



Western Orthopaedic Association

82nd Annual Meeting

August 1-4, 2018 ♦ Westin Snowmass ♦ Snowmass, CO

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President's Welcome



Dear Colleagues,

Welcome to Snowmass, Colorado. As President of the WOA this year, it is my honor to welcome you and your family to the beautiful valley of Snowmass for the 82nd Annual Meeting of the WOA. My wife Debbie and I are excited and grateful that you have chosen to spend a wonderful summer week with us in Snowmass, and we hope you enjoy both the simulating academic meeting, and the fantastic outdoor mountain venue that awaits you and your family.

I would like to give a big thanks to Jeff Krygier, MD who, along with the Program Committee, has put together a tremendous program with symposia on the latest updates in joint replacement, trauma, sports, and foot and ankle, as well as the kick-off of a new series, "Survive the Night" hand call for the general orthopedist. The rapid fire sessions will provide a casual but upbeat venue for original research papers, while the resident program, led by Jennifer van Warmerdam, will help attending residents prepare for life in orthopedics.

Thursday night, we will kick off the meeting at the Outdoor Rodeo, which is sure to entertain the whole family. And remember, our closing Saturday night Gala is themed Denim and Diamonds, so feel free to dress up your jeans.

This year we have an incredible line-up of guest speakers. Dr. Wayne Sotile will deliver the Howard Steel Lecture on Thursday with an engaging talk on physician resilience and preventing burnout. On Friday, my Presidential Guest Speaker Nate Kaufman will challenge all of us with medical economics and the stubborn facts that might change your views. AAOS President David A. Halsey, MD will address the attendees on Friday with an Academy update, and our final special invitee, Mike McCaslin from the Ortho Forum, will lead a symposium on orthopedic business success.

The Board of Directors has worked tirelessly to make sure there is plenty of fun this year in Colorado. I hope you and your family enjoy the biking, hiking, jeeping, fly fishing, golfing, and touring available in Snowmass and Aspen. New this year for spouses, significant others, and families, we will have morning yoga each day, and a breakfast each morning. Dr. Sotile will speak at breakfast Thursday, the dogsled teams of Snowmass will be at breakfast Friday, and on Saturday we will have a community outreach team helping put hygiene kits together for local organizations.

Again, thank you for coming to Snowmass to enjoy the WOA Annual Meeting this year. I appreciate your engagement and participation throughout the week's activities, and look forward to hosting a wonderful week of education and fun!

Regards,

Brian Jewett

Brian A. Jewett, MD
WOA President

Program Chair



Jeffrey E. Krygier, MD
San Jose, CA
Santa Clara Valley Medical Center

Presidential Guest Speaker



Nathan S. Kaufman
San Diego, CA
**Succeeding in the Brave New/Old World:
Facts Are Stubborn Things!**
Friday, 9:40 am

Howard Steel Lecturer



Wayne M. Sotile, PhD
Davidson, NC
**Choosing Resilience: How Physicians &
Medical Organizations Can Curb Burnout**
Thursday, 9:25 am



Summary of Events

See Scientific Program for times for all CME Activities

KEY

⦿ Activity/Tour

✦ Social Event

✧ Special Presentation

★ Allied Health Session

Wednesday, August 1

12:00 pm – 5:00 pm

Board of Directors Meeting Kitchen Snowmass Dining Room II

12:00 pm – 5:00 pm

Meeting Registration Mt. Daly Ballroom Foyer

12:00 pm – 5:00 pm

Exhibit Setup Mt. Daly Ballroom A, C, D & E

12:00 pm – 5:00 pm

Speaker Ready Area 1st Floor Registration

Thursday, August 2

5:45 am – 6:45 am

Scientific E-Poster Session Cirque Boardroom, Cathedral Deck, Cathedral Peak & Castle Peak Auditorium

5:45 am – 1:40 pm

Speaker Ready Area 1st Floor Registration

6:00 am – 1:40 pm

Meeting Registration Mt. Daly Ballroom Foyer

6:30 am – 1:40 pm

Technical Exhibits, Continental Breakfast, Coffee Breaks and Daily Drawing Mt. Daly Ballroom A, C, D & E

6:45 am – 6:50 am

Welcome, Announcements and Meeting Overview Mt. Daly Ballroom B

6:50 am – 7:00 am

First Business Meeting Mt. Daly Ballroom B

7:00 am – 1:40 pm

Scientific Program Mt. Daly Ballroom B (unless otherwise specified)

7:30 am

✦ **Yoga** Overlook Room
Price: Included in Registration Fee

7:30 am

✦ **Group Walk** Meet in Lobby
Price: Included in Registration Fee

7:50 am – 8:20 am

✧ **Focused Brunch Presentation** Mt. Daly Ballroom B
*CME Credit Not Available

7:50 am – 8:50 am

★ **Concurrent Allied Health Session 1 - Hand** Alpine Springs

8:30 am – 10:00 am

✦ **Spouse/Guest/Children's Hospitality** Garden Terrace
Join your friends and meet new spouses while enjoying a continental breakfast. Our Howard Steel Speaker, Dr. Wayne Sotile will present "Resilient Medical Families: New Challenges; New Solutions" and Steve Miller with the Convention and Visitors Bureau will tell us what is exciting in Snowmass and activities to explore!
Price: Included in Registration Fee or \$40 per Unregistered Adult Guest and \$20 per Child (5-17 years)

9:05 am – 9:25 am

Break – Please visit Exhibits Mt. Daly Ballroom A, C, D & E

9:25 am – 10:20 am

✧ **Howard Steel Lecture** Mt. Daly Ballroom B
Choosing Resilience: How Physicians & Medical Organizations Can Curb Burnout
Wayne M. Sotile, PhD

10:20 am – 10:40 am

Break – Please visit Exhibits Mt. Daly Ballroom A, C, D & E

11:30 am – 12:00 pm

✧ **Focused Lunch Presentation** Mt. Daly Ballroom B
*CME Credit Not Available

12:00 pm – 12:35 pm

✧ **OREF Update/WOF/Young Investigator Awards** Mt. Daly Ballroom B

12:00 pm – 1:00 pm

★ **Concurrent Allied Health Session 2 - Trauma** Alpine Springs

12:45 pm – 5:15 pm

⦿ **Biking Tour Downhill from Maroon Bells**

Meet in Lobby at 12:35 pm

The tour begins with a drive to the "most photographed peaks in North America" – the Maroon Bells and Maroon Lake. At Maroon Lake there will be time for photographs and to talk about the local wildlife. After everyone has limbered up, you will begin your 12-mile downhill descent on a paved road through the Maroon Valley. Along the way, you are welcome to stop and enjoy the spectacular views, and to photograph one of the most picturesque wilderness areas in Colorado. Your trip finishes in Aspen. We will stop for a refreshing snack along the way. The Maroon Bells road is closed to most vehicular traffic for the majority of the summer and affords a perfect opportunity to enjoy your downhill bike ride. Trip departs at 1:15 pm and returns by 5:15 pm. ***Please eat prior to tour.**
Price: \$115 per Adult (13 and older) / \$105 per Child 7-12 (under 7 cannot ride their own bike) / \$39 per child under 3 in Burley trailer

1:00 pm – 5:00 pm

⦿ **Jeep Tour**

Meet in Lobby at 12:50 pm

Panoramic views of the entire Roaring Fork Valley highlight this trip, as we head high up Aspen Mountain to an elevation of 12,000 feet. As soon as we leave the Gant, we begin our ascent, winding up roads that you may recognize as ski runs if you have visited us in the winter months. Once on top, we will traverse Richmond Ridge before descending the backside of Aspen Mountain. Along the way we will pass old silver mines rich in history. Once we get back on to Castle Creek Road, we will head to the ghost town of Ashcroft. This scenic ghost town was once larger than Aspen itself during the height of the mining boom. ***Please eat prior to tour.**
Price: \$105 per Adult (13 and older) / \$95 per Child 8-12

1:40 pm – 2:40 pm

Scientific E-Poster Session Cirque Boardroom, Cathedral Deck, Cathedral Peak & Castle Peak Auditorium
Presenters will be available to answer questions.

1:45 pm – 5:00 pm

✧ **Resident Symposium** Alpine Springs

2:40 pm – 4:00 pm

Multimedia Education Session 1st Floor Registration



Summary of Events

See Scientific Program for times for all CME Activities

KEY

⊕ Activity/Tour

✦ Social Event

* Special Presentation

★ Allied Health Session

4:45 pm – 5:30 pm

✦ **New Member Reception** Overlook Room

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: Cowboy Boots and Jeans or Resort Casual

5:45 pm – 10:00 pm

✦ **Welcome Dinner at the Rodeo**

Meet at bus depot at 5:30 pm for transportation to the Rodeo

Have a boot stomping good time at Snowmass's Rodeo -Saddle Bronc Riding, Bareback riding, Bull Riding, Team Roping, Barrel Races and more! All children can participate in the calf scramble.

Sidle up to the bar and savor the best BBQ in Colorado.

Transportation from hotel provided.

Attire: Cowboy Boots and Jeans

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

9:45 pm – 10:45 pm

✦ **Resident Reception** Overlook Room

All Residents are invited to attend this reception.

Attire: Cowboy Boots and Jeans or Resort Casual

Price: Included in Registration Fee

Friday, August 3

6:00 am – 7:00 am

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

Kitchen Snowmass Dining Room II

6:00 am – 7:00 am

Scientific E-Poster Session Cirque Boardroom, Cathedral Deck, Cathedral Peak & Castle Peak Auditorium

6:00 am – 2:25 pm

Speaker Ready Area 1st Floor Registration

6:30 am – 2:25 pm

Meeting Registration Mt. Daly Ballroom Foyer

6:45 am – 2:25 pm

Technical Exhibits, Continental Breakfast, Coffee Breaks and Daily Drawing Mt. Daly Ballroom A, C, D & E

6:55 am – 7:00 am

Announcements Mt. Daly Ballroom B

7:00 am – 2:25 pm

Scientific Program Mt. Daly Ballroom B (unless otherwise specified)

7:30 am

✦ **Yoga** Overlook Room

Price: Included in Registration Fee

7:30 am

✦ **Group Walk** Meet in Lobby

Price: Included in Registration Fee

7:50 am – 8:20 am

* **Focused Brunch Presentation** Mt. Daly Ballroom B

*CME Credit Not Available

8:25 am – 9:25 am

★ **Concurrent Allied Health Session 3 – Radiology** Alpine Springs

8:30 am – 10:30 am

✦ **Spouse/Guest/Children's Hospitality** Garden Terrace

Meet & greet the sled dogs of Snowmass while enjoying a continental breakfast.

Price: Included in Registration Fee or \$40 per Unregistered Adult Guest and \$20 per Child (5-17 years)

9:05 am – 9:25 am

Break – Please visit Exhibits Mt. Daly Ballroom A, C, D & E

9:25 am – 9:40 am

* **AAOS Report** Mt. Daly Ballroom B

David Halsey, MD

9:40 am – 10:35 am

* **Presidential Guest Speaker** Mt. Daly Ballroom B

Succeeding in the Brave New/Old World: Facts Are Stubborn Things!

Nathan S. Kaufman

10:35 am – 10:55 am

Break – Please visit Exhibits Mt. Daly Ballroom A, C, D & E

11:45 am – 12:15 pm

* **Focused Lunch Presentation** Mt. Daly Ballroom B

*CME Credit Not Available

12:15 pm – 1:20 pm

* **WOF Report & Western Orthopaedic Foundation Named Grant Awards** Mt. Daly Ballroom B

1:00 pm – 5:00 pm

⊕ **Fly Fishing**

Meet in Lobby at 12:20 pm for transportation

Fly Fishing for wild trout in the unspoiled waters of Western Colorado is an unforgettable experience not to be missed. The Aspen/Snowmass area, with the Roaring Fork and Frying Pan Rivers at its back door, is the center of the finest wild trout fishing in Western Colorado. Both rivers are designated as Gold Medal Rivers by the Colorado Department of Wildlife. Trip departs at 12:30 pm and returns by 5:00 pm.

