MID-AMERICA ORTHOPAEDIC ASSOCIATION

38th Annual Meeting
September 29 – October 3, 2021
Omni Amelia Island Resort
Amelia Island, FL
Scientific Program

*Denotes speaker

WEDNESDAY, SEPTEMBER 29, 2021

7:30 a.m. - 5:00 p.m.
MAOA Pre-Meeting Course
Topic: Why Did This Joint Replacement Not Work Out as it Should Have? Avoiding Problems and Addressing Early Failures in Primary THA/TKA
Room: Magnolia E

5:30 p.m. - 7:00 p.m.
Company-sponsored workshop (slot currently open)

THURSDAY, SEPTEMBER 30, 2021

6:30 a.m. - 7:45 a.m.
Instructional Course I
Topic: Do We Really Need a Hand Surgeon? Understanding Common Operations about the Hand, Wrist, and Elbow that Every Orthopedic Surgeon Can Perform
Room: Magnolia F
Faculty: Alfonso Mejia, M.D., M.P.H. - Moderator
Chicago, IL
Mark H. Gonzalez, M.D.
Chicago, IL
Gautam Malhotra, M.D.
Chicago, IL
Steven I. Grindel, M.D.
Milwaukee, WI
**Instructional Course II**  **CANCELED**

**Topic:** Meniscus Repairs To Replacement: Key Trends, Tips, and Techniques

**Room:** Magnolia G

**Faculty:**
- David C. Flanigan, M.D. - Moderator
  Columbus, OH
- Geoffrey S. Baer, M.D.
  Madison, WI
- Marc Tompkins, M.D.
  Minneapolis, MN

**FIRST PLENARY SESSION**

**Room:** Magnolia D

8:00 a.m. - 8:05 a.m.  **Welcome and Introductory Remarks**

Matthew A. Mormino, M.D.
Omaha, NE
2019-2020 President, MAOA

Craig R. Mahoney, M.D.
Des Moines, IA
2020-2021 President, MAOA

8:05 a.m. – 8:50 a.m.  **Symposium I**

**Topic:** Periprosthetic Femur Fractures

**Faculty:**
- Glenn D. Wera, M.D., Moderator
  Cleveland, OH
- Matthew D. Karam, M.D.
  Iowa City, IA
- Erik T. Otterberg, M.D.
  Omaha, NE

8:51 a.m. - 9:24 a.m.  **Scientific Paper Session #1**

**Co-Moderator:**
- Matthew A. Mormino, M.D.
  Omaha, NE
- Justin C. Siebler, M.D.
  Omaha, NE
8:51 a.m. – 8:56 a.m.  
1. Midterm Outcomes of Isolated Lateral Meniscus Tears in Young Patients  
   *Nicholas C. Duethman, M.D.  
   Lucas K. Keyt, B.S.  
   Bryant M. Song, M.S.  
   Ryan R. Wilbur, B.A.  
   Matthew D. LaPrade, B.S.  
   Aaron J. Krych, M.D.  
   Rochester, MN

8:57 a.m. – 9:02 a.m.  
2. Opioid Medication Use in Pediatric Orthopedic Surgery Patients: A Prospective Study  
   *Michael A. Ewing, M.D.  
   Lauren N. Livesay, B.S.  
   Emily V. Leary, Ph.D.  
   Sumit Gupta, M.D.  
   Columbia, MO

9:03 a.m. - 9:08 a.m.  
3. Preoperative Opioid Usage Correlates with Revision Surgeries and Hospital Readmission in the Most Common Orthopedic Surgical Procedures Performed in the United States  
   *Cameron A. Roth, M.D.  
   David J. Cook, B.A.  
   Jasha Sommer-Simpson, M.S.  
   Kenneth S. Chakour, M.D.  
   Sara S. Wallace, M.D.  
   Hue H. Luu, M.D.  
   Chicago, IL

9:08 a.m. - 9:24 a.m.  
Floor Discussion

9:25 a.m. - 9:55 a.m.  
CLASSICS IN ORTHOPAEDICS  
Topic: Invest in our Future: The Art of Mentoring  
Speaker: Lisa K. Cannada, M.D.  
Jacksonville, FL

Introduced by: Matthew A. Mormino, M.D.  
Omaha, NE

9:56 a.m. - 10:02 a.m.  
**Introduction of Recipients of Education Grants, Multipurpose Resident Grants, and Traveling Fellowships**  
Introductions by: Lisa K. Cannada, M.D.  
Jacksonville, FL

10:03 a.m. - 10:08 a.m.  
**Traveling Fellowship Presentation**  
David B. Bumpass, M.D.  
Little Rock, AR  
2018-2019 Recipient

10:09 a.m. - 10:14 a.m.  
**OREF Presentation**  
Presented by: Richard F. Kyle, M.D.  
Minneapolis, MN  
OREF President
10:15 a.m. - 10:30 a.m.  **Historian’s Report**  
Robert L. Kurland, M.D.  
Rochester, MN  
Room: Magnolia D

10:30 a.m. - 10:40 a.m.  **Member Business Meeting**  
Room: Magnolia D

10:30 a.m. - 11:00 a.m.  **Poster Viewing** – presenters for Posters 1-120 will be available (CME credit will be offered)  
Room: Magnolia Foyer

10:30 a.m. - 11:00 a.m.  **Coffee Break in Exhibit Area**  
Room: Magnolia ABC

11:00 a.m. - 11:30 a.m.  **Ask the Expert and Open Case Discussions**  
Topic: Spine  
Room: Magnolia D  
Faculty: Anthony F. Guanciale, M.D., Moderator  
Cincinnati, OH  
Chris A. Cornett, M.D., MPT  
Omaha, NE  
- Postoperative Pain Care and Work-Up for the Spine Patient with Ongoing Back and Leg Pain  
Robert F. McLain, M.D.  
Solon, OH  
- Long-Term Outcomes of Lumbar Disc Replacement  
- Sacroiliac Joint Fusions

11:30 a.m. - 12:00 p.m.  **Ask the Expert and Open Case Discussions**  
Topic: Foot & Ankle  
Room: Magnolia D  
Faculty: Norman S. Turner, M.D., Moderator  
Rochester, MN  
Matthew D. Karam, M.D.  
Iowa City, IA  
Daniel B. Ryssman, M.D.  
Rochester, MN

12:00 p.m. - 1:00 p.m.  **Zimmer Biomet-sponsored lunch/presentation (No CME offered)**  
Room: Magnolia E  
Topic: ROSA® Knee - Practical Application of Robotics in TKA  
Speaker: Trevor G. Murray, M.D.
1:15 p.m. – 3:00 p.m. Five Breakouts to run concurrently

THURSDAY, SEPTEMBER 30, 2021
BREAKOUT SESSION #1
Topic: Hand/Elbow
Room: Magnolia G

Co-Moderator: Alfonso Mejia, M.D., M.P.H.
Chicago, IL

Co-Moderator: Joseph A. Morgan, M.D.
Omaha, NE

1:15 p.m. – 1:20 p.m. 5. What Kind of Procedures are Orthopedic Hand Surgery Fellows Doing?
An Analysis of ACGME Case Log Data from 2010-2018
*Azeem T. Malik, MBBS
Columbus, OH
Safdar N. Khan, M.D.
Columbus, OH
Kanu S. Goyal, M.D.
Columbus, OH

Paper position #6 deleted

1:21 p.m. – 1:26 p.m. 7. Limb Occlusion Pressure vs. Standard Pneumatic Tourniquet Pressure in Open Carpal Tunnel Surgery – A Randomized Trial
Hannah Morehouse, M.D.
Houston, TX
*Haley M. Goble, MHA, CCRC
Houston, TX
Bradley S. Lambert, Ph.D.
Houston, TX
Jaclyn Jones, B.S.
Houston, TX
Todd E. Siff, M.D.
Houston, TX
Patrick C. McCulloch, M.D.
Houston, TX
Shari R. Liberman, M.D.
Houston, TX

Paper position #8 deleted

1:26 p.m. – 1:35 p.m. Floor Discussion

1:36 p.m. – 1:41 p.m. 9. Radiographic Outcomes Following K-wire Augmentation of Dorsal Spanning Plate Fixation for Intra-Articular Fractures of the Distal Radius
Harsh A. Shah, M.D.
Miami, FL
*Anthony R. Martin, M.D.
Miami, FL
Joseph S. Geller, B.A.
Miami, FL
Kirsten A. Sumner, M.D.
Miami, FL
Seth D. Dodds, M.D.
Miami, FL

1:42 p.m. – 1:47 p.m. 10. The Effect of Smoking on Short-Term Postoperative Complications after Elective Surgery of the Hand
*Junho Ahn, M.D.
Dallas, TX
Michael A. Del Core, M.D.
Dallas, TX
Robert L. Bass, M.D.
Dallas, TX
Ann S. Golden, M.D.
Dallas, TX
Daniel M. Koehler, M.D.
Dallas, TX
1:48 p.m. – 1:53 p.m.  11. Safety of Cubital Tunnel Release Under General vs. Regional Anesthesia
   *Courtney R. Carlson Strother, M.D. Rochester, MN
   Lauren E. Dittman, M.D. Rochester, MN
   Steven L. Moran, M.D. Rochester, MN
   Marco Rizzo, M.D. Rochester, MN
   Peter C. Rhee, D.O., M.S. Rochester, MN

1:54 p.m. – 1:59 p.m.  12. What are the Risk Factors for Revisions and Surgical Site Infections Following Primary Proximal Interphalangeal Arthroplasty?
   Samuel J. Swiggett, M.D. Brooklyn, NY
   Eric Roth, M.D. Brooklyn, NY
   Rushabh M. Vakharia, M.D. Brooklyn, NY
   Joseph O. Ehiorobo, M.D. Brooklyn, NY
   Michael A. Mont, M.D. New York, NY
   Afshin E. Razi, M.D. Brooklyn, NY
   Jack Choueka, M.D. Brooklyn, NY
   *Miriam D. Weisberg, M.D. Brooklyn, NY

1:59 p.m. – 2:16 p.m.  Floor Discussion

2:17 p.m. – 2:26 p.m.  Spotlight Lecture
   Speaker: Joseph A. Morgan, M.D.
   Omaha, NE
   Topic: What’s New about Carpal Tunnel Syndrome?

2:27 p.m. – 2:32 p.m.  13. Intramedullary Screw Fixation of Metacarpal Fractures
   Cameron A. Roth, M.D. Chicago, IL
   *Ellen Goldberg, B.A. Chicago, IL
   Leon S. Benson, M.D. Chicago, IL
   Megan A. Conti Mica, M.D. Chicago, IL

2:33 p.m. – 2:38 p.m.  14. Risk-Factors for Infections Following Total Elbow Arthroplasty: An Analysis of a Nationwide Claims Database
   *Miriam Weisberg, M.D. Brooklyn, NY
   Samuel J. Swiggett, M.D. Brooklyn, NY
   Eric Roth, M.D. Brooklyn, NY
   Rushabh M. Vakharia, M.D. Brooklyn, NY
   Afshin E. Razi, M.D. Brooklyn, NY
   Ramin Sadeghpour, M.D. Brooklyn, NY
   Jack Choueka, M.D. Brooklyn, NY

Paper position #15 deleted

2:39 p.m. – 2:44 p.m.  16. Donor Site Morbidity in Nerve Transfer Surgery for Adult Traumatic Brachial Plexus Injury
   Christian Athens, D.O. Canton, OH
   *Raahil S. Patel, B.S. Tampa, FL
   Alexander Y. Shin, M.D. Rochester, MN
   Peter C. Rhee, D.O., M.S. Rochester, MN

2:44 p.m. – 3:00 p.m.  Floor Discussion
THURSDAY, SEPTEMBER 30, 2021
BREAKOUT SESSION #2
Topic: Sports Medicine
Room: Magnolia E

Co-Moderator: Gregory L. Cvetanovich, M.D.
Columbus, OH

Co-Moderator: Jeffrey A. Macalena, M.D.
Minneapolis, MN

1:15 p.m. – 1:20 p.m.  17. Surgical Treatment of Isolated Meniscus Tears in Competitive Wrestlers: Outcomes, Reoperations, and Return to Sport

*Erick M. Marigi, M.D. Rochester, MN
Lucas K. Keyt, B.S. Rochester, MN
Matthew D. LaPrade, B.S. Rochester, MN
Ryan R. Wilbur, B.A. Rochester, MN
Bryant M. Song, M.S. Rochester, MN
Christopher L. Camp, M.D. Rochester, MN
Bruce A. Levy, M.D. Rochester, MN
Diane L. Dahm, M.D. Rochester, MN
Michael J. Stuart, M.D. Rochester, MN
Aaron J. Krych, M.D. Rochester, MN

1:21 p.m. – 1:26 p.m.  18. Nonoperative Management of Anterior Shoulder Instability Can Result in High Rates of Recurrent Instability and Pain at Long-Term Follow-Up

Kira Novakofski, M.D. Rochester, MN
Heath P. Melugin, M.D. Rochester, MN
Devin Leland, M.D. Rochester, MN
Christopher Bernard, M.D. Rochester, MN
Nels Leafblad, M.D. Rochester, MN
Ryan R. Wilbur, B.S. Rochester, MN
Aaron J. Krych, M.D. Rochester, MN
*Christopher L. Camp, M.D. Rochester, MN

1:27 p.m. – 1:32 p.m.  19. Standardization of Opioid Prescribing after Anterior Cruciate Ligament Reconstruction

*Tyler R. Williamson, M.D. Minneapolis, MN
Jeremiah Atkinson, B.S. Minneapolis, MN
Natalie Scholz, M.P.H. Minneapolis, MN
Megan Reams, M.A., ORT/L Bloomington, MN
Bradley J. Nelson, M.D. Minneapolis, MN
Deborah C. Bohn, M.D. Minneapolis, MN

1:33 p.m. – 1:38 p.m.  20. Injury Incidence on Artificial Turf and Natural Grass Among High School Athletes

*Andrew S. Paliobeis, B.S. Cleveland, OH
Lakshmanan Sivasundaram, M.D. Cleveland, OH
Derrick M. Knapik, M.D. Cleveland, OH
Michael R. Karns, M.D. Cleveland, OH
Michael J. Salata, M.D. Cleveland, OH
James E. Voos, M.D. Cleveland, OH

1:38 p.m. – 1:45 p.m. Floor Discussion
1:46 p.m. – 1:51 p.m.  21. Lateral Femoral Condyle Osteochondritis Dissecans: Does Weightbearing Zone Location Predict Healing?  
*Sharon G. Huang, B.S.  
Liang Zhou, M.D.  
K. John Wagner, III, B.S.  
Shawn Gee, M.D.  
Philip L. Wilson, M.D.  
Henry B. Ellis, Jr., M.D.

1:52 p.m. – 1:57 p.m.  22. Skeletally Immature Patients with ACL Bone Bruise Patterns Have a Higher Chance of Having an Intact ACL Than Patients with a Closed Distal Femoral Physis  
*Seth R. Cope, M.D.  
Jessica Welter, D.O.  
Dexter A. Witte, III, M.D.  
Thomas W. Throckmorton, M.D.  
Tyler J. Brolin, M.D.  
Frederick M. Azar, M.D.  
David L. Bernholt, M.D.

1:58 p.m. – 2:03 p.m.  23. Quadriceps Strength in Adolescent Patients Undergoing Anterior Cruciate Ligament Reconstruction after Femoral Nerve Block vs. Adductor Canal Block  
James E. Ohliger, III, M.D.  
Craig Siesel, M.D.  
*Paul R. Fleissner, M.D.  
Kodi A. Veale, P.A.

2:04 p.m. – 2:09 p.m.  24. Biomechanical Evaluation of a Suture-Reinforced Human Dermal Allograft: A Pilot Study  
*Cody S. Lee, B.S.  
Manoj Reddy, M.D.  
Bryan Scott, M.D.  
Daniel Curtis, M.D.  
Farid Amrouche, Ph.D.  
Aravind Athiviraham, M.D.

