MID-AMERICA ORTHOPAEDIC ASSOCIATION



Thirty-Second Annual Meeting

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April 23-27, 2014 La Cantera Hill Country Resort San Antonio, Texas

Preliminary Program and Registration Information Visit <u>www.maoa.org</u> to register online Registration Deadline – March 21, 2014

Pre-Meeting Course – Wednesday, April 23, 2014 "The Shoulder: Current Concepts on Sports, Trauma, and Reconstruction" Dear Colleagues,

I have enclosed the Preliminary Program for the 2014 Mid-America Orthopaedic Association Annual Meeting in San Antonio, Texas, from April 23-27.

Dr. Craig Della Valle, Program Chair, and the rest of the Program Committee (Drs. Brian Wolf, Jeffrey Macalena, Andrew Markiewitz, Jeffrey McLaughlin, and Benjamin Miller) have put together a tremendous meeting which will undoubtedly rank among the best ever. A practice management symposium, an ask-the-expert forum, and expanded poster presentations are just a few examples of the new innovations they have incorporated.

A one-day pre-meeting course focused on the shoulder will be offered on Wednesday, April 23, 2014, and co-sponsored with the International Congress for Joint Reconstruction. Dr. Brian Wolf will chair this year's course. He has put together a cadre of outstanding faculty who will address the full gamut of shoulder issues, including sports medicine, reconstruction, trauma, and peri-scapular endoscopy. This course format which focuses on one anatomic area has been very popular and successful in the past. The course is geared towards orthopedic surgery residents and orthopedic surgeons in the first five years of his/her career.

As your President, I have had the opportunity to select six phenomenal speakers for the 2014 Annual Meeting. Our Presidential Guest Speaker will be former Mid-America President, Dr. Lynn Crosby from the University of Georgia, an international leader in shoulder arthroplasty. Classics Speakers include Dr. Jim Beaty from the Campbell Clinic, who is a former AAOS and MAOA President; Dr. Frank Frassica, Professor of Orthopaedics at John Hopkins and a world leader in orthopedic education and musculoskeletal oncology; and Dr. Larry Bone, Chair of Orthopaedic Surgery at the State University of Buffalo and an icon in orthopedic traumatology. Our Rapp Lecturer, focusing on innovations in orthopedic surgery, will be Dr. Thomas Byrd from the Nashville Sports Medicine Foundation. Our Steel Lecturer, which focuses on areas of interest outside of orthopedic surgery, will be Dr. Vincent Lam, who is an emergency room physician and author of <u>Bloodletting and Miraculous Cures</u>. Here are the specific topics for these speakers:

<u>Dr. Lynn Crosby:</u> "Complications of Total Shoulder Arthroplasty: Treatment and Prevention" <u>Dr. Jim Beaty</u>: "Femur Fractures in Children and Adolescents...What Has Happened?" Dr. Frank Frassica: "Decision-Making in Soft Tissue Tumors"

Dr. Larry Bone: "The Proper Place for Damage Control Surgery"

Dr. Thomas Byrd: "Hip Arthroscopy in Athletes: A Personal Journey"

Dr. Vincent Lam: "Narrative in Medicine: Why We Need Stories in an Age of Evidence"

The venue for the San Antonio meeting is the La Cantera Hill Country Resort — a tremendous location with Texas charm and flair. The resort features a beautiful poolside and family amenities, golf and tennis, and proximity to the Alamo, River Walk, and Fiesta Texas. My wife, Theresa, and the MAOA staff, have envisioned a family-friendly social program that will be fun for all ages. "Nestled in the beautiful Texas Hill Country just north of San Antonio, the La Cantera Hill Country Resort provides breathtaking views of the surrounding hill country, The La Cantera Golf Course, and downtown San Antonio. The resort is located 12 miles from the San Antonio International Airport and 15 miles from the Alamo and River Walk. It is adjacent to the Six Flags® Fiesta Texas and 15 minutes from Sea World of San Antonio." I hope you will take the time to check out the resort via the MAOA web site (www.maoa.org).

Built over an old limestone quarry that gave the resort its name, the resort offers a variety of activities including a Kids Club. The Tom Weiskopf/Jay Morrish La Cantera Golf Course surround the resort. In addition, there is a second 18-hole championship golf course designed by Arnold Palmer. The resort features unique dining, as well as six pools, three hot tubs, two tennis courts, hiking trails, and a luxurious spa.

I look forward to seeing you in San Antonio!

