2016 Summer Spine Meeting Program

Wednesday, July 20
6:00-9:00 a.m.
Registration
Atrium, 3rd Floor

7:30 a.m.-4:30 p.m.

**Hands-on Course: Spine Deformity Surgery**
Chair: Ronald A. Lehman, MD
*Miami Anatomical Research Center (MARC)*
This comprehensive adult spinal deformity course will provide in-depth coverage of all areas of the spinal column from the cervical spine to the sacrum. Through expert lectures, moderated case discussions and cadaveric bioskills sessions, spinal surgeons will gain practical knowledge and technical skills to improve the care they provide to their spinal deformity patients.

Upon completion of this course, participants should gain strategies to:

- Recognize various forms of cervical deformity, patient presentations, symptoms, evaluation and surgical treatment;
- Identify various forms of Adult Idiopathic Scoliosis deformities, their classification, symptomatology, evaluation, operative and non-operative treatments;
- Differentiate features of Adult De Novo Degenerative Lumbar Scoliosis, presenting symptoms including spinal stenosis, evaluation, operative and non-operative treatments;
- Identify issues involved with revision spinal deformity patients, avoidance of complications, optimal spinal balance, pelvic parameters, and principles and techniques of revision spinal reconstruction;
- Differentiate between less invasive deformity options, their indications, results, possible complications, and where these are potentially headed in the future.

7:30 a.m.  
Registration, Continental Breakfast

8:00-8:20 a.m.  
Cervical Spine Deformity
  - Evaluation of Cervical Deformity
  - Degenerative and Deformity Classification
  - Measurement of Cervical Spine deformity
  - Evaluation and Treatment

  *Frank L. Acosta, MD*

8:20-8:30 a.m.  
**Topic**

**Faculty**
8:35-8:50 a.m.  Biologics and Spinal Deformity
   •  An Evidence-based Approach to Bone Graft Choices
      Wellington K. Hsu, MD

8:50- 9:05 a.m.  Spondylolisthesis
   •  When to Reduce
   •  Fixation Techniques
      o  TLIF
      o  Transacral fixation
      o  Role of Anterior or anterior like approaches
      John R. Dimar II, MD

9:05-9:20 a.m.  Outcomes, Complications and Value Optimization in Adult Deformity Surgery
   •  Cost Considerations
   •  Improving Outcomes and Durability
      Thomas E. Mroz, MD

9:20-9:35 a.m.  Obtaining Sagittal Balance in the Deformed and Degenerated Spine
   •  Understanding Goals
   •  Measuring Deformity in the Thoracolumbar Spine
   •  Sagittal Parameters
      Ronald A. Lehman, Jr., MD

9:35-9:50 a.m.  Role of Minimally Invasive Spine Techniques for Deformity Correction:
      How Far Have We Come and What Can We Actually Achieve.
      •  Approach
      •  Interbody
      •  Correction Mechanics
      Sheeraz A. Qureshi, MD

9:45-10:00a.m.  Osteotomies for Posterior-based Correction of Deformity
   •  SPO/Ponte/PSO/VCR
   •  Indications and Techniques
      Jason W. Savage, MD

10:00-10:15 a.m.  Break

10:15 a.m.-12:15 p.m.  Hands-on Skills Lab
   MIS and Open TLIF, Decompression with Osteotomes, Posterior Column Osteotomies
   S2 Alar Iliac Screws, Iliac Screws
   Percutaneous Fixation Techniques

12:15-1:15 p.m.  Lunch
   (Participants can send in cases before course to upload and discuss during lunch)

1:15-2:00 p.m.  Case Based Discussions – Adult Spinal Deformity
   •  How to Diagnose/Work Up
   •  Preop Planning
   •  Correction and Fixation Considerations
   •  Operative Results
Moderators: *Ronald A. Lehman, Jr.*
Panel: *Jason W. Savage, MD; John R. Dimar II, MD*

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<td>Hands-on Skills Lab</td>
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<td>Lumbar PSO</td>
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<td>Thoracic PCO (Ponte/Smith Petersen) and VCR (Vertebral Column Resection)</td>
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<td>Correction Techniques for Deformity Correction</td>
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<td>4:15-4:30 p.m.</td>
<td>Wrap up and Q&amp;A</td>
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3:00-6:00 p.m.
**Registration**
*Atrium, 3rd Floor*

3:00-6:00 p.m.
**Speaker Information Center**
*Atrium, 3rd Floor*

6:00-7:30 p.m.
**Opening Wine and Cheese Reception**
*Corporate Lounge*

**Thursday, July 21**
6:30-8:00 a.m.
**Breakfast**
*Met Ballroom 2-4*

6:30 a.m.-12:00 p.m.
**Technical Exhibition/ePoster Kiosks**
*Met Ballroom 2-4*

6:30 a.m.-12:30 p.m.
**Registration/Speaker Information Center**
*Atrium, 3rd Floor*

7:00-7:10 a.m.
**Opening Remarks**
*Met Ballroom 1*
7:10-7:30 a.m.
The Future of Medical Liability Reform: Will the outcome of the 2016 elections Help or Hurt the Legislative Prospects of Reform in the New Congress?
Chair: John G. Finkenberg, MD
Met Ballroom 1
This session will provide attendees with an update on the status of federal tort reform efforts in Congress and examine how some lawmakers are working on innovative solutions to work around the polarizing effect this issue has caused between the major political parties.