2:09 p.m. – 2:16 p.m.  Floor Discussion

2:17 p.m. – 2:26 p.m.  Spotlight Lecture  
Speaker: Gregory L. Cvetanovich, M.D.  
Columbus, OH  
Topic: Anterior Glenohumeral Instability in Contact Athletes

2:27 p.m. – 2:32 p.m.  26. Institutional Review of the Impact of Intra-Articular Steroids on Rates of Infection after Knee Arthroscopy  
Robert A. Duerr, M.D.  
Morgan Kohls, M.D.  
Sean M. Fitzpatrick, M.D.  
*David C. Flanigan, M.D.  
Christopher C. Kaeding, M.D.  
Robert A. Magnussen, M.D., M.P.H.
2:33 p.m. – 2:38 p.m.  27. Limitations of MPFL Reconstruction for Treatment of Patellar Instability with Patella Alta: Dynamic Simulation
  *Travis J. Jones, M.D.  Akron, OH
  Kerwyn C. Jones, M.D.  Akron, OH
  John J. Elias, Ph.D.  Akron, OH

2:39 p.m. – 2:44 p.m.  28. Preoperative Opioid Use Negatively Affects Postoperative Pain, Function, and Mood Scores in Patients Undergoing Arthroscopic Rotator Cuff Repair
  Fabien Meta, M.D.  Detroit, MI
  *Alexander Ziedas, B.S.  Detroit, MI
  Caleb M. Gullede, B.S.  Detroit, MI
  Lafi S. Khalil, M.D.  Detroit, MI
  Stephanie J. Muh, M.D.  Detroit, MI
  Vasilios Moutzouros, M.D.  Detroit, MI
  Eric C. Makhni, M.D., M.B.A.  Detroit, MI

2:44 p.m. – 3:00 p.m.  Floor Discussion
THURSDAY, SEPTEMBER 30, 2021
BREAKOUT SESSION #3
Topic: Trauma
Room: Magnolia F

Co-Moderator: Marc F. Swiontkowski, M.D.
Minneapolis, MN

Co-Moderator: Brandon J. Yuan, M.D.
Rochester, MN

1:15 p.m. – 1:20 p.m.  29. Bilateral Femur Fractures are Associated with Femoral Neck Fractures
Hayden P. Baker, M.D.  Chicago, IL
*James Dahm, M.D.  Chicago, IL
Ye Lin, B.S.  Chicago, IL
Daniel Portney, M.D.  Chicago, IL
Daryl Dillman, M.D.  Chicago, IL
Jason Strelzow, M.D.  Chicago, IL

1:21 p.m. – 1:26 p.m.  30. The Diabetic Pilon Fracture: Are They as Bad as We Think?
*Lasun O. Oladeji, M.D., M.S.  Columbia, MO
Brooks Platt  Indianapolis, IN
Brett D. Crist, M.D., F.A.C.S.  Columbia, MO

1:27 p.m. – 1:32 p.m.  31. Immediate vs. Delayed Weightbearing after Ankle ORIF: A Retrospective Study
Brandi R. Hartley, M.D.  Louisville, KY
Jon B. Carlson, M.D.  Louisville, KY
Lauren M. Nelson, M.D.  Louisville, KY
*Grant O. Schmidt, B.A.  Louisville, KY
Jordan L. Pamplin, B.S.  Louisville, KY

33. Understanding the Value of Hip Fracture Surgery at Critical Access Hospitals
Azeem T. Malik, M.B.B.S.  Columbus, OH
Janice M. Bonsu, M.P.H.  Columbus, OH
Megan Roser, B.A.  Columbus, OH
Safdar N. Khan, M.D.  Columbus, OH
Laura S. Phieffer, M.D.  Columbus, OH
Thuan V. Ly, M.D.  Columbus, OH
Ryan K. Harrison, M.D.  Columbus, OH
Carmen E. Quatman, M.D.  Columbus, OH
*Krystin Hidden, M.D.  Columbus, OH

1:48 p.m. – 1:53 p.m.  34. Utility of Post-Mobilization Radiographs in Nonoperative Management of Pelvis and Acetabulum Fractures
*Alex Sanders, M.D.  Oklahoma City, OK
Scott H. Conant, M.D.  Oklahoma City, OK
Nathan Odor, M.D.  Oklahoma City, OK
David C. Teague, M.D.  Oklahoma City, OK
1:54 p.m. – 1:59 p.m.  
36. Does Subcutaneous Internal Fixation (INFIX) Perform Similar Radiographically to Other Methods of Anterior Pelvic Fixation for Pelvic Ring Injury?  
Malynda S. Wynn, M.D.  
Brandon G. Wilkinson, M.D.  
Nathan R. Hendrickson, M.D.  
Matthew H. Hogue, M.D.  
*Matthew D. Karam, M.D.

1:59 p.m. – 2:14 p.m.  
Floor Discussion

2:15 p.m. – 2:24 p.m.  
**Spotlight Lecture**  
Speaker: Brandon J. Yuan, M.D.  
Rochester, MN  
Topic: Antegrade Femoral Nailing: Positioning, Starting Point, and Interlocking Considerations

2:25 p.m. – 2:30 p.m.  
37. Is Follow-Up Imaging Necessary in Nonoperatively Treated Extra-Articular Scapula Body Fractures?  
R. Garrett Steinmetz, M.D.  
Jeremiah J. Maupin, M.D.  
*Eric B. Johnson, M.D.  
Austin J. Cantrell  
Jake Fox  
Jeremy A. Bernhardt  
Charles B. Pasque, M.D.  
David C. Teague, M.D.

2:31 p.m. – 2:36 p.m.  
38. The Safety of the Henry Approach for Proximal-Third Radial Shaft Fractures  
*Kelly M. Bridgham, B.S.  
Nathan O'Hara, M.H.A.  
Gerard Slobogean, M.D.  
Robert O'Toole, M.D.  
Raymond Pensy, M.D.

2:37 p.m. – 2:42 p.m.  
40. Bigger is Not Better: Obesity is Predictive of Nonoperative Treatment Failure in Humeral Shaft Fractures  
*Jessica L. Churchill, M.D.  
Alexandra C. Ferre, M.D.  
Jose F. Vega, M.D.  
Heather A. Vallier, M.D.

2:42 p.m. – 3:00 p.m.  
Floor Discussion
THURSDAY, SEPTEMBER 30, 2021
BREAKOUT SESSION #4
Topic: Hip and Knee Arthroplasty Infection
Room: Magnolia D

Co-Moderator: Brett R. Levine, M.D., M.S.
Chicago, IL

Co-Moderator: R. Michael Meneghini, M.D.
Indianapolis, IN

1:15 p.m. – 1:20 p.m.  41. The Relationship Between Prosthetic Joint Infections and Mental Health Conditions: Are Total Knee Arthroplasty Patients with Prosthetic Joint Infections at a Greater Risk for Mental Health Issues?
Hiba Anis, M.D.  Cleveland, OH
Jared A. Warren, D.O.  Cleveland, OH
Alison K. Klika, M.S.  Cleveland, OH
Siran Koroukian, Ph.D.  Cleveland, OH
Guangjin Zhou, B.S.  Cleveland, OH
Wael K. Barsoum, M.D.  Cleveland, OH
*Carlos A. Higuera, M.D.  Weston, FL
Nicolas S. Piuzzi, M.D.  Cleveland, OH

1:21 p.m. – 1:26 p.m.  42. Plasma D-Dimer Does Not Determine the Fate of Reimplantation in Two-Stage Exchange Arthroplasty
Tejbir S. Pannu, M.D., M.S.  Weston, FL
Jesus M. Villa, M.D.  Weston, FL
Charles A. Engh, III, M.S.  Chicago, IL
Brett R. Levine, M.D., M.S.  Chicago, IL
Jorge Manrique, M.D.  Weston, FL
Nicolas S. Piuzzi, M.D.  Cleveland, OH
*Carlos A. Higuera, M.D.  Weston, FL
Aldo M. Riesgo, M.D.  Weston, FL

1:27 p.m. – 1:32 p.m.  43. Outcomes of Primary Total Knee Arthroplasty Following Septic Arthritis of the Native Knee: A Case-Controlled Study
*Jacob W. Bettencourt, B.S.  Rochester, MN
Cody C. Wyles, M.D.  Rochester, MN
Douglas R. Osmon, M.D.  Rochester, MN
Arlen D. Hanssen, M.D.  Rochester, MN
Daniel J. Berry, M.D.  Rochester, MN
Matthew P. Abdel, M.D.  Rochester, MN

1:33 p.m. – 1:38 p.m.  44. Two-Stage Exchange Arthroplasty for Prosthetic Joint Infection: Ultimate Fate of Spacers and Risk Factors for Failure
*Cameron B. Barton, M.D.  Iowa City, IA
David L. Wang, M.S.  Iowa City, IA
Qiang An, M.B.B.S., M.P.H.  Iowa City, IA
Timothy S. Brown, M.D.  Houston, TX
Jesse E. Otero, M.D.  Iowa City, IA

1:38 p.m. – 1:45 p.m.  Floor Discussion
1:46 p.m. – 1:51 p.m.  45. Risk of Infection after Traumatic Wound Dehiscence Following Primary Total Knee Arthroplasty
*Matthew B. Shirley, M.D.  Rochester, MN
Elizabeth B. Gausden, M.D., M.P.H.  Rochester, MN
Matthew P. Abdel, M.D.  Rochester, MN
Rafael J. Sierra, M.D.  Rochester, MN

1:52 p.m. – 1:57 p.m.  46. What is the Clinical Utility of Synovial Alpha-Defensin Testing of Antibiotic Spacers Prior to Reimplantation?
Christopher N. Carender, M.D.  Iowa City, IA
Jacob L. Henrichsen, M.D.  Iowa City, IA
David E. DeMik, M.D., PharmD  Iowa City, IA
Jesse E. Otero, M.D., Ph.D.  Charlotte, NC
*Nicolas O. Noiseux, M.D., FRCS(C), M.S.  Iowa City, IA
Timothy S. Brown, M.D.  Houston, TX
Nicholas A. Bedard, M.D.  Iowa City, IA

1:58 p.m. – 2:03 p.m.  47. Only Host Grade and Neutrophil Percentage Predicts Failure of Two Stage Reimplantation for Periprosthetic Joint Infection
Ashleigh N. Bush, B.S.  Indianapolis, IN
*Michael Stefl, M.D.  Indianapolis, IN
Evan R. Deckard, BSE  Indianapolis, IN
Mary Ziemba-Davis, B.A.  Indianapolis, IN
Lucian C. Warth, M.D.  Indianapolis, IN
R. Michael Meneghini, M.D.  Indianapolis, IN

2:04 p.m. – 2:09 pm.  48. Diagnostic Utility of a Novel Point-of-Care Test of Calprotectin for Periprosthetic Joint Infection in Total Knee Arthroplasty Patients
*Jared A. Warren, D.O.  Cleveland, OH
Hiba K. Anis, M.D.  Cleveland, OH
Kathleen Bowers M(ASCP)  Cleveland, OH
Alison K. Klika, M.S.  Cleveland, OH
Xiaochun Zhang, M.D., Ph.D.  Cleveland, OH
Nicolas S. Piuzzi, M.D.  Cleveland, OH
Carlos A. Higuera, M.D.  Weston, FL

2:09 p.m. – 2:16 p.m.  Floor Discussion

2:17 p.m. – 2:26 p.m.  **Spotlight Lecture**
Speaker:  Brett R. Levine, M.D., M.S.
          Chicago, IL
Topic:  Antibiotic Spacer for PJI

2:27 p.m. – 2:32 p.m.  49. No Benefit to Extended Oral Antibiotic Prophylaxis Following Primary Total Joint Arthroplasty in the Morbidly Obese
Christopher N. Carender, M.D.  Iowa City, IA
David E. DeMik, M.D., PharmD  Iowa City, IA
Natalie A. Glass, Ph.D.  Iowa City, IA
Nicolas O. Noiseux, M.D., FRCS(C), M.S.  Iowa City, IA
Timothy S. Brown, M.D.  Houston, TX
*Nicholas A. Bedard, M.D.  Iowa City, IA
2:33 p.m. – 2:38 p.m. 50. Total Knee Arthroplasty is a Better Choice than Unicompartmental Knee Arthroplasty for Morbidly Obese Patients: A Two-Year Minimum Follow-Up Study
John F. Nettrour, M.D. Columbia, MO
*Robert T. Ellis, M.D. Columbia, MO
Benjamin J. Hansen, M.D. Columbia, MO
James A. Keeney, M.D. Columbia, MO

2:39 p.m. – 2:44 p.m. 51. Two-Stage Treatment for TKA Infection Utilizing a Second Generation Articulating Pre-Fabricated Antibiotic Spacer: Allow Function, Maintain Safety, Eradicate Infection
*Lucian C. Warth, M.D. Indianapolis, IN
Michael Stefl, M.D. Indianapolis, IN
R. Michael Meneghini, M.D. Indianapolis, IN

2:45 p.m. – 2:50 p.m. 52. Contemporary Three-Month Extended Oral Antibiotic Prophylaxis after Two-Stage Arthroplasty Reimplantation Reduces Reinfection Rates
*Michael Stefl, M.D. Ames, IA
Ashleigh N. Bush, B.S. Indianapolis, IN
Mary Ziemba-Davis, B.A. Indianapolis, IN
Lucian C. Warth, M.D. Indianapolis, IN
R. Michael Meneghini, M.D. Indianapolis, IN

2:50 p.m. – 3:00 p.m. Floor Discussion
THURSDAY, SEPTEMBER 30, 2021
BREAKOUT SESSION #5
Topic: Tumor/Education/Practice Management
Room: Talbot

Co-Moderator: Lukas M. Nyström, M.D.
Cleveland, OH

Co-Moderator: Peter S. Rose, M.D.
Rochester, MN

1:15 p.m. – 1:20 p.m.  53. The Preoperative Machine Learning Algorithm for Extremity Metastatic Disease Can Predict 90-Day and 1-Year Survival: An External Validation Study of 206 Patients
Mary K. Skalitzky, M.D. Iowa City, IA
*Trevor R. Gulbrandsen, M.D. Iowa City, IA
Oliver Q. Groot, M.D. Boston, MA
Aditya V. Karhade, M.D., M.B.A. Boston, MA
Jorit-Jan Verlaan, M.D., Ph.D. Utrecht, The Netherlands
Joseph Schwab, M.D., M.S. Boston, MA
Benjamin J. Miller, M.D., M.S. Iowa City, IA

1:21 p.m. – 1:26 p.m.  54. What is the Likelihood of Non-Pulmonary Metastasis Occurring in the Absence of Lung Metastasis in Bone and Soft Tissue Sarcoma? Nested Case Control
Obada Hasan, M.D., M.S. Iowa City, IA
Momin Nasir Iowa City, IA
Qiang An, M.B.B.S., M.S.P.H. Iowa City, IA
*Benjamin J. Miller, M.D., M.S. Iowa City, IA

1:27 p.m. – 1:32 p.m.  55. Non-Surgical Outcomes for Periacetabular Metastasis
*Cory G. Couch, M.D. Gainesville, FL
Dennis I. English, M.D. Gainesville, FL
Andre R. Spiguel, M.D. Gainesville, FL

1:33 p.m. – 1:38 p.m.  56. Comparison of Reconstruction Techniques Following Oncologic Intra-Articular Proximal Humerus Resection
Matthew T. Houdek, M.D. Rochester, MN
*Brandon R. Bukowski, M.D. Rochester, MN
Alexander G. Athey, M.D. Rochester, MN
Peter S. Rose, M.D. Rochester, MN
Jonathan D. Barlow, M.D., M.S. Rochester, MN
Eric R. Wagner, M.D., M.S. Atlanta, GA
Joaquin Sanchez-Sotelo, M.D., Ph.D. Rochester, MN

1:38 p.m. – 1:45 p.m.  Floor Discussion

1:46 p.m. – 1:51 p.m.  57. Has the Volume and Variability of Procedures Reported by Fellows in ACGME-Accredited Musculoskeletal Oncology Fellowship Programs Changed Over Time?
Azeem T. Malik, M.B.B.S. Columbus, OH
*Ryan T. Voskuil, M.D. Columbus, OH
Jae Baek, B.S. Columbus, OH
John H. Alexander, M.D. Tampa, FL
Thomas J. Scharschmidt, M.D. Columbus, OH
Factors Considered in Ranking Orthopedic Trauma Fellowship Applicants: A Survey of Program Directors

*Kevin P. Sandhu, M.D.  Madison, WI
Natasha M. Simske, B.S.  Madison, WI
Porter Young, M.D.  Jacksonville, FL
Nathaniel M. Wilson, M.D.  Madison, WI
Lisa K. Cannada, M.D.  Jacksonville, FL
Paul S. Whiting, M.D.  Madison, WI

What are Orthopedic Surgery Residency Program Director Opinions of the Current Match Process?

*Keegan T. Conry, M.D.  Akron, OH
Nicholas L. Kolodychuk, M.D.  Akron, OH
Steven B. Lippitt, M.D.  Akron, OH
Joseph N. Gabra, D.Eng.  Akron, OH
Gregory A. Vrabec, M.D.  Akron, OH

Residency Program Reputation Influences Fellowship Match

*Lisa K. Cannada, M.D.  Jacksonville, FL
Chad A. Krueger, M.D.  Philadelphia, PA
Jonathan R. Helms, M.D.  Greenville, NC
Anthony Bell, M.D.  Jacksonville, FL
Heidi Israel, Ph.D.  St. Louis, MO

Spotlight Lecture
Speaker:  Lukas M. Nystrom, M.D.
Cleveland, OH
Topic:  Technological Advancements for Margin Acquisition in Complex Bone Resections

Paper position #61 deleted

Is Surgical Resection of the Primary Site Associated with an Improved Overall Survival for Patients with Primary Malignant Bone Tumors who have Metastatic Disease at Presentation?

