

MID-AMERICA ORTHOPAEDIC ASSOCIATION

40th Annual Meeting

April 19 – 23, 2023

Hilton Sandestin Beach Golf Resort | Miramar Beach, FL

Scientific Program

*Denotes speaker

WEDNESDAY, APRIL 19, 2023

7:55 AM - 3:00 PM

MAOA Pre-Meeting Course

Topic: Tips and Tricks to Save You During Primary and Revision Hip and Knee Arthroplasties: Video-Based Demonstrations

Room: Coral A

THURSDAY, APRIL 20, 2023

6:30 AM - 7:45 AM

Instructional Course I

Topic: **Primary Total Hip and Knee Arthroplasty in 2023: What's In and What's Out?**

Room: Coral A

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

Anna Cohen-Rosenblum, M.D.
Metairie, LA

Charles P. Hannon, M.D., MBA
St. Louis, MO

Linda I. Suleiman, M.D.
Chicago, IL

6:30 AM - 7:45 AM

Instructional Course II

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

Room: Coral B

Faculty: David C. Flanigan, M.D., Moderator
Columbus, OH

Geoffrey S. Baer, M.D.
Madison, WI

Derrick M. Knapik, M.D.
St. Louis, MO

Jeffrey A. Macalena, M.D.
Minneapolis, MN

FIRST PLENARY SESSION
Room: Emerald ABC

THURSDAY, APRIL 20, 2023

8:00 AM - 8:05 AM **Welcome and Introductory Remarks**
Erik T. Otterberg, M.D.
Omaha, NE
2022 – 2023 President, MAOA

8:05 AM – 8:50 AM **Symposium I**

Topic: **Thinking Outside the Box**

Faculty: Lisa K. Cannada, M.D., Moderator
Jacksonville, FL

Social Media: Friend or Foe?
Lisa K. Cannada, M.D.
Jacksonville, FL

Tips for the Top (Dealing with Administrators)
Craig J. Della Valle, M.D.
Chicago, IL

Building a Practice
H. Clayton Thomason, III, M.D.
Gastonia, NC

Industry: Partnering for Success
Kevin D. Plancher, M.D.
New York, NY

8:51 AM - 9:24 AM **Scientific Paper Session #1**

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

Co-Moderator: **Bradley K. Weiner, M.D.**
Houston, TX

- 8:51 AM – 8:56 AM **1. Comparing Patient-Reported Outcome Measures and Postoperative Healthcare Utilization after One and Two level ACDF Procedures**
 *Erik B. Gerlach, M.D. Chicago, IL
 Mark A. Plantz, M.D. Chicago, IL
 Bejan Alvandi, M.D. Chicago, IL
 Steven Kurapaty, M.D. Chicago, IL
 Jason Tegethoff, M.D. Chicago, IL
 Jeremy Marx, M.D. Chicago, IL
 Jacqueline E. Inglis, BA Chicago, IL
 Srikanth N. Divi, M.D. Chicago, IL
 Wellington Hsu, M.D. Chicago, IL
 Alpesh Patel, M.D. Chicago, IL
- 8:57 AM – 9:02 AM **2. Return to Sport and Patient Reported Outcomes of Collegiate Gymnasts Following Subpectoral Biceps Tenodesis for Treatment of SLAP Tears**
 *Marisa N. Ulrich, B.S. Columbus, OH
 Gregory L. Cvetanovich, M.D. Columbus, OH
 Brett D. Meeks, M.D. Columbus, OH
 Grant L. Jones, M.D. Columbus, OH
- 9:03 AM – 9:08 AM **3. Why Do Infants and Children Recover from Nerve Injury Better than Adults? Differential Expression of Acetylcholine Receptor Subunits and Localization of Motor Endplates**
 Luigi P. Gonzales Irvine, CA
 Vivian Chen Irvine, CA
 *Arjun T. Gupta Irvine, CA
 Tyler R. Johnston, M.D. Irvine, CA
 Oswald Steward, Ph.D. Irvine, CA
- 9:09 AM – 9:14 AM **4. Bedside Hip Aspiration Results in Decrease in Total General Anesthesia Time in Pediatric Patients: A Multicenter Study**
 *Zachary V. Braig, M.D. Rochester, MN
 Pratik Pradhan, B.S. Boston, MA
 Meagan E. Tibbo, M.D. Rochester, MN
 Horacio Padua, M.D. Boston, MA
 William J. Shaughnessy, M.D. Rochester, MN
 Anthony A. Stans, M.D. Rochester, MN
 A. Noelle Larson, M.D. Rochester, MN
 Benjamin J. Shore, M.D., MPH Boston, MA
 Todd A. Milbrandt, M.D. Rochester, MN
- 9:14 AM – 9:24 AM **Floor Discussion**
- 9:25 AM – 9:55 AM **CLASSICS IN ORTHOPAEDICS**
Topic: Evolution of the Arthroscopic Ankle Fusion: Early Techniques, Complications, and Current Indications
Speaker: Timothy C. Fitzgibbons, M.D.
 Omaha, NE

Introduced by: Erik T. Otterberg, M.D.
 Omaha, NE

11:30 AM – 12:00 PM

Ask the Expert & Open Case Discussions

Topic: **Knee: Cartilage, Meniscus, and Ligament**

Room: Emerald ABC

Faculty: Jeffrey A. Macalena, M.D., Moderator
Minneapolis, MN

Lucas T. Buchler, M.D.
Chicago, IL

David C. Flanigan, M.D.
Columbus, OH

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

12:00 PM – 1:00 PM

Company-Sponsored lunch/presentation | Zimmer Biomet (No CME offered)

Topic: **Leveraging Technology in Your Practice**

Room: Emerald ABC

Speaker: Daniel Gerscovich, M.D.
Spartanburg, SC

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|-------------------|---|
| 1:52 PM – 1:57 PM | <p>10. Long-Term Outcomes of the Darrach Procedure in Patients 40 Years and Younger</p> <p>*Courtney R. Carlson Strother, M.D. Rochester, MN
 Anthony L. Logli, M.D. Rochester, MN
 Sanjeev Kakar, M.D. Rochester, MN
 Marco Rizzo, M.D. Rochester, MN</p> |
| 1:58 PM – 2:03 PM | <p>11. Anatomic and Biomechanical Study of Thumb Carpometacarpal Dislocations: A Laboratory Study</p> <p>*Devan O. Higginbotham, M.D. Detroit, MI
 Heather Preston, D.O. Detroit, MI
 Hannah Joines, M.S. Detroit, MI
 Chaoyang Chen, M.D. Detroit, MI
 Andrew G. Tsai, M.D. Detroit, MI</p> |
| 2:04 PM – 2:09 PM | <p>12. Metacarpophalangeal Joint Pyrocarbon Arthroplasty for Osteoarthritis: An Analysis of 44 Consecutive Arthroplasties</p> <p>Matthew M. Rode, M.S. Rochester, MN
 Matthew Claxton Atlanta, GA
 *Alexis K. Matrka, M.D. Rochester, MN
 Marco Rizzo, M.D. Rochester, MN</p> |
| 2:09 PM – 2:16 PM | <p>Floor Discussion</p> |
| 2:17 PM – 2:26 PM | <p>Spotlight Lecture #1</p> <p>Topic: Tips and Tricked: When Complex Carpal Instability Gets Even More Complicated</p> <p>Speaker: Joseph A. Morgan, M.D.
 Omaha, NE</p> |
| 2:27 PM – 2:32 PM | <p>13. Short-Term Outcome of Unicortical Intramedullary Repair of Distal Biceps Ruptures - A Retrospective Cohort Study</p> <p>Christopher Cheng, M.D. Cleveland, OH
 *Oliver Dong, B.S. Cleveland, OH
 Walter Klyce, M.D. Cleveland, OH
 Adrienne Lee, M.D. Cleveland, OH
 Blaine Bafus, M.D. Cleveland, OH</p> |
| 2:33 PM – 2:38 PM | <p>14. Is Therapy Associated with Lower Rates of Surgical Treatment in Thumb Carpometacarpal Arthritis?</p> <p>*Daniel Portney, M.D. Chicago, IL
 Quinn Stillson B.S. Chicago, IL
 Jason Strelzow, M.D. Chicago, IL
 Jennifer Wolf, M.D., Ph.D. Chicago, IL</p> |

2:39 PM – 2:44 PM

15. Investigating the Cost-Effectiveness of Operative vs. Nonoperative Treatment for Distal Radius Fractures

*Ani S. Kazanjian, M.D., MPH	Detroit, MI
Sreten Franovic	Detroit, MI
Alexander D. Pietroski	Detroit, MI
Katherine Druskovich	Detroit, MI
Gabriel Burdick	Detroit, MI
Bushra Fathima	Detroit, MI
Michael J. McIntosh	Detroit, MI
Elizabeth King	Detroit, MI
Stephanie J. Muh, M.D.	Detroit, MI

2:45 PM – 2:50 PM

16. Challenging the Dogma of Distal Radioulnar Joint Examination

*Joshua J. Meaie, M.D.	Rochester, MN
Jesse D. Meaie, M.D.	Rochester, MN
Sanjeev Kakar, M.D.	Rochester, MN

2:50 PM – 3:00 PM

Floor Discussion

THURSDAY, APRIL 20, 2023
SESSION #2 | HIP PRESERVATION

ROOM: Emerald ABC

Co-Moderator: **John M. Ryan, M.D.**
Columbus, OH

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

1:15 PM – 1:20 PM	17.	<p>Is There an Association Between Femoral and Acetabular Retroversion and Idiopathic Cam Morphology: Analysis of 986 Hips</p> <p>*Margaret A. Sinkler, M.D. Cleveland, OH William Z. Morris, M.D. Dallas, TX Roger T. Yuh, M.D. Fresno, CA Katherine Xie, M.D. Richmond, VA Daniel R. Cooperman, M.D. New Haven, CT Raymond W. Liu, M.D. Cleveland, OH</p>
1:21 PM – 1:26 PM	18.	<p>Sex-Based Differences in Arthroscopic Treatment of Femoroacetabular Impingement: 10-Year Outcomes with a Nested Propensity-Matched Comparison</p> <p>Benjamin G. Domb, M.D. Des Plaines, IL Allison Y. Kufita, B.S. Des Plaines, IL Olivia A. Paraschos, B.A. Des Plaines, IL Wallace T. Harris, M.D. Des Plaines, IL Payam W. Sabetian, M.D. Des Plaines, IL *Paulo P. Padilla, M.D. Des Plaines, IL</p>
1:27 PM – 1:32 PM	19.	<p>Cam Sclerosis and Return to Sport in Femoroacetabular Impingement</p> <p>Jacob L. Henrichsen, M.D. Iowa City, IA *Andrew McKeen, B.S. Iowa City, IA Olivia C. O'Reilly, M.D. Iowa City, IA Qiang An, M.B.B.S, M.S.P.H Iowa City, IA Robert W. Westermann, M.D. Iowa City, IA</p>
1:33 PM – 1:38 PM	20.	<p>Dancers Following Primary Hip Arthroscopy for Demonstrate Favorable Outcomes and High Rate of Return to Dance at Minimum Five-Year Follow-Up</p> <p>*David R. Maldonado, M.D. Des Plaines, IL Michael S. Lee, B.A. Des Plaines, IL Jade S. Owens, B.S. Des Plaines, IL Andrew E. Jimenez, M.D. New Haven, CT Ajay C. Lall, M.D., M.S. Des Plaines, IL Benjamin G. Domb, M.D. Des Plaines, IL</p>
1:38 PM – 1:45 PM	Floor Discussion	

1:46 PM – 1:51 PM	<p>21. Outcomes of Hip Arthroscopy in Patients with Hypermobile Ehlers-Danlos Syndrome</p> <p>*Devin P. Leland, M.D. Rochester, MN Anna K. Reinholz, B.S. Rochester, MN Sydney V. Kalina, B.S. Rochester, MN Allen S. Wang, M.S. Rochester, MN Alexander M. Boos, B.A. Rochester, MN Abhinav Lamba, B.S. Rochester, MN Rafael J. Sierra, M.D. Rochester, MN Aaron J. Krych, M.D. Rochester, MN Bruce A. Levy, M.D. Rochester, MN</p>
1:52 PM – 1:57 PM	<p>22. Long-Term Survivorship and Outcomes of Patients Undergoing Capsular Repair and Primary Hip Arthroscopy for Femoroacetabular Impingement Syndrome</p> <p>Benjamin G. Domb, M.D. Des Plaines, IL Michael S. Lee, B.A. Des Plaines, IL Andrew E. Jimenez, M.D. New Haven, CT David R. Maldonado, M.D. Des Plaines, IL Ajay C. Lall, M.D., M.S. Des Plaines, IL Wallace T. Harris, M.D. Des Plaines, IL *Paulo P. Padilla, M.D. Des Plaines, IL</p>
1:58 PM – 2:03 PM	<p>23. The Impact of Competition Level and Concomitant Procedures on Return to Sport After Hip Preservation Surgery</p> <p>*Steven M. Leary, M.D. Iowa City, IA Andrew L. Schaver, M.D. Iowa City, IA Michael C. Willey, M.D. Iowa City, IA Amanda C. Paulson, D.P.T. Iowa City, IA Jacob L. Henrichsen, M.D. Iowa City, IA Robert W. Westermann, M.D. Iowa City, IA</p>
2:04 PM – 2:09 PM	<p>24. 10-Year Outcomes Following Endoscopic Gluteus Medius Repair</p> <p>Benjamin G. Domb, M.D. Des Plaines, IL Jade S. Owens, B.S. Des Plaines, IL Kara B. Miecznikowski, B.S. Des Plaines, IL *David R. Maldonado, M.D. Des Plaines, IL Ajay C. Lall, M.D., M.S. Des Plaines, IL Payam W. Sabetian, M.D. Des Plaines, IL</p>
2:09 PM – 2:16 PM	<p>Floor Discussion</p>
2:17 PM – 2:26 PM	<p>Spotlight Lecture #2</p> <p>Topic: Psychosocial Components of Hip Preservation Surgery Speaker: W. Kelton Vasileff, M.D. Columbus, OH</p>

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| 2:27 PM – 2:32 PM | 25. | The Physics of Postless Hip Arthroscopy | *Austin E. Winger, M.D. Houston, TX
Justin Cho, B.S. Houston, TX
Omer Mei-Dan, M.D. Aurora, CO
Matthew Kraeutler, M.D. Houston, TX
Joshua D. Harris, M.D. Houston, TX |
| 2:33 PM – 2:38 PM | 26. | Learning Curve of Hip Dysplasia Treated with Periacetabular Osteotomy Based on Patient Reported Outcomes | *Michael C. Willey, M.D. Iowa City, IA
Aspen C. Miller, B.S. Iowa City, IA
Steven M. Leary, M.D. Iowa City, IA
Robert W. Westermann, M.D. Iowa City, IA |
| 2:39 PM – 2:44 PM | 27. | Elevated Joint Contact Stress Increases Risk of Joint Failure When Hip Dysplasia is Treated with Periacetabular Osteotomy | Holly D. Aitken, Ph.D. Iowa City, IA
Michael C. Willey, M.D. Iowa City, IA
Robert W. Westermann, M.D. Iowa City, IA
*Aspen C. Miller, B.S. Iowa City, IA
Natalie A. Glass, Ph.D. Iowa City, IA
Jessica E. Goetz, Ph.D. Iowa City, IA |
| 2:45 PM – 2:50 PM | 28. | Risk Factors for Superior Ramus Osteotomy Nonunion When Hip Dysplasia is Treated with Periacetabular Osteotomy | John Davison, MPH Iowa City, IA
Ganesh Sivamurugan, MBBS Iowa City, IA
Robert W. Westermann, M.D. Iowa City, IA
Natalie A. Glass, Ph.D. Iowa City, IA
Aspen C. Miller, B.S. Iowa City, IA
*Jacob L. Henrichsen, M.D. Iowa City, IA
Todd O. McKinley, M.D. Indianapolis, IN
Michael C. Willey M.D. Iowa City, IA |
| 2:50 PM – 3:00 PM | Floor Discussion | | |

