American Society of Spine Radiology
Annual Symposium

FEBRUARY 14-18, 2018
FAIRMONT SCOTTSDALE PRINCESS • SCOTTSDALE, ARIZONA

25.15 AMA PRA CATEGORY 1 CREDIT(S)™

Specific sessions will be submitted to the ABR for SAM qualification.
One of the core values of the ASSR remains the multidisciplinary nature of our scientific program. In addition to radiologists from multiple spine-related subspecialties, the scientific sessions include oncologists, spine surgeons, palliative care and interventional pain specialists. As in the past, we expect that our attendees will include many physicians from outside of the membership of the ASSR. Controversies, hot topics, exceptional faculty, case-based presentations, and embedded abstracts will keep audience members active and engaged during the scientific sessions.

The ASSR 2018 Annual Symposium is already active on social media. We believe #ASSR18 will be an exceptional meeting experience. We look forward to welcoming and hosting you February 14-18, 2018 at the Fairmont Princess in Scottsdale, Arizona.

John D. Barr, MD, FACR, FSIR, FSNIS
ASSR President and Program Chair
TARGET AUDIENCE
This CME activity is primarily intended and designed to educate radiologists, neuroradiologists, musculoskeletal radiologists, interventional radiologists, spine surgeons, pain management and rehabilitation physicians, anesthesiologists, as well as fellows and residents in these specialties. Course material is also aimed at allied health professionals, including physician assistants and nurse practitioners who specialize, or have particular interest, in conditions affecting imaging and treatment of the spine.

ACCREDITATION STATEMENT
This activity has been planned and implemented in accordance with the Essential Areas and policies of the Accreditation Council for Continuing Medical Education through the joint sponsorship of the International Institute for Continuing Medical Education, Inc. and The American Society of Spine Radiology (ASSR).

DESIGNATION STATEMENT
The International Institute for Continuing Medical Education, Inc. designates this live activity for a maximum for 25.15 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

REGISTRATION INFORMATION
Registration includes all symposium materials, including a comprehensive electronic syllabus, continental breakfasts, refreshment breaks, Breakfast & Learn and Lunch & Learn Sessions, Workshops and all lectures. Family members and friends, ages 12 years and older, who wish to attend social functions which include the Welcome Reception, Continental Breakfasts and the Closing Party may do so by registering for the Symposium. The fee for each guest is $150.00. Vendor-sponsored, unaccredited Workshops will require separate registrations directly through the vendor. Early registration is strongly suggested. Cancellations must be received in writing. A $75.00 processing fee will be applied to all cancellations. Refunds requested in writing prior to January 14, 2018 will be issued for the amount of registration fee less the $75.00 processing fee. No refunds will be made on or after that date.

EASY WAYS TO REGISTER
INTERNET: To register log on to: http://www.iicme.net or www.theassr.org.

FAX: Fax your completed registration form to (205) 467-0195. Please be sure to include your MasterCard, VISA, American Express or Discover credit card information, including signature and expiration date. This is all that is necessary; please do not mail a duplicate form.

MAIL: Mail your completed registration form, including credit card information or check payable to ASSR 2018 to: International Institute for Continuing Medical Education, Inc., P.O. Box 350, Springville, AL 35146.

INFORMATION
For more information or questions regarding the ASSR 2018 Annual Symposium, contact Kelsey Rodgers at 205-467-0290, ext 108, or krogers@iicme.net.

DISCLAIMER
The International Institute for Continuing Medical Education, Inc. and the ASSR as planners and presenters of this meeting claim no liability for the acts of any suppliers or the safety of any attendees while in transit to, from, or during this event or any optional activities. The total amount of liability, if any, for the meeting organizers is limited to a refund of the registration fee.

SCOTTSDALE POINTS OF INTEREST
Whether you’re a first-time visitor or seasoned regular, here are nine uniquely Scottsdale experiences you won’t want to miss.

SCOTTSDALE’S MCDOWELL SONORAN PRESERVE
This expansive urban preserve, the largest of its kind in the nation, boasts nearly 200 miles of scenic shared-use trails in the McDowell Mountain foothills that are great for hiking, mountain biking and horseback riding. The Gateway trailhead offers access to numerous paths, ranging from the ADA accessible Baja Banda Nature Trail to the challenging Windgate Pass Trail.

FRANK LLOYD WRIGHT’S TALIESIN WEST
Legendary architect Frank Lloyd Wright was so captivated by the Sonoran Desert’s natural beauty and sunny climate that he chose Scottsdale as the location for his winter home and architectural school, Taliesin West. Daily tours offer guests an insider’s look into Wright’s ingenious designs and his ability to seamlessly blend indoor and outdoor spaces.

MUSICAL INSTRUMENT MUSEUM
Discover unique instruments and music from around the world at MIM. High-tech headphones and multi-media displays immerse you in global musical traditions, while the hands-on Experience Gallery lets aspiring musicians of all ages try their hand at instruments like guitars, gongs and gamelans.

DOWNTOWN SCOTTSDALE
Downtown’s nine walkable neighborhoods offer you a variety of experiences by day and night. Discover historic Scottsdale in Old Town, browse the galleries of the Arts District, shop along Fifth Avenue or discover the energy of Scottsdale after dark in the Entertainment District.

WESTERN SPIRIT: SCOTTSDALE’S MUSEUM OF THE WEST
This downtown gem celebrates the pioneer spirit of the American West through changing exhibitions of fine art, rare historic artifacts and cultural treasures. Be sure to check out the museum’s event calendar for live music, speakers and Western film screenings.

ODYSEA IN THE DESERT
This one-of-a-kind dining, shopping and entertainment center features three of Scottsdale’s newest attractions – OdySea Aquarium, Dolphinaris and Butterfly Wonderland. Explore the rivers and oceans of the world, swim with dolphins, and walk among thousands of butterflies – it’s all at OdySea in the Desert!