Azeem T. Malik, M.B.B.S.  Columbus, OH
John H. Alexander, M.D.  Tampa, FL
Joel L. Mayerson, M.D.  Columbus, OH
Safdar N. Khan, M.D.  Columbus, OH
Thomas J. Scharschmidt, M.D.  Columbus, OH
*Carl Quinion, M.D.  Columbus, OH

What Are Preoperative Risk Factors for Fibrosarcomatous Transformation in Dermatofibrosarcoma Protubersans (DFSP)

*Katherine Mallett, M.D.  Rochester, MN
Matthew R. Claxton, B.S.  Rochester, MN
Peter S. Rose, M.D.  Rochester, MN
Matthew T. Houdek, M.D.  Rochester, MN
64. Can the Addition of Robotic Terminal Cleaning Via Pulsed-Xenon Ultraviolet Light Reduce Bioburden in the Operating Room

*Ashley E. Xiong, B. S. Rochester, MN
Nayef Bin Dajim, M.D. Rochester, MN
Benjamin Nelson Rochester, MN
Arjun S. Sebastian, M.D. Rochester, MN
Brett A. Freedman, M.D. Rochester, MN

2:44 p.m. – 3:00 p.m. Floor Discussion
FRIDAY, OCTOBER 1, 2021

6:30 a.m. – 7:45 a.m.  
Instructional Course III  
Topic: Orthopedic Trauma Flat-Earthers – Despite Evidence to the Contrary, Why Do We Keep Doing it that Way?  
Room: Magnolia F  
Faculty: Brandon J. Yuan, M.D. – Moderator  
Jonathan D. Barlow, M.D., M.S.  
William W. Cross, III, M.D.  
S. Andrew Sems, M.D.  
Rochester, MN  

6:30 a.m. – 7:45 a.m.  
Instructional Course IV  
Topic: Spinal Surgery in 2021 – You Might Find This Interesting…  
Room: Magnolia G  
Faculty: Robert F. McLain, M.D. – Moderator  
Solon, OH  
David B. Bumpass, M.D.  
Little Rock, AR  
Anthony F. Guanciale, M.D.  
Cincinnati, OH

SECOND PLENARY SESSION  
Room: Magnolia D  
Co-Moderator: Erik T. Otterberg, M.D.  
Omaha, NE  
Co-Moderator: Norman S. Turner, M.D.  
Rochester, MN

8:00 a.m. – 8:02 a.m.  
Assemble/Announcements

8:02 a.m. – 8:42 a.m.  
Symposium II  
Topic: The Athlete’s Shoulder in 2021  
Faculty: Gregory L. Cvetanovich, M.D., Moderator  
Columbus, OH  
Jeffrey A. Macalena, M.D.  
Minneapolis, MN  
Matthew J. Teusink, M.D.  
Omaha, NE
8:43 a.m. – 9:13 a.m. **PRESIDENTIAL GUEST SPEAKER**

Topic: Long-Term Results of Two-Stage Revision for Chronic Periprosthetic Hip Infections

Speaker: Kevin L. Garvin, M.D.
Omaha, NE

Introduced by: Craig R. Mahoney, M.D.
Des Moines, IA

9:14 a.m. - 9:16 a.m. **Presentation of Mid-America Orthopaedic Association Physician in Training Award Winners for Excellence in Medical Writing**

Edward D. Henderson Award
E. W. Johnson, Jr. Award
Carl L. Nelson Award
Dallas B. Phemister Award

Presented by: Nicolas O. Noiseux, M.D., FRCS(C), M.S.
Iowa City, IA

9:17 a.m. - 9:22 a.m. **2021 Edward D. Henderson, M.D. Award Presentation**

Closed Incision Negative-Pressure Therapy for Revision Total Hip Arthroplasty: A Randomized Control Trial

*E. Bailey Terhune, M.D.  Chicago, IL
JaeWon Yang, B.A.  Chicago, IL
Anne DeBenedetti, B.A.  Chicago, IL
Craig J. Della Valle, M.D.  Chicago, IL
Tad L. Gerlinger, M.D.  Chicago, IL
Brett R. Levine, M.D., M.S.  Chicago, IL
Denis Nam, M.D., MSc  Chicago, IL

9:23 a.m. - 9:28 a.m. **2021 E. W. Johnson, Jr., M.D. Award Presentation**

Fascia Iliaca Blocks Performed in the Emergency Department Decrease Opioid Consumption and Length of Stay in Hip Fracture Patients

*Nicholas L. Kolodychuk, M.D.  Akron, OH
J. Collin Krebs, M.D.  Akron, OH
Robert Stenberg, M.D.  Akron, OH
Lance Talmage, M.D.  Akron, OH
Anita Meehan, M.S.N.  Akron, OH
Nicholas DiNicola, M.D.  Akron, OH

9:29 a.m. – 9:34 a.m. **2021 Carl L. Nelson, M.D. Award Presentation**

Extended Oral Antibiotics Prevent PJI in High-Risk Cases: 3,855 Patients with One-Year Follow-Up

*Michael M. Kheir, M.D.  Indianapolis, IN
Julian E. Dilley, M.D.  Indianapolis, IN
Mary Ziembka-Davis, B.A.  Indianapolis, IN
R. Michael Meneghini, M.D.  Indianapolis, IN

9:35 a.m. – 9:40 a.m. **2021 Dallas B. Phemister Award Presentation**

Dual-Mobility Bearings Fail to Reduce Dislocation Rates vs. Jumbo Ceramic Heads in Revision THA

*Kevin A. Sonn, M.D.  Indianapolis, IN
Evan R. Deckard, B.S.E.  Indianapolis, IN
R. Michael Meneghini, M.D.  Indianapolis, IN

9:40 a.m. – 9:45 a.m. Floor Discussion
9:45 a.m. - 10:15 a.m. **CLASSICS IN ORTHOPAEDICS**

**Topic:** Introduction of New Technology in Orthopedic Surgery: Lessons from Total Joint Arthroplasty

**Speaker:** Daniel J. Berry, M.D.
Rochester, MN

**Introduced by:** Craig R. Mahoney, M.D.
Des Moines, IA

10:16 a.m. – 10:30 a.m. **ABOS Update 2021**

**Speaker:** Kevin L. Garvin, M.D.
Omaha, NE

10:30 a.m. – 11:00 a.m. **Poster Viewing** – presenters for Poster 121-240 will be available (CME credit will be offered)

**Room:** Magnolia Foyer

10:30 a.m. - 11:00 a.m. **Coffee Break in Exhibit Area**
11:00 a.m. - 1:00 p.m.  Five Breakouts to run concurrently

FRIDAY, OCTOBER 1, 2021
BREAKOUT SESSION #6
Topic: Foot and Ankle
Room: Talbot

Co-Moderator: Richard T. Laughlin, M.D.
Cincinnati, OH

Co-Moderator: David J. Ruta, M.D.
Green Bay, WI

11:00 a.m. - 11:05 a.m.  69. A Retrospective Review of Distal Tibiofibular Arthrodesis and Stabilization to Salvage Chronic Instability of the Syndesmosis: Revisited with Long Term Follow-Up
*Kiera A. Kingston, M.D.  Chicago, IL
Crystal Lin, B.S.  Chicago, IL
Alexander T. Bradley, M.D.  Chicago, IL
Jason Strelzow, M.D.  Chicago, IL
Kelly Hynes, M.D.  Chicago, IL
Brian C. Toolan, M.D.  Chicago, IL

11:06 a.m. - 11:11 a.m.  70. Predictive Variables for Patient Compliance with Physician-Prescribed Orthotics
Trenton T. Stevens, M.D.  Memphis, TN
Clayton C. Bettin, M.D.  Memphis, TN
David R. Richardson, M.D.  Memphis, TN
Garnett A. Murphy, M.D.  Memphis, TN
Benjamin J. Grear, M.D.  Memphis, TN
Oluwatosin Ojo, M.D.  Macon, GA
Jacob T. Hartline, B.S.  Memphis, TN
*William C. Skinner, M.D.  Memphis, TN

11:12 a.m. - 11:17 a.m.  71. Treatment of Ankle Fractures: Does Time Matter?
Jacob Hawkins, M.D.  Birmingham, AL
Bradley Alexander B.S.  Birmingham, AL
Abhinav Agarwal, M.D.  Birmingham, AL
Benjamin Cage, B.S.  Birmingham, AL
Elise Greco, B.S.  Birmingham, AL
Hannah Barranco, B.S.  Birmingham, AL
Akshar Patel, B.S.  Birmingham, AL
*Nicholas A. Andrews, B.S.  Birmingham, AL
Ashish B. Shah, M.D.  Birmingham, AL

11:17 a.m. - 11:25 a.m.  Floor Discussion
72. Factors Affecting Unplanned Events within 30 Days of Ankle Surgery
   John Prather, M.D. Birmingham, AL
   Bradley Alexander, B.S. Birmingham, AL
   Jared R. Halstrom, B.S. Birmingham, AL
   Charles Sutherland, B.S. Birmingham, AL
   Akshar Patel, B.S. Birmingham, AL
   Nicholas A. Andrews, B.S. Birmingham, AL
   Gerald McGwin, Ph.D. Birmingham, AL
   Ashish Shah, M.D. Birmingham, AL
   *Sean Young, B.S. Birmingham, AL

73. Factors Affecting the Outcomes of Tibiotalocalcaneal Fusion
   Charles Pitts, M.D. Birmingham, AL
   Bradley Alexander, B.S. Birmingham, AL
   Hannah Barranco, B.S. Birmingham, AL
   Romil Patel, B.S. Birmingham, AL
   Benji Patel, B.S. Birmingham, AL
   Nicholas A. Andrews, B.S. Birmingham, AL
   Ashish Shah, M.D. Birmingham, AL
   *Jessyca L. Ray, B.S. Birmingham, AL

74. Tibial Torsion and Ankle Arthritis: Is External Tibial Rotation Associated with Varus Deformity in Patients with Ankle Arthritis?
   Collin Barber, M.D. Grand Rapids, MI
   Teresa Hall, D.O. Grand Rapids, MI
   *Tyler S. Madden, B.S. Grand Rapids, MI
   Parin Kothari, B.S. Grand Rapids, MI
   Monica Lapointe, M.D. Grand Rapids, MI
   John D. Maskill, M.D. Grand Rapids, MI
   John G. Anderson, M.D. Grand Rapids, MI
   Donald R. Bohay, M.D. Grand Rapids, MI
   Michelle A. Padley, B.S., C.R.C. Grand Rapids, MI

Floor Discussion

Spotlight Lecture
Speaker: David J. Ruta, M.D.
Green Bay, WI
Topic: Considerations in the Complex Ankle Fracture

First Tarsometatarsal Joint Alignment after First Metatarsophalangeal Joint Arthrodesis for Hallux Valgus
*Christopher J. Traynor, M.D. Kalamazoo, MI
James R. Jastifer, M.D. Kalamazoo, MI

Anatomic Structures at Risk in Proximal Fifth Metatarsal Fracture Fixation: A Cadaver Study
Leonardo Moraes, M.D. Birmingham, AL
Bradley K. Alexander, B.S. Birmingham, AL
James T. McMurtrie, M.D. Birmingham, AL
Haley M. McKissack, B.S. Birmingham, AL
*Roshan Jacob Birmingham, AL
Ashish Brahmbhatt, M.D. Birmingham, AL
Joshua L. Washington, B.S. Birmingham, AL
Ashish B. Shah, M.D. Birmingham, AL
12:13 p.m. - 12:18 p.m.  
77. Perioperative Complications and Modifiable Risk Factors in Charcot Foot Reconstruction  
Madeline M. Lyons, M.D.  Maywood, IL  
*Patrick C. McGregor, M.D.  Maywood, IL  
William Adams, Ph.D.  Maywood, IL  
Michael S. Pinzur, M.D.  Maywood, IL

12:18 p.m. – 12:26 p.m.  
Floor Discussion

12:27 p.m. – 12:32 p.m.  
78. Treatment of Ankle Arthritis: A Long-Term Follow-Up  
*Luke Winkel, B.S.  Grand Rapids, MI  
Matthew J. Pete, B.S.  Grand Rapids, MI  
Alexander B. Sawatzke, M.D.  Seattle, WA  
Jacob T. Hall, B.S.  Grand Rapids, MI  
Leland E. Gossett, M.D.  Grand Rapids, MI  
Bruce J. Sangeorzan, M.D.  Seattle, WA  
Michelle A. Padley, M.S.  Grand Rapids, MI  
Lindsey A. Behrend, B.S.  Grand Rapids, MI  
John G. Anderson, M.D.  Grand Rapids, MI

12:33 p.m. - 12:38 p.m.  
79. Accuracy of Talonavicular Injection Using Ultrasound vs. Anatomical Landmark: A Cadaver Study  
Aaradhana J. Jha, M.D.  Birmingham, AL  
Leonardo Moraes, M.D.  Birmingham, AL  
Jared R. Halstrom, B.S.  Birmingham, AL  
John C. Prather, II, M.D.  Birmingham, AL  
Gean C. Viner, M.D.  Birmingham, AL  
Bradley K. Alexander, B.S.  Birmingham, AL  
Haley McKissack, B.S.  Birmingham, AL  
James R. Jones, B.S.  Birmingham, AL  
Ashish B. Shah, M.D.  Birmingham, AL  
Francisco J. Caycedo, M.D.  Birmingham, AL  
*Zachary L. Littlefield, M.D.  Birmingham, AL

12:39 p.m. - 12:44 p.m.  
80. Divergent vs. Parallel Screw Configurations for Subtalar Arthrodesis: Comparing Clinical Outcomes  
Carlton J. Fernandes, M.D.  Oklahoma City, OK  
Eric B. Johnson, M.D.  Oklahoma City, OK  
Matthew McDonald, M.D.  Oklahoma City, OK  
Brandon W. Moritz  Oklahoma City, OK  
Bentley Edmonds, M.D.  Oklahoma City, OK  
Paul Kammerlocher, M.D.  Oklahoma City, OK  
Amgad Haleem, M.D., Ph.D.  Oklahoma City, OK  
*Kacy Richburg, M.D.  Oklahoma City, OK

12:45 p.m. - 12:50 p.m.  
81. AP Screw Fixation for Posterior Malleolus Fractures: A Cadaver Study  
Haley M. McKissack, B.S.  Birmingham, AL  
Jonathan Yu, M.D.  Birmingham, AL  
Jun Kit He, M.A.  Birmingham, AL  
Tyler Montgomery, B.S.  Birmingham, AL  
Leonardo Moraes, M.D.  Birmingham, AL  
Gean C. Viner, M.D.  Birmingham, AL  
Ashish B. Shah, M.D.  Birmingham, AL  
Charles R. Sutherland, B.S.  Birmingham, AL  
*Zachary L. Littlefield, M.D.  Birmingham, AL
12:50 p.m. - 1:00 p.m.  Floor Discussion
FRIDAY, OCTOBER 1, 2021
BREAKOUT SESSION #7
Topic: Sports/Shoulder/Elbow
Room: Magnolia D

Co-Moderator: Jonathan D. Barlow, M.D., M.S.
Rochester, MN

Co-Moderator: Gregory L. Cvetanovich, M.D.
Columbus, OH

11:00 a.m. - 11:05 a.m. 82. Is There an Optimal Dilution of Liposomal Bupivacaine in Multimodal Pain Management after Rotator Cuff Repair?
Ravi T. Rudraraju, M.D. Weston, FL
Kiran Chatha, M.D. Miami, FL
Mauricio Drummond, Jr., M.D. Weston, FL
Wilfredo J. Borroto, B.S. San Juan, Puerto Rico
Vani J. Sabesan, M.D. Weston, FL
*Laila Khoury, B.S. Granada Hills, CA

11:06 a.m. - 11:11 a.m. 83. Rotator Cuff Training with Upper Extremity Blood Flow Restriction Produces Favorable Adaptations in Division IA Collegiate Pitchers
*Bradley S. Lambert, Ph.D. Houston, TX
Joshua R. Daum, B.S. Houston, TX
Carter M. Taft, B.S. Houston, TX
Jordan P. Ankersen, B.S. Houston, TX
Corbin A. Hedt, D.P. Houston, TX
Haley M. Goble, MHA, CCRC Houston, TX
Patrick C. McCulloch, M.D. Houston, TX

11:12 a.m. - 11:17 a.m. 84. Short-Term Outcomes of Surgical Intervention for Massive Rotator Cuff Tear: An Institutional Comparison of Superior Capsular Reconstruction, Partial Arthroscopic Repair, and Reverse Total Shoulder Arthroplasty
Travis Frantz, M.D. Columbus, OH
Andrew Mundy, M.D. Columbus, OH
Saul Fredrickson, M.D. Columbus, OH
Joshua S. Everhart, M.D., M.P.H. Columbus, OH
Gregory L. Cventanovich, M.D. Columbus, OH
Andrew S. Neviaser, M.D. Columbus, OH
Grant L. Jones, M.D. Columbus, OH
Julie Y. Bishop, M.D. Columbus, OH
*Marisa N. Ulrich, B.S. Columbus, OH

11:17 a.m. - 11:25 a.m. Floor Discussion

11:26 a.m. - 11:31 a.m. 85. Identification of Trends in Pitch Selection, Velocity, and Spin Rate Prior to Ulnar Collateral Ligament Reconstruction in Major League Baseball Pitchers
Adam Miller, B.S. Chicago, IL
Benjamin C. Mayo, M.D. Chicago, IL
*Michael J. Patetta, M.D. Chicago, IL
Garrett R. Schwarzman, M.D. Chicago, IL
Marshall Haden, M.D. Chicago, IL
Jeffrey W. Chen, B.S. Chicago, IL
Mark R. Hutchinson, M.D. Chicago, IL
11:32 a.m. - 11:37 a.m.  86. Lateral Elbow Overuse Injuries in Pediatric Female Gymnasts: A Comparison of Radial Head Stress Fractures and Capitellar OCD
*William C. Sears, B.S.  Dallas, TX
Chuck W. Wyatt, CPNP  Dallas, TX
Aaron J. Zynda, B.S., CCRP  Dallas, TX
Henry B. Ellis, M.D.  Dallas, TX
Philip L. Wilson  Dallas, TX