Lang V

Craig S. Roberts, M.D., M.B.A. President Mid-America Orthopaedic Association

TABLE OF CONTENTS

Preliminary Program
General Meeting Information 59
Hotel Information
Activities
Future Meetings
Meeting at a Glance
Board of Directors

REGISTRATION INFORMATION

Registration for the 2014 Annual Meeting will be done online through Mid-America's web site. Please visit www.maoa.org to register for the meeting and reserve a hotel room. Make plans early to attend a great meeting.

This activity has been planned and implemented in accordance with the Essential Areas and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint sponsorship of the American Academy of Orthopaedic Surgeons and Mid-America Orthopaedic Association.

The American Academy of Orthopaedic Surgeons is accredited by the ACCME to sponsor continuing medical education for physicians.

The American Academy of Orthopaedic Surgeons designates this live activity for a maximum of 31.25^* *AMA PRA Category 1 Credits*TM. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

*9 CME Credits for MAOA/ICJR Pre-Meeting Course *15.75 CME Credits for Scientific Program *2.5 CME Credits for Scientific Poster Sessions *2 CME Credits for Ask the Expert *2 CME Credit for Practice Management Symposium

OBJECTIVES

<u>Objective 1:</u> Describe outcomes and provide technical tips for complex primary and revision knee and hip arthroplasty, including the appropriate selection of patients and selection of surgical procedures.

<u>Objective 2:</u> Discuss indications for surgical management of sports-related injuries to the upper extremity and knee.

<u>Objective 3:</u> Provide an overview of recent technical advances in the area of musculoskeletal trauma and reconstructive surgery.

<u>Objective 4:</u> Provide an update on the status of metal-on-metal total hip arthroplasty, corrosion associated with hip implants and hip resurfacing.

<u>Objective 5:</u> Review the current challenges and latest information regarding musculoskeletal tumor surgery, pediatric orthopedics, hand, and foot and ankle surgery.

<u>Objective 6:</u> Describe state of the art treatment for pediatric, traumatic, and degenerative spine disorders.

<u>Objective 7:</u> Describe the current techniques and outcomes after hip joint preservation surgery.

<u>Objective 8:</u> Understand the indications, surgical techniques, and outcomes of shoulder arthroplasty.

<u>Objective 9:</u> Describe state of the art treatment for traumatic and degenerative shoulder disorders.

<u>Objective 10:</u> Discuss current research across specialty fields of orthopedic surgery to encourage further improvements in surgery to benefit patient outcomes.

Mid-America Orthopaedic Association would like to recognize and thank the following for their time and effort in reviewing the abstracts for the 2014 scientific program.

Program Committee

Craig J. Della Valle, M.D., Chair Brian R. Wolf, M.D., M.S. Jeffrey A. Macalena, M.D. Andrew J. Markiewitz, M.D. Jeffrey R. McLaughlin, M.D. Benjamin J. Miller, M.D.

Ad Hoc Reviewers

Lisa K. Cannada, M.D. Diane L. Dahm, M.D. Gregory P. Graziano, M.D. Anthony F. Guanciale, M.D. Kerwyn C. Jones, M.D. Christopher C. Kaeding, M.D. Paul M. Lafferty, M.D. Craig R. Mahoney, M.D. David C. Markel, M.D. J. Lawrence Marsh, M.D. Amy L. McIntosh, M.D. Robert F. McLain, M.D. Shane J. Nho, M.D. Michael R. O'Rourke, M.D. Erik T. Otterberg, M.D. David R. Richardson, M.D. Craig S. Roberts, M.D., M.B.A. Peter S. Rose, M.D. Jeffrey R. Sawyer, M.D. John W. Sperling, M.D. Thomas W. Throckmorton, M.D. Brian C. Toolan, M.D. Norman S. Turner, M.D. Scott D. Weiner, M.D. Robert W. Wysocki, M.D.

DISCLAIMER

The data, conclusions, and opinions presented by those who speak or exhibit at Mid-America Orthopaedic Association sponsored meetings or who serve as authors in its publications, are solely the responsibility of those individuals or exhibitors and are not to be considered those of the Association, which takes no responsibility for them. The Association does not endorse any products.

MID-AMERICA ORTHOPAEDIC ASSOCIATION PRELIMINARY PROGRAM Thirty-Second Annual Meeting

April 23-27, 2014

TUESDAY, APRIL 22, 2014

6:00 p.m. - 8:00 p.m. Registration

WEDNESDAY, APRIL 23, 2014

6:30 a.m. - 8:00 p.m. Registration

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

"The Shoulder: Current Concepts on Sports, Trauma, and Reconstruction" Pre-meeting course jointly sponsored by Mid-America Orthopaedic Association and the International Congress for Joint Reconstruction

Course Chair: Brian R. Wolf, M.D., M.S.