DESERT BOTANICAL GARDEN
The Garden’s five paved thematic trails introduce you to thousands of arid-land plants from around the world. Must-see events at the Garden include Las Noches de las Luminarias, the Music in the Garden concert series, and summer Flashlight Tours.

SCOTTSDALE WINE TRAIL
Downtown Scottsdale is a hub for tasting rooms from some of the state’s most acclaimed vineyards, including LDV Winery, Aridus Wine Company, Carlson Creek Vineyards and Salvatore Vineyards/Passion Cellars. Spend an afternoon sampling the fruits of their labor along the walkable Scottsdale Wine Trail.

SCOTTSDALE MUSEUM OF CONTEMPORARY ART
SMoCa celebrates the modern art, architecture and design of our time through thought-provoking, changing exhibitions. The museum, an ingenious renovation of an old movie theater by architect Will Bruder, also is home to “Knight Rise,” a James Turrell skyspace that allows you to track the sun’s colorful path across the desert sky.
| John D. Barr, MD, FACR, FSIR, FAHA, FSNIS | University of Texas Southwestern Medical Center | Dallas, TX |
| John L. Go, MD, FACR | University of Southern California | Keck School of Medicine | Los Angeles, CA |
| Michele H. Johnson, MD, FACR, FASER | Yale University School of Medicine | New Haven, CT |
| Joshua A. Hirsch, MD, FACR, FSIR | Massachusetts General Hospital | Harvard Medical School | Boston MA |
| John E. Chazen, MD | Weill Cornell Medical College | New York, NY |
| Adam E. Flanders, MD | Thomas Jefferson University Hospital | Philadelphia, PA |
| Wende N. Gibbs, MD, MA | University of Southern California, Keck School of Medicine | Los Angeles, CA |
| Christopher R. Hancock, MD | Desert Medical Imaging | Palm Springs, CA |
| Jack W. Jennings, MD, PhD | Mallinckrodt Institute of Radiology | Washington University in St. Louis | School of Medicine | St. Louis, MO |
| Blake A. Johnson, MD, FACR | Center for Diagnostic Imaging | Minneapolis, MN |
| Peter Kranz, MD | Duke University Medical Center | Durham, NC |
| Gregory J. Lawler, MD | Neuroimaging and Interventional Spine Services | Ridgefield, CT |
| Roland R. Lee, MD, FACR | UCSD/VA Medical Center | San Diego, CA |
| Dan T.D. Nguyen, MD | Penn State Milton Hershey Medical Center | Hershey, PA |
| Erin Simon Schwartz, MD, FACR | The Children’s Hospital of Philadelphia | Philadelphia, PA |
| Lubdha M. Shah, MD | University of Utah | Salt Lake City, UT |
| Richard H. Wiggins III, MD, CIIP, FSIIIM | University of Utah | Salt Lake City, UT |
| Walter S. Bartynski, MD | Adjunct Professor of Radiology | Duke University, Department of Radiology | Durham, NC |
| Douglas P. Beall, MD | Clinical Radiology of Oklahoma | Oklahoma City, OK |
| Jennifer L. Becker, BMBS, MRCS, FRCR | University of Arizona | Tucson, Arizona |
| Allan L. Brook, MD, FSIR | Mount Sinai Medical Center | Bronx, NY |
| Wilson Bryan, MD | FDA Center for Biologics Evaluation and Review | Silver Spring, MD |
| David P. Chason, MD, FACR | University of Texas Southwestern Medical Center | Dallas, TX |
| J. Levi Chazen, MD | Weill Cornell Medical College | New York, NY |
| Cynthia T. Chin, MD | University of California, San Francisco | San Francisco, CA |
| Charles H. Cho, MD, MBA | Massachusetts General Hospital | Harvard Medical School | Boston MA |
| Bohdan W. Chopko, MD, PhD | Stanford University Medical Center | Stanford, CA |
| Sylvie Dectian, MD | Stanford University Medical Center | Stanford, CA |
| Amish H. Doshi, MD | Icahn School of Medicine at Mount Sinai | New York, NY |
| William K. Erly, MD, MBA | University of Arizona | Tucson, Arizona |
| Adam E. Flanders, MD | Thomas Jefferson University Hospital | Philadelphia, PA |
| Judith A Gadde, DO, MBA | Emory University | Atlanta, GA |
| Bassem A. Georgy, MD | North County Radiology | Escondido, CA |
| Wende N. Gibbs, MD, MA | University of Southern California | Keck School of Medicine | Los Angeles, CA |
| John L. Go, MD, FACR | University of Southern California | Keck School of Medicine | Los Angeles, CA |
| Allison M. Grayev, MD | University of Wisconsin Hospital and Clinics | Madison, WI |
| Christopher R. Hancock, MD | Desert Medical Imaging | Palm Springs, CA |
| Richard J. Herzog, MD, FACR | Hospital for Special Surgery | New York, NY |
| Gregory G. Heuer, MD, PhD | Children’s Hospital of Philadelphia | Philadelphia, PA |
| Joshua A. Hirsch, MD, FACR, FSIR, FSNIS | Massachusetts General Hospital | Harvard Medical School | Boston MA |
| Travis J. Hillen, MD | Mallinckrodt Institute of Radiology | Washington University in St. Louis | School of Medicine | St. Louis, MO |
| Andrei I. Holodny, MD | Memorial Sloan-Kettering Cancer Center | College of Cornell University | New York, NY |
| Troy Hutchins, MD | University of Utah | Salt Lake City, UT |
| Jack W. Jennings, MD, PhD | Mallinckrodt Institute of Radiology | Washington University in St. Louis | School of Medicine | St. Louis, MO |
| Blake A. Johnson, MD, FACR | Center for Diagnostic Imaging | Minneapolis, MN |
| Michele H. Johnson, MD, FACR, FASER | Yale University School of Medicine | New Haven, CT |
| John P. Karis, MD | The Barrow Neurological Institute | Phoenix, Arizona |
| Charles W. Kerber, MD | UCSD Medical Center | San Diego, CA |
| Majid A. Khan, MD | Johns Hopkins University Medical Center | Baltimore, MD |
| Paul E. Kim, MD | University of Southern California, Keck School of Medicine | Los Angeles, CA |
| Peter Kranz, MD | Duke University Medical Center | Durham, NC |
| D. Scott Kreiner, MD | Ahwatukee Sports and Spine | Phoenix, AZ |
| Meng Law, MD, MBBS, FRACR | University of Southern California, Keck School of Medicine | Los Angeles, CA |
| Gregory J. Lawler, MD | Neuroimaging and Interventional Spine Services | Ridgefield, CT |
| Roland R. Lee, MD, FACR | UCSD/VA Medical Center | San Diego, CA |
| E. Michael Lewiecki, MD, FACP, FACE | University of New Mexico School of Medicine | Albuquerque, NM |
| Eric Lis, MD | Memorial Sloan-Kettering Cancer Center | New York, NY |
| Jeremiah R. Long, MD | Mallinckrodt Institute of Radiology | Washington University in St. Louis | School of Medicine | St. Louis, MO |
| Luigi Manfre, MD | A.O. Cannizzaro Hospital | Catania, ITALY |
| Stefano Marcia, MD | ASL Catanzaro, SS Trinita Hospital Cagliari, ITALY |
| John M. Mathis, MD, MS | VA Medical Center | Dayton, OH |
| Troy L. McJunkin, MD | Arizona Pain | Phoenix, AZ |
David A. Miller, MD
Mayo Clinic, Florida
Jacksonville, FL