11:38 a.m. - 11:43 a.m.  87. Elbow Torque is Reduced in College Pitchers with Elbow Laxity: A Dynamic Ultrasound Study
*Lafi S. Khalil, M.D.  Detroit, MI
Fabien Meta, M.D.  Detroit, MI
Joseph S. Tramer, M.D.  Detroit, MI
Muhammad J. Abbas, B.S.  Detroit, MI
Courtney Scher, D.O.  Detroit, MI
Marnix Van Holsbeek, M.D.  Detroit, MI
Patricia A. Kolowich, M.D.  Detroit, MI
Eric C. Makhni, M.D., M.B.A.  Detroit, MI
Vasilios Moutzouros, M.D.  Detroit, MI
Kelechi R. Okoroha, M.D.  Detroit, MI

11:43 a.m. - 11:51 a.m.  Floor Discussion

11:52 a.m. – 12:00 p.m.  Spotlight Lecture
Speaker:  Jonathan D. Barlow, M.D., M.S.
Rochester, MN
Topic:  Management of Proximal Humerus Fractures in 2021: State of the Art

12:01 p.m. – 12:06 p.m.  88. Identifying Subscapularis Tendon Tears: Machine Learning Can Improve Diagnostic Accuracy
Ayoosh Pareek, M.D.  Rochester, MN
*Micah J. Nieboer, M.D.  Rochester, MN
Mason Uvodich, M.D.  Rochester, MN
Derya Kilinc, Ph.D.  Rochester, MN
Nicholas G. Rhodes, M.D.  Rochester, MN
Christin A. Tiegs-Helden, M.D.  Rochester, MN
Kalyan S. Pasupathy, Ph.D.  Rochester, MN
Christopher L. Camp, M.D.  Rochester, MN
Joaquin Sanchez-Sotelo, M.D., Ph.D.  Rochester, MN

12:07 p.m. - 12:12 p.m.  90. Longer Careers and Similar Performance Following Operative Treatment of Shoulder Instability in National Football League Athletes
Tahsin M. Rahman, M.D.  Detroit, MI
Lafi S. Khalil, M.D.  Detroit, MI
*Muhammad J. Abbas, B.S.  Detroit, MI
Toufic Jildeh, M.D.  Detroit, MI
Michael McIntosh, B.S.  Detroit, MI
Arben Sokoli, B.S.  Detroit, MI
Nicholas Cominos, B.S.  Detroit, MI
Kelechi R. Okoroha, M.D.  Detroit, MI

12:12 p.m. – 12:20 p.m.  Floor Discussion
12:21 p.m. – 12:26 p.m.  91. Risk Factors for Postoperative Opioid Use in Arthroscopic Shoulder Labrum Surgery
   Kevin A. Taylor, M.D.  Detroit, MI
   Toufic R. Jildeh, M.D.  Detroit, MI
   Lafi S. Khalil, M.D.  Detroit, MI
   Joseph S. Tramer, M.D.  Detroit, MI
   *Laith Hasan, B.S.  New Orleans, LA
   Kelechi R. Okoroha, M.D.  Detroit, MI
   Vasilios Moutzouros, M.D.  Detroit, MI

12:27 p.m. - 12:32 p.m.  92. The Safety and Efficacy of a Liposomal Bupivacaine Adjunct to Eliminate Opioid Consumption after Rotator Cuff Repair
   Vani J. Sabesan, M.D.  Weston, FL
   Kiran Chatha, M.D.  Weston, FL
   Christian A. Martinez, B.S.  Ponce, PR
   Ravi Rudraraju, M.D.  Weston, FL
   Mauricio Drummond, M.D.  Weston, FL
   Brett J. Stephens, B.S.  Davie, FL
   Wilfredo J. Borroto, B.S.  San Juan, Puerto Rico
   Matthew A. Wilneff, B.S.  Boca Raton, FL
   Gregory Gilot, M.D.  Weston, FL
   *Alessia C. Lavin  Miami, FL

12:33 p.m. - 12:38 p.m.  93. Impact of Patient Resilience on Recovery from Rotator Cuff Repair
   *Charlie D. Wilson, M.D.  Temple, TX
   Benjamin D. Welling, M.D.  Temple, TX
   Kendall A. P. Hammonds, M.P.H.  Temple, TX
   Brett N. Robin, M.D.  Temple, TX

12:39 p.m. - 12:44 p.m.  94. Perioperative Opioid Use Predicts Postoperative Opioid Use and Inferior Outcomes after Shoulder Arthroscopy
   *Yining Lu, B.S. will be presenting in place of Dr. Cohn
   Matthew R. Cohn, M.D.  Chicago, IL
   Yining Lu, B.S.  Chicago, IL
   Alexander Beletsky, B.S.  Chicago, IL
   Bhavik H. Patel, B.S.  Chicago, IL
   Jourdan Cancienne, M.D.  Chicago, IL
   Michael Nemsick, B.S.  Chicago, IL
   Adam B. Yanke, M.D.  Chicago, IL
   Nikhil N. Verma, M.D.  Chicago, IL
   Brian J. Cole, M.D., M.B.A.  Chicago, IL
   Brian Forsythe, M.D.  Chicago, IL

12:44 p.m. - 1:00 p.m.  Floor Discussion
FRIDAY, OCTOBER 1, 2021
BREAKOUT SESSION #8
Topic: Trauma
Room: Magnolia E

Co-Moderator: Michael T. Archdeacon, M.D.
Cincinnati, OH

Co-Moderator: Brent L. Norris, M.D.
Tulsa, OK

11:00 a.m. - 11:05 a.m.  95. Preoperative Risk Factors for Polymicrobial Infection Following Open Fracture
*Madeline M. Lyons, M.D.
Maywood, IL
Philip Ghobrial, B.S.
Maywood, IL
Madeline S. Tiee, M.D.
Maywood, IL
Hobie D. Summers, M.D.
Maywood, IL
Joseph B. Cohen, M.D.
Maywood, IL
Garin G. Hecht, M.D.
San Jose, CA

11:06 a.m. - 11:11 a.m.  96. Outcomes of Vancouver B Periprosthetic Femur Fractures Treated with Open Reduction and Internal Fixation Regardless of Prosthesis Loosening
*Michael W. Perry, M.D.
Chicago, IL
John-Luke Rivera, M.D.
Maywood, IL
Daniel Schmitt, M.D.
Chicago, IL
Cameron J. Killen, M.D.
Chicago, IL
Joseph B. Cohen, M.D.
Chicago, IL
William Lack, M.D.
Seattle, WA
Nicholas M. Brown, M.D.
Chicago, IL

Paper position #97 deleted

11:11 a.m. - 11:19 a.m.  Floor Discussion

11:20 a.m. - 11:25 a.m.  98. Early Ambulation after Hip Fracture Surgery is Associated with Decreased 30-Day Mortality
*Jace J. Heiden, M.D.
Omaha, NE
Stephen R. Goodin, B.S.
Omaha, NE
Matthew A. Mormino, M.D.
Omaha, NE
Justin C. Siebler, M.D.
Omaha, NE
Sara M. Putnam, M.D.
Omaha, NE
Elizabeth R. Lyden, M.S.
Omaha, NE
Matthew A. Tao, M.D.
Omaha, NE

11:26 a.m. - 11:31 a.m.  99. The Effect of Tranexamic Acid Use on Wound Complications after Hip Hemiarthroplasty
*Thomas Wenzlick, M.D.
Grand Rapids, MI
Andrew Albert, M.D.
Grand Rapids, MI
Tyler S. Madden, B.S.
Grand Rapids, MI
Andrew Fras, M.D.
Grand Rapids, MI
11:32 a.m. - 11:37 a.m.  
100. Postoperative Outcomes of Hip Fracture Surgery in Geriatric Patients on Clopidogrel or Warfarin at the Time of Surgery  
Joshua C. Locker, M.D.  
Omaha, NE  
Elizabeth R. Lyden, M.S.  
Omaha, NE  
*Justin C. Siebler, M.D.  
Omaha, NE

11:37 a.m. - 11:45 a.m.  
Floor Discussion

11:46 a.m. – 11:54 a.m.  
**Spotlight Lecture**  
Speaker: Brent L. Norris, M.D.  
Tulsa, OK  
Topic: Current Management of Long Bone Defects

11:55 a.m. – 12:00 p.m.  
101. Are Orthopedic Trauma Surgeons Being Adequately Compensated for Treating Nonunions of the Femoral Shaft? An Analysis of Relative Value Units  
Azeem T. Malik, M.B.B.S.  
Columbus, OH  
*Krystin Hidden, M.D.  
Columbus, OH  
Carmen E. Quatman, M.D.  
Columbus, OH  
Laura S. Phieffer, M.D.  
Columbus, OH  
Safdar N. Khan, M.D.  
Columbus, OH  
Thuan V. Ly, M.D.  
Columbus, OH

12:01 p.m. - 12:06 p.m.  
102. Risk Factors for Nonunion Following Locked Plating of Distal Femur Fractures  
Ryan M. Graf, M.D.  
Madison, WI  
Natasha M. Simske, B.S.  
Madison, WI  
Jordan T. Shaw, M.D.  
Madison, WI  
Patricia N. Siy  
Madison, WI  
Alexander B. Siy, B.S.  
Madison, WI  
Stephanie A. Kliethermes, Ph.D.  
Madison, WI  
Paul S. Whiting, M.D.  
Madison, WI  
*Andrew Brooks, M.D.  
Madison, WI

12:07 p.m. - 12:12 p.m.  
103. Evaluation of Intraoperative Fluoroscopic Techniques to Estimate Femoral Rotation: A Cadaveric Study  
David V. Ivanov  
Rochester, MN  
John P. Welby  
Rochester, MN  
Jonathan D. Barlow, M.D., M.S.  
Rochester, MN  
S. Andrew Sems, M.D.  
Rochester, MN  
Michael E. Torchia, M.D.  
Rochester, MN  
*Brandon J. Yuan, M.D.  
Rochester, MN

12:12 p.m. – 12:20 p.m.  
Floor Discussion

12:21 p.m. – 12:26 p.m.  
104. Early Weight Bearing After Distal Femur Fractures in the Elderly: A Prospective, Cohort Pilot Study  
*Lisa K. Cannada, M.D.  
Jacksonville, FL  
Jennifer L. Bruggers, M.D.  
Atlanta, GA  
Kyle J. Jeray, M.D.  
Greenville, SC  
Robert D. Zura, M.D.  
New Orleans, LA  
Heidi Israel, Ph.D.  
St. Louis, MO  
Sarah Dawson, R.N.  
St. Louis, MO  
Stephanie Tanner, R.N.  
Greenville, SC
12:27 p.m. - 12:32 p.m.  105. Coronal Plane Fractures in Intercondylar Distal Femur Fractures: An Analysis of Incidence and Major Fracture Fragments
*Jarod A. Richards, M.D.  Louisville, KY
Fehmi B. Berkay, M.S.  Louisville, KY
Caleb M. Davis, M.D.  Louisville, KY
Rodolfo A. Zamora, M.D.  Louisville, KY

12:33 p.m. - 12:38 p.m.  106. Dual vs. Lateral Plating for Bicondylar Tibial Plateau Fractures: Factors Influencing Decision Making
William Behrens, MD will be Presenting in place of Dr. Suresh
*Srikrishna Vangipuram Suresh  St. Louis, MO
Thomas Revak, D.O.  St. Louis, MO
William W. Behrens, M.D.  St. Louis, MO

12:39 p.m. - 12:44 p.m.  107. Re-Operation and Complication Rates Following Patellar Fracture Repair with Plates: A Retrospective Review of 60 Patients
*Jake X. Checketts, B.S.  Tulsa, OK
Jared Scott, D.O.  Tulsa, OK
Jake Whitener, D.O.  Tulsa, OK
Jesse Putman, D.O.  Tulsa, OK
Azad Dadgar, D.O.  Tulsa, OK
Mark M. Calder, M.D.  Tulsa, OK
Brent L. Norris, M.D.  Tulsa, OK

12:44 p.m. - 1:00 p.m.  Floor Discussion
FRIDAY, OCTOBER 1, 2021
BREAKOUT SESSION #9
Topic: Opioid Management
Room: Magnolia F

Co-Moderator: Matthew F. Dilisio, M.D.
Omaha, NE

Co-Moderator: S. Trent Guthrie, M.D.
Detroit, MI

11:00 a.m. - 11:05 a.m.  108. Education Increases Disposal of Unused Opioids after Total Joint Arthroplasty: A Randomized Controlled Trial
*Cindy R. Nahhas, M.D. Chicago, IL
Charles P. Hannon, M.D. Chicago, IL
Chris Culvern, M.S. Chicago, IL
Tad L. Gerlinger, M.D. Chicago, IL
Denis Nam, M.D., MSc. Chicago, IL
Craig J. Della Valle, M.D. Chicago, IL

11:06 a.m. - 11:11 a.m.  109. Resilience Influences Perioperative Opioid Consumption in Primary Total Joint Arthroplasty Patients
Jonathan Q. Trinh, B.S. Iowa City, IA
Christopher N. Carender, M.D. Iowa City, IA
Qiang An, M.S. Iowa City, IA
*Nicolas O. Noiseux, M.D., FRCS(C), M.S. Iowa City, IA
Jesse E. Otero, M.D., Ph.D. Charlotte, NC
Timothy S. Brown, M.D. Houston, TX

11:12 a.m. - 11:17 a.m.  110. Who is Prescribing Opioids Preoperatively? A Survey of New Patients Presenting to Tertiary Care Adult Reconstruction Clinics
Tyler E. Calkins, M.D. Memphis, TN
Charles P. Hannon, M.D. Chicago, IL
Denis Nam, M.D. Chicago, IL
Tad L. Gerlinger, M.D. Chicago, IL
Scott M. Sporer, M.D. Chicago, IL
*Craig J. Della Valle, M.D. Chicago, IL

11:17 a.m. - 11:25 a.m.  Floor Discussion

11:26 a.m. - 11:31 a.m.  111. Can the ORT, SOAPP, or PROMIS Predict Opioid Consumption Following Shoulder Surgery?
Kiran Chatha, M.D. Weston, FL
Laila Khoury, B.S. Boca Raton, FL
Josh Stephens, B.S. Davie, FL
Nikolas Echeverry, B.S. Boca Raton, FL
Shimron Brown, B.S. Boca Raton, FL
Siddharth Kundal, B.S. Richmond, VA
Gregory Gilot, M.D. Weston, FL
Vani J. Sabesan, M.D. Weston, FL
Andres Guerrero, A.T.C. Weston, FL
Shawn Hall, A.T.C. Weston, FL
*Sarah Cole Delray Beach, FL
11:32 a.m. - 11:37 a.m.  112. Patterns in Opioid and Non-Opioid Prescriptions for Patients Operatively Treated for Ankle Fractures Following Implementation of 2017 Ohio Opioid Prescriber Law: A One Year Follow-Up
Robert N. Matar, M.D.  Cincinnati, OH
Georgina Glogovac, M.D.  Cincinnati, OH
Colin Cotton  Cincinnati, OH
Michael Rubeiz  Cincinnati, OH
Jamal Fitts, M.D.  Cincinnati, OH
Jordan Henne, D.P.M.  Cincinnati, OH
*Tonya L. Dixon, M.D., M.P.H.  Cincinnati, OH
Richard T. Laughlin, M.D.  Cincinnati, OH

11:38 a.m. - 11:43 a.m.  113. Effect of Postoperative Gabapentin Administration on Opioid Consumption
Haley M. McKissack, B.S.  Birmingham, AL
Jun Kit He, B.S.  Birmingham, AL
Alexandra M. Arguello  Birmingham, AL
Aseel Dib, B.S.  Birmingham, AL
Joshua L. Washington, B.S.  Birmingham, AL
Sameer Naranje, M.D.  Birmingham, AL
Gerald McGwin, Jr., M.D., Ph.D.  Birmingham, AL
Michael D. Johnson, M.D.  Birmingham, AL
Ashish B. Shah, M.D.  Birmingham, AL
*Roshan Jacob  Birmingham, AL

11:43 a.m. - 11:51 a.m.  Floor Discussion

11:52 a.m. – 12:00 p.m.  Spotlight Lecture
Speaker: Matthew F. Dilisio, M.D.
Omaha, NE
Topic: The Illusion of Pain

12:01 p.m. – 12:06 p.m.  114. Florida State Opioid Prescription Restriction Law: Impact on Opioid Utilization After Total Joint Arthroplasty in a Single Medical Center
*Tejbir S. Pannu, M.D., M.S.  Weston, FL
Jesus M. Villa, M.D.  Weston, FL
Jorge Fleites, B.S.  Weston, FL
Prateesh D. Patel, M.D.  Weston, FL
Wael K. Barsoum, M.D.  Weston, FL
Carlos A. Higuera, M.D.  Weston, FL
Aldo M. Riesgo, M.D.  Weston, FL