* **Eat during the Focused Lunch presentation.**

Price: \$290 per Angler (Includes equipment, flies, license, and gratuity)

1:00 pm – 5:30 pm

⊕ **Golf Tournament at Snowmass Club**

Meet in Lobby at 12:30 pm; 1:00 pm Tee Time

Award-winning architect Jim Engh designed the Snowmass Club Golf Course. The result is a course with majestic views, challenging landscapes, and sensitivity to the land and the sky above it. The fairways are sculpted, the greens are challenging, and the bunkers are downright frightening.

* **Eat during the Focused Lunch presentation**

Price: \$165 per person (Includes transportation, greens fees, beverage cart, and prizes)

1:30 pm – 5:00 pm

⊕ **Novice-Intermediate Hiking with Guide**

Meet in Lobby at 1:20 pm

Get a close look at the natural environment while you enjoy scenic, secluded trails. The elevation gain is 600-1,300 vertical feet, round trip distance is 3-4 miles and trail time is about 2 ½ hours, including transportation. Includes refreshments.

* **Eat during the Focused Lunch presentation**

Price: \$99 per adult (13+) / \$89 per child (8-12) (Includes gratuity)

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Summary of Events

See Scientific Program for times for all CME Activities

KEY

⦿ Activity/Tour

✦ Social Event

✧ Special Presentation

★ Allied Health Session

2:25 pm – 3:25 pm

Scientific E-Poster Tour Cirque Boardroom, Cathedral Deck, Cathedral Peak & Castle Peak Auditorium

Presenters will be available to answer questions.

3:25 pm – 4:25 pm

Multimedia Education Session 1st Floor Registration

5:30 pm – 7:30 pm

✦ **Exhibitor Reception** Mt. Daly Ballroom A, C, D & E

Before you go to dinner, start your evening off with drinks and hors d'oeuvres!

Attire: Business 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**

Cathedral Peak

While your parents are at the Exhibitor Reception, enjoy dinner and crafts or a movie with your friends. Children under 5 must be accompanied by an adult. This is not a babysitting service and is provided **only** for parents attending the Exhibitor Reception. Children must be registered.

Price: Included in Registration Fee or \$25 per Unregistered Child (5-17)

Saturday, August 4

5:40 am – 6:40 am

Scientific E-Poster Session Cirque Boardroom, Cathedral Deck, Cathedral Peak & Castle Peak Auditorium

5:40 am – 1:35 pm

Speaker Ready Area 1st Floor Registration

5:45 am – 6:40 am

Board of Directors Meeting Kitchen Snowmass Dining Room II

6:15 am – 1:35 pm

Meeting Registration Mt. Daly Ballroom Foyer

6:30 am – 1:35 pm

Technical Exhibits, Continental Breakfast, Coffee Breaks and Daily Drawing Mt. Daly Ballroom A, C, D & E

6:45 am – 7:00 am

Second Business Meeting Mt. Daly Ballroom B

7:00 am – 1:35 pm

Scientific Program Mt. Daly Ballroom B (unless otherwise specified)

7:30 am

✦ **Yoga** Overlook Room

Price: Included in Registration Fee

7:30 am

✦ **Group Walk** Meet in Lobby

Price: Included in Registration Fee

8:30 am – 10:00 am

✦ **Spouse/Guest/Children's Hospitality** Garden Terrace

Enjoy a continental breakfast! Clean the World – WOA's Social Responsibility Event. We will take repurposed bottled amenities and build hygiene kits to donate to a shelter. Hygiene kits are a great way to give back to our local communities in an affordable, mobile, and fun way.

Price: Included in Registration Fee or \$40 per Unregistered Adult Guest and \$20 per Child (5-17 years)

8:40 am – 9:10 am

✧ **Focused Brunch Presentation** Mt. Daly Ballroom B

*CME Credit Not Available

9:55 am – 10:20 am

Break – Please visit Exhibits Mt. Daly Ballroom A, C, D & E

11:00 am – 3:00 pm

⦿ **Anderson Ranch Arts Center**

Meet in Lobby at 10:50 am for transportation

The Annual Art Auction is Anderson Ranch's largest community fundraiser of the year and a festive highlight of the summer season! Held at the historic Ranch, the event welcomes art lovers of all ages to the campus. Over 200 works of art from \$100 – \$20,000 are available in live and silent auctions. Enjoy live music, art activities for children and a delicious picnic lunch prepared by the Ranch Café. Proceeds support the Ranch's artistic programs.

Price: \$20 per person (Includes transportation and BBQ lunch)
Maximum 20 people

11:25 am – 11:40 am

✧ **Presidential Address** Mt. Daly Ballroom B

The WOA and YOU

Brian Jewett, MD

11:45 am – 12:45 pm

★ **Concurrent Allied Health Session 4 - Case Review**

Alpine Springs

12:45 pm – 6:00 pm

⦿ **Class III Whitewater Rafting on the Colorado River**

Meet in Lobby at 12:35 pm

This popular trip boasts excellent Class III whitewater, followed by a stunning and scenic relaxing float within steep majestic canyon walls. These rapids, with names like "Superstition", "The Wall", and "Pinball", create an exhilarating section of unforgettable white water. The first section has Class III rapids and then declines to Class II & I as we focus on the beautiful scenery in the canyon. Younger children and less adventuresome adults can enter the rafts after the first set of larger rapids. **Children must be 50 lbs. and be able to swim.**

Price: \$118 per Adult (13 and older) / \$108 per Child 6-12

1:30 pm – 5:30 pm

⦿ **Get to Know Aspen Tour**

Meet in Lobby at 1:20 pm

This tour is a delightful blend Aspen's fascinating history with a stop at the Aspen Historical Museum; an architectural exploration by van of the Victorian West End; a stop at the Red Brick to visit with some highly talented local artists; and a tour with the curator of the current exhibit at the Aspen Art Museum.

Price: \$110 per person (Minimum 10 people)

2:00 pm – 3:00 pm

Multimedia Education Session 1st Floor Registration

7:00 pm – 11:00 pm

✦ **Family Gala Dinner Dance** Mt. Daly Ballroom A

Enjoy the sunset, then the stars and let's get the party started! This is the night to let your hair down and have some fun with your friends and colleagues. There will be a fabulous band, dinner and drinks, and don't forget to bring your dance moves!

Attire: Denim & Diamonds Theme - Jeans, Jackets and Cowboy Boots

Price: Included in Registration Fee or \$150 per Unregistered Adult Guest and \$50 per Child (5-17 years)



Scientific Program Mt. Daly Ballroom B, Unless Otherwise Specified

CME ACCREDITATION

The American Academy of Orthopaedic Surgeons designates this live activity for a maximum of 24.75 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

*16.5 CME Credits for Scientific Program

*5 CME Credits for Scientific E-Poster Sessions

*3.25 CME Credits for Multimedia Education Sessions

To ensure correct CME credit is awarded, please complete the WOA 2018 Annual Meeting CME Credit Records online at www.woa-assn.org. CME Certificates will be awarded to all registered participants.

Thursday, August 2

5:45 am **Scientific E-Poster Session** Cirque Boardroom, Cathedral Deck, Cathedral Peak & Castle Peak Auditorium

6:45 am **Welcome and Announcements**
Jeffrey E. Krygier, MD, Program Chair
Brian A. Jewett, MD, President

6:50 am **First Business Meeting**

Symposium 1 – Sports – Focus on the Athlete’s Knee

Moderator: Jonathan Bravman, MD, University of Colorado School of Medicine

7:00 am Team Physician Role and Responsibilities: How to Do It Right
Eric McCarty, MD, University of Colorado School of Medicine

7:12 am Return to Play after an ACL Injury
Kevin D. Plancher, MD, Albert Einstein College of Medicine

7:24 am Management of the “Other” Knee Ligaments (ALL, MCL, LCL, etc...)
CAPT Matthew T. Provencher, MD, The Steadman Clinic

7:36 am Current State of the Art in Treatment of Patellar Instability
Rachel M. Frank, MD, University of Colorado School of Medicine

7:48 am Discussion

7:50 am **Focused Brunch Presentation** *CME Credit Not Available
Smith & Nephew

Concurrent Allied Health Session 1 – Hand

Alpine Springs
Moderator: Theodore W. Coates, PA-C, University of California, Davis Medical Center

7:50 am Review of Hand Injuries and Conditions
Robert R. Slater Jr., MD, Folsom, CA

Rapid Fire Sessions 1A – Pediatrics

Cirque Boardroom
Moderators: Stephanie Y. Pun, MD, Stanford University Medical Center & Meghan N. Imrie, MD, Stanford University Medical Center

8:25 am Trends in Pediatric Traumatic Upper Extremity Amputations
Venus Vakhshori, MD, Keck School of Medicine of the University of Southern California

8:29 am Association Between Fracture Laterality and Nerve Injury Among Pediatric Supracondylar Humerus Fractures
Diana G. Douleh, MD, University of Colorado

8:33 am How Often Are Pediatric Elbow Radiographs Adequate for Interpretation
Daniel S. Brereton, DO, Riverside University Health System
*Presented by Steven G. Kenney, DO, MPH

8:37 am Mischievous Metaphyseal Metallic Implants in Children
Chason Ziino, MD, Stanford University
*Presented by Kimberly Hall, MD

8:41 am Discussion

8:45 am Radiolucent versus Fracture Tables for In Situ SCFE Pinning
Katherine Schroeder, MD, Texas Children’s Hospital / Baylor College of Medicine

8:49 am Accuracy of Fluoroscopy When Assessing Pin Protrusion during Fracture Stabilization?
Steven G. Kenney, DO, MPH, Riverside University Health System

8:53 am Sacroiliac Periosteal Avulsion as an Indication of Posterior Pelvic Fracture Instability in Children
Chase S. Dean, MD, University of Colorado School of Medicine

8:57 am Closed versus Surgical Management of SER IV Ankle Fractures in Adolescents: Maintain the Ankle Mortise
Benjamin M. Lurie, BA, Rady Children’s Hospital

9:01 am Discussion

Rapid Fire Sessions 1B – Upper Extremity/Hand & Wrist Cathedral Deck
Moderators: Gregory L. DeSilva, MD, University of Arizona Health Sciences & Basil R. Besh, MD, Fremont Orthopaedic & Rehabilitative Medicine

8:25 am Proximal Row Carpectomy versus Four Corner Fusion: Regional Differences, Incidence, and Conversion to Fusion
Harrison F. Kay, MD, University of Southern California Medical Center
*Presented by Hyunwoo P. Kang, MD

8:29 am Feasibility and Usability of a Ranking Tool for Trigger Finger
Lauren M. Shapiro, MD, Stanford Hospital and Clinics

8:33 am Wrist Arthroscopy for the Treatment of Scapholunate Predynamic Instability and Return to Push-Up Activity
Christopher M. Belyea, MD, MBA, Tripler Army Medical Center

8:37 am Fast-Fix All-Arthroscopic Repair of Peripheral TFCC Tears: Safe and Effective in Long-Term
Eric J. Sarkissian, MD, Stanford University Medical Center

8:41 am Discussion

8:45 am Epidemiological and Treatment Trends of Distal Radius Fractures across Multiple Age Groups
Ali Azad, MD, University of Southern California

8:49 am Peripheral Nerve Block Prior to Distal Radius Repair
Pierce Johnson, MD, Banner University of Arizona

8:53 am Feasibility and Usability of Conjoint Analysis for Distal Radius Fractures
Lauren M. Shapiro, MD, Stanford Hospital and Clinics

