80th Annual Meeting

September 28 - October 1, 2016
Renaissance Indian Wells
Indian Wells, CA

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Grantor & Exhibitor Acknowledgements

The Western Orthopaedic Association is grateful for the support of its educational grantors and exhibitors. Thank you for your participation and commitment to WOA.

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Welcome to Indian Wells! Our 80th Annual Meeting you gives you the opportunity to experience, not only an excellent educational program, but also enjoy the stunning Renaissance Indian Wells Resort in the foothills of Palm Springs’ Coachella Valley. Your educational program planned by Dr. Robert Hart and the WOA Program Committee promises to be an excellent scientific meeting with state-of-the-art symposia presented by expert faculty. There will also be Podium, Rapid Fire and E-poster abstract presentations.

My Presidential Guest Speaker is Mr. Timothy Briggs MD, who has served as Director of the Royal National Orthopaedic Hospital and as President of the British Orthopaedic Association. He will discuss his courageous leadership focused on improving access and outcomes for thousands of British patients. We are also honored to have Ronald C. White, Jr., PhD as our Howard Steel Lecturer. He is a wonderful speaker and brilliant writer who will inspire us all. I believe there is no better subject than American history to help us understand who we are and what it is to lead.

At the Welcome Reception on Thursday evening we will enjoy delicious food and an open bar, in a beautiful setting with the Santa Rosa Mountains in the background. On Friday evening the Exhibitor/Sponsor Reception is a casual opportunity to mingle with friends and colleagues and express our appreciation to those who have supported the meeting. Be sure to smile and get your picture taken with Sinatra & Monroe, who will then entertain us at our Gala Dinner; a fun social finale for the meeting.

There are many recreational activities planned; from the popular Jeep Adventure of the San Andreas Fault Line, to a fabulous Palm Springs Architecture Tour. If you are a biker, complimentary bikes are available. Oh, and for you golfers, don’t forget the world famous WOA Golf Tournament on Friday. My wife, Nancy is planning special activities for all spouses, children and guests. On Thursday, there will be breakfast and a presentation about Palm Springs’ architecture by Robert Imber, a local enthusiast of the desert’s midcentury modern marvels. Also she invites you to participate on Friday morning in an informal discussion with renowned history professor and author, Dr. Ronald White, on the importance of teaching American history. Dr. White’s Howard Steel Lectureship will follow immediately in the general session where he will present leadership lessons of Abraham Lincoln’s Second Inaugural Address.

Nancy and I thank you for joining us in Indian Wells for a truly unforgettable meeting.
Summary of Events

Wednesday, September 28

8:00 am – 5:00 pm
Board of Directors Meeting
Malta Rooms A & B

12:00 pm – 5:00 pm
Meeting Registration
Esmeralda Ballroom Foyer

12:00 pm – 5:00 pm
Exhibit Setup
Esmeralda Ballrooms 5, 6, 7 & 8

12:00 pm – 5:00 pm
Speaker Ready Area
Esmeralda Ballroom Foyer

Thursday, September 29

6:00 am – 6:45 am
Scientific E-Poster Session
Esmeralda Ballrooms 1, 2, 3 & Pre-function 6-8
Presenters will be available to answer questions.

6:00 am – 2:05 pm
Speaker Ready Area
Esmeralda Ballroom Foyer

6:30 am – 2:05 pm
Meeting Registration
Esmeralda Ballroom Foyer

6:45 am – 7:00 am
First Business Meeting
Esmeralda Ballroom 4

6:45 am – 2:05 pm
Technical Exhibits, Continental Breakfast, Coffee Breaks and Daily Drawing
Esmeralda Ballrooms 5, 6, 7 & 8

7:00 am – 7:05 am
Welcome and Announcements
Esmeralda Ballroom 4

7:05 am – 7:50 am
General Session 1 – Foot & Ankle/Pediatrics
Esmeralda Ballroom 4

7:50 am – 8:40 am
Symposium 1 - Pediatric Sports Injuries
Esmeralda Ballroom 4

8:40 am – 9:00 am
Break - Please visit Exhibits
Esmeralda Ballrooms 5, 6, 7 & 8

9:00 am – 9:30 am
General Session 2 – Total Hip
Esmeralda Ballroom 4

9:00 am – 10:03 am
* Concurrent PA Session 1 – Pediatric Fracture
Esmeralda Boardroom

9:00 am – 10:30 am
Spouse/Children’s Hospitality
Malta Room A & B
Our guest speaker, Robert Imber, turned his love for architecture and the desert’s modern marvels into a business. For over ten years, Robert has been doing what he loves most – showing Palm Springs’ incredible architecture to visitors and telling them stories that only an avid, irrepressible architecture buff and preservation advocate would know.
Price: Included in Registration Fee or $40 per Unregistered Adult Guest; $20 per Unregistered Child (5-17 years)

9:33 am – 10:03 am
Rapid Fire Session 3A-D
Esmeralda Ballrooms 1, 2, 3, & Pre-Function 6-8

10:03 am – 10:23 am
Break - Please visit Exhibits
Esmeralda Ballrooms 5, 6, 7 & 8

10:23 am – 11:25 am
* General Session 4 - AAOS, Presidential Guest Speaker
Esmeralda Ballroom 4
Mr. Timothy Briggs MBBS (Hons), MD(Res), MCh(Orth), FRCS(Ed), FRCS(Eng)

11:25 am – 12:15 pm
Symposium 2 - Social Media in Orthopaedics: Online Reputation Management and the Use of Twitter and Facebook
Esmeralda Ballroom 4

12:15 pm – 1:15 pm
WOA Luncheon – Industry Presentation
Esmeralda Ballroom 4
Mallinckrodt Pharmaceuticals
Ethicon
*CME Credit Not Available

1:15 pm – 2:05 pm
Symposium 3 - Total Joint Arthroplasty
Esmeralda Ballroom 4

1:30 pm – 4:30 pm
Jeep Adventures - San Andreas Fault Line
Meet in Front Lobby
We whisk you away in our H1 Hummers to our first stop in the Colorado Sonoran Desert, the San Andreas Fault and Oasis. We guide you on a nature walk through the third largest Oasis in the world. Here, we will walk a palm lined trail and trek over a bridge above the San Andreas Fault where water gurgles out of the ground. This land is rich in geology, Native American, and Early Pioneer history. We will step inside a palm log cabin built by one of the first settlers of the area. Guests will board the Hummer and travel along an old goldmine trail into one of the oldest and most historic canyons in the country. Our narrated off-road journey rises about 2000 feet above the desert floor through beautiful canyon walls of granite and rock formations that have remained virtually unchanged for thousands of years.
Price: $110 per person (minimum 5 people) includes gratuity
Summary of Events

2:05 pm – 5:05 pm  
* Resident Review Program  
Esmeralda Boardroom

5:05 pm – 5:35 pm  
Multimedia Education Session  
Esmeralda Ballroom Foyer

5:05 pm – 6:00 pm  
+ Resident Reception  
Esmeralda Ballroom Foyer

6:00 pm – 7:00 pm  
+ New Member Reception  
Presidential Suite, #7057  
All WOA new members are invited to attend.  
Price: Included in Registration Fee

7:00 pm – 9:30 pm  
+ Welcome Reception  
Rose Lawn  
Savor delicious food delicacies and an open bar, chat with friends and colleagues, and look out onto the Santa Rosa Mountains at the foothills of Palm Springs’ Coachella Valley.  
Attire: Resort Casual (no coat required)  
Price: Included in Registration Fee or $100 per Unregistered Adult Guest

Friday, September 30

6:00 am – 7:00 am  
Regional and AAOS President’s Breakfast Meeting with State Presidents and Board of Councilors  
Monte Carlo Room

6:00 am – 7:00 am  
Scientific E-Poster Session  
Esmeralda Ballrooms 1, 2, 3 & Pre-function 6-8  
Presenters will be available to answer questions.