THURSDAY, APRIL 20, 2023
BREAKOUT SESSION #3 | TRAUMA

ROOM: Coral A

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

Co-Moderator: Anthony T. Sorkin, M.D.
Indianapolis, IN

1:15 PM – 1:20 PM	29.	<p>Clavicle Fracture: Does Plate Type Predict Fixation Failure?</p> <p>Alexandra M. Cancio-Bello, B.S. Rochester, MN</p> <p>*James R. Markos, M.D. Rochester, MN</p> <p>Anna K. Reinholz, B.S. Rochester, MN</p> <p>Sara E. Till, B.S. Rochester, MN</p> <p>Taylor D. Dennison, M.D. Rochester, MN</p> <p>Blake P. Gillette, M.D. Rochester, MN</p> <p>S. Andrew Sems, M.D. Rochester, MN</p> <p>Jonathan D. Barlow, M.D., M.S. Rochester, MN</p> <p>Brandon J. Yuan, M.D. Rochester, MN</p> <p>William W. Cross III, M.D. Rochester, MN</p>
1:21 PM – 1:26 PM	30.	<p>Proximal Trans-Ulnar Fracture Dislocations of the Elbow: A Systematic Review and Clarification of Classification Systems</p> <p>*Micah J. Nieboer, M.D. Rochester, MN</p> <p>Alexandra M. Cancio-Bello, B.S. Rochester, MN</p> <p>Katherine E. Mallett, M.D. Rochester, MN</p> <p>Mark E. Morrey, M.D. Rochester, MN</p> <p>Joaquin Sanchez-Sotelo, M.D., Ph.D. Rochester, MN</p> <p>Shawn W. O'Driscoll, M.D. Rochester, MN</p> <p>Jonathan D. Barlow, M.D., M.S. Rochester, MN</p>
1:27 PM – 1:32 PM	31.	<p>CAMKK2 Inhibition Protects Against Chondrocyte Apoptosis and Cartilage Degradation In Human Osteoarthritis</p> <p>*Julian E. Dilley, M.D. Indianapolis, IN</p> <p>Abijit Seetharam, M.D. Indianapolis, IN</p> <p>Xinchun Ding, Ph.D. Indianapolis, IN</p> <p>Margaret Bello, B.S. Indianapolis, IN</p> <p>Roman Natoli, M.D., Ph.D. Indianapolis, IN</p> <p>Todd McKinley, M.D. Indianapolis, IN</p> <p>Uma Sankar, Ph.D. Indianapolis, IN</p>

1:33 PM – 1:38 PM	32.	Survivability of the Femoral Neck System for the Treatment of Femoral Neck Fractures in Adults	
		*Samuel D. Stegelmann, M.D.	Toledo, OH
		Justin Butler, D.O.	Toledo, OH
		Dylan Mathews, D.O.	Toledo, OH
		Hunter Ostlie, B.S.	Toledo, OH
		Benjamin Boothby, D.O.	Toledo, OH
		Seth Phillips, D.O.	Toledo, OH
1:38 PM – 1:45 PM	Floor Discussion		
1:46 PM – 1:51 PM	33.	Proximal Tibia Anatomic Variation May Impact Tibial Intramedullary Nailing	
		*Drew B. Krumm, M.D.	Grand Rapids, MI
		Blake Miller, D.O.	Grand Rapids, MI
		Luke Winkel, M.D.	Grand Rapids, MI
		Laura A. Krech, M.P.H	Grand Rapids, MI
		Alistair J. Chapman, M.D.	Grand Rapids, MI
		Steffen J. Pounders, B.S.	Grand Rapids, MI
		Jessica Parker, Gstat, M.S.	Grand Rapids, MI
		Gable Bert Moffitt, M.D.	Grand Rapids, MI
1:52 PM – 1:57 PM	34.	No Association Between Mortality and Early Postoperative Ambulation after Distal Femur Fracture Fixation in Elderly Patients	
		*Erin Stockwell, M.D.	Omaha, NE
		Matthew Hays, M.D.	Omaha, NE
		Nathanael Urban, 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
1:58 PM – 2:03 PM	35.	Fascia Iliaca Blocks in the ED Decrease Opioid Consumption in Femoral Shaft and Distal Femur Fracture Patients	
		*Michael Dubé, B.S.	Akron, OH
		Nicholas L Kolodychuk, M.D.	Akron, OH
		Nicholas DiNicola, M.D.	Akron, OH
2:04 PM – 2:09 PM	36.	Fascia Iliaca Compartment Block and Pericapsular Nerve Group Block Reduce Opioid Consumption in Hip Fracture Patients	
		*David A. Brueggeman, M.D.	Dayton, OH
		Garrhett G. Via, M.D.	Dayton, OH
		Andrew Froehle, Ph.D.	Dayton, OH
		Scott Hadaway, M.D.	Dayton, OH
		Michael Prayson, M.D.	Dayton, OH
		Indresh Venkatarayappa, M.D.	Dayton, OH
2:09 PM – 2:16 PM	Floor Discussion		
2:17 PM – 2:26 PM	Spotlight Lecture #3		
	Topic:	No Bone is Straight – And Other Tips	
	Speaker:	Anthony T. Sorkin, M.D. Indianapolis, IN	

- 2:27 PM – 2:32 PM **37. The Use of the Piriformis Fossa Radiographic Landmark to Predict "In-Out-In" Placement of the Posterosuperior Femoral Neck Screw**
 *Nicolas P. Kuttner, B.S. Rochester, MN
 Alexandra M. Cancio-Bello, B.S. Rochester, MN
 Krystin A. Hidden, M.D. Rochester, MN
 Timothy M. Hoggard, M.D. Greenville, SC
 Brandon J. Yuan, M.D. Rochester, MN
 John D. Adams Jr., M.D. Greenville, SC
- 2:33 PM – 2:38 PM **38. Cemented vs. Cementless Total Hip Arthroplasty for Acute Femoral Neck Fractures: A Multicenter Study**
 Julian E. Dilley, M.D. Indianapolis, IN
 *Michael M. Kheir, M.D. New York, NY
 Jacob Speybroeck, M.D. Cleveland, OH
 Emile-Victor Kuyl, B.A. New York, NY
 George Ochenjele, M.D. Cleveland, OH
 Alexander S. McLawhorn, M.D. New York, NY
 R. Michael Meneghini, M.D. Fishers, IN
- 2:39 PM – 2:44 PM **39. Revision Sacroiliac Joint Fusion: One-Year Outcomes Using a Principles-Based Approach – Joint Decortication, Bone Grafting, Compression, and Rigid Internal Fixation**
 Jeremy C. Thompson, M.D. Rochester, MN
 Erick M. Marigi, M.D. Rochester, MN
 *Zachariah W. Pinter, M.D. Rochester, MN
 Nicolas P. Kuttner, B.S. Rochester, MN
 William W. Cross III, M.D. Rochester, MN
- 2:45 PM – 2:50 PM **40. Outcomes of Patella Fracture Fixation: Novel Wagon Wheel Construct vs. Tension-Band Construct**
 Alexandra M. Cancio-Bello, B.S. Rochester, MN
 *Aaron R. Owen, M.D. Rochester, MN
 Nicolas P. Kuttner, B.S. Rochester, MN
 Krystin A. Hidden, M.D. Rochester, MN
 William W. Cross III, M.D. Rochester, MN
 Brandon J. Yuan, M.D. Rochester, MN
 Stephen A. Sems, M.D. Rochester, MN
- 2:50 PM – 3:00 PM **Floor Discussion**

THURSDAY, APRIL 20, 2023
BREAKOUT SESSION #4 | PEDIATRIC ORTHOPEDICS

ROOM: Coral B

Co-Moderator: Paul R. Fleissner, Jr., M.D.
Akron, OH

Co-Moderator: Brian P. Hasley, M.D.
Omaha, NE

1:15 PM – 1:20 PM	<p>41. Preoperative MRI Delays Surgery in Pediatric Patients with Infectious Atraumatic Extremity Pain</p> <p>E. Graham Englert, M.D. Royal Oak, MI *Collin Braithwaite Royal Oak, MI Aaron Lam, M.D. Brooklyn, NY Mohamed Sarraj, M.D. Hamilton, Ontario Maria Aguirre-Flores, M.D. El Paso, TX Abigail Kumagai Royal Oak, MI Amr Abdelgawad, M.D. Brooklyn, NY Ahmed Thabet Hagag, M.D. El Paso, TX Waleed Kishta, M.D. Hamilton, Ontario Ehab Saleh, M.D. Royal Oak, MI</p>
1:21 PM – 1:26 PM	<p>42. Assessing the Safety and Efficacy of Tranexamic Acid Usage in Osteogenesis Imperfecta Patients</p> <p>*Vincent P. Eaton Brooklyn, NY Makayla Schissel Omaha, NE Elizabeth Strudthoff Omaha, NE Maegen Wallace, M.D. Omaha, NE</p>
1:27 PM – 1:32 PM	<p>43. Unplanned Return to the Operating Room (UPROR) Occurs in Half of MCGR Patients at 2.4 Years After Initial Implantation</p> <p>*Amy L. McIntosh, M.D. Dallas, TX Matthew Oetgen Washington D.C. Anna Booth Dallas, TX</p>
1:33 PM – 1:38 PM	<p>44. A Novel Technique for Delivery of Nusinersen After Posterior Spinal Fusion in Patients with Spinal Muscular Atrophy</p> <p>*Hannah T. Hoopes, M.D. Oklahoma City, OK Kacy Richburg, M.D. Oklahoma City, OK</p>
1:38 PM – 1:45 PM	Floor Discussion
1:46 PM – 1:51 PM	<p>45. Adolescent Idiopathic Scoliosis Treated with a Unilateral Posterior Peri-Apical Distraction Device (ApiFix): Preliminary Results at One-Year Follow-Up</p> <p>David A. Brueggeman, M.D. Dayton, OH *Garrhett G. Via, M.D. Dayton, OH Michael C. Albert, M.D. Dayton, OH</p>

1:52 PM – 1:57 PM	46. Patient Reported Outcomes Following Calcaneal Lengthening Osteotomy for Treatment of Pediatric Painful Flexible Flatfoot Matthew William Kansas City, MO Daniel Pereira, M.D. St. Louis, MO Pooya Hosseinzadeh, M.D. St. Louis, MO *Jason Cummings St. Louis, MO
1:58 PM – 2:03 PM	47. Preliminary Results of Access to Orthopedic Care in Pediatric Patients with Osteogenesis Imperfecta *Lauren D. Nun, B.S. Omaha, NE Erika Carter, B.S. Gaithersburg, MD Kara B. Ayers, Ph.D. Cincinnati, OH Tracy Hart, B.S. Gaithersburg, MD Elizabeth Strudthoff, RN, B.S.N. Omaha, NE Maegen Wallace, M.D. Omaha, NE
2:04 PM – 2:09 PM	48. Retrospective Analysis of Opioid Prescription Patterns Following Anterior Cruciate Ligament Reconstruction in a Pediatric Population *Tanner L. Hudson Dayton, OH Scott W. Huff, M.D. Dayton, OH Joseph D. Henningsen, M.D. Dayton, OH Eric D. Erb, M.D. Dayton, OH Andrew W. Froehle, Ph.D. Dayton, OH Michael C. Albert, M.D. Dayton, OH
2:09 PM – 2:16 PM	Floor Discussion
2:17 PM – 2:26 PM	Spotlight Lecture #4 Topic: Current Concepts in Pediatric Musculoskeletal Infections Speaker: Paul R. Fleissner, Jr., M.D. Akron, OH
2:27 PM – 2:32 PM	49. Changes in Incidence of Pediatric Fractures During the Covid-19 Pandemic *Isaiah Selkridge, B.A. Chicago, IL Andrew J. Straszewski, M.D. Chicago, IL Sonya Alitzia Kheshti, M.D. Chicago, IL Clarabelle DeVries, M.D. Chicago, IL Laura W. Lewallen, M.D. Chicago, IL
2:33 PM – 2:38 PM	50. Pediatric Radial Neck Fractures: Clinical and Radiographic Outcomes of Closed Reduction in the Emergency Department *Katherine L. Wood, M.D. Oklahoma City, OK Thomas R. Lewis, M.D. Oklahoma City, OK
2:39 PM – 2:44 PM	51. Is Prematurity A Risk Factor for Developmental Dysplasia of the Hip? A Systemic Review and Meta-Analysis *Ryan McNassor, B.S. Cleveland, OH Robert John Burkhart, B.S. Cleveland, OH Alexander Joseph Acuña, M.D. Cleveland, OH Atul F. Kamath, M.D. Cleveland, OH

2:45 PM – 2:50 PM

52. Pediatric Patients are Ready to Return to Sport at Six Months Following Meniscal Repair Based on Isokinetic Dynamometry Testing

*Kenneth Morris Clark, Jr.	Columbus, OH
David C. Flanigan, M.D.	Columbus, OH
Robert A. Magnussen, M.D., MPH	Columbus, OH
Robert A. Duerr, M.D.	Columbus, OH
Christopher C. Kaeding, M.D.	Columbus, OH
Steven Swinehart, M.D.	Columbus, OH
Alex C. DiBartola, M.D.	Columbus, OH
Eric M. Milliron, M.D.	Columbus, OH
Parker A. Cavendish, M.D.	Columbus, OH
Caroline Brunst, P.T., A.T.	Columbus, OH

2:50 PM – 3:00 PM

Floor Discussion

THURSDAY, APRIL 20, 2023
BREAKOUT SESSION #5 | DIGITAL MEDIA AND ROBOTIC-ASSISTED ARTHROPLASTY

ROOM: Coral D

Co-Moderator: **Nicholas A. Bedard, M.D.**
Rochester, MN

Co-Moderator: **Nicolas O. Noiseux, M.D., M.S., FRCSC**
Iowa City, IA

1:15 PM – 1:20 PM	53.	Preoperative Coronal Plane Deformity May Affect Accuracy of Robotic-Arm Assisted Total Knee Arthroplasty	
		Matthew B. Shirley, M.D.	Rochester, MN
		*Nathan J. Jacobson, M.D.	Rochester, MN
		Alisa Geier, M.D.	Jacksonville, FL
		Elizabeth Wellings, M.D. M.Eng	Rochester, MN
		Cedric J. Ortiguera, M.D.	Jacksonville, FL
1:21 PM – 1:26 PM	54.	Reverse Coronal Deformity: Use of Robotic Total Knee Arthroplasty for Identification and Correction	
		*Andrew M. Rizzi, M.D.	Chicago, IL
		Alexander T. Bradley, M.D.	Chicago, IL
		Lalit Puri, M.D.	Chicago, IL
1:27 PM – 1:32 PM	55.	Robotic-Assisted Total Knee Arthroplasty Increases the Frequency of Achieving Target Postoperative Mechanical Alignment	
		*Austin Wininger, M.D.	Houston, TX
		Bradley S. Lambert, Ph.D.	Houston, TX
		Thomas Castlen Sullivan, B.S.	Houston, TX
		Stephen J. Incavo, M.D.	Houston, TX
		Kwan J. Park, M.D.	Houston, TX
1:33 PM – 1:38 PM	56.	Improved Patellar Tracking in Image-Free Robotic-Assisted Total Knee Arthroplasty	
		Erik P. Severson, M.D.	Crosby, MN
		*Matthew Musto, D.O.	Crosby MN
		Thomas M. Lewandowski, PA-C	Crosby MN
		Matthew F. Fleming, PA-C	Crosby MN
		Luke J. LeMieur, B.S.	Crosby, MN
		John A. Reimer, B.S.N.	Crosby, MN
		Adam R. English, C.N.P.	Crosby MN
1:38 PM – 1:45 PM	Floor Discussion		