8:57 am Declining Use of Wrist External Fixation – The Rise of the Bridge Plate
Venus Vakhshori, MD, Keck School of Medicine of the University of Southern California

9:01 am Discussion

Rapid Fire Sessions 1C – Total Hip

Cathedral Peak
Moderators: Alexander Sah, MD, Institute for Joint Restoration & Kathryn L. Schabel, MD, Oregon Health & Science University



Scientific Program

Mt. Daly Ballroom B, Unless Otherwise Specified

- 8:25 am Statin Use Is Associated with Less Postoperative Arrhythmia after Total Hip Arthroplasty
Michael Chen, MD, Stanford University
- 8:29 am THA in HIV-Positive Patients Managed with Contemporary Protocols Outcomes
Clara L. Telford, BA, University of Texas Southwestern
*Presented by Sean Shahrestani, MD
- 8:33 am Resources and Complications in Primary Total Arthroplasty for Dialysis Patients
Joseph Patterson, MD, University of California San Francisco
- 8:37 am Discussion
- 8:42 am Incision Site Subcutaneous Fat Thickness and 90-Day Complications for THA
Gregory R. Sprowls, MD, Baylor Scott and White Health
- 8:46 am To Cement or Not to Cement? Modern Hybrid Total Hip Replacement - Low Risks and Excellent Results with Cemented Femoral Fixation
Alexander Sah, MD, Institute for Joint Restoration
- 8:50 am First Report of Early Results of a Commonly Used Cementless Single Tapered Femoral Component in Primary Total Hip Arthroplasty
Alexander Sah, MD, Institute for Joint Restoration
- 8:54 am Discussion

Rapid Fire Sessions 1D – Sports Medicine

Castle Peak Auditorium
Moderators: Eric McCarty, MD, University of Colorado School of Medicine & Omer A. Ilahi, MD, Southwest Orthopedic Group/Texas Arthroscopy & Sports Medicine Institute

- 8:25 am Outcomes of Arthroscopic Capsular Release Based on Patient Position
Darby A. Houck, BA, University of Colorado School of Medicine
- 8:29 am Regional Anesthesia for Shoulder Arthroscopy Decreases Early Opioid Requirements in Preoperative Opioid Users
Nicholas A. Trasolini, MD, Keck School of Medicine of the University of Southern California
*Presented by Hyunwoo P. Kang, MD
- 8:33 am Does the ABER View Improve Preoperative Identification of Labral Lesions?
Jeffrey E. Mait, MD, The Sports Clinic
- 8:37 am Scapular Retraction Test's Diagnostic Accuracy in Assessing Rotator Cuff Status
Stephen T. Gates, MD, University of Texas Southwestern
- 8:41 am Discussion
- 8:45 am Trans-Osseous versus Anchor Repair of Acute Patellar Tendon Ruptures
James A. O'Dowd, MD, University of Southern California
- 8:49 am Trans-Osseous versus Anchor Repair of Acute Quadriceps Tendon Ruptures
Steven Heer, BS, Tulane School of Medicine
- 8:53 am Return to Work after Autologous Chondrocyte Implantation of the Knee in Patients with Workers' Compensation Insurance
John G. Lane, MD, University of California
- 8:57 am Outcomes of Pediatric Meniscal Injuries
Stephanie Logterman, MD, University of Colorado
- 9:01 am Discussion
- 9:05 am **Break – Please Visit Exhibits** Mt. Daly Ballroom A, C, D & E

General Session 1 – Howard Steel Lecture

Moderator: Brian A. Jewett, MD, Slocum Center for Orthopedics and Sports Medicine

- 9:25 am Introduction of Presidential Guest Speaker
Brian A. Jewett, MD, Slocum Center for Orthopedics and Sports Medicine

9:30 am Howard Steel Presentation

Choosing Resilience: How Physicians and Medical Organizations Can Curb Burnout
Wayne M. Sotile, PhD, The Sotile Center for Resilience and the Center for Physician Resilience

10:20 am **Break – Please Visit Exhibits** Mt. Daly Ballroom A, C, D & E

Symposium 2 – Surviving Hand Call for Non-Hand Specialists – A Case Based Session with a Panel of Experts

Moderator: Jeffrey E. Krygier, MD, Santa Clara Valley Medical Center

Panelists:

Gregory L. DeSilva, MD, University of Arizona Health Sciences
Kevin D. Plancher, MD, Albert Einstein College of Medicine
Robin N. Kamal, MD, Stanford University Medical Center

10:40 am Panel Discussion

11:30 am **Focused Lunch Presentation** *CME Credit Not Available
Johnson & Johnson Medical Devices Companies
Moving Toward Opioid Free Orthopedic Surgery
Alexander Sah, MD

General Session 2 – OREF Update/WOF/OREF Young Investigator Awards

Moderator: Jeffrey E. Krygier, MD, Santa Clara Valley Medical Center

12:00 pm OREF Update

P. Joanne Ray, CEO of Orthopaedic Research and Education Foundation

12:05 pm Biomarkers of Neutrophil Extracellular Trap Formation (NETosis) and Their Relationship to Wound Healing in Ankle Fracture Surgery
William T. Kent, MD, University of California, San Diego

12:13 pm 3-Dimensional Virtual Reality for Pain Control in Orthopaedic Patients: A Prospective Randomized Control Study
Milton T. M. Little, MD, Cedars Sinai Medical Center

12:21 pm Correlation of Intraoperative Neurophysiologic Monitoring Changes with Postoperative Neurologic Deficits
Kali R. Tileston, MD, Stanford University

12:29 pm Discussion

Concurrent Allied Health Session 2 – Trauma

Alpine Springs
Moderator: Theodore W. Coates, PA-C, University of California, Davis Medical Center

12:00 pm Hip Fractures – Diagnosis and Management
Milton L. "Chip" Routt Jr., MD, University of Texas Health Science Center

Rapid Fire Sessions 2A – Other

Cirque Boardroom
Moderators: Robin H. Dunn, MD, University of Colorado School of Medicine & Jeffrey E. Krygier, MD, Santa Clara Valley Medical Center

12:40 pm Patient Mental Health Status Is Minimally Associated with Patient Satisfaction
Laura Lu, BS, Stanford University
*Presented by Derek F. Amanatullah, MD, PhD

12:44 pm The Effect of a Revised Curriculum on OITE Performance
Taylor R. Lara, MD, Oregon Health & Science University

12:48 pm A Structured Review Instrument Improves the Quality of Orthopaedic Journal Club
Sean T. Campbell, MD, Stanford University



Scientific Program

Mt. Daly Ballroom B, Unless Otherwise Specified

- 12:52 pm Orthopaedic Surgery Residents and the Physician Payment Sunshine Act: Are Payments to Resident Physicians Being Reported in the Open Payments Database?
Jason H. Ghodasra, MD, MSCI, University of California Los Angeles
*Presented by Kent T. Yamaguchi, MD
- 12:56 pm Discussion
- 1:00 pm Which Subspecialties Produce Best Evidence at the AAOS Annual Meeting?
Kimberly E. Souza, BS, Stanford University
- 1:04 pm The Thirty Year Slump: Gender Diversity in Orthopaedic Literature
Meghan A. Brown, MD, University of Southern California Medical Center
- 1:08 pm Gender Disparities in Industry Support of Orthopaedic Surgeons
Rafael Buerba, MD, MHS, University of California Los Angeles
*Presented by Danielle C. Greenberg, BA
- 1:12 pm Current Maternity, Paternity and Adoption Leave Policies in Orthopaedic Surgery Residencies
Sara Van Nortwick, MD, Stanford University
*Presented by Breana Siljander, MD
- 1:16 pm Discussion
- 1:20 pm Can Patients and Families Read the Questionnaires for Patient Related Outcome Measures?
Ellen M. Raney, MD, Shriners Hospital for Children
- 1:24 pm One-Year Global Unplanned Reoperation Rates: A Useful Quality Metric in Orthopaedic Surgery?
Olufemi Adams, BA, BS, University of Chicago - Pritzker School of Medicine
- 1:28 pm Does Tailoring Discharge Opioid Regimens to Inpatient Use after Orthopaedic Procedures Affect Refill Rates?
Trevor Grace, MD, University of California San Francisco
- 1:32 pm Infection Surveillance at Ambulatory Surgical Centers
Jory Wasserburger, MD, University of New Mexico
- 1:36 pm Discussion
- Rapid Fire Sessions 2B – Upper Extremity** Cathedral Deck
Moderators: Robin N. Kamal, MD, Stanford University Medical Center & Robert R. Slater, Jr., MD, Folsom, CA
- 12:40 pm Nationwide Database Analysis of Intramedullary Nail versus Plate Fixation for Humeral Shaft Fractures
Paul D. Navo, MPH, Keck School of Medicine of the University of Southern California
*Presented by Alexis Rounds, BS
- 12:44 pm Early Post-Operative Outcomes of Plate Versus Nail Fixation for Humeral Shaft Fractures
Jill A. Goodwin, MD, University of Arizona College of Medicine
*Presented by Blake Eyberg, MD
- 12:48 pm Operative versus Nonoperative Treatment of Humeral Shaft Fractures
Brian M. Cash, MD, University of California Los Angeles Medical Center and Orthopaedic Hospital
- 12:52 pm Relationship of Neurovascular Structures to Multiplanar Distal Interlocking Screws in Intramedullary Humeral Nails
Garrett Steinmetz, MD, University of Oklahoma
- 12:56 pm Discussion
- 1:00 pm Low-Profile Mesh Plating for Treating Transverse Olecranon Fractures: Biomechanical Evaluation
Christina Salas, PhD, University of New Mexico
*Presented by Deana Mercer, MD
- 1:04 pm Low Complication Rates among Geriatric Olecranon Fracture Patients Treated with Plate Fixation
Sean T. Campbell, MD, Stanford University
- 1:08 pm Comparison of Tension Band and Plate Fixation of Olecranon Fractures
Michael Del Core, MD, University of Texas Southwestern Medical Center
- 1:12 pm Concomitant Upper Extremity Fracture Worsens Outcomes in Elderly Patients with Hip Fracture
Mary Kate Thayer, MD, University of Washington Department of Orthopaedics
*Presented by Conor P. Kleweno, MD
- 1:16 pm Discussion
- 1:20 pm A Novel Technique for Olecranon Osteotomy for Treatment of Distal Humerus Fractures
Duncan C. Ramsey, MD, MPH, Oregon Health & Science University
- 1:24 pm Radial Head Instability and Limited Hand Rotation after Simulated IOM Injury
Christina Salas, PhD, University of New Mexico
*Presented by Deana Mercer, MD
- 1:28 pm Effects of Centralized Microvascular Outreach on Quality of Patient Care
Christopher Chen, MD, University of Colorado
- 1:32 pm Feasibility of Discussing Cost of Surgery at Point of Care
Laura Lu, BS, Stanford University
*Presented by Lauren M. Shapiro, MD
- 1:36 pm Discussion
- Rapid Fire Sessions 2C – Total Knee** Cathedral Peak
Moderators: Alexander Sah, MD, Institute for Joint Restoration & Jennifer M. van Warmerdam, MD, St. Mary's Medical Center Total Joint Center
- 12:40 pm Manipulation Rate Is Not Increased after Customized Total Knee Arthroplasty
Andrew B. Kay, MD, Houston Methodist Hospital
- 12:44 pm Does Use of Robotic Technology Improve Surgeon Ergonomic Safety and Satisfaction during TKA?
Laura Scholl, MS, Mahwah, NJ
- 12:48 pm Unexpected High Failure Rate in a Patient-Specific Total Knee Arthroplasty
Kevin Park, MD, Houston Methodist Hospital
- 12:52 pm Effect of Computer Navigation on Complication Rates Following Unicompartmental Knee Arthroplasty
Deepak V. Chona, MD, Stanford University
*Presented by Abiram Bala, MD
- 12:56 pm Discussion
- 1:00 pm Vitamin D Is Associated with Higher Complication Rates in TKA
Vishal Hegde, MD, University of California, Los Angeles
- 1:04 pm Early Opioid Cessation and Patient Reported Outcomes in Primary TKA
Andrew R. Summers, BS, Oregon Health & Science University
*Presented by Jack Mazzulo, BA
- 1:08 pm Tranexamic Acid with Limited Use Tourniquet in Total Knee Arthroplasty
Avrey Novak, BS, University of Washington School of Medicine
*Presented by Adam A. Sassoon, MD, MS
- 1:12 pm Aminocaproic Acid versus Tranexamic Acid in Total Joint Arthroplasty. What's Better?
Zachary Lum, DO, University of California, Davis



