



Western Orthopaedic Association

81st Annual Meeting

August 2-5, 2017 🌸 Grand Hyatt Kauai Resort 🌸 Kauai, Hawaii



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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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WOA President's Welcome



Dear Colleagues,

As President of the WOA this year, I am honored to extend a warm Hawaiian ALOHA Welcome to the 2017 Annual Meeting on the tropical paradise island of Kauai. I hope you will agree the Grand Hyatt – Kauai is a terrific venue for families, friends, spouses and significant others to unwind from the stresses and strains of life on the mainland.

The scientific program is headed up by **Omer Ilahi, MD**. Give Omer and the entire Program Committee a high five for the magnificent job they did synthesizing a program that will be unparalleled as a source of what is new and exciting across all aspects of our profession.

On Thursday afternoon, there is an exciting program geared specifically for **Residents and Fellows**. For the first time ever, this program is a collaborative venture with the AAOS. **Jennifer van Warmerdam, MD** and her committee have done a superb job putting that together.

Peter Stern, MD will deliver this year's keynote lecture as my Presidential Guest Speaker. Peter is a world renowned hand surgeon and past president of the ASSH and ABOS, among other accomplishments. His presentation will be a fascinating look at how Orthopaedics has changed and continues to change.

Walter Cunningham will deliver the Howard Steel Lecture. Walt was one of the three astronauts on Apollo 7, the first manned mission in the Apollo series of NASA's space program. His life after NASA has been full of entrepreneurial adventures. Walt's comments about the importance of the space program as a focal point of shared excitement in the midst of social upheaval across the nation will resonate today more than ever.

There is a plethora of **fun activities** available for everyone here, and something for every level of sports and leisure enthusiast. Please let the meeting management staff or me know if there is anything we can do to facilitate your activities. Above all, we want to ensure a great experience for all attendees.

Mary Allan is my significant other and she has a great program lined up for spouses, guests and significant others while the rest of us are in conference. We hope you will join Mary Thursday morning for "Breakfast with an Astronaut!" Also, join Mary for yoga on the beach Friday morning. Other details and event listings are available at the registration desk.

Mahalo for your interest, engagement and participation in this year's meeting.

Bob

Robert R. Slater Jr., MD

Program Chair



Omer A. Ilahi, MD
Houston, TX

Southwest Orthopedic Group / Texas
Arthroscopy & Sports Medicine Institute

Presidential Guest Speaker



Peter F. Stern, MD
Cincinnati, OH

**Impact Developments in Hand
During My Lifetime**
Thursday, 9:20 am

Howard Steel Lecturer



Walter Cunningham
Houston, TX

The Golden Age of Space Flight
Friday, 9:10 am

Summary of Events

See Scientific Program for times for all CME Activities

Wednesday, August 2

12:00 pm – 5:00 pm
Board of Directors Meeting
Garden Isle Rooms 4 & 5

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

12:00 pm – 5:00 pm
Exhibit Setup
Grand Ballrooms 2,3,4 & 5

12:00 pm – 5:00 pm
Speaker Ready Area
Garden Isle Room 2

Thursday, August 3

6:00 am – 6:45 am
Scientific E-Poster Session
Kauai Ballrooms 1,2,3 & 4
Presenters will be available to answer questions.

6:00 am – 1:45 pm
Speaker Ready Area
Garden Isle Room 2

6:30 am – 1:45 pm
Meeting Registration
Grand Ballroom Foyer

6:45 am – 7:00 am
First Business Meeting
Grand Ballrooms 1,6 & 7

6:45 am – 1:45 pm
Technical Exhibits, Continental Breakfast, Coffee Breaks and Daily Drawing
Grand Ballrooms 2,3,4 & 5

7:00 am – 1:45 pm
Scientific Program
Grand Ballrooms 1,6 & 7

8:30 am – 10:00 am
◆ Guest/Children's Hospitality Breakfast with an Astronaut!
Dondero's Restaurant
Join your friends and meet new ones while enjoying a continental breakfast and learning about space from Astronaut Walt Cunningham.
Price: Included in Registration Fee or \$40 per Unregistered Adult Guest and \$20 per Child (5-17 years)

8:40 am – 9:00 am
Break – Please visit Exhibits
Grand Ballrooms 2,3,4 & 5

KEY

⊙ **Activity/Tour**
◆ **Social Event**

* **Special Presentation**
★ **Allied Health Session**

9:20 am – 9:50 am
* **Presidential Guest Speaker**
Grand Ballrooms 1,6 & 7
Impact Developments in Hand During My Lifetime
Peter J. Stern, MD, University of Cincinnati College of Medicine

9:55 am – 10:45 am
★ **Concurrent Allied Health Session 1 - Knee & Shoulder**
Kauai Ballrooms 5 & 6

10:25 am – 10:45 am
Break – Please visit Exhibits
Grand Ballrooms 2,3,4 & 5

11:45 am – 12:45 pm
* **WOA Luncheon – Industry Presentations**
Ethicon, US, LLC
Mallinckrodt Pharmaceuticals, Inc.
* **CME Credit Not Available**
Grand Ballrooms 1,6 & 7

12:30 pm – 5:30 pm
⊙ **Waimea Canyon Tour** * **Please eat prior to tour.**
Meet at group entrance in front of Kauai Ballroom
This tour takes you to the rim of one of the most awe-inspiring sites in Hawaii—Waimea Canyon, the “Grand Canyon of the Pacific.” Thousands of years of erosion have turned the canyon walls into a multi-hued canvas, where shadows and light produce a never-ending show. This tour also offers a spectacular view of Kauai’s western coast.
Price: \$62 per Adult (13 and older) / \$50 per Child (12 and under)

1:45 pm – 2:45 pm
* **Industry Presentation**
Legally Mine
* **CME Credit Not Available**
Grand Ballrooms 1,6 & 7

1:45 pm – 2:45 pm
Scientific E-Poster Session
Kauai Ballrooms 1,2,3 & 4
Presenters will be available to answer questions.

1:45 pm – 5:00 pm
* **AAOS/WOAResident Review Program**
Kauai Ballrooms 5 & 6

2:45 pm – 5:00 pm
Multimedia Education Session
Garden Isle Room 2

5:00 pm – 6:00 pm
◆ **Resident Reception**
Kauai Ballroom Foyer
All Residents are invited to attend this reception.
Attire: Resort Casual
Price: Included in Registration Fee

6:15 pm – 7:00 pm
◆ **New Member Reception**
Grand Lawn Gazebo
All WOA new members are invited to attend this reception. The WOA Board, and other leadership, would like to take this opportunity to welcome you to the WOA.
Attire: Resort Casual
Price: Included in Registration Fee

Summary of Events

See Scientific Program for times for all CME Activities

KEY

- ⦿ Activity/Tour
- ✦ Social Event

- ✦ Special Presentation
- ★ Allied Health Session

7:00 pm – 9:30 pm

✦ Welcome Reception

Ilima Gardens

Have a wonderful evening overlooking the ocean and enjoying the Hawaiian breezes. You'll savor delicious food delicacies and open bar while chatting with friends and colleagues. Take pleasure in the Hawaiian entertainment and soak in the "Kauai" experience.

Attire: Resort Casual (no jacket required and spike heels not recommended)

Price: Included in Registration Fee or \$100 per Unregistered Adult Guest, \$50 per Unregistered Child (5-17 years)

Friday, August 4

6:00 am – 7:00 am

Regional and AAOS Presidents' Breakfast Meeting with State Presidents and Board of Councilors

Garden Isle Rooms 4 & 5

6:00 am – 7:00 am

Scientific E-Poster Session

Kauai Ballrooms 1,2,3 & 4

Presenters will be available to answer questions.