1:46 PM – 1:51 PM	<p>57. Optimal 3-Dimensional Component Position in TKA: Targeting Native Alignment Optimizes MCIDs in PROMs</p> <p>Hassan Farooq, M.D. Fishers, IN Evan R. Deckard, BSE Fishers, IN Justin Carlson, B.S. Fishers, IN Nathan Ghattas, B.S. Fishers, IN *R. Michael Meneghini, M.D. Fishers, IN</p>
1:52 PM – 1:57 PM	<p>58. Resource Utilization with VELYS Robot and Manual TKA</p> <p>Erik P. Severson, M.D. Crosby, MN *Thomas Lewandowski, PA-C Crosby, MN Matthew Fleming PA-C Crosby, MN John Reimer, B.S.N Crosby, MN Katherine Etter, Ph.D. New Brunswick, NJ Ziyu Tan, M.Sc. Canada Luke LeMieur, B.S. Minneapolis, MN Adam English, C.N.P. Crosby, MN</p>
1:58 PM – 2:03 PM	<p>59. Public Perception of Robotic-Assisted Total Hip Replacement Surgery</p> <p>James E. Feng, M.D., M.S. Royal Oak, MI Marvee Espiritu, M.S., PAS, PA-C Rochester, MI *Phillip Vartanyan, M.D. Royal Oak, MI Drew Moore, M.D. Royal Oak, MI Robert Runner, M.D. Royal Oak, MI Mark Karadsheh, M.D. Royal Oak, MI</p>
2:04 PM – 2:09 PM	<p>60. Quantifying the Importance of Orthopedic Surgeon Attributes by the Public</p> <p>*James E. Feng, M.D., M.S. Royal Oak, MI Rasheed M. Abdullah, B.S. Royal Oak, MI Phillip Vartanyan, M.D. Royal Oak, MI Hassan Alish, M.D. Royal Oak, MI Mark Karadsheh, M.D. Royal Oak, MI Leonardo Cavinatto, M.D., Ph.D. Royal Oak, MI Betina Hinckel, M.D., Ph.D. Royal Oak, MI</p>
2:09 PM – 2:16 PM	<p>Floor Discussion</p>
2:17 PM – 2:26 PM	<p>Spotlight Lecture #5</p> <p>Topic: Robotics in Total Joints: What is the Current Level of Evidence Showing Benefit?</p> <p>Speaker: Nicolas O. Noiseux, M.D., M.S., FRCSC Iowa City, IA</p>
2:27 PM – 2:32 PM	<p>61. A Pilot and Feasibility Study to Assess an Interactive Voice Response Intervention in the Follow-Up of Primary Total Joint Arthroplasty</p> <p>Roshan Jacob, M.D. Birmingham, AL Kelly Chandler Birmingham, AL Sameer Naranje M.D. Birmingham, AL *Elizabeth Marks Benson Birmingham, AL</p>

- 2:33 PM – 2:38 PM **62. YouTube as a Source of Patient Information for Distal Radius Fractures: Quantitative Analysis of Video Reliability, Quality, and Content**
*Manish P. Mehta, M.D. Chicago, IL
Annemarie K. Leonard, M.D. Chicago, IL
Carly L. Williams, M.D. Chicago, IL
Abraham Ouweleen Chicago, IL
Erik B. Gerlach, M.D. Chicago, IL
John J. Carney, M.D. Chicago, IL
Chirag M. Shah, M.D. Chicago, IL
- 2:39 PM – 2:44 PM **63. Factors Influencing the Completion of Patient Recorded Outcome Measures Virtually vs. In Clinic: One Healthcare System's Experience**
Joshua P. Castle, M.D. Detroit, MI
Michael Gaudiani, M.D. Detroit, MI
*Anna McGee, B.S. Detroit, MI
Matthew Gasparro, B.S. Detroit, MI
Eric Makhni, M.D., MBA Detroit, MI
- 2:45 PM – 2:50 PM **64. Telehealth in Orthopedic Sports Medicine**
*Jacob C. Tilmon, M.D. Indianapolis, IN
Hassan Farooq, B.S. Indianapolis, IN
Cameron M. Metzger, M.D. Indianapolis, IN
Stephen H. Schlecht, Ph.D. Indianapolis, IN
Robert G. Klitzman, M.D. Indianapolis, IN
- 2:50 PM – 3:00 PM **Floor Discussion**

FRIDAY, APRIL 21, 2023

6:30 AM - 7:45 AM

Instructional Course III**Topic: Workplace Violence in the Health Care Setting: What We Can Do to Protect Our Patients and Ourselves**

Room: Coral B

Faculty: Alfonso Mejia, M.D., MPH, Moderator
Chicago, ILMark H. Gonzalez M.D.
Chicago, ILPatrick Siemsen
Chicago, IL

6:30 AM - 7:45 AM

Instructional Course IV**Topic: Nuances and Current Controversies in Ankle Fracture Fixation**

Room: Coral A

Faculty: Brandon J. Yuan, M.D., Moderator
Rochester, MNTaylor R. Beahrs, M.D.
Mankato, MNClayton C. Bettin, M.D.
Memphis, TNMatthew A. Mormino, M.D.
Omaha, NE**SECOND PLENARY SESSION****Room: Emerald ABC****Co-Moderator: Simon Mears, M.D.**
Little Rock, AR**Co-Moderator: Marc F. Swiontkowski, M.D.**
Minneapolis, MN

8:00 AM - 8:02 AM

Assemble/Announcements

8:02 AM – 8:42 AM

Symposium II**Topic: Biologics**Faculty: David C. Flanigan, M.D., Moderator
Columbus, OHTendon
W. Kelton Vasileff, M.D.
Columbus, OHHow to Incorporate Biologics in My Practice
Michael R. Karns, M.D.
Cleveland, OHCartilage
Derrick M. Knapik, M.D.
St. Louis, MO

8:43 AM – 9:13 AM

PRESIDENTIAL GUEST SPEAKER

Topic: Musings on the Future of Orthopedic Surgery Based on 38 Years of Practice and Academic Activity

Speaker: Marc F. Swiontkowski, M.D.
Minneapolis, MN

Introduced by: Erik T. Otterberg, M.D.
Omaha, NE

9:14 AM - 9:16 AM

**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: Matthew F. Dilisio, M.D.
Omaha, NE

9:17 AM - 9:22 AM

65. Edward D. Henderson, M.D. Award Presentation

Isolated Thoracic and Lumbar Transverse Process Fractures, Do They Need Spine Surgeon Evaluation? A High Volume Level I Trauma Center Experience with Cost Analysis

*Asa Z. Peterson, M.D. St. Louis, MO

Jonathan P. Behrens, M.D. St. Louis, MO

Howard M. Place, M.D. St. Louis, MO

9:23 AM - 9:28 AM

66. E. W. Johnson, Jr., M.D. Award Presentation

Hemiarthroplasty for Femoral Neck Fracture. Does Approach Affect Outcomes?

*Michael A. Ewing, M.D. Columbia, MO

Madeline A. Sauer, B.S. Columbia, MO

Brett D. Crist, M.D. Columbia, MO

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

9:29 AM – 9:34 AM

67. Carl L. Nelson, M.D. Award Presentation

A Comparison of Clinical and Radiographic Outcomes in Humeral Shaft Fracture

*Chrystina L. James, M.D. Detroit, MI

Jager W. Haan, B.A. Grand Rapids, MI

Yash D. Hegde, B.S. Grand Rapids, MI

Susan G. Wager, B.S. Detroit, MI

Trevor D. Wolterink, B.S. Detroit, MI

Stephanie J. Muh, M.D. Detroit, MI

- 9:35 AM – 9:40 AM **68. Dallas B. Phemister, M.D. Award Presentation**
Nationwide Analysis of Cardiopulmonary Outcomes After Multiple Long Bone Fracture Fixation
 *Maxwell V. Phillips, M.D. Grand Rapids, MI
 Gable Bert Moffitt, M.D. Grand Rapids, MI
 Laura A. Krech, MPH Grand Rapids, MI
 Jessica Parker, GStat, M.S. Grand Rapids, MI
 Steffen J. Ponders, B.S. Grand Rapids, MI
 Alistair J. Chapman, M.D. Grand Rapids, MI
 Blake Miller, D.O. Grand Rapids, MI
- 9:40 AM – 9:45 AM **Floor Discussion**
- 9:45 AM - 10:15 AM **CLASSICS IN ORTHOPAEDICS**
Topic: Subtrochanteric Femur Fractures: Avoiding Complications
 Speaker: Matthew A. Mormino, M.D.
 Omaha, NE
- Introduced by: Erik T. Otterberg, M.D.
 Omaha, NE
- 10:16 AM – 10:30 AM **ABOS Update 2023**
 Speaker: David F. Martin, M.D.
 Executive Director, ABOS
- 10:30 AM – 11:00 AM **Poster Viewing** – presenters will be available (CME credit will be offered)
 Room: Coastal & Emerald Foyers
- 10:30 AM – 11:00 AM **Coffee Break in Exhibit Area**

11:26 AM - 11:31 AM	72. Rates of Complications and Readmissions: In-Patient vs. Outpatient ORIF of Calcaneus Fractures	
	*Allen Yazdi	Birmingham, AL
	Rodney Y. Arthur, B.S.	Birmingham, AL
	David A. Patch	Birmingham, AL
	Nicholas A. Andrews	Birmingham, AL
	Reed M. Butler	Birmingham, AL
	Collier C. Campbell	Birmingham, AL
	William A. Byrd	Birmingham, AL
	Thomas L. Devine	Birmingham, AL
	Clay A. Spitler, M.D.	Birmingham, AL
	Michael D. Johnson, M.D.	Birmingham, AL

Paper position #73 deleted

11:32 AM - 11:37 AM	74. Midfoot Nail-Plate-Constructs for Charcot Neuroarthropathy: A Cohort Study with Mid-Term Follow-Up	
	*William C. Skinner, M.D.	Memphis, TN
	Naveen Pattisapu, M.D.	Memphis, TN
	Clayton C. Bettin, M.D.	Memphis, TN

11:37 AM - 11:51 AM **Floor Discussion**

11:52 AM – 12:00 PM **Spotlight Lecture #6**

Topic: Treatment of Achilles Tendon Ruptures
 Speaker: Norman S. Turner, M.D.
 Rochester, MN

12:01 PM – 12:06 PM	75. Anatomic Structures at Risk When Utilizing Percutaneous Intramedullary Fibular Screw Fixation for Lateral Malleolus Fractures: A Cadaveric Study	
	Thomas Sanchez, B.S.	Birmingham, AL
	Cole Howie, B.S.	Birmingham, AL
	David Patch, B.S.	Birmingham, AL
	*Morgan Sisk, B.S.	Birmingham, AL
	Meghan Underwood, B.S.	Birmingham, AL
	Ashish Shah, M.D.	Birmingham, AL

12:07 PM - 12:12 PM	76. Tibiotalocalcaneal Arthrodesis with Hybrid Nail-Plate Constructs: A Novel Technique for Treatment of Unstable Ankle and Hindfoot Deformities	
	*Carson J. Smith, M.D.	Memphis, TN
	Braden J. Boyer, M.D.	Memphis, TN
	Clayton C. Bettin, M.D.	Memphis, TN

FRIDAY, APRIL 21, 2023
BREAKOUT SESSION #7 | SHOULDER/ELBOW

ROOM: Emerald ABC

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

Co-Moderator: **Nicholas H. Maassen, M.D.**
Chicago, IL

11:00 AM - 11:05 AM	<p>82. Superior Capsular Reconstruction and Lower Trapezius Transfer Both Provide Good Outcomes in Properly Selected Patients with Irreparable Rotator Cuff Tears</p> <p>*Erick M. Marigi, M.D. Rochester, MN Jacob R. Jackowski, M.D. Rochester, MN Muhammad A. Elahi, M.D. Scottsdale, AZ Jonathan D. Barlow, M.D., M.S. Rochester, MN Mark E. Morrey, M.D. Rochester, MN Christopher L. Camp, M.D. Rochester, MN Joaquin Sanchez-Sotelo, M.D., Ph.D. Rochester, MN</p>
11:06 AM - 11:11 AM	<p>83. Unsupervised Machine Learning to Identify Clinically Meaningful Subgroups in Patients Undergoing Arthroscopic Rotator Cuff Repair</p> <p>*Yining Lu, M.D. Rochester, MN Elyse J. Berlinberg, B.A. Chicago, IL Ethan Chervonski, B.A. Chicago, IL Harsh Patel, B.A. Chicago, IL Morgan W. Rice, B.A. Chicago, IL Mario Hevesi, M.D., Ph.D. Rochester, MN Adam B. Yanke, M.D., Ph.D. Chicago, IL Brian J. Cole, M.D., MBA Chicago, IL Nikhil N. Verma, M.D. Chicago, IL Brian Forsythe, M.D. Chicago, IL Tyler G. Allen, M.D. Rochester, MN</p>
11:12 AM - 11:17 AM	<p>84. Liposomal Bupivacaine vs. Interscalene Nerve Block for Arthroscopic Shoulder Surgery: A Prospective Randomized Clinical Non-Inferiority Study</p> <p>Kevin Wall, M.D. Birmingham, AL *Samuel Schick, M.D. Birmingham, AL Joseph Elphinstone, M.D. Birmingham, AL Marshall Williams, M.D. Birmingham, AL Kyle Paul, M.D. Birmingham, AL Alexandra Arguello, M.D. Birmingham, AL Lisa MacBeth, M.D. Birmingham, AL Amit Momaya, M.D. Birmingham, AL Brent Ponce, M.D. Birmingham, AL Eugene Brabston, M.D. Birmingham, AL</p>
11:17 AM - 11:25 AM	<p>Floor Discussion</p>

11:26 AM - 11:31 AM	85. Patients Undergoing Arthroscopic Rotator Cuff Repair with Bioinductive Patch Augmentation Achieve Greater Range of Motion but Equivalent Patient-Reported Outcomes at One Year: A Retrospective Matched Cohort Study																
	<table border="0"> <tr><td>*Joshua P. Castle, M.D.</td><td>Detroit, MI</td></tr> <tr><td>Gabriel B. Burdick</td><td>Detroit, MI</td></tr> <tr><td>Bushra Fathima</td><td>Detroit, MI</td></tr> <tr><td>Trevor D. Wolterink</td><td>Detroit, MI</td></tr> <tr><td>Jager W. Haan</td><td>Detroit, MI</td></tr> <tr><td>Johnny Kasto, M.D.</td><td>Detroit, MI</td></tr> <tr><td>Stephanie J. Muh, M.D.</td><td>Detroit, MI</td></tr> </table>	*Joshua P. Castle, M.D.	Detroit, MI	Gabriel B. Burdick	Detroit, MI	Bushra Fathima	Detroit, MI	Trevor D. Wolterink	Detroit, MI	Jager W. Haan	Detroit, MI	Johnny Kasto, M.D.	Detroit, MI	Stephanie J. Muh, M.D.	Detroit, MI		
*Joshua P. Castle, M.D.	Detroit, MI																
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Johnny Kasto, M.D.	Detroit, MI																
Stephanie J. Muh, M.D.	Detroit, MI																
11:32 AM - 11:37 AM	86. Comparison of Long Head of the Biceps Autograft vs. Human Dermal Allograft for Superior Capsule Reconstruction After Rotator Cuff Tear																
	<table border="0"> <tr><td>*Cody Lee, M.D.</td><td>Chicago, IL</td></tr> <tr><td>Pranav Krishnan, B.S.</td><td>Chicago, IL</td></tr> <tr><td>Nicholas Maassen, M.D.</td><td>Chicago, IL</td></tr> <tr><td>Hayden Baker, M.D.</td><td>Chicago, IL</td></tr> <tr><td>Jason Koh, M.D.</td><td>Chicago, IL</td></tr> <tr><td>Farid Amirouche, Ph.D.</td><td>Chicago, IL</td></tr> <tr><td>Aravind Athiviraham, M.D.</td><td>Chicago, IL</td></tr> </table>	*Cody Lee, M.D.	Chicago, IL	Pranav Krishnan, B.S.	Chicago, IL	Nicholas Maassen, M.D.	Chicago, IL	Hayden Baker, M.D.	Chicago, IL	Jason Koh, M.D.	Chicago, IL	Farid Amirouche, Ph.D.	Chicago, IL	Aravind Athiviraham, M.D.	Chicago, IL		
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Aravind Athiviraham, M.D.	Chicago, IL																
11:38 AM - 11:43 AM	87. Many Patients Fail to Achieve Minimum Clinically Important Difference Following Nonoperative Management of Partial- and Full-Thickness Rotator Cuff Tears																
	<table border="0"> <tr><td>Katherine Keith, M.S.</td><td>Detroit, MI</td></tr> <tr><td>*Joshua P. Castle, M.D.</td><td>Detroit, MI</td></tr> <tr><td>Mitt Patel, B.S.</td><td>Detroit, MI</td></tr> <tr><td>Anna McGee, B.S.</td><td>Madison, WI</td></tr> <tr><td>Nikhil Yedulla, B.S.</td><td>Detroit, MI</td></tr> <tr><td>Michael Gaudiani, M.D.</td><td>Detroit, MI</td></tr> <tr><td>Eric C. Makhni, M.D.</td><td>Detroit, MI</td></tr> </table>	Katherine Keith, M.S.	Detroit, MI	*Joshua P. Castle, M.D.	Detroit, MI	Mitt Patel, B.S.	Detroit, MI	Anna McGee, B.S.	Madison, WI	Nikhil Yedulla, B.S.	Detroit, MI	Michael Gaudiani, M.D.	Detroit, MI	Eric C. Makhni, M.D.	Detroit, MI		
Katherine Keith, M.S.	Detroit, MI																
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Michael Gaudiani, M.D.	Detroit, MI																
Eric C. Makhni, M.D.	Detroit, MI																
11:43 AM - 11:51 AM	Floor Discussion																
11:52 AM – 12:00 PM	<p>Spotlight Lecture #7</p> <p>Topic: Rotator Cuff Tears and Collagen Patches...</p> <p>Speaker: Nicholas H. Maassen, M.D. Chicago, IL</p>																
12:01 PM – 12:06 PM	88. Initial Operative Treatment of Anterior Shoulder Instability in Patients >50 is Associated with Decreased Recurrent Instability																
	<table border="0"> <tr><td>Annie A. Smartt, M.D.</td><td>Rochester, MN</td></tr> <tr><td>Ryan R. Wilbur B.A.</td><td>Chicago, IL</td></tr> <tr><td>Bryant M. Song M.S.</td><td>New Orleans, LA</td></tr> <tr><td>Aaron J. Krych, M.D.</td><td>Rochester, MN</td></tr> <tr><td>Kelechi Okoroha, M.D.</td><td>Rochester, MN</td></tr> <tr><td>Jonathan D. Barlow, M.D., M.S.</td><td>Rochester, MN</td></tr> <tr><td>Christopher L. Camp, M.D.</td><td>Rochester, MN</td></tr> <tr><td>*Alexander Boos, B.A.</td><td>Rochester, MN</td></tr> </table>	Annie A. Smartt, M.D.	Rochester, MN	Ryan R. Wilbur B.A.	Chicago, IL	Bryant M. Song M.S.	New Orleans, LA	Aaron J. Krych, M.D.	Rochester, MN	Kelechi Okoroha, M.D.	Rochester, MN	Jonathan D. Barlow, M.D., M.S.	Rochester, MN	Christopher L. Camp, M.D.	Rochester, MN	*Alexander Boos, B.A.	Rochester, MN
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Christopher L. Camp, M.D.	Rochester, MN																
*Alexander Boos, B.A.	Rochester, MN																

