

**MID-AMERICA ORTHOPAEDIC ASSOCIATION**

**37<sup>th</sup> Annual Meeting  
April 10-14, 2019  
Hilton Sandestin Beach Golf Resort  
Miramar Beach, FL  
Scientific Program**

\*Denotes speaker

**WEDNESDAY, APRIL 10, 2019**

7:30 a.m. – 5:00 p.m.

**MAOA/ICJR Pre-Meeting**

Topic: Case-Based Controversies in Orthopedic Trauma  
Room: Coral A

5:30 p.m. - 7:00 p.m.

**Company-sponsored workshop (slot currently open)**

**THURSDAY, APRIL 11, 2019**

6:30 a.m. – 7:45 a.m.

**Instructional Course I**

Topic: Rotator Cuff Tears in 2019: When to Repair, Reconstruct, or Replace?

Room: Coral A

Faculty: Julie Y. Bishop, M.D., Moderator  
Columbus, OH

Gregory L. Cvetanovich, M.D.  
Columbus, OH

Grant L. Jones, M.D.  
Columbus, OH

Brian R. Wolf, M.D., M.S.  
Iowa City, IA

6:30 a.m. – 7:45 a.m.

**Instructional Course II**

Topic: Lumps, Bumps, and Bone Lesions – When to Refer to Orthopedic Oncology

Room: Coral B

Faculty: Matthew T. Houdek, M.D., Moderator  
Rochester, MN

Peter S. Rose, M.D.  
Rochester, MN

Brent Witten, M.D.  
Milwaukee, WI

**FIRST PLENARY SESSION**

**Room: Emerald ABC**

8:00 a.m. - 8:05 a.m.

**Welcome and Introductory Remarks**

Robert F. McLain, M.D.  
Solon, OH  
President, MAOA

8:05 a.m. – 8:50 a.m.

**Symposium I**

**Topic:** State Regulations and Opioids – How Can We Still Manage Pain?

Faculty: Vani J. Sabesan, M.D., Moderator  
Weston, FL

8:51 a.m. - 9:24 a.m.

**Scientific Paper Session #1**

Co-Moderator: Carlos A. Higuera, M.D.  
Weston, FL

Co-Moderator: Robert F. McLain, M.D.  
Solon, OH

8:51 a.m. – 8:56 a.m.

1. Long-Term 17-Year Follow-Up After Meniscus Repair with Concomitant Anterior Cruciate Ligament Reconstruction in a Pediatric and Adolescent Population

|                           |               |
|---------------------------|---------------|
| *Adam J. Tagliero, M.D.   | Rochester, MN |
| Vishal S. Desai, B.S.     | Rochester, MN |
| Nicholas I. Kennedy, M.D. | Rochester, MN |
| Christopher L. Camp, M.D. | Rochester, MN |
| Michael J. Stuart, M.D.   | Rochester, MN |
| Bruce A. Levy, M.D.       | Rochester, MN |
| Diane L. Dahm, M.D.       | Rochester, MN |
| Aaron J. Krych, M.D.      | Rochester, MN |

8:57 a.m. – 9:02 a.m.

2. Do Geriatric Hip Fractures Need Follow-Up Past Three Months? A 10-Year Retrospective Review

|                            |               |
|----------------------------|---------------|
| *Philip J. Shaheen, M.D.   | St. Louis, MO |
| Djoldas M. Kuldjanov, M.D. | St. Louis, MO |
| J. Tracy Watson, M.D.      | St. Louis, MO |

9:03 a.m. - 9:08 a.m.

3. Comparison of Total Knee Arthroplasty Outcomes in Patients with and Without Chronic Preoperative Opioid Usage

|                           |                |
|---------------------------|----------------|
| Christian J. Eccles, M.D. | Louisville, KY |
| *Austin F. Smith, M.D.    | Louisville, KY |
| David Hagan, B.S.         | Louisville, KY |
| Trevor Fain, B.S.         | Louisville, KY |
| Shikha Sachdeva, M.D.     | Louisville, KY |
| Langan Smith, B.S.        | Louisville, KY |
| Arthur L. Malkani, M.D.   | Louisville, KY |

9:09 a.m. - 9:14 a.m. 4. Implementation of Procedure-Specific Opioid Guidelines: A Facile Strategy to Improve Consistency and Decrease Excess Prescribing Following Orthopedic Surgery  
Cody C. Wyles, M.D. Rochester, MN  
Mario Hevesi, M.D. Rochester, MN  
Daniel S. Ubl, M.P.H. Rochester, MN  
Elizabeth B. Habermann, Ph.D. Rochester, MN  
Halena M. Gazelka, M.D. Rochester, MN  
Robert T. Trousdale, M.D. Rochester, MN  
Mark W. Pagnano, M.D. Rochester, MN  
\*Tad M. Mabry, M.D. Rochester, MN

9:14 a.m. - 9:24 a.m. Floor Discussion

9:25 a.m. - 9:55 a.m. **CLASSICS IN ORTHOPAEDICS**  
Topic: Extensor Mechanism Complications in TKA: Evaluation and Management  
Speaker: Kevin L. Garvin, M.D.  
Omaha, NE  
  
Introduced by: Robert F. McLain, M.D.  
Solon, OH

9:56 a.m. - 10:07 a.m. **Introduction of Recipients of Education Grants, Multipurpose Resident Grants, and Traveling Fellowships**  
Introductions by: Lisa K. Cannada, M.D.  
Jacksonville, FL

10:08 a.m. - 10:13 a.m. **Traveling Fellowship Presentation**  
Steven M. Cherney, M.D.  
Little Rock, AR  
2018-2019 Recipient

10:14 a.m. - 10:30 a.m. **Historian's Report**  
Robert L. Kurland, M.D.  
Rochester, MN  
Room: Emerald ABC

10:30 a.m. - 10:40 a.m. **First Member Business Meeting**  
Room: Emerald ABC

10:30 a.m. – 11:00 a.m. **Poster Viewing** – presenters will be available (CME credit will be offered)  
Room: Coastal Foyer

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

**Page 4**

11:00 a.m. - 11:30 a.m.

**Ask the Expert and Open Case Discussions**

Topic: How Do I Deal with Hip Instability?

Room: Emerald ABC

Faculty: Rafael J. Sierra, M.D., Moderator  
Rochester, MN

Trevor G. Murray, M.D.  
Cleveland, OH

Ryan M. Nunley, M.D.  
St. Louis, MO

Glenn D. Wera, M.D.  
Cleveland, OH

11:30 a.m. - 12:00 p.m.

**Ask the Expert and Open Case Discussions**

Topic: From Native Septic Joints to Chronic PJI

Room: Emerald ABC

Faculty: Matthew P. Abdel, M.D., Moderator  
Rochester, MN

Curtis W. Hartman, M.D.  
Omaha, NE

James A. Keeney, M.D.  
Columbia, MO

Nicolas O. Noiseux, M.D.  
Iowa City, IA

12:00 p.m. - 1:00 p.m.

**Flexion Therapeutics-sponsored lunch/presentation (No CME offered)**

**Room: Coral A vs. Emerald D**

Topic: TBD

Speaker:







**THURSDAY, APRIL 11, 2019**  
**BREAKOUT SESSION #2**  
**Topic: Sports Medicine**  
**Room: Coral A**

Co-Moderator: Julie Y. Bishop, M.D.  
Columbus, OH

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

- 1:15 p.m. – 1:20 p.m.      17.    The Impact of a Standardized Multimodal Analgesia Protocol on Opioid Prescriptions After Common Arthroscopic Procedures  
Christina J. Hajewski, M.D.      Iowa City, IA  
\*Robert W. Westermann, M.D.      Iowa City, IA  
Andrew J. Holte, B.S.      Iowa City, IA  
Alan G. Shamrock, M.D.      Iowa City, IA  
Matthew J. Bollier, M.D.      Iowa City, IA  
Brian R. Wolf, M.D., M.S.      Iowa City, IA
- 1:21 p.m. – 1:26 p.m.      18.    Reduction of Opioid Over-Prescribing and Consumption After Upper Extremity Surgery Through a Predictive Pain Calculator and Comprehensive Pain Plan  
Marissa D. Jamieson, M.D.      Columbus, OH  
Joshua S. Everhart, M.D.      Columbus, OH  
\*James S. Lin, M.D.      Columbus, OH  
Sonu A. Jain, M.D.      Columbus, OH  
Hisham M. Awan, M.D.      Columbus, OH  
Kanu S. Goyal, M.D.      Columbus, OH
- 1:27 p.m. – 1:32 p.m.      19.    The Effect of Preoperative Opioid Use on Outcome Scores and Postoperative Opioid Use After ACL Reconstruction  
\*Christina J. Hajewski, M.D.      Iowa City, IA  
Andrew Freese, M.D.      Iowa City, IA  
Alan G. Shamrock, M.D.      Iowa City, IA  
Matthew J. Bollier, M.D.      Iowa City, IA  
Brian R. Wolf, M.D., M.S.      Iowa City, IA  
Robert W. Westermann, M.D.      Iowa City, IA
- 1:33 p.m. – 1:38 p.m.      20.    Preoperative Opioid Use and Degree of Arthritis Predicts Duration of Postoperative Opioid Use Following Arthroscopic Meniscus Surgery  
\*Kevin A. Taylor, M.D.      Detroit, MI  
Toufic R. Jildeh, M.D.      Detroit, MI  
Lafi S. Khalil, M.D.      Detroit, MI  
Kelechi R. Okorooha, M.D.      Detroit, MI  
Robert N. Matar, M.S.      Mt. Pleasant, MI  
Alexander Geisenhoff, B.S.      Detroit, MI  
Vasilios Moutzouros, M.D.      Detroit, MI
- 1:38 p.m. – 1:45 p.m.      Floor Discussion





THURSDAY, APRIL 11, 2019  
BREAKOUT SESSION #3

Topic: **Trauma**

Room: **Coral B**

Co-Moderator: J. Lawrence Marsh, M.D.  
Iowa City, IA

Co-Moderator: Justin C. Siebler, M.D.  
Omaha, NE

1:15 p.m. – 1:20 p.m.