6:00 am – 1:30 pm  
Speaker Ready Area  
Esmeralda Ballroom Foyer

6:30 am – 1:30 pm  
Meeting Registration  
Esmeralda Ballroom Foyer

6:45 am – 1:30 pm  
Technical Exhibits, Continental Breakfast, Coffee Breaks and Daily Drawing  
Esmeralda Ballrooms 5, 6, 7 & 8

7:00 am – 7:05 am  
Announcements  
Esmeralda Ballroom 4

7:05 am – 7:30 am  
* General Session 5: WOA/OREF Young Investigator Awards  
Esmeralda Ballroom 4

7:05 am – 8:20 am  
* Concurrent PA Session 2 – Understanding MRIs  
Esmeralda Boardroom

7:30 am – 8:20 am  
* General Session 6: WOA Resident Awards  
Esmeralda Ballroom 4

8:20 am – 8:40 am  
Break - Please visit Exhibits  
Esmeralda Ballrooms 5, 6, 7 & 8

8:40 am – 9:50 am  
* General Session 7 - BOC Report and Howard Steel Lecture  
Esmeralda Ballroom 4  
Ronald C. White Jr., PhD

9:53 am – 10:30 am  
Rapid Fire Session 8A-D  
Esmeralda Ballrooms 1, 2, 3 & Pre-Function 6-8

9:53 am – 10:50 am  
* Concurrent PA Session 3 – Ultrasound Usage  
Esmeralda Boardroom

10:00 am  
* Spouses’ Discussion with Ron White  
Malta Room A & B  
Please have breakfast on your own and listen to Dr. Ron White’s presentation, Lincoln's Sermon on the Mount: The Second Inaugural at 9:00 am in the General Session. Then join fellow spouses and guests at 10:00 am for a discussion led by Dr. White on the importance of teaching American history.  
Price: Included in Registration Fee

10:30 am – 10:50 am  
Break - Please visit Exhibits  
Esmeralda Ballrooms 5, 6, 7 & 8

10:50 am – 11:38 am  
Symposium 4 - Modern Trauma Pitfalls and Solutions  
Esmeralda Ballroom 4

11:38 am – 12:38 pm  
* WOA Luncheon – Industry Presentation  
Esmeralda Ballroom 4  
THINK Surgical  
DT MedSurg, LLC, a Data Trace Company (Seminar presentation supported by an unrestricted grant from Pacira Pharmaceuticals, Inc.)  
*CME Credit Not Available

12:38 pm – 1:30 pm  
Symposium 5 - Management of Metastatic Spine Disease  
Esmeralda Ballroom 4

1:00 pm – 5:00 pm  
* Golf Tournament (1:00 pm Tee Time)  
Meet in Front Lobby at 12:15  
The Players Course (John Fought designed course) features a classic American design complete with sculpted bunkers. Most of the holes are oriented to take full advantage of jaw-dropping views of the San Jacinto, Santa Rosa and San Bernardino mountain ranges and the majestic Eisenhower Mountain stands sentinel to the south. The tournament will be a shotgun start with a scramble format.  
Price: $180 per person (includes transportation, greens fee, lunch and beverage cart)
### Summary of Events

#### 1:30 pm – 2:30 pm
**Scientific E-Poster Session**  
Esmeralda Ballrooms 1,2,3 & Pre-function 6-8  
Presenters will be available to answer questions.

#### 1:30 pm – 4:30 pm
**Palm Springs Modern Architecture Tour**  
Meet in Front Lobby  
The tour includes the history of Palm Springs: the people who lived, worked and vacationed there, the Hollywood stars who played and built homes in Palm Springs and the architects, builders, and designers who, from the late 1930s through the early 1970s, developed the “desert modernism” style for which Palm Springs has become famous.  
*Price: $78 Per Person (Minimum 20 People)*

#### 2:30 pm – 4:30 pm
**Multimedia Education Session**  
Esmeralda Ballroom Foyer

#### 5:30 pm – 7:30 pm
**Exhibitor Reception**  
Esmeralda Ballrooms 5,6,7 & 8  
Before dinner, start your evening off with drinks and mingle with Frank Sinatra and Marilyn Monroe.  
*Price: Included in Registration Fee or $75 per Unregistered Adult Guest*

#### 7:30 pm – 10:00 pm
**Kids’ Movie Night with Arts & Crafts and Dinner**  
Esmeralda Ballroom 3  
Dinner and a movie—fun!!! Watch a great movie and nibble on snacks and treats with your friends! If younger than 5 years old, must be accompanied by an adult. This is not a babysitting service, but provided only for parents attending the Gala Dinner; children must be registered.  
*Price: Included in Registration Fee or $40 per Unregistered Child (5-17)*

#### Saturday, October 1

#### 6:00 am – 6:50 am
**Board of Directors Meeting**  
Malta Room A & B

#### 6:00 am – 7:00 am
**Scientific E-Poster Session**  
Esmeralda Ballrooms 1,2,3 & Pre-function 6-8  
Presenters will be available to answer questions.

#### 6:00 am – 12:05 pm
**Meeting Registration**  
Esmeralda Ballroom Foyer

#### 6:30 am – 12:05 pm
**Technical Exhibits, Continental Breakfast, Coffee Breaks and Daily Drawing**  
Esmeralda Ballrooms 5,6,7 & 8

#### 7:00 am – 7:15 am
**Second Business Meeting**  
Esmeralda Ballroom 4

#### 7:15 am – 7:50 am
**General Session 9 - Total Knee / Upper Extremity**  
Esmeralda Ballroom 4

#### 7:53 am – 8:30 am
**Rapid Fire Session 10A–D**  
Esmeralda Ballrooms 1, 2, 3 & Pre-Function 6-8

#### 8:30 am – 8:55 am
**Break - Please visit Exhibits**  
Esmeralda Ballrooms 5, 6, 7 & 8

#### 8:55 am – 9:45 am
**Symposium 6 - Shoulder/Elbow**  
Esmeralda Ballroom 4

#### 9:45 am – 10:25 am
**General Session 11 - OREF and Presidential Address**  
John R. Tongue, MD

#### 10:25 am – 11:15 am
**Symposium 7 – Shoulder Dislocations**  
Esmeralda Ballroom 4

#### 11:15 am – 11:55 am
**WOA Luncheon – Industry Presentation**  
Esmeralda Ballroom 4  
*Legally Mine*  
*CME Credit Not Available*

#### 11:55 am – 12:45 pm
**General Session 12 - Sports/Trauma**  
Esmeralda Ballroom 4

#### 12:45 pm – 1:45 pm
**Scientific E-Poster Session**  
Esmeralda Ballrooms 1,2,3 & Pre-function 6-8  
Presenters will be available to answer questions.

#### 1:45 pm – 2:45 pm
**Multimedia Education Session**  
Esmeralda Ballroom Foyer

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**Check with the concierge for tram rides, the Living Desert Museum, Air Museum, complimentary biking, and shopping at El Paseo in Palm Desert.**
Thursday, September 29

6:00 am  **Scientific E-Poster Session**  
Esmeralda Ballrooms 1,2,3 & Pre-function 6-8  
Presenters will be available to answer questions.