- 12:07 PM - 12:12 PM **89. A Retrospective Evaluation of External Rotation at 0° and 90° of Abduction After Arthroscopic Latarjet Procedure**
Michael E. Bodine, D.O. Chesterfield, MI
*Shariff K. Bishai, D.O. St. Clair Shores, MI
Guy Ball, D.O. St. Clair Shores, MI
Cameron King, D.O. St. Clair Shores, MI
Lydia Wait, B.S. St. Clair Shores, MI
Grace Brannan, Ph.D. Mount Clemens, MI
- 12:13 PM - 12:18 PM **90. The Intraoperative Diagnosis and Procedures Performed for Shoulder Pathology Diagnosed on Arthroscopy Following Normal MRI: A Retrospective Case Series**
*Paul T. Greenfield, M.D. Memphis, TN
Barry B. Phillips, M.D. Memphis, TN
Tyler J. Brolin, M.D. Memphis, TN
- 12:18 PM – 12:26 PM **Floor Discussion**
- 12:27 PM – 12:32 PM **91. Changes in Elbow Stress and Ball Velocity During Reduced Effort Pitching: A Marker-Based Motion Capture Analysis**
*Anthony P. Fiegen, M.D. Rochester, MN
Stuart P. Nezelek, M.S. Rochester, MN
Stacy R. Loushin, B.S. Minneapolis, MN
Abhinav Lamba, B.S. Rochester, MN
Daniel J. Christoffer, ATC Rochester, MN
Martijn Verhoeven, Ph.D. Rochester, MN
Kenton R. Kaufman, Ph.D. Rochester, MN
Christopher L. Camp, M.D. Rochester, MN
Kelechi R. Okoroha, M.D. Rochester, MN
- 12:33 PM - 12:38 PM **92. Osteochondritis Dissecans of the Capitellum of the Elbow: A Comparison of Nonoperative and Surgical Outcomes at Long-Term Follow-Up**
Zachary V. Braig, M.D. Rochester, MN
Mason E. Uvodich, M.D. Rochester, MN
*Abhinav Lamba, B.S. Rochester, MN
Allen S. Wang, M.S. Rochester, MN
Alexander M. Boos, B.A. Rochester, MN
Mark E. Morrey, M.D. Rochester, MN
Joaquin Sanchez-Sotelo, M.D., Ph.D. Rochester, MN
Shawn W. O'Driscoll, M.D., Ph.D. Rochester, MN
Christopher L. Camp, M.D. Rochester, MN
- 12:39 PM - 12:44 PM **93. Elbow Medial Ulnar Collateral Ligament Repair vs. Reconstruction: How Has the Trend Changed?**
*Joseph M. Rund, M.D. Iowa City, IA
Garrett V. Christensen, M.D. Iowa City, IA
Olivia C. O'Reilly, M.D. Iowa City, IA
Krit Petrachaianan, B.A. Iowa City, IA
Brian R. Wolf, M.D. Iowa City, IA

12:45 PM - 12:50 PM

94. Incidence and Epidemiology of Symptomatic Osteochondritis Dissecans of the Capitellum of the Elbow

Mason E. Uvodich, M.D.	Rochester, MN
Zachary V. Braig, M.D.	Rochester, MN
Alexander M. Boos, B.A.	Rochester, MN
*Allen S. Wang, M.S.	Rochester, MN
Abhinav Lamba, B.S.	Rochester, MN
Shawn W. O'Driscoll, M.D., Ph.D.	Rochester, MN
Mark E. Morrey, M.D.	Rochester, MN
Joaquin Sanchez-Sotelo, M.D., Ph.D.	Rochester, MN
Christopher L. Camp, M.D.	Rochester, MN

12:50 PM - 1:00 PM

Floor Discussion

FRIDAY, APRIL 21, 2023
BREAKOUT SESSION #8 | TRAUMA

ROOM: Coral A

Co-Moderator: **William W. Cross, III, M.D.**
Rochester, MN

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

- | | |
|---------------------|---|
| 11:00 AM - 11:05 AM | <p>95. Reliability of Proxy and Self-Assessed Pre-Injury Functional Status in Orthopedic Trauma</p> <p>*Robert F. Kelly, B.S. Chicago, IL
 Carlos Mucharraz, M.D. Denver, CO
 Luke Taylor, B.S. Chicago, IL
 Safi Bajwa, B.S. Chicago, IL
 Cara Joyce, Ph.D. Chicago, IL
 Joseph Cohen, M.D. Chicago, IL
 Hobie Summers, M.D. Chicago, IL
 Ashley E. Levack, M.D. Chicago, IL</p> |
| 11:06 AM - 11:11 AM | <p>96. Can a Prediction Tool that Utilizes Both Clinical and Laboratory Data Increase Accuracy of Septic Nonunion Diagnosis?</p> <p>*Tyler J. Moon, M.D. Cleveland, OH
 Lucas R. Haase, M.D. Cleveland, OH
 Andrew J. Burcke, B.S. Cleveland, OH
 Robert J. Wetzell, M.D. Cleveland, OH
 John K. Sontich, M.D. Cleveland, OH
 George Ochenjele, M.D. Cleveland, OH
 Joshua K. Napora, M.D. Cleveland, OH</p> |
| 11:12 AM - 11:17 AM | <p>97. Significant Loss of Skeletal Muscle Mass Occurs After Femoral Fragility Fracture</p> <p>*John Davison, MPH Iowa City, IA
 Aspen C. Miller, B.S. Iowa City, IA
 Emiko Hasegawa, B.S. Iowa City, IA
 Ruth E. Grossmann, Ph.D., R.N. Iowa City, IA
 Lisa M. Reider, Ph.D. Baltimore, MD
 Natalie A. Glass, Ph.D. Iowa City, IA
 Tessa Kirkpatrick, B.S. Eugene, OR
 Erin C. Owen, Ph.D. MPH Eugene, OR
 Daniel C. Fitzpatrick, M.D. Eugene, OR
 J. Lawrence Marsh, M.D. Iowa City, IA
 Michael C. Willey, M.D. Iowa City, IA</p> |
| 11:17 AM - 11:25 AM | <p>Floor Discussion</p> |

11:26 AM - 11:31 AM	<p>98. Subperiosteal Elevation of the Ulnar Nerve is a Safe and Effective Way to Minimize Postoperative Ulnar Neuritis in Distal Humerus Fractures</p> <p>Margaret A. Sinkler *Mina Ayad Ramon Arza Kirsten Boes Joshua Napora, M.D. George Ochenjele, M.D.</p>	<p>Cleveland, OH Cleveland, OH Cleveland, OH Cleveland, OH Cleveland, OH Cleveland, OH</p>
11:32 AM - 11:37 AM	<p>99. 3D-Printed One-Third Tubular Plates in an Ankle Fracture Model: A Biomechanical Study</p> <p>Luke W. Adams, B.S. Kevin Feltz, M.D. Lisa N. MacFadden, Ph.D. *Nathan W. Skelley, M.D.</p>	<p>Sioux Falls, SD Fargo, ND Sioux Falls, SD Sioux Falls, SD</p>
11:38 AM - 11:43 AM	<p>100. The Lateral Tibiotalar Line: A Novel Radiographic Marker for Syndesmotic Stability of the Ankle</p> <p>*Michelle L. Hertzberg M.D. Stephanie Debolle M.D. Jonathan Shaw M.D. Lindsay Maier Nicholas Laucis M.D. S. Trent Guthrie M.D.</p>	<p>Detroit, MI Detroit, MI Detroit, MI Detroit, MI Detroit, MI Detroit, MI</p>
11:43 AM - 11:51 AM	Floor Discussion	
11:52 AM – 12:00 PM	<p>Spotlight Lecture #8</p> <p>Topic: Medullary Nailing Pearls for Success Speaker: William W. Cross, III, M.D. Rochester, MN</p>	
12:01 PM – 12:06 PM	<p>101. Evaluation of a Multidisciplinary Preoperative Workup Strategy for Geriatric Hip Fractures at a Level III Community Hospital</p> <p>Brian M. Johnson, M.D. Jacob R. Meyer, B.S. *Andrew M. Steffensmeier, M.D. Richard T. Laughlin, M.D.</p>	<p>Cincinnati, OH Cincinnati, OH Cincinnati, OH Cincinnati, OH</p>
12:07 PM - 12:12 PM	<p>102. Periprosthetic Fractures Following Total Hip Arthroplasty: How Many Have Systemic Osteopenia or Osteoporosis?</p> <p>*Michael W. Seward, M.D. Brandon J. Yuan, M.D. Ann E. Kearns, M.D., Ph.D. Paul A. Anderson, M.D. Daniel J. Berry, M.D. Matthew P. Abdel, M.D.</p>	<p>Rochester, MN Rochester, MN Rochester, MN Madison, WI Rochester, MN Rochester, MN</p>

- 12:13 PM - 12:18 PM **103. Results of a Staged Protocol for Total Hip Arthroplasty with Interval Resection and Articulating Antibiotic PMMA Spacer for Failed ORIF of Acetabular Fractures**
 Zachary Crawford, M.D., Pharm.D. Cincinnati, OH
 *Jonathan Ellis, M.D. Cincinnati, OH
 Christopher Matson, M.D. Cincinnati, OH
 Theodore Toan Le, M.D. Cincinnati, OH
 Henry Claude Sagi, M.D. Cincinnati, OH
- 12:18 PM – 12:26 PM **Floor Discussion**
- 12:27 PM – 12:32 PM **104. The Association Between Preoperative INR Values and Postoperative Outcomes Including Mortality in Geriatric Femoral Neck Fractures Treated with Hemiarthroplasty**
 *Mason E. Uvodich, M.D. Rochester, MN
 Evan M. Dugdale, M.D. Rochester, MN
 Stephanie Q. Duong, M.S. Rochester, MN
 Alexandra Cancio-Bello, B.S. Rochester, MN
 S. Andrew Sems, M.D. Rochester, MN
 Brandon J. Yuan, M.D. Rochester, MN
- 12:33 PM - 12:38 PM **105. Impact of COVID-19 on Time to Surgery for Fractures in Orthopedic Trauma**
 *Nicholas A. Lin, B.A. Chicago, IL
 Jay B. Patel, B.S. Chicago, IL
 Kelly K. Hynes, M.D. Chicago, IL
 Jason A. Strelzow, M.D. Chicago, IL
- 12:39 PM - 12:44 PM **106. What Are the Major Risk Factors for Nonunion in Pilon Fractures?**
 Rodney Y. Arthur, B.S. Birmingham, AL
 *Anthony L. Wilson, B.S. Birmingham, AL
 Brandon Boyd, B.S. Birmingham, AL
 Kyle Cichos, M.D. Birmingham, AL
 David Patch, M.D. Birmingham, AL
 Gerald McGwin, Ph.D. Birmingham, AL
 Michael Johnson, M.D. Birmingham, AL
 Clay A. Spitler, M.D. Birmingham, AL
- 12:45 PM - 12:50 PM **107. Presence of Concomitant Scapular Fractures is Associated with Increased Displacement of Clavicle Fractures**
 *Jorge H. Figueras, B.S. Cincinnati, OH
 Matthew Frederickson, B.S. Cincinnati, OH
 Jacob R. Meyer, B.S. Cincinnati, OH
 Justin May, B.S. Cincinnati, OH
 Brian M. Johnson, M.D. Cincinnati, OH
 Cameron G. Thomson, M.D. Cincinnati, OH
 Richard T. Laughlin, M.D. Cincinnati, OH
- 12:50 PM - 1:00 PM **Floor Discussion**

FRIDAY, APRIL 21, 2023
BREAKOUT SESSION #9 | ARTHROPLASTY: INFECTION

ROOM: Coral B

Co-Moderator:	James A. Keeney, M.D. Columbia, MO
Co-Moderator:	Glenn D. Wera, M.D. Cleveland, OH
11:00 AM - 11:05 AM	<p>108. Temporal Relationship of Hardware Removal and Correlation with Postoperative Deep Infections Following Conversion Total Knee Arthroplasty</p> <p>*Hayden P. Baker, M.D. Chicago, IL Henry Seidel Chicago, IL Lohith Vatti, M.D. Chicago, IL Douglas J. Weaver, M.D. Chicago, IL Bryan Scott, M.D. Chicago, IL</p>
11:06 AM - 11:11 AM	<p>109. Is There a Time-Dependent Contamination Risk to Open Surgical Trays During Total Hip and Knee Arthroplasty?</p> <p>Michael D. Russell M.D., MPH, MBA Iowa City, IA Michael Orness, M.D. Iowa City, IA Alyssa Conrad, M.S. Iowa City, IA Nicholas A. Bedard, M.D. Rochester, MN Timothy S. Brown, M.D. Houston, TX *Nicolas O. Noiseux, M.D., M.S., FRCSC Iowa City, IA</p>
11:12 AM - 11:17 AM	<p>110. Efficacy of Saline Wash Plus Vancomycin/Tobramycin-Doped PVA Composite (PVA-VAN/TOB-P) in a Mouse Pouch Infection Model Implanted with 3D-Printed Porous Titanium Cylinders</p> <p>*Dexter T. Powell, M.D. Saint Clair Shores, MI David C. Markel, M.D. Ann Arbor, MI Paula Dietz, M.S. Southfield, MI Bin Wu, M.D. Southfield, MI Therese Bou-Akl, M.D., Ph.D. Southfield, MI Weiping Ren, M.D., Ph.D. Southfield, MI</p>
11:17 AM - 11:25 AM	Floor Discussion
11:26 AM - 11:31 AM	<p>111. Validating a Decision-Making Model for Use of Debridement, Antibiotics, and Implant Retention</p> <p>*Meagan E. Tibbo, M.D. Chicago, IL Victoria Oladipo, B.S. Chicago, IL Jonathan A. Guntin, B.A. Chicago, IL Conor Jones, M.D. Chicago, IL Brett R. Levine, M.D., M.S. Chicago, IL</p>

