WOA Scientific Program Hyatt Regency Monterey, Monterey, CA July 31 – August 3, 2019

Thursday, August 1

5:45 am – 6:45 am Scientific Poster & E-Poster Sessions

6:45 am – 6:55 am **First Business Meeting**

6:55 am – 7:00 am Welcome, Announcements and Meeting Overview

David H. Chafey III, MD, Program Co-Chair David J. Mansfield, MD, Program Co-Chair

Omer A. Ilahi, MD, President

Symposium 1 – Shoulder/Elbow Surgery

Moderator: Ronald A. Navarro, MD. Kaiser Permanente

7:00 am – 7:15 am Treatment Options in Proximal Humeral Fractures

T. Bradley Edwards, MD, Fondren Orthopedic Group LLP

7:15 am – 7:30 am Clavicle Trauma from Acromion to Sternum

Ronald A. Navarro, MD, Kaiser Permanente

7:30 am – 7:45 am Elbow Trauma and the Roles of Radial Head and Total

Elbow Arthroplasty

Mark T. Dillon, MD, Kaiser Permanente Sacramento

7:45 am – 7:50 am Discussion

7:50 am – 8:20am **Focused Brunch Presentation – Heron Therapeutics**

Benefits and Limitations of Local Anesthetics in

Postoperative Pain

Alexander P. Sah, MD

*CME Credit Not Available

Rapid Fire Session 1A – Trauma Fixation & Fracture Healing

Moderator: Jason W. Stoneback, MD, *University of Colorado*

Conor P. Kleweno, MD, Harborview Medical Center

8:25 am – 8:29 am 151 - Timing of Fixation and Wound Closure for Open

Ankle Fractures

Marschall Berkes, MD, University of Texas Health Science

Center at Houston

Danid Fire Session 1R To	tal Uin
9:01 am – 9:05 am	Discussion
8:57 am – 9:01 am	68 - Factors Predicting Postoperative Adverse Events in Distal Humerus Fractures Kamran Movassaghi, MD, University of California, San Francisco
8:53 am – 8:57 am	246 - Tapered Plate Geometry Reduces Stress Shielding in the Humeral Shaft Tennyson L. Block, MD, San Francisco Orthopedic Residency Program, St. Mary's Medical Center
8:49 am – 8:53 am	69 - Operative Outcomes in Distal Humerus Fractures with One-Year Follow Up <i>Philip Locker, MD, University of California, San Francisco</i>
8:45 am – 8:49 am	257 - Biomechanical Comparison of Bone-Screw-Fasteners vs. Traditional Locked Screws Malcolm DeBaun, MD, Stanford University
8:41 am – 8:45 am	Discussion
8:37 am – 8:41 am	359 - Titanium vs. Stainless Steel: Clinical Superiority Despite Biomechanical Inferiority Matthew Burnham, BS, University of Arizona College of Medicine - Phoenix *Presented by Richard Auran, MD
8:33 am – 8:37 am	20 - How do Pilon Fractures Heal? An Analysis of Dual Plating, Biomechanically Matched Fixation, and Callus Formation Sean T. Campbell, MD, Stanford University
8:29 am – 8:33 am	423 - Patients Benefit from Recording Postoperative Instructions after Ankle Fracture Surgery Sam Y. Jiang, BA, Stanford University

Rapid Fire Session 1B – Total Hip

Moderator: Brian A. Jewett, MD, Slocum Center for Orthopedics and Sports Medicine Derek F. Amanatullah, MD, PhD, Stanford University

8:25 am – 8:29 am 317 - Metal on Metal THA: Pseudotumor with Intermittent

Unilateral Vascular Claudication

Alex Lencioni, MD, University of Colorado

8:29 am – 8:33 am	442 - Sleep Disturbance in Patients with Femoroacetabular Impingement and Acetabular Dysplasia Nisha Reddy, BA, UT Southwestern Medical Center
8:33 am – 8:37 am	60 - Understanding the Learning Curve: Comparison of First 75 Direct Anterior THAs to Concomitant Established Mini-Posterior THAs Alexander P. Sah, MD, Institute for Joint Restoration
8:37 am – 8:41 am	61 - Implant Size and Outcome Differences in Staged Bilateral THA in 300 Patients Alexander P. Sah, MD, Institute for Joint Restoration
8:41 am – 8:45 am	Discussion
8:45 am – 8:49 am	62 - Learning Curve for the Direct Superior Approach to Total Hip Arthroplasty Rami M. Ezzibdeh, Stanford University School of Medicine
8:49 am – 8:53 am	161 - Smooth Reamer Impaction Autografting for Total Hip Arthroplasty in the Setting of Acetabular Protrusio Adam A. Sassoon, MD, University of California, Los Angeles
8:53 am – 8:57 am	146 - Entrapped Posteromedial Structures after Spanning External Fixation in Tibial Pilon Fractures Preet Gurusamy, MD, University of California, San Diego
8:57 am – 9:01 am	371 - Government Significantly Reduced Reimbursement for Surgical Hip Fracture Treatment Cory K. Mayfield, BS, Keck School of Medicine of the University of Southern California
9:01 am – 9:05 am	Discussion
•	s , Shriners Hospital for Children , MD, Denver Health Medical Center
8:25 am – 8:29 am	159 - Return to Sport after Posterior Spinal Fusion for Idiopathic Scoliosis Allison Tetreault, MD, University of Colorado
8:29 am – 8:33 am	210 - Skeletal Age Assessment by Calcaneal Apophyseal Stage in Cerebral Palsy

	Donald T. Kephart, MD, University of California, Davis Medical Center
8:33 am – 8:37 am	416 - AAOS Appropriate Use Criteria: Management of Supracondylar Humerus Fractures at a Level I Trauma Center Diana G. Douleh, MD, University of Colorado
8:37 am – 8:41 am	448 - Measuring the Acetabular Index; An Accurate and Reliable Alternative Method of Measurement Benjamin J. Sherman, DO, Children's Hospital of Orange County
8:41 am – 8:45 am	Discussion
8:45 am – 8:49 am	410 - Mini C-Arm vs. Portable Radiograph: Radiation Exposures with Closed Reduction in the ED <i>Eli Ahdoot, DO, Children's Hospital of Orange County</i>
8:49 am – 8:53 am	191 - Does Univalve Location Differentially Effect Pressures at the Three-Point Mold? Blake K. Montgomery, MD, Stanford University
8:53 am – 8:57 am	338 - Distinguishing Septic Arthritis from Aseptic Effusion in Pediatric Irritable Knee <i>Claudia S. Thomas, MD, University of Washington</i>
8:57 am – 9:01 am	270 - Incidence of Coxa Profunda and Other Signs of FAI in Adolescents with DDH <i>Tyler R. Freeman, MD, University of Colorado</i>
9:01 am – 9:05 am	Discussion
Rapid Fire Session 1D – Hand & Wrist Moderator: Basil R. Besh, MD, Fremont Orthopaedic & Rehabilitative Medicine Gregory L. DeSilva, MD, University of Arizona Health Sciences	
8:25 am – 8:29 am	241 - Application of Cryotherapy to Casts Reduces Skin

8:25 am – 8:29 am	241 - Application of Cryotherapy to Casts Reduces Skin Surface Temperature Neal Goldenberg, MD, San Francisco Orthopedic Residency Program, St. Mary's Medical Center
8:29 am – 8:33 am	63 - Biomechanical Comparison of Flexor Digitorum Profundus Avulsion Repair Jill G. Putnam, University of Arizona College of Medicine- Phoenix

8:33 am – 8:37 am	330 - Time to Case Closure of Occupational Hand Injuries Aaron Gray, MD, University of Nevada Las Vegas School of Medicine	
8:37 am – 8:41 am	23 - Ethnicity-Related Prevalence of Obesity in Children with Distal Radius Fractures Compared with National Values Jessica Avila, BS, Texas Tech University Health Science Center	
8:41 am – 8:45 am	Discussion	
8:45 am – 8:49 am	72 - Radiographic Outcomes of Dorsal Spanning Plate for Treatment of Comminuted Distal Radius Fractures Behnam Sharareh, MD, Baylor College of Medicine	
8:49 am – 8:53 am	78 - Wide-Awake Hand Surgery Associated with Decreased Opioid Use and Morbidity Gopal R. Lalchandani, MD, University of California, San Francisco	
8:53 am – 8:57 am	344 - Patient Outcomes and Costs after Isolated Flexor Tendon Repair Gopal R. Lalchandani, MD, University of California, San Francisco	
8:57 am – 9:01 am	37 - Distal Ulna Morphology – Estimating the Prevalence of Reverse Obliquity <i>Blake Schultz, MD, Stanford University</i>	
9:01 am – 9:05 am	Discussion	
Rapid Fire Session 1E – Basic Science Moderator: Russell Stitzlein, MD, University of California, Irvine Trevor J. Shelton, MD, University of California, Davis		
8:25 am – 8:29 am	99 - Do Pre-Operative Transcutaneous Oxygen Perfusion Measurements Predict Atraumatic Amputation Wound Healing? Naudereh Noori, MD, Cedars Sinai Medical Center	
8:29 am – 8:33 am	74 - Multimodal Imaging Guides Surgical Management in Preclinical Spinal Implant Infection Stephen Zoller, MD, University of California, Los Angeles	

8:33 am – 8:37 am	119 - Lateral Femoral Cortical Thickness Correlates to Femoral Bone Mineral Density Musa Zaid, MD, University of California San Francisco	
8:37 am – 8:41 am	221 - Zoledronic Acid Decreases Infection in Mouse Spine Implant Infection Model Chad Ishmael, MD, University of California, Los Angeles	
8:41 am – 8:45 am	Discussion	
8:45 am – 8:49 am	300 - Ex-Vivo Human Chondrocyte Toxicity After Exposure to Tranexamic Acid Erika L. Garbrecht, MD, University of New Mexico	
8:49 am – 8:53 am	283 - Adipose-Derived Stem Cell Quantity in Infrapatellar Fat vs. Subcutaneous Lipoaspirate <i>Hyunwoo P. Kang, MD, University of Southern California</i>	
8:53 am – 8:57 am	136 - Can Drilling Energy Predict Bone Mineral Density and Screw Pullout Strength in Cadaveric Bone? <i>Michael J. Chen, MD, Stanford Orthopaedic</i>	
8:57 am – 9:01 am	279 - Pre-Operative Use of a Chlorohexidine-Impregnated Sponge Reduces Skin Soil Contamination Byron H. Izuka, MD, Childrens Orthopaedics of Hawaii *Presented by Trent M. Tamate, MD	
9:01 am – 9:05 am	Discussion	
9:05 am – 9:25 am	Break – Please visit Exhibits	
General Session 1 – Howard Steel Lecture Moderator: Omer A. Ilahi, MD, Southwest Orthopedic Group/Texas Arthroscopy & Sports Medicine Institute		
9:25 am – 9:30 am	Tribute to Howard Steel Theodore L. Stringer, MD, Colorado Springs Orthopaedic Group	
9:30 am – 9:35 am	Introduction of Howard Steel Lecture Omer A. Ilahi, MD, Southwest Orthopedic Group/Texas Arthroscopy & Sports Medicine Institute	
9:35 am – 10:20 am	Howard Steel Lecture Crossing Barriers: Lessons from the Past on How to Overcome what Divides Us Today	