7:30-9:00 a.m.
International Symposium: Biologics
Chair: Wellington K. Hsu, MD
Met Ballroom 1
Spinal biologics is a rapidly changing area with new preclinical and clinical studies being published every week. In the last decade there have been many dramatic trends in the usage of different types of products dependent on efficacy, safety, and availability. While the body of evidence to support the use of certain products grows, there remains unanswered questions as to cost-effectiveness, safety, and evaluation of new technologies. This session will evaluate the latest information available to help spine surgeons make decisions for their patients.

Upon completion of this session, participants should gain strategies to:
• Evaluate differences in bone graft substitutes and extenders for posterior lumbar interbody fusion;
• Assess the evidence-based literature to support interbody cage materials for ACDF;
• Grade literature studying efficacy of biologics dependent on anatomic location.

Agenda
7:30-7:37 a.m.  Current State of Spinal Biologics
Wellington K. Hsu, MD

7:37-7:44 a.m.  The Differences Between Allograft and Cellular Based Therapies
Ricardo Fontes, MD

7:44-7:51 a.m.  Debate Case Presentation: Which Spinal Biologic Should be Used and in What Way in a Single-level Posterior Interbody Fusion?
Wellington K. Hsu, MD

7:51-7:58 a.m.  Cellular Based Therapies
John H. Shin, MD

7:58-8:05 a.m.  Growth Factors
Sheeraz A. Qureshi, MD

8:05-8:12 a.m.  Allograft
Ricardo Fontes, MD

8:12-8:22 a.m.  Discussion

8:22-8:29 a.m.  Debate: Case presentation: Which strategy should be used for a 2-level ACDF?
Wellington K. Hsu, MD

8:29-8:36 a.m.  Allograft
Jason W. Savage, MD
8:36-8:43 a.m.  PEEK with Biologic  
Frank L. Acosta, MD

8:43-8:50 a.m.  Titanium with or without Biologic  
Thomas E. Mroz, MD

8:50-9:00 a.m.  Discussion

9:00-9:30 a.m.  
**Break/Technical Exhibition**  
*Met Ballroom 2-4*

9:30-11:00 a.m.  
**Symposium: Oncology**  
Chair: Clinton J. Devin, MD  
*Met Ballroom 1*

This session will cover topics including metastatic and primary tumors of the mobile spine, diagnosis of spinal instability, stereotactic radiation and minimally invasive treatment for tumors-options, and patient selection as well as present relevant cases.

**Upon completion of this session, participants should gain strategies to:**
- Identify metastatic and primary tumors of the mobile spine;
- Diagnose spinal instability, stereotactic radiation and minimally invasive treatment for tumors;
- Determine patient selection as well as present relevant cases.

**Agenda**

9:30-9:45 a.m.  Metastatic Tumors of the Mobile Spine  
*Mohamed Bydon, MD*

9:45-10:00 a.m.  Primary Spine Tumors of the Mobile Spine  
*Ahmad N. Nassr, MD*

10:00-10:15 a.m.  Diagnosis of Spinal Instability – Spinal Instability Neoplastic Score  
*Clinton J. Devin, MD*

10:15-10:30 a.m.  Stereotactic Radiation  
*Mohamed Bydon, MD*

10:30-10:45 a.m.  Minimally Invasive Treatment for Spinal Tumors: Options and Patient Selection  
*Sheeraz A. Qureshi, MD*

10:45-11:00 a.m.  Case Discussion

11:00-11:30 a.m.  
**Break/Technical Exhibition**  
*Met Ballroom 2-4*
11:30 a.m.-12:30 p.m.

**Symposium: Cervical Myelopathy**
Chair: Thomas E. Mroz, MD

*Met Ballroom 1*

This symposium will provide attendees with a better understanding of the natural history of cervical spondylotic myelopathy (CSM), surgical indications and established surgical treatments for CSM.

**Upon completion of this session, participants should gain strategies to:**

- Discuss the natural history and the merits and limitation of various surgical approaches;
- Identify the complication profile of surgical treatments;
- Recognize the expected neurological and functional outcomes following surgery for CSM.