11:32 AM - 11:37 AM	112. Prophylactic Postoperative Oral Antibiotics Reduce 90-Day Infection Rate After Aseptic Tibial Polyethylene Exchange												
	<table border="0"> <tr> <td>Avinash Inabathula, M.D.</td> <td>Springfield, IL</td> </tr> <tr> <td>Anthony Milto, M.D.</td> <td>Springfield, IL</td> </tr> <tr> <td>Sowmyanarayanan Thuppal, Ph.D.</td> <td>Springfield, IL</td> </tr> <tr> <td>Kristin Delfino, Ph.D.</td> <td>Springfield, IL</td> </tr> <tr> <td>John V. Horberg, M.D.</td> <td>Springfield, IL</td> </tr> <tr> <td>*D. Gordan Allan, M.D.</td> <td>Springfield, IL</td> </tr> </table>	Avinash Inabathula, M.D.	Springfield, IL	Anthony Milto, M.D.	Springfield, IL	Sowmyanarayanan Thuppal, Ph.D.	Springfield, IL	Kristin Delfino, Ph.D.	Springfield, IL	John V. Horberg, M.D.	Springfield, IL	*D. Gordan Allan, M.D.	Springfield, IL
Avinash Inabathula, M.D.	Springfield, IL												
Anthony Milto, M.D.	Springfield, IL												
Sowmyanarayanan Thuppal, Ph.D.	Springfield, IL												
Kristin Delfino, Ph.D.	Springfield, IL												
John V. Horberg, M.D.	Springfield, IL												
*D. Gordan Allan, M.D.	Springfield, IL												
11:38 AM - 11:43 AM	113. Cutibacterium Acnes Periprosthetic Joint Infections: Presentation and Treatment Considerations												
	<table border="0"> <tr> <td>*Christopher N. Warne, M.D.</td> <td>Rochester, MN</td> </tr> <tr> <td>Sean P. Ryan, M.D.</td> <td>Durham, NC</td> </tr> <tr> <td>Elizabeth Yu, M.D.</td> <td>Columbus, OH</td> </tr> <tr> <td>Douglas R. Osmon, M.D.</td> <td>Rochester, MN</td> </tr> <tr> <td>Matthew P. Abdel, M.D.</td> <td>Rochester, MN</td> </tr> <tr> <td>Daniel J. Berry, M.D.</td> <td>Rochester, MN</td> </tr> </table>	*Christopher N. Warne, M.D.	Rochester, MN	Sean P. Ryan, M.D.	Durham, NC	Elizabeth Yu, M.D.	Columbus, OH	Douglas R. Osmon, M.D.	Rochester, MN	Matthew P. Abdel, M.D.	Rochester, MN	Daniel J. Berry, M.D.	Rochester, MN
*Christopher N. Warne, M.D.	Rochester, MN												
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Matthew P. Abdel, M.D.	Rochester, MN												
Daniel J. Berry, M.D.	Rochester, MN												
11:43 AM - 11:51 AM	Floor Discussion												
11:52 AM – 12:00 PM	Spotlight Lecture #9 Topic: Detection and Confirmation of Periprosthetic Infection in 2023 Speaker: Glenn D. Wera, M.D. Cleveland, OH												
12:01 PM – 12:06 PM	114. Functional and Patient Reported Outcomes After Successful DAIR for Periprosthetic Joint Infection of Total Knee Arthroplasty												
	<table border="0"> <tr> <td>*Matthew G. Van Engen, B.S.</td> <td>Iowa City, IA</td> </tr> <tr> <td>Christopher Carender, M.D.</td> <td>Iowa City, IA</td> </tr> <tr> <td>Nicholas Bedard, M.D.</td> <td>Iowa City, IA</td> </tr> <tr> <td>Natalie Glass, Ph.D.</td> <td>Iowa City, IA</td> </tr> <tr> <td>Nicolas O. Noiseux, M.D., M.S., FRCSC</td> <td>Iowa City, IA</td> </tr> </table>	*Matthew G. Van Engen, B.S.	Iowa City, IA	Christopher Carender, M.D.	Iowa City, IA	Nicholas Bedard, M.D.	Iowa City, IA	Natalie Glass, Ph.D.	Iowa City, IA	Nicolas O. Noiseux, M.D., M.S., FRCSC	Iowa City, IA		
*Matthew G. Van Engen, B.S.	Iowa City, IA												
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Natalie Glass, Ph.D.	Iowa City, IA												
Nicolas O. Noiseux, M.D., M.S., FRCSC	Iowa City, IA												
12:07 PM - 12:12 PM	115. Synovial Fluid ANC and NLR Are Not Superior to PMN% in Detecting PJI												
	<table border="0"> <tr> <td>*Julian E. Dilley, M.D.</td> <td>Indianapolis, IN</td> </tr> <tr> <td>Abhijit Seetharam, M.D.</td> <td>Indianapolis, IN</td> </tr> <tr> <td>R. Michael Meneghini, M.D.</td> <td>Fishers, IN</td> </tr> <tr> <td>Michael M. Kheir, M.D.</td> <td>Novi, MI</td> </tr> </table>	*Julian E. Dilley, M.D.	Indianapolis, IN	Abhijit Seetharam, M.D.	Indianapolis, IN	R. Michael Meneghini, M.D.	Fishers, IN	Michael M. Kheir, M.D.	Novi, MI				
*Julian E. Dilley, M.D.	Indianapolis, IN												
Abhijit Seetharam, M.D.	Indianapolis, IN												
R. Michael Meneghini, M.D.	Fishers, IN												
Michael M. Kheir, M.D.	Novi, MI												
12:13 PM - 12:18 PM	116. Increased Incidence of MRSA in Knee and Hip Prosthetic Joint Infection												
	<table border="0"> <tr> <td>*Matthew R. Hays, M.D.</td> <td>Omaha, NE</td> </tr> <tr> <td>Kevin L. Garvin, M.D.</td> <td>Omaha, NE</td> </tr> <tr> <td>Curtis W. Hartman, M.D.</td> <td>Omaha, NE</td> </tr> <tr> <td>Elizabeth I. Lyden, M.S.</td> <td>Omaha, NE</td> </tr> <tr> <td>Beau J. Kildow, M.D.</td> <td>Omaha, NE</td> </tr> </table>	*Matthew R. Hays, M.D.	Omaha, NE	Kevin L. Garvin, M.D.	Omaha, NE	Curtis W. Hartman, M.D.	Omaha, NE	Elizabeth I. Lyden, M.S.	Omaha, NE	Beau J. Kildow, M.D.	Omaha, NE		
*Matthew R. Hays, M.D.	Omaha, NE												
Kevin L. Garvin, M.D.	Omaha, NE												
Curtis W. Hartman, M.D.	Omaha, NE												
Elizabeth I. Lyden, M.S.	Omaha, NE												
Beau J. Kildow, M.D.	Omaha, NE												
12:18 PM – 12:26 PM	Floor Discussion												

FRIDAY, APRIL 21, 2023
BREAKOUT SESSION #10 | SPINE

ROOM: Coral C

Co-Moderator: Anthony F. Guanciale, M.D.
Cincinnati, OH

Co-Moderator: Catherine R. Olinger, M.D.
Iowa City, IA

11:00 AM - 11:05 AM	<p>121. Social Vulnerability Index (SVI) Can Be Used to Predict Healthcare Resource Utilization and Persistent Opioid Use After Elective Lumbar Spine Surgery</p> <p>Erik B. Gerlach, M.D. Chicago, IL Mark A. Plantz, M.D. Chicago, IL Bejan Alvandi, M.D. Chicago, IL Steven Kurapaty, M.D. Chicago, IL Jason Tegethoff, M.D. Chicago, IL *Jeremy Marx, M.D. Chicago, IL Srikanth Divi, M.D. Chicago, IL Wellington Hsu, M.D. Chicago, IL Alpesh Patel, M.D. Chicago, IL</p>
11:06 AM - 11:11 AM	<p>122. Preoperative Serum Albumin Level Predicts Length of Stay and Perioperative Complications Following Vertebral Corpectomy and Posterior Stabilization for Metastatic Spinal Pathology</p> <p>*Takashi Hirase, M.D., MPH Houston, TX Khaled Taghlabi, M.D. Houston, TX Jesus G. Cruz-Garza, Ph.D. Houston, TX Amir H. Faraji, M.D., Ph.D. Houston, TX Rex A.W. Marco, M.D. Houston, TX Comron Saifi, M.D. Houston, TX</p>
11:12 AM - 11:17 AM	<p>123. Time to Improvement for Postoperative Symptoms for Cervical Myelopathy: A Retrospective Analysis</p> <p>*Anthony Baumann, DPT Rittman, OH Mingda Chen, B.A. Cleveland, OH Peter Ahorukomeye, B.S. Cleveland, OH Christopher Furey, M.D. Cleveland, OH Christina Cheng, M.D. Cleveland, OH</p>
11:17 AM - 11:25 AM	Floor Discussion
11:26 AM - 11:31 AM	<p>124. Assessing Treatment of Floating Lateral Mass (FLM) Fractures of the Subaxial Cervical Spine</p> <p>*Kayla Prezelski, MSE St. Louis, MO Karissa N. Simon, B.S. St. Louis, MO Benjamin A. Nwadike, M.D. St. Louis, MO Howard M. Place, M.D. St. Louis, MO</p>

11:32 AM - 11:37 AM	<p>125. Patient Satisfaction with Spine Surgery Telemedicine Visits</p> <p>*Mark A. Plantz, M.D. Chicago, IL Erik B. Gerlach, M.D. Chicago, IL Cody Goedderz, M.D. Chicago, IL Steven Kurapaty, M.D. Chicago, IL Jason Tegethoff, M.D. Chicago, IL Jeremy Marx, M.D. Chicago, IL Srikanth Divi, M.D. Chicago, IL Alpesh Patel, M.D. Chicago, IL Wellington Hsu, M.D. Chicago, IL</p>
11:38 AM - 11:43 AM	<p>126. The Effects of Static and Expandable Cages on Local and Global Lumbar Lordosis (LL) in Transforaminal Lumbar Interbody Fusion (TLIF) Patients: A Minimum One-Year Follow-Up</p> <p>*Tzu Chuan Yen, M.D. Columbia, MO Major Benjamin Burch, M.D. Providence, RI Julia Crim, M.D. Columbia, MO Emily Leary, PhD Columbia, MO Sameh Abolfotouh, M.D. Dubai Don K. Moore, M.D. Columbia, MO</p>
11:43 AM - 11:51 AM	Floor Discussion
11:52 AM – 12:00 PM	<p>Spotlight Lecture #10</p> <p>Topic: Where Are We Now? A Review of Structural and Non-Structural Graft Materials for the Spine</p> <p>Speaker: Anthony F. Guanciale, M.D. Cincinnati, OH</p>
12:01 PM – 12:06 PM	<p>127. Women in Spine</p> <p>Kathryn Jurenovich, D.O. Warren, OH Lisa K. Cannada, M.D. Jacksonville, FL Melissa Erickson, M.D. Durham, NC *Hania Shahzad, MBBS Columbus, OH Nazihah Bhatti Columbus, OH Elizabeth Yu, M.D. Columbus, OH</p>
12:07 PM - 12:12 PM	<p>128. Percutaneous vs. Open Management of Thoracic and Lumbar Hyperostotic Fractures: A Case Control Study</p> <p>*Mark C. Lawlor, M.D. Rochester, NY Clarke Cady-McCrea, M.D. Rochester, NY Addisu Mesfin, M.D. Rochester, NY Karim Elmobdy Rochester, NY</p>
12:13 PM - 12:18 PM	<p>129. Retrospective Review of Expandable Meshed Allograft Containment Device for Interbody Fusion in Traumatic Fractures and Osteomyelitis</p> <p>*Zachary Crawford, M.D., Pharm.D. Cincinnati, OH Kellsa Mbah-Feng Cincinnati, OH Brian Johnson, M.D. Cincinnati, OH Anthony Guanciale, M.D. Cincinnati, OH</p>
12:18 PM – 12:26 PM	Floor Discussion

12:27 PM – 12:32 PM	<p>130. Cervical Spinal Immobilization: A Head-to-Head Comparison of a One-Step Spray-on Foam Splint vs. SAM splint Immobilization</p> <p>Kevin Martin, D.O. Columbus, OH *Austin J. Roebke, M.D. Columbus, OH Kathryn Jurenovich, D.O. Columbus, OH Elizabeth Yu, M.D. Columbus, OH Jonathan Karnes, M.D. Columbus, OH Safdar Khan, M.D. Columbus, OH Nicholas Kman, M.D. Columbus, OH Adam Groth, M.D. Columbus, OH Nate Bates, Ph.D. Columbus, OH</p>
12:33 PM - 12:38 PM	<p>131. Outcomes of Elective Lumbar Decompression and Decompression with Fusion Procedures in Octogenarians</p> <p>Peter Swiatek, M.D. Chicago, IL Josh P. Weissman, M.D. Chicago, IL *Mark A. Plantz, M.D. Chicago, IL Erik Gerlach, M.D. Chicago, IL Nicholas Arpey, M.D. Chicago, IL Hogan J. Brecount, M.D. Chicago, IL Steven Kurapaty, M.D. Chicago, IL Alyssa M. Goodwin, B.S. Chicago, IL Jacqueline E. Inglis, B.A. Chicago, IL Srikanth N. Divi, M.D. Chicago, IL</p>
12:39 PM - 12:44 PM	<p>132. Does the Use of a Smoke Evacuation Device Reduce Smoke Exposure in the OR? A Prospective Study</p> <p>*James R. L. Hall, M.D. Iowa City, IA Joshua M. Eisenberg, M.D. Iowa City, IA Ashley J. Bell, B.S. Iowa City, IA Christopher N. Carender, M.D. Iowa City, IA Christopher P. Lindsay Iowa City, IA Natalie A. Glass, Ph.D. Iowa City, IA Catherine R. Olinger, M.D. Iowa City, IA Cassim M. Igram, M.D. Iowa City, IA Andrew J. Pugely, M.D. Iowa City, IA</p>
12:45 PM - 12:50 PM	<p>133. Experiences with the Treatment of Cervical Spine Infections from a Level-I Trauma Center: A Retrospective Cohort Study</p> <p>Jorge H. Figueras, B.S. Cincinnati, OH Zachary Crawford, M.D., Pharm.D. Cincinnati, OH Brian M. Johnson, M.D. Cincinnati, OH Cameron G. Thomson Cincinnati, OH *Anthony F. Guanciale, M.D. Cincinnati, OH</p>
12:50 PM - 1:00 PM	<p>Floor Discussion</p>

6:30 PM – 7:30 PM

STEEL MEMORIAL LECTURE

Topic: **The 1991 Liberation of Kuwait: A Military and Political Perspective**

Speaker: General Charles A. Horner, USAF (ret.)
Shalimar, FL

Introduced by: Erik T. Otterberg, M.D.
Omaha, NE

SATURDAY, APRIL 22, 2023

THIRD PLENARY SESSION

Room: Emerald ABC

Moderator: Jeffrey R. McLaughlin, M.D.
Oshkosh, WI

7:00 AM – 7:04 AM

Assemble/Announcements

7:05 AM – 7:45 AM

Symposium III**Topic: Shoulder Arthroplasty**

Faculty: Gregory L. Cvetanovich, M.D., Moderator
Columbus, OH

Management of Humeral and Glenoid Insufficiency in Shoulder Arthroplasty

Jonathan D. Barlow, M.D., M.S.

Rochester, MN

TSA vs. RSA: Do Outcomes Differ?