Jeffrey H. Miller, MD
Phoenix Children’s Hospital
Phoenix, AZ

Todd S. Miller, MD
Albert Einstein College of Medicine Montefiore
New York, NY

Michael T. Modic, MD, FACR
Cleveland Clinic Foundation
Cleveland, OH

William Moore, MD
University of Texas Southwestern Medical Center
Dallas, TX

Jonathan M. Morris, MD
Mayo Clinic
Rochester, MN

M. Craig Morris, MD
University of Texas Southwestern Medical Center
Dallas, TX

Kieran P.J. Murphy, MD, FRCPC
Toronto General Hospital
Toronto, Ontario, CANADA

Kambiz Nael, MD
Mount Sinai Hospital
New York, NY

Dan T.D. Nguyen, MD
Penn State Milton Hershey Medical Center
Hershey, PA

Orlando Ortiz, MD, MBA, FACR
Winthrop-University Hospital, Mineola, NY
Stony Brook University School of Medicine
Stony Brook, NY

Susan Palasis, MD
Children’s Healthcare of Atlanta
Atlanta, GA

Gregory W. Petermann, MD
Marshfield Clinic
Marshfield, WI

Marco Pinho, MD
University of Texas Southwestern Medical Center
Dallas, TX

David W. Polly, Jr., MD
University of Minnesota
Minneapolis, MN

Edward P. Quigley III, MD, PhD
University of Utah
Salt Lake City, UT

George Rappard, MD
Los Angeles Minimally Invasive Spine Institute
Los Angeles, CA

Kent B. Remley, MD
Community Westview Hospital
Indianapolis, IN

Carolyn D Robson, MB, ChB
Boston Children’s Hospital
Boston, MA

Jeffrey S. Ross, MD
Mayo Clinic
Phoenix, AZ

Stephen L.G. Rothman, MD
Neuroradiologist
Los Angeles, CA

Robert J. Russo, MD, PhD
Scripps Clinic Medical Center
La Jolla, CA

Donald F. Schomer, MD
University of Texas MD Anderson Medical Center
Houston, TX

Erin Simon Schwartz, MD
The Children’s Hospital of Philadelphia
Philadelphia, PA

Gaurang V. Shah, MD
University of Michigan Health System
Ann Arbor, MI

Lubdha M. Shah, MD
University of Utah
Salt Lake City, UT

Vinil N. Shah, MD
University of California, San Francisco
San Francisco, CA

Aseem Sharma, MD
Mallinckrodt Institute of Radiology
Washington University in St. Louis
School of Medicine
St. Louis, MO

Robert M. Sheridan, RTR, FAVIR
Massachusetts General Hospital
Harvard Medical School
Boston MA

Richard Silbergleit, MD, MBA
William Beaumont School of Medicine
Royal Oak, MI

Lisa Jo Sterns, MD
Center for Pain and Supportive Care
Phoenix, AZ

Jeffrey A. Stone, MD, FACR
Mayo Clinic, Florida
Jacksonville, FL

Joseph C. Sullivan, MD
MidSouth Imaging and Therapeutics
Memphis, TN

Sophia C. Symko, MD
Harbor UCLA
Torrance CA

Jason F. Talbott, MD, PhD
University of California, San Francisco
San Francisco, CA

Anderanik Tomasian, MD
University of Southern California,
Keck School of Medicine
Los Angeles, CA

Carlos H. Torres, MD, FRCPC
University of Ottawa
Ottawa, Ontario, CANADA

Richard B. Towbin, MD, FACR
Phoenix Children’s Hospital
Phoenix, AZ

Raymond K. Tu, MD, MS, FACR
Progressive Radiology
Washington, DC

Johan W. Van Goethem, MD, PhD
University Hospital Antwerp
Antwerp, BELGIUM

Alyssa T. Watanabe, MD
University of Southern California
Keck School of Medicine
Los Angeles, CA

Frederick E. Weiss, MD, PT, DPT, RMSK
White-Wilson Medical Center
Fort Walton Beach, FL