6:00 am – 1:25 pm

Speaker Ready Area

Garden Isle Room 2

6:30 am – 1:25 pm

Meeting Registration

Grand Ballroom Foyer

6:45 am – 1:25 pm

Technical Exhibits, Continental Breakfast, Coffee Breaks and Daily Drawing

Grand Ballrooms 2,3,4 & 5

7:00 am – 1:25 pm

Scientific Program

Grand Ballrooms 1,6 & 7

7:05 am – 8:30 am

★ Concurrent Allied Health Session 2 – Foot & Ankle with Saw Bones Session

Kauai Ballrooms 5 & 6

7:30 am

Yoga on the Beach

Meet on Beach

Price: Included in Registration Fee

8:40 am – 9:00 am

Break - Please visit Exhibits

Grand Ballrooms 2,3,4 & 5

8:45 am – 10:00 am

⦿ 1 hour Adult Golf Clinic at Poipu Bay Golf Course

Meet at group entrance in front of Kauai Ballroom

Covering the fundamentals of golf. Must wear golf attire (collared shirts, Bermuda shorts, and sneakers)

Price: \$37 per person (minimum 4 people)

9:10 am – 10:05 am

✦ Howard Steel Lecture

Grand Ballrooms 1,6 & 7

The Golden Age of Space Flight

Walter Cunningham, Houston, TX

10:00 am – 11:15 am

⦿ 1 hour Children's Golf Clinic at Poipu Bay Golf Course Meet at group entrance in front of Kauai Ballroom

Covering the fundamentals of golf. Must wear golf attire (collared shirts, Bermuda shorts, and sneakers)

Price: \$37 per person (minimum 4 people)

10:05 am – 10:25 am

Break – Please visit Exhibits

Grand Ballrooms 2,3,4 & 5

11:25 am – 12:25 pm

✦ WOA Luncheon - Industry Presentation

ConvaTec

*CME Credit Not Available

Grand Ballrooms 1,6 & 7

12:30 pm – 5:30 pm

⦿ Golf Tournament

Meet at group entrance in front of Kauai Ballroom at 12:30 pm

Sprawled between lush mountains and rugged ocean cliffs on Kauai's sunny South Shore, Poipu Bay Golf Course boasts 18 championship holes with seashore paspalum greens that are as visually stunning as they are challenging. Designed by Robert Trent Jones, Jr., Poipu Bay is one of the most highly acclaimed resort courses in the Pacific. From 1994 to 2006, the course played host to the annual PGA Grand Slam of Golf. A round at Poipu Bay Golf Course affords you the opportunity to experience the sheer pleasures and daunting challenges of a course recognized as one of America's finest and to "play where champions play."

Price: \$175 per person (Includes green fees, tournament fee and prizes)

1:30 pm – 2:30 pm

Scientific E-Poster Session

Kauai Ballrooms 1,2,3 & 4

Presenters will be available to answer questions.

1:50 pm – 4:00 pm

⦿ Botanical Gardens Medical Tour

Meet at group entrance in front of Kauai Ballroom

This garden is over 250 acres of conservation research land and home to over 6,000 rare and endangered species of plants. We'll take a short leisurely walk to an enchanted tropical rain forest which has a backdrop of one of the most beautiful waterfalls on Kauai, Waihulili Falls. This magical trail is lined with some of the rarest species of plants found in the Garden. Guests must be able to walk approximately 1/4 mile over a one hour period with rest stops. Guests must wear comfortable attire for walking, including closed-toe shoes. It is also recommended that guests bring along bug repellent.

Price: \$40 per Adult / \$20 per Child (12 and under) Minimum 15 people

2:00 pm – 4:00 pm

⦿ Tennis Round Robin

Meet at Tennis Courts

Price: \$20 per person (Minimum 4 People)

Summary of Events

See Scientific Program for times for all CME Activities

2:30 pm – 3:30 pm
Multimedia Education Session
Garden Isle Room 2

5:30 pm – 7:30 pm
✦ **Exhibitor Reception**
Grand Ballrooms 2,3,4 & 5
This is an opportunity to visit with the Exhibitors and view the scientific posters. Before you go to dinner, start your evening off with your favorite beverage!
Attire: Resort Casual
Price: Included in Registration Fee or \$75 per Unregistered Adult Guest

5:30 pm – 7:30 pm
✦ **Kids' Movie Night with Arts & Crafts and Dinner**
Kauai Ballrooms 5 & 6
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.
Price: Included in Registration Fee or \$25 per Unregistered Child (5-17 years)

Saturday, August 5

6:00 am – 6:55 am
Board of Directors Meeting
Garden Isle Rooms 4 & 5

6:00 am – 7:00 am
Scientific E-Poster Session
Kauai Ballrooms 1,2,3 & 4
Presenters will be available to answer questions.

6:00 am – 12:30 pm
Speaker Ready Area
Garden Isle Room 2

6:30 am – 12:30 pm
Meeting Registration
Grand Ballroom Foyer

6:45 am – 12:30 pm
Technical Exhibits, Continental Breakfast, Coffee Breaks and Daily Drawing
Grand Ballrooms 2,3,4 & 5

7:00 am – 7:15 am
Second Business Meeting
Grand Ballrooms 1,6 & 7

7:15 am – 12:30 pm
Scientific Program
Grand Ballrooms 1,6 & 7

8:15 am – 8:45 am
* **WOA Brunch - Industry Presentation**
DePuy Synthes Sales, Inc./Pacira Pharmaceuticals, Inc.
***CME Credit Not Available**
Grand Ballrooms 1,6 & 7

KEY

⦿ **Activity/Tour**
✦ **Social Event**

* **Special Presentation**
★ **Allied Health Session**

9:10 am – 9:55 am
★ **Concurrent Allied Health Session 3 – MR Imaging Interpretation**
Kauai Ballrooms 5 & 6

9:50 am – 10:15 am
Break - Please visit Exhibits
Grand Ballrooms 2,3,4 & 5

10:20 am – 10:50 am
* **Presidential Address**
Grand Ballrooms 1,6 & 7
Grand, High Views of the WOA and the WOF: Understanding Where We've Been to Predict Where We're Going
Robert R. Slater, Jr., MD, Folsom, CA

10:50 am – 11:00 am
Refreshment Break
Grand Ballroom Foyer

11:00 am – 12:30 pm
★ **Concurrent Allied Health Session 4 - Fractures Of The Hand And Wrist – Share Interesting Cases for Interactive Review**
Kauai Ballrooms 5 & 6

12:30 pm – 1:30 pm
Multimedia Education Session
Garden Isle Room 2

1:15 pm – 5:15 pm
⦿ **Sailing Na Pali Coast**
Meet at group entrance in front of Kauai Ballroom
Take in breathtaking views as you cruise along the Na Pali Coast. Enjoy beverage and snacks as we explore the coastline while the crew keeps you entertained with local stories about the sights on the way. This tour allows you to see sights that can only be seen from the water (an area you cannot drive to see). You will see the sea caves, valleys, cliffs and waterfalls of the Na Pali Coastline-what Kauai is known for!
Price: \$170 per person (Includes transportation, beverages and snacks)
Minimum 40 people

7:00 pm – 10:00 pm
✦ **Family Luau – Havaiki Nui – A Journey to New Lands**
Ilima Gardens
Join us on a fascinating journey through Polynesia where a Royal feast nourishes both body and soul, and magical stories of Hawaii fill your heart. Listen to traditional and contemporary Hawaiian music and chants. Watch hula dancers tell beautiful stories of Hawaii with their elegant and graceful movements; enjoy this unique Hawaiian experience!
Attire: Resort Casual (no jacket required)
Price: Included in Registration Fee or \$150 per Unregistered Adult Guest and \$50 per Child (5-17 years)

Scientific Program Grand Ballrooms 1, 6 & 7, Unless Otherwise Specified

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

To ensure correct CME credit is awarded, please complete the WOA 2017 Annual Meeting CME Credit Records online at www.woa-assn.org. CME Certificates will be awarded to all registered participants.

RADIOLOGY TECHNOLOGY CONTINUING MEDICAL EDUCATION

A maximum of 10 hours may be claimed for Radiology Technology Continuing Medical Education hours.

Thursday, August 3

6:00 am **Scientific E-Poster Session** Kauai Ballrooms 1,2,3 & 4
Presenters will be available to answer questions.