29. Short Cephalomedullary Nails Superior to Long Cephalomedullary Nails for Pertrochanteric Hip Fractures: A Randomized Prospective Study  
\*Steven F. Shannon, M.D. Rochester, MN  
Brandon J. Yuan, M.D. Rochester, MN  
William W. Cross, III, M.D. Rochester, MN  
Jonathan D. Barlow, M.D. Rochester, MN  
Michael E. Torchia, M.D. Rochester, MN  
Pamela K. Holte, APRN, M.S.N., C.N.P. Rochester, MN  
S. Andrew Sems, M.D. Rochester, MN

1:21 p.m. – 1:26 p.m.

30. Accurate Prediction of Antegrade or Retrograde Femoral Intramedullary Implant Length from Patient Height: A Review of 608 Cases  
\*Jeffrey M. Pearson, M.D. Birmingham, AL  
Gerald McGwin, Ph.D., M.S. Birmingham, AL  
Jonathan H. Quade, M.D. Birmingham, AL

**Paper position #31 deleted**

1:27 p.m. – 1:32 p.m.

32. Hybrid Screw Fixation for Femoral Neck Fractures: Does it Prevent Mechanical Failure?  
\*Derly O. Cuellar, III, M.D. St. Louis, MO  
J. Tracy Watson, M.D. St. Louis, MO  
J. Gary Bledsoe, Ph.D. St. Louis, MO

1:32 p.m. – 1:42 p.m.

Floor Discussion

1:43 p.m. – 1:48 p.m.

33. Tibia Fractures and NSAIDs. Does It Make a Difference? A Multicenter Retrospective Study  
\*Lauren M. Fader, M.D. Louisville, KY  
Rodolfo Zamora, M.D. Louisville, KY  
John E. Whitaker, B.S. Louisville, KY  
Miguel Lopez, B.S. Louisville, KY  
Mauricio Parra, M.D. Santiago, Chile

1:49 p.m. – 1:54 p.m.

34. Effect of Postoperative Nonsteroidal Anti-Inflammatory Drugs (NSAIDs) on Nonunion Rates in Long Bone Fractures  
\*William A. Tucker, M.D. Kansas City, KS  
Mitchell C. Birt, M.D. Kansas City, KS  
Greg A. Horton, M.D. Kansas City, KS  
Archie A. Heddings, M.D. Kansas City, KS



**THURSDAY, APRIL 11, 2019  
BREAKOUT SESSION #4**

**Topic: Hip and Knee Arthroplasty Infection**  
**Room: Emerald ABC**

Co-Moderator: Matthew P. Abdel, M.D.  
Rochester, MN

Co-Moderator: Carlos A. Higuera, M.D.  
Weston, FL

**Paper position #41 deleted**

- |                       |     |  |
|-----------------------|-----|--|
| 1:15 p.m. – 1:20 p.m. | 42. | Protocol-Based Dual-Antibiotic Protocol Effectively Reduces Prosthetic Joint Infection Rates<br>*Mark K. Lane, M.D. Columbia, MO<br>Ben Hansen, M.D. Columbia, MO<br>Ajay Aggarwal, M.D. Columbia, MO<br>James A. Keeney, M.D. Columbia, MO  |
| 1:21 p.m. – 1:26 p.m. | 43. | Efficacy of Intraoperative Prophylactic Techniques for Prevention of Periprosthetic Joint Infection: Superiority of Betadine Against Multiple Bacteria<br>Kyle H. Cichos, B.S. Birmingham, AL<br>Rachel Andrews, B.S. Birmingham, AL<br>Whitney Narmore, B.S. Birmingham, AL<br>Frank Wolschendorf, Ph.D. Birmingham, AL<br>*Elie S. Ghanem, M.D. Birmingham, AL   |
| 1:27 p.m. – 1:32 p.m. | 44. | Povidone-Iodine Irrigation Prior to Wound Closure Did Not Decrease Infection in Primary Total Knee and Hip Arthroplasties: An Analysis of 11,738 Cases<br>*Nicholas M. Hernandez, M.D. Rochester, MN<br>Adam Hart, M.D. Rochester, MN<br>Michael J. Taunton, M.D. Rochester, MN<br>Tad M. Mabry, M.D. Rochester, MN<br>Matthew P. Abdel, M.D. Rochester, MN<br>Kevin I. Perry, M.D. Rochester, MN  |
| 1:32 p.m. – 1:42 p.m. |     | Floor Discussion   |
| 1:43 p.m. – 1:48 p.m. | 45. | Dilute Betadine Lavage Reduces the Risk of Acute Postoperative Infection in Aseptic Revision Total Knee or Hip Arthroplasty: Interim Analysis of a Randomized Controlled Trial<br>*Tyler E. Calkins, B.S. Chicago, IL<br>Chris Culvern, M.S. Chicago, IL<br>Denis Nam, M.D., MSc Chicago, IL<br>Tad L. Gerlinger, M.D. Chicago, IL<br>Brett R. Levine, M.D., M.S. Chicago, IL<br>Scott M. Sporer, M.D. Chicago, IL<br>Craig J. Della Valle, M.D. Chicago, IL |











**FRIDAY, APRIL 12, 2019**

6:30 a.m. – 7:45 a.m.

**Instructional Course III**

Topic: The Young Adult Hip – What is the Issue?  
Room: Coral A

Faculty: W. Kelton Vasileff, M.D., Moderator  
Columbus, OH

Jeffrey J. Nepple, M.D.  
St. Louis, MO

Rafael J. Sierra, M.D.  
Rochester, MN

Geoffrey Van Thiel, M.D., M.B.A.  
Rockford, IL

6:30 a.m. – 7:45 a.m.

**Instructional Course IV**

Topic: Why Didn't That Work? Techniques That Work Great in the  
Textbook...But Not Always in Practice  
Room: Coral B

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

**SECOND PLENARY SESSION**

**Room: Emerald ABC**

8:00 a.m. - 8:03 a.m.

Assemble/Announcements

8:03 a.m. - 8:33 a.m.

**PRESIDENTIAL GUEST SPEAKER**

Topic: Closing the Gap Between Health Care and Health  
Speaker: James N. Weinstein, D.O., M.S.  
Boston, MA

Introduced by: Robert F. McLain, M.D.  
Solon, OH

8:34 a.m. - 9:11 a.m.

**Symposium II**

**Topic:** Emerging Trends in Health Care

Faculty: Wael K. Barsoum, M.D., Moderator  
Weston, FL

9:12 a.m. – 9:27 a.m.

**AAOS Report**

Kristy L. Weber, M.D.  
Philadelphia, PA  
President, American Academy of Orthopaedic Surgeons

Introduced by:

9:27 a.m. - 9:32 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: Carlos A. Higuera, M.D.  
Weston, FL

Co-Moderator: Carlos A. Higuera, M.D.  
Weston, FL

Co-Moderator: Craig R. Mahoney, M.D.  
West Des Moines, IA

9:32 a.m. - 9:37 a.m.

66. **Edward D. Henderson, M.D. Award Presentation**

Prior Hip or Knee PJI in Another Joint Increases Risk of PJI after Primary TKA by Three Fold: A Matched Control Study

|                          |               |
|--------------------------|---------------|
| *Brian P. Chalmers, M.D. | Rochester, MN |
| John T. Weston, 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 |

9:38 a.m. - 9:43 a.m.

67. **E. W. Johnson, Jr., M.D. Award Presentation**

Increased PJI Risk Following Primary TKA and THA with Alternatives to Cefazolin: The Value of Allergy Testing for Antibiotic Prophylaxis

|                               |               |
|-------------------------------|---------------|
| *Cody C. Wyles, M.D.          | Rochester, MN |
| Mario Hevesi, M.D.            | Rochester, MN |
| Douglas R. Osmon, M.D.        | Rochester, MN |
| Miguel A. Park, M.D.          | Rochester, MN |
| Elizabeth B. Habermann, Ph.D. | Rochester, MN |
| David G. Lewallen, M.D.       | Rochester, MN |
| Daniel J. Berry, M.D.         | Rochester, MN |
| Rafael J. Sierra, M.D.        | Rochester, MN |

9:44 a.m. – 9:49 a.m.

68. **Carl L. Nelson, M.D. Award Presentation**

Large Opioid Prescriptions Are Unnecessary After Total Joint Arthroplasty: A Randomized Controlled Trial

|                            |             |
|----------------------------|-------------|
| *Brian Darrith, M.D.       | Chicago, IL |
| Charles P. Hannon, M.D.    | Chicago, IL |
| Tyler E. Calkins, B.S.     | Chicago, IL |
| Jefferson Li, B.S.         | Chicago, IL |
| Chris Culvern, M.S.        | Chicago, IL |
| Denis Nam, M.D., MSc       | Chicago, IL |
| Tad L. Gerlinger, M.D.     | Chicago, IL |
| Craig J. Della Valle, M.D. | Chicago, IL |

9:50 a.m. – 9:55 a.m.

69. **Dallas B. Phemister Award Presentation**  
Walking Greater Than Five Feet After Hip Fracture Surgery Decreases the Risk of Complications, Including Death  
\*Richard J. VanTienderen, D.O. El Paso, TX  
Isaac Fernandez, M.D. El Paso, TX  
Dominic Campano, M.D. El Paso, TX  
Michael S. Reich, M.D. El Paso, TX  
Mai P. Nguyen, M.D. El Paso, TX

9:55 a.m. – 10:00 a.m.