Paul Moses, New York, NY

10:20 am – 10:40 am Break – Please visit Exhibits

Symposium 2 – Sports Medicine

Moderator: David J. Mansfield, MD, El Paso Orthopaedic Surgery Group

10:40 am – 10:55 am Anterolateral Complex of the Knee - Understanding the

Evidence and Recent Trends

Andrew G. Geeslin, MD, Western Michigan University

10:55 am – 11:10 am Pediatric, Adolescent ACL: Differences in Technique,

Graft, and Augmentation to Avoid Complications in the

Highest ACL Failure Risk Group

Kevin G. Shea, MD, Stanford Children's Clinic

11:10 am – 11:25 am Is the Clock Face Analogy Truly of No Benefit for Femoral

Tunnel Placement During ACL Reconstruction? Is there a

Better Analogy?

Omer A. Ilahi, MD, Southwest Orthopedic Group/Texas

Arthroscopy & Sports Medicine Institute

11:25 am – 11:30 am Discussion

11:30 am – 12:00 pm **Focused Lunch Presentation – Bioventus Global**

LIPUS and Fracture Healing *Mark D. Campbell, MD* *CME Credit Not Available

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

Moderators: David H. Chafey III, MD, University of New Mexico

David J. Mansfield, MD, El Paso Orthopaedic Surgery Group

12:00 pm – 12:05 pm OREF Update

12:05 pm – 12:13 pm 101 - Implementing a Geriatric Fracture Program in a

Pluralistic Environment

Carol Lin, MD, MA, Cedars-Sinai Medical Center

12:13 pm – 12:21 pm 133 - Mean Ten-Year Survivorship, Patient-Reported

Outcomes and Satisfaction of a Fixed-Bearing

Unicompartmental Knee Arthroplasty

Ryland Kagan, MD, Oregon Health & Science University

12:21 pm – 12:29 pm 434 - Females and Long Spinal Fusions Result in Total Hip

Arthroplasty

Zachary C. Lum, DO, University of California, Davis

Medical Center

12:29 pm – 12:35 pm Discussion

Concurrent Allied Health Session 1

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

12:40 pm — 1:40 pm Long Bone Fracture Management of the Lower Extremity

Ellen P. Fitzpatrick, MD, University of California, Davis

Rapid Fire Session 2A – Trauma Tibia

Moderator: Bryon D. Hobby, MD, FAAOS, *Billings Clinic*

Michael Githens, MD, University of Washington

12:40 pm - 12:44 pm 274 - Soft Tissue Management in Open Tibial Shaft

Fractures: A Comparison of Institutional Protocols *Matthew R. Garner, MD, University of Texas Health*

Science Center at Houston

12:44 pm - 12:48 pm 426 - Use of Balloon Osteoplasty for Reduction of Tibial

Plateau Fractures

Stephanie Logterman, MD, Denver Health Medical Center

12:48 pm - 12:52 pm 179 - A Review of 11,000 Open Tibia Fractures over Four

Decades

Stephen Warner, MD, PhD, University of Texas Health

Science Center at Houston

12:52 pm - 12:56 pm 126 - Defining the Intramedullary Axis of the Distal Tibia

using Computed Tomography

Haydn Roberts, MD, Banner University Medical Center

12:56 pm - 1:00 pm 261 - Predicting Reoperation and Quality of Life after

Open Tibia Fractures

Patrick Albright, BS, MS, University of California, San

Francisco

1:00 pm - 1:04 pm 150 - Quantification of Volumetric Articular Depression in

Lateral Split/Depressed Tibial Plateau Fractures

Heba Ahmad, BS, University of Texas Health Science

Center at Houston

1:04 pm - 1:10 pm Discussion

1:10 pm - 1:14 pm	275 - The OTA-OFC as a Predictive Outcome Tool in Open Tibia Fractures Matthew R. Garner, MD, University of Texas Health Science Center at Houston	
1:14 pm - 1:18 pm	276 - Comparison of Outcomes following Open vs. Closed Patella Fractures Jie Yao, MD, University of Washington	
1:18 pm - 1:22 pm	452 - Mesh Plate as a Fixation Method for Patellar Fractures: A Report of Nine Cases Ahmed Thabet, MD, Texas Tech University Health Sciences Center	
1:22 pm - 1:26 pm	229 - Lower Extremity CT Angiograms and Nephropathy in Orthopedic Trauma Patients Elise Britt, MD, University of California, San Diego Health	
1:26 pm - 1:30 pm	202 - Inadequate Soft-Tissue Coverage following Open Tibia Fractures in Tanzania Jordan T. Holler, BS, University of California, San Francisco	
1:30 pm - 1:34 pm	227 - Treatment of Tibial Plateau Fractures with a Novel Fenestrated Screw <i>Alexander Telis, MD, University of Southern California</i>	
1:34 pm - 1:40 pm	Discussion	
Rapid Fire Session 2B – Total Joint Moderator: Jay R. Lieberman, MD, Keck School of Medicine of the University of Southern California Parminder S. Kang, MD, Desert Orthopaedic Center		
12:40 pm - 12:44 pm	355 - Toxic Noise Levels during Total Joint Arthroplasty Surgery Brandon A. Romero, MD, University of Nevada Las Vegas	
12:44 pm - 12:48 pm	19 - Sources Of Contamination in the Operating Room: A Fluorescent Particle Powder Study Holt Cutler, MD, University of Texas Southwestern Medical Center	
12:48 pm - 12:52 pm	22 - Complications of Total Joint Arthroplasty in Liver Disease Patients Eric G. Kim, MD, University of California, Davis	

12:52 pm - 12:56 pm	50 - Immunologic Status Does Not Predict the Risk of Periprosthetic Infection in Patients Infected with Human Immunodeficiency Virus Undergoing Total Hip Arthroplasty Phillip H. Behrens IV, MD, Cedars-Sinai Medical Center
12:56 pm - 1:00 pm	52 - Evolution of Two-Stage to One-Stage Treatment of PJI: the First 500 Cases Gerhard E. Maale III, MD, Dallas Ft. Woth Sarcoma Group/Medical City Plano
1:00 pm - 1:04 pm	396 - Cannabis Use Among Patients Undergoing Total Joint Arthroplasty Has Increased Sahitya K. Denduluri, MD, Stanford Orthopaedic Surgery
1:04 pm - 1:10 pm	Discussion
1:10 pm - 1:14 pm	302 - Investigating Repeated Intra-Articular Injections of The Anti-Inflammatory Compound LMWF-5A In Adults with Severe Osteoarthritis: An Open-Label Extension Study John Schwappach, MD, Denver Metro Orthopedics, PC
1:14 pm - 1:18 pm	87 - Staged Bilateral Total Shoulder Arthroplasty: A Systematic Review of Clinical Outcomes John-Rudolph Smith, BS, University of Colorado Sports Medicine
1:18 pm - 1:22 pm	249 - Quantifying Patient Encounters in Arthroplasty During the Global Period Malcolm DeBaun, MD, Stanford University Department of Orthopaedic Surgery
1:22 pm - 1:26 pm	323 - A Qualitative Comparison of Shoulder Arthroplasty to Lower Extremity Arthroplasty Alexandra Schumacher, MS, University of Colorado Sports Medicine
1:26 pm - 1:30 pm	325 - A Qualitative Comparison on the Effect of Arthroplasty Operation Order Alexandra Schumacher, MS, University of Colorado Sports Medicine
1:30 pm - 1:34 pm	379 - Meeting Patient Expectations after TJA: Do We Live Up to the Hype?

Adam A. Sassoon, MD, University of California, Los Angeles

1:34 pm - 1:40 pm

Discussion

Rapid Fire Session 2C – Sports Medicine

Moderator: Dean Wang, MD, *University of California, Irvine*Richard A. Marder, MD, *UC Davis School of Medicine*

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12:40 pm - 12:44 pm	188 - Resident Involvement in Sports Medicine Surgeries Kent C. Doan, MD, University of Colorado
12:44 pm - 12:48 pm	322 - Comparative Effectiveness of Treatment Options for Displaced Midshaft Clavicle Fractures: A Systematic Review and Network Meta-Analysis John R. Martin, MD, University of Arizona, Phoenix *Presented by Richard Auran, MD
12:48 pm - 12:52 pm	339 -Playing Surface Effects Anterior Cruciate Ligament Injury In NCAA Soccer Samantha Solaru, BS, University of Southern California
12:52 pm - 12:56 pm	352 - Direct and Indirect Savings with use of In-Office Diagnostic Arthroscopy <i>Omar Ramos, MD, Loma Linda University Medical Center</i>
12:56 pm - 1:00 pm	9 - Orthopaedic Sleep and Novel Analgesic Pathway for Shoulder Arthroplasty Recovery Jonathan Cheah, MD, University of California, San Francisco
1:00 pm - 1:04 pm	147 - All Soft-Tissue Quadriceps Graft for Anterior Cruciate Ligament Reconstruction Mitchell Stroh, DO, Hoag Orthopedic Institute
1:04 pm - 1:10 pm	Discussion
1:10 pm - 1:14 pm	286 - Hypovitaminosis D is Not a Risk Factor for Stress Fracture in NCAA Division I Track and Field Adam Lindsay, MD, University of Southern California
1:14 pm - 1:18 pm	290 - A Comparison of Collegiate Women's Court and Beach Volleyball Injury Data: A Three-Year Retrospective Analysis Tristan Juhan, MD, MA, University of Southern California