6:45 am **First Business Meeting**

7:00 am **Welcome, Announcements and Meeting Overview**
Omer A. Ilahi, MD, Program Chair
Robert R. Slater Jr., MD, President

General Session 1 – WOA/OREF Young Investigator Awards

Moderator: Omer A. Ilahi, MD, Southwest Orthopedic Group/Texas Arthroscopy & Sports Medicine Institute

7:15 am Accuracy of the ASES Physician Assessment in Shoulder Arthroplasty Patients
Alan L. Zhang, MD, University of California, San Francisco

7:21 am Effect of Hamstring Harvest in the Setting of ACL and MCL Concurrent Injury
Thomas J. Kremen Jr., MD, Cedars-Sinai Medical Center

7:27 am The Role of Calcaneofibular Ligament in Ankle and Subtalar Biomechanics
Kenneth J. Hunt, MD, University of Colorado

7:33 am Discussion

Symposium 1 – Foot and Ankle

Moderator: Vinod K. Panchbhavi, MD, FACS, University of Texas Medical Branch

7:40 am Management of the Charcot Foot
Vinod K. Panchbhavi, MD, FACS, University of Texas Medical Branch

7:52 am Jones Fracture Management
Gregory A. Lundeen, MD, MPH, Reno Orthopaedic Clinic

8:04 am Lisfranc Joint Injuries
Thomas G. Harris, MD, Congress Orthopaedic Associates

8:16 am Talar OCD Management
Kenneth J. Hunt, MD, University of Colorado

8:28 am Discussion

8:40 am **Break – Please visit Exhibits** Grand Ballrooms 2, 3, 4 & 5

General Session 2 – Own the Bone, AAOS Report & Presidential Guest Speaker

Moderator: Robert R. Slater, Jr., MD, Folsom, CA

9:00 am **Own the Bone**
Fred C. Redfern, MD, Henderson, NV

9:05 am **AAOS Report**
William J. Maloney III, MD, Stanford School of Medicine

9:20 am **Presidential Guest Speaker**
Impact Developments in Hand During My Lifetime
Peter J. Stern, MD, University of Cincinnati College of Medicine

Rapid Fire Session 3A – Trauma Kauai Ballroom 1
Moderators: Milton “Chip” Rount Jr., MD, University of Texas Health Science Center & Payam Tabrizi, MD, The Hughston Clinic/Memorial Hospital

9:55 am Nationwide Analysis of Femoral Neck Fractures: A Receding Tide
Derek G. Ju, MD, Cedars-Sinai Medical Center

9:59 am Complications Associated with Distal Femoral, Proximal Tibial, and Calcaneal Traction Pins
Michael Stefl, MD, University of Southern California

10:03 am Are Factor Xa Inhibitors Effective Thromboprophylaxis after Hip Fracture Fixation?
Abiram Bala, MD, Stanford University
*Presented by Julius A. Bishop, MD

10:07 am Discussion

10:10 am Outcomes of Nonoperatively Managed Patella Fractures
Joseph D. Cooper, MD, University of Southern California
*Presented by Mary Kate Erdman, MD

10:14 am Radiographic Variance of Tibial Plateau Anatomy- Reference to Plateau Fractures
Adam Johannsen, MD, Stanford University

10:18 am Comparison of Fluoroscopic Techniques for Assessment of Femoral Rotational Alignment
Elizabeth Gray Lieberman, MD, Oregon Health and Science University

10:22 am Discussion

Rapid Fire Session 3B – Sports Medicine Kauai Ballroom 2
Moderators: Kimberly L. Furry, MD, Mercy Orthopedics Associates & Jonathan T. Bravman MD, CU Sports Medicine

9:55 am Hip Arthroscopy Trends and Survivorship, A Population-Based Study
K. Soraya Heidari, BA, University of Southern California
*Presented by Nathanael D. Heckmann, MD

9:59 am Hamstring Strains in a Division I College Football Team
James Giordano, MD, University of Southern California

10:03 am Effect of Gender on Outcomes after Reverse Total Shoulder Arthroplasty
Stephanie E. Wong, MD, University of California, San Francisco

Scientific Program

Grand Ballrooms 1, 6 & 7, Unless Otherwise Specified

- 10:07 am Discussion
- 10:10 am Comparing of Twist Test (A New Test for Hip Labral Pathology) to Arthroscopy
Farshad Adib, MD, University of Maryland
- 10:14 am Tibial Tubercle Osteotomy and Medial Patellofemoral Ligament Reefing for Patellar Instability Due to Trochlear Dysplasia
Michael P. Leathers, MD, University of California, San Francisco
*Presented by Alan L. Zhang, MD
- 10:18 am Smoking: An Age-Dependent Risk Factor for Readmission Following Knee Arthroscopy
Behdod Katebian, BS, University of Southern California
- 10:22 am Discussion

Rapid Fire Session 3C – Tumor Kauai Ballroom 3

Moderators: Bryan S. Moon, MD, MD Anderson Cancer Center & David H. Chafey III, MD, University of New Mexico

- 9:55 am Outcomes of Cement in Cement Technique for Revision Endoprostheses Surgery
Vishal V. Hegde, MD, University of California, Los Angeles
- 9:59 am Role of Inflammatory Markers in the Pre-Operative Evaluation of Patients Undergoing Total Hip Arthroplasty Salvage Procedure
Jessica Hughes, MD, Baylor Scott and White
- 10:03 am 3-D Prosthetic Reconstructions Types 1-2, and Bilateral 1 Pelvic Resections
Gerhard E. Maale III, MD, Medical City Hospital
- 10:07 am Discussion
- 10:10 am Is There a Delay to Achieve Stable Compressive Osseointegration Fixation?
Dayton Opel, MD, Oregon Health & Science University
- 10:14 am Magnetic Growing Intramedullary Nails with Intercalary Allograft after Tumor Resection
Robert C. Vercio, MD, Loma Linda University Health
- 10:18 am Gait Outcomes after Proximal Tibial Replacement in Oncology
Kent T. Yamaguchi Jr., MD, University of California, Los Angeles
- 10:22 am Discussion

Rapid Fire Session 3D – Basic Science Kauai Ballroom 4

Moderators: Jennifer van Warmerdam, MD, St. Mary's Medical Center Total Joint Center & Jeffrey E. Krygier, MD, Santa Clara Valley Medical Center

- 9:55 am Effect of Anteromedial vs. Transtibial Technique on ACL Tibial Tunnel Contact
Gregory J. Adamson, MD, Congress Medical Foundation
- 9:59 am Temperatures with K-Wires Using Two Drilling Methods: Forward and Oscillation
Scott Anderson, MD, Loma Linda University
- 10:03 am Myogene mRNA Expression Following Rotator Cuff Injury
Allison Ariniello, BS, University of California, Los Angeles
- 10:07 am Discussion
- 10:10 am Controversies in Fracture Healing: Early, Late or Reverse Dynamization?
Blake J. Schultz, MD, Stanford University
*Presented by Douglas Cerny, MD, MBA
- 10:14 am Do Promising Biomechanical Research Studies Lead to Clinically Meaningful Results?
Jason R. Kang, MD, Stanford Hospital & Clinics
*Presented by Gabrielle M. Paci, MD

- 10:18 am Hallux Motion: Using Electromagnetic Sensors to Measure Range of Motion Under Immobilization Devices
Collin Barber, MD, Banner Health

- 10:22 am Discussion

Concurrent Allied Health Session 1 – Knee & Shoulder

Kauai Ballrooms 5 & 6

Moderator: Theodore W. Coates, PA-C, University of California, Davis

- 9:55 am The Knee and Shoulder Exam
Richard A. Marder, MD, University of California, Davis