Richard H. Wiggins III, MD, CIIP, FSIIH
University of Utah
Salt Lake City, UT

Alan L. Williams, MD
Mallinckrodt Institute of Radiology
Washington University in St. Louis
School of Medicine
St. Louis, MO

Wade H.M. Wong, DO, FACR, FAOCR
University of California, San Diego
San Diego, CA

Gregg H. Zoarski, MD
Christiana Care Health System
Newark, DE

Vahe M. Zohrabian, MD
Yale University School of Medicine
New Haven, CT
TUESDAY, FEBRUARY 13, 2018
4:00 – 6:00 pm  Registration Opens — East Foyer A

WEDNESDAY, FEBRUARY 14, 2018
7:00 – 7:50 am  Registration — East Foyer A
7:00 – 7:50 am  Continental Breakfast for Registrants — Salon D & E
7:00 – 7:50 am  Breakfast & Learn Session — (non-accredited) — Salon A-C
8:00 – 8:05 am  Welcome and Dedication  

JOINT SESSION 1: THE DEGENERATIVE AND POST-OPERATIVE SPINE: CRITICAL FINDINGS AND MANAGEMENT  
Moderators: Wende N. Gibbs, MD, MA; John M. Mathis, MD, MS and John P. Karis, MD

8:05 – 8:20 am  Clinically Relevant Spine Reports: What the Clinicians Want to Know  
8:20 – 8:35 am  The Facet Joint: Physical Exam, Imaging & Evidence-Based Medicine  
8:35 – 8:50 am  Spinal Deformity: What the Surgeon Looks for in the Imaging  
8:50 – 9:05 am  Pitfalls in Imaging the Post-operative Spine  
9:05 – 9:20 am  Imaging of Pseudoarthrosis and Instability in the Post-operative Spine  
9:20 – 9:35 am  Interventional Pain Management in Failed Back Surgery Syndrome  
9:35 – 9:50 am  Spinal Surgery for the Very Elderly Patient: Unique Challenges and Innovations  
9:50 – 10:00 am  Questions & Answers  
10:00 – 10:30 am  Refreshment Break / Visit Exhibits — Salon D & E

Diagnostic Session I: Next Gen Imaging – Infection, Inflammation, and Spondyloarthropathies (Salon A-C)  
Moderators: John L. Go, MD, FACR; Johan Van Goethem, MD, PhD and Allison Grayev, MD

10:30 – 10:40 am  Spondylodiscitis  
10:40 – 10:50 am  TB and Fungal Infections  
10:50 – 11:00 am  Parasitic Infections  
11:00 – 11:10 am  Viral Myelitis  
11:20 – 11:30 am  Toxic and Metabolic Processes of the Spinal Cord  
11:30 – 11:40 am  Multiple Sclerosis  
11:40 – 11:55 am  Diagnostic Scientific Oral Presentations  
11:55 – 12:00 pm  Questions and Answers  

12:00 – 1:00 pm  Lunch & Learn Session — Sponsor: EOS Imaging — Title: What You Should Know About EOS: The Radiologist and Orthopedist Perspectives — Faculty: David W. Polly, Jr., MD, Takashi Takahashi, MD, MS, and Molly Dempsey, MD — Salon A-C or Lunch On Your Own

JOINT SESSION 2: TRAUMA AND SPINAL CORD INJURY (SAM SESSION)  
Moderators: David P. Chason MD, FACR, Lubdha M. Shah, MD and Walter S. Bartynski, MD

1:00 – 1:15 pm  Evidence-Based Guidelines for Imaging of Spine Trauma  
1:15 – 1:30 pm  Advanced Imaging of Spinal Cord Trauma  
1:30 – 1:45 pm  Classification Systems for Spine Trauma  
1:45 – 2:00 pm  Vascular Injury in Spine Trauma  
2:00 – 2:15 pm  Pediatric Spine Trauma  
2:15 – 2:30 pm  Role of Imaging in Sports Injuries  
2:30 – 2:45 pm  SAM Questions  
2:45 – 3:15 pm  Refreshment Break / Visit Exhibits — Salon D & E  
3:15 – 3:45 pm  Annual Business Meeting (ASSR Members Only) — Salon A-C  
3:45 – 4:45 pm  Intervventional Roundtable for Trainees and Aspiring Interventional Spine Physicians (non-accredited) — TBD  

Moderators:
5:00 – 6:30 pm  Workshop 1 — TBD Topic: Ironwood Meeting Room

6:30 – 7:15 pm  Women with Spine Reception — TBD
7:00 – 9:00 pm  Welcome Reception — Sonoran Landing
8:30 – 9:30 pm  Mentoring Reception for Trainees and Early Career Physicians — TBD
THURSDAY, FEBRUARY 15, 2018
7:00 – 7:55 am Continental Breakfast for Registrants — Salon D & E
7:00 – 7:55 am Breakfast & Learn Session — (non-accredited) — Salon A-C

JOINT SESSION 3: VITAL ISSUES IN SPINE RADIOLOGY: VALUE, TECHNOLOGY, AND INNOVATIVE PATIENT CARE (SAM SESSION)
Moderators: Wende Gibbs, MD, MA; Dan T.D. Nguyen, MD and Gregory J. Lawler, MD

8:00 – 8:15 am Variability in Spine Reporting
8:15 – 8:30 am Best Practices Reporting (RadLex. Lexicons)
8:30 – 8:45 am Back Pain: Adding Value in the Current Socioeconomic Environment
8:45 – 9:00 am Stenosis Grading Systems
9:00 – 9:15 am Lessons Learned in AI from Data Scientists
9:15 – 9:35 am Current State of Osteoporosis and Treatment
9:35 – 9:45 am How Spine Radiologists Can Alleviate the Osteoporosis Treatment Gap
9:45 – 10:00 am Questions and Answers
10:00 – 10:30 am Refreshment Break / Visit Exhibits — Salon D & E