*Presented by Andrew Homere, MS3

1:18 pm - 1:22 pm	313 - Injections and Ultrasound Imaging in Orthopedics: Medicare Trends in Reimbursement from 2000-2019 Cory K. Mayfield, BS, Keck School of Medicine of the University of Southern California
1:22 pm - 1:26 pm	186 - Surfing Injuries - A Review for the Orthopaedic Surgeon Ryan J. Bickley, MD, Tripler Army Medical Center
1:26 pm - 1:30 pm	231 - Assessment of Cartilage Growth after Biopsy of Osteochondral Loose Bodies Sean Robinson, MD, St. Mary's Medical Center
1:30 pm - 1:34 pm	234 - When is a Hill-Sachs Lesion Too Large for Remplissage? The Relationship Between Humeral Head Size and Infraspinatus Tendon Length Thomas Kremen, MD, David Geffen School of Medicine at UCLA
1:34 pm - 1:40 pm	Discussion
Rapid Fire Session 2D – Shoulder	& Elbow MD. Fondran Orthopodic Group IIP

Moderator: T. Bradley Edwards, MD, Fondren Orthopedic Group LLP

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

12:40 pm - 12:44 pm	391 - The Effect of Transexamic Acid on Early Postoperative Pain and Opiate Consumption after Total Shoulder Arthroplasty Pengcheng Wang, UCLA Medical Center Program
12:44 pm - 12:48 pm	148 - Outcomes after Shoulder Surgery: Legacy Score vs. PROMIS Function Score <i>Todd S. Kim, MD, Palo Alto Medical Foundation</i>
12:48 pm - 12:52 pm	390 - Low BMI Predicts Inferior Outcomes after Reverse Total Shoulder Arthroplasty Edward J. Wu, MD, Stanford University Department of Orthopaedic Surgery
12:52 pm - 12:56 pm	408 - Analysis of 164 Patients with Unsatisfactory Results after Failed Rotator Cuff Repair Sagar S. Chawla, MD, University of Washington

12:56 pm - 1:00 pm	450 - Radial Neck Diameter as a Guide for Prosthetic Stem Sizing Dave Shukla, MD, Mayo Clinic
1:00 pm - 1:04 pm	327 - Pre-Operative Corticosteroid Injections are Associated with Shoulder Arthroscopy Infectious Outcomes Sarah Bhattacharjee, Pritzker School of Medicine at the University of Chicago
1:04 pm - 1:10 pm	Discussion
1:10 pm - 1:14 pm	421 - Radiographic Changes in the Acromiohumeral Distance through the Sagittal Plane <i>Craig T. Gillis, DO, Buffalo, NY</i>
1:14 pm - 1:18 pm	357 - Effects of Age on Postoperative Complications following Shoulder Arthroplasty Hasani W. Swindell, MD, University of Southern California
1:18 pm - 1:22 pm	124 - Biomechanical Assessment of Patella Tendon Allograft as Alternative Graft Material for Superior Capsule Reconstruction William Croom, MD, MBA, Kaiser Permanente
1:22 pm - 1:26 pm	137 - Stemless Shoulder Arthroplasty: Review of Short and Medium-Term Results Nicholas P. Satariano, MD, University of California, San Francisco
1:26 pm - 1:30 pm	311 - Clinical Results of Subpectoral Biceps Tenodesis using a Single Unicortical Anchor Taylor D. Mansfield, MD, Madigan Army Medical Center
1:30 pm - 1:34 pm	331 - Sleep Quality following Rotator Cuff Repair: A Systematic Review Andres F. Barandiaran, University of Colorado
1:34 pm - 1:40 pm	Discussion
Rapid Fire Session 2E – Spine Moderator: Evaling Burger MD	University of Colorado

Moderator: Evalina Burger, MD, *University of Colorado* Yu-Po Lee, MD, *University of California, Irvine*

12:40 pm - 12:44 pm 454 - Costs and Utility of Post-Discharge Rehabilitation

following Spinal Deformity Surgery

	Alexander A. Theologis, MD, University of California, San Franci
12:44 pm - 12:48 pm	256 - ALIF Provides More Decompression of the Foraminal Space than Foraminotomy Khalid Odeh, MD, St. Mary's Medical Center, San Francisco
12:48 pm - 12:52 pm	201 - Vertebral Fracture After T10-L5 Fusion, Case Series and Literature Review David W. Cheng, Bones and Spine Surgery Inc.
12:52 pm - 12:56 pm	449 - Thoracoplasty Effects on Postoperative Recovery in Adolescent Idiopathic Scoliosis Benjamin J. Sherman, DO, Children's Hospital of Orange County
12:56 pm - 1:00 pm	315 - An Analysis of Medicare Reimbursement Rates in Spine Surgery: 2000-2018 Cory K. Mayfield, BS, Keck School of Medicine of the University of Southern California
1:00 pm - 1:04 pm	342 - Fenestrated Pedicle Screw Cement Augmentation: A Safety and Efficacy Study Ruwan Ratnayake, MD, University of California, Davis Medical Center *Presented by Houssam Bouloussa, MD, MS
1:04 pm - 1:10 pm	Discussion
1:10 pm - 1:14 pm	174 - The Utility of Flexion/Extension Radiographs in Degenerative Cervical Spondylolisthesis Andrew P. Alvarez, MD, University of California, Irvine
1:14 pm - 1:18 pm	306 - Inpatient Episodes of Care in Spine Surgery: Medicare Reimbursement Rates Jordan Dutcher, Mayo Clinic School of Medicine
1:18 pm - 1:22 pm	397 - Dissimilar Rod-Screw Metal Constructs Do Not Affect Complications in Deformity Surgery Sahitya K. Denduluri, MD, Stanford Orthopaedic Surgery
1:22 pm - 1:26 pm	104 - Initial Management of Sacral Insufficiency Fractures: A Systematic Review Pierce Johnson, MD, University of Arizona Phoenix *Presented by Richard Auran, MD

1:26 pm - 1:30 pm	73 - Pre-Operative Hemoglobin: A Predictor for Mobilization and Length of Stay <i>Ali Noorzad, MD, Cedars-Sinai Medical Center</i>
1:30 pm - 1:34 pm	172 - Defining the Association between Sacral Dysmorphism and Hip Dysplasia Elizabeth Gausden, MD, University of Texas Health Science Center at Houston
1:34 pm - 1:40 pm	Discussion
1:40 pm – 2:40 pm	Scientific Poster & E-Poster Sessions
2:40 pm – 3:40 pm	Multimedia Education Session

Friday, August 2

5:45 am – 6:55 am	Scientific Poster & E-Poster Sessions
6:55 am – 7:00 am	Announcements David H. Chafey III, MD, Program Co-Chair David J. Mansfield, MD, Program Co-Chair

Symposium 3 – Tumor

Moderator: David H. Chafey III, MD, University of New Mexico

7:00 am – 7:15 am	Tips and Tricks for Managing Soft Tissue Masses Kristy L. Weber, MD, University of Pennsylvania
7:15 am – 7:30 am	The Lytic Lesion of Bone in Adults Valerae O. Lewis, MD, MD Anderson Cancer Center
7:30 am – 7:45 am	Pediatric Bone Cysts: Know Your ABCs and UBCs Nicole I. Montgomery, MD, Texas Children's Hospital
7:45 am – 7:50 am	Discussion
7:50 am – 8:20 am	Focused Brunch Presentation – Convatec *CME Credit Not Available
8:20 am – 8:40 am	Break – Please visit Exhibits

Rapid Fire Session 3A – Trauma Traffic & Thrombosis

Moderator: Tony Pedri, MD, Regions Trauma Center

Ahmed Thabet, MD, Texas Tech University Health Sciences Center

8:40 am - 8:44 am	114 - Comparison of Injuries Among Motorcycle, Moped and Bicycle Traffic Accident Victims Tyler Kent, MD, University of Nevada Las Vegas
8:44 am - 8:48 am	250 - Electric Scooter Orthopaedic Injuries at a Level 1 Trauma Center Ophelie Lavoie-Gagne, University of California, San Diego
8:48 am - 8:52 am	252 - Electric Scooter Orthopaedic Injuries Have Significant Financial Implications Matthew Y. Siow, MD, University of California, San Diego
8:52 am - 8:56 am	281 - Electric Scooters: A New Wave in Orthopaedic Trauma Ali Noorzad, MD, Cedars-Sinai Medical Center
8:56 am - 9:00 am	Discussion
9:00 am - 9:04 am	367 - An Analysis of Medicare Reimbursement Rates in Orthopaedic Trauma: 2000-2018 Cory K. Mayfield, BS, Keck School of Medicine of the University of Southern California
9:04 am - 9:08 am	447 - What Makes a Strong Orthopaedic Trauma Fellowship Application: A Program Director's Perspective Kareem Shaath, MD, University of Texas Health Science Center
9:08 am - 9:12 am	199 - Targeted Dosing of LMWH Does Not Reduce Thrombosis in Orthopaedic Trauma Carol Lin, MD, MA, Cedars-Sinai Medical Center
9:12 am - 9:16 am	208 - The Incidence of DVT in Orthopedic Trauma Hyunwoo P. Kang, MD, University of Southern California
9:16 am - 9:20 am	Discussion

Rapid Fire Session 3B – Sports Medicine

Moderator: Robert C. Schenck Jr., MD, *University Of New Mexico* Chris Kweon, MD, *University of Washington*

8:40 am - 8:44 am	383 - Sliding or Non-Sliding Arthroscopic Knots for Shoulder Procedures: A Systematic Review of Clinical Outcomes Caellagh D. Morrissey, BA, University of Colorado Sports Medicine
8:44 am - 8:48 am	141 - All-Inside Repair of Bucket-Handle Meniscus Tears: A Systematic Review Carolyn Ardizzone, University of Colorado Sports Medicine
8:48 am - 8:52 am	318 - Anterior Cruciate Ligament Reconstruction Outcomes in Skiers Compared to Non-Skiers Alexandra Schumacher, MS, University of Colorado Sports Medicine
8:52 am - 8:56 am	125 - Bone Graft Options for Tunnel Augmentation in Revision ACL Reconstruction Hytham S. Salem, MD, Universit of Colorado, Denver
8:56 am - 9:00 am	Discussion
9:00 am - 9:04 am	144 - Natural History of Subacromial Shoulder Pain: Analysis of 474 Cases John H. Thayer, MBS, University of Washington School of Medicine
9:04 am - 9:08 am	173 - Radiographic Assessment of Femoral Tunnel Ossification in ACL Reconstruction Ali A. Qadeer, MD, Baylor College of Medicine
9:08 am - 9:12 am	84 – Pre-Operative Determination of Adequate Graft Diameter for Hamstring ACL Reconstruction <i>Trevor J. Shelton, MD, University of California, Davis</i>
9:12 am - 9:16 am	458 - Surgical Trends in Meniscal Tears: Analysis of ABOS Certification Data. Jory Wasserburger, MD, Albuquerque, NM
9:16 am - 9:20 am	Discussion