- 10:25 am Break – Please visit Exhibits** Grand Ballrooms 2, 3, 4 & 5

Symposium 2 – Hip/Knee Arthroplasty

Moderator: Michael Huo, MD, University of Texas Southwestern Medical Center

- 10:45 am Minimally Invasive Surgery in Joint Replacement. Where are We?
Michael Huo, MD, University of Texas Southwestern Medical Center
- 11:00 am Preventing and Treating Total Joint Arthroplasty Infections
Kenneth B. Mathis, MD, University of Texas Health Science Center
- 11:15 am Robotics, Navigation, and Custom Implants for Total Joint Arthroplasty
William J. Maloney III, MD, Stanford School of Medicine
- 11:30 am Discussion
- 11:45 am **WOA Luncheon – Industry Presentations**
*CME Credit Not Available
Ethicon, US, LLC
Wound Management in 2017
Ryan Nunley, MD
- Mallinckrodt Pharmaceuticals, Inc.**
A Non-Opioid, Non-NSAID Analgesic for Perioperative Pain Management
Alexander Sah, MD

Symposium 3 – Patient Safety

Moderator: David C. Ring, MD, PhD, Dell Medical School, The University of Texas at Austin

- 12:45 pm **Panel Discussion**
David C. Ring, MD, PhD, Dell Medical School, The University of Texas at Austin
Marc M. DeHart, MD, University of Texas Health Science Center
William J. Maloney III, MD, Stanford School of Medicine
Bess E. Brackett, MD, SAMGI
C. Lowry Barnes, MD, University of Arkansas for Medical Sciences
James T. Guille, MD, Brandywine Institute of Orthopaedics
Matthew J. Matava, MD, Washington University School of Medicine
- 1:35 pm Discussion
- 1:45 pm **WOA Industry Presentation** *CME Credit Not Available
Legally Mine
Understanding Legal Tools: The Keys to Locking Out Lawsuits and Reducing Taxes
Dan McNeff
- 1:45 pm **Scientific E-Poster Session** Kauai Ballrooms 1,2,3 & 4
Presenters will be available to answer questions.

AAOS/WOA Resident Review Program Kauai Ballrooms 5 & 6

Moderator: Jennifer van Warmerdam, MD, St. Mary's Medical Center Total Joint Center

- 1:45 pm The Time Machine: A History of Orthopaedics
Payam Tabrizi, MD, The Hughston Clinic/Memorial Hospital

Scientific Program

Grand Ballrooms 1, 6 & 7, Unless Otherwise Specified

- 2:15 pm Transitioning from Training to Practice
Debra Phairas, Practice & Liability Consultants, LLC
- 3:00 pm Physician Practice Options
Debra Phairas, Practice & Liability Consultants, LLC
- 3:45 pm How to Give a Presentation at a National Meeting
Milton "Chip" Routh Jr., MD, University of Texas Health Science Center
- 4:15 pm How to Review Your First Employment Contract
Rosalyng Nguyen JD, MBA, Presbyterian Healthcare Services
- 4:45 pm Discussion
- 2:45 pm **Multimedia Education Session** Garden Isle Room 2

Friday, August 4

- 6:00 am **Scientific E-Poster Session** Kauai Ballrooms 1,2,3 & 4
Presenters will be available to answer questions.

- 7:00 am Announcements
Omer A. Ilahi, MD, Program Chair

General Session 4 – WOA Resident Awards

Moderator: Omer A. Ilahi, MD, Southwest Orthopedic Group/Texas Arthroscopy & Sports Medicine Institute

- 7:05 am Vitamin D is a Modifiable Risk Factor for Periprosthetic Joint Infection
Vishal V. Hegde, MD, University of California, Los Angeles
- 7:11 am Clinical Presentation and Intra-Articular Injury in Patients with Posterior Shoulder Instability
Jessica Bryant, MD, University of California, San Francisco
- 7:17 am 14 Year Follow-Up of Arthroscopic versus Open Anterior Shoulder Stabilization
John D. Johnson, DO, Tripler Army Medical Center
- 7:23 am Vancomycin Powder in Spine Surgery: Does It Work and Does Dose Matter? An In-Vivo Mouse Model Experiment
Howard Y. Park, MD, University of California, Los Angeles
- 7:29 am Longitudinal Murine Model of Allograft Infection: Evidence for Paradigm Shift?
Stephen D. Zoller, MD, University of California, Los Angeles
- 7:35 am Radiographic Risk Factors for Loss of Fixation Following Volar Plate Fixation of Intra-Articular Distal Radius Fractures
Jason H. Ghodasra, MD, MSCI, University of California, Los Angeles
- 7:41 am Comparison of Short-Term Biodex Results after Anatomic ACL Reconstruction between Three Autografts
Jonathan D. Hughes, MD, Scott and White Medical Center
- 7:47 am Discussion

Concurrent Allied Health Session 2 – Foot & Ankle with Saw Bones Session

Kauai Ballrooms 5 & 6

Moderator: Theodore W. Coates, PA-C, University of California, Davis

- 7:05 am Do Not Miss These Injuries of the Foot & Ankle
Christopher D. Kreulen, MD, University of California, Davis

Rapid Fire Session 5A – Sports Medicine

Kauai Ballroom 1
Moderators: Richard A. Marder, MD, UC Davis School of Medicine & Jonathan T. Bravman MD, CU Sports Medicine

- 8:00 am Concomitant Shoulder and Cervical Spine Pathology: Diagnosis and Management Trends
James B. Chen, MD, University of California, Los Angeles

- 8:04 am Should Pre-Operative Fascia Iliaca Block Be Used for Hip Arthroscopy?
Michael J. Huang, MD, Colorado Springs Orthopaedic Group
*Presented by Jennifer J. Wages, PhD, ATC
- 8:08 am Teres Minor Fatty Infiltration Affects Outcomes Following Rotator Cuff Surgery
Eric J. Sarkissian, MD, Stanford Hospital & Clinics
- 8:12 am Discussion
- 8:18 am Wearable Sensors Allow Measurement of Resident Improvement in Arthroscopic Simulation
Peters T. Otlans, MD, MPH, Oregon Health & Science University
- 8:22 am Predicting Injury in Collegiate Athletes Using the Y-Balance Test
Wilson Lai, BS, University of California, Los Angeles
*Presented by James B. Chen, MD
- 8:26 am Effect of Graft Proudness on OCA Contact Forces
Peter Z. Du, BS, University of California Los Angeles
- 8:30 am A Comparison of Ankle Sprains in a Division I Collegiate Football Team
Colin M. Mansfield, MD, University of Southern California
*Presented by Seth C. Gamradt, MD
- 8:34 am Discussion

Rapid Fire Session 5B – Trauma

Kauai Ballroom 2
Moderators: Julius A. Bishop, MD, Stanford Hospital & Clinics & Payam Tabrizi, MD, The Hughston Clinic/Memorial Hospital

- 8:00 am Risk of Delirium after Intramedullary Nailing for Intertrochanteric Hip Fracture
Dayton Opel, MD, Oregon Health & Science University
- 8:04 am The Crush Index: Orthopaedic Trauma as an Economic Indicator
Armin Arshi, MD, University of California, Los Angeles
- 8:08 am Effect of Hypoalbuminemia on Perioperative Complications in Ankle Fracture Fixation
Collin Barber, MD, Banner Health
- 8:12 am Discussion
- 8:18 am The Utility of Immediate Postoperative Radiographs after Fluoroscopy-Assisted Fracture Fixation
Tony Pedri, MD, University of New Mexico Health Sciences Center
- 8:22 am Are Retrograde Nails Better for Distal Femur Fractures in Obese Patients?
Kevin A. Murr, MD, Harborview Medical Center
*Presented by Conor P. Kleweno, MD
- 8:26 am Acetabular Fractures: Emergence of Total Hip Arthroplasty as Index Procedure
John Garlich, MD, Cedars Sinai Medical Center
- 8:30 am Operative versus Non-Operative Management of Traumatic Arthrotomies from Gun Shot Wounds
Christopher Shultz, MD, University of New Mexico
- 8:34 am Discussion

Rapid Fire Session 5C – Total Hip

Kauai Ballroom 3
Moderators: Brian A. Jewett, MD, Slocum Orthopedics & Richard Gehlert, MD, University of New Mexico

- 8:00 am The Burden of Revision Total Hip Arthroplasty in the United States
Sean S. Rajaei, MD, Cedars-Sinai Medical Center