Nicholas H. Maassen, M.D.

Chicago, IL

Management of Complications in Shoulder Arthroplasty

Matthew J. Teusink, M.D.

Omaha, NE

Case Discussions

7:46 AM – 7:48 AM

Presentation of MAOA Poster Awards

Presented by: Matthew F. Dilisio, M.D.
Omaha, NE

7:49 AM – 8:29 AM

AAOS Report

Speaker: Kevin J. Bozic, M.D., M.B.A.
President, American Academy of Orthopaedic Surgeons

Introduced by: Erik T. Otterberg, M.D.
Omaha, NE

8:30 AM – 9:30 AM

Quiz Bowl

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

9:30 AM – 10:00 AM

Rapp Lecturer

Topic: The Modified Romash Osteotomy in Calcaneal Fracture-Dislocation Malunions: Joint Salvage to Arthrodesis

Speaker: Michael P. Clare, M.D.
Bradenton, FL

Introduced by: Erik T. Otterberg, M.D.
Omaha, NE

10:00 AM – 10:30 AM

Coffee Break in Exhibit Area

10:30 AM – 1:30 PM

FIVE BREAKOUTS TO RUN CONCURRENTLY

SATURDAY, APRIL 22, 2023

BREAKOUT SESSION #11 | **ADULT RECONSTRUCTION: HIP**

ROOM: Emerald ABC

**Co-Moderator | Papers #134 – 143: Anna Cohen-Rosenblum, M.D.
Metairie, LA**

**Co-Moderator | Papers #134 – 143: Craig J. Della Valle, M.D.
Chicago, IL**

10:30 AM - 10:35 AM

134. Dual-Mobility vs. Large Femoral Head in Revision Total Hip Arthroplasty: Interim Analysis of a Randomized Controlled Trial

Matthew T. Weintraub, B.S.	Chicago, IL
Anne DeBenedetti, MSc	Chicago, IL
Denis Nam, M.D., MSc	Chicago, IL
Brian Darrith, M.D.	Detroit, MI
Colin M. Baker, B.S.	Philadelphia, PA
Daniel Waren, MPH	New York, NY
Ran Schwarzkopf, M.D., MSc	New York, NY
P. Maxwell Courtney, M.D.	Philadelphia, PA
*Craig J. Della Valle, M.D.	Chicago, IL

10:36 AM - 10:41 AM

135. Contemporary Custom Flanged Acetabular Components: Expected Outcomes May Differ for Women and Men

*Payton K. Arnold, M.D.	Indianapolis, IN
Mary Ziemba-Davis, B.A.	Fishers, IN
Leonard T. Buller, M.D.	Indianapolis, IN
R. Michael Meneghini, M.D.	Fishers, IN

10:42 AM - 10:47 AM

136. Do 'Surgeon Champions' and High-Volume Surgeons Have Lower Rates of Periprosthetic Hip Fracture?

*Jacob F. Markel M.D.	Louisville, KY
Nathanael Adams, M.D.	Flint, MI
Ajay Srivastava, M.D.	Flint, MI
David C. Markel, M.D.	Novi, MI
Brian Hallstrom, M.D.	Ann Arbor, MI

10:47 AM - 10:54 AM

Floor Discussion

- | | |
|---------------------|---|
| 10:55 AM - 11:00 AM | <p>137. Disproportionate Number of Patients Qualify as "High-Risk" for Arthroplasty from Disadvantaged Areas</p> <p>*Genna R. Potter, B.S. Little Rock, AR
 Bennett W. Feuchtenberger, B.S. Iowa City, IA
 Halee Sowinski, B.S. Morgantown, WV
 Austin Roberts, B.S. Morgantown, WV
 Jeffery B. Stambough, M.D. Little Rock, AR
 Matthew Dietz, M.D. Morgantown, WV
 Eric R. Siegel, M.S. Little Rock, AR
 Nicholas Bedard, M.D. Rochester, MN
 Simon C. Mears Little Rock, AR</p> |
| 11:01 AM - 11:06 AM | <p>138. Can the American Joint Replacement Registry Utilize Administrative Claims Data to Accurately Classify Revision THA Surgical Diagnoses?</p> <p>Samuel E. Broida, M.D. Rochester, MN
 Jacob M. Wilson, M.D. Rochester, MN
 Hilal D. Maradit Kremers, M.D. Rochester, MN
 James A. Browne, M.D. Charlottesville, VA
 Bryan D. Springer, M.D. Charlotte, NC
 Daniel J. Berry, M.D. Rochester, MN
 David G. Lewallen, M.D. Rochester, MN
 *Nicholas A. Bedard, M.D. Rochester, MN</p> |
| 11:07 AM - 11:12 AM | <p>139. Medicaid Patients Undergo Total Joint Arthroplasty at Lower Volume Hospitals by Lower Volume Surgeons</p> <p>*Anna Cohen-Rosenblum, M.D. Metairie, LA
 Amit Piple, M.D. Los Angeles, CA
 Charles Hansen, M.D. New Orleans, LA
 Jennifer Wang, B.S. Los Angeles, CA
 Nathanael Heckmann, M.D. Los Angeles, CA</p> |
| 11:13 AM - 11:18 AM | <p>140. Have We Gotten Better Over Time Mitigating Complications in Obese Patients Undergoing THA?</p> <p>*Evan M. Dugdale, M.D. Rochester, MN
 Mason E. Uvodich, M.D. Rochester, MN
 Mark W. Pagnano, M.D. Rochester, MN
 Daniel J. Berry, M.D. Rochester, MN
 Matthew P. Abdel, M.D. Rochester, MN
 Nicholas A. Bedard, M.D. Rochester, MN</p> |
| 11:18 AM - 11:26 AM | Floor Discussion |
| 11:27 AM - 11:32 AM | <p>141. Tapered Fluted Titanium Stems in Revision Total Hip Arthroplasty: A Clinical and Radiographic Outcomes Study of Monobloc and Modular Designs.</p> <p>*Bradford P. Zitsch, M.D. Omaha, NE
 Jay Byrd, B.S. Omaha, NE
 Beau S. Konigsberg, M.D. Omaha, NE
 Curtis W. Hartman, M.D. Omaha, NE</p> |

- 12:14 PM – 12:19 PM **146. Abdominal Pannus Size Should Not Dictate Surgical Approach in Primary Total Hip Arthroplasty**
 Robert R. Burnham Jr., M.D. Maywood, IL
 *Samantha E. Bialek, M.D. Maywood, IL
 Audrey K. Mustoe, B.S. Maywood, IL
 Nicholas M. Brown, M.D. Maywood, IL
- 12:20 PM – 12:25 PM **147. Medial Collar Stem Design Lowers Six Month Periprosthetic Hip Fracture and Subsidence Rate**
 Avinash Inabathula, M.D. Springfield, IL
 Ryan O'Rourke, M.D. South Bend, IN
 Benjamin T. Ryan, M.D. Springfield, IL
 Anthony Milto, M.D. Springfield, IL
 Sowmyanarayanan Thuppal, Ph.D. Springfield, IL
 *D. Gordon Allan, M.D. Springfield, IL
- 12:25 PM - 12:33 PM **Floor Discussion**
- 12:34 PM – 12:39 PM **148. How Do Physician Patients Fare After Primary Total Hip and Total Knee Arthroplasty?**
 *Matthew B. Shirley, M.D. Rochester, MN
 Matthew P. Abdel, M.D. Rochester, MN
 Henry D. Clarke, M.D. Phoenix, AZ
 Robert T. Trousdale, M.D. Rochester, MN
 Cameron K. Ledford, M.D. Jacksonville, FL
- 12:40 PM – 12:45 PM **149. Age, Comorbidities, and Lack of Insurance Are Predictors of In-Hospital Mortality After Periprosthetic Hip Fracture**
 *Ramon A. Arza, B.S. Cleveland, OH
 Ajay S. Potluri, B.S. Cleveland, OH
 Mitchell L. Thom, B.S. Cleveland, OH
 Glenn D. Wera, M.D. Cleveland, OH
- 12:46 PM – 12:51 PM **150. Greater Trochanteric Fixation Using Cable Plate Devices in Complex Primary and Revision Total Hip Arthroplasty**
 *Kwan J. Park, M.D. Houston, TX
 Patrick Schafer, M.D., M.S. Houston, TX
 Thomas C. Sullivan, B.S. Houston, TX
 Bradley Lambert, Ph.D. Houston, TX
 Timothy S. Brown, M.D. Houston, TX
 Terry A. Clyburn, M.D. Houston, TX
 Stephen J. Incavo, M.D. Houston, TX
- 12:51 PM – 12:58 PM **Floor Discussion**

- 12:59 PM – 1:04 PM **151. Outcomes of Total Hip Arthroplasty in Patients with a History of Native Hip Septic Arthritis: A 20-Year Retrospective Review**
 Johnny K. Kasto, M.D. Detroit, MI
 Gabriel B. Burdick Detroit, MI
 Ayo Ayoola Detroit, MI
 *Noah A. Kuhlmann Detroit, MI
 Lindsay M. Maier, M.D. Detroit, MI
 Trevor R. Banka, M.D. Detroit, MI
 Stephanie J. Muh, M.D. Detroit, MI
- 1:05 PM – 1:10 PM **152. Comparative Study Measuring Radiation Exposure in Direct Anterior Total Hip Arthroplasty**
 Erik P. Severson M.D. Crosby, MN
 *Luke J. LeMieur, B.S. Minneapolis, MN
 Thomas M. Lewandowski, PA-C Crosby, MN
 Matthew F. Fleming, PA-C Crosby, MN
 John A. Reimer, BSN Crosby, MN
 Adam R. English, CNP Crosby, MN
- 1:11 PM – 1:16 PM **153. Large Femoral Heads and Select Dual-Mobility Bearing Use Reduce Instability in Contemporary Posterior Approach THA**
 *Lauren I. Pitz, M.D. Fishers, IN
 Evan R. Deckard, BSE Fishers, IN
 R. Michael Meneghini, M.D. Fishers, IN
- 1:17 PM – 1:22 PM **154. Medicare Coverage and Patient Demographics Predict Discharge to Home After Periprosthetic Hip Fracture**
 *Ajay S. Potluri, B.S. Cleveland, OH
 Ramon A. Arza, B.S. Cleveland, OH
 Mitchell Thom, B.S. Cleveland, OH
 Glenn D. Wera, M.D. Cleveland, OH
- 1:22 PM – 1:30 PM **Floor Discussion**

- 11:01 AM - 11:06 AM **159. What is the Clinical Impact of Staging and Surveillance PET-CT Scan Findings in Patients with Bone and Soft Tissue Sarcoma?**
 Linus Lee, B.E. Chicago, IL
 Alexander Kazmer, B.S. Chicago, IL
 Gayathri Vijayakumar, B.S. Chicago, IL
 Matthew W. Colman, M.D. Chicago, IL
 Steven Gitelis, M.D. Chicago, IL
 Marta Batus, M.D. Chicago, IL
 *Alan T. Blank, M.D., M.S. Chicago, IL
- 11:07 AM - 11:12 AM **160. PET Imaging vs. Clinical Examination in Determining Lymph Node Involvement in Merkel Cell Carcinoma of the Extremity**
 *Samuel E. Broida, M.D. Rochester, MN
 Xiao T. Chen, M.D. Rochester, MN
 Brian D. Wahlig, M.D. Rochester, MN
 Steven Moran, M.D. Rochester, MN
 Matthew T. Houdek, M.D. Rochester, MN
- 11:13 AM - 11:18 AM **161. The Value the Tip-Apex-Distance in Pathologic Bone: Predicting Failure of Prophylactic Fixation of Impending Peritrochanteric Hip Fractures**
 *Logan M. Good, B.S. Columbus, OH
 David Pettit, M.D. Columbus, OH
 Carl D. Quinion, M.D. Columbus, OH
 Azeem T. Malik, M.B.B.S. Columbus, OH
 Brandon Jonard, M.D. Columbus, OH
 Thomas J. Scharschmidt, M.D. Columbus, OH
- 11:18 AM - 11:26 AM **Floor Discussion**
- 11:27 AM - 11:32 AM **162. Merkel Cell Carcinoma of the Lower Extremity: Outcomes of Multidisciplinary Treatment**
 Samuel E. Broida, M.D. Rochester, MN
 *Xiao T. Chen, M.D. Rochester, MN
 Brian D. Wahlig, M.D. Rochester, MN
 Steven Moran, M.D. Rochester, MN
 Matthew T. Houdek, M.D. Rochester, MN
- 11:33 AM - 11:38 AM **163. Sarcopenia in Soft Tissue Sarcoma Population**
 *Michael D. Russell M.D., MPH, MBA Iowa City, IA
 Benjamin J. Miller, M.D. Iowa City, IA
 Steven M. Leary M.D. Iowa City, IA
 Nathan Saxby, B.S. Iowa City, IA
- 11:39 AM - 11:44 AM **164. Bone Marrow Aspiration and Biopsy in the Initial Staging of Extraskeletal Ewing Sarcoma**
 *Brian D. Wahlig, M.D. Rochester, MN
 Samuel E. Broida, M.D. Rochester, MN
 Peter S. Rose, M.D. Rochester, MN
 Steven Robinson, MBBS Rochester, MN
 Brittany Siontis, M.D. Rochester, MN
 Matthew T. Houdek, M.D. Rochester, MN

11:44 AM – 11:51 AM **Floor Discussion**

11:52 AM – 12:01 PM **Spotlight Lecture #12**

Topic: 3D Printing and Virtual Surgical Planning in Orthopedic Oncology

Speaker: Thomas J. Scharschmidt, M.D.

Columbus, OH

**Co-Moderator | Papers #165 – 175: Jonathan D. Barlow, M.D., M.S.
Rochester, MN**

**Co-Moderator | Papers #165 – 175: Christopher F. Deans, M.D.
Omaha, NE**

12:02 PM – 12:07 PM

165. Simulated Subacromial Injection Instruction Improves Accuracy and Skill Level: A Model for Procedural Training

*Rishi Chatterji, M.D.	Detroit, MI
Jake Foote, M.D.	Southfield, MI
Michael Fry, M.D.	Detroit, MI
Joseph Crutcher, DHS	Southfield, MI
William Kesto, M.D.	Southfield, MI

12:08 PM – 12:13 PM

166. Effects of the COVID-19 Pandemic on Orthopedic Surgery Residency Program Attractiveness - An Applicant's Perspective

*Samuel Schick, M.D.	Birmingham, AL
Ryan Quigley, M.D.	Morgantown, WV
Wesley Lemons, M.D.	Richmond, VA
Kenneth Sabacinski, M.D.	Morgantown, WV
Michelle Bramer, M.D.	Morgantown, WV

12:14 PM – 12:19 PM

167. The Student You Know: Orthopedic Surgery Home Program Match Rates and Geographic Relationships Before and After COVID-19

*Anthony J. Nestler, M.D.	Springfield, IL
Benjamin M. Feibel, M.D.	Springfield, IL
Austin M. Beason, M.D.	Springfield, IL
Kathryn Besserman, B.S.	Springfield, IL
Samuel D. Mounce, B.S.	Springfield, IL
J. Ross Bailey, M.D.	Springfield, IL
Kristin R. Delfino, Ph.D.	Springfield, IL
D. Gordon Allan, M.D.	Springfield, IL

12:20 PM – 12:25 PM

168. A 20-Year Analysis of Orthopedic Surgery Residency Programs: Trends in Program and Applicant Competitiveness

*Victor H. Martinez, B.S.	San Antonio, TX
Jaime A. Quirarte, B.A.	San Antonio, TX
Matthew D. Smith, B.S.	San Antonio, TX
Rebecca N. Treffalls, B.S.	San Antonio, TX
Steven D. Gibbons, M.D.	San Antonio, TX
Ryan A. Rose, M.D.	San Antonio, TX

12:25 PM - 12:33 PM	Floor Discussion	
12:34 PM – 12:39 PM	169. Resident Case Log Practices and Attitudes Among Orthopedic Surgery Residents and Program Directors	
	*Matthew D. Dulas, B.A.	Chicago, IL
	Thomas J. Utset-Ward, M.D., MBA	Chicago, IL
	Jason Strelzow, M.D.	Chicago, IL
	Tessa Balach, M.D.	Chicago, IL
12:40 PM – 12:45 PM	170. The Fate of Orthopedic Surgery Applicants from Medical Schools without an Orthopedic Surgery Residency in the Match	
	Joshua R. Eskew, M.D.	Greenville, SC
	*Jonathan Light, B.S.	Norfolk, VA
	Amelia Weingart, M.D.	Orlando, FL
	Jacob Jackowski, M.D.	Rochester, MN
	Natalie Marengi, M.D.	Winston Salem, NC
	Lisa K. Cannada, M.D.	Jacksonville, FL
12:46 PM – 12:51 PM	171. Bullying in Orthopedic Surgery Residency	
	*John R. Green IV, M.D.	St. Louis, MO
	Howard M. Place, M.D.	St. Louis, MO
12:51 PM – 12:58 PM	Floor Discussion	
12:59 PM – 1:04 PM	172. Orthopedic Surgery First Year Resident Surgical Skills Month Curriculum	
	*Justin C. Siebler, M.D.	Omaha, NE
	Jenni Bouckhuyt, B.S.	Omaha, NE
	Matthew A. Mormino, M.D.	Omaha, NE
1:05 PM – 1:10 PM	173. The Crucial Role Program Directors Play in Impacting Diversity in Orthopedic Surgery	
	Alessia C. Lavin, M.D.	Palm Beach, FL
	Lisa K. Cannada, M.D.	Jacksonville, FL
	Michael Amador, B.S.	Palm Beach, FL
	*Clyde Fomunung, B.S., MBA	Lake Worth, FL
	Justin Elkhechen, B.S.	Palm Beach, FL
	Carlos Fernandez, M.D.	Palm Beach, FL
	Vani J. Sabesan, M.D.	Boca Raton, FL
1:11 PM – 1:16 PM	174. Wielding the "Strategic Signaling Spear": Medical Student Preference-Signaling During the Orthopedic Surgery Residency Application Process	
	*Aliya G. Feroe, M.D., MPH	Rochester, MN
	Annie A. Smartt, M.D.	Rochester, MN
	Nicholas Pulos, M.D.	Rochester, MN
	Amiethab A. Aiyer, M.D.	Baltimore, MD
	William N. Levine, M.D.	New York, NY
	Jonathan D. Barlow, M.D., M.S.	Rochester, MN

1:17 PM – 1:22 PM

175. Is Height an Unconscious Bias During Orthopedic Residency Selection?

Austin Smith, B.A.