12:07 p.m. - 12:12 p.m.  115. Dose of Preoperative Opioids Affects Outcomes after Total Hip Arthroplasty
E. Bailey Terhune, M.D.  Chicago, IL
Charles P. Hannon, M.D.  Chicago, IL
*Robert A. Burnett, M.D.  Chicago, IL
Craig J. Della Valle, M.D.  Chicago, IL
12:13 p.m. - 12:18 p.m.  116. Ensemble Machine Learning for the Prediction of Prolonged Postoperative Opioid Use in Patients Undergoing Elective Knee Arthroscopy
   *Yining Lu, M.D.  Rochester, MN
   Enrico M. Forlenza, B.S.  Chicago, IL
   Ryan R. Wilbur, B.A.  Rochester, MN
   Michael C. Fu, M.D.  Chicago, IL
   Adam B. Yanke, M.D.  Chicago, IL
   Brian J. Cole, M.D., M.B.A.  Chicago, IL
   Nikhil N. Verma, M.D.  Chicago, IL
   Brian Forsythe, M.D.  Chicago, IL

12:18 p.m. – 12:26 p.m.  Floor Discussion

12:27 p.m. - 12:32 p.m.  119. Perioperative Counseling Reduces Opioid Use Following Primary Total Joint Arthroplasty
   Christopher N. Carender, M.D.  Iowa City, IA
   Christopher A. Anthony, M.D.  Philadelphia, PA
   Edward O. Rojas, M.D.  Iowa City, IA
   *Nicolas O. Noiseux, M.D., FRCS(C), M.S.  Iowa City, IA
   Nicholas A. Bedard, M.D.  Iowa City, IA
   Timothy S. Brown, M.D.  Houston, TX

12:33 p.m. - 12:38 p.m.  120. Physician Bias Regarding the Accuracy of Patient Reported Opioid Use
   *Scott W. Huff, M.D.  Dayton, OH
   Joseph D. Henningsen, M.D.  Dayton, OH
   Emily A. Young  Dayton, OH
   Andrew Froehle, Ph.D.  Dayton, OH
   Anil Krishnamurthy, M.D.  Dayton, OH

12:38 p.m. - 1:00 p.m.  Floor Discussion
FRIDAY, OCTOBER 1, 2021
BREAKOUT SESSION #10
Topic: Hip Preservation and Arthroscopy
Room: Magnolia G

Co-Moderator: Rafael J. Sierra, M.D.
Rochester, MN

Co-Moderator: W. Kelton Vasileff, M.D.
Columbus, OH

11:00 a.m. - 11:05 a.m.
121. Hip Arthroscopy for Patients with Persistent Pain Following Periacetabular Osteotomy: No Significant Changes in Pre- and Postoperative Patient-Reported Outcomes
Mario Hevesi, M.D. Rochester, MN
Cody C. Wyles, M.D. Rochester, MN
Wahid Abu-Amer, M.D. St. Louis, MO
John C. Clohisy, M.D. St. Louis, MO
Robert T. Trousdale, M.D. Rochester, MN
Aaron J. Krych, M.D. Rochester, MN
*Rafael J. Sierra, M.D. Rochester, MN

11:06 a.m. - 11:11 a.m.
122. Minimum Two-Year Patient Reported Outcomes in Athletes Following Hip Arthroscopy for Femoroacetabular Impingement
Andrew Jimenez, M.D. is presenting instead of Dr. Annin
*Shawn Annin, M.D. Des Plaines, IL
Ajay C. Lall, M.D., M.S. Des Plaines, IL
Mitchell J. Yelton, B.S. Des Plaines, IL
Jacob Shapira, M.D. Des Plaines, IL
Hari Ankem, M.D. Des Plaines, IL
Mitchell B. Meghpara, M.D. Des Plaines, IL
Philip J. Rosinsky, M.D. Des Plaines, IL
David R. Maldonado, M.D. Des Plaines, IL
Benjamin G. Domb, M.D. Des Plaines, IL
Andrew Jimenez, M.D. Des Plaines, IL

11:11 a.m. – 11:16 a.m.
Floor Discussion

11:17 a.m. - 11:22 a.m.
123. Predictors of Clinical Outcomes after Hip Arthroscopy: Five-Year Follow-Up Analysis of 1,038 Patients
Andrew Jimenez, M.D. is presenting instead of Dr. Lall
*Ajay C. Lall, M.D., M.S. Des Plaines, IL
Sarah L. Chen, B.A. Des Plaines, IL
Camille C. Go, B.S. Des Plaines, IL
Rafael Walker-Santiago, M.D. Des Plaines, IL
David Maldonado, M.D. Des Plaines, IL
Jacob Shapira, M.D. Des Plaines, IL
Benjamin G. Domb, M.D. Des Plaines, IL
Andrew Jimenez, M.D. Des Plaines, IL
11:23 a.m. - 11:28 a.m.  124. Isolated Acetabuloplasty for the Treatment of Femoroacetabular Impingement: Long-Term Patient-Reported Outcomes
   *Matthew J. Hartwell, M.D.  Chicago, IL
   Bejan A. Alvandi, M.D.  Chicago, IL
   Ujash Sheth, M.D.  Chicago, IL
   Bejan Alvandi, M.D.
   presenting instead of
   Matthew J. Hartwell, M.D.
   Patrick Nelson, B.A.  Chicago, IL
   Allison M. Morgan, B.A.  Chicago, IL
   Claire Fernandez, M.D.  Chicago, IL
   Vehniah K. Tjong, M.D., FRCS(C)  Chicago, IL
   Michael A. Terry, M.D.  Chicago, IL

   **Paper position #125 deleted**

   **Paper position #126 deleted**

11:28 a.m. - 11:33 a.m.  Floor Discussion

11:34 a.m. - 11:42 a.m.  **Spotlight Lecture**
   Speaker: Rafael J. Sierra, M.D.
   Topic: Acetabular Retroversion: Treatment with PAO

11:43 a.m. - 11:48 a.m.  127. The Evolving Source: Postoperative Radiographic Measurements Change in Response to a New Weight-Bearing Zone Following Periacetabular Osteotomy
   Cody C. Wyles, M.D.  Rochester, MN
   Juan S. Vargas-Hernandez, M.D.  Rochester, MN
   *Mark J. Heidenreich, M.D.  Rochester, MN
   Rafael J. Sierra, M.D.  Rochester, MN
   Robert T. Trousdale, M.D.  Rochester, MN

11:49 a.m. - 11:54 a.m.  128. Differences in Radiographic Measurements on Standing vs. Supine Pelvic Radiographs
   Andrea M. Spiker, M.D.  Madison, WI
   Ryan M. Graf, M.D.  Madison, WI
   Sean P. Duminie, M.S.  Madison, WI
   Stephanie A. Kliethermes, Ph.D.  Madison, WI
   David C. Goodspeed, M.D.  Madison, WI
   *Elizabeth H. G. Turner, M.D.  Madison, WI

11:55 a.m. - 12:00 p.m.  129. Preoperative Patient-Reported Outcomes Measurement Information System (PROMIS) Scores Predict Postoperative Outcomes in Hip Arthroscopy Patients
   Haley E. Smith, M.D.  Chicago, IL
   Daniel J. Johnson, M.D.  Chicago, IL
   Ryan S. Selley, M.D.  Chicago, IL
   Eric J. Sanders, M.D.  Chicago, IL
   Michael A. Terry, M.D.  Chicago, IL
   Vehniah K. Tjong, M.D., FRCS(C)  Chicago, IL
   *Elizabeth H. G. Turner, B.A.  Madison, WI

12:00 p.m. - 12:08 p.m.  Floor Discussion
12:09 p.m. – 12:14 p.m.  130. Incidence of Hip Dysplasia Diagnosis in Young Patients with Hip Pain: A Geographic Population Cohort Analysis
Matthew D. LaPrade, B.S. Rochester, MN
Heath P. Melugin, M.D. Rochester, MN
Rena F. Hale, Ph.D. Rochester, MN
*Devin P. Leland, M.D. Rochester, MN
Christopher D. Bernard, M.D. Rochester, MN
Ryan R. Wilbur, B.A. Rochester, MN
Rafael J. Sierra, M.D. Rochester, MN
Robert T. Trousdale, M.D. Rochester, MN
Bruce A. Levy, M.D. Rochester, MN
Aaron J. Krych, M.D. Rochester, MN

Paper position #131 deleted

12:15 p.m. - 12:20 p.m.  132. Risk Factors for Long-Term Hip Osteoarthritis in Patients with Hip Dysplasia without Surgical Intervention
Heath P. Melugin, M.D. Rochester, MN
Rena F. Hale, Ph.D. Rochester, MN
Matthew D. LaPrade, B.S. Rochester, MN
*Dustin R. Lee, M.D. Rochester, MN
Rafael J. Sierra, M.D. Rochester, MN
Robert T. Trousdale, M.D. Rochester, MN
Bruce A. Levy, M.D. Rochester, MN
Aaron J. Krych, M.D. Rochester, MN

12:21 p.m. - 12:26 p.m.  133. The Association Between Labral Size and Intra-Articular Damage in Dysplastic Patients: An Analysis of 1,765 Hips Treated via Hip Arthroscopy
Andrew Jimenez, M.D. is presenting instead of Dr. Domb
Jacob Shapira, M.D. Des Plaines, IL
Mitchell J. Yelton, B.S. Des Plaines, IL
Jeffrey W. Chen, B.A. Nashville, TN
Philip J. Rosinsky, M.D. Des Plaines, IL
David R. Maldonado, M.D. Des Plaines, IL
Ajay C. Lall, M.D., M.S. Des Plaines, IL
*Benjamin G. Domb, M.D. Des Plaines, IL
Andrew Jimenez, M.D. Des Plaines, IL

12:26 p.m. - 1:00 p.m.  Floor Discussion

6:30 p.m. – 7:30 p.m.  Steel Memorial Lecture
Topic: Living is the Difficult Thing
Speaker: Hal Kushner, M.D, FACS
Daytona Beach, FL

Introduced by: Craig R. Mahoney, M.D.
Des Moines, IA
THIRD PLENARY SESSION
Room: Magnolia D

Moderator: Nicolas O. Noiseux, M.D., FRCS(C), M.S.

7:00 a.m. – 7:04 a.m.  Assemble/Announcements

7:05 a.m. – 7:45 a.m.  Symposium III
Topic: Challenging Proximal Femur Fractures

Faculty: Justin C. Siebler, M.D., Moderator
Omaha, NE

Michael T. Archdeacon, M.D., M.S.E.
Cincinnati, OH

S. Andrew Sems, M.D.
Rochester, MN

7:46 a.m. – 7:48 a.m.  Presentation of MAOA Poster Award Winners

Presented by: Nicolas O. Noiseux, M.D., FRCS(C), M.S.
Iowa City, IA

7:49 a.m. – 8:29 a.m.  AAOS Report
Speaker: Daniel K. Guy, M.D.
Lagrange, GA
Immediate Past President, American Academy of Orthopaedic Surgeons

Introduced by: Craig R. Mahoney, M.D.
Des Moines, IA

8:30 a.m. – 9:30 a.m.  Quiz Bowl
Room: Magnolia D
Moderator: James A. Keeney, M.D.
Columbia, MO

9:30 a.m. – 10:00 a.m.  Rapp Lecture
Topic: Outpatient Hip and Knee Replacement
Speaker: Craig J. Della Valle, M.D.
Chicago, IL

Introduced by: Craig R. Mahoney, M.D.
Des Moines, IA

10:00 a.m. – 10:30 a.m.  Coffee Break in Exhibit Area
10:30 a.m. – 1:30 p.m. Five Breakouts to run concurrently

**SATURDAY, OCTOBER 2, 2021**
**BREAKOUT SESSION #11**
**Topic:** Hip Arthroplasty
**Room:** Magnolia E

Co-Moderator for Papers #134-143: Carlos A. Higuera, M.D.
Weston, FL

Co-Moderator for Papers #134-143: Nathaniel J. Stewart, M.D.
Altoona, WI

10:30 a.m. - 10:35 a.m. 134. **2020 E. W. Johnson, Jr., M.D. Award Presentation**
Quicker and More Predictable Return of Motor Function and Ambulation after Mepivacaine vs. Bupivacaine Spinal: A Double Blind RCT in Primary TKA and THA

Rafael J. Sierra, M.D.
*M* Cody C. Wyles, M.D.
Mark W. Pagnano, M.D.
Robert T. Trousdale, M.D.
Rafael J. Sierra, M.D.
Michael J. Taunton, M.D.
Kevin I. Perry, M.D.
Dirk R. Larson, M.S.
Hugh M. Smith, M.D., Ph.D.
Christopher M. Duncan, M.D.
Matthew P. Abdel, M.D.

*Presenting instead of* Cody C. Wyles, M.D.

10:36 a.m. - 10:41 a.m. 135. Are 3D Printed Implant Alloys the Same as Conventional Alloys?

*Nicholas B. Frisch, M.D., M.B.A.*
Mozart Queiroz Neto, Ph.D.
Deborah J. Hall, B.S.
Joshua J. Jacobs, M.D.
Robin Pourzal, Ph.D.

10:42 a.m. - 10:47 a.m. 136. Iliopsoas Impingement after Anterior Hip Arthroplasty: Epidemiology, Risk Factors, and Treatments

Luke Menken, D.O.
*Leonard T. Buller, M.D.*
Evan J. Hawkins, M.D., M.B.A.
Marcel A. Bas, M.D.
Gilbert C. Roc, Jr., M.D.
H. John Cooper, M.D.
Jose A. Rodriguez, M.D.

10:47 a.m. - 10:54 a.m. Floor Discussion

10:55 a.m. - 11:00 a.m. 137. Primary Total Hip Arthroplasty in Patients 20 Years Old and Younger

Graham D. Pallante, M.D.
Joseph M. Statz, M.D.
Chad W. Parkes, M.D.
*Alexis Mattrka, M.D.*
Todd A. Milbrandt, M.D.
Robert T. Trousdale, M.D.
11:01 a.m. - 11:06 a.m.  138. Divergent Trends of Hip Periprosthetic Fractures: Declining Rates of Revision Arthroplasty
   Samuel R. Boas, B.S.                      Cleveland, OH
   Matthew Kaufman, B.A.                     Cleveland, OH
   Alexander Rascoe, M.D.                    Cleveland, OH
   Yida Cai, B.A.                            Cleveland, OH
   Anand Kumar, M.D.                         Cleveland, OH
   Glenn D. Wera, M.D.                       Cleveland, OH
   *Mitchell Thom                            Cleveland, OH

11:07 a.m. - 11:12 a.m.  140. Artificial Intelligence More Accurately Measures Acetabular Component Orientation Than Hand Measurements
   Michael P. Murphy, M.D.                   Maywood, IL
   *Amir Boubekri, M.D.                      Maywood, IL
   Steven J. Ralles, M.D.                    Maywood, IL
   Sara Winfrey, B.S.                        Maywood, IL
   Karen Wu, M.D.                            Maywood, IL
   Nicholas M. Brown, M.D.                   Maywood, IL

11:12 a.m. - 11:22 a.m.  Floor Discussion

11:23 a.m. - 11:28 a.m.  141. Pelvic Tilt and the Pubic Symphysis to Sacrococcygeal Junction Distance: Risk Factors for Hip Dislocation
   *William G. Rainer, III, D.O.             Rochester, MN
   Matthew P. Abdel, M.D.                    Rochester, MN
   Brett A. Freedman, M.D.                   Rochester, MN
   Daniel J. Berry, M.D.                     Rochester, MN
   Michael J. Taunton, M.D.                  Rochester, MN

11:29 a.m. - 11:34 a.m.  142. What Factors Reduce the Incidence of Early Dislocations in Liner and Acetabular Hip Revisions?
   *Jesus M. Villa, M.D.                     Weston, FL
   Tejbir S. Pannu, M.D., M.S.               Weston, FL
   Preetesh D. Patel, M.D.                   Weston, FL
   Wael K. Barsoum, M.D.                     Weston, FL
   Carlos A. Higuera, M.D.                   Weston, FL
   Aldo M. Riesgo, M.D.                      Weston, FL

11:35 a.m. – 11:40 a.m.  143. Application of Neural Networks in Determining Implant Name from Total Hip Arthroplasty Radiograph
   *Michael P. Murphy, M.D.                  Maywood, IL
   Cameron J. Killen, M.D.                   Maywood, IL
   Robert R. Burnham, Jr., M.D.              Maywood, IL
   Fahad Sarvari, B.S.                       Maywood, IL
   Karen Wu, M.D.                            Maywood, IL
   Nicholas M. Brown, M.D.                   Maywood, IL

11:40 a.m. – 11:51 a.m.  Floor Discussion
11:52 a.m. – 12:01 p.m.  **Spotlight Lecture**
Speaker: Nathaniel J. Stewart, M.D.
Altoona, WI
Topic: Transition to the Direct Anterior Approach. Avoiding Complications