6:45 am  **First Business Meeting**

7:00 am  **Welcome and Announcements**  
John R. Tongue, MD, President  
Robert A. Hart, MD, Program Chair

**General Session 1 – Foot & Ankle/Pediatrics**  
Moderators: James Meeker, MD, Oregon Health & Science University, Portland, OR & Ronald J. Turker, MD, Kaiser Permanente Sunnybrook, Portland, OR

7:05 am  Early Versus Delayed Weightbearing After Microfracture For Talar Osteochondral Lesions  
J. Banks Deal Jr., MD, Tripler Army Medical Center, Honolulu, HI

7:11 am  The Role of Computed Tomography in Supination-Adduction Ankle Fractures  
Ram K. Alluri, MD, Keck School of Medicine at University of Southern California, Los Angeles, CA

7:17 am  Radiographic Assessment Of Fibular Length Variance  
Barkha Gurbani, MPH, MD, University of Texas Medical Branch, Galveston, TX

7:23 am  Standardized Electronic Medical Record Note Templates Lead To Earlier Documentation Of Neurologic Injuries In Pediatric Patients With Supracondylar Humerus Fractures  
Ryan P. Farmer, MD, MS, Children’s Hospital Colorado, Aurora, CO

7:29 am  Postoperative Pain Control In Pediatric Scoliosis Patients  
Hilda H. Kriel, MD, University of Texas Medical Branch, Galveston, TX

7:35 am  Temporal Characteristics Of Meniscal Tears In Adolescents Undergoing ACL Reconstruction  
Stephen D. Zoller, MD, University of California, Los Angeles, CA

7:41 am  Discussion

**Symposium 1 – Pediatric Sports Injuries**  
Moderator: Jeremy P. Bauer, MD, Shriner’s Hospital for Children, Portland, OR

7:50 am  Pediatric Sports Shoulder Injuries  
Eric W. Edmonds, MD, Rady’s Children’s Hospital, San Diego, CA

8:05 am  Pediatric Knee OCD  
John D. Polousky, MD, Rocky Mountain Youth Sports Medicine Institute, Centennial, CO

8:20 am  Pediatric Patellar Instability  
Ronald J. Turker, MD, Kaiser Permanente Sunnybrook, Portland, OR

8:35 am  Discussion

8:40 am  **Break – Please visit Exhibits**  
Esmeralda Ballrooms 5,6,7 & 8

**General Session 2: Total Hip**  
Moderators: William C. McMaster, MD, UCI Medical Center Orthopaedics, Orange, CA & Kathryn Schabel, MD, Oregon Health and Sciences University, Portland, OR

9:00 am  Prophylactic Antibiotic Impregnated Calcium Sulfate Beads In High Risk Hip And Knee Arthroplasty  
Adam Sassoon, MD, MS, University of Washington, Seattle, WA

9:06 am  Fate Of Serum Cobalt Following Revision Of A Recalled Dual Modularity Femoral Component  
Russell Cohen, MD, Tucson Orthopedic Institute, Tucson, AZ

9:12 am  Efficacy Of Intra-Articular Hip Injections And Subsequent Surgery  
Wilson Lai, BS, David Geffen School of Medicine at University of California, Los Angeles, CA

9:18 am  Spinopelvic Mobility On Late Dislocations In Total Hip Arthroplasty  
Nathaniel Heckmann, MD, Keck School of Medicine at University of Southern California, Los Angeles, CA

9:24 am  Discussion

**Concurrent PA Session 1 – Pediatric Fractures**  
Esmeralda Boardroom  
Moderator: Jason S. Salden, PA-C, Slocum Orthopedics, Eugene, OR

9:00 am  Staying Out of Trouble and When to Refer  
Daniel Fitzpatrick, MD, Slocum Orthopedics, Eugene, OR

**Rapid Fire Session 3A – Total Hip**  
Esmeralda Ballroom 1  
Moderators: Scott T. Ball, MD, University of California, San Diego, CA & Dennis K. Collins, MD, Slocum Orthopedics, Eugene, OR

9:33 am  Hip Arthroplasty Closed Reduction: Fracture Table Technique And Clinical Experience  
Justin S. Roth, DO, Riverside County Regional Medical Center, Moreno Valley, CA

CME ACCREDITATION

The American Academy of Orthopaedic Surgeons designates this live activity for a maximum of 22 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

- **13.75 CME Credits for Scientific Program**
- **3.5 CME Credits for Scientific E-Poster Sessions**
- **4.75 CME Credits for Multimedia Education Sessions**

To ensure correct CME credit is awarded, please complete the WOA 2016 Annual Meeting CME Credit Records online at [www.woa-assn.org](http://www.woa-assn.org). CME Certificates will be awarded to all registered participants.
9:37 am | A Biomechanical Analysis Of Fixation Methods For The Posterior Malleolus
Chase Bennett, MD, Stanford University, Stanford, CA

9:41 am | Complications Following ORIF Of Closed Calcaneus Fractures In Medicare Population
Benjamin V. Kelley, BA, David Geffen School of Medicine at University of California, Los Angeles, Los Angeles, CA

9:45 am | Discussion

9:50 am | Characterization And Incidence Of Missed Posterior Malleolus Fractures
CPT Shawn Gee, MD, Tripler Army Medical Center, Honolulu, HI

9:54 am | Calcaneus Fracture And Psychiatric Illness Or Use Of Psychotropic Medication
Cory F. Janney, MD, University of Texas Medical Branch, Galveston, TX

9:58 am | Discussion

Rapid Fire Session 3D – Spine/Pediatrics | Esmeralda Ballroom Pre-Function 6-8
Moderator: Jeremy P. Bauer, MD, Shriner’s Hospital for Children, Portland, OR & Rolando F. Roberto, MD, University of California, Davis, Sacramento, CA

9:33 am | Spinal Fusion In Children With Osteogenesis Imperfecta: A Nationwide Perspective Over A 12 Year Period
Christopher M. Belyea, MD, Tripler Army Medical Center, Honolulu, HI

9:37 am | Pre-Operative Urinary Symptoms In Patients Undergoing Elective Lumbar Spine Surgery
Elizabeth Lieberman, MD, Oregon Health and Science University, Portland, OR

9:41 am | Antibiotic Therapy In A Mouse Model Of Spine Implant Infection
Daniel Johansen, BS, David Geffen School of Medicine at University of California, Los Angeles, Los Angeles, CA

9:45 am | Discussion

9:50 am | Indications And Outcomes Of Sacroiliac Arthrodesis: A Systematic Review Of The Literature
Travis Philipp, MD, Oregon Health and Science University, Portland, OR

9:54 am | Monitor Progression Of Adolescent Idiopathic Scoliosis With Scoliometer
Aaron Beck, MD, University of California Harbor Medical Center, Torrance, CA

9:58 am | Discussion

10:03 am | Break – Please visit Exhibits | Esmeralda Ballrooms 5,6,7 & 8

General Session 4 – AAOS, Presidential Guest Speaker
Moderator: John R. Tongue, MD, Cascade Orthopaedic Group, Tualatin, OR

10:23 am | Introduction of AAOS President
John R. Tongue, MD, Cascade Orthopaedic Group, Tualatin, OR

10:25 am | AAOS Report
Gerald R. Williams Jr., MD, The Rothman Institute, Philadelphia, PA

10:35 am | Introduction of Presidential Guest Speaker
John R. Tongue, MD, Cascade Orthopaedic Group, Tualatin, OR

10:40 am | Presidential Guest Speaker
Improving the Quality of Elective Orthopaedic Care – An International Problem
**Symposium 2 – Social Media in Orthopedics: Online Reputation Management and The Use of Twitter and Facebook**
Moderator: Basil R. Besh, MD, Fremont Orthopaedic & Rehabilitation Medicine, Fremont, CA

11:25 am **Online Reputation Management**
Basil R. Besh, MD, Fremont Orthopaedic & Rehabilitation Medicine, Fremont, CA

11:40 am **The Value of Twitter and Other Social Media in Orthopaedic Practice**
Ronald A. Navarro, MD, Kaiser Permanente, Harbor City, CA

11:55 am **How to get Started in Social Media...It's Easier than You Think**
Steve A. Mora, MD, Restore Orthopedics and Spine Center, Orange, CA

12:10 pm **Discussion**

12:15 pm **WOA Luncheon - Industry Presentation**
Mallinckrodt Pharmaceuticals

1:15 pm **Highly Cross Linked Polyethylene – Is Wear No Longer An Issue?**
James J. Huddleston III, MD, Stanford School of Medicine, Redwood City, CA

1:27 pm **Dual Mobility Liners: A Hip for All Seasons?**
Geoffrey H. Westrich, MD, Hospital for Special Surgery, New York, NY

1:39 pm **Bearing Surface Selections in 2016**
Jay R. Lieberman, MD, University of Southern California, Los Angeles, CA