Scientific Program

Mt. Daly Ballroom B, Unless Otherwise Specified

- 1:16 pm Discussion
- 1:20 pm Outcomes of a Unique Milling System Technique for Patellofemoral Arthroplasty
Alexander Sah, MD, Institute for Joint Restoration
- 1:24 pm Effect of Patellar Thickness on Gait Biomechanics Following Knee Arthroplasty
Anne Wright, MD, University of Hawaii
- 1:28 pm Addressing Large Tibial Osseous Defects in Primary Total Knee Arthroplasty Using Trabecular Metal Cones
Jae S. You, MD, University of Hawaii
- 1:32 pm Clinical Performance of a Novel 3D Printed Cementless Tibial Baseplate
Steven F. Harwin, MD, Mount Sinai Hospital
*Presented by Manoshi Bhowmik-Stoker, PhD
- 1:36 pm Discussion

Rapid Fire Sessions 2D – Trauma/Hip Fractures

Castle Peak Auditorium
Moderators: Geoffrey S. Marecek, MD, Keck School of Medicine of the University of Southern California & Julius A. Bishop, MD, Stanford HealthCare

- 12:40 pm Time-to-Block: Early Fascia Iliac Block Reduces Opioid Use in Geriatric Hip Fractures
John M. Garlich, MD, Cedars Sinai Medical Center
- 12:44 pm Geriatric Hip Fractures: Regional Anesthesia with Multimodal Pain Management
John M. Garlich, MD, Cedars Sinai Medical Center
- 12:48 pm Single-Shot versus Continuous Fascia Iliaca Blocks for Hip Fractures
Stephen Stephan, MD, Cedars-Sinai Medical Center
- 12:52 pm Fascia Iliacus Blocks Do Not Affect Hospital Length of Stay
Landon S. Polakof, MD, Cedars-Sinai Medical Center
- 12:56 pm Discussion
- 1:00 pm Determining Indications for Preoperative Fascia Iliac Nerve Block in Hip Fracture Patients
Eytan Debbi, MD, PhD, Cedars Sinai Medical Center
- 1:04 pm Fewer Fatal Fractures: Impact of Comprehensive Geriatric Hip Fracture Program on One-Year Mortality
Jason W. Stoneback, MD, University of Colorado School of Medicine
- 1:08 pm Predictors for 30-Day to One-Year Readmission Rates in a Geriatric Hip Fracture Population
Samuel K. Stephenson, MD, PhD, Cedars Sinai Medical Center
- 1:12 pm Impact of Interhospital Transfer on 30-Day Hip Fracture Outcomes
David Campbell, MD, University of Arizona
- 1:16 pm Discussion
- 1:20 pm Incidence and Risk Factors for Pneumonia in Hip Fractures
Blake Eyberg, MD, University of Arizona College of Medicine
- 1:24 pm Nail versus Plate: No Difference in Hip Fracture Episode Cost
Joseph Patterson, MD, University of California San Francisco
- 1:28 pm Hip Fracture Patients Receiving Perioperative TAVR Have Higher Complication Rates
Dheeraj R. Yalamanchili, MD, Cedars-Sinai Medical Center
- 1:32 pm Effect of Organ Transplantation on Operative Outcomes in Hip Fractures
Bejan A. Alvandi, BS, Keck School of Medicine of the University of Southern California
*Presented by Venus Vakhshori, MD
- 1:36 pm Discussion

- 1:40 pm **Scientific E-Poster Session** Cirque Boardroom, Cathedral Deck, Cathedral Peak & Castle Peak Auditorium
Presenters are available to answer questions.

Resident Review Course

Alpine Springs
Moderators: Jennifer M. van Warmerdam, MD, St. Mary's Medical Center Total Joint Center

- 1:45 pm How to Prepare for the Oral Orthopaedic Board Examination from an Examiner's Point of View
Milton L. "Chip" Routh Jr., MD, University of Texas Health Science Center
- 2:15 pm How to Prepare for the Oral Exam from a Recent Graduate
Speaker TBA
- 2:45 pm Panel Discussion: Pros and Cons of Different Practice Settings
Private/Foundation Model
Jennifer M. van Warmerdam, MD, St. Mary's Medical Center Total Joint Center
- Academic
Meghan N. Imrie, MD, Stanford University Medical Center
County
Jeffrey E. Krygier, MD, Santa Clara Valley Medical Center
Volunteer
Speaker TBA
- 3:15 pm How to Negotiate Your First Employment Contract
Rosalyn Nguyen JD, MBA, The University of New Mexico
- 4:00 pm How to Find Your Niche and Build Your Brand
Ryan M. Nunley, MD, Washington University School of Medicine
- 4:45 pm Why It Is Important to Be a Resident Member of the WOA
Logan Koehler, MD, William Beaumont Army Medical Center/Texas Tech El Paso Health Sciences Center
- 4:50 pm Discussion
- 2:40 pm **Multimedia Education Session** 1st Floor Registration

Friday, August 3

- 6:00 am **Scientific E-Poster Session** Cirque Boardroom, Cathedral Deck, Cathedral Peak & Castle Peak Auditorium

Announcements

Jeffrey E. Krygier, MD, Program Chair

Symposium 3 – Adult Reconstruction: Why Knees Fail – Tips and Tricks to Avoid and Manage Complications

Moderator: William J. Maloney, MD, Stanford University School of Medicine

- 7:00 am Introduction – Current Problems and Why TKA's Fail Today
William J. Maloney, MD, Stanford University School of Medicine
- 7:02 am Wound Drainage and the Infected Knee
Jay R. Lieberman, MD, Keck School of Medicine of the University of Southern California
- 7:12 am The Unstable Knee
Derek F. Amanatullah MD, PhD, Stanford University School of Medicine
- 7:22 am The Stiff Total Knee
William J. Maloney, MD, Stanford University School of Medicine
- 7:32 am Robotics and Total Knee Replacement – Has the Time Come?
Russell G. Cohen, MD, Tucson Orthopaedic Institute
- 7:42 am Cases and Questions



Scientific Program

Mt. Daly Ballroom B, Unless Otherwise Specified

7:50 am **Focused Brunch Presentation** *CME Credit Not Available
Stryker
Creating the Future with Mako Robotic-Arm Assisted Surgery
C. Brian Blackwood, MD

Rapid Fire Sessions 3A – Pediatrics Cirque Boardroom
Moderators: Stephanie Y. Pun, MD, Stanford University Medical Center & Meghan N. Imrie, MD, Stanford University Medical Center

8:25 am Weight-Bearing Osteochondritis Dissecans Lesions of the Knee: Two-Year Follow-Up Analysis
Liang Zhou, MD, Tripler Army Medical Center

8:29 am Growth Arrest after Transphyseal ACL Reconstruction in Skeletally Immature Adolescents
Thomas J. Melton, MD, Madigan Army Medical Center

8:33 am A Patellar Advancement Technique in Children with Patella Alta and Cerebral Palsy
Jason T. Rhodes, MD, Children's Hospital Colorado

8:37 am Single versus Two Incision Technique for Treatment of Neuromuscular Hip Dysplasia
Sara Van Nortwick, MD, Stanford University
*Presented by Malcolm R. DeBaun, MD

8:41 am Discussion

8:45 am Effects of Calcaneal Lengthening Osteotomy on Foot Progression Angle in Children with Cerebral Palsy
Ryan Davenport, BS, University of Colorado School of Medicine

8:49 am Pediatric Dual X-Ray Absorptiometry (DXA) Scores Poorly Correlate with Vertebral Fractures
Sara Van Nortwick, MD, Stanford University

8:53 am Outcomes of Meniscus Repairs in Children and Adolescents
Shawn Nguyen, DO, Riverside University of Health Sciences

8:57 am Discussion

Rapid Fire Sessions 3B – Foot & Ankle/Ankle Injuries Cathedral Deck
Moderators: Christopher B. Hirose, MD, Saint Alphonsus Coughlin Foot and Ankle Clinic & Kimberly L. Furry, MD, Mercy Orthopedics Associates

8:25 am The Incidence of Plafond Impaction in Pronation-Abduction Ankle Fractures and the Role of Computed Tomography in Diagnosis and Surgical Planning
Ram K. Alluri, MD, Keck School of Medicine of the University of Southern California

8:29 am Ankle Fractures: Ottawa Ankle Rules Need Geriatric Modifier
David Weiner, MD, Union Memorial Hospital

8:33 am Predicting Risk of Complications in Diabetic Patients with Ankle Fractures
Robin H. Dunn, MD, University of Colorado School of Medicine

8:37 am Quality and Utility of Immediate PACU Radiographs after Ankle Fractures
Tony Pedri, MD, University of New Mexico
*Presented by Matthew G. Wharton, MD

8:41 am Discussion

8:45 am Tibiotalar Pressure Mechanics after Instrumentation with Screws versus Suspensory Fixation
Eric Q. Pang, MD, Stanford University
*Presented by Ariel A. Palanca, MD

8:49 am Cost-Effectiveness of Screw versus Suture Button Fixation in Syndesmotic Injuries
Duncan C. Ramsey, MD, MPH, Oregon Health & Science University

8:53 am Open Visualization versus Palpation for Reduction of the Syndesmosis
Eric Q. Pang, MD, Stanford University
*Presented by Julius A. Bishop, MD

8:57 am Evaluating Current Treatment Strategies for Syndesmosis Injuries in Athletes
Michael Reiter, MD, University of Colorado School of Medicine
*Presented by Robin H. Dunn, MD

9:01 am Discussion

Rapid Fire Sessions 3C – Sports Medicine Cathedral Peak
Moderators: Rachel M. Frank, MD, University of Colorado School of Medicine & Richard A. Marder, MD, UC Davis School of Medicine

8:25 am Clinical and Radiographic Outcomes of a Novel Acromioclavicular-Coracoclavicular (AC/CC) Reconstruction
Joseph D. Cooper, MD, Keck School of Medicine of the University of Southern California
*Presented by Mary Kate Erdman, MD

8:29 am Biceps Tendon Tenodesis without Tenotomy: A Means of Augmenting Repair of Massive Rotator Cuff Tears
Steven J. Barad, MD, Methodist Hospital

8:33 am Effect of Prior Bariatric and Transplant Surgery on Rotator Cuff Tears
Anthony Essilfie, MD, University of Southern California

8:37 am Is Arthroscopy at Time of Medial Patellofemoral Ligament Reconstruction Necessary?
Christopher Shultz, MD, University of New Mexico

8:41 am Discussion

8:45 am Risk Factors for Early Revision Anterior Cruciate Ligament Reconstruction
Matthew C. Gallo, BA, Keck School of Medicine of the University of Southern California
*Presented by Kavitha Thiagarajan, BA

8:49 am Validation of PROMIS Computer Adaptive Testing for Multi-Ligament Knee Reconstruction
Shane Korber, BS, Keck School of Medicine of the University of Southern California

8:53 am Are Orthopaedic Surgeons Performing Fewer Arthroscopic Partial Meniscectomies in Patients Greater than 50 Years Old? A National Database Study
Hyunwoo P. Kang, MD, Keck School of Medicine of the University of Southern California