Floor Discussion

10:00 a.m. - 10:30 a.m.

**CLASSICS IN ORTHOPAEDICS**

Topic: Malignancies Around the Major Joints: Current Surgical Treatment Options  
Speaker: Kristy L. Weber, M.D.  
Philadelphia, PA

Introduced by: Robert F. McLain, M.D.  
Solon, OH

10:30 a.m. – 11:00 a.m.

**Poster Viewing** – presenters will be available (CME credit will be offered)  
Room: Coastal 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, APRIL 12, 2019**  
**BREAKOUT SESSION #6**  
**Topic: Foot and Ankle**  
**Room: Coral D**

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

Co-Moderator: Norman S. Turner, M.D.  
Rochester, MN

11:00 a.m. - 11:05 a.m.

70. Effects of Aging on Walking Ankle Kinematics in the Sagittal Plane in an Asymptomatic Population  
Trenden L. Flanigan, M.D. Dayton, OH  
\*Jonathan A. Rogozinski, M.D. Dayton, OH  
Grant M. Slack, B.S. Dayton, OH  
Max L. Quellhorst, B.S. Dayton, OH  
Andrew W. Froehle, Ph.D. Dayton, OH  
Richard T. Laughlin, M.D. Cincinnati, OH

11:06 a.m. - 11:11 a.m.

71. Revisiting the Prevalence of Associated Co-Pathologies in Chronic Lateral Ankle Instability: Are There Any Predictors of Outcome?  
\*Aaradhana Jha, M.D. Birmingham, AL  
Ibukunoluwa Araoye, M.S. Birmingham, AL  
Zachariah W. Pinter, B.S. Birmingham, AL  
Sung R. Lee, B.S. Birmingham, AL  
Cesar de Cesar Netto, M.D. Birmingham, AL  
Parke Hudson, B.S. Birmingham, AL  
Chandan Basetty Birmingham, AL  
Alan Hsu, B.S. Birmingham, AL  
Haley McKissack, B.S. Birmingham, AL  
Ashish Shah, M.D. Birmingham, AL

11:12 a.m. - 11:17 a.m.

72. Early vs. Delayed Mobilization Postoperative Protocols for Primary Lateral Ankle Ligament Repair: A Systematic Review  
\*Matthew L. G. Vopat, M.D. Kansas City, KS  
Armin Tarakemeh, B.S. Kansas City, KS  
Brandon L. Morris, M.D. Kansas City, KS  
Maaz Hassan, B.S. Kansas City, KS  
Patrick Garvin, B.S. Kansas City, KS  
Scott M. Mullen, M.D. Kansas City, KS  
J. Paul Schroepfel, M.D. Kansas City, KS  
Bryan G. Vopat, M.D. Kansas City, KS

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

Floor Discussion

- 11:26 a.m. - 11:31 a.m. 73. Postoperative Tourniquet Pain in Patients Undergoing Foot and Ankle Surgery  
Eva Lehtonen, B.S. Birmingham, AL  
Martim Pinto, M.D. Birmingham, AL  
Harshadkumar A. Patel, M.D. Durham, NC  
Promil Kukreja, M.D. Birmingham, AL  
\*Jun Kit He, B.S. Birmingham, AL  
Ashish Shah, M.D. Birmingham, AL  
Sameer M. Naranje, M.D. Birmingham, AL
- 11:32 a.m. - 11:37 a.m. 74. Postoperative Pain and Opioid Use Following Surgical Treatment of Ankle Fractures  
John G. Anderson, M.D. Grand Rapids, MI  
Donald R. Bohay, M.D. Grand Rapids, MI  
John D. Maskill, M.D. Grand Rapids, MI  
\*Matthew J. Pate, B.S. Grand Rapids, MI  
Jacob T. Hall, B.S. Grand Rapids, MI  
Michelle A. Padley, M.S. Grand Rapids, MI
- 11:38 a.m. - 11:43 a.m. 75. Preoperative Opioid Use is Associated with Prolonged Postoperative Opioid Use Following Total Ankle Arthroplasty  
\*David E. DeMik, M.D. Iowa City, IA  
Christopher C. Cychosz, M.D. Iowa City, IA  
Nicholas A. Bedard, M.D. Iowa City, IA  
Cameron Barton, M.D. Iowa City, IA  
Kyle R. Duchman, M.D. Iowa City, IA
- 11:43 a.m. - 11:51 a.m. Floor Discussion
- 11:52 a.m. – 12:00 p.m. **Spotlight Lecture**  
Speaker: Richard T. Laughlin, M.D.  
Cincinnati, OH  
Topic:
- 12:01 p.m. – 12:06 p.m. 76. Arthroscopy in Lateral Ankle Ligament Surgery: Costs, Complications, Intra-Articular Defect Diagnosis, and Reoperations  
G. Matthew Heenan Kansas City, KS  
\*Kisan Parikh, M.D. Kansas City, KS  
Armin Tarakemeh, B.S. Kansas City, KS  
J. Paul Schroepfel, M.D. Kansas City, KS  
Scott M. Mullen, M.D. Kansas City, KS  
Bryan G. Vopat, M.D. Kansas City, KS
- 12:07 p.m. - 12:12 p.m. 77. Nationwide Analysis of Total Ankle Replacement and Ankle Arthrodesis in Medicare Patients: Trends, Complications, and Cost  
William A. Tucker, M.D. Kansas City, KS  
Brandon L. Morris, M.D. Kansas City, KS  
Brandon L. Barnds, M.D. Kansas City, KS  
Armin Tarakemeh, B.S. Kansas City, KS  
Scott M. Mullen, M.D. Kansas City, KS  
J. Paul Schroepfel, M.D. Kansas City, KS  
Bryan G. Vopat, M.D. Kansas City, KS

- 12:13 p.m. - 12:18 p.m. 78. A Comparative Analysis of Cost and Early Complications in Outpatient vs. Inpatient Hindfoot Fusion  
\*John T. Wilson, B.S. Birmingham, AL  
Andrew S. Moon, B.S. Birmingham, AL  
Harshadkumar A. Patel, M.D. Durham, NC  
Andrew McGee, B.S. Birmingham, AL  
Gerald McGwin, Ph.D., M.S. Birmingham, AL  
Brooklyn Williamson Birmingham, AL  
Nicholas Dahlgren, B.S. Birmingham, AL  
Sierra Phillips, M.D. Birmingham, AL  
Ashish Shah, M.D. Birmingham, AL  
Sameer M. Naranje, M.D. Birmingham, AL
- 12:18 p.m. – 12:26 p.m. Floor Discussion
- 12:27 p.m. – 12:32 p.m. 79. Effect of Type 1 and Type 2 Diabetes Mellitus on Complication and Reoperation Rates of Ankle Arthrodesis and Total Ankle Arthroplasty  
William A. Tucker, M.D. Kansas City, KS  
Brandon L. Morris, M.D. Kansas City, KS  
Brandon L. Barnds, M.D. Kansas City, KS  
Armin Tarakemeh, B.S. Kansas City, KS  
Scott M. Mullen, M.D. Kansas City, KS  
J. Paul Schroepel, M.D. Kansas City, KS  
Bryan G. Vopat, M.D. Kansas City, KS
- 12:33 p.m. - 12:38 p.m. 80. Incidence of Venous Thromboembolism in Orthopedic Foot and Ankle Surgeries: A Retrospective Database Analysis for Years 2006-2015  
Samuel R. Huntley, B.S. Littleton, CO  
Eildar Abyar, M.D. Birmingham, AL  
Eva Lehtonen, B.S. Birmingham, AL  
Harshadkumar A. Patel, M.D. Durham, NC  
Alan Hsu, B.S. Birmingham, AL  
Haley McKissack, B.S. Birmingham, AL  
\*Matthew Anderson, B.S. Birmingham, AL  
Ashish Shah, M.D. Birmingham, AL  
Sameer M. Naranje, M.D. Birmingham, AL
- 12:39 p.m. - 12:44 p.m. 81. Surgical Infection Incidence Associated with Summer Months in Foot and Ankle Surgery  
Samuel R. Huntley, B.S. Littleton, CO  
Sung Lee, B.S. Birmingham, AL  
Rishi Kalra, B.S. Birmingham, AL  
\*Joseph X. Robin, B.S. Birmingham, AL  
Gerald McGwin, Ph.D., M.S. Birmingham, AL  
Sameer M. Naranje, M.D. Birmingham, AL  
Ashish Shah, M.D. Birmingham, AL

|                         |     |   |
|-------------------------|-----|---|
| 12:45 p.m. - 12:50 p.m. | 82. | Outcomes of Inpatient vs. Outpatient Elective Foot and Ankle Surgery<br>*Haley McKissack, B.S. Birmingham, AL<br>Samuel R. Huntley, B.S. Littleton, CO<br>Andrew McGee, B.S. Birmingham, AL<br>Luke Johnson, B.S. Birmingham, AL<br>Hank Debell, B.S. Birmingham, AL<br>Gerald McGwin, Ph.D., M.S. Birmingham, AL<br>Sameer M. Naranje, M.D. Birmingham, AL<br>Chason Farnell, B.S. Birmingham, AL<br>Tyler Montgomery, B.S. Birmingham, AL<br>Ashish Shah, M.D. Birmingham, AL |
| 12:50 p.m. - 1:00 p.m.  |     | Floor Discussion  |