1:51 pm **Discussion**

**Resident Review Program**

2:05 pm **Orthopaedic Career Opportunities** (Corporate, Academic, Private Practice & Non-Profit/Government)
Moderator: Robert A. Hart, MD, Swedish Hospital System, Seattle, WA

Panel:
- Chad MacLachlan, MD, Kaiser Foundation Hospital, Vallejo, CA
- Payam Tabrizi, MD, Santa Clara Valley Orthopedics, San Jose, CA
- Jacqueline Munch, MD, Oregon Health & Science University, Portland, OR
- Nicholas J. Giori, MD, PhD, Stanford University School of Medicine, Redwood City, CA
- Jennifer M. van Warmerdam, MD, San Francisco, CA

3:05 pm **ABOS Oral Board Tips And Tricks**
Residents Are Encouraged To Bring Practice Cases
Milton “Chip” Routt Jr., MD, University of Texas Health Science Center, Houston, TX
Jacqueline Munch, MD, Oregon Health & Science University, Portland, OR
Kathryn Schabel, MD, Oregon Health & Science University, Portland, OR

4:05 pm **The Importance of Staying Engaged with the Orthopaedic Community**
Omer Iahi, MD, South West Orthopedic Group/Texas Arthroscopy & Sports Medicine Institute, Houston, TX

**Friday, September 30**

6:00 am **Scientific E-Poster Session**
Esmeralda Ballrooms 1,2,3 & Pre-function 6-8
Presenters will be available to answer questions.

7:00 am **Announcements**
Robert A. Hart, MD, Program Chair

**General Session 5 – WOA/OREF Young Investigator Awards**
Moderator: Robert A. Hart, MD, Swedish Hospital System, Seattle, WA

7:05 am **Obesity Is Associated With Early Total Hip Revision For Aseptic Loosening**
Derek F. Amanatullah, MD, PhD, Stanford University School of Medicine, Redwood City, CA

7:11 am **The Scandanavian Total Ankle Replacement: Patient Outcomes At 15 Year Follow-Up**
Ariel Palanca, MD, Stanford University Medical Center, Stanford, CA

7:17 am **Vitamin D Deficiency In Patients With Osteoarthritis Undergoing Total Knee Arthroplasty**
Kathryn Schabel, MD, Oregon Health and Sciences University, Portland, OR

7:23 am **Discussion**

**Concurrent PA Session 2 – Understanding MRIs**
Moderator: Jason S. Salden, PA-C, Slocum Orthopedics, Eugene, OR

7:05 am **50 Shades of Grey: Understanding MRIs**
Richard Rolfs, MD, ProScan, Cincinnati, OH

7:30 am **Critical Findings On MR-Arthrogram In Posterior Shoulder Instability**
MAJ Joseph W. Galvin, DO, Madigan Army Medical Center, Tacoma, WA

7:36 am **Fibroadipogenic Progenitor Cells Cause Fatty Infiltration in Murine Rotator Cuff Tears**
Andrew R. Jensen, MD MBE, University of California, Los Angeles, CA

7:42 am **Curcumin’s Modulatory Effects On Inflammation In Animal Model Of Tendon Healing**
Nathan Moroski, MD, PhD, University of California, Irvine, CA

7:48 am **Knee Sepsis Following Suprapatellar Medullary Nailing Of Open Tibia Fractures**
Luke T. Nicholson, MD, University of Southern California, Los Angeles, CA

7:54 am **Digital Radiography In Total Hip Arthroplasty: Technique And Clinical Results**
Sanjum Samagh, MD, Cedars-Sinai Medical Center, Los Angeles, CA
8:00 am  Proximal Tibia Anterior Closing Wedge Osteotomy Effects On ACL Force
Kent T. Yamaguchi, MD, University of California Los Angeles, Los Angeles, CA

8:06 am  Previous Lumbar Fusion Poses Risk For Postoperative Total Hip Instability
Philip J. York, MD, University of Colorado, Aurora, CO

8:12 am  Discussion

8:20 am  Break – Please visit Exhibits  Esmeralda Ballrooms 5, 6, 7 & 8

General Session 7 – BOC Report and Howard Steel Lecture
Moderator: John R. Tongue, MD, Cascade Orthopaedic Group, Tualatin, OR

8:40 am  BOC Report
Bryan S. Moon, MD, MD Anderson Cancer Center, Houston, TX

8:50 am  Western Orthopaedic Foundation Report
Robert R. Slater Jr., MD, Folsom, CA

8:58 am  Introduction of Howard Steel Lecture
John R. Tongue, MD, Cascade Orthopaedic Group, Tualatin, OR

9:03 am  Howard Steel Lecture
Lincoln’s Sermon on the Mount: The Second Inaugural
Ronald C. White, Jr., PhD, La Canada, CA

Rapid Fire Session 8A – Sports  Esmeralda Ballroom 1
Moderators: Matthew J. Matava, MD, Washington University School of Medicine, St. Louis, MO & Dean K. Matsuda, MD, DISC Sports and Spine, Marina del Rey, CA

9:53 am  Hip Arthroscopy Trends In The United States: An Update Following Coding Changes In 2011
Jeremy Truntzer, MD, Stanford University, Redwood City, CA

9:57 am  Obesity Predicts Increased Healthcare Utilization For Patients Undergoing ACL Reconstruction
Daniel J. Lorenzana, BA, Keck School of Medicine at University of Southern California, Los Angeles, CA

10:01 am  Benzoyl Peroxide –Clindamycin Skin Preparation Decreases P-Acnes Colonization In Shoulder Arthroscopy
Wesley M. Nottage, MD, The Sports Clinic, Laguna Hills, CA

10:05 am  Discussion

10:09 am  Cyclic And Load To Failure Of All-Suture Anchors In Synthetic Bone
Nathan Douglass, MD, Stanford University Medical Center, Stanford, CA
*Presented by Tyler Johnston

10:13 am  Anterior Cruciate Ligament Injury At Time Of Pediatric Tibial Eminence Fractures
Meredith Mayo, MD, University of Colorado, Aurora, CO

10:17 am  Arthroscopic Mechanical Chondroplasty Of The Knee Is Beneficial For Treatment Of Focal Cartilage Lesions In The Absence Of Concurrent Pathology
Michael Rose, MD, Oregon Health and Science University, Portland, OR

10:21 am  Platelet-Rich Plasma In Orthopaedic Surgery: The Assessment Of Quality, Accuracy, And Readability Of Online Patient Resources
Jason H. Ghodasra, MD, MSCI, University of California, Los Angeles, Los Angeles, CA

10:25 am  Discussion

Rapid Fire Session 8B – Pediatrics  Esmeralda Ballroom 2
Moderators: Ronald J. Turker, MD, Kaiser Permanente Sunnybrook, Portland, OR & Ellen M. Raney, MD, Shriners Hospitals for Children, Portland, OR

9:53 am  Midterm Outcomes Of Growth Manipulation In Infantile Blount’s Disease
Carlos Meheux, MD, Houston Methodist Hospital, Houston, TX

9:57 am  Intrinsic Hypoplasia Of The Osseous Structures In Patients With Unilateral Clubfoot: The Influence Of Distance From The Epicenter Of Pathology
Jennifer Beck, MD, Orthopedic Institute for Children, Los Angeles, CA

10:01 am  Definitive Diagnosis Of Children Presenting To A Pediatric Emergency Department With Fever And Extremity Pain
Nicolas V. Vardiabasis, DO, Riverside University Health System, Moreno Valley, CA

10:05 am  Discussion

10:09 am  Ballistic Spine Trauma In The U.S. Pediatric Population
Mitchell C. Harris, MD, Tripler Army Medical Center, Honolulu, HI

10:13 am  Continuous Local Infusion Analgesia After Pediatric Foot And Ankle Surgery
Julia S. Sanders, MD, University of Colorado School of Medicine, Aurora, CO

10:17 am  Pediatric Orthopaedic Related Injuries Associated With Recreational Trampoline Use
John D. Johnson, DO, Tripler Army Medical Center, Honolulu, HI