SPECIAL JOINT SESSION 4: MULTIDISCIPLINARY CASE MANAGEMENT CONFERENCE
Panel: John L. Go, MD, FCR (diagnostic radiologist), Johan Van Goethem, MD, PhD (diagnostic radiologist), Jeffrey A. Stone, MD, FACR (interventional spine radiologist), David W. Polly, Jr., MD (spine surgeon), Bohdan W. Chopko, MD, PhD (spine surgeon), Eric Lis, MD (interventional spine radiologist), Michele H. Johnson, MD, FACR, FASER (interventional spine radiologist),

10:30 – 12:30 pm Multidisciplinary Case Management Conference

12:30 – 1:30 pm Lunch and Learn Session — TBD (non-accredited) — Salon A-C or Lunch On Your Own

FRIDAY, FEBRUARY 16, 2018
7:00 – 7:55 am Continental Breakfast for Registrants — Salon D & E
7:00 – 7:55 am Continental Breakfast for Registrants — Salon D & E

JOINT SESSION 5: IMPLANTED SPINAL INFUSION PUMPS FOR PAIN MANAGEMENT • Moderators: Douglas P. Beall, MD and Lisa Jo Sterns, MD

12:00 – 12:15 pm Bridging the Gap Between Medical Therapy and Major Surgery: What Can and Should the Radiologist Provide?
12:15 – 12:30 pm What Does the Spine Radiologist Need to Know About Radiation Oncology?
12:30 – 12:45 pm What Does the Spine Radiologist Need to Know About Surgical Management of Spinal Oncologic Disease?
12:45 – 1:00 pm What Does the Spine Radiologist Need to Know About Ablative Techniques for Spinal Tumors?
1:00 – 1:15 pm What Does the Spine Radiologist Need to Know About Management of Pediatric Spinal Oncologic Disease?
1:15 – 1:30 pm What Does the Spine Radiologist Need to Know About Palliative Options for Management of Spinal Oncologic Disease?
1:30 – 1:45 pm What Does the Spine Radiologist Need to Know About Critical Interventional Issues for the Spine Oncology Patient?
1:45 – 2:00 pm Questions and Answers
2:00 – 2:30 pm Refreshment Break / Visit Exhibits — Salon D & E

JOINT SESSION 6: SPINAL ONCOLOGY SESSION (SAM SESSION) • Moderators: Alan L. Williams, MD; Michele H. Johnson, MD, FACR and Donald F. Schomer, MD

10:00 – 10:15 am Lessons Learned in AI from Data Scientists
10:15 – 10:30 am Current State of Osteoporosis and Treatment
10:30 – 10:45 am How Spine Radiologists Can Alleviate the Osteoporosis Treatment Gap
10:45 – 11:00 am Questions and Answers
11:00 – 11:30 am Refreshment Break / Visit Exhibits — Salon D & E

BREAK-OUT SESSION II

Interventional Session II: Ablation Techniques (Salon F & G)
Moderators: Jack W. Jennings, MD, PhD; Stefano Marcia, MD and Gregg H. Zoarski, MD

10:30 – 10:45 am Why I Like Ice (Cryoablation) in the Spine
10:45 – 11:00 am Some Like It Hot (RFA) for Spinal Lesions
11:00 – 11:15 am Microwave Ablation in Spine Ablation
11:15 – 11:30 am Treatment of Benign Spine Lesions
11:30 – 11:45 am The Role of Imaging in Ablation: Before and After
11:45 – 12:00 pm Challenging Spine Biopsies
12:00 – 12:15 pm Interventional Scientific Oral Presentations
12:15 – 12:30 pm Questions and Answers
### Diagnostic Session II: Spinal Neoplasms (Salon A-C)

**Moderators:** John L. Go, MD, FACR and Adam E. Flanders, MD

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:30 – 10:40 am</td>
<td>Intramedullary Tumors</td>
<td>John L. Go, MD, FACR</td>
</tr>
<tr>
<td>10:40 – 10:50 am</td>
<td>Intradural Extramedullary Tumors</td>
<td>Sylvie Destian, MD</td>
</tr>
<tr>
<td>10:50 – 11:00 am</td>
<td>Extradural Masses</td>
<td>Troy Hutchins, MD</td>
</tr>
<tr>
<td>11:00 – 11:10 am</td>
<td>Lesions of the Neural Foramen</td>
<td>Edward P. Quigley III, MD, PhD</td>
</tr>
<tr>
<td>11:10 – 11:20 am</td>
<td>Osteocartilaginous Tumors</td>
<td>Jay Acharya, MD</td>
</tr>
<tr>
<td>11:20 – 11:30 am</td>
<td>Multiparametric Evaluation of Spinal Masses</td>
<td>Kambiz Nael, MD</td>
</tr>
<tr>
<td>11:30 – 11:45 am</td>
<td>Diagnostic Scientific Oral Presentations</td>
<td>TBD</td>
</tr>
<tr>
<td>11:35 – 12:00 pm</td>
<td>Questions and Answers</td>
<td>Faculty</td>
</tr>
</tbody>
</table>