Co-Moderator for Papers #144-154: Michael A. Charters, M.D.
Detroit, MI
Co-Moderator for Papers #145-154: Jeffrey R. McLaughlin, M.D.
Oshkosh, WI

12:02 p.m. – 12:07 p.m.  144. Cementing Liners into Well-Fixed Acetabular Components: Should We Be Concerned about Long-Term Fixation?
*Nicholas A. Bedard, M.D. Iowa City, IA
Matthew W. Tetreault, M.D. Rochester, MN
Arlen D. Hanssen, M.D. Rochester, MN
David G. Lewallen, M.D. Rochester, MN
Robert T. Trousdale, M.D. Rochester, MN
Daniel J. Berry, M.D. Rochester, MN
Matthew P. Abdel, M.D. Rochester, MN

12:08 p.m. – 12:13 p.m.  145. Long-Term Survivorship, Performance, and Predictors of Outcome for Patients Undergoing Primary Total Hip Arthroplasty with a Porous Tantalum Femoral Prosthesis
*Naisal Akram, M.D. Kentwood, MI
Kyle N. Kunze, M.D. New York, NY
Benjamin Kerzner, B.S. Chicago, IL
Alejandro Gonzalez, B.S. Chicago, IL
Arnold Palacios, M.A. Chicago, IL
Brett R. Levine, M.D., M.S. Chicago, IL

12:14 p.m. – 12:19 p.m.  146. Does It Matter How We Define Obesity to Predict Perioperative Outcomes Following Total Joint Arthroplasty (TJA)?
*Ramon A. Ruberte Thiele, M.D., M.S. Cincinnati, OH
Nathaniel Scarberry, B.S. Cincinnati, OH
Todd Kelley, M.D. Cincinnati, OH
Theodore T. Le, M.D. Cincinnati, OH

12:20 p.m. – 12:25 p.m.  147. Revision Surgery for Instability Following Total Hip Arthroplasty: Does Timing Matter?
Nathanael D. Heckmann, M.D. Los Angeles, CA
*JaeWon Yang, B.A. Chicago, IL
Kevin L. Ong, Ph.D. Philadelphia, PA
Edmund C. Lau, M.S. Menlo Park, CA
Brian C. Fuller, M.D. Irving, TX
Daniel D. Bohl, M.D., M.P.H. Chicago, IL
Craig J. Della Valle, M.D. Chicago, IL

12:25 p.m. - 12:33 p.m.  Floor Discussion
12:34 p.m. – 12:39 p.m. 148. Robotic-Assisted vs. Conventional Total Hip Arthroplasty: A Contemporary Systematic Review of Outcomes at Minimum Two-Year Follow-Up
*Matthew C. Sweet, M.D. Kalamazoo, MI
George J. Borrelli, M.D. Kalamazoo, MI
Shaan S. Manawar, B.S. Kalamazoo, MI
Nicholas Miladore, M.D. Kalamazoo, MI

12:40 p.m. – 12:45 p.m. 149. Identifying At-Risk Patients in the Transition to Bundled Payments: Disparities in Hip Arthroplasty Outcomes from 2016-2018
Akash Adhia, B.S. Chicago, IL
*Joseph A. Weiner, M.D. Chicago, IL
Joseph Feinglass, Ph.D. Chicago, IL
David W. Manning, M.D. Chicago, IL
Linda I. Suleiman, M.D. Chicago, IL

12:46 p.m. – 12:51 p.m. 150. **Edward D. Henderson, M.D. Award Presentation**
Pain Control after Total Hip Arthroplasty: A Randomized Trial Determining Efficacy of Fascia Iliaca Compartment Blocks in the Immediate Postoperative Period
*Kevin Lindsay-Rivera, M.D. Detroit, MI
Kamil Bober, M.D. Detroit, MI
Allen A. Kadado, M.D. Detroit, MI
Wayne T. North, M.D. Detroit, MI
Michael A. Charters, M.D. Detroit, MI

12:51 p.m. – 12:58 p.m.  Floor Discussion

12:59 p.m. – 1:04 p.m. 151. Intraoperative Imaging in Primary Total Hip Arthroplasty - Optimizing Placement and Balancing Time
William Ralston, D.O. Columbia, MO
Ajay Aggarwal, M.D. Columbia, MO
John F. Nettour, M.D. Columbia, MO
Benjamin J. Hansen, M.D. Las Vegas, NV
*James A. Keeney, M.D. Columbia, MO

1:05 p.m. – 1:10 p.m. 152. Factors Affecting Access to Care Among Medicaid- and Privately-Insured Total Hip Arthroplasty
Alan Hsu, M.D. Birmingham, AL
Adam Almaguer, M.D. Birmingham, AL
Jeffrey Pearson, M.D. Birmingham, AL
Haley M. McKissack, B.S. Birmingham, AL
James R. Jones, B.S. Birmingham, AL
Joshua Washington, B.S. Birmingham, AL
Ashish Brahmabhett, M.D. Birmingham, AL
Ashish Shah, M.D. Birmingham, AL
Sameer M. Naranje, M.D. Birmingham, AL
*Matt Young Birmingham, AL
1:11 p.m. – 1:16 p.m. 153. What are the Costs of Hip Osteoarthritis in the Year Prior to a Total Hip Arthroplasty (THA)?
*Azeem T. Malik, M.B.B.S. Columbus, OH
John H. Alexander, M.D. Columbus, OH
Daniel Li, M.D. Columbus, OH
Mengnai Li, M.D., Ph.D. Columbus, OH
Safdar N. Khan, M.D. Columbus, OH
Thomas J. Scharschmidt, M.D. Columbus, OH

1:17 p.m. – 1:22 p.m. 154. Anesthesia and Surgical Time in Direct Anterior vs. Posterior Approach Total Hip Arthroplasty
*Kent R. Kraus, B.S. Indianapolis, IN
Julian E. Dilley, M.D. Indianapolis, IN
Mary Ziemba-Davis, B.A. Indianapolis, IN
R. Michael Meneghini, M.D. Indianapolis, IN

1:22 p.m. – 1:30 p.m. Floor Discussion
Co-Moderator for Papers #155-164: Chris A. Cornett, M.D.
Omaha, NE

Co-Moderator for Papers #155-164: Marc J. Levine, M.D.
Mercerville, NJ

10:30 a.m. - 10:35 a.m.  155. Anterior Cervical Osteophyte Resection for Treatment of Dysphagia
*Joshua M. Kolz, M.D., M.S. Rochester, MN
Mohammed A. Alvi, M.B.B.S. Rochester, MN
Atiq R. Bhatti Rochester, MN
Mohamad Bydon, M.D. Rochester, MN
Bradford L. Currier, M.D. Rochester, MN
Brett A. Freedman, M.D. Rochester, MN

10:36 a.m. - 10:41 a.m.  156. Risk Factors for Allograft Subsidence Following ACDF
Zachariah W. Pinter, M.D. Rochester, MN
*Ryder Reed, M.D. Rochester, MN
Anthony Mikula, M.D. Rochester, MN
Matthew B. Shirley, M.D. Rochester, MN
Ashley E. Xiong, B.S. Rochester, MN
Brett A. Freedman, M.D. Rochester, MN
Benjamin Elder, M.D., Ph.D. Rochester, MN
I. David Kaye, M.D. Philadelphia, PA
Scott C. Wagner, M.D. Bethesda, MD
Ahmad Nassr, M.D. Rochester, MN
Arjun S. Sebastian, M.D. Rochester, MN

10:42 a.m. - 10:47 a.m.  157. Role of Sagittal Balance in Degenerative Spondylolisthesis
*Gurmit Singh, M.D. Minneapolis, MN
Jonathan N. Sembrano, M.D. Minneapolis, MN
David W. Polly, M.D. Minneapolis, MN

10:47 a.m. - 10:54 a.m.  Floor Discussion

10:55 a.m. - 11:00 a.m.  158. Does a Reported Penicillin Allergy Affect Outcomes Following Elective Posterior Lumbar Fusions?
*Austin J. Roebke, M.D. Columbus, OH
Azeem T. Malik, M.B.B.S. Columbus, OH
Elizabeth M. Yu, M.D. Columbus, OH

11:01 a.m. - 11:06 a.m.  159. Lateral Lumbar Interbody Fusion with Percutaneous Pedicle Screw Fixation (LLIF-PPS): Are We Getting the Sagittal Alignment Right?
*Breana J. Siljander, M.D. Minneapolis, MN
Nicholas R. Dick, B.S. Minneapolis, MN
J. Alex Thomas, M.D. Wilmington, NC
Jonathan N. Sembrano, M.D. Minneapolis, MN
11:07 a.m. - 11:12 a.m. 160. Intravenous and Oral Tranexamic Acid are Equivalent at Reducing Blood Loss in Thoracolumbar Spinal Fusion: A Prospective Randomized Trial Phase 3
*Charles C. Yu, M.D.        Detroit, MI
Omar M. Kadri, M.D.        Detroit, MI
Allen A. Kadado, M.D.        Detroit, MI
Mohsin S. Fidai, M.D.        Detroit, MI
Justin Jabara, M.D.        Detroit, MI
Jacob A. Pawloski, M.D.        Detroit, MI
Morenikeji A. Buraimoh, M.D.        Baltimore, MD
Stephen Bartol, M.D.        Detroit, MI
Gregory P. Graziano, M.D.        Detroit, MI

11:13 a.m. - 11:18 a.m. 161. Efficacy, Safety, and Cost Effectiveness of Intraoperative Tranexamic Acid in Adult Spinal Surgery: A Retrospective Analysis of 214 Cases
*Aidan P. Sweeney, M.S.        Atlanta, GA
Bryan M. Grommersch, B.S.        Atlanta, GA
Joel A. Zaldumbibe, B.S.        Atlanta, GA
Samuel E. Broida, B.S.        Atlanta, GA
Hardeep Singh, M.D.        Atlanta, GA
Keith W. Michael, M.D.        Atlanta, GA

11:18 a.m. - 11:29 a.m. Floor Discussion

11:30 a.m. - 11:35 a.m. 163. S. aureus Decolonization Program Reduces Surgical Site Infection in Pediatric Neuromuscular and Syndromic Spinal Fusion Patients
*Matthew D. Smith, B.S.        San Antonio, TX
Amy L. McIntosh, M.D.        Dallas, TX
Chris Geyer, R.N.        Dallas, TX
Charu Sharma, M.H.A.        Dallas, TX
Kerry A. Wilder, Ph.D.        Dallas, TX

11:36 a.m. – 11:41 a.m. 164. Can a Standardized Infection Reduction Bundle Decrease Pediatric Spinal Deformity Infections?
*George H. Thompson, M.D.        Cleveland, OH
Connie Poe-Kochert, CNP        Cleveland, OH
Jilan Shimberg, M.D.        Cleveland, OH
Christina K. Hardesty, M.D.        Cleveland, OH
Jochen P. Son-Hing, M.D.        Cleveland, OH
R. Justin Mistovich, M.D., M.B.A.        Cleveland, OH

11:41 a.m. – 11:51 a.m. Floor Discussion
11:52 a.m. – 12:01 p.m. **Spotlight Lecture**
Speaker: Marc J. Levine, M.D.
Mercerville, NJ
Topic: Minimally Invasive Lumbar Spine Surgery Why and How

Co-Moderator for Papers #165-175: Paul R. Fleissner, Jr., M.D.
Akron, OH

Co-Moderator for Papers #165-175: James R. Gregory, M.D.
Oklahoma City, OK

12:02 p.m. – 12:07 p.m. 165. Effectiveness of an Adolescent Idiopathic Scoliosis Care Path
*Swetha J. Sundar, M.D. Cleveland, OH
Brittany Hudson, M.S. Cleveland, OH
R. Tracy Ballock, M.D. Cleveland, OH
Ryan C. Goodwin, M.D. Cleveland, OH
David P. Gurd, M.D. Cleveland, OH
Thomas E. Kuvila, M.D. Cleveland, OH
Ernest Y. Young, M.D. Cleveland, OH

12:08 p.m. – 12:13 p.m. 166. Pediatric Supracondylar Humerus Fractures Can Be Safely Treated by Orthopedic Surgeons with and without Pediatric Fellowship Training
*Kelly A. Harms Jenkins, M.D. Kalamazoo, MI
Shannon M. South, B.A. Kalamazoo, MI
Karen M. Bovid, M.D. Kalamazoo, MI
Keith Kenter, M.D. Kalamazoo, MI

12:14 p.m. – 12:19 p.m. 167. Comparison of Spica Casting by Pediatric-Trained Orthopedic Surgeons vs. Non-Pediatric-Trained Orthopedic Surgeons for Pediatric Femoral Shaft Fractures
R. Garrett Steinmetz, M.D. Oklahoma City, OK
Margaret A. Baldwin, M.D. Oklahoma City, OK
Samuel F. Thompson, M.D. Oklahoma City, OK
Christian McCartney, M.D. Oklahoma City, OK
*Hannah Hoopes, M.D. Oklahoma City, OK
Eric B. Johnson, M.D. Oklahoma City, OK
Dylan J. Cannon, B.S. Oklahoma City, OK
William R. Puffinbarger, M.D. Oklahoma City, OK
Garrett Waller, M.D. Oklahoma City, OK

12:20 p.m. – 12:25 p.m. 168. Which Radiographic Technique Better Predicts Postoperative Correction in Idiopathic Scoliosis?
Mehmet Erkilinc, M.D. Cleveland, OH
Anne Marie Dumaine, M.D. Cleveland, OH
Jerry Du, M.D. Cleveland, OH
Connie Poe-Kochert, C.N.P. Cleveland, OH
George H. Thompson, M.D. Cleveland, OH
*R. Justin Mistovich, M.D., M.B.A.

12:25 p.m. - 12:33 p.m. Floor Discussion
12:34 p.m. – 12:39 p.m. 169. Safety and Efficacy of Waterproof Mehta Casting for Early Onset Scoliosis
   *Keegan T. Conry, M.D. Akron, OH
   Lorena V. Floccari, M.D. Akron, OH
   Melanie Morscher, B.S. Akron, OH
   Todd F. Ritzman, M.D. Akron, OH

12:40 p.m. – 12:45 p.m. 170. Aborted AIS Spinal Fusion Due to Persistent Loss of IONM: When is it Safe to Return to the OR
   *Amy L. McIntosh, M.D. Dallas, TX
   Kiley Poppino Dallas, TX
   Spenser Freeman Dallas, TX

12:46 p.m. – 12:51 p.m. 171. Low BMI (<10th Percentile) Increases Complications and Readmissions after Posterior Spinal Fusion in Adolescent Idiopathic Scoliosis
   *Farzam Farahani, B.S.A. Dallas, TX
   Brandon Ramo, M.D. Dallas, TX

12:51 p.m. – 12:58 p.m. Floor Discussion

12:59 p.m. – 1:04 p.m. 172. A Retrospective Study to Identify Factors Contributing to Pressure Ulcers in Pediatric Patients with Lower Extremity Splints
   Kenton M. Barry Dayton, OH
   Robert R. Hoopes Dayton, OH
   Justin L. Thrush Dayton, OH
   Michael C. Albert, M.D. Dayton, OH
   *Joshua Perrin Dayton, OH

1:05 p.m. – 1:10 p.m. 173. Systematic Isolation of Key Parameters for Estimating Skeletal Maturity on Hip Radiographs
   Ryan J. Furdock, M.D. Cleveland, OH
   Alex Benedick, M.D. Cleveland, OH
   Grant Nelson, M.D. Cleveland, OH
   Don T. Li, M.S. New Haven, CT
   Daniel R. Cooperman, M.D. New Haven, CT
   James O. Sanders, M.D. Chapel Hill, NC
   *Raymond W. Liu, M.D. Cleveland, OH

1:11 p.m. – 1:16 p.m. 174. The Frequency of Mediastinal Injury in Acute Posterior Sternoclavicular Dislocation: A Multicenter Study
   Matthew N. Fournier, M.D. Memphis, TN
   Mark R. Sinclair, M.D. Kansas City, MO
   Evan Zheng, B.S. Boston, MA
   David A. Spiegel, M.D. Philadelphia, PA
   Anna Johnson, M.D. Mobile, AL
   Apurva Shah, M.D., M.B.A. Philadelphia, PA
   Anthony Riccio, M.D. Dallas, TX
   Marilyn Elliott, B.S. Dallas, TX
   Donald S. Bae, M.D. Boston, MA
   Jeffrey R. Sawyer, M.D. Memphis, TN
   *Nate Alexander, M.D. Memphis, TN
1:17 p.m. – 1:22 p.m.  175. Pediatric Elbow Dislocations: Which Ones Require Surgical Management?
   *Laura W. Lewallen, M.D.  Chicago, IL
   Marilyn Elliott, B.A.  Dallas, TX
   Amy L. McIntosh, M.D.  Dallas, TX
   Christine A. Ho, M.D.  Dallas, TX

1:22 p.m. – 1:30 p.m.  Floor Discussion
SATURDAY, OCTOBER 2, 2021
BREAKOUT SESSION #13
Topic: Knee Arthroplasty
Room: Magnolia G