8:57 am Discussion

Rapid Fire Sessions 3D – Trauma Castle Peak Auditorium
Moderators: Geoffrey S. Marecek, MD, Keck School of Medicine of the University of Southern California & Conor P. Kleweno, MD, Harborview Medical Center

8:25 am The Super Elderly (≥ 80 Years Old) Do Not Have Higher Inpatient Morbidity Than Young Geriatric (65-79 Years Old) Pelvic Insufficiency Fractures
Sean S. Rajaei, MD, Cedars-Sinai Medical Center
*Presented by Milton T. M. Little, MD

8:29 am Retrospective Examination of Tension Band Plate Fixation in Transverse and Comminuted Patella Fractures
Sean M. Mitchell, MD, University of Arizona College of Medicine Phoenix
*Presented by Richard L. Auran, MD

8:33 am Patient-Reported Outcomes after Pelvic and Acetabular Fractures: A Preliminary Study
Conor P. Kleweno, MD, Harborview Medical Center



Scientific Program

Mt. Daly Ballroom B, Unless Otherwise Specified

- 8:37 am Outcomes of Femoral Head Fractures Associated with Traumatic Hip Dislocations
Michael Del Core, MD, University of Texas Southwestern Medical Center
*Presented by Stephen Blake Wallace, MD
- 8:41 am Discussion
- 8:45 am Current Drug and Alcohol Use in Orthopedic Trauma Patients
D'Ann Arthur, MD, Harbor-University of California Los Angeles Medical Center
- 8:49 am Surgical Delay Increases the Rate of 30 Day Complications and Mortality in Femoral Shaft Fractures
Robert Walker, MD, University of Arizona College of Medicine
*Presented by Ryan DiGiovanni, MD
- 8:53 am Location of Pelvic Ballistic Fracture and Associated Visceral Injuries
Mary Kate Erdman, MD, University of Southern California
- 8:57 am Discussion
- Concurrent Allied Health Session 3 – Radiology** Alpine Springs
Moderator: Theodore W. Coates, PA-C, University of California, Davis
- 8:25 am Imaging of the Wrist and Hand
Andrew Sonin, MD, FACR, Radiology Imaging Associates, PC
- 9:05 am **Break – Please Visit Exhibits** Mt. Daly Ballroom A, C, D & E
- General Session 3 – AAOS Report & Presidential Guest Speaker**
Moderator: Brian A. Jewett, MD, Slocum Center for Orthopedics and Sports Medicine
- 9:25 am **AAOS Report**
David A. Halsey, MD, President
- 9:40 am Introduction of Presidential Guest Speaker
Brian A. Jewett, MD, Slocum Center for Orthopedics and Sports Medicine
- 9:45 am **Presidential Guest Speaker**
Succeeding in the Brave New/Old World: Facts Are Stubborn Things!
Nathan S. Kaufman, Kaufman Strategic Advisors
- 10:35 am **Break – Please Visit Exhibits** Mt. Daly Ballroom A, C, D & E
- Symposium 4 – Orthopaedic Business**
Moderator: Michael J. McCaslin, CPA, Somerset CPA and Advisors
- 10:55 am **Key Business Issues:**
Patient Centered Care
Urgent Care/Immediate Access
Extender Utilization, Optimization and Cost Accounting
Ownership of Assets and Services to Manage Risk
Payer, Hospital and Employer Strategies
Private Equity and Impact on Orthopaedics
- Panel:**
Michael J. McCaslin, CPA, Somerset CPAs and Advisors
Brian A. Jewett, MD, Slocum Center for Orthopedics and Sports Medicine
- 11:40 am Discussion
- 11:45 am **Focused Lunch Presentation** *CME Credit Not Available
Flexion Therapeutics
Clinical Data Supporting Approval for ZILRETTA® (triamcinolone acetone extended-release injectable suspension utilizing microsphere PLGA technology) as an Intra-articular Treatment for Osteoarthritis of the Knee (OAK) Pain
Jack Bert, MD
- General Session 4 – WOF Report & Western Orthopaedic Foundation Named Grants**
Moderator: Robert R. Slater Jr., MD, Folsom, CA
- 12:15 pm **WOF Report**
Robert R. Slater, Jr., MD, Folsom, CA
- 12:25 pm **WOF Robert R. Slater, Jr., MD Travel Grant**
Complications in Computer Navigated versus Conventional Total Hip Arthroplasty
Blake K. Montgomery, MD, Stanford University
- 12:31 pm **WOF Brian A. Jewett, MD Travel Grant**
Application of Patient-Reported Outcome Measurement Information System in Elite Athletes
Jesse Roberts, MD, University of Colorado
- 12:37 pm **WOF Jeffrey E. Krygier, MD Travel Grant**
A Preoperative Score for Predicting 30-Day Readmission after Elective 1-2 Level Posterior Lumbar Spinal Fusion
Joseph Patterson, MD, University of California, San Francisco
- 12:43 pm **WOF Jeffrey M. Nakano, MD Travel Grant**
Efficacy of a Team-Based Approach to Improving Antibiotic Administration in Open Fractures
Alvin Shieh, MD, University of California Davis
- 12:49 pm **WOF Paul C. Collins, MD Travel Grant**
Infection Rates of Low-Velocity Gunshot Femur Fractures Treated without Debridement
Jessica D. Bear, MD, Hospital for Special Surgery
- 12:55 pm **WOF Basil R. Besh, MD Travel Grant**
Timing of Lumbar Spinal Fusion Impacts Total Hip Arthroplasty Outcomes
Abiram Bala, MD, Stanford University
- 1:01 pm **WOF Milton L. “Chip” Routh, Jr., MD Travel Grant**
Mouse Spine Implant Infection Model: Fluorescent Probe Detects Multiple Bacteria
Gideon W. Blumstein, MD, MS, University of California Los Angeles
- 1:07 pm **WOF Nitin N. Bhatia, MD Travel Grant**
Smoking and Total Hip Arthroplasty in 2014: Increased Complications and Costs
Eytan Debbi, MD, PhD, Cedars Sinai Medical Center
- 1:13 pm Discussion
- Rapid Fire Sessions 4A – Basic Science** Cirque Boardroom
Moderators: Robert R. Slater, Jr., MD, Folsom, CA & Jeffrey E. Krygier, MD, Santa Clara Valley Medical Center
- 1:25 pm Local Delivery of Supplemental Agrin Prevents Motor Endplate Degradation
Winnie Palispis, MD, University of California, Irvine
- 1:29 pm hES-Pericyte Conditioned Media Rescue Myotube Atrophy In Vitro
Regina Husman, BS, David Geffen School of Medicine at University of California Los Angeles
- 1:33 pm Differentially Expressed Micro-RNA in Rotator Cuff Tendinopathy Using RNA-Sequencing
Kimberly Hall, MD, Stanford Hospital and Clinics
- 1:37 pm Accuracy of 3D Printed Bone Models Using Open Source Software
Trevor J. Shelton, MD, MS, University of California, Davis
- 1:41 pm Discussion
- 1:45 pm Anti-Inflammatory Peptide Enhances New Bone Formation and Reduces Inflammation in Rbmp-2-Mediated Spine Fusion
Phillip H. Behrens, MD, Cedars-Sinai Medical Center
- 1:49 pm Characterization of Stable and Endochondral Human Articular Cartilage Progenitor Cells
Phillip W. Lam, BS, Oregon Health & Science University



Scientific Program

Mt. Daly Ballroom B, Unless Otherwise Specified

1:53 pm "Smart" Pedicle Probe for Residency Motor Skills Evaluation and Training

Christina Salas, PhD, University of New Mexico
*Presented by Deana Mercer, MD

1:57 pm Discussion

2:01 pm Masquelet Model to Evaluate Engineered Induced Membranes for Bone Healing

Malcolm R. DeBaun, MD, Stanford University

2:05 pm Toward Translational Treatments: A Novel Model of Revision Arthroplasty

Zachary D.C. Burke, MD, David Geffen School of Medicine at University of California Los Angeles

2:09 pm Single-Stage Revision with Tobramycin-Loaded Polymethylmethacrylate Is Ineffective in Periprosthetic Infection Model

Zachary D.C. Burke, MD, David Geffen School of Medicine at University of California Los Angeles

2:13 pm Greater Muscle Degeneration in Aged Mice after Rotator Cuff Injury

Abhinav Sharma, BS, David Geffen School of Medicine at University of California Los Angeles

2:17 pm Discussion

Rapid Fire Sessions 4B – Sports Medicine Cathedral Deck

Moderators: Rachel M. Frank, MD, University of Colorado School of Medicine & COL (Ret) Edward D. Arrington, MD, Madigan Army Medical Center

1:25 pm Fixed-versus Adjustable-Loop Devices for ACLR: A Systematic Review and Meta-Analysis

Darby A. Houck, BA, University of Colorado School of Medicine

1:29 pm New Biomechanical Testing Standards for Adjustable Femoral Cortical Suspension Devices

Alexander B. Peterson, MD, Tibor Rubin Long Beach VA Medical Center

1:33 pm Estimating the Length of Semitendinosus and Gracilis Tendons by MRI

Ali A. Qadeer, MD, Baylor College of Medicine

1:37 pm ACL and ATSF Injury Epidemiology and Risk Factors in Skiers

Benjamin Albertson, MD, University of New Mexico

1:41 pm Discussion

1:45 pm Supplementation of Vitamin D in Division I NCAA Athletes

Shane Korber, BS, Keck School of Medicine of the University of Southern California

1:49 pm Early Return from Concussion Associated with Increased Injury in Athletes

Garrett Harada, BA, David Geffen School of Medicine at the University of California Los Angeles

1:53 pm The Epidemiology of Concussions in a NCAA Division I Female Soccer Team

Santano L. Rosario, BA, Keck School of Medicine of the University of Southern California

*Presented by Shane Korber, BS

1:57 pm Effect of Artificial Turf versus Natural Grass on Knee Injuries in NCAA Football: Ten Year Report

Galvin Loughran, BS, Georgetown University School of Medicine

2:01 pm Discussion

2:05 pm Division I Collegiate Athletes Have a High Return-to-Sport Rate Following Hip Arthroscopy for Femoroacetabular Impingement Syndrome

Haley L. Nakata, BS, Keck School of Medicine of the University of

Southern California

*Presented by Omid Jalali, BS

2:09 pm Factors Determining Safe Return to Driving after Hip Arthroscopy

Mika De Coster, BS, Keck School of Medicine of the University of Southern California

2:13 pm Incidence and Management of Heterotopic Ossification Following Arthroscopic Hip Surgery

Michael J. Huang, MD, Colorado Springs Orthopaedic Group

*Presented by Jennifer J. Wages, PhD, ATC, OTC

2:17 pm Discussion

Rapid Fire Sessions 4C – Trauma Cathedral Peak

Moderators: David H. Chafey III, MD, University of New Mexico & Jonathan G. Eastman, MD, University of California, Davis

1:25 pm Which Trauma Patients Need Psychiatry Consultation?: A Pilot Survey Study

Sean T. Campbell, MD, Stanford University

1:29 pm Blade Plating of High-Energy Proximal Femur Fractures Results in Union and Minimal Complications

Matthew Weldon, MD, University of Texas at Houston

*Presented by Timothy S. Achor, MD

1:33 pm Does Screw Location Affect the Risk of Subtrochanteric Femur Fracture after Femoral Neck Fixation?

Erica K. Crump, MD, Naval Medical Center San Diego

1:37 pm Are Piriformis Reconstruction Nails Ideal for Prophylactic Femoral Neck Fixation?