#### Interventional Session III: Advanced Augmentation and Beyond (Salon F & G)

**Moderators:** Joshua A. Hirsch, MD, FACR, FSIR, FSNIS; Giuseppe B. Ammirati, MD and David A. Miller, MD

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:00 – 1:15 pm</td>
<td>Historical Review of Augmentation from a Pioneering Insider</td>
<td>Gregg H. Zavorski, MD</td>
</tr>
<tr>
<td>1:15 – 1:30 pm</td>
<td>Master Level Sacroplasty</td>
<td>Orlando Ortiz, MD, MBA, FACR</td>
</tr>
<tr>
<td>1:30 – 1:45 pm</td>
<td>Master Level Augmentation: Cervical and Beyond</td>
<td>Luigi Manfre, MD</td>
</tr>
<tr>
<td>1:45 – 2:00 pm</td>
<td>Post-Augmentation Fracture Progression in the Cancer Patient</td>
<td>Eric Lis, MD</td>
</tr>
<tr>
<td>2:00 – 2:15 pm</td>
<td>Disc Replacement with Disceogl</td>
<td>Stefano Marcia, MD</td>
</tr>
<tr>
<td>2:15 – 2:30 pm</td>
<td>Percutaneous Interspinous Spacers</td>
<td>Stefano Marcia, MD</td>
</tr>
<tr>
<td>2:30 – 2:45 pm</td>
<td>Interventional Scientific Oral Presentations</td>
<td>TBD</td>
</tr>
<tr>
<td>2:45 – 3:00 pm</td>
<td>Questions and Answers</td>
<td>Faculty</td>
</tr>
</tbody>
</table>

### Diagnostic Session III: Deep Dive on Pediatric Spine (Salon A-C)

**Moderators:** Erin Simon Schwartz, MD and Susan Palasis, MD

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:00 – 1:15 pm</td>
<td>Update on Fetal Myelomeningocoele Repair</td>
<td>Gregory G. Heuer, MD, PhD</td>
</tr>
<tr>
<td>1:15 – 1:30 pm</td>
<td>Vascular Lesions of the Pediatric Spine</td>
<td>Caroline D. Robson, MB, ChB</td>
</tr>
<tr>
<td>1:30 – 1:45 pm</td>
<td>Pediatric Spinal Cord Inflammation and Mimics</td>
<td>M. Craig Morris, MD</td>
</tr>
<tr>
<td>1:45 – 2:00 pm</td>
<td>Evaluating the Peripheral Nerves in Children</td>
<td>Cynthia T. Chin, MD</td>
</tr>
<tr>
<td>2:00 – 2:15 pm</td>
<td>Update on the Chiari I Deformity</td>
<td>Judith A. Gadde, DO, MBA</td>
</tr>
<tr>
<td>2:15 – 2:30 pm</td>
<td>Advances in Pediatric Spine Intervention</td>
<td>Richard B. Towbin, MD, FACR</td>
</tr>
<tr>
<td>2:30 – 2:45 pm</td>
<td>Diagnostic Scientific Oral Presentations</td>
<td>TBD</td>
</tr>
<tr>
<td>2:45 – 3:00 pm</td>
<td>Questions and Answers</td>
<td>Faculty</td>
</tr>
<tr>
<td>3:00 – 3:30 pm</td>
<td>Refreshment Break / Visit Exhibits</td>
<td>Panel</td>
</tr>
</tbody>
</table>

### Break-Out Session II (Continued)

#### Burst-Out Session II (EAST) Adam E. Flanders, MD; Alan L. Brook, MD, FSIR and Enin Simon Schwartz, MD vs (WEST) Jason F. Talcott, MD, PhD; Jeffrey S. Ross, MD and Jennifer L. Becker, MD, FRCR

**Moderators:** John L. Go, MD, FACR and Adam E. Flanders, MD

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>3:30 – 5:00 pm</td>
<td>Spinal Jeopardy East vs West</td>
<td>Panel</td>
</tr>
<tr>
<td>5:00 – 6:30 pm</td>
<td>Workshop 2 — Sponsor: Medtronic — Title: Experts Forum</td>
<td>Cuby Scientific Oral Presentations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Faculty</td>
</tr>
</tbody>
</table>

### SATURDAY, FEBRUARY 17, 2018

#### Break-Out Session III (EAST) Adam E. Flanders, MD; Alan L. Brook, MD, FSIR and Enin Simon Schwartz, MD vs (WEST) Jason F. Talcott, MD, PhD; Jeffrey S. Ross, MD and Jennifer L. Becker, MD, FRCR

**Moderators:** John L. Go, MD, FACR and Adam E. Flanders, MD

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 – 8:30 am</td>
<td>Regulatory Aspects of Cellular Regenerative Therapies (CRT)</td>
<td>Wilson Bryan, MD</td>
</tr>
<tr>
<td>8:30 – 8:50 am</td>
<td>Spinal Cord CRT</td>
<td>William Moore, MD</td>
</tr>
<tr>
<td>8:50 – 9:15 am</td>
<td>Disc, Facet and SI Joint CRT</td>
<td>Christopher R. Hancock, MD</td>
</tr>
<tr>
<td>9:15 – 9:40 am</td>
<td>Platelet Rich Plasma vs. Stem Cells for CRT</td>
<td>Blake A. Johnson, MD, FACR</td>
</tr>
<tr>
<td>9:40 – 10:00 am</td>
<td>Questions and Answers</td>
<td>Faculty</td>
</tr>
<tr>
<td>10:00 – 10:30 am</td>
<td>Refreshment Break / Visit Exhibits</td>
<td>Panel</td>
</tr>
<tr>
<td>10:30 – 10:45 am</td>
<td>Gold Medal Presentation &amp; Lecture</td>
<td>John D. Barr, MD, FACR, FSIR, FAHA, FSNIS</td>
</tr>
</tbody>
</table>