Southfield, MI

James T. Layson, D.O.

Madison Heights, MI

*Valerie Davidson, D.O.

Madison Heights, MI

Benjamin Best, D.O.

Madison Heights, MI

1:22 PM – 1:30 PM

Floor Discussion

SATURDAY, APRIL 22, 2023
BREAKOUT SESSION #13 | ADULT RECONSTRUCTION: KNEE

ROOM: Coral C

Co-Moderator | Papers #176 – 185: Brett R. Levine, M.D., M.S.
Chicago, IL

Co-Moderator | Papers #176 – 185: R. Michael Meneghini, M.D.
Fishers, IN

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| 10:30 AM - 10:35 AM | <p>176. Cementless Total Knee Arthroplasty is a Risk Factor for Early Aseptic Loosening in a Large National Database</p> <p>Joseph Serino III, M.D. Chicago, IL
 *Enrico M. Forlenza, M.D. Chicago, IL
 E. Bailey Terhune, M.D. Chicago, IL
 Matthew T. Weintraub, B.S. Chicago, IL
 Denis Nam, M.D., M.Sc. Chicago, IL
 Craig J. Della Valle, M.D. Chicago, IL</p> |
| 10:36 AM - 10:41 AM | <p>177. Vitamin D3 Supplementation Prior to Total Knee Arthroplasty: A Randomized Controlled Trial</p> <p>*Matthew T. Weintraub, B.S. Chicago, IL
 Jonathan A. Guntin, B.A. Chicago, IL
 Jaewon Yang, M.D. Seattle, WA
 Anne DeBenedetti, M.Sc. Chicago, IL
 Vasili Karas, M.D., M.S. Chicago, IL
 Craig J. Della Valle, M.D. Chicago, IL
 Denis Nam, M.D., M.Sc. Chicago, IL</p> |
| 10:42 AM - 10:47 AM | <p>178. Prior Authorization is Burdensome for Total Joint Arthroplasty Surgeons: A Survey of the American Association of Hip and Knee Surgeons Membership</p> <p>*Daniel Enrique Pereira, M.D. St. Louis, MO
 Eli Kamara, M.D. Bronx, NY
 Adam Rana, M.D. Falmouth, ME
 Charles P. Hannon, M.D., MBA St. Louis, MO</p> |
| 10:47 AM - 10:54 AM | Floor Discussion |
| 10:55 AM - 11:00 AM | <p>179. Photographic Evidence of Range of Motion Following Total Knee Arthroplasty: Is There an Influence on Early Rehabilitation and Recovery?</p> <p>Bailey Johnson, M.D. Maywood, IL
 Hassan Farooq, M.D. Maywood, IL
 Brooke Dickens, M.D. Maywood, IL
 Julianna Holzer, B.S. Maywood, IL
 Michael Wesolowski, MPH Chicago, IL
 *Nicholas M. Brown, M.D. Maywood, IL</p> |

- 11:01 AM - 11:06 AM **180. Changes in Neuraxial Anesthesia Protocols Lead to Improved Efficiency of Same Day Discharge Total Knee Arthroplasty in an Ambulatory Surgery Center**
 Tyler E. Calkins, M.D. Memphis, TN
 Clayton W. Wing, M.D. Memphis, TN
 Zachary R. Diltz, M.D. Memphis, TN
 *Andrew D. Gailey, M.D. Memphis, TN
 William M. Mihalko, M.D., Ph.D. Memphis, TN
 Patrick C. Toy, M.D. Memphis, TN
- 11:07 AM - 11:12 AM **181. The Impact of Social Determinants of Health on Postoperative Outcomes and Complications Following Total Knee Arthroplasty: A Retrospective, Database Study**
 *Mary E. Hennekes, M.D. Detroit, MI
 Tahsin Rahman, M.D. Detroit, MI
 Logan Hansen, M.D. Detroit, MI
 Luke Wesemann, B.S. Detroit, MI
 Craig Silverton, D.O. Detroit, MI
- 11:13 AM - 11:18 AM **182. Radiographic Outliers, Revisions, and Functional Outcomes in Fixed-Bearing Medial Unicompartmental Arthroplasty**
 *Colin Harris, B.S. Indianapolis, IN
 Mary Ziemba-Davis, B.A. Fishers, IN
 Evan R. Deckard, BSE Indianapolis, IN
 Kevin A. Sonn, M.D. Indianapolis, IN
 R. Michael Meneghini, M.D. Fishers, IN
- 11:18 AM - 11:26 AM **Floor Discussion**
- 11:27 AM - 11:32 AM **183. Did Rapid Expansion of Same-Day Discharge During the COVID-19 Pandemic Increase Early Complications After Total Joint Arthroplasty?**
 *Taylor J. Den Hartog, M.D. Iowa City, IA
 David DeMik, M.D. Iowa City, IA
 Kyle Geiger, M.D. Iowa City, IA
 Christopher Carender, M.D. Iowa City, IA
 Jacob Elkins, M.D. Iowa City, IA
- 11:33 AM - 11:38 AM **184. Cementless Total Knee Arthroplasty in Patients Over 75: A Single Practice Review Using Statewide Registry Data**
 *Brendan J. Comer, M.D. Southfield, MI
 Dexter T. Powell, M.D. Southfield, MI
 Michael Fry, M.D. Southfield, MI
 David C. Markel, M.D. Novi, MI
- 11:39 AM - 11:44 AM **185. Preoperative Expectations Do Not Predict Contemporary Total Knee Arthroplasty Satisfaction**
 *Kevin Horner, B.S. Columbia, MO
 Brenton G. Albracht, M.D. Phoenix, AZ
 J. Turner Brown, M.D. Jackson, MS
 James A. Keeney, M.D. Columbia, MO
- 11:44 AM - 11:51 AM **Floor Discussion**

11:52 AM – 12:01 PM **Spotlight Lecture #13**
 Topic: All in Total Knee Arthroplasty
 Speaker: Brett R. Levine, M.D., M.S.
 Chicago, IL

Co-Moderator | Papers #186 – 196: Trevor G. Murray, M.D.
 Cleveland, OH

Co-Moderator | Papers #186 – 196: W. Trevor North, M.D.
 Detroit, MI

- 12:02 PM – 12:07 PM **186. Comparing the Clinical Performance and Radiographic Observations of Single vs. Multiple Radius Femoral Components in Primary Total Knee Arthroplasty**
 Victoria A. Oladipo, B.S. Chicago, IL
 *Joyee Tseng, M.S. Chicago, IL
 David L. Zepeda, B.S. Chicago, IL
 Grant S. Owen, B.S. Chicago, IL
 Scott M. Sporer, M.D., M.S. Chicago, IL
 Wayne G. Paprosky, M.D. Chicago, IL
 Brett R. Levine, M.D., M.S. Chicago, IL
- 12:08 PM – 12:13 PM **187. Total Joint Arthroplasty in Patients with Lymphedema as Compared to a Propensity Matched Control Cohort**
 William H. Cusma, B.S. Maywood, IL
 Nicholas M. Brown, M.D. Maywood, IL
 *Daniel Schmitt, M.D. Maywood, IL
 William J. Hopkinson, M.D. Maywood, IL
 Andrew M. Schneider, M.D. Maywood, IL
- 12:14 PM – 12:19 PM **188. Long-Term Survivorship of Metaphyseal Sleeves in Revision Total Knee Arthroplasty**
 Samuel E. Broida, M.D. Rochester, MN
 *Jacob R. Jackowski, M.D. Rochester, MN
 Brian P. Chalmers, M.D. New York, NY
 Robert T. Trousdale, M.D. Rochester, MN
- 12:20 PM – 12:25 PM **189. Assessing Risk Factors for 90-Day Emergency Department Visits Status-Post Index Total Knee Arthroplasty: A Retrospective Case Control Study**
 Ian Penvose, M.D. Providence, RI
 Helen Huetteman, M.D. Minneapolis, MN
 Phil Vartanyan, M.D. Royal Oak, MI
 *James E. Feng, M.D., M.S. Royal Oak, MI
 Robert Runner, M.D. Royal Oak, MI
 Drew Moore, M.D. Royal Oak, MI
 Mark Karadsheh, M.D. Royal Oak, MI
- 12:25 PM - 12:33 PM **Floor Discussion**

SATURDAY, APRIL 22, 2023
BREAKOUT SESSION #14 | ADULT RECONSTRUCTION: SHOULDER

ROOM: Coral B

Co-Moderator | Papers #197 – 206: Gregory L. Cvetanovich, M.D.
Columbus, OH

Co-Moderator | Papers #197 – 206: Cory M. Stewart, M.D.
Eau Claire, WI

- | | |
|---------------------|---|
| 10:30 AM - 10:35 AM | <p>197. When Intravenous Vancomycin Prophylaxis is Needed in Shoulder Arthroplasty, Incomplete Administration is Associated with Increased Infectious Complications</p> <p>Erick M. Marigi, M.D. Rochester, MN
 *Ian M. Marigi, B.A. St. Louis, MO
 Harsh N. Shah, MPH, M.S. Rochester, MN
 Bradley S. Schoch, M.D. Rochester, MN
 John W. Sperling, M.D. MBA Rochester, MN
 Joaquin Sanchez-Sotelo, M.D. Ph.D. Rochester, MN</p> |
| 10:36 AM - 10:41 AM | <p>198. Teres Minor Deficiency Does Not Predict Clinically Inferior External Rotation After Reverse Total Shoulder Arthroplasty: A Two-Year Matched Cohort Study</p> <p>*Anthony J. Marois, M.D. Memphis, TN
 Tyler J. Brolin, 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</p> |
| 10:42 AM - 10:47 AM | <p>199. Association of Superior Humeral Head Osteophyte with Rotator Cuff Pathology in Patients with Glenohumeral Osteoarthritis</p> <p>*Brenton Jennewine, M.D. Memphis, TN
 William Polio, M.D. Memphis, TN
 Nick James, M.D. Memphis, TN
 Micah Nieboer, M.D. Jacksonville, FL
 Bradley Schoch, M.D. Jacksonville, FL
 Thomas W. Throckmorton, M.D. Memphis, TN
 David L. Bernholt, M.D. Memphis, TN
 Frederick M. Azar, M.D. Memphis, TN
 Abu Mohd Naser, Ph.D. Memphis, TN
 Tyler J. Brolin, M.D. Memphis, TN</p> |
| 10:47 AM - 10:54 AM | <p>Floor Discussion</p> |

10:55 AM - 11:00 AM	<p>200. Muscle Activation Patterns During Active External Rotation After Reverse Total Shoulder Arthroplasty</p> <p>William P. Polio, M.D. Memphis, TN *Blake Hajek Memphis, TN Tyler J. Brolin, M.D. Memphis, TN William M. Mihalko, M.D. Memphis, TN Alexis Nelson Memphis, TN Kunal Singhal Memphis, TN Emily S. Hughes Memphis, TN David L. Bernholt, M.D. Memphis, TN Frederick M. Azar, M.D. Memphis, TN Thomas W. Throckmorton, M.D. Memphis, TN</p>
11:01 AM - 11:06 AM	<p>201. Complications After Reverse Shoulder Arthroplasty for Proximal Humerus Nonunion</p> <p>*Lauren E. Dittman, M.D. Rochester, MN Ronda Esper, B.S. Rochester, MN Jonathan D. Barlow, M.D., M.S. Rochester, MN Mark E. Morrey, M.D. Rochester, MN John W. Sperling, M.D., MBA Rochester, MN Joaquin Sanchez-Sotelo, M.D., Ph.D. Rochester, MN</p>
11:07 AM – 11:12 AM	<p>202. Does Implant Innovation Optimize the Rates of Recovery After Reverse Shoulder Arthroplasty?</p> <p>Justin Elkhechen, B.S. Lake Worth, FL Clyde Fomunung, B.S., MBA Lake Worth, FL *Brandon Macknofsky, B.S. Lake Worth, FL Alessia Lavin, M.D. Lake Worth, FL Howard Routman, D.O. Lake Worth, FL</p>
11:13 AM - 11:18 AM	<p>203. Functional Outcomes and Complications Following Superior Humeral Head Resurfacing for Treatment of Compensated Cuff Arthropathy</p> <p>Joshua T. Rogers, M.D. Wichita, KS Gonzalo H. Sanchez, M.D. Pierre, SD Katherine M. Turner, RN, MSN, CNP Pierre, SD *Peter H. Sanchez, B.A. Iowa City, IA</p>
11:18 AM - 11:26 AM	<p>Floor Discussion</p>
11:27 AM - 11:32 AM	<p>204. Evaluating the Utility of Perioperative Laboratory Tests in Primary Shoulder Arthroplasty</p> <p>Yazdan Raji, M.D. Cleveland, OH Elisabeth Kroneberger, B.S. Cleveland, OH Grant B. Nelson, M.D. Cleveland, OH John T. Strony, M.D. Cleveland, OH *Lucas R. Haase, M.D. Cleveland, OH Nikunj N. Trivedi, M.D. Cleveland, OH Chenya Zhao, MS Cleveland, OH Robert J. Gillespie, M.D. Cleveland, OH</p>

Paper position #205 deleted

11:33 AM – 11:38 AM	206. Can Making Skin Incision with Electrocautery Eliminate C. acnes from Surgical Wound During Shoulder Arthroplasty? A Prospective Randomized Clinical Trial	*Conor A. Smith, M.D. Matthew J. Smith, M.D. H. Mike Kim, M.D.	Columbia, MO Columbia, MO Columbia, MO
11:38 AM – 11:51 AM	Floor Discussion		
11:52 AM – 12:01 PM	Spotlight Lecture #14	Topic: Is This Prosthesis Infected? Work Up of PJI in Shoulder Speaker: Gregory L. Cvetanovich, M.D. Columbus, OH	