**FRIDAY, APRIL 12, 2019**  
**BREAKOUT SESSION #7**  
**Topic: Sports/Shoulder/Elbow**  
**Room: Emerald ABC**

Co-Moderator: Nicholas H. Maassen, M.D.  
Houston, TX

Co-Moderator: Brian R. Wolf, M.D., M.S.  
Iowa City, IA

- 11:00 a.m. - 11:05 a.m.      83.      Surgical Decompression for Thoracic Outlet Syndrome in Adolescent Patients  
\*Erin F. Ransom, M.D.      Birmingham, AL  
Heather Minton, B.S.      Birmingham, AL  
Bradley L. Young, M.D.      Charlotte, NC  
Gerald McGwin, Ph.D., M.S.      Birmingham, AL  
Brent A. Ponce, M.D.      Birmingham, AL  
Richard D. Meyer, M.D.      Birmingham, AL
- 11:06 a.m. - 11:11 a.m.      84.      Failure Mode Differences with Simple vs. Mattress Sutures in Arthroscopic Bankart Repairs: A Cadaveric Study  
\*Derrick M. Knapik, M.D.      Cleveland, OH  
Shana N. Miskovsky, M.D.      Cleveland, OH
- 11:12 a.m. - 11:17 a.m.      85.      Baseline Characteristics and Two-Year Outcomes of Patients with and without Maladaptive Psychopathological Conditions Undergoing Shoulder Stabilization Surgery  
\*Kyle R. Duchman, M.D.      Iowa City, IA  
Brian R. Wolf, M.D., M.S.      Iowa City, IA  
Natalie A. Glass, Ph.D.      Iowa City, IA  
Julie Y. Bishop, M.D.      Columbus, OH  
Keith M. Baumgarten, M.D.      Sioux Falls, SD  
Carolyn M. Hettrich, M.D., M.P.H.      Lexington, KY
- 11:17 a.m. - 11:25 a.m.      Floor Discussion
- 11:26 a.m. - 11:31 a.m.      86.      Greater Muscle Degeneration in Aged Mice After Rotator Cuff Energy  
\*Abhinav K. Sharma, B.S.      Los Angeles, CA  
Paras Shah, B.S.      Los Angeles, CA  
Regina Husman, B.S.      Los Angeles, CA  
Gina M. Mosich, M.D.      Los Angeles, CA  
Allison Ariniello, B.S.      Los Angeles, CA  
Bruno Peault, Ph.D.      Edinburgh, UK  
Ayelet Dar, Ph.D.      Los Angeles, CA  
Frank A. Petrigliano, M.D.      Los Angeles, CA
- 11:32 a.m. - 11:37 a.m.      87.      The Proximal and Distal Effects of Blood Flow Restriction Therapy on Upper and Lower Extremity Strengthening: A Randomized Controlled Trial  
\*Eric N. Bowman, M.D.      Nashville, TN  
Rami El-Shaar, M.D.      Los Angeles, CA  
Heather Milligan, B.S.      Los Angeles, CA  
Greg Jue, B.S.      Los Angeles, CA  
Karen Mohr, B.S.      Los Angeles, CA  
Orr Limpisvasti, M.D.      Los Angeles, CA

- 11:38 a.m. - 11:43 a.m. 88. Do Outcomes and Complications Differ When Total Elbow Arthroplasty is Performed Acutely for a Distal Humerus Fracture vs. After Prior Attempted Internal Fixation?  
Anthony L. Logli, M.D. Rochester, MN  
Steven F. Shannon, M.D. Rochester, MN  
\*Chelsea C. Boe, M.D. Rochester, MN  
Mark E. Morrey, M.D. Rochester, MN  
Shawn W. O'Driscoll, M.D., Ph.D. Rochester, MN  
Joaquin Sanchez-Sotelo, M.D., Ph.D. Rochester, MN
- 11:43 a.m. - 11:51 a.m. Floor Discussion
- 11:52 a.m. – 12:00 p.m. **Spotlight Lecture**  
Speaker: Nicholas H. Maassen, M.D.  
Houston, TX  
Topic:
- 12:01 p.m. – 12:06 p.m. 89. Impact of Caffeine on Early Rotator Cuff Healing in a Rat Model  
Bradley L. Young, M.D. Charlotte, NC  
\*Sierra Phillips, M.D. Birmingham, AL  
Martim Pinto, M.D. Birmingham, AL  
Harshadkumar A. Patel, M.D. Durham, NC  
Andrew S. Moon, B.S. Birmingham, AL  
Eva Lehtonen, B.S. Birmingham, AL  
Evan Sheppard, M.D. Birmingham, AL  
Trevor Stubbs, M.D. Birmingham, AL  
Shawn R. Gilbert, M.D. Birmingham, AL  
Amit Momaya, M.D. Birmingham, AL  
Eugene W. Brabston, M.D. Birmingham, AL  
Gerald McGwin, Ph.D., M.S. Birmingham, AL  
Robin Collingwood, M.D. Birmingham, AL  
Jun Kit He, B.S. Birmingham, AL  
Brent A. Ponce, M.D. Birmingham, AL
- 12:07 p.m. - 12:12 p.m. 90. Preoperative Narcotic Use and Resiliency Scores Do Not Predict Changes in Sleep Quality Following Arthroscopic Rotator Cuff Repair  
\*Georgina Glogovac, M.D. Cincinnati, OH  
Adam P. Schumaier, M.D. Cincinnati, OH  
Yehia H. Bedeir, M.D. Cincinnati, OH  
Angelo J. Colosimo, M.D. Cincinnati, OH  
Brian M. Grawe, M.D. Cincinnati, OH
- 12:13 p.m. - 12:18 p.m. 91. Deltoid Compartment Pressures Do Not Significantly Affect Postoperative Narcotic Utilization Following Arthroscopic Rotator Cuff Repair  
Derrick M. Knapik, M.D. Cleveland, OH  
Michael J. Salata, M.D. Cleveland, OH  
\*James E. Voos, M.D. Cleveland, OH  
Robert J. Gillespie, M.D. Cleveland, OH
- 12:18 p.m. – 12:26 p.m. Floor Discussion

- 12:27 p.m. – 12:32 p.m.      92.      Do Anatomic Changes Found in Pitching Elbow After a Season of Pitching Resolve with Offseason Rest: A Dynamic Ultrasound Study  
\*Lafi S. Khalil, M.D.      Detroit, MI  
Kelechi R. Okoroha, M.D.      Detroit, MI  
Toufic R. Jildeh, M.D.      Detroit, MI  
Robert N. Matar, M.S.      Mt. Pleasant, MI  
Mohsin S. Fidai, M.D.      Detroit, MI  
Joseph S. Tramer, M.D.      Detroit, MI  
Eric C. Makhni, M.D., M.B.A.      Detroit, MI  
Vasilios Moutzouros, M.D.      Detroit, MI
- 12:33 p.m. - 12:38 p.m.      93.      Progressive Elbow MRI Abnormalities in Little League Baseball Players Are Common: A Three-Year Longitudinal Evaluation  
\*Joshua B. Holt, M.D.      Iowa City, IA  
Tracey Bastrom, M.S.      San Diego, CA  
Jerry Dwek, M.D.      San Diego, CA  
Philip Sterns, R.N.      San Diego, CA  
Morgan Dennis, B.S.      San Diego, CA  
Andrew T. Pennock, M.D.      San Diego, CA
- 12:39 p.m. - 12:44 p.m.      94.      Revision Ulnar Collateral Ligament Reconstruction in Professional Baseball: Current Trends, Surgical Techniques, and Outcomes  
Christopher L. Camp, M.D.      Rochester, MN  
Vishal S. Desai, B.S.      Rochester, MN  
\*Christopher D. Bernard, B.S.      Rochester, MN  
Stan Conte      Santa Clara, CA  
Christopher S. Ahmad, M.D.      New York, NY  
Michael Ciccotti, M.D.      Philadelphia, PA  
John D'Angelo, B.S.      New York, NY  
Timothy B. Griffith, M.D.      Atlanta, GA
- 12:45 p.m. - 12:50 p.m.      95.      Reconstruction of the Medial Ulnar Collateral Ligament of the Elbow: Comparison of a Novel Anatomic Technique to the Docking Technique  
\*Christopher L. Camp, M.D.      Rochester, MN  
Bill Benavitz      Naples, FL  
John Konicek, B.S.      Naples, FL  
Joshua S. Dines, M.D.      New York, NY
- 12:50 p.m. - 1:00 p.m.      Floor Discussion















- 11:32 a.m. - 11:37 a.m. 126. The Education and Training of Future Hip Arthroscopists: Aggregate Recommendations of High-Volume Surgeons  
\*Matthew J. Steffes, M.D. Chicago, IL  
Austin W. Chen, M.D. Chicago, IL  
Joseph Laseter, B.S. Westmont, IL  
David R. Maldonado, M.D. Westmont, IL  
Victor Ortiz, M.D. Westmont, IL  
Benjamin G. Domb, M.D. Westmont, IL
- 11:38 a.m. - 11:43 a.m. 127. Validation of a Novel Hip Arthroscopy Simulator  
\*Chris C. Cychosz, M.D. Iowa City, IA  
Michael C. Willey, M.D. Iowa City, IA  
Kyle R. Duchman, M.D. Iowa City, IA  
Matthew D. Karam, M.D. Iowa City, IA  
Robert W. Westermann, M.D. Iowa City, IA
- 11:43 a.m. - 11:51 a.m. Floor Discussion
- 11:52 a.m. – 12:00 p.m. **Spotlight Lecture**  
Speaker: Rafael J. Sierra, M.D.  
Rochester, MN  
Topic:
- 12:01 p.m. – 12:06 p.m. 128. The Rapidly Assessed Predictor of Intraoperatively-Visualized Damage (RAPID) Score: An In-Clinic Predictive Model for High Grade Acetabular Chondrolabral Disruption  
\*Mario Hevesi, M.D. Rochester, MN  
David E. Hartigan, M.D. Phoenix, AZ  
Isabella T. Wu, B.S. Rochester, MN  
Cody C. Wyles, M.D. Rochester, MN  
Vishal S. Desai, B.S. Rochester, MN  
Andre J. van Wijnen, Ph.D. Rochester, MN  
Daniel B. F. Saris, M.D. Rochester, MN  
Bruce A. Levy, M.D. Rochester, MN  
Aaron J. Krych, M.D. Rochester, MN
- 12:07 p.m. - 12:12 p.m. 129. Prognosis Following Hip Arthroscopy Varies in Professional Athletes Based on Sport  
\*Robert A. Christian, M.D. Chicago, IL  
Ryan J. Lubbe, M.D. Chicago, IL  
Danielle S. Chun, M.D. Chicago, IL  
Ryan S. Selley, M.D. Chicago, IL  
Michael A. Terry, M.D. Chicago, IL  
Wellington K. Hsu, M.D. Chicago, IL
- 12:13 p.m. - 12:18 p.m. 130. PROMIS Validation in Hip Arthroscopy for FAI  
\*Ryan S. Selley, M.D. Chicago, IL  
Daniel J. Johnson, M.D. Chicago, IL  
Richard W. Nicolay, M.D. Chicago, IL  
Michael A. Terry, M.D. Chicago, IL  
Vehniah K. Tjong, M.D. Chicago, IL
- 12:18 p.m. – 12:26 p.m. Floor Discussion



**SATURDAY, APRIL 13, 2019**

**THIRD PLENARY SESSION**

**Room: Emerald ABC**

Moderator: Carlos A. Higuera, M.D.  
Weston, FL

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

7:05 a.m. – 7:50 a.m.