### Joint Session 8: Spinal Cellular Regenerative Therapies

**Moderators:** John D. Barr, MD, FACR, FSIR, FAHA, FSNIS, Jack W. Jennings, MD, PhD and Lubhia M. Shah, MD

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:45 – 11:00 am</td>
<td>Introduction to AI, Machine Learning, and Deep Learning</td>
<td>Richard H. Wiggins III, MD, CIIP, FSIM</td>
</tr>
<tr>
<td>11:00 – 11:15 am</td>
<td>Perfusion Imaging of the Spine</td>
<td>Andrei I. Holodyny, MD</td>
</tr>
<tr>
<td>11:15 – 11:30 am</td>
<td>Peripheral Nerve Imaging &amp; DTI in Clinical Practice</td>
<td>Vinil N. Shah, MD</td>
</tr>
<tr>
<td>11:30 – 11:45 am</td>
<td>Brachial Plexus Imaging</td>
<td>Carlos H. Torres MD, FRCP</td>
</tr>
<tr>
<td>11:45 – 12:00 am</td>
<td>Advanced Imaging of Spinal CSF Leaks</td>
<td>Timothy J. Armhein, MD</td>
</tr>
<tr>
<td>12:00 – 12:15 am</td>
<td>Questions and Answers</td>
<td>Faculty</td>
</tr>
<tr>
<td>12:15 – 1:15 pm</td>
<td>Lunch and Learn Session — (non-accredited) — Salon A-C or Lunch On Your Own</td>
<td>Faculty</td>
</tr>
</tbody>
</table>
**Interventional Session IV: Advanced Topics in Spine IR (Salon F & G)**

*Moderators: Charles W. Kerber, MD; Orlando Ortiz, MD, MBA, FACR and Kieran P.J. Murphy, MD, FRCPC*

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:15 – 1:30 pm</td>
<td>Percutaneous Fixation Systems: The European Experience</td>
<td>Luigi Manfre, MD</td>
</tr>
<tr>
<td>1:30 – 1:45 pm</td>
<td>Intra-Arterial Chemotherapy for Spinal Vertebral Column Tumors</td>
<td>Bohdan W. Chopko, MD, PhD</td>
</tr>
<tr>
<td>1:45 – 2:00 pm</td>
<td>10 Myths and Misperceptions About Spinal CSF Leaks</td>
<td>Peter Kranz, MD</td>
</tr>
<tr>
<td>2:00 – 2:15 pm</td>
<td>Is the Basivertebral Nerve Key to Fixing Spine Pain?</td>
<td>Dan T.D. Nguyen, MD</td>
</tr>
<tr>
<td>2:15 – 2:30 pm</td>
<td>Endoscopic Micro-Discectomy</td>
<td>George Rappard, MD</td>
</tr>
<tr>
<td>2:30 – 2:45 pm</td>
<td>Minimally Invasive Lumbar Decompression</td>
<td>John D. Barr, MD, FACR, FSIR, FAHA, FSNIS</td>
</tr>
<tr>
<td>2:45 – 3:00 pm</td>
<td>Interventional Scientific Oral Presentations</td>
<td>TBD</td>
</tr>
<tr>
<td>2:45 – 3:00 pm</td>
<td>Questions and Answers</td>
<td>Faculty</td>
</tr>
</tbody>
</table>

**Diagnostic Session IV: MRI Compatibility & Safety (Salon A-C)**

*Moderators: Roland R. Lee, MD, FACP; Gregory W. Petermann, MD and Alyssa T. Watanabe, MD*

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:15 – 1:35 pm</td>
<td>MR-Guided Focused Ultrasound for Facet Pain</td>
<td>Lubdha M. Shah, MD</td>
</tr>
<tr>
<td>1:35 – 2:05 pm</td>
<td>MRI and Pacemakers</td>
<td>Robert J. Russo, MD, PhD</td>
</tr>
<tr>
<td>2:05 – 2:25 pm</td>
<td>Clinical Practice Integration of MR Safety &amp; Pacemakers</td>
<td>Roland R. Lee, MD, FACP</td>
</tr>
<tr>
<td>2:25 – 2:45 pm</td>
<td>Contrast Safety Issues</td>
<td>Meng Law, MD, MBBS, FRACR</td>
</tr>
<tr>
<td>2:45 – 3:00 pm</td>
<td>Diagnostic Scientific Oral Presentations</td>
<td>TBD</td>
</tr>
<tr>
<td>3:00 – 3:15 pm</td>
<td>Questions and Answers</td>
<td>Faculty</td>
</tr>
</tbody>
</table>

**SUNDAY, FEBRUARY 18, 2018**

7:00 – 7:55 am  Continental Breakfast for Registrants — Salon D & E
7:00 – 7:55 am  Breakfast & Learn Session — (non-accredited) — Salon A-C

**JOINT SESSION 10: HEALTHCARE POLICY AND ECONOMICS THAT YOU MUST KNOW**

*Moderators: Allan L. Brook, MD, FSIR; Richard H. Wiggins, III, MD CHP, FSIIAM and Joseph C. Sullivan, MD*

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 – 8:30 am</td>
<td>Keynote Address — Alternative Payment Models: Historical Context and Present Day</td>
<td>Joshua A. Hirsch, MD, FACR, FSIR</td>
</tr>
<tr>
<td>8:30 – 8:45 am</td>
<td>MIPS and the Spine Radiologist</td>
<td>Gaurang V. Shah, MD</td>
</tr>
<tr>
<td>8:45 – 9:00 am</td>
<td>Can You Perform High-End Spine Radiology in a Medicaid Dominated Practice?</td>
<td>Raymond K. Tu, MD, MS, FACR</td>
</tr>
<tr>
<td>9:00 – 9:15 am</td>
<td>The Ugly Face of Medical Management Utilization</td>
<td>Bassem A. Georgy, MD</td>
</tr>
<tr>
<td>9:15 – 9:30 am</td>
<td>Pain Medicine Certificate for Radiologists</td>
<td>Frederick E. Weiss, MD, PT, DPT, RMSK</td>
</tr>
<tr>
<td>9:30 – 9:45 am</td>
<td>Innovative Clinical Operations That Can Improve Your Spine Practice</td>
<td>Robert M. Sheridan, RTR, FAVIR</td>
</tr>
<tr>
<td>9:45 – 10:00 am</td>
<td>Questions and Answers</td>
<td>Faculty</td>
</tr>
<tr>
<td>10:00 – 10:30 am</td>
<td>Refreshment Break / Visit Exhibits — Salon D &amp; E</td>
<td></td>
</tr>
</tbody>
</table>