Scientific Program

Grand Ballrooms 1, 6 & 7, Unless Otherwise Specified

- 8:04 am Obesity is Associated with Revision Hip Arthroplasty for Infection and Early Loosening
L. Henry Goodnough, MD, PhD, Stanford Hospitals and Clinics
- 8:08 am Complications in Computer Navigated vs Conventional Total Hip Arthroplasty
Blake K. Montgomery, MD, Stanford University
*Presented by Derek F. Amanatullah, MD, PhD
- 8:12 am Discussion
- 8:18 am Prospective, Multi-Centered, Non-Randomized, Post-Approval Study: Longitudinal Evaluation of the Long-Term Safety and Efficacy of the BHR System
Lawrence R. Housman, MD, Tucson Orthopaedic Institute
- 8:22 am Total Hip Arthroplasty: Association of Comorbidities and Discharge Destination
Cory Janney, MD, University of Texas Medical Branch
- 8:26 am A Rosetta Stone for THA: Translating Expectations into Patient Reported Outcomes
Adam A. Sassoon, MD, MS, University of Washington
- 8:30 am Factor Xa Inhibitors Outperform Traditional Anticoagulants in Total Hip Arthroplasty
Abiram Bala, MD, Stanford University
*Presented by Derek F. Amanatullah, MD, PhD
- 8:34 am Discussion

Rapid Fire Session 5D – Total Knee Kauai Ballroom 4

Moderators: Jeffrey M. Nakano, MD, Rocky Mountain Orthopaedic Associates & Jay R. Lieberman, MD, University of Southern California

- 8:00 am Does Intrathecal Morphine Have a Role in Modern Joint Arthroplasty?
Jonathan Cheah, MD, University of California, San Francisco
- 8:04 am Proximalization of the Tibial Tubercle Osteotomy: A Solution for Patella Infera During Revision Total Knee Arthroplasty
Alexander M. DeHaan, MD, Orthopaedic and Fracture Specialists
- 8:08 am Cluster Analysis Reveals Functional Trajectories Following Total Knee Arthroplasty
Steven T. DiSegna, MD, University of Massachusetts Memorial Medical Center
- 8:12 am Discussion
- 8:18 am Post Market Surveillance Using Patient Reported Outcome Measures
Steven T. DiSegna, MD, University of Massachusetts Memorial Medical Center
- 8:22 am The Effect of Preoperative Malnutrition on Postoperative Stamina in Total Joint Arthroplasty Patients
Travis C. Philipp, MD, Oregon Health and Science University
- 8:26 am Consequences of Increasing Insert Thickness in Total Knee Arthroplasty
Trevor J. Shelton, MD, University of California, Davis
- 8:30 am Analysis of Spanish vs English Speaking Patients Undergoing Total Knee Arthroplasty
Adam Wright, MD, Baylor Scott and White
*Presented by Nathan Haile, MD
- 8:34 am Discussion
- 8:40 am **Break – Please visit Exhibits** Grand Ballrooms 2, 3, 4 & 5

General Session 6 – BOC Report, WOF Report & Howard Steel Lecture

Moderator: Robert R. Slater, Jr., MD, Folsom, CA

- 9:00 am **BOC Report**
Bryan S. Moon, MD, MD Anderson Cancer Center
- 9:05 am **WOF Report**
Robert R. Slater, Jr., MD, Folsom, CA
- 9:10 am **Introduction of Howard Steel Lecturer**
Robert R. Slater, Jr., MD, Folsom, CA
- 9:15 am **Howard Steel Lecture**
The Golden Age of Space Flight
Walter Cunningham, Houston, TX
- 10:05 am **Break – Please visit Exhibits** Grand Ballrooms 2, 3, 4 & 5

Symposium 4 – Sports Medicine

Moderator: Omer A. Ilahi, MD, Southwest Orthopedic Group/Texas Arthroscopy & Sports Medicine Institute

- 10:25 am Treating Patellofemoral Instability
Omer A. Ilahi, MD, Southwest Orthopedic Group/Texas Arthroscopy & Sports Medicine Institute
- 10:40 am Reconstruction of the Superior Gleno-Humeral Capsule
Stephen S. Burkhart, MD, The San Antonio Orthopaedic Group
- 10:55 am ACL Graft Choices & Femoral Drilling Techniques
David J. Mansfield, MD, El Paso Orthopaedic Surgery Group
- 11:10 am Discussion
- 11:25 am **WOA Luncheon – Industry Presentation**
*CME Credit Not Available
ConvaTec
Risk Mitigation of Infection Following Total Joint Arthroplasty
Kirby Hitt, MD & Louis Kwong, MD

Symposium 5 – Impact of Innovative Procedures and Techniques Utilized for Hand, Wrist, and Elbow Disorders on Patient Outcomes: Is Novel Always Better?

Moderator: Thomas R. Hunt III, MD, DSc, Baylor College of Medicine

- 12:25 pm Innovation in Medicine and Its Impact on Quality of Care
Thomas R. Hunt III, MD, DSc, Baylor College of Medicine
- 12:35 pm Innovation in Pediatric Orthopedics: Impact on Patient Outcome
Pamela J. Sherman, MD, Cook Children's Medical Center
- 12:50 pm Innovation in the Care of Wrist Disorders: Impact on Patient Outcome
Brian D. Adams, MD, Baylor College of Medicine
- 1:05 pm Innovation in Upper Extremity Fracture Care: Impact on Patient Outcome
Scott A. Mitchell, MD, Baylor College of Medicine
- 1:20 pm Discussion
- 1:30 pm **Scientific E-Poster Session** Kauai Ballrooms 1,2,3 & 4
Presenters will be available to answer questions.
- 2:30 pm **Multimedia Education Session** Garden Isle Room 2

Saturday, August 5

- 6:00 am **Scientific E-Poster Session** Kauai Ballrooms 1,2,3 & 4
Presenters will be available to answer questions.
- 7:00 am **Second Business Meeting**

Symposium 6 – Trauma

Moderator: Kyle F. Dickson, MD, Southwest Orthopedic Group

Scientific Program

Grand Ballrooms 1, 6 & 7, Unless Otherwise Specified

- 7:15 am Open Fractures, Especially of the Tibia
Kyle F. Dickson, MD, Southwest Orthopedic Group
- 7:30 am Evaluating Cervical Spine Injuries
Rex A. Marco, MD, Houston Methodist Hospital
- 7:45 am New Perspectives in the Treatment of Osteomyelitis
David W. Lowenberg, MD, Stanford University School of Medicine
- 8:00 am Discussion
- 8:15 am **WOA Brunch – Industry Presentation**
DePuy Synthes Sales, Inc./Pacira Pharmaceuticals, Inc.
**CME Credit Not Available*

Symposium 7 – Physician-Hospital Relationships

Moderator: Basil R. Besh, MD, Fremont Orthopaedic & Rehabilitative Medicine

- 8:45 am Orthopedics without a Hospital
Basil R. Besh, MD, Fremont Orthopaedic & Rehabilitative Medicine
- 8:50 am Current Economics of Orthopaedic Private Practice Model
Omer A. Ilahi, MD, Southwest Orthopedic Group/Texas Arthroscopy & Sports Medicine Institute
- 8:55 am Partnering with a Hospital in a Surgery Co-Management Model
Usman Mirza, MBA, The San Antonio Orthopaedic Group
- 9:00 am Discussion

Rapid Fire Session 7A – Total Hip Kauai Ballroom 1

Moderators: Brian A. Jewett, MD, Slocum Orthopedics & Jay R. Lieberman, MD, University of Southern California