10:21 am  The Use Of 3D Printers In Hip Preservation Surgery
Brian Haus, MD, Shriners Hospital Northern California, Sacramento, CA

10:25 am  Discussion

Rapid Fire Session 8C – Total Knee/Total Hip  Esmeralda Ballroom 3
Moderators: James I. Huddleston III, MD, Stanford School of Medicine, Redwood City, CA & Andrew I. Spitzer, MD, Cedars-Sinai, Los Angeles, CA

9:53 am  Precision And Reproducibility Of Tibial Component Rotation On CT Scans
Derek F. Amanatullah, MD, PhD, Stanford University School of Medicine, Redwood City, CA

9:57 am  Obesity Predicts Increased Healthcare Utilization For Patients Undergoing ACL Reconstruction
Daniel J. Lorenzana, BA, Keck School of Medicine at University of Southern California, Los Angeles, CA

10:01 am  Wound Vacuum Dressings Effect On Complications After Primary Knee Arthroplasty
CPT Joseph H. Dannenbaum, MD, Madigan Army Medical Center, Tacoma, WA
*Presented by Taylor Mansfield, MD

10:05 am  Discussion

10:09 am  Pulmonary Embolism Rates Following Total Knee Arthroplasty With Prophylactic Anticoagulation
Vincent Cheng, BA, Keck School of Medicine at University of Southern California, Los Angeles, CA

10:13 am  Tribocorrosion In Primary THA With Metal On Polyethylene Bearings
John T. Dearborn, MD, Institute for Joint Restoration and Research, Fremont, CA
10:17 am Total Hip Replacement Using Anatomic Head Size Has Low Dislocation Rate In High Risk Patients
William T. Long, MD, Good Samaritan Hospital, Los Angeles, CA

10:21 am Properly Selected Homeless Veterans Have Good Outcomes Following TJA
Laura Lu, BS, Stanford University, Stanford, CA

10:25 am Discussion

Rapid Fire Session 8D – Basic Science/Other Esmeralda Ballroom Pre-Function 6-8
Moderators: William McMaster, MD, UCI Medical Center Orthopaedics, Orange, CA & Jacqueline Munch, MD, Oregon Health & Science University, Portland, OR

9:53 am Creation Of A Clinically Accurate Biomechanical Model For Vertical Femoral Neck Fractures
Christopher Bui, MD, University of California, Irvine, Orange, CA

9:57 am Biomechanical Analysis Of A Novel Buried Fixation Technique Using Headless Compression Screws
Alisa Alayan, MD, Cedars Sinai Medical Center, Los Angeles, CA

10:01 am Ulnar Variance For Diagnosing Essex-Lopresti Injury And Radiocapitellar Overstuffing
Garet C. Corner, MD, Stanford University School of Medicine, Redwood City, CA
*Presented by Gabrielle M. Pacl, MD

10:05 am Discussion

10:09 am Influence Of Female Orthopaedic Surgery Faculty On Female Residency Applicants
Alana M. Munger, BS, Keck School of Medicine at University of Southern California, Los Angeles, CA

10:13 am Intramedullary Nailing Of Sarcoma Bone Metastases
Bryan Moon, MD, MD Anderson Cancer Center, Houston, TX

10:17 am Postoperative Hypothermia In Orthopaedic Surgery: Incidence And Risk Factors
John P. Kleimeyer, MD, Stanford University, Redwood City, CA

10:21 am Cost Minimization Analysis for the Treatment of Acute Achilles Tendon Ruptures
Jeremy Truntzer, MD, Stanford University, Redwood City, CA

10:25 am Discussion

Concurrent PA Session 3 – Ultrasound Usage Esmeralda Boardroom
Moderator: Jason S. Salden, PA-C, Slocum Orthopedics, Eugene, OR

9:53 am Hands-On Ultrasound Usage
Richard Rolles, MD, ProScan, Cincinnati, OH

10:30 am Break – Please visit Exhibits Esmeralda Ballrooms 5,6,7 & 8

Symposium 4 – Modern Trauma Pitfalls and Solutions
Moderator: Milton “Chip” Routt Jr., MD, University of Texas Health Science Center, Houston, TX

10:50 am Resolving Selection Conflict - Sliding Hip Screw or IM Nail for Intertrochanteric Femur Fractures
Marc F. Swiontkowski, MD, University of Minnesota, Minneapolis, MN

10:53 am The Syndesmosis Injury in 2016 - Current Concepts and Controversies
Michael J. Gardner, MD, Stanford University School of Medicine, Stanford, CA

6:00 am Scientific E-Poster Session
Esmeralda Ballrooms 1,2,3,4 & Pre-function 6-8
Presenters will be available to answer questions. Poster awards decided.

11:14 am The Unstable Patient with an Unstable Pelvic Ring Injury - What, When, How, and Why
Milton “Chip” Routt Jr., MD, University of Texas Health Science Center, Houston, TX

11:26 am Discussion and Case Presentations

11:38 am WOA Luncheon - Industry Presentation
THINK Surgical
Active Robotics for Total Joint Replacement
William L. Barger, MD
DT MedSurg, LLC, a Data Trace Company (Seminar presentation supported by an unrestricted grant from Pacira Pharmaceuticals, Inc.)

*Presented by Gabrielle M. Paci, MD

Symposium 5 – Management of Metastatic Spine Disease
Moderator: Jacob M. Buchowski, MD, Washington University School of Medicine, St. Louis, MO

12:38 pm Introduction
Jacob M. Buchowski, MD, Washington University School of Medicine, St. Louis, MO

12:39 pm Operative Treatment
Paul Santiago, MD, Washington University School of Medicine, St. Louis, MO

12:51 pm Radiation Therapy
Clifford G. Robinson, MD, Washington University School of Medicine, St. Louis, MO

1:03 pm Interventional/Nonsurgical Treatment
Jack W. Jennings, MD, PhD, Washington University School of Medicine, St. Louis, MO

1:15 pm Case Discussion

1:30 pm Scientific E-Poster Session
Esmeralda Ballrooms 1,2,3 & Pre-function 6-8
Presenters will be available to answer questions. Poster awards decided.

2:30 pm Multimedia Education Session Esmeralda Ballroom Foyer

Saturday, October

6:00 am Scientific E-Poster Session
Esmeralda Ballrooms 1,2,3 & Pre-function 6-8
Presenters will be available to answer questions.

7:00 am Second Business Meeting

General Session 9 – Total Knee/Upper Extremity
Moderators: Jonathan T. Bravman, MD, University of Colorado, Boulder, CO & Robert J. Feibel, MD, University of Ottawa, Ottawa, ON

7:15 am A Safe And Effective Protocol To Minimize Blood Transfusion And Venous Thromboembolic Disease After Primary Total Hip And Knee Arthroplasty
Joshua Campbell, MD, Cedars-Sinai, Los Angeles, CA

7:21 am Prospective, Randomized Evaluation Of The Quality Of Wound Closure With Barbed Versus Standard Suture After TJA
Alexander P. Sah, MD, Institute for Joint Restoration, Fremont, CA
7:27 am  Uncemented Tantalum Patellar Components Have A High Fracture Rate  
Jeramy Y. Chan, MD, Stanford University, Stanford, CA

7:33 am  Digital Tomography For Detection Of Acute Occult Scaphoid Fractures  
Liang Zhou, MD, Tripler Army Medical Center, Honolulu, HI

7:39 am  Insurance Status Affects Postoperative Morbidity And Complication Rate After Shoulder Arthroplasty  
Paul H. Yi, MD, University of California, San Francisco, San Francisco, CA  
*Presented by Joseph W. Galvin, DO

7:45 am  Discussion

**Concurrent PA Session 4 – Casting** Esmeralda Boardroom
Moderator: Jason S. Salden, PA-C, Slocum Orthopedics, Eugene, OR