$Rapid\ Fire\ Session\ 3C-Shoulder\ \&\ Elbow$

Moderator: Deana Mercer, MD, *University Of New Mexico* Ronald A. Navarro, MD, *Kaiser Permanente*

8:40 am - 8:44 am	25 - Cutibacterium Acnes Cultures are Rarely Positive in Shoulders Undergoing Primary Arthroplasty Dave Shukla, MD, Mayo Clinic
8:44 am - 8:48 am	192 - Comparison of MRI Utilization: Diagnosis and Treatment of the Elbow <i>Brett A. Schiffman, MD, University of Washington</i>
8:48 am - 8:52 am	307 - Analysis of Glenohumeral Joint Intraarticular Pressure Measurements in Volume-Limited MR Arthrograms in Patients with Shoulder Instability Compared to a Control Group Zachary L. McBeth, MD, Madigan Army Medical Center
8:52 am - 8:56 am	332 - The Relationship between "Grit" and Clinical Outcomes following Rotator-Cuff Repair Andres F. Barandiaran, University of Colorado
8:56 am - 9:00 am	Discussion
9:00 am - 9:04 am	27 - Trends in Peripheral Nerve Blocks in Arthroscopic Rotator Cuff Repairs Abhinav K. Sharma, BS, David Geffen School of Medicine at UCLA
9:04 am - 9:08 am	53 - Sex-Based Review of Recurrence Rates following Arthroscopic Anterior Shoulder Stabilization Connor Cannizzaro, University of Colorado Sports Medicine
9:08 am - 9:12 am	129 - Anterior Capsule Reconstruction vs. Pectoralis Major Transfer for Irreparable Subscapularis Tears Gregory Adamson, Orthopaedic Biomechanics Laboratory, Congress Medical Foundation
9:12 am - 9:16 am	77 - The Effect of Hook Plate with Augmented Fixation on High Energy Shoulder Girdle Injuries Wesley Dosher, MD, University of Texas Health Science Center At Houston
9:16 am - 9:20 am	Discussion

Rapid Fire Session 3D – Foot & Ankle
Moderator: David H. Chafey III, MD, University of New Mexico
Blake Schultz, MD, Stanford University

8:40 am - 8:44 am	28 - Lesser Metatarsophalangeal Interpositional Arthroplasty with Semitendinosus Allograft: Outcomes and Technique Eugene F. Stautberg III, MD, Southwest Orthopedic Group
8:44 am - 8:48 am	43 - Ligametous Lisfranc: Biomechanical Properties of InternalBrace, Suture Button, and Screw <i>Trevor J. Shelton, MD, University of California, Davis</i>
8:48 am - 8:52 am	220 - Contemporary Comparison of Short-Term Outcomes after Total Ankle Replacement and Ankle Arthrodesis Stephen B. Wallace, MD, University of Texas Southwestern
8:52 am - 8:56 am	167 - Patient-Reported Outcomes after use of Dynamic Bracing in the Civilian Population Ryan Hadden, MD, Oregon Health and Science University
8:56 am - 9:00 am	Discussion
9:00 am - 9:04 am	235 - Outcomes and Complications of Supination-Adduction (AO/OTA 44A2.3) Ankle Fractures <i>Ram K. Alluri, MD, Keck Medical Center of USC</i>
9:04 am - 9:08 am	443 - Sural Fasciocutaneous Flaps for Ortho-Geriatric Patients Haydn Roberts, MD, Banner University Medical Center
9:08 am - 9:12 am	178 - Tricortical Kirschner Wire vs. Screw Fixation for Distal Chevron Osteotomy Natalie R. Black, BS, University of Texas Medical Branch at Galveston
9:12 am - 9:16 am	181 - Provisional Reduction and Percutaneous Pinning of Traumatic Foot Injuries Justin A. Rennard, MD, University of Texas Health Science Center at Houston
9:16 am - 9:20 am	Discussion

Rapid Fire Session 3E – Pharmacology: The Good, Bad and the Opioids Moderator: Jeffrey E. Krygier, MD, Santa Clara Valley Medical Center Amalia M. De Comas, MD, The CORE Institute

8:40 am - 8:44 am

122 - Human Skeletal Stem Cells from Acute Fractures

Maintain Self-Renewal and Differentiation Independent of

Non-Steroidal Anti-Inflammatory Drugs (NSAID)

Lawrence H. Go	odnough. N	AD. Stant	ford U	Iniversity
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	8 , , , ,
8:44 am - 8:48 am	200 - Acute Postoperative Multimodal Pain Management and Long-Term Opioid Use
	Carol Lin, MD, MA, Cedars-Sinai Medical Center
8:48 am - 8:52 am	97 - Standardized Pain Regimen in Orthopedic Trauma Patients Reduces Opioid Use Carol Lin, MD, MA, Cedars-Sinai Medical Center
	Carot Lin, InD, Inn, Ceaurs Smai Meateur Center
8:52 am - 8:56 am	226 - Outcomes and Complications Among Methamphetamine Users in Orthopaedic Trauma Nicholas A. Trasolini, MD, University of Southern California
8:56 am - 9:00 am	Discussion
9:00 am - 9:04 am	190 - High Variability in Opioid Prescribing Following Fracture Fixation Andrew Fithian, MD, Stanford University
9:04 am - 9:08 am	224 - Methamphetamine Use and Postoperative Narcotic Use in Orthopedic Trauma Patients Adam Lindsay, MD, University of Southern California
9:08 am - 9:12 am	258 - Perioperative Complication Rates amongst Methamphetamine Positive Orthopaedic Trauma Patients Malcolm DeBaun, MD, Stanford University
9:12 am - 9:16 am	207 - Complication Rates and Reimbursements in Hip Fracture Patients Using DMARDs Mary Kate Erdman, MD, University of Southern California
9:16 am - 9:20 am	Discussion

General Session 3 – AAOS Report & Presidential Guest Speaker

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

9:25 am – 9:40 am	AAOS Report Kristy L. Weber, MD, President, AAOS, University of Pennsylvania
9:40 am – 9:45 am	Introduction of Presidential Guest Speaker

Omer A. Ilahi, MD, Southwest Orthopedic Group/Texas

Arthroscopy & Sports Medicine Institute

9:45 am – 10:25 am Presidential Guest Speaker

The Burden of Craft and the Blessing of Craftsmanship Stephen S. Burkhart, MD, The San Antonio Orthopaedic

Group

10:25 am – 10:45 am Break – Please visit Exhibits

Symposium 4 – Hip/Knee

Moderator: Parminder S. Kang, MD, Desert Orthopaedic Center

10:45 am – 11:00 am Management of Peri-Prosthetic Fractures of the Femur:

Don't Gamble on the Stem

Parminder S. Kang, MD, Desert Orthopaedic Center

11:00 am – 11:15 am Diagnosis and Treatment of Total Joint Infections

Michael D. Ries, MD, Reno Orthopedic Clinic

11:15 am – 11:30 am The Painful Knee after Arthroplasty: Prevention and

Approach

Russell T. Nevins, MD, Nevada Orthopaedic & Spine

Center

11:30 am – 11:35 am Discussion

11:35 am – 12:05 pm Focused Lunch Presentation – Flexion Therapeutics

Localized Treatment for Osteoarthritis Knee Pain with a

Novel Intra-Articular Formulation

Kevin Murphy, MD

*CME Credit Not Available

General Session 4 – WOF Report & Western Orthopaedic Foundation Donor Awards Moderator: Robert R. Slater, Jr., MD, Folsom, CA

12:05 pm – 12:15 pm WOF Report

12:15 pm – 12:21 pm **Basil R. Besh, MD Donor Award**

419 - High Resiliency Improves Patient-Reported

Outcomes following Knee Surgery in Active-Duty Patients *Nicholas J. Drayer, MD, Madigan Army Medical Center*

12:21 pm – 12:27 pm **Nitin N. Bhatia, MD Donor Award**

373 - Two-Week Postoperative Radiographs after Ankle

ORIF Have Low Utility

Hyunwoo P. Kang, MD, University of Southern California

12:27 pm – 12:33 pm	David H. Chafey III, MD Donor Award 157 - Infraspinatus Tenotomy Improves Glenoid Visualization with the Modified Judet Approach John Garlich, MD, Cedars-Sinai Orthopaedic Surgery
12:33 pm – 12:39 pm	Omer A. Ilahi, MD Donor Award 381 - Supporting Orthopedic Resident Education and Advancement in Leadership Skills Jonathan Cheah, MD, University of California, San Francisco *Presented by Sachin Allahabadi, MD
12:39 pm – 12:45 pm	Brian A. Jewett, MD Donor Award 309 - Overprescribing of Opioids in Orthopaedic Surgery <i>Taylor D. Mansfield, MD, Madigan Army Medical Center</i>
12:45 pm – 12:51 pm	Jeffrey E. Krygier, MD Donor Award 403 - Newer NCAA Bat Standard is Associated with Hamate Fractures Trevor J. Shelton, MD, University of California, Davis
12:51 pm – 12:57 pm	Jeffrey M. Nakano, MD Donor Award 166 - Current Trends: Surgical Treatment of Syndesmotic

12:57 pm – 1:03 pm Robert R. Slater Jr., MD Donor Award

407 - Improved Fracture Reduction in Patients Undergoing Early Definitive Fixation for Tibial Plateau Fractures with