**Agenda**

11:30-11:40 a.m.  
Natural History and Overview of Surgical Options  
*Sheeraz A. Qureshi, MD*

11:40-11:50 a.m.  
Common Causes of Occipital-Cervical Stenosis and Treatment  
*John H. Shin, MD*

11:50 a.m.-12:00 p.m.  
Ventral Decompression and Fusion Procedures  
*Jason W. Savage, MD*

12:00-12:10 p.m.  
Cervical Laminectomy / Fusion and Laminoplasty  
*Frank L. Acosta, MD*

12:10-12:20 p.m.  
Complications  
*Thomas E. Mroz, MD*

12:20-12:30 p.m.  
Case Discussion  
*Panel*

12:30 p.m.

**General Meeting Adjourns**

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**Friday, July 22**

6:30-8:00 a.m.

**Breakfast**  
*Met Ballroom 2-4*

6:30 a.m.-12:00 p.m.

**Technical Exhibition/ ePoster Kiosks**

*Met Ballroom 2-4*

6:30 a.m.-12:30 p.m.

**Registration/ Speaker Information Center**  
*Atrium, 3rd Floor*
7:00-7:10 a.m.  
**Opening Remarks**  
*Met Ballroom 1*

7:10-7:30 a.m.  
**Spine Foundation Update**  
*Met Ballroom 1*

7:30-9:00 a.m.  
**Symposium: Spine Injuries in Sports**  
Chair: Shah Dodwad, MD  
*Met Ballroom 1*

This session will cover topics including treatment options for acute athletic spine traumas and those with spondylolysis and spondylolisthesis. A panel discussion will evaluate cases and provide an opportunity for interactive audience participation.

Upon completion of this session, participants should gain strategies to:

- Identify treatment options for acute athletic spine trauma;
- Determine treatment for athletes with spondylolysis and spondylolisthesis;
- Recognize the impact of a spine versus other musculoskeletal injuries in the professional athlete.

**Agenda**

7:30-7:45 a.m.  
Deciphering the Mystery of Stingers  
*Sina Pourtaheri, MD*

7:45-8:00 a.m.  
How to Handle Acute Athletic Spine Trauma  
*Shah Dodwad, MD*

8:00-8:15 a.m.  
What to Do with Athletes with Spondylolysis and Spondylolisthesis  
*Jason W. Savage, MD*

8:15-8:30 a.m.  
The Impact of a Spine versus other Musculoskeletal Injuries in the Professional Athlete  
*Wellington K. Hsu, MD*

8:30-9:00 a.m.  
Case Discussions and Questions  
*Panel*

9:00-9:30 a.m.  
**Break/Technical Exhibition**  
*Met Ballroom 2-4*
9:30-11:00 a.m.

Symposium: Cervical Disc Arthroplasty
Chair: Peter G. Whang, MD
Met Ballroom 1
Assessment of the current state of cervical disc arthroplasty, including a review of recent biomechanical studies, clinical trials and economic analyses related to this technology, will be covered. Faculty also will discuss contemporary surgical techniques which may serve to improve the outcomes following these procedures.

Upon completion of this session, participants should gain strategies to:
• Determine the mechanisms of action by which various disc implants attempt to replicate physiologic motion;
• Critically assess the recent safety, efficacy, and cost-effectiveness data published in the peer-reviewed literature;
• Refine their surgical technique to improve the success of cervical disc arthroplasty procedures.

Agenda
9:30-9:45 a.m. Biomechanics of Cervical TDR – Are We Doing Any Better?
John H. Shin, MD
9:45-10:00 a.m. Review of Clinical Data for Cervical TDR – Two-Level Results and Adjacent Segment Degeneration
James J. Yue, MD
10:00-10:15 a.m. Surgical Technique – Pearls and Pitfalls
Pierce D. Nunley, MD
10:15-10:30 a.m. Discussion
10:30-10:45 a.m. Complications – How Safe is Cervical TDR?
Peter G. Whang, MD
10:45-11:00 a.m. Cost-Effectiveness of Cervical TDR
Alan S. Hilibrand, MD

11:00-11:30 a.m.
Break/Technical Exhibition
Met Ballroom 2-4

11:30 a.m.-12:30 p.m.