**Co-Moderator | Papers #207 – 217: Stephanie J. Muh, M.D.
Detroit, MI**

**Co-Moderator | Papers #207 – 217: Thomas W. Throckmorton, M.D.
Memphis, TN**

12:02 PM – 12:07 PM	207. Reverse vs. Anatomical Total Shoulder Arthroplasty: A Comparison Study Evaluating Postoperative Range of Motion and Pain Over 24 months	*Amir M. Boubekri, M.D. Hassan Farooq, M.D. William Oetojo, B.A. Safi Bajwa, B.S. Dane H. Salazar, M.D., MB.A. Nickolas G. Garbis, M.D.	Maywood, IL Maywood, IL Maywood, IL Maywood, IL Maywood, IL Maywood, IL
12:08 PM – 12:13 PM	208. Hemiarthroplasty for Non-Traumatic Avascular Necrosis of the Humeral Head is Associated with Low Complications and Reoperation Rates	*Ryan T. Conyer, M.D. Adnan N. Cheema, M.D. Jacob J. Triplet, D.O. Jonathan D. Barlow, M.D., M.S. Mark E. Morrey, M.D. John W. Sperling, M.D. Joaquin Sanchez-Sotelo, M.D., Ph.D.	Rochester, MN Rochester, MN Rochester, MN Rochester, MN Rochester, MN Rochester, MN Rochester, MN

12:14 PM – 12:19 PM	<p>209. The Effect of Humeral Component Retroversion on External Rotation and Shoulder Function Outcomes in Patients Undergoing Reverse Total Shoulder Arthroplasty</p> <p>*Gabrielle R. Kuhn, M.D. Marshall, IL Theodore T. Guild, M.D. Boston, MA Mikel R. Stiffler-Joachim, M.S. Madison, WI Rebecca E. Cheski, A.P.C. Algonquin, IL Marie E. Rivers, PA-C Algonquin, IL Brian J. Bear, M.D. Rockford, IL Rolando Izquierdo, M.D. Algonquin, IL</p>
12:20 PM – 12:25 PM	<p>210. Gait Abnormalities in Elderly Patients Undergoing Elective Shoulder Surgery</p> <p>Erik S. Moore, M.D. Omaha, NE Mark J. Amirtharaj, M.D. Omaha, NE *Tyler Sharp Omaha, NE Joshua Cameron, M.D. Omaha, NE Matthew J. Teusink, M.D. Omaha, NE</p>
12:25 PM - 12:33 PM	Floor Discussion
12:34 PM – 12:39 PM	<p>211. Effect of Steroid Injections on Preoperative Pain and Function Prior to Shoulder Arthroplasty</p> <p>Vani J. Sabesan, M.D. Boca Raton, FL Sarah Girshfeld, B.A. Boca Raton, FL William Pallissery, B.S. Boca Raton, FL Gabriel Lama, B.S. Boca Raton, FL Jessica V. Baran, B.S. Boca Raton, FL Jared Kushner, B.S. Boca Raton, FL Clyde Fomunung, B.S., MBA Lake Worth, FL Justin Elkhechen, B.S. Palm Beach, FL Alessia Lavin, M.D. Palm Beach, FL Howard Routman, D.O. Palm Beach, FL Carlos A. Fernandez, M.D. Palm Beach, FL *Anna Redden, B.S. Boca Raton, FL</p>
12:40 PM – 12:45 PM	<p>212. Rate of Incidental Findings on Routine Preoperative Computed Tomography for Shoulder Arthroplasty</p> <p>*Daniel G. Meeker, M.D., Ph.D. Iowa City, IA Maria Bozoghlian, M.D. Iowa City, IA Jill Corlette, M.S. Iowa City, IA James V. Nepola, M.D. Iowa City, IA Brendan M. Patterson, M.D., MPH Iowa City, IA</p>
12:46 PM – 12:51 PM	<p>213. Impact of Sickle Cell Disease in Shoulder Arthroplasty: A Matched Cohort Analysis</p> <p>Erick M. Marigi, M.D. Rochester, MN Jacob J. Triplet, D.O. Rochester, MN *Kareme D. Alder, M.D. Rochester, MN Adnan Cheema, M.D. Rochester, MN John W. Sperling, M.D., MBA Rochester, MN Joaquin Sanchez-Sotelo, M.D., Ph.D. Rochester, MN</p>

12:51 PM – 12:58 PM	Floor Discussion	
12:59 PM – 1:04 PM	214. Risk Factors that Predispose Patients to Failure After Augmented Reverse Shoulder Arthroplasty	
	Vani J. Sabesan, M.D.	Boca Raton, FL
	*Ali A. Mohamed, B.S., M.S.	Lake Worth, FL
	Justin Elkhechen, B.S.	Lake Worth, FL
	Clyde Fomunung, B.S., MBA	Lake Worth, FL
	Carlos Fernandez, M.D.	Lake Worth, FL
	Howard Routman, D.O.	Lake Worth, FL
1:05 PM – 1:10 PM	215. Volume Distribution of Shoulder Arthroplasty Among Low and High-Volume Surgeons in the State of Iowa	
	*Mary Kate Skalitzky, M.D.	Iowa City, IA
	Maria F. Bozoghlian, M.D.	Iowa City, IA
	James V. Nepola, M.D.	Iowa City, IA
	Natalie Glass, Ph.D.	Iowa City, IA
	Brendan M. Patterson, M.D., MPH	Iowa City, IA
1:11 PM – 1:16 PM	216. Utility of PACU vs. Postoperative Day 1 Radiographs Following Shoulder Arthroplasty	
	Taylor J. Den Hartog, M.D.	Iowa City, IA
	*Garrett V. Christensen, M.D.	Iowa City, IA
	Maria F. Bozoghlian, M.D.	Iowa City, IA
	James V. Nepola, M.D.	Iowa City, IA
	Brendan M. Patterson, M.D., MPH	Iowa City, IA
1:17 PM – 1:22 PM	217. The Return to Activity for Patients Undergoing Revision RSA	
	Vani J. Sabesan, M.D.	Boca Raton, FL
	*Jared Kushner, B.S.	Lake Worth, FL
	Clyde Fomunung, B.S., MBA	Lake Worth, FL
	Justin Elkhechen, B.S.	Lake Worth, FL
	Carlos Fernandez, M.D.	Lake Worth, FL
	Howard Routman, D.O.	Lake Worth, FL
1:22 PM – 1:30 PM	Floor Discussion	

SATURDAY, APRIL 22, 2023
BREAKOUT SESSION #15 | SPORTS: KNEE

ROOM: Coral A

Co-Moderator | Papers #218 – 227: Lucas T. Buchler, M.D.
Chicago, IL

Co-Moderator | Papers #218 – 227: Patricia A. Kolowich, M.D.
Detroit, MI

- | | |
|---------------------|---|
| 10:30 AM - 10:35 AM | <p>218. Oral Ketorolac as an Adjuvant Agent for Postoperative Pain Control Following Arthroscopic Anterior Cruciate Ligament Reconstruction: A Prospective, Randomized, Controlled Study</p> <p>*Sunita R. Mengers, M.D. Cleveland, OH
 John T. Strony, M.D. Cleveland, OH
 Lakshmanan Sivasundaram, M.D. Chicago, IL
 Jiao Yu, MA Minneapolis, MN
 Donald Goodfellow, M.D. Cleveland, OH
 Michael J. Salata, M.D. Cleveland, OH
 James E. Voos, M.D. Cleveland, OH
 Michael R. Karns, M.D. Cleveland, OH</p> |
| 10:36 AM - 10:41 AM | <p>219. Mid-Term Results of Particulate Articular Cartilage Implantation</p> <p>*Paul R. Fleissner, Jr., M.D. Akron, OH
 Kodi A. Veale, PA-C Akron, OH</p> |
| 10:42 AM - 10:47 AM | <p>220. Outcomes Following Arthroscopic Intervention for Arthrofibrosis after Anterior Cruciate Ligament Reconstruction</p> <p>*Charles L. Holliday, M.D. Rochester, MN
 Erick M. Marigi, M.D. Rochester, MN
 Anna K. Reinholz, B.S. Rochester, MN
 Allen S. Wang, M.S. Rochester, MN
 Alexander M. Boos, B.A. Rochester, MN
 Ryan R. Wilbur, M.D. Rochester, MN
 Bryant M. Song, M.D. Rochester, MN
 Aaron J. Krych, M.D. Rochester, MN
 Michael J. Stuart, M.D. Rochester, MN
 Bruce A. Levy, M.D. Rochester, MN</p> |
| 10:47 AM - 10:54 AM | <p>Floor Discussion</p> |

- 10:55 AM - 11:00 AM **221. Hypermobility Lateral Meniscus: A Clinical Case Series Describing Diagnosis and Surgical Outcomes**
 *Malik E. Dancy, M.D. Rochester, MN
 Adam J. Tagliero, M.D. Rochester, MN
 Sara E. Till, M.S. Rochester, MN
 Diane L. Dahm, M.D. Rochester, MN
 Aaron J. Krych, M.D. Rochester, MN
- 11:01 AM - 11:06 AM **222. Anterior Cruciate Ligament Tears in the Adolescent Population: Injury Demographics and Risk of Re-injury Amongst High School Athletes**
 *Bhargavi Maheshwer, M.D. Cleveland, OH
 Andrew Paliobeis, M.D. Cleveland, OH
 Penelope Halkiadakis, B.S. Cleveland, OH
 Jacob G. Calcei, M.D. Cleveland, OH
 James E. Voos, M.D. Cleveland, OH
- 11:07 AM - 11:12 AM **223. Social Determinants of Health Influence Outcomes and Health Care Utilization Following Anterior Cruciate Ligament Reconstruction**
 Alexander C. Ziedas, M.D. Detroit, MI
 *Joshua P. Castle, M.D. Detroit, MI
 Varag Abed, B.S. Detroit, MI
 Alexander Swantek, M.D. Detroit, MI
 Sarah Chaides, B.S. Detroit, MI
 Kareem Elhage, B.S. Detroit, MI
 Vasilios Moutzouros, M.D. Detroit, MI
 Eric C. Makhni, M.D., MBA Detroit, MI
- 11:13 AM - 11:18 AM **224. Influence of Femoral Tunnel Interference Screw Diameter on Pull-Out Strength and Failure Mode During Anterior Cruciate Ligament Reconstruction: A Biomechanical Study**
 *Jason Ina, M.D. Cleveland, OH
 Mark Megerian Cleveland, OH
 Derrick M. Knapik, M.D. St. Louis, MO
 Jacob Calcei, M.D. Cleveland, OH
 Clare Rimnac, Ph.D. Cleveland, OH
 James E. Voos, M.D. Cleveland, OH
- 11:18 AM - 11:26 AM **Floor Discussion**
- 11:27 AM - 11:32 AM **225. Predicting Risk Factors for All Cause Reoperation After Anterior Cruciate Ligament Reconstruction: A Machine Learning Approach**
 Quinn J. Johnson, B.A. Rochester, MN
 Mohamed Sobhi Jabal, M.D. Rochester, MN
 Alexandra M. Arguello, M.D. Rochester, MN
 Yining Lu, M.D. Rochester, MN
 *Kevin Jurgensmeier, M.D. Rochester, MN
 Bruce A. Levy, M.D. Rochester, MN
 Christopher L. Camp, M.D. Rochester, MN
 Aaron J. Krych, M.D. Rochester, MN

- 12:14 PM – 12:19 PM **230. Improved Biomechanical Performance and Excellent Clinical Outcomes with the Use of Suture Anchors for Patellar Tendon Repair: A Scoping Review**
 *Michael A. Gaudiani, M.D. Detroit, MI
 Joshua P. Castle, M.D. Detroit, MI
 Mitchell Pfennig Detroit, MI
 Harkirat Jawanda Detroit, MI
 Fabien Meta, M.D. Detroit, MI
 T. Sean Lynch, M.D. Detroit, MI
- 12:20 PM – 12:25 PM **231. Association of Long Distance Running with Hip and Knee Arthritis**
 Joseph E. Tanenbaum, M.D., Ph.D. Chicago, IL
 Matthew Hartwell, M.D. San Francisco, CA
 George Chiampas, M.D. Chicago, IL
 Michael Terry, M.D. Chicago, IL
 Vehniah Tjong, M.D. Chicago, IL
 *Hunter Angileri Chicago, IL
- 12:25 PM - 12:33 PM **Floor Discussion**
- 12:34 PM – 12:39 PM **232. Predicting the Risk of Post-Traumatic Osteoarthritis Following Anterior Cruciate Ligament Reconstruction: A Machine Learning Time to Event Analysis**
 *Yining Lu, M.D. Rochester, MN
 Anna K. Reinholz, B.S. Rochester, MN
 Sara E. Till, M.S. Rochester, MN
 Allen S. Wang, M.S. Rochester, MN
 Sydney Kalina, B.S. Rochester, MN
 Daniel B. F. Saris, M.D., Ph.D. Rochester, MN
 Christopher L. Camp, M.D. Rochester, MN
 Michael J. Stuart, M.D. Rochester, MN
- 12:40 PM – 12:45 PM **233. Coronal Plane Alignment Does Not Affect Outcomes After Transtibial Meniscus Root Repair**
 *Logan M. Good, B.S. Columbus, OH
 Reid A. Palumbo, B.S. Columbus, OH
 Eric M. Milliron, M.D. Columbus, OH
 Parker A. Cavendish, M.D. Columbus, OH
 James C. Kirven, M.D. Columbus, OH
 Alex C. DiBartola, M.D., MPH Columbus, OH
 Robert A. Duerr, M.D. Columbus, OH
 Robert A. Magnussen, M.D., MPH Columbus, OH
 David C. Flanigan, M.D. Columbus, OH
- 12:46 PM – 12:51 PM **234. Return to Sport After Knee Injuries in Collegiate Wrestling**
 Kory M. Ford, B.S. Iowa City, IA
 *Andrew L. Schaver, M.D. Iowa City, IA
 Steven M. Leary, M.D. Iowa City, IA
 Jerrod Keith, M.D. Iowa City, IA
 Robert W. Westermann, M.D. Iowa City, IA
- 12:51 PM – 12:58 PM **Floor Discussion**

- 12:59 PM – 1:04 PM **235. Achilles Tendon Ultrasound Characteristics in NCAA Division I Gymnasts**
 *Amanda J. Schroeder, M.D. Minneapolis, MN
 Kirk Scofield, M.D. Minneapolis, MN
 Julie Agel, M.A., A.T.C. Seattle, WA
 Suzanne Hecht, M.D. Minneapolis, MN
- 1:05 PM – 1:10 PM **236. Negative Pain Thoughts Questionnaire Scores and Outcomes After Orthopedic Sports Medicine Procedures**
 *Brian M. Johnson, M.D. Cincinnati, OH
 Cameron G. Thomson, M.D. Cincinnati, OH
 Jorge H. Figueras, B.S. Cincinnati, OH
 Nihar S. Shah, M.D. Cincinnati, OH
 Henry A. Kuechly, B.S. Cincinnati, OH
 Brian M. Newyear, B.S. Cincinnati, OH
 Brian M. Grawe, M.D. Cincinnati, OH
- 1:11 PM – 1:16 PM **237. Relation Between Anterior Cruciate Ligament Return to Sport After Injury Scale and Physical Functioning Tests**
 *Luke W. Adams, B.S. Sioux Falls, SD
 Colin W. Bond, Ph.D, MBA Fargo, ND
 Lisa N. MacFadden, Ph.D. Sioux Falls, SD
 Nathan W. Skelley, M.D. Sioux Falls, SD
 Benjamin C. Noonan, M.D. Fargo, ND
- 1:17 PM – 1:22 PM **238. Novel Anti-Inflammatory Benefits of Aquatic Treadmill Use with Considerations for Rehabilitation**
 Sarah Parker, DPT Houston, TX
 Corbin Hedt, DPT Houston, TX
 Steven Martin, Ph.D. College Station, TX
 Aaron Carbuhn, Ph.D. Lawrence, KS
 Steven Riechman, Ph.D. College Station, TX
 Stephen Crouse, Ph.D. College Station, TX
 *Bradley S. Lambert, Ph.D. Houston, TX
- 1:22 PM – 1:30 PM **Floor Discussion**