- 9:10 am Outpatient Total Hip Arthroplasty in the United States: A Population-Based Comparative Analysis of Complication Rates
Armin Arshi, MD, University of California, Los Angeles
- 9:14 am Utility of Intraoperative Fluoroscopic Positioning of THA Components
Christopher M. Belyea, MD, Tripler Army Medical Center
- 9:18 am Outcomes of a New 3D Porous Metal Acetabular Component
Tyler D. Goldberg, MD, Texas Orthopedics, Sports and Rehabilitation
**Presented by Andrea Torres*
- 9:22 am Efficacy of Hepatitis C Screening Prior to Total Hip Arthroplasty
Nathan Haile, MD, Baylor Scott and White Healthcare/Texas A&M Health Science Center
- 9:26 am Discussion
- 9:30 am Efficacy of Hemoglobin A1c Screening Prior to Total Hip Arthroplasty
Nathan Haile, MD, Baylor Scott and White Healthcare/Texas A&M Health Science Center
- 9:34 am Femoral Neck Exposure for the Smith-Peterson versus the Watson-Jones Approach
John Paul Kleimyer, MD, Stanford University
- 9:38 am Does Approach Affect Objective Functional Outcomes in Total Hip Arthroplasty?
Christopher Joyce, MD, University of Colorado
- 9:42 am Abductor Repair in Patients with and without Total Hip Arthroplasty
Ruwan Ratnayake, MD, UC Davis Medical Center
- 9:46 am Discussion

Rapid Fire Session 7B – Sports Medicine Kauai Ballroom 2

Moderators: Richard A. Marder, MD, UC Davis School of Medicine & Jonathan T. Bravman MD, CU Sports Medicine

- 9:10 am Measurement of Intra-Articular Length for All-Inside Anterior Cruciate Ligament Reconstruction
Jonathan-James Eno, MD, Stanford University
**Presented by Brian Karamian, MD*
- 9:14 am The Diagnostic Accuracy of Three Physical Exam Maneuvers in the Diagnosis of Hip Microinstability
Daniel Hoppe, MD, University of Toronto
**Presented by Lauren M. Shapiro, MD*
- 9:18 am Comparison of Patient-Reported Outcomes a Minimum 2 Years after Anatomic ACL Reconstruction between Four Graft Types
Jonathan D. Hughes, MD, Scott and White Medical Center
- 9:22 am A Biomechanical Comparison of Arciero and Laprade Posterolateral Corner Reconstruction
Paul J. Johnson, MD, MS, University of New Mexico Health Sciences Center
- 9:26 am Discussion
- 9:30 am High Variability in Evaluating Articular Cartilage Lesions in Clinical Studies
William L. Sheppard Jr., BS, University of California, Los Angeles
**Presented by Armin Arshi, MD*
- 9:34 am Use of Bipolar Radiofrequency for the Treatment of Tendonosis
James P. Tasto, MD, San Diego Sports Medicine and Orthopaedic Center
- 9:38 am Pectoralis Major Tendon Repair: A Meta-Analysis Comparing Different Surgical Techniques
Peter S. Zezeridis, MD, University of California
**Presented by Kent T. Yamaguchi Jr., MD*
- 9:42 am Crossover Sign in Dysplasia: Not Uncommon and Do Not Resect!
Dean K. Matsuda, MD, DISC Sports and Spine
- 9:46 am Discussion

Rapid Fire Session 7C – Foot & Ankle Kauai Ballroom 3

Moderators: Julius A. Bishop, MD, Stanford Hospital & Clinics & Kenneth J. Hunt, MD, University of Colorado

- 9:10 am Trends Associated with Surgical Fixation of Lisfranc Injuries in the United States
Evan E. Vellios, MD, University of California, Los Angeles
- 9:14 am Orthopaedists Have Less Complications Following Ankle Fracture Fixation than Podiatrists
Jeremy Y. Chan, MD, Stanford University
**Presented by Julius A. Bishop, MD*
- 9:18 am Unrestricted Weightbearing with Stirrup Brace Following Lateral Ankle Ligament Stabilization
Christopher Diefenbach, MD, Reno Orthopedic Clinic
**Presented by Gregory A. Lundeen, MD, MPH*
- 9:22 am Responsiveness of Patient Reported Outcome Measures for Foot and Ankle Surgery
Ajay Gurbani, MD, University of California Los Angeles
**Presented by Evan E. Vellios, MD*
- 9:26 am Discussion
- 9:30 am Early Weight Bearing as Tolerated after ORIF of Ankle Fracture
Michael Orden, MD, University of California, Los Angeles
- 9:34 am The Role of Fixation of the Lateral Process of the Talus in Development of Subtalar Arthritis in Patients with a Talar Neck or Body Fracture
Nicholas Romeo, DO, Harborview Medical Center / University of Washington
**Presented by Michael Githens, MD*

Scientific Program

Grand Ballrooms 1, 6 & 7, Unless Otherwise Specified

9:38 am A National Comparison of Total Ankle Replacement versus Arthrodesis
Andrew F. Sabour, BS, University of Southern California

9:42 am Factors Reducing the Complication Rate and Improving the Success Rate for Initiating a Total Ankle Arthroplasty Program
Kaitlin C. Neary, MD, Reno Orthopaedic Clinic
*Presented by Gregory A. Lundeen, MD, MPH

9:46 am Discussion

Rapid Fire Session 7D – Other Kauai Ballroom 4

Moderators: Meghan N. Imrie, MD, Stanford School of Medicine & Basil R. Besh, MD, Fremont Orthopaedic & Rehabilitative Medicine

9:10 am Factors that Impact the Residency Match: Research, Medical School, and Honor Society Membership
Sean T. Campbell, MD, Stanford University

9:14 am What Makes Journal Club Effective?: A Survey of Orthopaedic Residents and Faculty
Sean T. Campbell, MD, Stanford University

9:18 am Perioperative Antibiotic Prophylaxis with Both Vancomycin and Cefazolin Prior to Primary Hip and Knee Arthroplasty: A Safety and Efficacy Analysis
Alexander M. DeHaan, MD, Orthopaedic and Fracture Specialists

9:22 am Hierarchical-Modeling versus Traditional-Regression for Studies Utilizing the National Inpatient Sample
Joshua W. Hustedt, MD, MHS, University of Arizona

9:26 am Discussion

9:30 am Personal Physician Characteristics Adversely Affect Patient Satisfaction in Orthopaedic Surgery
Laura Y. Lu, BS, Stanford University

9:34 am Resident Involvement in Hip Fracture Surgery Affects Patient Outcomes
Dayton Opel, MD, Oregon Health & Science University

9:38 am Electronic Medical Record Impact on Physician-Patient Interaction in Orthopaedics
Jean-Christophe N. Rwigema, BS, University of Southern California

9:42 am Are Surgical Skills Under-Emphasized in Disaster Response Literature?
CAPT Steven Wilding, MD, Tripler Army Medical Center
*Presented by CPT J. Banks Deal, MD

9:46 am Discussion

Concurrent Allied Health Session 3 – MR Imaging Interpretation

Kauai Ballrooms 5 & 6

Moderator: Theodore W. Coates, PA-C, University of California, Davis

9:10 am MR Imaging of the Knee and Shoulder
Russell C. Fritz, MD, National Orthopaedic Imaging Associates

9:50 am **Break – Please Visit Exhibits** Grand Ballrooms 2, 3, 4 & 5

General Session 8 – OREF Update & Presidential Address

Moderator: Omer A. Ilahi, MD, Southwest Orthopedic Group/Texas Arthroscopy & Sports Medicine Institute

10:15 am **OREF Update**
William C. McMaster, MD, UCI Medical Center Orthopaedics

10:20 am **Presidential Address**
Grand, High Views of the WOA and the WOF: Understanding Where We've Been to Predict Where We're Going
Robert R. Slater, Jr., MD, Folsom, CA

10:50 am **Refreshment Break** Grand Ballroom Foyer

General Session 9 – Sports Medicine / Other / Trauma / Total Joint

Moderator: Omer A. Ilahi, MD, Southwest Orthopedic Group/Texas Arthroscopy & Sports Medicine Institute

11:00 am A Novel Approach to Detection of Acetabular Cartilage Delamination in FAI Patients
Alan L. Zhang, MD, University of California, San Francisco

11:06 am Enhanced ACL Graft Incorporation by Novel Minimally Invasive Activation of Endogenous Stem Cells
Thomas J. Kremen Jr., MD, Cedars-Sinai Medical Center

11:12 am Iliopsoas Related Pathology: Prevalence, Associated Findings, and Surgical Procedures from a Large Multicenter Hip Arthroscopy Study Group
Dean K. Matsuda, MD, DISC Sports and Spine