**Symposium III**

**Topic:** How to Transition to Elective Ambulatory Arthroplasty – Words of Experience

Faculty: C. Lowry Barnes, M.D., Moderator  
Little Rock, AR

7:51 a.m. – 7:53 a.m.

Presentation of MAOA Poster Award Winners

Presented by: Carlos A. Higuera, M.D.  
Weston, FL

7:54 a.m. – 7:59 a.m.

**OREF Presentation**

Presented by:

8:00 a.m. - 8:30 a.m.

**Rapp Lecture**

Topic: Perspectives on the Evolution of Shoulder Replacement  
Speaker: Evan L. Flatow, M.D.  
New York, NY

Introduced by: Robert F. McLain, M.D.  
Solon, OH

8:30 a.m. – 9:30 a.m.

**Quiz Bowl**

Room: Emerald ABC

Moderator: James A. Keeney, M.D.  
Columbia, MO

9:30 a.m. – 10:00 a.m.

**CLASSICS IN ORTHOPAEDICS**

Topic: Orthopedic Education of the Future  
Speaker: J. Lawrence Marsh, M.D.  
Iowa City, IA

Introduced by: Robert F. McLain, M.D.  
Solon, OH

10:00 a.m. – 10:05 a.m.

Second Member Business Meeting

**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, APRIL 13, 2019**

**BREAKOUT SESSION #11**

**Topic: Hip Arthroplasty**

**Room: Emerald ABC**

Co-Moderator for Papers #135-144: Wayne Trevor North, M.D.  
Detroit, MI

Co-Moderator for Papers #135-144: Glenn D. Wera, M.D.  
Cleveland, OH

- 10:30 a.m. - 10:35 a.m. 135. Payment Variation in Commercial Health Plans  
Dave Terry Watertown, MA  
\*Mah-J Soobader, Ph.D. Watertown, MA
- 10:36 a.m. - 10:41 a.m. 136. Primary Total Hip Arthroplasty in Patients Less Than 50 Years of Age at  
a Mean of 16 Years  
\*Andrew J. Bryan, M.D. Chicago, IL  
Tyler E. Calkins, B.S. Chicago, IL  
Vasili Karas, M.D. Chicago, IL  
Denis Nam, M.D., MSc Chicago, IL  
Craig J. Della Valle, M.D. Chicago, IL
- 10:42 a.m. - 10:47 a.m. 137. Charnley Cemented vs. Contemporary Uncemented Total Hip  
Arthroplasty with Highly Crosslinked Polyethylene Inserts: Have We  
Improved in 50 Years?  
\*Meagan E. Tibbo, M.D. Rochester, MN  
Afton K. Limberg, B.S. Rochester, MN  
Matthew P. Abdel, M.D. Rochester, MN  
Daniel J. Berry, M.D. Rochester, MN
- 10:47 a.m. - 10:54 a.m. Floor Discussion
- 10:55 a.m. - 11:00 a.m. 138. Instituting a Restrictive Opioid Prescribing Protocol for Primary Total Hip  
and Knee Arthroplasty: One Institution's Experience  
\*Andrew J. Holte, B.S. Iowa City, IA  
Christopher N. Carender, M.D. Iowa City, IA  
Nicolas O. Noiseux, M.D. Iowa City, IA  
Jesse E. Otero, M.D. Iowa City, IA  
Timothy S. Brown, M.D. Iowa City, IA
- 11:01 a.m. - 11:06 a.m. 139. Does it Matter: Total Hip Arthroplasty (THA) or Lumbar Spinal Fusion  
(LSF) First? Preoperative Sagittal Spinopelvic Measurements Guide  
Patient-Specific Surgical Strategies in Patients Requiring both THA and  
LSF  
Frank W. Parilla, M.D. North Chicago, IL  
Ritesh R. Shah, M.D. Morton Grove, IL  
Alexander C. Gordon, M.D. Morton Grove, IL  
Steven Mardjetko, M.D. Morton Grove, IL  
Wayne M. Goldstein, M.D. Morton Grove, IL  
\*Jeffrey M. Goldstein, M.D. Morton Grove, IL



11:52 a.m. – 12:01 p.m.

**Spotlight Lecture**

Speaker: Robert T. Trousdale, M.D.  
Rochester, MN

Topic:

Co-Moderator for Papers #145-155: Jeffrey R. McLaughlin, M.D.  
Oshkosh, WI

Co-Moderator for Papers #145-155: Robert T. Trousdale, M.D.  
Rochester, MN

12:02 p.m. – 12:07 p.m.

145. A Risk Assessment Model for Unplanned Hospital Readmission Following Total Joint Arthroplasty
- |                          |               |
|--------------------------|---------------|
| Mhamad Faour, M.D.       | Cleveland, OH |
| *Jesus M. Villa, M.D.    | Weston, FL    |
| Anabelle Visperas, Ph.D. | Cleveland, OH |
| Kamal Maheshwari, M.D.   | Cleveland, OH |
| Kurt P. Spindler, M.D.   | Cleveland, OH |
| Robert M. Molloy, M.D.   | Cleveland, OH |
| Michael A. Mont, M.D.    | New York, NY  |
| Carlos A. Higuera, M.D.  | Weston, FL    |

12:08 p.m. – 12:13 p.m.

146. Emergency Department Visit within One Year Prior to Elective Total Hip Arthroplasty is Predictive of Postoperative Return to Emergency Department within 90 Days
- |                           |             |
|---------------------------|-------------|
| Michael D. Gabbard, M.D.  | Detroit, MI |
| Michael A. Charters, M.D. | Detroit, MI |
| Sean P. Mahoney, B.S.     | Detroit, MI |
| *Wayne Trevor North, M.D. | Detroit, MI |

12:14 p.m. – 12:19 p.m.

147. Uncemented Total Hip Arthroplasty with a Tapered Femoral Component: A Minimum 30-Year Follow-Up
- |                              |             |
|------------------------------|-------------|
| *Jeffrey R. McLaughlin, M.D. | Oshkosh, WI |
| Kyla R. Lee, M.D.            | Oshkosh, WI |
| Mary Ann Johnson             | Oshkosh, WI |

12:20 p.m. – 12:25 p.m.

148. Mepivacaine Spinal Anesthesia for Total Hip Arthroplasty Facilitates Shorter Length of Stay and Fewer Urinary Complications Compared to
- |                           |             |
|---------------------------|-------------|
| *Michael Chad Mahan, M.D. | Detroit, MI |
| Jonathan H. Shaw, M.D.    | Detroit, MI |
| Justin T. Jabara, B.S.    | Detroit, MI |
| Toufic R. Jildeh, M.D.    | Detroit, MI |
| Omar M. Kadri, M.D.       | Detroit, MI |
| Jason J. Davis, M.D.      | Detroit, MI |

12:25 p.m. - 12:33 p.m.

Floor Discussion



- |                       |  |
|-----------------------|--|
| 1:17 p.m. – 1:22 p.m. | 155. Use of a Mandatory Clinical Decision Unit Reduces Readmission Rates Following Total Joint Arthroplasty<br>*Arthur Manoli, III, M.D. Southfield, MI<br>Jacob Markel, B.S. Detroit, MI<br>Natalie Pizzimenti, M.S. Novi, MI<br>David C. Markel, M.D. Novi, MI |
| 1:22 p.m. – 1:30 p.m. | Floor Discussion   |