Co-Moderator for Papers #176-185: Harold W. Rees, M.D.
Oak Park, IL

Co-Moderator for Papers #176-185: Lucian C. Warth, M.D.
Indianapolis, IN

Paper position #176 deleted

10:30 a.m. - 10:35 a.m. 177. Differentiating Conversion Total Knee Arthroplasty from Primary Total Knee Arthroplasty
Nicholas B. Frisch, M.D., M.B.A. Rochester, MI
*Timothy C. Keating, M.D. Chicago, IL
Tyler E. Calkins, M.D. Memphis, TN
Chris Culvern, M.S. Chicago, IL
Craig J. Della Valle, M.D. Chicago, IL

10:36 a.m. - 10:41 a.m. 178. Comparison of Revision Risk Based on Timing of Knee Arthroscopy Prior to Total Knee Arthroplasty
Safa C. Fassihi, M.D. Washington, DC
Alex Gu, M.D. Washington, DC
Lauren Wessel, M.D. New York, NY
Michael P. Ast, M.D. New York, NY
Peter K. Sculco, M.D. New York, NY
Ryan M. Nunley, M.D. St. Louis, MO
*Alisa Malyavko Washington, DC

10:41 a.m. - 10:51 a.m. Floor Discussion

10:52 a.m. – 10:57 a.m. 179. Is There a Difference Between One Dose and Two Doses of Tranexamic Acid in Total Joint Arthroplasty?
Andrew G. Golz, M.D. Maywood, IL
Heather Yee, B.S. Maywood, IL
*Benjamin J. Davis, M.D. Maywood, IL
Nicholas M. Brown, M.D. Maywood, IL

10:58 a.m. - 11:03 a.m. 180. Revision Rates of Cementless Total Knee Arthroplasty
*William W. Behrens, Jr., M.D. St. Louis, MO
Jeffrey B. Whiting, M.D. St. Louis, MO
Heidi Israel, Ph.D. St. Louis, MO

11:04 a.m. - 11:09 a.m. 181. Survivorship of Primary Nexgen Knee Replacement Comparing Cementless Trabecular Metal to Other Designs of Tibial Component
Michael A. Charters, M.D. Detroit, MI
*Ayooluwa S. Ayoola, B.S. Detroit, MI
Luke Wesemann, B.S. Detroit, MI
Peter L. Lewis, M.B.B.S, FRACS Adelaide, South Australia
Yi Peng, MMed Adelaide, South Australia
W. Trevor North, M.D. Detroit, MI
11:10 a.m. - 11:15 a.m. 182. 25-Year Function after Proximal Tibial Osteotomy: Paired Outcomes in Patients with Bilateral TKAs Following Unilateral Osteotomy
Mario Hevesi, M.D. Rochester, MN
*Ryan R. Wilbur, B.A. Rochester, MN
Lucas K. Keyt, M.D. Rochester, MN
Matthew P. Abdel, M.D. Rochester, MN
Robert T. Trousdale, M.D. Rochester, MN
Bruce A. Levy, M.D. Rochester, MN
Daniel B. F. Saris, M.D., Ph.D. Rochester, MN
Michael J. Stuart, M.D. Rochester, MN
Aaron J. Krych, M.D. Rochester, MN

11:15 a.m. - 11:26 a.m. Floor Discussion

11:27 a.m. - 11:32 a.m. 183. Has Removal from the Inpatient Only List Increased Complications after Total Knee Arthroplasty?
David E. DeMik, M.D., PharmD Iowa City, IA
Christopher N. Carender, M.D. Iowa City, IA
Qiang An, M.B.B.S., M.P.H. Iowa City, IA
Timothy S. Brown, M.D. Houston, TX
*Nicholas A. Bedard, M.D. Iowa City, IA

11:33 a.m. - 11:38 a.m. 184. Impact of Perioperative Pain Control on Knee Range of Motion and Development of Arthrofibrosis Following Primary Total Knee Arthroplasty
*Joshua R. Harmer, M.D. Rochester, MN
Cody C. Wyles, M.D. Rochester, MN
Kristin C. Mara, M.S. Rochester, MN
Nafissese S. Warner, M.D. Rochester, MN
Robert T. Trousdale, M.D. Rochester, MN

11:39 a.m. – 11:44 a.m. 185. Impact of Inpatient Advanced Practice Nurse (APN) Role on Postoperative Outcomes and Patient Satisfaction within a Total Joint Arthroplasty Perioperative Surgical Home
*Daniel A. Hu Chicago, IL
Ryan E. Harold, M.D. Chicago, IL
Albert D’Heurle, M.D. Chicago, IL
Kevin D. Hardt, M.D. Chicago, IL
David W. Manning, M.D. Chicago, IL

11:44 a.m. – 11:51 a.m. Floor Discussion

11:52 a.m. – 12:01 p.m. Spotlight Lecture
Speaker: Lucian C. Warth, M.D.
Indianapolis, IN
Topic: Flexion Instability in TKA: Avoid it in your Primary, Diagnose it in an Unhappy Knee, and Treat it in Revision

Co-Moderator for Papers #186-196: Nicholas B. Frisch, M.D., M.B.A.
Bloomfield Hills, MI

Co-Moderator for Papers #186-196: Craig R. Mahoney, M.D.
Des Moines, IA
12:02 p.m. – 12:07 p.m. 186. Arthrofibrosis after Total Knee Arthroplasty: Incidence, Results, and Risk Factors Over 25 Years
*Aaron R. Owen, M.D. 
Meagan E. Tibbo, M.D. 
Andre J. van Wijnen, Ph.D. 
Mark W. Pagnano, M.D. 
Daniel J. Berry, M.D. 
Matthew P. Abdel, M.D.
Rochester, MN

12:08 p.m. – 12:13 p.m. 187. Extensor Mechanism Reconstruction Using Marlex Mesh, is Postoperative Casting Mandatory?
*Leonard T. Buller, M.D. 
Lucian C. Warth, M.D. 
Evan R. Deckard, B.S.E. 
R. Michael Meneghini, M.D.
Indianapolis, IN

12:14 p.m. – 12:19 p.m. 188. Results of a 3D Printed Porous Titanium Cone Utilizing a Novel Preparation Technique in Revision TKA
*R. Michael Meneghini, M.D. 
Lucian C. Warth, M.D. 
Abhi Seetharam, M.D.
Indianapolis, IN

12:20 p.m. – 12:25 p.m. 189. Demographic Data is More Predictive of Component Size than Digital Templating in Total Knee Arthroplasty
*Micahel P. Murphy, M.D. 
Stephen J. Wallace, M.D. 
Corey J. Schiffman, M.D. 
William H. Adams, Ph.D. 
Nicholas M. Brown, M.D. 
William J. Hopkinson
Maywood, IL

12:25 p.m. – 12:33 p.m. Floor Discussion

12:34 p.m. – 12:39 p.m. 190. Factors Affecting the Risk of Patellar Complications in Primary Total Knee Arthroplasty
*Afton K. Limberg, B.S. 
Meagan E. Tibbo, M.D. 
Matthieu Ollivier, M.D. 
Cathy D. Schleck, B.S. 
Matthew P. Abdel, M.D. 
Nattapol Tammachote, M.D., M.S.
Rochester, MN Marseille, France Rochester, MN Rochester, MN Bangkok, Thailand Rochester, MN

12:40 p.m. – 12:45 p.m. 191. Minimal Clinically Important Difference Achievement in Robotic-Assisted Total Knee Arthroplasty vs. Standard Manual Total Knee Arthroplasty
*Jonathan H. Shaw, M.D. 
Kevin Lindsay-Rivera, M.D. 
Patrick Buckley, B.S. 
Robb M. Weir, M.D. 
Trevor R. Banka, M.D. 
Jason J. Davis, M.D.
Detroit, MI Detroit, MI Detroit, MI Detroit, MI Detroit, MI
12:46 p.m. – 12:51 p.m.  192. Total Knee Arthroplasty: Assessment of Online Patient Education Material
Mary K. Skalitzky, M.D.  Iowa City, IA
*Trevor R. Gulbrandsen, M.D.  Iowa City, IA
Alan G. Shamrock, M.D.  Iowa City, IA
Burke Gao, M.D.  Iowa City, IA
Jacob M. Elkins, M.D., Ph.D.  Iowa City, IA
Timothy S. Brown, M.D.  Houston, TX
Nicholas A. Bedard, M.D.  Iowa City, IA

12:51 p.m. – 12:58 p.m.  Floor Discussion

12:59 p.m. – 1:04 p.m.  194. Robotic-Assisted vs. Manual Unicompartmental Knee Arthroplasty: Equivalent Functional Outcomes in Contemporary Systematic Literature Review and Meta-Analysis
*Michael A. Gaudiani, B.A.  Cleveland, OH
Linsen T. Samuel, M.D., M.B.A.  Cleveland, OH
Atul F. Kamath, M.D.  Cleveland, OH
P. Maxwell Courtney, M.D.  Philadelphia, PA
Gwo-Chin Lee, M.D.  Philadelphia, PA

1:05 p.m. – 1:10 p.m.  195. Do Intra-Articular Corticosteroid Injections Prior to TKA Increase Complication Rates?
*Matthew A. Siegel, M.D.  Chicago, IL
David Rhode, M.D.  Chicago, IL
Elan Volchenko, M.D.  Chicago, IL
Deena Kishawi, M.D.  Chicago, IL
Michael Patetta, M.D.  Chicago, IL
Anshum Sood, M.D.  Chicago, IL
Garrett Schwarzman, M.D.  Chicago, IL
Samuel J. Chmell, M.D.  Chicago, IL
Alfonso Mejia, M.D., M.P.H.  Chicago, IL
Mark H. Gonzalez, M.D., Ph.D.  Chicago, IL

1:11 p.m. – 1:16 p.m.  196. One vs. Two-Year Patient-Reported Outcomes after Total Knee Arthroplasty: Determining Minimum Required Follow-Up
Peter Surace, M.D.  Cleveland, OH
*Hiba K. Anis, M.D.  Cleveland, OH
Marcelo B. Siqueira, M.D.  Cleveland, OH
Alison K. Klika, M.S.  Cleveland, OH
Isaac Briskin, M.S.  Cleveland, OH
Gregory J. Strnad, M.S.  Cleveland, OH
Kurt P. Spindler, M.D.  Cleveland, OH
Carlos A. Higuera, M.D.  Cleveland, OH
Nicolas S. Piuzzi, M.D.  Cleveland, OH

1:16 p.m. – 1:30 p.m.  Floor Discussion
SATURDAY, OCTOBER 2, 2021
BREAKOUT SESSION #14
Topic: Shoulder Arthroplasty
Room: Magnolia F

Co-Moderator for Papers #197-206: Nicholas H. Maassen, M.D.
Chicago, IL

Co-Moderator for Papers #197-206: Matthew J. Teusink, M.D.
Omaha, NE

10:30 a.m. - 10:35 a.m.  197. Primary Reverse Shoulder Arthroplasty with Glenoid and Humeral Lateralization Does Not Result in Increased Blood Metal Ion Levels Regardless of Glenosphere Size: A Randomized Controlled Trial
Ayosh Pareek, M.D. Rochester, MN
*Rachel L. Honig, M.D. Rochester, MN
Ngoc Tram V. Nguyen, B.A. Rochester, MN
Mark E. Morrey, M.D. Rochester, MN
Joaquin Sanchez-Sotelo, M.D., Ph.D. Rochester, MN

10:36 a.m. - 10:41 a.m.  198. Does Early Mobilization Rehabilitation Protocol Affect Pain Scores and Opioid Consumption in Reverse Shoulder Arthroplasty?
Mauricio Drummond, Jr., M.D. Weston, FL
Andres Guerrero, ATC Fort Lauderdale, FL
John Merriam, B.S. Boca Raton, FL
Bhavya Sheth Miami, FL
Gregory Gilot, M.D. Weston, FL
Vani J. Sabesan, M.D. Weston, FL
*Brandon Macknofsky Delray Beach, FL

10:42 a.m. - 10:47 a.m.  199. Dexamethasone Improves Postoperative Pain and Nausea after Total Shoulder Arthroplasty: A Prospective, Randomized Controlled Trial
*Elizabeth A. Klag, M.D. Detroit, MI
Joseph S. Tramer, M.D. Detroit, MI
Noah Kuhlmann Detroit, MI
Stephanie J. Muh, M.D. Detroit, MI

10:47 a.m. - 10:54 a.m.  Floor Discussion

10:55 a.m. - 11:00 a.m.  200. The Utility and Cost of Atypical Cultures in Revision Shoulder Arthroplasty
*Erik S. Contreras, M.D. Columbus, OH
Selina Deiparine, B.S. Columbus, OH
Marisa Ulrich, B.S. Columbus, OH
Paul Alvarez, M.D. Columbus, OH
Julie Y. Bishop, M.D. Columbus, OH
Gregory L. Cvetanovich, M.D. Columbus, OH

11:01 a.m. - 11:06 a.m.  201. Intraoperative Efficiency in Contemporary Total Shoulder Arthroplasty: Is Manual Pressure During Cement Curing Still Necessary with Interference Fit Pegged Glenoids?
Rebecca G. Burr, M.D. Maywood, IL
Andrew M. Schneider, M.D. Maywood, IL
Nickolas G. Garbis, M.D. Maywood, IL
Dane H. Salazar, M.D. Maywood, IL
*Nicholas M. Brown, M.D. Maywood, IL
11:07 a.m. - 11:12 a.m.  202. Effect of 24-Hour vs. Single-Dose Antibiotic Prophylaxis on Infection and Revision Rate Among Patients Undergoing Anatomic and Reverse Total Shoulder Arthroplasty
   Charles T. Fryberger, III, M.D.                         Memphis, TN
   Thomas W. Throckmorton, M.D.                          Memphis, TN
   *Daniel Smigielski, M.D.                              Memphis, TN
   SaeRam Oh, B.S.                                       Memphis, TN
   Jim Wan, Ph.D.                                        Memphis, TN
   Frederick M. Azar, M.D.                               Memphis, TN
   Tyler J. Brolin, M.D.                                 Memphis, TN

11:13 a.m. - 11:18 a.m.  203. Relative Risks of Complications after Revision Shoulder Arthroplasty for Infection
   Vani J. Sabesan, M.D.                                 Weston, FL
   Shad Sommerville, B.S.                                Boynton Beach, FL
   Carlos Rivera                                         Weston, FL
   Kiran Chatha, M.D.                                    Weston, FL
   *Payton Yerke-Hansen                                  Boynton Beach, FL

11:18 a.m. - 11:26 a.m.  Floor Discussion

11:27 a.m. - 11:32 a.m.  204. Is Total Shoulder Arthroplasty (TSA) or Reverse Total Shoulder Arthroplasty (RTSA) Candidacy in an Ambulatory Surgery Center (ASC) Dictated by Safety or Insurance?
   *Anthony J. Marois, M.D.                              Memphis, TN
   Caleb A. Jones, M.D.                                  Memphis, TN
   David L. Bernholt, M.D.                               Memphis, TN
   Frederick M. Azar, M.D.                               Memphis, TN
   Thomas W. Throckmorton, M.D.                          Memphis, TN
   Tyler J. Brolin, M.D.                                 Memphis, TN

11:33 a.m. - 11:38 a.m.  205. Subscapularis Repair Technique Does Not Influence Outcomes Following Reverse Total Shoulder Arthroplasty
   *Jacob T. Hartline, M.D.                             Memphis, TN
   Tyler J. Brolin, M.D.                                 Memphis, TN
   Jim Y. Wan, Ph.D.                                     Memphis, TN
   Daniel T. Dibaba, Ph.D.                              Memphis, TN
   Frederick M. Azar, M.D.                               Memphis, TN
   Thomas W. Throckmorton, M.D.                         Memphis, TN

11:39 a.m. – 11:44 a.m.  206. Acute vs. Delayed Reverse Total Shoulder Arthroplasty for Proximal Humerus Fractures in the Elderly
   *Noah A. Kuhlmann, M.S., B.S.                        West Bloomfield, MI
   Kevin A. Taylor, M.D.                                 West Bloomfield, MI
   Sreten Franovic, M.S., B.S.                          West Bloomfield, MI
   Christopher P. Roche, M.B.A.                          Gainesville, FL
   Pierre-Henri Flurin                                   Bourdeaux, France
   Bradley S. Schoch, M.D.                              Gainesville, FL
   Bradley C. Carofino, M.D.                            Virginia Beach, VA
   Thomas W. Wright, M.D.                               Gainesville, FL
   Joseph D. Zuckerman, M.D.                            New York, NY
   Stephanie J. Muh, M.D.                                West Bloomfield, MI

11:44 a.m. – 11:51 a.m.  Floor Discussion
11:52 a.m. – 12:01 p.m.  **Spotlight Lecture**

**Speaker:** Matthew J. Teusink, M.D.
Omaha, NE

**Topic:** Management of the “Abnormal” Glenoid in Total Shoulder Arthroplasty

**Co-Moderator for Papers #207-217:**

Vani J. Sabesan, M.D.
Weston, FL

**Co-Moderator for Papers #207-217:**

Thomas W. Throckmorton, M.D.
Memphis, TN

12:02 p.m. – 12:07 p.m.  207. **Short-Term Complications Associated with Custom Glenoid Replacements in Complex Shoulder Arthroplasty**