11:18 am Intraoperative Methylene Blue Staining Allows Visualization of Microbial Biofilm-Associated Tissue in Periprosthetic Joint Infection
Jeremy D. Shaw, MD, University of California, San Francisco
*Presented by Jonathan Cheah, MD

11:24 am Orthopaedic Resident Practice Management and Policy Education: Experience and Expectations
Eugene F. Stautberg III, MD, University of Texas Medical Branch
*Presented by Marc M. DeHart, MD

11:30 am Chemoprophylaxis does not Prevent Relevant VTE after Fracture Surgery Below the Knee
Joseph T. Patterson, MD, Orthopaedic Trauma Institute, University of California, San Francisco

11:36 am Discussion

Concurrent Allied Health Session 4 – Fractures of the Hand and Wrist – Share Interesting Cases for Interactive Review

Kauai Ballrooms 5 & 6

Moderator: Theodore W. Coates, PA-C, University of California, Davis

11:00 am A unique opportunity to review and discuss cases ranging from everyday fractures to obscure events with your peers. Rehearse your case presentation with the group and obtain constructive feedback. Everyone will benefit from the experience, a refresher on the basics and a means to gain a few new clinical pearls.
Basil R. Besh, MD, Fremont Orthopaedic & Rehabilitative Medicine

Rapid Fire Session 10A – Total Knee Kauai Ballroom 1

Moderators: Jeffrey M. Nakano, MD, Rocky Mountain Orthopaedic Associates & David H. Chafey III, MD, University of New Mexico

11:50 am Varus and Valgus Deformities Have Different Compartment Forces after TKA
Trevor J. Shelton, MD, University of California, Davis

11:54 am Mechanical Multidirectional Instability after Primary Knees Associated with Metal Ion Allergy
Gerhard E. Maale III, MD, Medical City Hospital

11:58 am Factor-Xa Inhibitors and Aspirin Outperform Traditional Anticoagulants in Total Knee Arthroplasty
Abiram Bala, MD, Stanford University
*Presented by Derek F. Amanatullah, MD, PhD

12:02 pm Discussion

12:10 pm The Linea Aspera as a Marker for Intraoperative Femoral Rotation
Cody Covington, MD, Baylor Scott & White Medical Center

12:14 pm A Rosetta Stone for TKA: Translating Expectations into Patient Reported Outcomes
Adam A. Sassoon, MD, MS, University of Washington

Scientific Program

Grand Ballrooms 1, 6 & 7, Unless Otherwise Specified

12:18 pm Distal Femoral Osteotomy Trends and Survivorship: A Population-Based Study
K. Soraya Heidari, BA, University of Southern California

12:22 pm Discussion

Rapid Fire Session 10B – Upper Extremity Kauai Ballroom 2

Moderators: Robert R. Slater, Jr., MD, Folsom, CA & Thomas R. Hunt, MD, Baylor College of Medicine

11:50 am Relevant Insertion Site Anatomy of the Conventus Distal Radius System
Jacob Duncan, DO, MD, Valley Orthopaedic Surgery Residency
*Presented by Jesua Law, DO

11:54 am Proximal Interphalangeal Collateral Ligament Cadaveric Study
John G. Coury, DO, Valley Orthopedic Surgery Residency

11:58 am Determining Insertion of Digital Extensor Mechanism Terminal Tendon Using Lunula
Jeff Jett, DO, Valley Orthopedic Surgery Residency
*Presented by Jesua Law, DO

12:02 pm Discussion

12:08 pm Cost Minimization Analysis of the Treatment Distal Radius Fractures in the Elderly
Eric Q. Pang, MD, Stanford University
*Presented by Robin N. Kamal, MD

12:12 pm The Effects of Prior Cervical Fusion on Outcomes and Early Complications after Shoulder Arthroplasty
Jennifer Tangtiphaiboonatana, MD, University of California, San Francisco

12:16 pm Trans-Brachioradialis Approach to Radial Tunnel, Anatomic Study of Compression Sites
Jason Ummel, DO, Valley Orthopaedic Surgery Residency
*Presented by John G. Coury, DO

12:20 pm Dorsal Distraction Distal Radius Plating Fractures with Dorsal Marginal Impaction
Eric Huish, DO, Valley Orthopaedic Surgery Residency
*Presented by John G. Coury, DO

12:24 pm Discussion

Rapid Fire Session 10C – Spine Kauai Ballroom 3

Moderators: Rex A. Marco, MD, Houston Methodist Hospital & Omer A. Ilahi, MD, Southwest Orthopedic Group/Texas Arthroscopy & Sports Medicine Institute

11:50 am Outcomes for Adult Spinal Deformity Correction; Staged versus Same-Day Surgery
Alexander H. Arzeno, MD, Stanford University

11:54 am ALIF vs. AxialLIF at the Bottom of a Long Construct in CMIS Treatment of Adult Spinal Deformity
Alisa Alayan, MD, Cedars Sinai Medical Center

11:58 am A Prospective, Randomized Study of Patient Controlled Epidural Analgesia versus Patient Controlled Intravenous Analgesia for Postoperative Pain Control after 1 and 2-Level Lumbar Fusions
Alexander H. Arzeno, MD, Stanford University

12:02 pm Discussion

12:08 pm Lifelong Antibiotic Suppression for Infected Instrumented Spines – Fact or Myth?
Krishn Khanna, MD, University of California, San Francisco

12:12 pm Improved Biomechanics of Two Alternative Kyphoplasty Cementation Methods
John Paul Kleimeyer, MD, Stanford University

12:16 pm Is Two Better than One? Infection Rates and Bacterial Resistance Following Prophylactic Administration of Vancomycin IV in Addition to Standard Prophylactic Antibiotics in Spinal Instrumentation Surgery
Howard Y. Park, MD, University of California, Los Angeles

12:20 pm Single Position versus Lateral-Then-Prone Positioning for Lateral Interbody Fusions and Pedicle Screw Fixation
Chason Ziino, MD, Stanford University
*Presented by Ashley Aratani, MD

12:24 pm Discussion

Rapid Fire Session 10D – Pediatrics Kauai Ballroom 4

Moderators: Meghan N. Imrie, MD, Stanford School of Medicine & Pamela J. Sherman, MD, Cook Children's Medical Center

11:50 am Does Pre-Culture Antibiotics Cause Non-Diagnostic Results in Pediatric Musculoskeletal Infections
Michael Basso-Williams, DO, MPH, Riverside University Health System Medical Center

11:54 am The National Incidence of Failed Initial Irrigation and Debridement for Pediatric Septic Hip
Ram Alluri, MD, University of Southern California

11:58 am Short Leg Cast Immobilization of Distal Tibial Physeal Fractures
Clayton Vaughan, MD, Baylor Scott and White Memorial Hospital

12:02 pm Discussion

12:08 pm Is the Bernese Periacetabular Osteotomy Safe for the Treatment of Hip Dysplasia When the Triradiate Cartilage is Still Open? A Preliminary Study
Stephanie Pun, MD, Stanford University

12:12 pm The S Sign: A New Radiographic Tool to Aid in the Diagnosis of Slipped Capital Femoral Epiphysis
Eric J. Rebach, DO, Riverside University Health System

12:16 pm Clinical Outcomes of Articular Cartilage Restoration of the Pediatric and Adolescent Knee with Respect to Minimal Clinically Important Difference: A Systematic Review
Rosa S. Valtanen, BS, University of California, Los Angeles
*Presented by Armin Arshi, MD

12:20 pm Single Incision Pediatric Flexible Intramedullary Tibial Nailing
Zachary C. Lum, DO, Valley Orthopaedic Surgery Residency
*Presented by Jesua Law, DO

12:24 pm Discussion

12:30 pm **Multimedia Education Session** Garden Isle Room 2

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Scientific Poster Presentations