Rebecca Griffith, MD, University of Colorado Denver

Acute Compartment Syndrome

Injuries in Elite Athletes

School of Medicine

Tony Pedri, MD, Regions Trauma Center

1:03 pm - 1:10 pm Discussion

Concurrent Allied Health Session 2

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

1:15 pm – 2:15 pm Initial Management of the Spine Patient

Adam M. Wegner, MD, Washington University, St. Louis

Rapid Fire Session 4A – Trauma Pelvis & Acetabulum

Moderator: Ronald W. Lindsey, MD, *The University of Texas Medical Branch*

Carol Lin, MD, MA, Cedars-Sinai Medical Center

1:15 pm - 1:19 pm	216 - Expert Agreement on the Outcome of Pelvic Exam Under Anesthesia Geoffrey S. Marecek, MD, University of Southern California
1:19 pm - 1:23 pm	143 - Visualizing Anterior Pelvis Bone Strength to Optimize Screw Fixation <i>Jerad D. Allen, MD, Harborview Medical Center</i>
1:23 pm - 1:27 pm	145 - Novel Method to Visualize Pelvic Bone Strength for Surgical Planning Jerad D. Allen, MD, Harborview Medical Center
1:27 pm - 1:31 pm	294 - Evaluation of Functional and Psychological Outcomes in Patients with Severe Pelvic Ring Fractures Murphy P. Martin, MD, Denver Health Medical Center *Presented by Chase Dean, MD
1:31 pm - 1:35 pm	297 - Occult Injuries of the Contralateral SI Joint in Operatively Treated Pelvis Fractures: Incidence Andrew S. Maertens, MD, University of Colorado
1:35 pm - 1:39 pm	292 - Complications Associated with Early vs. Delayed Fixation of Pelvic Ring Injuries David Rojas, MD, Denver Health Medical Center
1:39 pm - 1:45 pm	Discussion
1:45 pm - 1:49 pm	55 - Posterior Pelvic Ring Bone Density: Implications for Third Sacral Segment <i>Jonathan G. Eastman, MD, University of California, Davis</i>
1:49 pm - 1:53 pm	204 - A Biomechanical Study Comparing Compressive Strength of Fully-Threaded vs. Partially Threaded Cannulated Transiliac-Transacral Lag Screws for Posterior Pelvic Ring Stabilization. Andrew S. Maertens, MD, University of Colorado
1:53 pm - 1:57 pm	237 - Obesity Is Not a Risk Factor for Complications Following Acetabular Fracture Surgery: A Comparative Cohort Study Kareem Shaath, MD, University of Texas Health Science Center
1:57 pm - 2:01 pm	219 – Low-Dose CT for Assessment of Acetabular Fracture Reduction

Stephen Gibbs, MD, University of Southern California

2:01 pm - 2:05 pm 94 - The Hybrid Suite and Intrailiac Balloon Occlusion for

Acetabular Open Reduction Internal Fixation

Jason Davis, MD, University of California, San Francisco

2:05 pm - 2:09 pm 404 - Financial Impact of the ACA on an Orthopedic

Trauma Service

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

2:09 pm - 2:15 pm Discussion

Rapid Fire Session 4B – Tumors & Pediatrics

Moderator: Nicole I. Montgomery, MD, Texas Children's Hospital

Selina Poon, MD, Shriners for Children Medical Center, Pasadena

1:15 pm - 1:19 pm 264 - CD44 and ALDH1 Predict Oncologic Outcomes in

Osteosarcoma

Augustine M. Saiz Jr., MD, University of California, Davis

1:19 pm - 1:23 pm 160 - Natural History of Enchondroma Referrals at a

Comprehensive Cancer Center

Alysia K. Kemp, MD, The University of Texas MD

Anderson Cancer Center

1:23 pm - 1:27 pm 163 - Acrometastasis: Is Lung Carcinoma Still the Most

Common Primary Lesion?

Alysia K. Kemp, MD, The University of Texas MD

Anderson Cancer Center

1:27 pm - 1:31 pm 362 - Patellar Tendon Augmentation Not Necessary in

Proximal Tibia Endoprosthetic Reconstruction

Russell Stitzlein, MD, University of California, Irvine

1:31 pm - 1:35 pm 120 - Prospective Study of Percutaneous Bone-Anchored

Implants in Patients with Above Knee Amputation: the

UCSF Experience

Musa Zaid, MD, University of California, San Francisco

1:35 pm - 1:39 pm 366 - Vertebra Plana Caused by CRMO: A Case Series in

Pediatric Patients

Jesse Roberts, MD, University of Colorado

1:39 pm - 1:45 pm Discussion

1:45 pm - 1:49 pm	439 - Utility of Bioabsorbable Fixation of Osteochondral Lesions in the Adolescent Knee; Outcomes Analysis With Minimum Two-Year Follow-Up Shawn Nguyen, DO, Children's Hospital of Orange County
1:49 pm - 1:53 pm	47 - Secondary Surgeries Following Major Lower Extremity Amputations in the Pediatric Population <i>Christopher Joyce, MD, University of Colorado</i>
1:53 pm - 1:57 pm	177 - Validation of a Novel Method for Measuring Proximal Ulnar Alignment in the Pediatric Patient Megan H.M. Kuba, MD, Kaiser Permanente Orange County
1:57 pm - 2:01 pm	304 - Percutaneous Hip Adductor Release for Cerebral Palsy: Adolescents and Adults David A. Yngve, MD, The University of Texas Medical Branch
2:01 pm - 2:05 pm	314 - Distinctive Opiate Prescription Patterns in Adolescent Subpopulations following ACL Reconstruction Charles M. Chan, MD, Stanford University *Presented by Alexander Karius, BS
2:05 pm - 2:09 pm	453 - Aseptic Nonunion in Long Bones among Pediatric Patients: A Report of 13 Cases Ahmed Thabet, MD, Texas Tech University Health Sciences Center
2:09 pm - 2:15 pm	Discussion
	Tedicine D. Arrington, MD, Madigan Army Medical Center MD, Premier Physicians Management Company
1:15 pm - 1:19 pm	291 – Two-Year Revision ACL Reconstruction: Age-Based Risk Factors Matthew C. Gallo, BA, University of Southern California
1:19 pm - 1:23 pm	456 - Interfacial Shear Mechanical Properties of Commercially Available Osteochondral Allografts Dean Wang, MD, University of California, Irvine
1:23 pm - 1:27 pm	80 - When Do Patients Improve after Hip Arthroscopy For Femoroacetabular Impingement? A Prospective Cohort Analysis

$Alan\ Zhang,$	MD,	UCSF	Medical	Center

1:27 pm - 1:31 pm	308 - Patellar Height Comparison between Knees in Adolescents and Young Adults Benjamin Albertson, MD, University of New Mexico
1:31 pm - 1:35 pm	121 - The Effect of ACL Graft Choice On Meniscal Repair Success Hytham S. Salem, MD, Universit of Colorado, Denver
1:35 pm - 1:39 pm	239 - How Accurate are Radiographic Landmarks at Predicting the Location of Lateral Knee Structures? Thomas Kremen, MD, David Geffen School of Medicine at UCLA
1:39 pm - 1:45 pm	Discussion
1:45 pm - 1:49 pm	110 - Long-Term Risk of Osteoarthritis After Allograft or Autograft ACL Reconstruction Peter Chebi, SOAR Medical
1:49 pm - 1:53 pm	38 - Handedness Affects Resident Upper Extremity Motion Patterns during Arthroscopic Simulation Joseph G. O'Sullivan, Oregon Health and Science University
1:53 pm - 1:57 pm	81 - Air Arthrogram Aids Joint Distraction for Hip Arthroscopy and Decreases Acute Postoperative Pain Alan Zhang, MD, University of California, San Francisco Medical Center
1:57 pm - 2:01 pm	93 - Return to Sport following Medial Patellofemoral Ligament Reconstruction Darby A. Houck, BA, University of Colorado Sports Medicine
2:01 pm - 2:05 pm	95 - Does Workflow Influence Component Placement Accuracy to Plan for PKA? Emily Hampp, MD, Mahwah, NJ *Presented by Shon Darcy
2:05 pm - 2:09 pm	96 - The Impact of Workflow on Cutting Time for Partial Knee Arthroplasty Emily Hampp, MD, Mahwah, NJ *Presented by Shon Darcy

Discussion

Rapid Fire Session 4D – Total Knee

Moderator: Jennifer M. van Warmerdam, MD, *St. Mary's Medical Center Total Joint Center* Michael D. Ries, MD, *Reno Orthopedic Clinic*

1:15 pm - 1:19 pm	400 - Utility of Medial-to-Total Force Ratio in Kinematically Aligned TKA
	Trevor J. Shelton, MD, University of California, Davis
1:19 pm - 1:23 pm	405 - Counseling Patients with Mechanically Aligned TKA Undergoing Kinematically Aligned TKA Trevor J. Shelton, MD, University of California, Davis
1:23 pm - 1:27 pm	437 - Joint Replacement in X-Linked Hypophosphatemia Emily S. Mills, BS, Frank H. Netter MD School of Medicine at Quinnipiac University
1:27 pm - 1:31 pm	328 - Defining a Safe Interval between Pre-Operative Corticosteroid Injections and TKA's Sarah Bhattacharjee, Pritzker School of Medicine at the University of Chicago
1:31 pm - 1:35 pm	66 - Predictors of Complications after TKA In Patients with a Prior Arthroscopy Geoffrey Rohlfing, MD, University of California, San Francisco
1:35 pm - 1:39 pm	67 - Influence of Prior Arthroscopy on Revision TKA Complications and Readmissions Kamran Movassaghi, MD, University of California, San Francisco
1:39 pm - 1:45 pm	Discussion
1:45 pm - 1:49 pm	98 - Periprosthetic Tissue Reaction Independent of LTT Result and Implanted Materials in TKA Brian Schneiderman, MD, Harbor UCLA Medical Center
1:49 pm - 1:53 pm	171 - Initial/Repeat Triamcinolone Acetonide Extended-Release in Patients With Prior Intra-Articular Corticosteroids Andrew I. Spitzer, MD, Cedars-Sinai Orthopaedic Center
1:53 pm - 1:57 pm	435 - Outcomes of Kinematic, Gap Balancing and Measured Resection Total Knee

Zachary C. Lum, DO, University of California, Davis Medical Center

1:57 pm - 2:01 pm 197 – Pre-Operative Vitamin D Repletion in Total Knee

Arthroplasty: A Preliminary Cost-Effectiveness Model Armin Arshi, MD, David Geffen School of Medicine at

UCLA

2:01 pm - 2:05 pm 424 - The Femoral Condyles Are Not Parallel in Coronal

Plane; What is the Significance? A Radiographic and

Computational Study

Mahdie Kerdari, MD, Rowan University

2:05 pm - 2:09 pm 432 - To Evaluate The Efficacy and Safety of

Buprenorphine 5 mg Patch in the Immediate Postoperative

Pain Relief following Total Knee Replacement

Sanjay B. Londhe, MS FRCS FRCSI MCh (Orth), Holy

Spirit Hospital

2:09 pm - 2:15 pm Discussion

Rapid Fire Session 4E – Total Hip

Moderator: Kathryn L. Schabel, MD, *Oregon Health & Science University* William J. Maloney, MD, *Stanford University School of Medicine*

1:15 pm - 1:19 pm 310 - Comparing Different Hip Physical Examination

Methods on the Diagnosis of Labral Tear

Farshad Adib, University of Maryland Orthopaedic

Associates

1:19 pm - 1:23 pm 349 - Direct Anterior Approach Total Hip Arthroplasty

without Pre-Operative Templating - Challenging the

Dogma of Pre-Operative Templating

Ian Hasegawa, MD, University of Hawaii

1:23 pm - 1:27 pm 100 - Determining and Achieving Target Limb Length and

Offset in Total Hip Arthroplasty using Intra-Operative

Digital Radiography

Eytan M. Debbi, MD, PhD, Cedars-Sinai Medical Center

1:27 pm - 1:31 pm 215 - Is there a Relationship between Severity of Hip

Dysplasia and Patient Reported Pain?