**JOINT SESSION 11: BEST LITERATURE REVIEW & MEETING SUMMATION**

*Moderators: John L. Go, MD, FACR and Michele H. Johnson, MD, FACR, FASER*

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:30 – 11:00 am</td>
<td>The Year’s Best Interventional Spine Manuscripts</td>
<td>Jack W. Jennings MD, PhD</td>
</tr>
<tr>
<td>11:00 – 11:30 am</td>
<td>The Year’s Best Diagnostic Spine Manuscripts</td>
<td>Jeffrey S. Ross, MD</td>
</tr>
<tr>
<td>11:30 – 11:45 am</td>
<td>What Should our 2019 Annual Symposium Feature? Open Mic</td>
<td>Audience Discussion</td>
</tr>
<tr>
<td>11:45 – 12:00 PM</td>
<td>2018 Annual Symposium Summation</td>
<td>John D. Barr, MD, FACR, FSIR, FAHA, FSNIS</td>
</tr>
<tr>
<td>12:00 PM</td>
<td>2018 ANNUAL SYMPOSIUM CONCLUDES</td>
<td></td>
</tr>
</tbody>
</table>
**SPECIAL NOTE TO THE DISABLED**

For more information, contact Ryals & Associates, Inc., Monday - Friday, 8:30 a.m. to 5:00 p.m. CST; P.O. Box 380, Springville, AL 35146. If you need any auxiliary aids or services identified in the Americans with Disabilities Act, please indicate so on your registration form.

**EASY WAYS TO ENROLL**

SELLOUT! Rooms will be reserved on a space-available basis. We urge you to make reservations early. **THE HOTEL WILL**

All room rates are subject to a 10% California Hotel Room Tax. All tax structures and percentages are subject to change. Visit our web site to register online using our SSL encrypted secure server, pre-filled with your personal and credit card information.

**GUEST FEE:** Family members and friends, ages 12 years and older, who wish to attend social functions which included the Welcome Reception, Continental Breakfasts and the Closing Party must register.

Guests Name(s)

____________________________________________________________________

____________________________________________________________________

Even though you do not need to register anyone under 12 years of age, please let us know how many in the age category will accompany you. **# _______**

**HOW TO REGISTER:**

WE ACCEPT:

INTERNET:  www.iiCME.com

MAIL: Check payable to ASSR 2018

Mail to: International Institute for Continuing Medical Education, Inc., P.O. Box 350, Springville, AL 35146

PHONE: 205-467-0290

FAX: 205-467-0195

**SPECIAL NOTE TO THE DISABLED**

The International Institute for Continuing Medical Education, Inc. wishes to ensure that no individual with a disability is excluded, denied services, segregated or otherwise treated differently than other individuals because of the absence of auxiliary aids or services. If you need any auxiliary aids or services identified in the Americans with Disabilities Act, please indicate so on your registration form.
WELCOME TO FAIRMONT SCOTTSDALE PRINCESS

THE ULTIMATE DESERT OASIS
The AAA Five-Diamond Fairmont Scottsdale Princess provides the perfect setting to enjoy al fresco living in the blooming Sonoran Desert. As in the Native American tradition, you’ll live in harmony with nature...vast open spaces, lushly landscaped grounds, regal Saguaro cacti and a burning orange sun sinking behind the majestic mountains will inspire and energize you. From the rich purple hues of the desert sunset to the green agave plants and coral pinks and butter yellow of blooming cactus flowers, the natural palate at play is of the most unique and stunning in the world.

SOMETHING FOR EVERYONE
Four top-ranked Arizona restaurants, inspiring indoor and outdoor meeting facilities, innovative spa and fitness programs at Well & Being Spa, six sparkling pools, including the all-new Sunset Beach, and annual events that turn into family traditions, this highly acclaimed Scottsdale resort is truly an experience like no other.

EXPERIENCE SCOTTSDALE IN STYLE
Let the Fairmont Scottsdale Princess be your gateway to everything Scottsdale has to offer. Minutes away from shopping centers and just a short drive from Sedona, the Grand Canyon and the bustling cultural center home to the Phoenix Open, Spring Training baseball, five Major League sports teams, Arabian horse shows and more. From art walks and culinary festivals to hot air ballooning and jeep tours, spend your next vacation in style at the Fairmont Scottsdale Princess.

MAKE RESERVATIONS
FAIRMONT SCOTTSDALE PRINCESS
7575 East Princess Drive
Scottsdale, Arizona 85255
Phone: 480-585-4848
Fax: 480-502-9492
scottsdale@fairmont.com

Special Group Room Rate
$349 SINGLE/Doubles

Online Hotel Reservations:
https://aws.passkey.com/go/ASSR2018

Reservations number: 1-800-344-4758
Remember to identify yourself as a registrant of the ASSR 2018 Annual Symposium in order to qualify for the special group room rate.

Make your reservations as soon as possible as our room block may sell out prior to the cut-off date of Monday, January 15, 2018. After this date, reservations will be accepted at the discretion of the hotel, on a space and rate available basis.

Complimentary basic wireless internet in all guestrooms. Check-in Time: 4:00 pm. Check-out Time: 12:00 noon. Reservations must be made on or before cut-off date.
American Society of SPINE RADIOLOGY
2018 Annual Symposium
FEBRUARY 14-18, 2018

FAIRMONT SCOTTSDALE PRINCESS
SCOTTSDALE, ARIZONA
25.15 AMA PRA CATEGORY 1 CREDIT(S)™

ATTENTION ALL NON MEMBERS:
Become a member and get an immediate registration discount. See registration page inside for details!