Alvin Shieh, MD, University of California, Davis

1:41 pm Discussion

1:45 pm Management of Aseptic Ptertrochanteric Femoral Fracture Nonunions

Michael Duran, MD, University of Arizona College of Medicine

1:49 pm Healing the Index Humeral Nonunion Surgery

Donald A. Wiss, MD, Cedars Sinai Medical Center

*Presented by John M. Garlich, MD

1:53 pm Clavicle Nonunions: Plate and Graft Type Do Not Effect Healing Rates

Donald A. Wiss, MD, Cedars Sinai Medical Center

*Presented by John M. Garlich, MD

1:57 pm Discussion

2:01 pm Regional Anesthesia Decreases Length of Stay in Tibial Shaft Fractures

Ryan DiGiovanni, MD, Banner University Medical Center

*Presented by Michael Duran, MD

2:05 pm Outcomes and Complications of SIGN Intramedullary Nailing of the Tibia

Nikolas Baksh, MD, Oregon Health & Science University

2:09 pm Flexed versus Semi-Extended Positioning for Tibial Nailing: Changing Practice Patterns

Lawrence H. Goodnough, MD, PhD, Stanford University

*Presented by Alexander H. Arzeno, MD

2:13 pm Methamphetamine Abuse in Orthopaedic Trauma Patients

Nicholas Trasolini, MD, Keck School of Medicine at the University of Southern California

*Presented by John Carney, BS

2:17 pm Discussion

Rapid Fire Sessions 4D – Total Joint Castle Peak Auditorium

Moderators: Derek F. Amanatullah MD, PhD, Stanford University School of Medicine & Kathryn L. Schabel, MD, Oregon Health & Science University



Scientific Program

Mt. Daly Ballroom B, Unless Otherwise Specified

- 1:25 pm Insurance Status Predicts Morbidity, Mortality, and Cost in Revision Total Joint Arthroplasty
Blake Eyberg, MD, University of Arizona College of Medicine
- 1:29 pm Use of a 2D/3D Registration Method to Evaluate the Psoas Impingement in Total Hip Arthroplasty
Ahmad Faizan, PhD, Mahwah, NJ
*Presented by Laura Scholl, MS
- 1:33 pm Mortality during Total Hip Periprosthetic Joint Infection: A Meta-Analysis
Zachary Lum, DO, University of California, Davis
- 1:37 pm Immediate Impact of Tranexamic Acid in Blood Conservation in Primary Total Joint Replacement
Alexander Sah, MD, Institute for Joint Restoration
- 1:41 pm Discussion
- 1:45 pm A Comparison of Traumatic Hip Fracture & Primary Elective Total Hip Patients: Comorbidity Burden, Hospital Course, Postoperative Complications and Cost of Care Analysis
Sean M. Mitchell, MD, University of Arizona College of Medicine Phoenix
*Presented by Jason A. Lowe, MD
- 1:49 pm Isolated Greater Trochanteric Fracture and the Direct Anterior Approach Using a Fracture Table
Bradley P. Graw, MD, Palo Alto Medical Foundation
- 1:53 pm An In-Vitro Comparative Assessment of Acetabular Cup Removal Systems
Louis M. Kwong, MD, Harbor-University of California Los Angeles Medical Center
- 1:57 pm Discussion
- 2:01 pm Mortality during Total Knee Periprosthetic Joint Infection: A Meta Analysis
Zachary Lum, DO, University of California, Davis
- 2:05 pm Conversion Rates and Timing to Total Knee Arthroplasty Following ACL Reconstruction: A United States Population-Based Study
Jacob Bobman, MD, Keck School of Medicine of the University of Southern California
- 2:09 pm Bilateral Simultaneous versus Staged Total Knee Arthroplasty: Minimal Perioperative Risk-Differences
Ellen L. Tsay, BS, MS, University of California, San Francisco
- 2:13 pm Distal Femur Locking Plates Fit Poorly after Total Knee Arthroplasty
Sean T. Campbell, MD, Stanford University
- 2:17 pm Discussion

Scientific E-Poster Tour

Cirque Boardroom, Cathedral Deck, Cathedral Peak & Castle Peak Auditorium

Moderators: Jeffrey E. Krygier, MD, Santa Clara Valley Medical Center & Julius A. Bishop, MD, Stanford HealthCare

2:25 pm E-Poster Tour

3:25 pm **Multimedia Education Session** 1st Floor Registration

Saturday, August 4

- 5:40 am **Scientific E-Poster Session** Cirque Boardroom, Cathedral Deck, Cathedral Peak & Castle Peak Auditorium
- 6:40 am **Announcements**
Jeffrey E. Krygier, MD, Program Chair
- 6:45 am **Second Business Meeting**

General Session 5 – WOF Resident Awards

Moderator: Michael Dayton, MD, University of Colorado School of Medicine

- 7:00 am Influence of Capsular Laxity and Labral Integrity on Hip Stability
Adam Johannsen, MD, Stanford University
- 7:06 am C1-C3 Construct with Short C2 Pedicle Screws versus Goel-Harms Fixation
Young Lu, MD, University of California, Irvine
- 7:12 am When is an Orthopaedic Intern Ready to Take Call?
Trevor Barronian, MD, Oregon Health & Science University
- 7:18 am Comparing AHD Between MRI and X-Ray in Massive Cuff Tears
Steven Donohoe, MD, Keck School of Medicine of the University of Southern California
- 7:24 am Innervation of the Subscapularis: An Anatomical Study
Brian W. Sager, MD, University of Texas Southwestern
- 7:30 am Pre-Operative CT Can Predict Post-Operative Shortening of Extra-Capsular Hip Fractures
Garin Hecht, MD, Harborview Medical Center
- 7:36 am Intramedullary Nailing versus Lateral Locked Plating for Distal Femur Fractures
K. Chandra Vemulapalli, MD, University of Texas Health McGovern Medical School
- 7:42 am Discussion

Symposium 5 – Trauma

Moderator: Timothy S. Achor, MD, Memorial Hermann Texas Medical Center

- 7:50 am How to Avoid Non-Unions
Alexandra K. Schwartz, MD, University of California, San Diego
- 8:02 am Healthcare Finance and Trauma Coding
Timothy J. Bray, MD, Reno Orthopedic Clinic
- 8:14 am Humeral Shaft Fractures: What's Current? What's Controversial?
Clifford B. Jones, MD, The CORE Institute
- 8:26 am Case Discussion
- 8:36 am Discussion
- 8:40 am **Focused Brunch Presentation** *CME Credit Not Available
ConvaTec
Risk Mitigation of Infection in Total Joint Arthroplasty
Alexander Sah, MD

Rapid Fire Sessions 5A – Tumor

Cirque Boardroom

Moderators: Russ N. Stitzlein, MD, MD Anderson Cancer Center & Bryan S. Moon, MD, MD Anderson Cancer Center

- 9:15 am Distal Femoral Compressive Osseointegration Endoprostheses: A Minimum Ten-Year Follow-Up Study
Kara Tanaka, MFA, University of California, San Francisco
- 9:19 am Compress Mechanical Failure Assessment Using Radiographic Parameter Driven Decision Tree
Lindsay Parlee, BS, Med, Oregon Health & Science University
- 9:23 am Vascularized Fibula Grafting in the Operative Treatment of Bone Tumors
Mark J. Landau, PhD, Keck School of Medicine of the University of Southern California
*Presented by Ram K. Alluri, MD
- 9:27 am Incidence of Amputees Who Could Benefit From an Osseointegrated Prosthesis
Melissa N. Zimel, MD, University of California, San Francisco
- 9:31 am Discussion



Scientific Program

Mt. Daly Ballroom B, Unless Otherwise Specified

9:35 am Outcomes of Reamer Irrigator Aspirator in Metastatic Femoral Intramedullary Nails
Alexandra K. Callan, MD, University of Texas Southwestern Medical Center

9:39 am PROMIS Outcomes Following Surgical Intervention for Metastatic Bone Disease: Analysis of Early Enrollment in a Multicenter Cohort Study
Daniel M. Lerman, MD, Institute Limb Preservation, OrthoONE, Presbyterian/St. Luke's Medical Center

9:43 am Pattern of Radiation Referral after Femoral Stabilization in Metastatic Disease
Andrew R. Summers, BS, Oregon Health & Science University
*Presented by David S. Putnam, MD

9:47 am Host Immune Response in Undifferentiated Pleomorphic Sarcoma – Ten-Year Retrospective Analysis
Joey Sheridan, BS, University of California, San Francisco

9:51 am Discussion

Rapid Fire Sessions 5B – Upper Extremity/Shoulder Cathedral Deck
Moderators: Kimberly L. Furry, MD, Mercy Orthopedics Associates & Jeffrey M. Nakano, MD, Rocky Mountain Orthopaedic Associates

9:15 am Utility for Radiographs in Diagnosing Hill-Sachs and Bankart Lesions: NO NEED Pre-Reduction Radiology
Dave Milzman, MD, George Washington School of Medicine

9:19 am Intraoperative Clavicle Fracture Characterization and Radiographic Outcomes after Operative Fixation
Nicholas J. Drayer, MD, Madigan Army Medical Center
*Presented by Michelle L. Dudevior, MD

9:23 am Effect of Pre-Operative Opioid Usage on Pain Following Arthroplasty
William Curtis, BS, Keck School of Medicine of the University of Southern California
*Presented by Ryan Lee, BS

9:27 am Discussion

9:35 am Vascularized Dermal Autograft for the Treatment of Irreparable Rotator Cuff Tears
Michael Stone, MD, Keck School of Medicine of the University of Southern California

9:39 am Axillary and Radial Nerve Proximity to Latissimus Insertion: A Cadaveric Study
Stephen T. Gates, MD, University of Texas Southwestern

9:43 am Discussion

Rapid Fire Sessions 5C – Trauma Cathedral Peak
Moderators: Timothy S. Achor, MD, Memorial Hermann Texas Medical Center & Milton L. "Chip" Routh Jr., MD, University of Texas Health Science Center

9:15 am Percutaneous Transiliac-Transsacral Fixation of Sacral Insufficiency Fractures Improves Ambulation and Rate of Disposition to Home
J. Brock Walker, MD, University of Arizona College of Medicine
*Presented by David Campbell, MD

9:19 am Superior Pubic Ramus Screw Fixation: Radiographic Assessment of Successful Medullary Screw Insertion
Brock Foster, MD, University of Southern California
*Presented by Venus Vakhshori, MD

9:23 am Safety of Medullary Superior Pubic Ramus Screws
James Learned, MD, University of California Irvine Medical Center

9:27 am A Biomechanical Study of Three Methods of Fixing Acetabular Fractures
Weston Ryan, BS, University of Colorado Denver School of Medicine

9:31 am Discussion

9:35 am Restoring Condylar Width: Radiographic Relationship Between The Lateral Tibial Plateau and Lateral Femoral Condyle in Normal Adult Knees
Nima Kabirian, MD, University of Southern California
*Presented by Geoffrey S. Marecek, MD

9:39 am Lateral Articular Involvement in Tibial Plateau Schatzker Type IV Fractures
Mary Kate Erdman, MD, University of Southern California

9:43 am Heterotopic Ossification About the Knee in Floating Knee Injuries
Trevor J. Shelton, MD, MS, University of California, Davis

9:47 am Evaluation of Lateral C-Arm Drape Contamination during Lower Extremity Fracture Surgery: A Prospective Pilot Study
Erin Haggerty, MD, Cedars Sinai Medical Center

9:51 am Discussion

Rapid Fire Sessions 5D – Sports Medicine Castle Peak Auditorium
Moderators: CAPT Matthew T. Provencher, MD, The Steadman Clinic & David J. Mansfield, MD, El Paso Orthopaedic Surgery Group

9:15 am Fists of Fury but No Fractures: Fighting in the National Hockey League
Aidan Neustadtyl, BS, Georgetown University

9:19 am Prevalence and Treatment of Humeral Head Avascular Necrosis in Transplant and Bariatric Surgery Patients: A Population-Based Study
Kavitha Thiagarajan, BA, Keck School of Medicine of the University of Southern California