**SATURDAY, APRIL 13, 2019**  
**BREAKOUT SESSION #12**  
**Topic: Pediatrics/Spine**  
**Room: Coral D**

Co-Moderator for Papers #156-165: Michael C. Albert, M.D.  
Dayton, OH

Co-Moderator for Papers #156-165: James R. Gregory, M.D.  
Oklahoma City, OK

- |                         |  |
|-------------------------|--|
| 10:30 a.m. - 10:35 a.m. | <p>156. Femoral Nerve Block vs. Adductor Canal Block for Anterior Cruciate Ligament Reconstruction in Pediatric and Adolescent Patients<br/>           *Orlando D. Sabbag, M.D. Rochester, MN<br/>           Heath P. Melugin, M.D. Rochester, MN<br/>           Brian T. Samuelsen, M.D. Rochester, MN<br/>           Nancy H. Cummings, M.D. Rochester, MN<br/>           Diane L. Dahm, M.D. Rochester, MN<br/>           Bruce A. Levy, M.D. Rochester, MN<br/>           Michael J. Stuart, M.D. Rochester, MN<br/>           Aaron J. Krych, M.D. Rochester, MN<br/>           Todd A. Milbrandt, M.D. Rochester, MN</p> |
| 10:36 a.m. - 10:41 a.m. | <p>157. Use of Tranexamic Acid for Hip Reconstruction Surgery in Children with Cerebral Palsy: A Pilot Study<br/>           *Maksim Shlykov, M.D. St. Louis, MO<br/>           Arya Minaie, B.S. St. Louis, MO<br/>           Jaclyn Schipper St. Louis, MO<br/>           Pooya Hosseinzadeh, M.D. St. Louis, MO</p>  |
| 10:42 a.m. - 10:47 a.m. | <p>158. Has the Introduction of the Ponseti Method Influenced the Type of Clubfoot Procedures Performed in the United States?<br/>           *Brandon G. Wilkinson, M.D. Iowa City, IA<br/>           Natalie A. Glass, Ph.D. Iowa City, IA<br/>           Thomas Cook, Ph.D. Iowa City, IA<br/>           Jose A. Morcuende, M.D. Iowa City, IA</p>   |
| 10:47 a.m. - 10:54 a.m. | <p>Floor Discussion</p>  |
| 10:55 a.m. - 11:00 a.m. | <p>159. Pediatric Septic Arthritis of the Knee: Can Predictors of Septic Hip Be Applied?<br/>           *Mitchel R. Obey, M.D. St. Louis, MO<br/>           Arya Minaie, B.S. St. Louis, MO<br/>           Jaclyn Schipper St. Louis, MO<br/>           Pooya Hosseinzadeh, M.D. St. Louis, MO</p>   |
| 11:01 a.m. - 11:06 a.m. | <p>160. Predictors of Total Hip Arthroplasty Following Surgical Treatment of Pediatric Developmental Hip Dysplasia<br/>           Ernest Y. Young, M.D. Rochester, MN<br/>           *Paul L. Sousa, M.D. Rochester, MN<br/>           Todd A. Milbrandt, M.D. Rochester, MN<br/>           William J. Shaughnessy, M.D. Rochester, MN<br/>           Anthony A. Stans, M.D. Rochester, MN<br/>           A. Noelle Larson, M.D. Rochester, MN</p>   |

- 11:07 a.m. - 11:12 a.m. 161. Biomechanical Comparison of Partially-Threaded and Fully-Threaded Cannulated Screws in Pediatric Hip Fractures  
\*Jonathan D. Hughes, M.D. Temple, TX  
Jessica L. Hughes, M.D. Temple, TX  
Christopher D. Souder, M.D. Temple, TX
- 11:13 a.m. - 11:18 a.m. 162. Load to Failure of Fully-Threaded vs. Partially-Threaded Cannulated Screws in SCFE  
Jonathan D. Hughes, M.D. Temple, TX  
\*Jessica L. Hughes, M.D. Temple, TX  
Christopher D. Souder, M.D. Temple, TX
- 11:18 a.m. - 11:26 a.m. Floor Discussion
- 11:27 a.m. - 11:32 a.m. 163. Novel Enhanced Recovery After Surgery Pathway Significantly Reduces Length of Stay in Adolescent Idiopathic Scoliosis Patients Undergoing Posterior Spinal Fusion  
Kristen Spisak, M.D. Dayton, OH  
Alvin C. Jones, M.D. Dayton, OH  
Zachary J. Sirois, B.S. Dayton, OH  
\*Matthew D. Thomas, B.S. Dayton, OH  
Andrew W. Froehle, Ph.D. Dayton, OH  
Lucinda Brown, R.N. Dayton, OH  
Alex Clark Dayton, OH  
Michael C. Albert, M.D. Dayton, OH
- 11:33 a.m. - 11:38 a.m. 164. Effect of Crosslinks on Lengthening Magnetic Spinal Growing Rods: A Retrospective Review  
\*Radomir Dimovski, M.D. Detroit, MI  
Scott A. McCarty, M.D. Detroit, MI  
Walid K. Yassir, M.D. Detroit, MI
- 11:39 a.m. - 11:44 a.m. 165. The Safety and Efficacy of Liposomal Bupivacaine (EXPAREL) for Incisional Pain Relief Following Pediatric Spine Surgery  
Brittany Hudson, M.S. Cleveland, OH  
Morad Chughtai, M.D. Cleveland, OH  
Anton Khoplas, M.D. Cleveland, OH  
Nipun Sodhi, M.D. Cleveland, OH  
James Bena, M.S. Cleveland, OH  
\*Ryan C. Goodwin, M.D. Cleveland, OH  
David P. Gurd, M.D. Cleveland, OH  
Thomas E. Kuivila, M.D. Cleveland, OH  
Robert T. Ballock, M.D. Cleveland, OH
- 11:44 a.m. - 11:51 a.m. Floor Discussion
- 11:52 a.m. - 12:01 p.m. **Spotlight Lecture**  
Speaker: Michael C. Albert, M.D.  
Dayton, OH  
Topic: The Use of Sublaminar Bands in the Treatment of Pediatric Spinal Deformity







**SATURDAY, APRIL 13, 2019**  
**BREAKOUT SESSION #13**  
**Topic: Knee Arthroplasty**  
**Room: Coral C**

Co-Moderator for Papers #177-186: Aidin Eslam Pour, M.D., M.S.  
 Ann Arbor, MI

Co-Moderator for Papers #177-186: Trevor G. Murray, M.D.  
 Cleveland, OH

- |                         |  |
|-------------------------|--|
| 10:30 a.m. - 10:35 a.m. | 177. What is the Price and Claimed Efficacy of Platelet-Rich Plasma Injections for the Treatment of Knee Osteoarthritis in the United States?<br>Nicolas S. Piuze, M.D. Cleveland, OH<br>*Mitchell Ng Cleveland, OH<br>Ariel Kantor Cleveland, OH<br>Kenneth Ng Cleveland, OH<br>Stephanie Kha Cleveland, OH<br>Michael A. Mont, M.D. New York, NY<br>George F. Muschler, M.D. Cleveland, OH |
| 10:36 a.m. - 10:41 a.m. | 178. The Utility and Cost of Magnetic Resonance Imaging of the Knee in Elderly Patients: A Retrospective Cohort Study<br>*Ryan Fairchild, M.D. Dallas, TX<br>Marcel R. Wiley, M.D. Dallas, TX<br>Brian W. Sager, M.D. Dallas, TX<br>Stephen T. Gates, M.D. Dallas, TX<br>Zachary Shirley, M.D. Dallas, TX<br>Kenneth A. Estrera, M.D. Dallas, TX<br>Brigham K. Au, M.D. Dallas, TX           |
| 10:42 a.m. - 10:47 a.m. | 179. Are Adult Reconstructive Surgeons Being Adequately Compensated for Single-Component vs. Double-Component Revisions? - An Analysis of Relative Value Units (RVUs)<br>*Azeem T. Malik, M.D. Columbus, OH<br>Thomas J. Scharschmidt, M.D. Columbus, OH<br>Mengnai Li, M.D., Ph.D. Columbus, OH<br>Nikhil Jain, M.D. Columbus, OH<br>Safdar N. Khan, M.D. Columbus, OH                      |
| 10:47 a.m. - 10:57 a.m. | Floor Discussion   |
| 10:58 a.m. - 11:03 a.m. | 180. Anxiety and Depression Predict Chronic Postoperative Opioid Use in Total Joint Arthroplasty: A Systematic Review<br>*Christopher P. Lindsay, M.D. Iowa City, IA<br>Andrew J. Holte, B.S. Iowa City, IA<br>Nicolas O. Noiseux, M.D. Iowa City, IA<br>Jesse E. Otero, M.D. Iowa City, IA<br>Timothy S. Brown, M.D. Iowa City, IA  |
| 11:04 a.m. - 11:09 a.m. | 181. Patient Dissatisfaction After Total Knee Arthroplasty- Is Opioid Medication Use a Cause or Effect?<br>Mark K. Lane, M.D. Columbia, OH<br>*Benjamin Hansen, M.D. Columbia, OH<br>Ajay Aggarwal, M.D. Columbia, OH<br>James A. Keeney, M.D. Columbia, OH  |

- 11:10 a.m. - 11:15 a.m. 182. Risk Factors for Opioid Misuse or Abuse Following Total Hip or Knee Arthroplasty  
\*Trenden L. Flanigan, M.D. Dayton, OH  
Jonathan A. Rogozinski, M.D. Dayton, OH  
Anil B. Krishnamurthy, M.D. Dayton, OH  
Justin P. Fox, M.D. Dayton, OH
- 11:16 a.m. - 11:21 a.m. 183. Unicompartmental Knee Arthroplasty Utilization in the Medicare Population  
\*Brandon L. Morris, M.D. Kansas City, KS  
Daniel Reinhardt, M.D. Kansas City, KS  
Maaz S. Hassan, B.S. Kansas City, KS  
Armon Tarakemen, B.S. Kansas City, KS  
J. Paul Schroepel, M.D. Kansas City, KS  
Scott Mullen, M.D. Kansas City, KS  
Bryan G. Vopat, M.D. Kansas City, KS
- 11:21 a.m. - 11:31 a.m. Floor Discussion
- 11:32 a.m. - 11:37 a.m. 184. Surgical Outcomes of Patients on Acetylsalicylic Acid Therapy Undergoing Total Joint Arthroplasty  
\*Jonathan H. Shaw, M.D. Detroit, MI  
Omar M. Kadri, M.D. Detroit, MI  
Michael Chad Mahan, M.D. Detroit, MI  
Clifford M. Les, Ph.D. Detroit, MI  
Michael A. Charters, M.D. Detroit, MI
- 11:38 a.m. - 11:43 a.m. 185. Improved Outcomes Following a Novel Nerve Block Combination for Total Knee Arthroplasty  
\*Christian J. Eccles, M.D. Louisville, KY  
Andrew M. Swiergosz, M.D. Louisville, KY  
Austin F. Smith, M.D. Louisville, KY  
Samrath Bhimani, M.D. Louisville, KY  
Langan Smith, B.S. Louisville, KY  
Arthur L. Malkani, M.D. Louisville, KY