OBJECTIVES

- Update and consolidate knowledge on the evaluation and treatment of shoulder trauma including fractures and injuries involving the proximal humerus and clavicle
- 2. Update and consolidate knowledge on the evaluation and treatment of glenohumeral osteoarthritis
- 3. Review specialized techniques for primary, revision, and reverse shoulder arthroplasty
- Update and consolidate knowledge on the evaluation and treatment of shoulder instability and shoulder disorders often treated using shoulder arthroscopy
- Update and consolidate knowledge on the evaluation and treatment of rotator cuff tears

<u>Trauma</u>

Julie Y. Bishop, M.D., Columbus, OH – Moderator

- Fractures of the Distal Clavicle / Treatment Options for Two- and Three-Part Proximal Humerus Fractures / Recognizing and Treating Complications of Proximal Humerus Fractures - Julie Y. Bishop, M.D., Columbus, OH
- Mid-Shaft Clavicular Fractures 2014 -Carolyn M. Hettrich, M.D., M.P.H., Iowa City, IA

- High Grade Acromioclavicular Joint Injuries / Internal Fixation vs. Arthroplasty for Four-Part Proximal Humerus Fractures - Gregory N. Lervick, M.D., Minneapolis, MN
- Indications and Options for Treating Sternoclavicular Joint Injuries - Brian R. Wolf, M.D., M.S., Iowa City, IA

Arthritis and Arthroplasty

John W. Sperling, M.D., Rochester, MN – Moderator

- Outcomes After Reverse Shoulder Arthroplasty - Warren R. Dunn, M.D., M.P.H., Madison, WI
- Primary Total Shoulder Arthroplasty Outcomes in 2014 - Carolyn M. Hettrich, M.D., M.P.H., Iowa City, IA
- Managing Osteoarthritis in the Young Patient - Jay D. Keener, M.D., St. Louis, MO
- Primary Total Shoulder Arthroplasty Planning and Exposure / Indications for Reverse Shoulder Arthroplasty in 2014 / Recognizing and Managing Shoulder Arthroplasty Complications - John W. Sperling, M.D., Rochester, MN
- Revision Shoulder Arthroplasty / Concepts Behind Different Reverse Shoulder Arthroplasty Designs - Thomas W. Throckmorton, M.D., Memphis, TN

Rotator Cuff

Warren R. Dunn, M.D., M.P.H., Madison, WI – Moderator

- Rotator Cuff Tears: Epidemiology and Surgical Indications / Arthroplasty Options for Symptomatic Irreparable Rotator Cuff Tears - Warren R. Dunn, M.D., M.P.H., Madison, WI
- Partial Thickness Rotator Cuff Tears Grant L. Jones, M.D., Columbus, OH
- Arthroscopic Rotator Cuff Repair Tear Pattern Recognition and Repair Options / Enhancing Healing for Rotator Cuff Repairs
 Jay D. Keener, M.D., St. Louis, MO
- Massive Rotator Cuff Tears: Role of Partial Repair - Thomas W. Throckmorton, M.D., Memphis, TN
- Subscapularis Tears Brian R. Wolf, M.D., M.S., Iowa City, IA

(continued on next page)

Shoulder Instability and Arthroscopy

Bradley J. Nelson, M.D., Minneapolis, MN – Moderator

- Bony Bankart Injuries and Glenoid Bone Loss / Peri-Scapular Endoscopy -Christopher R. Chuinard, M.D., M.P.H., Traverse City, MI
- SLAP Tears: When to Ignore, Debride, Repair, or Tenodese / Long Head of Biceps: Recognizing Pathology and Treatment Options - Grant L. Jones, M.D., Columbus, OH
- Managing Anterior Shoulder Instability in Athletes / Evaluating and Treating Humeral Head Bone Loss / The Failed Instability Surgery Patient - Bradley J. Nelson, M.D., Minneapolis, MN
- Posterior Shoulder Instability Brian R. Wolf, M.D., M.S., Iowa City, IA

Join us one day prior to the MAOA Annual Meeting for this CME event of didactic lectures, case studies, interactive audience discussions, and bioskills workshops. Fee: \$250 for practicing orthopedists and \$150 for residents, fellows, medical students, and allied health. To register, visit the MAOA web site (www.maoa.org). Click on "2014 Annual Meeting". 9 Category 1 CME credits will be offered for this one-day course. For more information, go to the ICJR (www.icjr.net) or MAOA (www.maoa.org) web sites.