7:15 am  Casting Pearls  
Jarred Gibson, ATC, Slocum Orthopedics, Eugene, OR

**Rapid Fire Session 10A - Total Knee** Esmeralda Ballroom 1
Moderators: Brian A. Jewett, MD, Slocum Orthopedics, Eugene, OR & Kathryn Schabel, MD, Oregon Health and Sciences University, Portland, OR

7:53 am  Preoperative Systemic Sepsis in Prosthetic Joint Infection  
Grace Xiong, BA, Stanford University, Stanford, CA

7:57 am  More Bang For Your Bundle: Oxinium Femurs On All-Polyethylene Tibias  
Adam Sasson, MD, MS, University of Washington, Seattle, WA

8:01 am  Varus Tibial Alignment In TKA Decreases Strain In Cadaveric Tibias  
Paul Mead, MD, St. Mary’s Medical Center, San Francisco, CA

8:05 am  Discussion

8:11 am  Tibial Component Rotation Based On Landmark Selection And Surgeon Experience  
Derek F. Amannullah, MD, PhD, Stanford University School of Medicine, Redwood City, CA

8:15 am  Claims versus Registry: Capturing Outcomes In Total Joint Arthroplasty  
Joseph T. Patterson, MD, University of California, San Francisco, San Francisco, CA

8:19 am  Knee Flexion At Time Of Hospital Discharge As Indication Of Ultimate Range Of Motion After Total Knee Arthroplasty  
Alexander P. Safi, MD, Institute for Joint Restoration, Fremont, CA

8:24 am  Discussion

**Rapid Fire Session 10B – Trauma** Esmeralda Ballroom 2
Moderators: Amer J. Mirza, MD, Summit Orthopaedics, Portland, OR & John A. Scolaro, MD, University of California, Irvine, Orange CA

7:53 am  Do You Know When Your Open Fractures Actually Receive Antibiotics?  
Justin F. Lucas, MD, UC Davis Health System, Sacramento, CA

7:57 am  Locked Plate Fixation Of Complex Comminuted Patellar Fractures  
Tyler Moore, MD, University of California, Irvine, Orange, CA

8:01 am  Race And Gender Influence Management Of Humerus Shaft Fracture  
Dayton M. Opel, MD, Oregon Health & Science University, Portland, OR

8:05 am  Discussion

8:09 am  Provisional Plating Of Closed Tibia Fractures  
Justin Haller, MD, Harborview Medical Center, Seattle, WA  
*Presented by Michael Githens, MD

8:13 am  Can Manual Palpation To Detect Compartment Syndrome Be Taught?  
Samuel E. Galle, MD, University of California, Irvine, Orange, CA  
*Presented by Philip K. Lim, BS, MD

8:17 am  Reduction Of Posterior Pelvic Ring Through Reduction Of Anterior Ring  
Krishna C. Vemulapalli, MD, University of Texas Health, Houston, TX

8:21 am  Mini-Fragment Fixation Is Equivalent To Bicortical Screws For Horizontal Medial Malleolus Fractures  
Adam M. Wegner, MD, PhD, University of California Davis Medical Center, Sacramento, CA

8:25 am  Discussion

**Rapid Fire Session 10C – Upper Extremity** Esmeralda Ballroom 3
Moderators: Robert M. Orfaly, MD, Oregon Health & Sciences University, Portland, OR & John G. Costouros, MD, FACS, Stanford Health Care, Redwood City, CA

7:53 am  Bennett Fractures: A Biomechanical Model and Its Relevant Ligamentous Anatomy  
Jason R. Kang, MD, Stanford University School of Medicine, Stanford, CA

7:57 am  Is The Appropriate Use Criteria For Type II Supracondylar Humerus Fractures Really Appropriate?  
Howard Y. Park, MD, University of California at Los Angeles, Los Angeles, CA  
*Presented by Mauricio Silva, MD

8:01 am  Operative Management Of Rotator Cuff Tears In The Medicare Population  
Andrew R. Jensen, MD MBE, University of California at Los Angeles, Los Angeles, CA

8:05 am  Discussion

8:09 am  Effect Of Wrist And Finger Loading And Thumb Position On Scaphoid Fracture Displacement  
Tyler Moore, MD, University of California, Irvine, Orange, CA

8:13 am  Reduced-Dose Computed Tomography To Detect Radius Screw Penetration  
Kevin J. Leffers, MD, University of Texas Medical Branch, Galveston, TX  
*Presented by Ronald W. Lindsey, MD

8:17 am  Premorbid Version Affects Pathologic Morphology In Patients Undergoing Total Shoulder Arthroplasty  
Michael H. Amini, MD, Southwest Orthopaedic Surgery Specialists, Tucson, AZ

8:21 am  Characterizing the Propionibacterium Load in Revision Shoulder Arthroplasty - A Study of 137 Culture Positive Cases  
Zahab S. Ahsan, MD, University of Washington, Seattle, WA

8:25 am  Discussion

**Rapid Fire Session 10D – Spine** Esmeralda Ballroom Pre-Function 6-8
Moderators: Nitin N. Bhatia, MD, University of California, Irvine, Irvine, CA & Eric Klineberg, MD, University of California, Davis, Sacramento, CA

7:27 am  Uncemented Tantalum Patellar Components Have A High Fracture Rate  
Jeramy Y. Chan, MD, Stanford University, Stanford, CA
7:53 am  Lumbar MRI Findings In Patients With And Without Waddell Signs  
John S. Cox, MD, Oregon Health and Science University, Portland, OR

7:57 am  Chondrosarcoma Of The Osseous Spine: An Analysis Of 974 Cases Using The SEER Registry  
Armin Arshi, BS, David Geffen School of Medicine at University of California, Los Angeles, Los Angeles, CA

8:01 am  Does Age Influence The Outcome Of Demineralized Bone Matrix Enriched With Concentrated Bone Marrow Aspirate In Lumbar Fusions?  
Remi M. Ajiboye, MD, MPH, University of California at Los Angeles, Los Angeles, CA

8:05 am  Discussion

8:11 am  The Routine Use Of Intraoperative Neuromonitoring During ACDFs For The Treatment Of Spondylotic Myelopathy And Radiculopathy Is Questionable: A Review Of 15395 Cases  
Remi M. Ajiboye, MD, MPH, University of California at Los Angeles, Los Angeles, CA

8:15 am  Quality Measures In Spine Surgery  
Chase Bennett, MD, Stanford University, Stanford, CA

8:19 am  Validation Of The ICD-9 Invasiveness Index For Spine Surgery  
David J. Wright, MS, University of California, Irvine, Orange, CA

8:23 am  Discussion

8:30 am  Break – Please Visit Exhibits  
Esmeralda Ballrooms 5,6,7 & 8

Symposium 6 – Shoulder/Elbow  
Moderator: Robert M. Orfaly, MD, Oregon Health & Sciences University, Portland, OR

8:55 am  The Role of Reverse TSA for Cuff Deficiency and Revision  
Robert M. Orfaly, MD, Oregon Health & Sciences University, Portland, OR

9:07 am  Use of RTSA for Fracture and Complex Instability  
Jonathan T. Braman, MD, CU Sports Medicine Center, Denver, CO

9:19 am  Reverse Arthroplasty: Is Over Utilization a Problem?  
Gerald R. Williams Jr., MD, The Rothman Institute, Philadelphia, PA

9:31 am  Discussion

General Session 11 – OREF and Presidential Address  
Moderator: Robert A. Hart, MD, Swedish Hospital System, Seattle, WA

9:45 am  OREF Update  
Richard F. Santore, MD, San Diego, CA

9:50 am  JBJS Update  
Marc F. Swiontkowski, MD, University of Minnesota, Minneapolis, MN

9:55 am  Presidential Address  
Roadway Trauma: Patterns and Prevention  
John R. Tongue, MD, Cascade Orthopaedic Group, Tualatin, OR

Symposium 7 – Shoulder Dislocations  
Moderator: Richard A. Marder, MD, University of California, Davis, Sacramento, CA