**Paper position #186 deleted**

- 11:43 a.m. – 11:51 a.m. Floor Discussion
- 11:52 a.m. – 12:01 p.m. **Spotlight Lecture**  
Speaker: Aidin Eslam Pour, M.D., M.S.  
Ann Arbor, MI  
Topic: Pain Control After Total Joints, Narcotic Epidemic and Alternative Options
- Co-Moderator for Papers #187-197: Michael A. Charters, M.D.  
Northville, MI
- Co-Moderator for Papers #187-197: Brett R. Levine, M.D., M.S.  
Chicago, IL

- |                         |                  |   |
|-------------------------|------------------|---|
| 12:02 p.m. – 12:07 p.m. | 187.             | <p>Total Knee Arthroplasty in Patients Less Than 50 Years of Age: Results at a Mean of 13 Years</p> <p>*Vasili Karas, M.D. Chicago, IL</p> <p>Tyler E. Calkins, B.S. Chicago, IL</p> <p>Andrew J. Bryan, M.D. Chicago, IL</p> <p>Chris Culvern, M.S. Chicago, IL</p> <p>Richard A. Berger, M.D. Chicago, IL</p> <p>Aaron G. Rosenberg, M.D. Chicago, IL</p> <p>Craig J. Della Valle, M.D. Chicago, IL</p>                             |
| 12:08 p.m. – 12:13 p.m. | 188.             | <p>Total Knee Arthroplasty After High Tibial Osteotomy Resulted in Excellent Long-Term Survivorship and Clinical Outcomes</p> <p>Brian P. Chalmers, M.D. Rochester, MN</p> <p>*Afton K. Limberg, B.S. Rochester, MN</p> <p>Meagan E. Tibbo, M.D. Rochester, MN</p> <p>Kevin I. Perry, M.D. Rochester, MN</p> <p>Mark W. Pagnano, M.D. Rochester, MN</p> <p>Matthew P. Abdel, M.D. Rochester, MN</p>                                   |
| 12:14 p.m. – 12:19 p.m. | 189.             | <p>Radiographic Comparison of Cementless Total Knee Arthroplasty in the Elderly (&gt;70) vs. Adult (&lt;70) Population</p> <p>*Andrew Nelson, M.D. Detroit, MI</p> <p>Justin T. Jabara, B.S. Detroit, MI</p> <p>Michael Chad Mahan, M.D. Detroit, MI</p> <p>Craig D. Silverton, D.O. Detroit, MI</p>  |
| 12:20 p.m. – 12:25 p.m. | 190.             | <p>Prospective Validation of a Demographically-Based Primary Total Knee Arthroplasty Size Calculator</p> <p>Robert A. Sershon, M.D. Chicago, IL</p> <p>Jefferson Li, B.S. Chicago, IL</p> <p>Tyler E. Calkins, B.S. Chicago, IL</p> <p>P. Maxwell Courtney, M.D. Philadelphia, PA</p> <p>Denis Nam, M.D., MSc Chicago, IL</p> <p>Tad L. Gerlinger, M.D. Chicago, IL</p> <p>*Brett R. Levine, M.D., M.S. Chicago, IL</p>               |
| 12:25 p.m. - 12:33 p.m. | Floor Discussion |   |
| 12:34 p.m. – 12:39 p.m. | 191.             | <p>An Experienced Surgeon Can Meet or Exceed Robotic Accuracy in Manual Unicompartmental Knee Arthroplasty</p> <p>*Ashleigh N. Bush, B.S. Indianapolis, IN</p> <p>Mary Ziemba-Davis, B.S. Indianapolis, IN</p> <p>Evan R. Deckard, B.S. Indianapolis, IN</p> <p>R. Michael Meneghini, M.D. Fishers, IN</p>  |
| 12:40 p.m. – 12:45 p.m. | 192.             | <p>Patient Satisfaction Following Total Knee Arthroplasty Using Technologic Innovation to Achieve Balanced Gaps</p> <p>Christian J. Eccles, M.D. Louisville, KY</p> <p>Austin F. Smith, M.D. Louisville, KY</p> <p>Samrath Bhimani, M.D. Louisville, KY</p> <p>Rohat Bhimani, B.S. Louisville, KY</p> <p>*Kevin Denehy, M.D. Lexington, KY</p> <p>Langan Smith, B.S. Louisville, KY</p> <p>Arthur L. Malkani, M.D. Louisville, KY</p> |

- 12:46 p.m. – 12:51 p.m. 193. Patient Optimization in Total Joint Arthroplasty: A Comparison of Episode Cost After Clinical Care Pathway Implementation  
\*Jennifer N. Blanda, B.S. Toledo, OH  
Joseph B. Blanda, M.D. Toledo, OH  
Ian M. Gradisar, M.D. Akron, OH
- 12:51 p.m. – 12:58 p.m. Floor Discussion
- 12:59 p.m. – 1:04 p.m. 194. Incisional Negative Pressure Wound Therapy Devices Improve Short-Term Wound Complications, but not Long-Term Infection Rate Following Hip and Knee Arthroplasty  
\*James A. Keeney, M.D. Columbia, MO  
Ajay Aggarwal, M.D. Columbia, MO  
Stacey Clawson, R.N. Columbia, MO  
James L. Cook, M.D., DVM, Ph.D, OTSC Columbia, MO  
James P. Stannard, M.D. Columbia, MO
- 1:05 p.m. – 1:10 p.m. 195. Predictors of Infection-Free Survival After Irrigation and Debridement of Revision Total Knee Arthroplasty  
\*Nicholas Bene, M.D. Boston, MA  
Xing Li, B.S. Hanover, NH  
Sumon Nandi, M.D. Toledo, OH
- 1:11 p.m. – 1:16 p.m. 196. Impact of Antibiotic-Loaded Bone Cement on Antibiotic Resistance in Prosthetic Knee Infections  
\*Daniel R. Schmitt, M.D. Maywood, IL  
Cameron J. Killen, M.D. Maywood, IL  
Michael Murphy, B.S. Maywood, IL  
Michael W. Perry, M.D. Maywood, IL  
Joseph Romano, M.D. Maywood, IL  
Nicholas Brown, M.D. Maywood, IL
- 1:16 p.m. – 1:30 p.m. Floor Discussion

**Paper position #197 deleted**

**SATURDAY, APRIL 13, 2019**  
**BREAKOUT SESSION #14**  
**Topic: Shoulder Arthroplasty**  
**Room: Coral B**

Co-Moderator for Papers #198-207: Brent A. Ponce, M.D.  
 Birmingham, AL

Co-Moderator for Papers #198-207: Matthew J. Teusink, M.D.  
 Omaha, NE

- |                         |   |
|-------------------------|---|
| 10:30 a.m. - 10:35 a.m. | 198. Opioid-Free Reverse Shoulder Arthroplasty: Optimizing Multimodal Pain Management<br>Vani J. Sabesan, M.D. Weston, FL<br>Kiran Chatha, M.D. Weston, FL<br>Danielle Malone, M.P.H., M.T. (ASCP) Weston, FL<br>Sandra Koen, M.P.H., M.T. (ASCP) Weston, FL<br>*Mauricio Drummond, M.D. Weston, FL<br>Gregory Gilot, M.D. Weston, FL   |
| 10:36 a.m. - 10:41 a.m. | 199. Mechanical Tradeoffs in Reverse Shoulder Arthroplasty: A Finite Element Analysis<br>*Brendan M. Patterson, M.D., M.P.H. Iowa City, IA<br>Andrea P. Caceres, B.S. Iowa City, IA<br>Donald D. Anderson, Ph.D. Iowa City, IA  |
| 10:42 a.m. - 10:47 a.m. | 200. Shoulder Arthroplasty for Proximal Humeral Fracture is Not a Typical DRG-483 – Implications for a Bundled Payment Model<br>*Corey T. Beals, M.D. Columbus, OH<br>Azeem T. Malik, M.D. Columbus, OH<br>Nikhil Jain, M.D. Columbus, OH<br>Julie Y. Bishop, M.D. Columbus, OH<br>Safdar N. Khan, M.D. Columbus, OH  |
| 10:47 a.m. - 10:54 a.m. | Floor Discussion  |
| 10:55 a.m. - 11:00 a.m. | 201. Minimum 10-Year Thin Cut CT Follow-Up of Total Shoulders with a Partially Cemented All-Polyethylene Glenoid<br>*Trevon McGill, B.S. Omaha, NE<br>Noah Porter, M.D. Omaha, NE<br>Melissa Manzer, M.D. Omaha, NE<br>Elizabeth R. Lyden, M.S. Omaha, NE<br>Matthew J. Teusink, M.D. Omaha, NE<br>Edward V. Fehringer, M.D. Columbus, OH   |
| 11:01 a.m. - 11:06 a.m. | 202. Results of Total Shoulder Arthroplasty in Patients Under vs. Over 55 Years of Age: An Analysis of 1,135 Patients with Over 2 Years of Follow-Up<br>*Ravi B. Patel, M.D. Detroit, MI<br>Stephanie J. Muh, M.D. Detroit, MI<br>Kelechi R. Okoroha, M.D. Detroit, MI<br>Thomas W. Wright, M.D. Gainesville, FL<br>Pierre-Henri Flurin, M.D. Merignac, France<br>Christopher Roche, M.S. Gainesville, FL<br>Joseph D. Zuckerman, M.D. New York, NY |