9:23 am Characterization of Metal Debris from Refurbished Arthroscopic Shavers
Louis M. Kwong, MD, Harbor-University of California Los Angeles Medical Center

9:27 am Treatment Injections for Lateral Epicondylitis: A Systematic Review of Overlapping Meta-Analyses
Darby A. Houck, BA, University of Colorado School of Medicine

9:31 am Discussion

9:35 am Pediatric and Adolescent Injury in Rodeo: A Systematic Review
Jason W. Stoneback, MD, University of Colorado School of Medicine

9:39 am Measurements of Femoroacetabular Impingement Reliable across Various Levels of Training
Ryan J. Bickley, MD, Johns Hopkins University School of Medicine

9:43 am Evaluation of Preoperative Diagnostic and Treatment Costs Prior to Articular Cartilage Restoration Surgery
Brenda Iglesias, BA, David Geffen School of Medicine at University of California Los Angeles/Charles Drew University of Medicine and Science

9:47 am Comparison of Injury Rate and Pattern of Collegiate Beach and Indoor Volleyball
Alexis Rounds, BS, Keck School of Medicine at the University of Southern California

9:51 am Discussion

9:55 am **Break – Please Visit Exhibits** Mt. Daly Ballroom A, C, D & E

Symposium 6 – Foot & Ankle – Acute Injuries to the Foot & Ankle
Moderator: Kenneth J. Hunt, MD, University of Colorado School of Medicine

10:20 am Syndesmotom Injuries
Daniel K. Moon, MBA, MD, MS, University of Colorado School of Medicine

10:30 am Lateral Ankle Ligament Injuries
Kenneth J. Hunt, MD, University of Colorado School of Medicine

10:40 am Achilles Tendon Injuries
Douglas E. Lucas, DO, Centura Health Physician Group



Scientific Program

Mt. Daly Ballroom B, Unless Otherwise Specified

10:50 am Backcountry Ankle Trauma
Christopher B. Hirose, MD, Saint Alphonsus Coughlin Foot and Ankle Clinic

11:00 am Case Discussion

11:08 am Questions

General Session 6 – Own the Bone, BOC Report & Presidential Address

Moderator: Jeffrey E. Krygier, MD, Santa Clara Valley Medical Center

11:10 am **Own the Bone**
Fred C. Redfern, MD, Henderson, NV

11:20 am **BOC Report**
Bryan S. Moon, MD, MD Anderson Cancer Center

11:25 am **Presidential Address**
The WOA and YOU
Brian A. Jewett, MD, Slocum Center for Orthopedics and Sports Medicine

Concurrent Allied Health Session 4 – Case Review

Alpine Springs
Moderator: Theodore W. Coates, PA-C, University of California, Davis Medical Center

11:45 am Bring Your Cases to Discuss
Basil R. Besh, MD, Fremont Orthopaedic & Rehabilitative Medicine

Rapid Fire Session 6A – Foot & Ankle

Cirque Boardroom
Moderators: Kenneth J. Hunt, MD, University of Colorado School of Medicine & Jeffrey M. Nakano, MD, Rocky Mountain Orthopaedic Associates

11:45 am Short Term Complications in Geriatric Ankle Fractures Using a Protocolized Approach to Surgical Treatment
Gerard Chang, MD, Thomas Jefferson University Hospital

11:49 am Impact of Time to Surgery for Closed Supination External Rotation (OTA/AO 44-B) Ankle Fractures
Anthony Essilfie, MD, University of Southern California
*Presented by Matthew Orgel, MD

11:53 am Diagnostic Validation of Dynamic Ultrasound Evaluation of Supination-External Rotation Ankle Injuries
Cara Fisher, MS, University of North Texas Health Science Center

11:57 am Discussion

12:02 pm Dual Purpose Use of FHL Tendon for Management of Chronic Achilles Ruptures
Mohammed A. Khalid, MD, University of Texas Medical Branch

12:06 pm All-Soft Suture Anchor versus Suture Bridge Construct for Insertional Achilles Tendon Repairs
Eric J. Lakey, BS, University of Colorado School of Medicine

12:10 pm Achilles Sleeve Avulsions: Clinical Features Including Description of a New Radiographic Sign
Christopher Shultz, MD, University of New Mexico

12:14 pm Gender Differences on SF-36 Patient-Reported Outcomes of Diabetic Foot Disease
Michael Del Core, MD, University of Texas Southwestern Medical Center

12:18 pm Discussion

12:23 pm A Comparison of Calcaneal Osteotomies for Charcot-Marie-Tooth Varus Hindfoot Deformity
Tonya W. An, MD, MA, Cedars-Sinai

12:27 pm Radiological Assessment of Sesamoid Reduction after Chevron-Akin Double Osteotomy
Jie Chen, MD, MPH, University of Texas Medical Branch

12:31 pm Arthroscopic versus Open MTP Arthrodesis: A Biomechanical Comparison
Christopher Chen, MD, University of Colorado

12:34 pm The Influence of Percentile Weight Bearing on Foot Radiographs
Trevor J. Shelton, MD, MS, University of California, Davis

12:38 pm Discussion

Rapid Fire Session 6B – Spine

Cathedral Deck
Moderators: P. Douglas Kiester, MD, University of California, Irvine & Jeffrey E. Krygier, MD, Santa Clara Valley Medical Center

11:45 am Lumbar Subcutaneous Adipose to Spinous Process Depth Ratio as a Predictor for Surgical Complications
Kylie Shaw, BA, David Geffen School of Medicine at University of California Los Angeles

11:49 am Risk Factors for Readmission and Complications in Obese and Morbidly Obese Patients Undergoing Elective Posterior Spinal Fusion
Deeptee Jain, MD, University of California, San Francisco
*Presented by Joseph Patterson, MD

11:53 am Complications of Modified Single-Incision Wiltse Approach to the Lumbar Spine
Nikolas Baksh, MD, Oregon Health & Science University

11:57 am A “Smart” Antimicrobial Implant Coating to Prevent Spinal Implant Infection
Vishal Hegde, MD, University of California, Los Angeles

12:01 pm Discussion

12:05 pm Rapid Recovery Pathway for the Adolescent Idiopathic Scoliosis
Eli S. Ahdoot, DO, Children's Hospital of Orange County

12:09 pm Preemptive Opioid-Sparing Pain Protocol Decreases Hospital Stay in Scoliosis Patients
Selina Poon, MD, Shriners for Children Medical Center, Pasadena
*Presented by Cynthia Nguyen, MD

12:13 pm Complications Associated with Temporary Internal Distraction in Severe Scoliosis
Graham T. Fedorak, MD, Shriners Hospital for Children, Salt Lake City
*Presented by Cynthia Nguyen, MD

12:17 pm Outcomes after Spinal Fusion in Patients with Obstructive Sleep Apnea
Charles C. Lin, BSE, University of California, Irvine
*Presented by Young Lu, MD

12:21 pm Discussion

12:25 pm Surgical Intervention for Cauda Equina in the Second and Third Trimesters of Pregnancy: A Case Series
Nicole E. Look, MD, University of Colorado Anschutz Medical Center

12:29 pm Insurance and Employment Affect the Presence of Waddell Signs
Stephanie S. Radoslovich, BA, Oregon Health & Science University

12:33 pm Construct Validity of the Fundamentals of Spinal Surgery (FOSS) Simulator
Winnie Palispis, MD, University of California, Irvine

12:37 pm Discussion

Rapid Fire Session 6C – Trauma

Cathedral Peak
Moderators: Clifford B. Jones, MD, The CORE Institute & Conor P. Kleweno, MD, Harborview Medical Center

11:45 am Greater Trochanteric Fractures with Intertrochanteric Extension: What Is the Rate of Displacement?
William T. Kent, MD, University of California, San Diego



Scientific Program

Mt. Daly Ballroom B, Unless Otherwise Specified

- 11:49 am Kinematic Analysis of Sagittal Plane Stability of Delta Frame External Fixation
Addison Wood, DO, PhD, John Peter Smith Hospital
- 11:53 am Current Trends in the Management of Flail Chest
J. Brock Walker, MD, University of Arizona College of Medicine
*Presented by David Campbell, MD
- 11:57 am Diagnosis of Traumatic Shoulder Arthrotomies Using Saline Load Test with Intra-Articular Pressure Monitoring
Matthew Belton, MD, University of Colorado School of Medicine
- 12:01 pm Discussion
- 12:05 pm Orthopaedic Trauma Quality Measures for Value Based Healthcare Delivery
Malcolm R. DeBaun, MD, Stanford University
- 12:09 pm VTE Occurrences in Pelvic & Lower Extremity Trauma Despite Modern Prophylactic Protocols
Sean M. Mitchell, MD, University of Arizona College of Medicine Phoenix
*Presented by Jason A. Lowe, MD
- 12:13 pm Prolonged Opioid Use Following Geriatric Hip Fracture Surgery
John M. Garlich, MD, Cedars Sinai Medical Center
- 12:17 pm Dramatically Increased Rate of Mortality Associated with Atypical Hip Fractures
Robert Walker, MD, University of Arizona College of Medicine
- 12:21 pm Discussion
- 12:25 pm Current Trends in Postoperative Opioid Prescriptions after Ankle Fracture Surgery
Michael Chen, MD, Stanford University
- 12:29 pm Early Post-Operative Radiographs Have No Effect on Patient Satisfaction
Blake J. Schultz, MD, Stanford University
- 12:33 pm X-Ray Does Not Adequately Assess Intertrochanteric Fracture Lateral Wall Morphology
Garin Hecht, MD, Harborview Medical Center
*Presented by Augustine M. Saiz, MD
- 12:37 pm Discussion
- Rapid Fire Session 6D – Upper Extremity/ Shoulder & Elbow**
Castle Peak Auditorium
Moderators: COL (Ret) Edward D. Arrington, MD, Madigan Army Medical Center & Kimberly L. Furry, MD, Mercy Orthopedics Associates
- 11:45 am Short-Term Outcomes of Outpatient Total Shoulder Arthroplasty Protocol
Richard L. Auran, MD, University of Arizona College of Medicine - Phoenix
- 11:49 am Socioeconomic and Ethnic Disparities in Pain Following Total Shoulder Arthroplasty
Alexis Rounds, BS, Keck School of Medicine at the University of Southern California
- 11:53 am Patient-Specific Planning in Shoulder Arthroplasty: Bending the Learning Curve
Henry M. Fox, BS, MA, Oregon Health & Science University
- 11:57 am Smoking as a Risk Factor for Complications Following Shoulder Arthroplasty: A Population-Based Study
Jae Kim, MA, Keck School of Medicine of the University of Southern California
*Presented by Alexis Rounds, BS
- 12:01 pm Discussion
- 12:05 pm 90-Day Complication Rate following Shoulder Arthroplasty in a Veteran Population
Farhad Darbandi, MD, University of Arizona
- 12:09 pm Complication of Reverse Shoulder Arthroplasty for Proximal Humerus Fracture
Santano L. Rosario, BA, Keck School of Medicine at the University of Southern California
*Presented by Alexis Rounds, BS
- 12:13 pm Hypoalbuminemia Is a Risk Factor for Both Complications and Readmissions after Open Reduction and Internal Fixation of Proximal Humerus Fractures
Jonathan Cheah, MD, University of California, San Francisco
- 12:17 pm Survivorship of Proximal Humerus Fracture Initial Management
Alexis Rounds, BS, Keck School of Medicine at the University of Southern California
- 12:21 pm Discussion
- 12:25 pm Trends of Initial Management Following Proximal Humerus Fracture
Santano L. Rosario, BA, Keck School of Medicine at the University of Southern California
*Presented by Alexis Rounds, BS
- 12:29 pm Outpatient Total Elbow Arthroplasty: 90-Day Outcomes
Michael Stone, MD, Keck School of Medicine at the University of Southern California
- 12:33 pm Ipsilateral Capitellum and Lesser Sigmoid Notch Predict Radial Head Size
Brett Schiffman, MD, University of Washington
- 12:37 pm Discussion
- General Session 7 – Abstract Presentations**
Moderator: Jeffrey E. Krygier, MD, Santa Clara Valley Medical Center
- 12:50 pm Limb Length Discrepancy and Walking Performance in Hemiplegic Cerebral Palsy
Jason T. Rhodes, MD, Children's Hospital Colorado
- 12:56 pm An MRI Study of Neurovascular Bundle to Popliteus Tendon Distance
Kendall A. Shifflett, BS, Orthopaedic Institute for Children
- 1:02 pm 3D Printed Scaffolds and Regional Gene Therapy for Bone Repair
Ram K. Alluri, MD, Keck School of Medicine at the University of Southern California
- 1:08 pm Does Day of the Week of Surgery Affect Time to Discharge?
Kali R. Tileston, MD, Stanford University
- 1:14 pm Should We Repair Extensor Tendon Lacerations >50% of Tendon Width?
Christina Salas, PhD, University of New Mexico
*Presented by Deana Mercer, MD
- 1:20 pm Injections Prior to Rotator Cuff Repair Increase Revision Rotator Cuff Repair Rates
Alexander E. Weber, MD, Keck School of Medicine at the University of Southern California
- 1:26 pm Discussion
- 1:30 pm Farewell
- Tumor Answer Session**
Moderators: Jeffrey E. Krygier, MD, Santa Clara Valley Medical Center & Bryan S. Moon, MD, MD Anderson Cancer Center
- 1:35 pm Questions & Discussion
- 2:00 pm **Multimedia Education Session** 1st Floor Registration



