contrast Safety Update

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

Update on the Latest Developments in MR Angiography

*James C. Carr, M.D.*

AI Machine Learning: Hype, Hope and Reality

*Eliot L. Siegel, M.D., FACR, FSIIM*

#### Program 6

Benign and Malignant Liver Lesions

*Bachir Taouli, M.D.*

Multiparametric MRI of the Prostate: Beyond Prostate  
Cancer What Else Do We See?

*John F. Feller, M.D.*

MRI of Myocardial Ischemic Disease

*Eric E. Williamson, M.D.*

Medicolegal Aspects Associated with the Era of Digital  
Imaging and Personalized Medicine

*Eliot L. Siegel, M.D., FACR, FSIIM*

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# MRI UPDATES 2019

## Musculoskeletal MRI

### Target Audience

This CME teaching activity is designed to educate radiologists, orthopedic surgeons, podiatrists, sports medicine physicians, and referring physicians who order musculoskeletal MRI studies.

### Educational Objectives

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

- Incorporate state of the art pulse sequences and protocols to assess the musculoskeletal system.
- Recognize the strengths and limitations of MRI for the management of sports related injuries.
- Describe the MRI appearance of common musculoskeletal pathology and differentiate this pathology from other causes of abnormal signal.
- Utilize MRI to evaluate hip and pelvic disorders.

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

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## Faculty

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### John A. Abraham, M.D.

Associate Professor of Orthopedic Surgery and Radiation Oncology  
Director  
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Vice Chair for Clinical Practice  
Director of Musculoskeletal MRI  
Thomas Jefferson University  
Philadelphia, PA

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# MRI UPDATES 2019

## Musculoskeletal MRI

### Program

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#### Program 1

MR of the Shoulder

*David P. Fessell, M.D.*

MRI of the Shoulder in the Throwing Athlete

*Adam C. Zoga, M.D.*

MR of the Elbow

*David P. Fessell, M.D.*

#### Program 2

Knee Nuances and Nuisances

*Adam C. Zoga, M.D.*

Imaging FAI and DDH

*Adam C. Zoga, M.D.*

MRI of the Lumbar Spine: A Sports Medicine Approach

*Phillip F.J. Tirman, M.D.*

#### Program 3

Evaluation of Groin Pain in the Athlete

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

MRI of Wrist and Hand Injuries

*John F. Feller, M.D.*

MR of the Ankle

*David P. Fessell, M.D.*

MRI of the Midfoot and Forefoot

*Adam C. Zoga, M.D.*

#### Program 4

Indirect MR Arthrography of the Hip and Shoulder

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

Malignant Bone Tumors

*David P. Fessell, M.D.*

Musculoskeletal MRI Missed Case Conference

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

MRI of Sports Injuries

*Garry E. Gold, M.D.*

#### Program 5

Spine Pathology: A Compartmental Approach

*Allan L. Brook, M.D., FSIR*

Automated MR Imaging of the Musculoskeletal System

*John F. Feller, M.D.*

New and Improved Techniques for  
Rapid Musculoskeletal MRI

*Jan Fritz, M.D., P.D., D.A.B.R.*

#### Program 6

Imaging of Extremity Soft Tissue Tumors

*John A. Abraham, M.D.*

Metal Artifacts in MRI: Practical Problem Solving

*Jan Fritz, M.D., P.D., D.A.B.R.*

MRI of Acute Bone and Cartilage Injuries

*John F. Feller, M.D.*

MRI of Knee Meniscus

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

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# MRI UPDATES 2019

## Neuro MRI

### Target Audience

This CME teaching activity should benefit radiologists and other physicians who perform, supervise, and interpret neurological MRI studies. It should also be valuable for referring physicians who order these studies.

### Educational Objectives

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

- Recognize the appearance of normal anatomy and common pathology.
- Expand clinical applications for MRI in evaluation of patients with a variety of CNS disorders.
- Develop image strategies to accurately assess the dural sinus.
- Apply imaging strategies to effectively evaluate the degenerative spine, postoperative spine and traumatic spine injuries.
- Apply advanced imaging techniques such as perfusion and functional imaging to evaluate neurological disorders.

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

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## Faculty

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### Jalal B. Andre, M.D.

Director of Neurological MRI, Harborview Medical Center  
Associate Member, Head Injury Prevention and Research Center  
Associate Medical Staff of Seattle Cancer Care Alliance  
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Director, Interventional Spine Service  
David Geffen School of Medicine at UCLA  
Los Angeles, CA

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# MRI UPDATES 2019

## Neuro MRI

### Program

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#### Program 1

Cerebrovascular Anatomy and Disease:

A Tutorial

*Allan L. Brook, M.D., FSIR*

White Matter Diseases

*Jeffrey S. Ross, M.D.*

MR Imaging of Skull Base Pathology

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

#### Program 2

CT and MR Imaging of Dural Sinus and  
Cortical Vein Thrombosis

*J. Pablo Villablanca, M.D., FACR*

Strategic Approach to Brain Tumor Imaging

*Michael N. Brant-Zawadzki, M.D., FACR*

Susceptibility: Friend or Foe

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

#### Program 3

Beyond The Canal: Imaging Anatomy and  
Pathology of Peripheral Nerves

*J. Pablo Villablanca, M.D., FACR*

Useful Protocols and Anatomy for  
Functional Neurosurgery

*Timothy M. Shepherd, M.D., Ph.D.*

Avoiding Diagnostic Pitfalls in Neuroradiology

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

Perfusion Imaging in Acute Ischemic Stroke

*Jalal B. Andre, M.D.*

#### Program 4

Craniovertebral Junction

*Jeffrey S. Ross, M.D.*

Arterial Spin Labeling:

Emerging Techniques and Applications

*Jalal B. Andre, M.D.*

Imaging Update: Cerebral Aneurysms

*J. Pablo Villablanca, M.D., FACR*

Imaging in Seizure Disorders

*James Y. Chen, M.D.*

#### Program 5

Neuroimaging in Dementia

*James Y. Chen, M.D.*

MR of the Sella Turcica and Parasellar Region

*Blake A. Johnson, MD., FACR*

Spine Trauma

*Jeffrey S. Ross, M.D.*

#### Program 6

Degenerative Spine

*James Y. Chen, M.D.*

Postoperative Spine Imaging

*Jeffrey S. Ross, M.D.*

Spinal Cord and Intradural Abnormalities

*James Y. Chen, M.D.*

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