- 12:46 p.m. – 12:51 p.m.      214.    Guidelines for Evidence-Based Prevention of Prosthetic Shoulder Infection Are Lacking: A Survey of Shoulder Surgeons  
\*Richard J. McLaughlin, M.D.                      Rochester, MN  
Dave R. Shukla, M.D.                                  Rochester, MN  
Julia Lee, M.D.    Rochester, MN  
Ngoc Tram Nguyen, B.S.                              Rochester, MN  
Joaquin Sanchez-Sotelo, M.D., Ph.D.              Rochester, MN
- 12:51 p.m. – 12:58 p.m.      Floor Discussion
- 12:59 p.m. – 1:04 p.m.      215.    Locking-Plate Fixation of Proximal Humerus Fractures in Patients Over 60 Continues to be Associated with a High Complication Rate  
Jonathan D. Barlow, M.D.                              Rochester, MN  
\*Anthony L. Logli, M.D.                                Rochester, MN  
Scott P. Steinmann, M.D.                              Rochester, MN  
S. Andrew Sems, M.D.                                 Rochester, MN  
William W. Cross, III, M.D.                           Rochester, MN  
Brandon J. Yuan, M.D.                                 Rochester, MN  
Michael E. Torchia, M.D.                             Rochester, MN  
Joaquin Sanchez-Sotelo, M.D., Ph.D.              Rochester, MN
- 1:05 p.m. – 1:10 p.m.      216.    Thromboembolic Complications After Total Shoulder Arthroplasty: An Update  
\*Joshua M. Kolz, M.D.                                 Rochester, MN  
William R. Aibinder, M.D.                             Rochester, MN  
Robert A. Adams, OPA-C                              Rochester, MN  
John W. Sperling, M.D.                                Rochester, MN
- 1:11 p.m. – 1:16 p.m.      217.    Pulmonary Comorbidities Are Associated with Increased Major Complication Rates Following Indwelling Interscalene Nerve Catheters for Shoulder Arthroplasty  
\*Ian A. Power, M.D.                                      Farmington, NM  
Thomas W. Throckmorton, M.D.                      Memphis, TN  
Richard A. Smith, Ph.D.                                Memphis, TN  
Frederick M. Azar, M.D.                                Memphis, TN  
Tyler J. Brolin, M.D.                                    Memphis, TN
- 1:17 p.m. – 1:22 p.m.      218.    Does the Transfusion Rate Following Reverse Total Shoulder Arthroplasty Warrant Aggressive Perioperative Blood Management?: An Indications-Based Analysis  
\*Zachary K. Pharr, M.D.                                Memphis, TN  
Baylor E. Blickenstaff, M.D.                         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
- 1:22 p.m. – 1:30 p.m.      Floor Discussion

**SATURDAY, APRIL 13, 2019**  
**BREAKOUT SESSION #15**  
**Topic: Sports Medicine**  
**Room: Coral A**

Co-Moderator for Papers #219-228: Paul R. Fleissner, Jr., M.D.  
Akron, OH

Co-Moderator for Papers #219-228: Henry T. Goitz, M.D.  
Warren, MI

- |                         |  |
|-------------------------|--|
| 10:30 a.m. - 10:35 a.m. | <p>219. Smoking as a Risk Factor for Readmission in Arthroscopic Surgery: A Propensity Matched Analysis</p> <p>Daniel J. Johnson, M.D. Chicago, IL</p> <p>Matthew J. Hartwell, M.D. Chicago, IL</p> <p>Richard W. Nicolay, M.D. Chicago, IL</p> <p>Ryan A. Selley, M.D. Chicago, IL</p> <p>*Hayden Baker, B.S. Chicago, IL</p> <p>Michael A. Terry, M.D. Chicago, IL</p> <p>Vehniah K. Tjong, M.D. Chicago, IL</p>   |
| 10:36 a.m. - 10:41 a.m. | <p>220. Preoperative Albumin as a Risk Factor for Infection in Arthroscopy</p> <p>Richard W. Nicolay, M.D. Chicago, IL</p> <p>*Abhishek S. Kannan, M.D. Chicago, IL</p> <p>Ryan S. Selley, M.D. Chicago, IL</p> <p>Daniel J. Johnson, M.D. Chicago, IL</p> <p>Michael A. Terry, M.D. Chicago, IL</p> <p>Vehniah K. Tjong, M.D. Chicago, IL</p>   |
| 10:42 a.m. - 10:47 a.m. | <p>221. The Incidence of Iatrogenic Cartilage Injury During Hip and Knee Arthroscopy</p> <p>*Michael E. Slattery, B.S. Iowa City, IA</p> <p>Jocelyn T. Compton, M.D. Iowa City, IA</p> <p>Zain M. Z. Khazi, B.S. Chicago, IL</p> <p>Robert W. Westermann, M.D. Iowa City, IA</p>   |
| 10:47 a.m. - 10:54 a.m. | <p>Floor Discussion</p>  |
| 10:55 a.m. - 11:00 a.m. | <p>222. Long-Term Results after Repair of Isolated Meniscus Tears in Patients 18 Years and Younger: An 18-Year Follow-up Study</p> <p>Michella Hagmeijer, M.D. Rochester, MN</p> <p>Nicholas I. Kennedy, M.D. Rochester, MN</p> <p>Adam J. Tagliero, M.D. Rochester, MN</p> <p>*Ayoosh Pareek, M.D. Rochester, MN</p> <p>Bruce A. Levy, M.D. Rochester, MN</p> <p>Michael J. Stuart, M.D. Rochester, MN</p> <p>Daniel B. F. Saris, M.D. Rochester, MN</p> <p>Diane L. Dahm, M.D. Rochester, MN</p> <p>Aaron J. Krych, M.D. Rochester, MN</p> |
| 11:01 a.m. - 11:06 a.m. | <p>223. Return to Sport and Sports Specific Outcomes After Osteochondral Allograft Transplantation in the Knee: A Systematic Review</p> <p>*Zachary T. Crawford Cincinnati, OH</p> <p>Adam P. Schumaier, M.D. Cincinnati, OH</p> <p>Georgina Glogovac, M.D. Cincinnati, OH</p> <p>Brian M. Grawe, M.D. Cincinnati, OH</p>  |



- |                         |                  |   |   |
|-------------------------|------------------|---|---|
| 12:02 p.m. – 12:07 p.m. | 229.             | The Cost Variability of Orthobiologics<br>*Alex R. Dombrowsky, B.S.<br>Andrew S. McGee, B.S.<br>Paul Waldrop, B.S.<br>Josh Wild, B.S.<br>Naqeeb Faroqui, B.S.<br>Samuel R. Huntley, B.S.<br>Eugene W. Brabston, M.D.<br>Brent A. Ponce, M.D.<br>Amit Momaya, M.D.   | Birmingham, AL<br>Birmingham, AL<br>Birmingham, AL<br>Dothan, AL<br>Columbus, GA<br>Littleton, CO<br>Birmingham, AL<br>Birmingham, AL<br>Birmingham, AL |
| 12:08 p.m. – 12:13 p.m. | 230.             | The Effect of Intraoperative Platelet-Rich Plasma (PRP) Injections on the Surgical Outcomes of Orthopedic Soft Tissue Repairs and Reconstructions: A Systematic Review with Meta-Analysis<br>*Parker A. Cavendish, B.S.<br>Joshua S. Everhart, M.D.<br>Alex D. Eikenberry, B.S.<br>Robert A. Magnussen, M.D.<br>Christopher C. Kaeding, M.D.<br>David C. Flanigan, M.D. | Columbus, OH<br>Columbus, OH<br>Columbus, OH<br>Columbus, OH<br>Columbus, OH<br>Columbus, OH  |
| 12:14 p.m. – 12:19 p.m. | 231.             | Collagen Nanofibers with and without Bone Marrow Stromal Cells Enhance Bone Healing in a Rat Calvarial Bone Defect Model<br>*Therese Bou-Akl, M.D., Ph.D.<br>David C. Markel, M.D.<br>Bin Wu, Ph.D.<br>Conor Daly-Seiler, M.S.<br>Mario Rossi, B.S.<br>Weiping Ren, Ph.D.   | Southfield, MI<br>Novi, MI<br>Southfield, MI<br>Detroit, MI<br>Southfield, MI<br>Detroit, MI  |
| 12:20 p.m. – 12:25 p.m. | 232.             | Platelet-Rich Plasma Composition Using the Arthrex Angel System<br>*William Kelton Vasileff, M.D.<br>Michael Baria, M.D.<br>Sushmitha Durgam, DVM, Ph.D.  | Columbus, OH<br>Columbus, OH<br>Columbus, OH  |
| 12:25 p.m. - 12:33 p.m. | Floor Discussion |   |   |
| 12:34 p.m. – 12:39 p.m. | 233.             | Physiological Bone Health Parameters Among Elite Ballet Dancers<br>*Michael T. Cain, M.D.<br>Tyler Heimdal, B.S.<br>Joshua D. Harris, M.D.<br>Steven Petak, M.D.<br>Bradley Lambert, Ph.D.<br>Patrick C. McCulloch, M.D.  | Houston, TX<br>College Station, TX<br>Houston, TX<br>Houston, TX<br>Houston, TX<br>Houston, TX  |
| 12:40 p.m. – 12:45 p.m. | 234.             | Epidemiology of Foot and Ankle Injuries in NCAA Jumping Athletes in the United States from 2009-2014<br>*Bryan G. Vopat, M.D.<br>Joseph B. Lytle, B.S.<br>Armin Tarakemeh, B.S.<br>Jeffrey Trojan, B.S.<br>Mary K. Mulcahey, M.D.   | Kansas City, KS<br>Kansas City, KS<br>Kansas City, KS<br>New Orleans, LA<br>New Orleans, LA   |