10:25 am  Arthroscopic Labral Repair for Recurrent Anterior Dislocation

10:32 am  Management of Recurrent Posterior Dislocation

10:39 am  Management of Multi-Directional Instability

10:46 am  Treatment of Anterior Dislocation with Glenoid Bone Loss

10:53 am  Interesting Cases, Panel and Audience Participation  
Panel:  
C. Benjamin Ma, MD, University of California, San Francisco, San Francisco, CA
James Van den Bogaerde, MD, University of California, Davis, Sacramento, CA
Richard A. Marder, MD, University of California, Davis, Sacramento, CA

11:00 am  WOA Luncheon - Industry Presentation  
Legally Mine  
Art McOmber, Orem, UT  
*CME Credit Not Available

General Session 12 – Sports/Trauma  
Moderators: Marc F. Swiontkowski, MD, University of Minnesota, Minneapolis, MN & Omer Ilahi, MD, South West Orthopedic Group/Texas Arthroscopy & Sports Medicine Institute, Houston, TX

11:55 am  Biologic Augmentation Of Microfracture For Treatment Of Symptomatic Chondral Defects Of The Knee: A Systematic Review  
Armin Arshi, BS, David Geffen School of Medicine at University of California, Los Angeles, Los Angeles, CA

12:01 pm  Cadaveric Intraarticular Pressure With Gravity And Pump Arthroscopic Systems  
Meredith Mayo, MD, University of Colorado, Aurora, CO  
*Presented by Jonathan T. Braman, MD

12:19 pm  Effects Of Low Serum Albumin On Outcomes After Knee Arthroscopy  
Remi M. Ajiboye, MD, MPH, University of California at Los Angeles, Los Angeles, CA

12:25 pm  Discussion

12:30 pm  Does Contralateral Templating Reliably Estimate Femoral Version for Fracture Fixation?  
Daniel J. Lorenzana, BA, Keck School of Medicine at University of Southern California, Los Angeles, CA

12:36 pm  Are Early Career Orthopaedic Surgeons Performing Less Complex Trauma Surgery?  
Jacob D. Gire, MD, Stanford University, Redwood City, CA

12:41 pm  Discussion

12:45 pm  Scientific E-Poster Session  
Esmeralda Ballrooms 1,2,3 & Pre-function 6-8  
Presenters will be available to answer questions.

1:45 pm  Multimedia Education Session  
(Esmeralda Ballroom Foyer)
**Scientific Poster Presentations Esmeralda Ballroom 1, 2, 3, 6 & Pre-Function 8**

### STATION A - Esmeralda Ballroom 1

#### Basic Science

**Poster 1:** Characterization of Mesenchymal Stem/Stromal Cells in Bone Marrow Aspirate Concentrates  
Malcolm R. DeBaun, MD, Stanford University Medical Center, Palo Alto, CA  
*Presented by Jacob D. Gire, MD*

**Poster 2:** Creating A Method Of Strain Analysis For The Proximal Tibia  
Bo He, MD, San Francisco Orthopaedic Residency Program, San Francisco, CA

**Poster 3:** Adipose Derived Perivascular Stem Cells For Anterior Cruciate Ligament Regeneration  
Robert C. Maciel, BS, MS, University of California Los Angeles, Los Angeles, CA

#### Other

**Poster 4:** Drilling Time And Far Cortex Penetration: A Cadaveric Study  
J. Ryan Hill, BA, BS, Keck School of Medicine at University of Southern California, Los Angeles, CA  
*Presented by William C. Pannell, MD*

**Poster 5:** Transillumination As An Adjunct Diagnostic Tool For Ganglion Cysts  
J. Ryan Hill, BA, BS, Keck School of Medicine at University of Southern California, Los Angeles, CA  
*Presented by Nathanael Heckmann, MD*

**Poster 6:** Prevalence Of Marijuana Use In Orthopaedic Patients: A Multicenter Survey  
Alan J. Hwang, BS, University of Southern California, Los Angeles, CA

**Poster 7:** The State Of Musculoskeletal Education In California Medical Schools: A Comprehensive Analysis  
Tim Wang, MD, Stanford University Medical Center, Stanford, CA

#### Total Hip

**Poster 8:** Inadvertent Muscle Damage: Direct Anterior versus Direct Superior  
Derek F. Amanatullah, MD, PhD, Stanford University School of Medicine, Redwood City, CA

**Poster 9:** Operative Notes Are Inadequate For Planning Revision Total Hip Replacement  
Derek F. Amanatullah, MD, PhD, Stanford University School of Medicine, Redwood City, CA

**Poster 10:** Academic Productivity Among Fellowship Associated Adult Total Joint Reconstruction Surgeons  
Adam Z. Khan, BS, David Geffen School of Medicine at University of California Los Angeles, Los Angeles, CA  
*Presented by Jason H. Ghodasra, MD*

#### Total Knee

**Poster 11:** Elevated Body Mass Index Is Associated With Early Total Knee Revision For Infection  
Derek F. Amanatullah, MD, PhD, Stanford University School of Medicine, Redwood City, CA

**Poster 12:** Inadequacy Of Operative Notes For Planning Revision Total Knee Arthroplasty  
Derek F. Amanatullah, MD, PhD, Stanford University School of Medicine, Redwood City, CA

**Poster 13:** Evaluation Of A New Cementless TKA Design  
Russell G. Cohen, MD, Tucson Orthopedic Institute, Tucson, AZ

**Poster 14:** Outcomes Of TJR Patients In LA County  
Cory H. Pham, MD, University of California Los Angeles Medical Center, Los Angeles, CA  
*Presented by Martina Shoukralla, BS*

**Poster 15:** Initial Experience With Next Day Discharge After Total Knee Arthroplasty  
Alexander P. Sah, MD, Institute for Joint Restoration, Fremont, CA

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### STATION B - Esmeralda Ballroom 2

#### Foot & Ankle

**Poster 16:** Delayed ORIF Of Missed, Low Energy Lisfranc Injuries  
Spenser J. Cassinelli, MD, Harbor University of California Medical Center, Torrance, CA

**Poster 17:** Lisfranc ORIF In An Athletic Population: Screw Fixation Vs. Suture Button Fixation  
CPT Shawn Gee, MD, Tripler Army Medical Center, Honolulu, HI

**Poster 18:** The Effect Of Insurance On The Treatment Of Tibialtalar Osteoarthritis  
Nathaniel Heckmann, MD, Keck School of Medicine at University of Southern California, Los Angeles, CA

**Poster 19:** Chevron-Akin Double Osteotomy In Mild, Moderate, And Severe Hallux Valgus  
Robert W. Lindeman, MD, University of Texas Medical Branch, Galveston, TX

**Poster 20:** Hindfoot Arthrodesis With Tricortical Allograft For Pes Planovalgus Deformity Updated  
Eric Q. Pang, MD, Stanford University, Stanford, CA  
*Presented by Jeremy Y. Chan, MD*

#### Sports Medicine

**Poster 21:** What Do Adolescent Athletes And Their Guardians Want In Their Sports Medicine Surgeon?  
Jennifer Beck, MD, Orthopedic Institute for Children, Los Angeles, CA

**Poster 22:** Injury Prediction Value Of Functional Movement Screening In Collegiate Athletes  
James Chen, MD, University of California Los Angeles, Los Angeles, CA

**Poster 23:** Hylan GF-20 Effectiveness In The Treatment Of Compartmentalized Knee Osteoarthritides  
Wendell Cole III, BS, Morehouse School of Medicine, Atlanta, GA

**Poster 24:** Radiographic Comparison Of Elbow OCD, UCL Injuries And Healthy-Controls In Adolescent-Athletes  
Brian Lau, MD, University of California San Francisco Medical Center, San Francisco, CA  
*Presented by Joseph T. Patterson, MD*

**Poster 25:** Ethnic Disparities In Patient-Reported Outcomes Following Rotator Cuff Repair  
Daniel J. Lorenzana, BA, Keck School of Medicine at the University of Southern California, Los Angeles, CA

**Poster 26:** ASSET Validity And Simulation Knee Model Arthroscopy For Resident Education  
Jacqueline Munch, MD, Oregon Health and Science University, Portland, OR