Shawn O. Okpara, BS, University of Texas Southwestern

Medical Center

1:31 pm - 1:35 pm	217 - Total Hip Arthroplasty for Osteoarthritis Secondary to Operatively Treated Acetabular Fractures; A Retrospective Analytic Study Samer Kakish, MD, University of New Mexico
1:35 pm - 1:39 pm	223 - Patient-Reported Return to Driving following Outpatient Total Hip Arthroplasty Anne R. Wright, MD, University of Hawaii
1:39 pm - 1:45 pm	Discussion
1:45 pm - 1:49 pm	32 - THA Outcomes in Adult Patients with Developmental Dysplasia of the Hip Peter P. Hsiue, MD, University of California, Los Angeles
1:49 pm - 1:53 pm	127 - Reduction of Femoral Offset after THA for Femoral Neck Fracture Andrew A. Barrett, MD, Stanford University School of Medicine
1:53 pm - 1:57 pm	287 - Are Complete Blood Count Tests Necessary after Total Hip Arthroplasty? Emily S. Mills, BS, Frank H. Netter MD School of Medicine at Quinnipiac University
1:57 pm - 2:01 pm	180 - 90-Day Safety of the Direct Superior Approach to Total Hip Arthroplasty Rami M. Ezzibdeh, Stanford University School of Medicine
2:01 pm - 2:05 pm	205 - Understanding Perceived Abduction and Anteversion Angles in Anterior Total Hip Anne R. Wright, MD, University of Hawaii
2:05 pm - 2:09 pm	211 - Does Pain Catastrophizing Predict Age of Onset in Symptomatic Hip Dysplasia and Femoroacetabular Impingement? Shawn O. Okpara, BS, University of Texas Southwestern Medical Center
2:09 pm - 2:15 pm	Discussion
Resident Program (Spyglass) Moderator: Jeffrey E. Krygier, M	ID, Santa Clara Valley Medical Center

TBD

2:15 pm – 5:30 pm

	2:15 pm - 3:15 pn	Scientific Poster & E-Poster Sessions
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3:15 pm - 4:15 pm**Multimedia Education Session**

Saturday, August 3

5:45 am – 6:40 am	Scientific Poster & E-Poster Sessions
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6:40 am - 6:45 amAnnouncements

> David H. Chafey III, MD, Co-Program Chair David Mansfield, MD, Co-Program Chair

General Session 5 – WOF Resident Awards

Moderators: David H. Chafey III, MD, *University of New Mexico*

David J. Mansfield, MD, El Paso Orthopaedic Surgery Group

6:45 am – 6:51 am	58 - Osteogenic and Chondrogenic Differentiation Defects in Geriatric Human Skeletal Stem Cells from Acute Fractures Lawrence H. Goodnough, MD, Stanford University
6:51 am – 6:57 am	102 - MRI Improves Diagnosis of Ipsilateral Femoral Neck

and Sh	aft Fract	ures					
3.7 .1	D	140 11 1	• .	CT	77	1.1 0	

Nathan Rogers, MD, University of Texas Health Science

Center at Houston

6:57 am - 7:03 am289 - Hypovitaminosis D is a Risk Factor for Posterior Chain Muscular Injury in NCAA Division I Track and

Field Athletes

Adam Lindsay, MD, University of Southern California

7:03 am - 7:09 am385 - Improving Trainee Arthroscopic Knot Tying Skills

Using the FAST Workstation

Peters T. Otlans, MD, Oregon Health & Science University

7:09 am - 7:15 am108 - Prospective Validation of the Sepsis MetaScore as a

> Novel Blood Test for Acute Septic Arthritis Blake Schultz, MD, Stanford University

7:15 am - 7:21 am278 - Hip Survival following Arthroscopy: Analysis of

12,733 Patients

Jie Yao, MD, University of Washington

7:21 am - 7:27 am198 - Altered Cortical Activity during Single Leg Balance

in ACL-Reconstructed Patients

Benjamin C. Meyer, MD, MountainView Regional Medical

Center

7:27 am - 7:35 am Discussion

7:35 am – 7:50 am **Second Business Meeting**

Symposium 5 – Trauma

Moderator: Bryon D. Hobby, MD, FAAOS, *Billings Clinic*

7:50 am – 8:05 am Improving Outcomes in Tibia Fractures

Bryon D. Hobby, MD, FAAOS, Billings Clinic

8:05 am – 8:20 am Critical-Size Bone Defect Tibia Nonunions: Evaluation and

Management

Jason W. Stoneback, MD, University of Colorado

8:20 am – 8:35 am Spino-Pelvic Fixation: Indications and Controversies

Ronald W. Lindsey, MD, The University of Texas Medical

Branch

8:35 am - 8:40 am Discussion

8:40 am – 9:10 am **Focused Brunch Presentation – Medtronic**

Tourniquet Free Total Knee Arthroplasty: Making the

Transition and Early Experiences

Alexander P. Sah, MD *CME Credit Not Available

Rapid Fire Session 5A – Trauma Hip

Moderator: Jonathan G. Eastman, MD, University of California, Davis

Andrew J. Palafox, MD, El Paso, TX

9:15 am - 9:19 am 305 - Anesthesia Choice for Elderly Hip Fracture Patients:

Should Anticoagulant Status Matter?

Cory K. Mayfield, BS, Keck School of Medicine of the

University of Southern California

9:19 am - 9:23 am 365 - Should an Elevated INR Delay Hip Fracture Surgery?

Cory K. Mayfield, BS, Keck School of Medicine of the

University of Southern California

9:23 am - 9:27 am 33 - Hip Arthroplasty Outcomes for Hip Fractures in

Transplant Patients

Peter P. Hsiue, MD, University of California, Los Angeles

9:27 am - 9:31 am	31 - Effect of Parkinson's Disease on Hemiarthroplasty Outcomes for Hip Fractures Peter P. Hsiue, MD, University of California, Los Angeles
9:31 am - 9:35 am	Discussion
9:35 am - 9:39 am	118 - The Utility of Traction Radiographs in Pre-Operative Planning for Hip Fractures Graham Albert, McGovern Medical School at UTHSCH
9:39 am - 9:43 am	103 - Predictors for 30-Day To One-Year Readmission in a Geriatric Hip Fracture Population Samuel K. Stephenson, MD, Cedars Sinai Medical Center
9:43 am - 9:47 am	105 - Blood Transfusion Rates and Predictors Following Geriatric Hip Fracture Surgery Armin Arshi, MD, David Geffen School of Medicine at UCLA
9:47 am - 9:51 am	106 - Inpatient Rehabilitation Facility Utilization in Postsurgical Orthogeriatric Hip Fracture Care Armin Arshi, MD, David Geffen School of Medicine at UCLA
9:51 am - 9:55 am	Discussion
Rapid Fire Session 5B – Upper Ex Moderator: Robert R. Slater, Jr.,	xtremity
Rapid Fire Session 5B – Upper Ex Moderator: Robert R. Slater, Jr.,	xtremity MD, Folsom, CA
Rapid Fire Session 5B – Upper Ex Moderator: Robert R. Slater, Jr., Robin N. Kamal, MI	MD, Folsom, CA D, Stanford University Medical Center 139 - Incidence of Corrective Procedures after Non-Operatively Managed Distal Radius Fractures in the Elderly Nicholas P. Satariano, MD, University of California, San
Rapid Fire Session 5B – Upper Ex Moderator: Robert R. Slater, Jr., Robin N. Kamal, MI 9:15 am - 9:19 am	MD, Folsom, CA D, Stanford University Medical Center 139 - Incidence of Corrective Procedures after Non-Operatively Managed Distal Radius Fractures in the Elderly Nicholas P. Satariano, MD, University of California, San Francisco 209 - Thumb UCL Repair with Suture Tape Augmentation Restores Kinematics

Hyunwoo P. Kang,	MD.	University	of Southern	California
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9:31 am - 9:35 am	Discussion
9:35 am - 9:39 am	155 - Two-Word Assessment and its Association with Likelihood to Recommend Lauren M. Shapiro, MD, Stanford University
9:39 am - 9:43 am	86 - Articular Injuries in Acute and Chronic Operative Acromioclavicular Joint Injuries Matti P. Asuma, MD, Madigan Army Medical Center *Presented by Taylor D. Mansfield, MD
9:43 am - 9:47 am	438 - Chronic Distal Biceps Avulsion Treated with Suture Button Joseph D. Mueller, DO, Ventura Orthopedics
9:47 am - 9:51 am	351 - Cost and Trends of Treatment for Proximal Humerus Fractures Edward J. Wu, MD, Stanford University
9:51 am - 9:55 am	Discussion

Rapid Fire Session 5C – Foot & Ankle

Moderator: Kimberly L. Furry, MD, Mercy Orthopedics Associates
David J. Mansfield, MD, El Paso Orthopaedic Surgery Group

9:15 am - 9:19 am	35 - A Retrospective Radiographic Evaluation of Augment Bone Graft Fusion Trevor J. Shelton, MD, University of California, Davis
9:19 am - 9:23 am	92 - Postoperative Oral Antibiotics in Outpatient Foot and Ankle Surgery <i>Jacob R. Carl, MD, University of California, Davis</i>
9:23 am - 9:27 am	111 - A Prospective, Randomized Suture-Button vs. Screw Syndesmotic Fixation Patrick S. Barousse, MD, University of California, Davis
9:27 am - 9:31 am	140 - Radiographic Outcomes of Lisfranc Injuries Treated with a Suture Button Device Connor Delman, MD, University of California, Davis
9:31 am - 9:35 am	Discussion