Scientific Poster Presentations

Cirque Boardroom, Cathedral Deck, Cathedral Peak & Castle Peak Auditorium

Thursday, August 2: 5:45 am – 6:45 am / 1:40 pm – 2:40 pm

Friday, August 3: 6:00 am – 7:00 am / 2:25 pm – 3:25 pm (Tour)

Saturday, August 4: 5:40 am – 6:40 am

Station A - Cirque Boardroom

SPORTS MEDICINE

Poster 1: Effect of Sport Specialization on Injury in Division I Athletes
Seth Ahlquist, BS, David Geffen School of Medicine at University of California Los Angeles

Poster 2: Effect of Correction Angle on Complications Following High Tibial Osteotomy
Derek Axibal, MD, MS, University of Colorado

Poster 3: Outcomes of ACL Reconstruction with Planned vs Unplanned Hybrid Graft
Derek Axibal, MD, MS, University of Colorado

Poster 4: Rotation Medical Patch Augmentation after Rotator Cuff Repair and Reduced Opioid Consumption
Steven J. Barad, MD, Methodist Hospital

Poster 5: Reliability of Preoperative MRI Prediction of Hamstring ACL Autograft Size
Andrew Hanna, MS, Virginia Tech Carilion School of Medicine

Poster 6: 2016 Track and Field Olympic Trials: Injuries and Medical Care
Nicholas L. Strasser, MD, Slocum Center for Orthopedics & Sports Medicine

Poster 7: Cannabis Use and Fracture Healing: A Matched Case-Control Study
Nicholas L. Strasser, MD, Slocum Center for Orthopedics & Sports Medicine

TOTAL KNEE

Poster 8: Early Results of a New Cementless TKA Design
Russell G. Cohen, MD, Tucson Orthopedic Institute
*Presented by Sheridan James, BS

Poster 9: Arthrodesis with a Cephalomedullary Nail after Failed Total Knee Arthroplasty
Malcolm DeBaun, MD, Stanford University

Poster 10: Less Iatrogenic Soft Tissue Damage in Robotic-Arm Assisted Approach TKA
Emily Hampp, PhD, Mahwah, NJ
*Presented by Laura Scholl, MS

Poster 11: Use of Intraoperative Implant Planning to Reduce Occurrence of Soft Tissue Releases
Robert C. Marchand, MD, Ortho Rhode Island
*Presented by Laura Scholl, MS

UPPER EXTREMITY

Poster 12: Driving After Shoulder Arthroplasty: When Is It Safe?
Santano L. Rosario, BA, Keck School of Medicine at the University of Southern California
*Presented by Alexis Rounds, BS

Poster 13: Trends in Peripheral Nerve Blocks in Shoulder Arthroscopy
Abhinav Sharma, BS, David Geffen School of Medicine at University of California Los Angeles

Station B - Cathedral Deck

BASIC SCIENCE

Poster 14: A New Orthopedic Screw Design that Does Not Strip
Nicholas Alfonso, MD, University of Colorado
*Presented by Todd H. Baldini, MSc

Poster 15: Does Greater Trochanter Decortication Affect Suture Anchor Pullout Strength in Abductor Tendon Repairs?: A Biomechanical Study
Jill A. Goodwin, MD, University of Arizona College of Medicine
*Presented by Blake Eyberg, MD

Poster 16: Biomechanical Analysis of Retrograde Superior Ramus Screw Fixation Constructs
Justin F. Lucas, MD, Harborview Medical Center
*Presented by Alvin Shieh, MD

Poster 17: Local Bio-Absorbable Antibiotic Calcium Sulfate Beads in Hip and Knee Arthroplasty
Zachary Lum, DO, University of California, Davis

Poster 18: Effects of Fondaparinux For Prophylaxis in Total Joint Arthroplasty
Zachary Lum, DO, University of California, Davis

FOOT & ANKLE

Poster 19: Operative Outcomes In Ankle and Talus Fractures Following Organ Transplantation
Bejan A. Alvandi, BS, Keck School of Medicine of the University of Southern California
*Presented by Venus Vakhshori, MD

Poster 20: Calcaneal Fractures Through Prior Schanz Pin Sites in Diabetic Neuropathy
Rachel Larsen, BS, Oregon Health and Science University

Poster 21: Dexamethasone Addition to Popliteal Nerve Blocks - Postoperative Nerve Complication and Analgesia Duration
Naudereh Noori, MD, Cedars Sinai Medical Center
*Presented by Dheeraj R. Yalamanchili, MD

Poster 22: A Systematic Review of the Outcome Evaluation Tools for the Foot and Ankle
Pejma Shazadeh Safavi, BS, University of Texas Medical Branch at Galveston

PEDIATRICS

Poster 23: Use of Rotationplasty for Pediatric Trauma and Significant Physeal Injuries
Kristina Barber, BA, University of Colorado School of Medicine

Poster 24: Transphyseal Distal Humerus Fracture in a Premature Neonate
Justin Chang, MD, University of Colorado Hospital

Poster 25: Atypical Femur Fracture in the Setting of Long-Term Bisphosphonate Use for Osteogenesis Imperfecta
Steven Jones Jr., MD, University of Colorado School of Medicine

Poster 26: Morphological Features of the Hip in Skeletal Dysplasia
Adam Lindsay, MD, MS, University of Southern California

Poster 27: Current State of the Opioid Epidemic as it Pertains to Pediatric Orthopaedics
Ellen M. Raney, MD, Shriners Hospital for Children



Scientific Poster Presentations

Cirque Boardroom, Cathedral Deck, Cathedral Peak & Castle Peak Auditorium

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Saturday, August 4: 5:40 am – 6:40 am

Station C - Cathedral Peak

SPINE

Poster 28: Venous Compression and Stenosis Owing To Lumbo-Sacral Exostosis: Case Report

Jory Wasserburger, MD, University of New Mexico

*Presented by Anastasia Haponyuk

Poster 29: Preoperative Oxycodone ER Impact on Postoperative Opioid Use and Outcomes

Joshua Hwang, BS, University of California, Davis School of Medicine

Poster 30: Bariatric Surgery Prior to Posterior Lumbar Fusion Reduces Medical Complications in Infection

Deeptee Jain, MD, University of California, San Francisco

*Presented by Joseph Patterson, MD

Poster 31: Impact of Cirrhosis on Morbidity and Mortality After Spinal Fusion

Young Lu, MD, University of California, Irvine

Poster 32: Complications of Harms Atlantoaxial Fixation at an Academic Medical Center

Thomas O'Toole, BA, Oregon Health & Science University

TOTAL HIP

Poster 33: Impact of Spinal Deformity on Acetabular Cup Orientation in Total Hip Arthroplasty

John Attenello, MD, University of Hawaii

Poster 34: Blood Loss and THA: Impact of a Bipolar Sealant Device

Tyler Bron, MD, University of Colorado School of Medicine

*Presented by Michael Dayton, MD

Poster 35: Early Clinical Outcomes with an Additive Manufactured Porous Acetabular Cup

Russell G. Cohen, MD, Tucson Orthopedic Institute

Poster 36: Pre-Operative Rehabilitation Correlates With Decreased Hospital Stay After Hip/Knee Arthroplasty

Sahitya Denduluri, MD, Stanford University

*Presented by Derek F. Amanatullah, MD, PhD

Poster 37: Impact of Depression on Opioid Requirements after Total Joint Arthroplasty

Trevor Grace, MD, University of California, San Francisco

Poster 38: Acetabular Liner Geometry and Dislocation Rate: Does it Really Matter?

Alex Joufflas, BS, University of Colorado School of Medicine

Poster 39: Correlation Of Modular Tapered Stem Subsidence In Revision THA

Emmanuel C. Nwelu, MD, University of Texas Southwestern

*Presented by Sean Shahrestani, MD

Poster 40: Ten-Year Outcomes Following Kinematically Aligned Total Knee Arthroplasty

Trevor J. Shelton, MD, MS, University of California, Davis

Station D - Castle Peak Auditorium

TRAUMA

Poster 41: Effect of Organ Transplantation on Operative Outcomes Following Tibial Plateau Fractures

Bejan A. Alvandi, BS, Keck School of Medicine of the University of Southern California

*Presented by Venus Vakhshori, MD

Poster 42: Effect Of Bariatric Surgery On Operative Outcomes In Pelvic and Acetabular Fractures

Bejan A. Alvandi, BS, Keck School of Medicine of the University of Southern California

*Presented by Venus Vakhshori, MD

Poster 43: How Feasible Are Routine Intraoperative Plain Radiographs in Orthopaedic Trauma Surgery?

Eric D. Farrell, MD, University of California Los Angeles

*Presented by Brian M. Cash, MD

Poster 44: Knee Radiographs? Ottawa Rules Need Change

Rand Floyd, MS, Georgetown University Medical School

Poster 45: Fat Emboli Syndrome and the Orthopedic Trauma Surgeon

Trevor Jackson, MD, University of Colorado School of Medicine

Poster 46: Body Habitus and Soft Tissue Envelope Thickness Overlying Knee Joint

Paul Johnson, MD, University of New Mexico

Poster 47: Spectrum of Orthopaedic Injuries Associated with Hoverboard Use

Derek Ju, MD, Cedars-Sinai Medical Center

*Presented by John Garlich, MD

Poster 48: Implant Removal Rates for Stable and Unstable Ankle Fractures

David S. Putnam, MD, Oregon Health and Science University

Poster 49: Orthopedic Surgeons Have Inadequate Knowledge Regarding Costs of Imaging Studies

Blake Schultz, MD, Stanford University

Poster 50: A Review of Surgical Approaches and Outcomes for Hoffa Fracture

Kristin Toy, MS, University of Toledo College of Medicine

*Presented by Adam T. Mierzwa, MS

TUMOR

Poster 51: Observing Clinical and Radiographic Outcomes of Limb Salvage with a 3D Printed Custom Titanium Cage

David B. Hahn, MD, Institute for Limb Preservation

Poster 52: Results of Femoral Head AVN Decompression and Autologous Stem Cell Injection

Cynthia M. Kelly, MD, Colorado Limb Consultants



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