**Poster 27:** Landing Patterns At The Reno Pole Vault Summit  
Jacqueline K. Nguyen, MD, San Francisco Orthopedic Residency Program, San Francisco, CA

**Poster 28:** Isolated Lateral Collateral Ligament Injuries: A Rare Injury Now Frequently Seen Among Mixed Martial Artists  
M. Kareem Shaath, MD, Rutgers - New Jersey Medical School, Newark, NJ

#### Tumor

**Poster 29:** Juxta-Articular Osteoid Osteoma Of The Knee: A Case Report  
CPT Matti P. Asuma, MD, Madigan Army Medical Center, Tacoma, WA
**Scientific Poster Presentations**

**Esmeralda Ballroom 1, 2, 3 & Pre-Function 6-8**

**STATION C - Esmeralda Ballroom 3**

**Trauma**

**Poster 30:** Factors Influencing Infection And Nonunion Rates After Open Humerus Fractures  
Brian M. Cash, MD, University of California Los Angeles Orthopaedic Surgery, Los Angeles, CA

**Poster 31:** Hardware Removal In Dual Mini-Fragment Fixation Of Clavicular Shaft Fractures  
Cory M. Czajka, MD, University of Texas at Houston, Houston, TX  
*Presented by Andrew B. Kay, MD

**Poster 32:** CT Scan In Management Of Ankle Fractures Involving The Posterior Malleolus  
Steven D. Donohoe, MD, LAC/USC Medical Center, Los Angeles, CA

**Poster 33:** The Value Of A Dedicated Orthopaedic Trauma Room  
Katherine J. Gavin, MD, University of New Mexico, Albuquerque, NM

**Poster 34:** Sacral Insufficiency Fractures: Determining Frequency And Defining The Patient Profile  
Hanne A. Gehling, BS, Providence Health and Services, Portland, OR

**Poster 35:** Surgical Treatment Of Intertrochanteric Fractures: An Analysis Of 13,276 Hips  
Nathanael Heckmann, MD, Keck School of Medicine at the University of Southern California, Los Angeles, CA

**Poster 36:** Pocket-Sized Ultrasound To Assess Distal-RADIUS Fractures And Quality Of Closed-Reduction  
Brian Lau, MD, University of California San Francisco Medical Center, San Francisco, CA  
*Presented by Joseph T. Patterson, MD

**Poster 37:** Midshaft Forearm Fractures: Demographics And Complication Rates Within Medicare Population  
Robert C. Maciel, BS, MS, University of California Los Angeles, Los Angeles, CA

**Poster 38:** Post-Ambulatory Radiographs Do Not Change Management Of Pelvic Ring Injuries  
Luke T. Nicholson, MD, University of Southern California, Los Angeles, CA

**Poster 39:** Early Clinical Experience With The SIGN Hip Construct  
Justin S. Roth, DO, Riverside County Regional Medical Center, Moreno Valley, CA

**Poster 40:** Complications Associated With Proximal Tibial Traction Pins  
Michael Stefl, MD, University of Southern California, Los Angeles, CA

**Poster 41:** Traumatic Hip Dislocations And Associated Injuries In A Level I Trauma Center  
Justin U. Tilian, MD, University of Southern California, Los Angeles, CA

**Poster 42:** Operative Versus Non-Operative Treatment Of Proximal Humerus Fractures: Demographics, Trends, & Complications In A Large National Healthcare Database  
Peter S. Vezeridis, MD, University of California Los Angeles, Los Angeles, CA

**Poster 43:** Sled Fixation For Horizontal Medial Malleolus Fractures  
Adam M. Wegner, MD, PhD, University of California Davis Medical Center, Sacramento, CA

**Poster 44:** Staged Reconstruction Of Long Bone Defects: Surgical And Patient Outcomes  
Stephen D. Zoller, MD, University of California Los Angeles, Los Angeles, CA

**STATION D - Esmeralda Ballroom Pre-Function 6-8**

**Upper Extremity**

**Poster 45:** Preoperative Morphology Affects Periprosthetic Osteolysis In Augmented Polyethylene Glenoids For Osteoarthrits  
Michael H. Amini, MD, Southwest Orthopaedic Surgery Specialists, Tucson, AZ

**Poster 46:** Carpal Translocation Following Bridge Plate Fixation Of Distal Radius Fractures  
Ali Azad, MD, University of Southern California, Los Angeles, CA

**Poster 47:** Distal Scaphoid Resection Arthroplasty Versus Four Corner Fusion For The Treatment Of Young Patients With Scaphoid Nonunions And Arthritis  
Christopher M. Belyea, MD, Tripler Army Medical Center, Honolulu, HI

**Poster 48:** Dorsal Bridge Plating Distal Radius Fractures In The Elderly  
J. Ryan Hill, BA, BS, Keck School of Medicine at the University of Southern California, Los Angeles, CA  
*Presented by Nathanael Heckmann, MD

**Poster 49:** Trends In Nonvascularized Bone Grafting For Nonunion Of The Scaphoid  
J. Ryan Hill, BA, BS, Keck School of Medicine at the University of Southern California, Los Angeles, CA

**Poster 50:** Combined Arthroscopic Anterior and Open Posterior Approach to the Arthritic Elbow  
Todd S. Kim, MD, Palo Alto Medical Foundation- Burlingame Division, Burlingame, CA

**Poster 51:** In-Vivo Analysis Of The Long Head Of The Biceps Tendon Characteristics In Relation To Subpectoral Biceps Tenodesis  
Christopher L. McCrum, MD, Keck School of Medicine at the University of Southern California, Los Angeles, CA

**Poster 52:** Effect Of Nerve Blocks On Outcomes After Distal Radius Fractures  
Bradon M. McKnight, BS, Keck School of Medicine at the University of Southern California, Los Angeles, CA

**Poster 53:** Factors Influencing Readmission Following Operative Fixation Of Distal Radius Fractures  
Bradon M. McKnight, BS, Keck School of Medicine at the University of Southern California, Los Angeles, CA

**Poster 54:** Reliability Of The Sirveaux Classification Of Scapular Notching  
Bradon M. McKnight, BS, Keck School of Medicine at the University of Southern California, Los Angeles, CA

**Poster 55:** Re-Defining Flexor Zone II: The FDS Footprint  
Luke T. Nicholson, MD, University of Southern California, Los Angeles, CA

**Poster 56:** H-Taping For Fixation Of Partial A2 Pulley Tears In Rockclimbers  
Alexander Telis, MD, MS, University of New Mexico, Albuquerque, NM

**Poster 57:** National Trends In Elbow Lateral Collateral Ligament Repair & Reconstruction In A Large Private Healthcare Database  
Peter S. Vezeridis, MD, University of California Los Angeles, Los Angeles, CA

**Poster 58:** Patient Demographics and Complications Following Operative Treatment Distal Radius Fractures  
Kent T. Yamaguchi, MD, University of California Los Angeles, Los Angeles, CA

**Poster 59:** Introducing And Comparison An Affordable And Effective Technique For The Treatment Of Distal Radius Fractures  
Hamed Yazdanshenas, MD, University of California Los Angeles, Los Angeles, CA
**A** Meeting Registration, Speaker Ready Room, Technical Exhibits, E-Posters, Scientific Sessions & Symposia, PA Sessions, Multimedia Education Sessions, Industry Presentations, Resident Review Program, Resident Reception, Exhibitor Reception, Kids’ Party
*Esmeralda Ballrooms 1-8, Pre-Function, and Foyer*

**B** Spouse/Children’s Hospitality, Spouses’ Discussion with Ron White
*Malta Room A & B (2nd Floor)*

**Regional and AAOS Presidents’ Breakfast**
*Monte Carlo Room (2nd Floor)*

**C** New Member Reception
*Presidential Suite, Hotel Room #7057*

**D** Welcome Reception
*Rose Lawn*

**E** Tour Departures
*Hotel Lobby*

**F** Gala Dinner
*Crystal Ballroom*