9:35 am - 9:39 am	230 - Utilization and Cost of Total Ankle Replacement vs. Tibiotalar Arthrodesis Cary S. Politzer, MD, University of California, San Diego	
9:39 am - 9:43 am	76 - Radiographic Evaluation of Adult Acquired Flatfoot Correction with Augmented Spring Ligament Repair Jason Fogleman, MD, University of California, Davis	
9:43 am - 9:47 am	89 - Evaluation of the Learning Curve for Total Ankle Replacement Using the Transfibular Approach Hyunwoo P. Kang, MD, University of Southern California	
9:47 am - 9:51 am	123 – Intra-Operative Fluoroscopy vs. Postoperative Weightbearing Radiographs after Bunion Surgery Amber L. Price, MD, University of New Mexico	
9:51 am - 9:55 am	Discussion	
Rapid Fire Session 5D – Basic Science Moderator: James H. Flint, MD, US Navy Orthopedics David H. Chafey III, MD, University of New Mexico		
9:15 am - 9:19 am	26 - Aged Mice Demonstrate Greater Muscle Degeneration After Rotator Cuff Injury Abhinav K. Sharma, BS, David Geffen School of Medicine at UCLA	
9:19 am - 9:23 am	75 - Regional Gene Therapy with Adipose-derived Stem Cells for Bone Repair Venus Vakhshori, MD, University of Southern California Medical Center	
9:23 am - 9:27 am	335 - Dramatically Improved Strength of Proximal Humeral Fixation with a Tuberosity-Specific Fixation Plate Robert S. Walker, MD, University of Arizona College of Medicine Phoenix	
9:27 am - 9:31 am	193 - Evaluation of Multiplanar Stability in Neer Type IIB Clavicle Fractures John Garlich, MD, Cedars-Sinai Orthopaedic Surgery	
9:31 am - 9:35 am	Discussion	
9:35 am - 9:39 am	387 - Omega 3 Fatty Acid (O3FA) Supplementation Reduces Intervertebral Disc Degeneration Phillip H. Behrens IV, MD, Cedars-Sinai Medical Center	

9:39 am - 9:43 am	299 - Ex-Vivo Toxicity of Topical Antiseptics and Antibiotics on Human Chondrocytes Erika L. Garbrecht, MD, University of New Mexico
9:43 am - 9:47 am	34 - Blood Transfusions: Does Storage Duration Affect Postoperative Infection Risk? Peter P. Hsiue, MD, University of California, Los Angeles
9:47 am - 9:51 am	388 - Neural Crest-Derived Mesenchymal Stem Cells (MSCs) Enhance Bone Allograft Healing <i>Phillip H. Behrens IV, MD, Cedars-Sinai Medical Center</i>
9:51 am - 9:55 am	Discussion
•	ee MD Anderson Cancer Center , The University of Texas MD Anderson Cancer Center
9:15 am - 9:19 am	428 - CRP (C Reactive Protein) Level after Total Knee Replacement in Indian Population- Does it Follow Anglo- Saxon Trend? Sanjay B. Londhe, MS FRCS FRCSI MCh (Orth), Holy Spirit Hospital
9:19 am - 9:23 am	430 - Post TKR Home Physiotherapy for a Period of Six Weeks Reduces the Rate of Post TKR Manipulation Under Anesthesia (MUA) Rate Sanjay B. Londhe, MS FRCS FRCSI MCh (Orth), Holy Spirit Hospital
9:23 am - 9:27 am	24 - Cooled Radiofrequency Ablation (CRFA) of the Geniculate Nerves Prior to Unilateral Total Knee Arthroplasty (TKA) Reduces Patient-Reported Pain Two Weeks Postoperatively Jeffrey Lyman, MD, Institute for Orthopedic Research and Innovation
9:27 am - 9:31 am	369 - Weight Loss Knowledge Base in the Total Joint Candidate Kenton B. Panas, MD, University of Oklahoma
9:31 am - 9:35 am	Discussion
9:35 am - 9:39 am	65 – Influence of Prior Arthroscopy on Primary TKA Complications and Readmissions

Geoffrey Rohlfing, MD, University of California, San

Francisco

9:39 am - 9:43 am 444 - Is there Risk to Using the Thinnest Liner in Primary

TKA? Evaluation of Knee Range of Motion, Outcomes, and Manipulation Rates with the Thinnest Available Liner *Alexander P. Sah, MD, Institute for Joint Restoration*

9:43 am - 9:47 am 393 - Robotic Arm Assisted Total Knee Arthroplasty

Workflow Optimization: A Technique Paper

Demonstrating Operative Times Comparable to Traditional

Instrumentation

Max Lingamfelter, MD, Inspira Health Network

9:47 am - 9:51 am 401 - Revision of a Medial UKA to a Kinematically

Aligned TKA

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

9:51 am - 9:55 am Discussion

Concurrent Allied Health Session 3

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

9:15 am – 10:15 am Pediatric Sports Medicine

Brian M. Haus, MD, University of California, Davis

9:55 am – 10:20 am Break – Please visit Exhibits

Symposium 6 – Spine Surgery

Moderator: Nitin N. Bhatia, MD, FACS, University of California, Irvine

10:20 am – 10:35 am Minimally Invasive Spine Surgery

Yu-Po Lee, MD, University of California, Irvine

10:35 am – 10:50 am Spinal Stenosis and New Technologies

Evalina Burger, MD, University of Colorado

10:50 am – 11:05 am Pre-Operative Assessment of Bone Quality Prior to

Adult Deformity Surgery

Olumide A. Danisa, MD, Loma Linda University Health

11:05 am – 11:10 am Discussion

11:10 am - 11:40 am Focused Lunch Presentation - Johnson & Johnson

Medical Devices Company

Optimizing a Multimodal Approach to Control Postsurgical

Pain

Alexander P. Sah, MD
*CME Credit Not Available

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

Moderators: David H. Chafey III, MD, *University of New Mexico*

David J. Mansfield, MD, El Paso Orthopaedic Surgery Group

11:40 am – 11:45 am Own the Bone

Update on The American Orthopaedic Association's "Own

the Bone" Registry

Fred C. Redfern, MD, Henderson, NV

11:45 am – 11:50 am BOC Report

Bryan S. Moon, MD, MD Anderson Cancer Center

11:50 am – 12:15 pm Presidential Address

Dad's Lunchbox

Omer A. Ilahi, MD, Southwest Orthopedic Group/Texas

Arthroscopy & Sports Medicine Institute

General Session 7 – Abstract Presentations

Moderator: TBD

12:15 pm – 12:23 pm **OREF/WOF Funded Presentation**

248 - The Impact of Early Sport Specialization on the

Collegiate Athlete

Caitlin M. Rugg, MD, UC San Francisco Orthopaedic

Surgery

12:23 pm – 12:31 pm **OREF/WOF Funded Presentation**

460 - Ex-Vivo Toxicity of Commonly-Used Topical Antiseptics, Antibiotics and Tranexamic Acid on Human

Chondrocytes

Erika Garbrecht, MD, University of New Mexico

12:31 pm – 12:37 pm 386 - Estrogen Receptor Alpha Expression in Female Knee

Articular Cartilage

Marissa Hughbanks,	MD,	University of	of Colorado	School of
1. 1				

Medicine

12:37 pm – 12:43 pm 109 - How Mobile Technology Changes Reporting of

Morbidity and Mortality

Christopher R. Johnson, MD, Cedars Sinai

12:43 pm – 12:49 pm 296 - A Biomechanical Comparison of Dual-Plate and

Plate-Nail Fixation in Supracondylar Distal Femur

Fractures

David J. Wright, MD, University of California, Irvine

12:49 pm – 12:55 pm 196 - Utility of Debridement for Ballistic Lower Extremity

Fractures

Ali Azad, MD, University of Southern California

12:55 pm – 1:01pm 425 - Is Posterior Referencing a Reliable Technique for

Rotational Femoral Component Alignment in TKR? Mahdie Kerdari, MD, Rowan University, Glassboro, New

Jersey

1:01 pm – 1:07 pm 340 - Hip and Knee Arthroplasty Medicare Reimbursement

2000-2018: An Unsustainable Trend

Cory K. Mayfield, BS, Keck School of Medicine of the

University of Southern California

1:07 pm – 1:13 pm 288 - The Necessity of Basic Metabolic Panel Tests After

Total Hip Arthroplasty

Emily S. Mills, BS, Frank H. Netter MD School of Medicine

at Quinnipiac University

1:13 pm – 1:20 pm Discussion

Concurrent Allied Health Session 4

Moderator: Jonathan G. Eastman, MD, University of California, Davis

1:25 pm – 2:25 pm Ultrasound Injection Lab

Speaker TBD

Rapid Fire Session 6A - Trauma Femur

Moderator: Geoffrey Marecek, MD, Keck School of Medicine of the University of Southern

California

Adam A. Sassoon, MD, University of California, Los Angeles

1:25 pm - 1:29 pm 170 - Comparison of IMN to Plating for Periprosthetic

Distal Femur Fractures

	Elizabeth Gausden, MD, University of Texas Health S cience Center at Houston
1:29 pm - 1:33 pm	187 - A New Orthogonal Plate Configuration in Treating Periprosthetic Proximal Femur Fractures Kareem Shaath, MD, University of Texas Health Science Center
1:33 pm - 1:37 pm	254 - Full Weight-Bearing after Fixation of Vancouver B1 Femur Fractures Malcolm DeBaun, MD, Stanford University
1:37 pm - 1:41 pm	298 - Supracondylar Distal Femur Fractures: Nail Diameter Significantly Impacts Stability in Plate-Nail Constructs David J. Wright, MD, University of California, Irvine
1:41 pm - 1:45 pm	154 - Subsequent Femoral Fragility Fractures: Underreported and Construct-Related Michael Murphy, Loyola University Medical Center
1:45 pm - 1:49 pm	195 - Open Femur Fractures: Complications and Outcome Mary Kate Erdman, MD, University of Southern California
1:49 pm - 1:55 pm	Discussion
1:55 pm - 1:59 pm	182 - Closed vs. Open Reduction For Young Patients with Femoral Neck Fractures Adam J. Miller, MD, University of Texas Health Science Center at Houston
1:59 pm - 2:03 pm	156 - Predictors of Nonunions in Young Patients with Femoral Neck Fractures Adeet Amin, BA, University of Texas Houston Orthopedics
2:03 pm - 2:07 pm	414 - Rates of Femoral Neck Fracture Union Using Variable Pitch Screws <i>Tony Bouz, DO, Fontana, CA</i>
2:07 pm - 2:11 pm	56 - Fractures Associated with Short vs. Long Cephalomedullary Nails: Distinct Injury Patterns and Patient Outcomes Lawrence H. Goodnough, MD, Stanford University
2:11 pm - 2:15 pm	269 - Prostheses Impact Amputee Quality of Life and Function in Tanzania Syed Ali, University of California, San Francisco

2:15 pm - 2:19 pm 115 - Moped Riders More Likely to Sustain Head Injuries than Motorcyclists