Kauai Ballrooms 1, 2, 3 & 4

Thursday, August 3: 6:00 am – 6:45 am / 1:45 pm – 2:45 pm

Friday, August 4: 6:00 am – 7:00 am / 1:30 pm – 2:30 pm

Saturday, August 5: 6:00 am – 7:00 am

Station A - Kauai Ballroom 1

BASIC SCIENCE

Poster 1: Characterization of Human Pluripotent Stem Cell Pericytes in Murine Model of Massive Rotator Cuff Tear
Gina M. Mosich, MD, University of California, Los Angeles

Poster 2: In Vitro Inhibition of Fibroadipogenic Progenitor Cells in a Murine Model of Rotator Cuff Tears
Brandon K. Vu, BS, University of California, Los Angeles

FOOT & ANKLE

Poster 3: Relationship between Hemoglobin A1c Value and Bone Healing in Diabetic Ankle Fractures Treated Operatively vs Non-Operatively
Jessica Hughes, MD, Baylor Scott and White

OTHER

Poster 4: Is the Internet a Reliable Source for Patient Education? A Systematic Review of Online Resources in Orthopaedic Surgery
Jason H. Ghodasra, MD, MSCI, University of California, Los Angeles
*Presented by Eli S. Kupperman, MD

Poster 5: Anatomic Knowledge and Perceptions of the Adequacy of Anatomic Education amongst Applicants to Orthopedic Residency
Jeremy D. Shaw, MD, University of California, San Francisco
*Presented by Jonathan Cheah, MD

SPINE

Poster 6: Incidence of Lumbar Disc Herniation in Military Helicopter Pilots
CPT J. Banks Deal Jr., MD, Tripler Army Medical Center

Poster 7: Long Term Clinical Outcomes in Patients with Type-II Odontoid Fractures
Ryan Martyn, MD, Geisinger Medical Center

SPORTS MEDICINE

Poster 8: Coracoclavicular Ligament Reconstruction: Early Outcomes of a Novel Reconstruction Technique
Michael H. French, DO, Riverside University Health System Medical Center
*Presented by Eric J. Rebich, DO

Poster 9: Return to Play Following Shoulder Stabilization: A Systematic Review
Marc N. Ialenti, MD, University of California, San Francisco
*Presented by Alan L. Zhang, MD

Poster 10: Comparative Effectiveness of Cartilage Repair with Respect to Minimal Clinically Important Difference (MCID)
Benjamin V. Kelley, MD, University of California, Los Angeles
*Presented by Armin Arshi, MD

TOTAL KNEE

Poster 11: Unicompartmental Knee Arthroplasty for Spontaneous Osteonecrosis of the Knee: A Meta-Analysis
Julio Jauregui, MD, University of Maryland
*Presented by Farshad Adib, MD

Poster 12: Effects of Corticosteroids on Periarticular Infiltration Analgesia in Knee Arthroplasty: A Systematic Review and Meta-Analysis of RCTs
Samer Kakish, FRCS (Tr and Orth), University of New Mexico

Station B - Kauai Ballroom 2

TRAUMA

Poster 13: Civilian Gunshot Wounds of the Innominate Bone
Meghan A. Brown, MD, University of Southern California

Poster 14: Dismounted Complex Blast Injuries: Patterns of Contralateral Limb Injuries in Patients with Lower Extremity Amputations
John Dupaix, MD, University of Hawaii

Poster 15: Civilian Gunshot Wounds of the Sacrum
Mary Kate Erdman, MD, University of Southern California

Poster 16: Effect of Mental Health Conditions on Complications, Revision Rates and Readmission Rates Following Lower Extremity Trauma
Brock Foster, MD, Keck School of Medicine of University of Southern California
*Presented by Mary Kate Erdman, MD

Poster 17: Practice Patterns in the Treatment of Posterior Pelvic Ring Injuries
Jacob D. Gire, MD, Stanford University
*Presented by Julius A. Bishop, MD

Poster 18: Distal Femur Replacement versus Fixation for Geriatric Distal Femur Fracture
Michael Githens, MD, Harborview Medical Center

Poster 19: A Management Protocol for Acute Knee Dislocations with Associated Vascular Injury
Thomas Githens, DO, Texas Tech University
*Presented by Michael Githens, MD

Poster 20: Use of 3D Printed Models to Improve Acetabulum Fracture Identification
Philip K. Lim, MD, University of California, Irvine

Poster 21: Scapula-Shoulder, Humerus, Elbow through Forearm Reconstruction: A Case Report
Gerhard E. Maale III, MD, Medical City Hospital

Poster 22: Nail or Plate? Supracondylar Distal Femur Fractures in the Elderly
Motasem Refaat, MD, Harborview Medical Center

Poster 23: Accuracy of Assessing Reduction in Intertrochanteric Hip Fractures Using Fluoroscopy
Evan E. Vellios, MD, University of California, Los Angeles

Poster 24: Retrograde Tibial Nailing for Shaft Fractures below a Total Knee Arthroplasty and Internal Fixation, A Novel Technique
Chason Ziino, MD, Stanford University
*Presented by Ashley Aratani, MD

Poster 25: Femoral Neck Displacement is Underestimated Using Fluoroscopy: Pilot Sawbones Study
Stephen D. Zoller, MD, University of California, Los Angeles

Scientific Poster Presentations Kauai Ballrooms 1, 2, 3 & 4

Thursday, August 3: 6:00 am – 6:45 am / 1:45 pm – 2:45 pm

Friday, August 4: 6:00 am – 7:00 am / 1:30 pm – 2:30 pm

Saturday, August 5: 6:00 am – 7:00 am

Station C - Kauai Ballroom 3

UPPER EXTREMITY

Poster 26: Effects of Chronic Opioid Use on Perioperative Shoulder Arthroplasty Outcomes

Jonathan Cheah, MD, University of California, San Francisco

Poster 27: Effect of Mental Health on Readmissions and Complications Following Shoulder Arthroplasty
Brock Foster, MD, Keck School of Medicine of University of Southern California

*Presented by Mary Kate Erdman, MD

Poster 28: The Assessment of Quality, Accuracy and Readability of Internet Queries for Dupuytren's Contracture: Are They Reliable Resources for Patient Education?

Jason H. Ghodasra, MD, MSCI, University of California, Los Angeles

Poster 29: Anatomic Anterior Proximal Ulnar Angle Differences Based on Arm Position and a Case Report of Its Use
Ian Hasegawa, MD, University of Hawaii

Poster 30: Aggression Related Injuries of the Hand in the United States

Joshua W. Hustedt, MD, MHS, University of Arizona

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Joshua W. Hustedt, MD, MHS, University of Arizona

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Jesua Law, DO, Valley Orthopaedic Surgery Residency

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Jesua Law, DO, Valley Orthopaedic Surgery Residency

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Chima D. Nwankwo, MD, St. Mary's Medical Center

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Gabrielle M. Paci, MD, Stanford Hospital and Clinics

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Eric Q. Pang, MD, Stanford University

*Presented by Robin N. Kamal, MD

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Eric Q. Pang, MD, Stanford University

*Presented by Robin N. Kamal, MD

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PEDIATRICS

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Derek Axibal, MD, MS, University of Colorado

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Derek Axibal, MD, MS, University of Colorado

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Derek Axibal, MD, MS, University of Colorado

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Julio Jauregui, MD, University of Maryland

*Presented by Farshad Adib, MD

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Taylor R. Lara, MD, Oregon Health & Science University

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Gina M. Mosich, MD, University of California, Los Angeles

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Gina M. Mosich, MD, University of California, Los Angeles

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Brielle Kimberly Payne, MD, University of New Mexico

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Nicolas Vardiabasis, DO, Riverside University Health System

*Presented by John A. Schlechter, DO

Poster 47: The Typical Resting Position of the Adolescent Scapula

Nicolas Vardiabasis, DO, Riverside University Health System

*Presented by John A. Schlechter, DO

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Chason Ziino, MD, Stanford University

*Presented by Ashley Aratani, MD

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B Board of Directors Meetings, Speaker Ready Area, Multimedia Education Sessions, Regional and AAOS Presidents' Breakfast Meeting
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E New Member Reception
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F Welcome Reception, Family Luau
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G Guest/Children's Hospitality Breakfast
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H Tennis Courts

I Poipu Bay Golf Course

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