*David M. Matson, M.D.  Minneapolis, MN
Jonathan P. Braman, M.D.  Minneapolis, MN
Alicia K. Harrison, M.D.  Minneapolis, MN

**Paper position #208 deleted**

12:08 p.m. – 12:13 p.m.  209. **Natural History of Glenoid Bone Loss in Primary Glenohumeral Osteoarthritis: How Does Bone Loss Progress Over a Decade?**

Samuel N. Schrader, M.D.  Rochester, MN
Anthony L. Logli, M.D.  Rochester, MN
Ayoosh Pareek, M.D.  Rochester, MN
Ngoc Tram V. Nguyen, B.S.  Rochester, MN
Joaquin Sanchez-Sotelo, M.D., Ph.D.  Rochester, MN
*Yining Lu, M.D.  Rochester, MN


*Bradley M. Kruckeberg, M.D.  Rochester, MN
Devin P. Leland, M.D.  Rochester, MN
Ryan R. Wilbur, B.A.  Rochester, MN
Bryant M. Song, M.S.  Rochester, MN
Christopher D. Bernard, M.D.  Rochester, MN
Aaron J. Krych, M.D.  Rochester, MN
Diane L. Dahm, M.D.  Rochester, MN
Joaquin Sanchez-Sotelo, M.D., Ph.D.  Rochester, MN
Christopher L. Camp, M.D.  Rochester, MN

12:19 p.m. - 12:30 p.m.  **Floor Discussion**

12:31 p.m. – 12:36 p.m.  211. **Value Analysis of Anatomic and Reverse Shoulder Arthroplasty for Glenohumeral Osteoarthritis with an Intact Rotator Cuff**

Teja S. Polisetty, B.S.  Fort Lauderdale, FL
Gagan Grewal, M.D.  Fort Lauderdale, FL
Ryan Colley, D.O.  Fort Lauderdale, FL
Jonathan C. Levy, M.D.  Fort Lauderdale, FL
Hugo C. Rodriguez, Jr., D.O.  Fort Lauderdale, FL
12:37 p.m. – 12:42 p.m. 212. Similar Outcomes for Rotator Cuff Intact and Rotator Cuff Deficient Reverse Total Shoulder Arthroplasty
Zachary K. Pharr, M.D. Memphis, TN
*Tanner Poppe, M.D. Memphis, TN
Jordan D. Walters, M.D. Memphis, TN
Ryan Eads, M.D. Memphis, TN
Ryan N. Walsh, B.S. Memphis, TN
Richard A. Smith, Ph.D. Memphis, TN
Tyler J. Brolin, M.D. Memphis, TN
Frederick M. Azar, M.D. Memphis, TN
Thomas W. Throckmorton, M.D. Memphis, TN

12:43 p.m. – 12:48 p.m. 213. Patients Undergoing Reverse Total Shoulder Arthroplasty have Less Pain and Require Less Opioid Pain Medications Compared to Anatomic Total Shoulder Arthroplasty in the Early Postoperative Period
*Caleb A. Jones, M.D. Memphis, TN
James Stephen Chambers, M.D. Memphis, TN
Andrew D. Renshaw, B.A. Memphis, TN
Mary Virginia Portera, B.A. Memphis, TN
Thomas W. Throckmorton, M.D. Memphis, TN
David L. Bernholt, M.D. Memphis, TN
Frederick M. Azar, M.D. Memphis, TN
Tyler J. Brolin, M.D. Memphis, TN

12:48 p.m. – 12:58 p.m. Floor Discussion

12:59 p.m. – 1:04 p.m. 214. Reverse Total Shoulder Arthroplasty for Patients with Minimal Preoperative Pain: A Matched Cohort Analysis
Teja S. Polisetty, B.S. Fort Lauderdale, FL
Andrew Malarkey, D.O. Fort Lauderdale, FL
Ryan Colley, D.O. Fort Lauderdale, FL
*Andrew Ardeljan, B.S. Fort Lauderdale, FL
Gagan Grewal, M.D. Fort Lauderdale, FL
Jonathan C. Levy, M.D. Fort Lauderdale, FL

1:05 p.m. – 1:10 p.m. 215. Revision Reverse Shoulder Arthroplasty for Anatomic Glenoid Component Loosening was not Universally Successful: A Detailed Analysis of 129 Consecutive Shoulders
*Douglas W. Bartels, M.D. Rochester, MN
Erick Marigi, M.D. Rochester, MN
John W. Sperling, M.D. Rochester, MN
Joaquin Sanchez-Sotelo, M.D., Ph.D. Rochester, MN

1:11 p.m. – 1:16 p.m. 216. The Effect of Compression Stockings on Cerebral Desaturation Events in Obese Patients Undergoing Shoulder Arthroscopy in the Beach-Chair Position: A Randomized Prospective Study
Andrew G. Golz, M.D. Maywood, IL
Michael W. Perry, M.D. Maywood, IL
William Davis, B.S. Maywood, IL
Nickolas G. Garbis, M.D. Maywood, IL
Douglas Evans, M.D. Maywood, IL
Pietro M. Tonino, M.D. Maywood, IL
*Nicholas M. Brown, M.D. Maywood, IL
Dane H. Salazar, M.D. Maywood, IL
1:17 p.m. – 1:22 p.m.  
217. PROMs or Demographics Do Not Effectively Predict Satisfaction Following Reverse Total Shoulder Arthroplasty  
Robert Matar, M.D.  
Robert N. Matar, M.D.  
Nihar S. Shah, M.D.  
Cincinnati, OH  
Brian Grawe, M.D.  
Cincinnati, OH

1:22 p.m. – 1:30 p.m.  
Floor Discussion
SATURDAY, OCTOBER 2, 2021
BREAKOUT SESSION #15
Topic: Sports Medicine
Room: Magnolia D

Co-Moderator for Papers #218-227: Patricia A. Kolowich, M.D.
Novi, MI

Co-Moderator for Papers #218-227: Thomas M. Matelic, M.D.
Grand Rapids, MI

10:30 a.m. - 10:35 a.m. 218. Concussion is Associated with Increased Odds of Lower Extremity Musculoskeletal Injury Among National Basketball Association Players Toufic R. Jildeh, M.D. Detroit, MI
*Fabien Meta, M.D. Detroit, MI
Jacob Young, B.S. Detroit, MI
Brendan Page, B.S. Detroit, MI
Lafi S. Khalil, M.D. Detroit, MI
Benedict Nwachukwu, M.D. New York, NY
Robert W. Westermann, M.D. Iowa City, IA
Kelechi R. Okoroha, M.D. Detroit, MI

10:36 a.m. - 10:41 a.m. 219. The Baseball Swing and Force at the Elbow: Entering Uncharted Territory Through Advanced Motion Capture Patrick C. McCulloch, M.D. Houston, TX
Harvey Oliver, M.D. Houston, TX
*Jordan P. Ankersen, B.S. College Station, TX
Corbin Hedt, PT, DPT, SCS, CSCS Houston, TX
Haley M. Goble, MHA, CCRC Houston, TX
Joshua Daum, B.S. Houston, TX
Aaron Henry, M.S. College Station, TX
Bradley S. Lambert, Ph.D. Houston, TX

Dr. Lambert will give presentation on behalf of Jordan Ankersen, B.S.

10:42 a.m. - 10:47 a.m. 220. Pitching Behaviors in Youth Baseball Pitchers: A Comparison to Pitch Smart Guidelines Justin J. Greiner, M.D. Madison, WI
Cameron A. Trotter, B.S. Madison, WI
Scott Hetzel, M.S. Madison, WI
Brian E. Walczak, D.O. Madison, WI
Timothy A. McGuine, Ph.D. Madison, WI
Geoffrey S. Baer, M.D. Madison, WI

10:47 a.m. - 10:54 a.m. Floor Discussion

10:55 a.m. - 11:00 a.m. 221. Time to Achieving Clinically Significant Outcomes after Meniscal Allograft Transplantation Hailey P. Huddleston, B.S. Chicago, IL
Nabil Mehta, M.D. Chicago, IL
Evan M. Polce, B.S. Chicago, IL
Ron Gilat, M.D. Chicago, IL
Mohamad Alzein, B.S. Chicago, IL
Kevin Parvaresh, M.D. Chicago, IL
Brian J. Cole, M.D., M.B.A. Chicago, IL
Adam B. Yanke, M.D., Ph.D. Chicago, IL
*E. Bailey Terhune, M.D. Chicago, IL
11:01 a.m. - 11:06 a.m. 222. A 10-Year Analysis of Surgical Costs for Arthroscopic Meniscectomy: Hospital Reimbursement Increased Steadily as Surgeon Payments Declined

*Matthew D. LaPrade, B.S. Rochester, MN
Ryan R. Wilbur, B.A. Rochester, MN
Bryant M. Song, M.S. Rochester, MN
Christopher L. Camp, M.D. Rochester, MN
Aaron J. Krych, M.D. Rochester, MN
Brian C. Werner, M.D. Charlottesville, VA

Matthew D. LaPrade, B.S. presenting instead of

Bryant M. Song, M.S.

11:07 a.m. - 11:12 a.m. 223. Medial Meniscus Posterior Root Tear Treatment: A Matched Cohort Comparison of Nonoperative Management, Partial Meniscectomy, and Repair

Christopher D. Bernard, B.S. Rochester, MN
Nicholas I. Kennedy, M.D. Rochester, MN
Adam J. Tagliero, M.D. Rochester, MN
*Bryant M. Song, M.S. Rochester, MN
Matthew D. LaPrade, B.S. Rochester, MN
Lucas K. Keyt, B.S. Rochester, MN
Christopher L. Camp, M.D. Rochester, MN
Daniel B. F. Saris, M.D., Ph.D. Rochester, MN
Bruce A. Levy, M.D. Rochester, MN
Michael J. Stuart, M.D. Rochester, MN
Aaron J. Krych, M.D. Rochester, MN

Matthew D. LaPrade, B.S. presenting instead of

Bryant M. Song, M.S.

11:13 a.m. - 11:18 a.m. 224. Are the Results of Knee Arthroplasty for Arthritis Secondary to Meniscus Root Tear Similar to Primary Osteoarthritis? A Matched Case-Control Comparison

*Adam J. Tagliero, M.D. Rochester, MN
Emil B. Kurian, B.S. Rochester, MN
Matthew D. LaPrade, B.S. Rochester, MN
Bryan M. Song, M.S. Rochester, MN
Ryan R. Wilbur, B.A. Rochester, MN
Daniel B. F. Saris, M.D., Ph.D. Rochester, MN
Michael J. Stuart, M.D. Rochester, MN
Christopher L. Camp, M.D. Rochester, MN
Aaron J. Krych, M.D. Rochester, MN

11:18 a.m. - 11:26 a.m. Floor Discussion

11:27 a.m. - 11:32 a.m. 225. **2020 Dallas B. Phemister Award Presentation**

Positive Reframing: An Important but Underutilized Coping Strategy in Young Athletes Undergoing Sports-Related Knee Surgery

Sean M. Fitzpatrick, M.D. Columbus, OH
*Scott A. Kuzma, M.D. Columbus, OH
Joshua S. Everhart, M.D., M.P.H. Columbus, OH
Alex C. DiBartola, M.D. Columbus, OH
Steven Schiele, M.A. Columbus, OH
Kristie Harris, M.S. Columbus, OH
Charles F. Emery, Ph.D. Columbus, OH
Robert A. Magnussen, M.D., M.P.H. Columbus, OH
Christopher C. Kaeding, M.D. Columbus, OH
David C. Flanigan, M.D. Columbus, OH
11:33 a.m. - 11:38 a.m. 226. Novel Cadaver Model Used to Predict Posterolateral Corner Injury Progression
*Joseph D. Henningsen, M.D. Dayton, OH
Scott W. Huff, M.D. Dayton, OH
Andrew Reichard, B.S. Dayton, OH
Andrew W. Froehle, Ph.D. Dayton, OH
Anil Krishnamurthy, M.D. Dayton, OH

11:39 a.m. – 11:44 a.m. 227. The Effect of Staging Associated Procedures on Outcomes in the Multiligament Injured Knee: A Matched Cohort Analysis
*Nicholas I. Kennedy, M.D. Rochester, MN
Benjamin Freychet, M.D. Rochester, MN
Devin P. Leland, M.D. Rochester, MN
Thomas Sanders, M.D. Rochester, MN
Nate Levy, B.S. Rochester, MN
Aaron J. Krych, M.D. Rochester, MN
Michael J. Stuart, M.D. Rochester, MN
Bruce A. Levy, M.D. Rochester, MN
Rachel L. Honig, M.D. Rochester, MN

11:44 a.m. – 11:51 a.m. Floor Discussion

11:52 a.m. – 12:01 p.m. Spotlight Lecture
Speaker: David C. Flanigan, M.D.
Topic: Biofilm and Bacteria in ACL Surgery. Really? Columbus, OH

Co-Moderator for Papers #228-238: Christopher L. Camp, M.D.
Rochester, MN

Co-Moderator for Papers #228-238: David C. Flanigan, M.D.
Columbus, OH

12:02 p.m. – 12:07 p.m. 228. Accuracy of MRI to Detect Lateral Ulnar Collateral Ligament Tears
*Austin B. Murphy, M.D. Memphis, TN
Thomas W. Throckmorton, M.D. Memphis, TN
Frederick M. Azar, M.D. Memphis, TN
Tyler J. Brolin, M.D. Memphis, TN
David L. Bernholt, M.D. Memphis, TN

12:08 p.m. – 12:13 p.m. 229. The Incidence of Posterolateral Tibial Plateau and Central Lateral Femoral Condylar Impaction Fractures in a Pediatric and Young Adult Population
*David L. Bernholt, M.D. Memphis, TN
Jessica Welter, D.O. Memphis, TN
Dexter A. Witte, III, M.D. Memphis, TN
Thomas W. Throckmorton, M.D. Memphis, TN
Tyler J. Brolin, M.D. Memphis, TN
Frederick M. Azar, M.D. Memphis, TN
230. Adductor Canal Nerve Block vs. Intra-Articular Anesthetic in Knee Arthroscopy: A Prospective Randomized Trial
   Michael W. Perry, M.D. 
   Ryan LeDuc 
   Steven Stakenas, P.A. 
   Audrice Francois, M.D. 
   Douglas A. Evans, M.D. 
   Nicholas M. Brown, M.D.

231. Hamstring Autograft Cruciate Ligament Reconstruction with and without Internal Brace Augmentation: A Matched Cohort Comparison
   *Chad W. Parkes, M.D. 
   Devin P. Leland, M.D. 
   Bruce A. Levy, M.D. 
   Michael J. Stuart, M.D. 
   Diane L. Dahm, M.D. 
   Aaron J. Krych, M.D.

Floor Discussion

233. Evaluating the Early Impact of the COVID-19 Pandemic on Sports Surgery Fellowship Education
   Peter R. Swiatek, M.D. 
   Joseph A. Weiner, M.D. 
   *Bejan A. Alvandi, M.D. 
   Daniel J. Johnson, M.D. 
   Bennet Butler, M.D. 
   Vehniah Tjong, M.D., FRCS(C) 
   Michael A. Terry, M.D.

234. The Difference in Failure Risk When Using Platelet-Rich Plasma for Isolated Meniscus Repairs Compared to Meniscal Repairs with Anterior Cruciate Ligament Reconstruction
   Parker A. Cavendish, B.S. 
   Alexander Eikenberry, B.S. 
   Robert A. Magnussen, M.D., M.P.H. 
   Christopher C. Kaeding, M.D. 
   Joshua S. Everhart, M.D., M.P.H. 
   *David C. Flanigan, M.D.

235. Factors Predicting Lesion Expansion and New Lesion Formation Following Biopsy in Two Stage Cartilage Restoration Procedures
   Robert J. Pettit, M.D. 
   *Nicholas Walla, M.D. 
   Alex C. DiBartola, M.D. 
   Joshua S. Everhart, M.D., M.P.H. 
   Robert A. Magnussen, M.D., M.P.H. 
   Christopher C. Kaeding, M.D. 
   David C. Flanigan, M.D.
1:00 p.m. – 1:05 p.m.  237. Do Financial Conflicts of Interest Influence the Outcomes in Clinical Studies Involving Autologous Chondrocyte Implantation?
Benjamin C. Mayo, M.D. Chicago, IL
Aimee Bobko, M.D. Chicago, IL
Garrett R. Schwarzman, M.D. Chicago, IL
Matthew J. Steffes, M.D. Chicago, IL
*Krishna C. Ravella, M.D. Chicago, IL
Leonard T. Onsen, M.D. Chicago, IL
Erwin Secretov, M.D. Chicago, IL
Mark R. Hutchinson, M.D. Chicago, IL

1:06 p.m. – 1:11 p.m.  238. Aspirin May Not Be Effective in Prevention of Deep Vein Thrombosis after Meniscus Root Repair
Robert J. Pettit, M.D. Columbus, OH
Scott A. Smith, M.D. Columbus, OH
*Alex C. DiBartola, M.D. Columbus, OH
David C. Flanigan, M.D. Columbus, OH
Robert A. Magnussen, M.D., M.P.H. Columbus, OH

1:11 p.m. – 1:30 p.m.  Floor Discussion