Tyler Kent, MD, University of Nevada Las Vegas

2:19 pm - 2:25 pm Discussion

Rapid Fire Session 6B - Total Knee

Moderator: Jeffrey M. Nakano, MD, VA Medical Center

Russell T. Nevins, MD, Nevada Orthopaedic & Spine Center

1:25 pm - 1:29 pm	11 - Effect of Modern Blood Preservation Techniques in Patients Undergoing Unicompartment Knee Replacement, Unilateral Total knee Replacement and Concurrent Bilateral Total Knee Replacement Rohan Bhimani, MD, Massachusetts General Hospital
1:29 pm - 1:33 pm	83 - Pes Planus is Associated with Poor Outcomes After TKA Allison Roe, MD, Stanford Hospital
1:33 pm - 1:37 pm	12 - Difference between Mechanical Alignment in Navigation vs.Scanogram during Total Knee Arthroplasty Rohan Bhimani, MD, Massachusetts General Hospital
1:37 pm - 1:41 pm	71 - Utilization, Costs, and Complications of Outpatient vs. Inpatient Unicompartmental Knee Arthroplasty Sahitya K. Denduluri, MD, Stanford Orthopaedic Surgery
1:41 pm - 1:45 pm	284 - Routine Postoperative Complete Blood Count Tests after Total Knee Arthroplasty Emily S. Mills, BS, Frank H. Netter, MD, School of Medicine at Quinnipiac University
1:45 pm - 1:49 pm	320 - Predictors of Changing Surgeon for Subsequent Elective Total Joint Replacement Syed Ali, University of California, San Francisco
1:49 pm - 1:55 pm	Discussion
1:55 pm - 1:59 pm	415 - Patella Baja after Knee Arthroscopy and Early Impact on TKA

California

David A. Brethouwer, DO, Kaiser Permanente Southern

1:59 pm - 2:03 pm	245 - Modern Posterior Stabilized All-Polyethylene Tibias are Equal to Metal-Backed Tibias Ezequiel A. Andrade, Hoag Orthopedics Institute
2:03 pm - 2:07 pm	285 - When Are Basic Metabolic Tests after Total Knee Arthroplasty Useful? Emily S. Mills, BS, Frank H. Netter MD School of Medicine at Quinnipiac University
2:07 pm - 2:11 pm	336 - Population-Based Survivorship of Computer Navigated vs. Conventional Total Knee Arthroplasty Hyunwoo P. Kang, MD, University of Southern California
2:11 pm - 2:15 pm	420 - Implementation of a Standardized Care Pathway for Total Knee Arthroplasty Daniel Gelvez, BS, University of Texas Southwestern Medical Center
2:15 pm - 2:19 pm	183 - Large Osteochondral Allograft Transplantation for Acute Traumatic Knee Articular Defects Braden F. Goldberg, McGovern Medical School
2:19 pm - 2:25 pm	Discussion
Rapid Fire Session 6C – Sports M	
Rapid Fire Session 6C – Sports M	ledicine
Rapid Fire Session 6C – Sports M Moderator: Luis H. Urrea II, MD	Iedicine D, El Paso Orthopaedic Surgery Group 138 - Pain Management of Anterior Cruciate Ligament Reconstruction
Rapid Fire Session 6C – Sports M Moderator: Luis H. Urrea II, MD 1:25 pm - 1:29 pm	Iedicine O, El Paso Orthopaedic Surgery Group 138 - Pain Management of Anterior Cruciate Ligament Reconstruction Augustine M. Saiz Jr., MD, University of California, Davis 169 - Impact of Sport and Injury: Assessing Athletes Using PROMIS Instruments Kenneth J. Hunt, MD, University of Colorado Denver

David A. Hankins, MD, University of New Mexico

1:41 pm - 1:45 pm	364 - Does Discoid Morphology Affect Performance on Return-to-Sport Testing after Meniscal Repair Megan H. M. Kuba, MD, Kaiser Permanente Orange County
1:45 pm - 1:49 pm	368 - Helmet Design and Hits to the Head: Analysis of NFL Tackling 1951-Present David Wang, MD, GWU School of Medicine
1:49 pm - 1:55 pm	Discussion
1:55 pm - 1:59 pm	457- Ramp Lesions of the Medial Meniscus in the Setting of ACL Rupture: Reoperation Rates and Clinical Outcomes <i>Dean Wang, MD, University of California, Irvine</i>
1:59 pm - 2:03 pm	265 - Factors Associated with Delay in Diagnosis of ACL Injuries Casey A. Slattery, BS, University of Washington
2:03 pm - 2:07 pm	268 - Cost Data for Nonsurgical Treatments in Sports Medicine are Lacking Jie Yao, MD, University of Washington
2:07 pm - 2:11 pm	29 - Neuromonitoring Changes during Pediatric Hip Arthroscopy Trevor J. Shelton, MD, University of California, Davis
2:11 pm - 2:15 pm	293 - Future ACL Injury Risk after ACL Reconstruction in Patients with Vascular Comorbidities: A Retrospective Database Study Matthew C. Gallo, BA, University of Southern California
2:15 pm - 2:19 pm	376 - The Effect of Artificial Turf vs. Natural Grass on the Incidence of Ankle Injuries in NCAA Football 2004 - 2014 Seasons Dave Milzman, MD, GWU School Of Medicine
2:19 pm - 2:25 pm	Discussion

Rapid Fire Session 6D – Practice Management/Education & Other

Moderator: Lawrence Housman, MD, *Tucson Orthopaedic Institute PC* Steven W. Thorpe, MD, *University of California, Davis Medical Center*

1:25 pm - 1:29 pm 347 - What Patient Reported Outcome Should I Use? Erik A. Magnusson, MD, University of Washington

1:29 pm - 1:33 pm	134 - Tibial IMN: Virtual Reality vs. Standard Surgical Guide Randomized Study Gideon Blumstein, MD, MS, University of California, Los Angeles
1:33 pm - 1:37 pm	233 - The Presence and Implications of Education Silos in Orthopaedic Trauma Mary Kate Erdman, MD, University of Southern California
1:37 pm - 1:41 pm	263 - Predicting Loss to Follow-Up after Lower Extremity Fractures Patrick Albright, BS, MS, University of California-San Francisco
1:41 pm - 1:45 pm	46 - Bringing In an Associate: Friend or Future Foe? Debra Phairas, San Francisco, CA
1:45 pm - 1:49 pm	49 - Decreasing Orthopedic Reimbursement Trends From 2000-2016 Robert S. Walker, MD, University of Arizona College of Medicine Phoenix
1:49 pm - 1:55 pm	Discussion
1:55 pm - 1:59 pm	82 - Perioperative Mental Health Status Does Not Affect Patient Satisfaction after TKA Laura Lu, Stanford University
1:59 pm - 2:03 pm	158 - Early Regional Anesthesia Improves Pain Management in Geriatric Hip Fractures John Garlich, MD, Cedars-Sinai Orthopaedic Surgery
2:03 pm - 2:07 pm	329 - Postoperative Opioids are Associated with Nonunion after Long Bone Fractures Sarah Bhattacharjee, Pritzker School of Medicine at the University of Chicago
2:07 pm - 2:11 pm	345 - Trends in Payments to Orthopedic Surgeons from 2013-2017 following the Sunshine Act Nathanael D. Heckmann, MD, Keck School of Medicine of the University of Southern California
2:11 pm - 2:15 pm	412 - Alpha-Defensin Only Changes Clinical Decision-Making when Physicians are Undecided about the Diagnosis of Periprosthetic Joint Infection <i>Derek F. Amanatullah, MD, PhD, Stanford University</i>

2:15 pm - 2:19 pm	398 - The Efficacy of Pediatricians Splinting Injuries in the Office Setting Byron H. Izuka, MD, Childrens Orthopaedics of Hawaii
2:19 pm - 2:25 pm	Discussion
	, FACS, University of California, Irvine MD, Loma Linda University Health
1:25 pm - 1:29 pm	222 - Reduced Mortality in Pediatric Non-Idiopathic Scoliosis by Implementing a Multidisciplinary Lorenzo de Rama Deveza, MD, PhD, Baylor College of Medicine
1:29 pm - 1:33 pm	240 - Dural Tears and Venous Thromboembolic Complications: Is there Increased Risk? <i>Ram K. Alluri, MD, Keck Medical Center of USC</i>
1:33 pm - 1:37 pm	348 - Does Autism Alter the Risk Profile for Idiopathic Scoliosis Surgery? John S. Vorhies, MD, Stanford University Medical Center
1:37 pm - 1:41 pm	377 - Prospective Evaluation of Bilateral Decompression in Patients with Degenerative Spondylolisthesis <i>Kimberly E. Hall, MD, Stanford Hospital and Clinics</i>
1:41 pm - 1:45 pm	411 - Efficacy and Safety of Early Thromboprophylaxis after Spinal Cord Injury Seth Ahlquist, BS, David Geffen School of Medicine at UCLA
1:45 pm - 1:49 pm	418 - Resiliency and Patient-Reported Outcomes in Active- Duty Military Patients Undergoing Lumbar Spinal Surgery Nicholas J. Drayer, MD, Madigan Army Medical Center
1:49 pm - 1:55 pm	Discussion
1:55 pm - 1:59 pm	455 - Economic Impact of Revisions for Cervical Spine Adjacent Segment Disease Alexander A. Theologis, MD, University of California, San Francisco
1:59 pm - 2:03 pm	21 - Risk Factors for Dysphagia/Dysphonia after Anterior Cervical Spine Surgery

	Ruwan Ratnayake, MD, University of California, Davis Medical Center *Presented by Jacob I. Priester, BS
2:03 pm - 2:07 pm	244 - Semitendinosus Ligament Reinforcement for Prevention of Proximal Junctional Failure Ram K. Alluri, MD, Keck Medical Center of USC
2:07 pm - 2:11 pm	251 - Spinolaminar Cortical Locking Plate: A Biomechanical Analysis for Lumbar Arthrodesis Khalid Odeh, MD, St. Mary's Medical Center, San Francisco
2:11 pm - 2:15 pm	39 - Utilization and Reimbursement Trends Based on Certificate-of-Need in Single-Level Cervical Decompression Abiram Bala, MD, Stanford University
2:15 pm - 2:19 pm	54 - Repeat Cervical Spine MRI in Patients with Documented Cervical Degeneration Grant McChesney, MD, University of Texas Medical Branch
2:19 pm - 2:25 pm	Discussion
2:25 pm – 3:25 pm	Multimedia Education Session