Brazilian Spine Society
Moderator: Mauro Volpi, MD
Met Ballroom 1
Members of the Brazilian Spine Society will conduct a panel discussion addressing complications of selective arthrodesis in idiopathic scoliosis, sagittal alignment parameters in patients submitted to extreme lateral interbody fusion vs. minimally invasive transforaminal interbody fusion, and management of spinal metastases. Additional topics include the evaluation of the stability of thoracolumbar burst fractures without neurological deficit and assessment of shoulder balance in adolescent idiopathic scoliosis.
Agenda

11:30-11:40 a.m. Complications of Selective Arthrodesis in Idiopathic Scoliosis
Raphael Martus Marcon, MD, PhD

11:40-11:50 a.m. Saggital Alignment Parameters in Patients Submitted to Extreme Lateral Interbody Fusion Versus Minimally Invasive Transforaminal Interbody Fusion
Daniel A. Oliveira, MD

11:50 a.m.-12:00 p.m. Current Management of Spinal Metastases
Marcelo Italo Risso, MD

12:00-12:10 p.m. Evaluation of the Stability of Thoracolumbar Burst Fractures Without Neurological Deficit
Robert Meves, MD

12:10-12:20 p.m. Assessment of Shoulder Balance in Adolescent Idiopathic Scoliosis
Alberto Gotfrid, MD

12:20-12:30 p.m. Panel Discussion

12:30 p.m.
General Meeting Adjourns

Saturday, July 23
6:30-8:00 a.m.
Breakfast
Met Ballroom 2-4

6:30-10:00 a.m.
Technical Exhibition/ ePoster Kiosks
Met Ballroom 2-4

6:30 a.m.-12:30 p.m.
Registration/ Speaker Information Center
Atrium, 3rd Floor

7:20-7:30 a.m.
Opening Remarks
Met Ballroom 1

7:30-9:00 a.m.
Symposium: Adult Spinal Deformity
Chair: Jason W. Savage, MD
Met Ballroom 1
Adult spinal deformity (ASD) is a complex disease comprised of different deformity types that involve the entire spine. Faculty will focus on radiographic evaluation of the spine and pelvis for accurate assessment of ASD as well as ASD surgical planning integration of regional, global and pelvic compensatory parameters to adequately
correct deformity and thereby improve outcomes and maximize function. Not all ASD patients require large reconstructive operations, and patient selection and precise surgical planning is critically important in optimizing outcomes and minimizing complications.

Upon completion of this session, participants should gain strategies to:
- Evaluate regional alignment, global alignment, and measures of pelvic compensation and morphology;
- Determine when/why to perform various types of osteotomies;
- Prevent complications including proximal junctional failure.

Agenda
7:30-7:45 a.m. Understanding Radiographic Parameters in Adult Spinal Deformity  
Jason W. Savage, MD
7:45-8:00 a.m. Types of Spinal Osteotomies and When to Use Them  
John H. Shin, MD
8:00-8:15 a.m. Proximal Junctional Failure: Prevention and Management  
Patrick A. Sugrue, MD
8:15-8:30 a.m. Outcomes and Value in Adult Spinal Deformity Surgery  
Clinton J. Devin, MD
8:30-9:00 a.m. Case Presentations and Discussion  
Faculty

9:00-9:30 a.m.  
Break/Technical Exhibition  
Met Ballroom 2-4

9:30-11:00 a.m.  
Symposium: Minimally Invasive Spine Surgery  
Chair: Sheeraz A. Qureshi, MD  
Met Ballroom 1  
This case-based session focuses on common degenerative spinal pathology seen in the office. The session will begin with a case presentation in each section and then the faculty will defend the minimally invasive spine surgery option for treatment that they are assigned.

Upon completion of this session, participants should gain strategies to:
- Identify common degenerative spinal pathology seen in the office;
- Determine minimally invasive options for the treatment of cervical radiculopathy;
- Identify L4-5 stenosis with spondyloolisthesis and L5-S1 lytic spondyloolisthesis;

Agenda
Minimally Invasive Options for the Treatment of Cervical Radiculopathy
9:30-9:40 a.m. MIS Posterior Cervical Foraminotomy  
Thomas E. Mroz, MD
Symposium: Navigation
Chair: Saad B. Chaudhary, MD, MBA

Met Ballroom 1
Technology has been a driving force for several recent approaches and innovative treatments in spine. Navigation tools have existed for a few decades, but significant advancements have occurred over the past decade. This symposium reviews the current navigation tools and their utility and efficacy in executing safe surgical procedures.

Upon completion of this session, participants should gain strategies to:
- Discuss the various modalities of navigation tools available today
- List the benefits and the barriers to adopting navigation in spine surgery
- Outline the best surgical procedures for navigation

Agenda
11:30-11:50 a.m. Navigation Options for Spinal Surgery
Saad B. Chaudhary, MD, MBA

11:50 a.m. -12:05 p.m. 3D Navigation in MIS spine surgery Surgery
John H. Shin, MD
12:05-12:25 p.m. Debate: MIS TLIF using Navigation vs. TLIF using Fluoroscopy
Sheeraz A. Qureshi, MD
Jason W. Savage, MD

12:25-12:30 p.m. Discussion

12:30 p.m.
General Meeting Adjourns