5:00 p.m. Board of Directors' Meeting

6:30 p.m.

Exhibitors' Meeting

7:00 p.m. - 9:00 p.m.

Welcome Reception and Buffet <u>Price:</u> Included in Registration Fee for doctors, allied health, and registered spouses/guests Exhibitor cost: \$145/person

Attire: Casual

A special children's buffet will be available for \$30/child (ages 4-12). Children's tickets may be purchased via the MAOA web site when registering for the meeting.

THURSDAY, APRIL 24, 2014

6:00 a.m. - 1:00 p.m. Registration

- 7:30 a.m. 12:30 p.m. Exhibits/Posters Open (continental breakfast available from 7:30 a.m. - 9:00 a.m. in exhibit area)
- 8:30 a.m. 10:30 a.m. **Spouse/Guest Hospitality** Breakfast <u>9:30 a.m. - Welcome by Dr. Theresa Corrigan</u> <u>9:45 a.m. - Spouse/Guest Program TBA</u>

FIRST PLENARY SESSION 8:00 a.m. - 10:30 a.m.

8:00 a.m. - 8:05 a.m. Introductory Remarks Craig S. Roberts, M.D., M.B.A. Louisville, KY President, Mid-America Orthopaedic Association

8:05 a.m. - 8:20 a.m. AAOS Report Frederick M. Azar, M.D. Memphis, TN 2014-2015 AAOS President

8:20 a.m. - 9:43 a.m.

 Factors Affecting Readmission Rates Following Primary Total Hip Arthroplasty

 *Rachel E. Mednick, M.D.
 Chicago, IL
 Hasham M. Alvi, M.D.
 Chicago, IL
 Varun Krishnan, B.S.
 Chicago, IL
 Francis Lovecchio, M.D.
 Chicago, IL
 David W. Manning, M.D.
 Chicago, IL

2. Revision of Recalled Modular Neck Femoral Implants *Christopher P. Walsh, M.D. Southfield, MI Joseph P. Nessler, M.D. St. Cloud, MN David C. Markel, M.D. Southfield, MI

- Unexpected High Rates of Corrosion-Related Revisions: Short-Term Results of the Modular Neck Rejuvenate Stem Morteza Meftah, M.D. Houston, TX
 Amgad M. Haleem, M.D. New York, NY
 *Stephen J. Incavo, M.D. Houston, TX
- 4. Diabetes Mellitus, Hyperglycemia, Hemoglobin A1c, and the Risk of Prosthetic Joint Infections Hilal Maradit-Kremers. M.D. Rochester, MN *Laura W. Lewallen, M.D. Rochester, MN Brian Lahr. B.S. Rochester, MN Tad M. Mabry, M.D. Rochester, MN James M. Steckelberg, M.D. Rochester, MN Daniel J. Berry, M.D. Rochester, MN Arlen D.Hanssen, M.D. Rochester, MN Elie F. Berbari, M.D. Rochester, MN Douglas R. Osmon, M.D. Rochester, MN
- Morbidly Obese Patients Have a Higher Risk of Failure than Non-Obese Patients Following Revision Total Hip Arthroplasty for Infection *Matthew T. Houdek, M.D. Rochester, MN
 Eric R. Wagner, M.D. Rochester, MN
 Chad C. Watts, M.D. Rochester, MN
 David G. Lewallen, M.D. Rochester, MN
 Tad M. Mabry, M.D. Rochester, MN

- 6. Effects of Local Delivery of D-Amino Acids from Biofilm-Dispersive Scaffolds on Infection in Contaminated Rat Segmental Defect Model *Chad A. Krueger, M.D. Fort Sam Houston, TX Carlos J. Sanchez. M.D. Fort Sam Houston, TX Edna M. Prieto. Ph.D. Nashville, TN Katarzyna Zienkiewicz, M.S. Nashville, TN Deiree R. Romano, B.S. Fort Sam Houston, TX Kevin S. Akers. M.D. Fort Sam Houston, TX Scott A. Guelcher. Ph.D. Nashville, TN Joseph C. Wenke, Ph.D. Fort Sam Houston, TX
- Direct Anterior vs. Mini-Posterior THA with the Same Advanced Pain Management and Rapid Rehabilitation Protocol: Some Surprises in Early Outcome *Kirsten L. Poehling-Monaghan, M.D. Rochester, MN Atul F. Kamath, M.D. Rochester, MN Michael J. Taunton, M.D. Rochester, MN Mark W. Pagnano, M.D. Rochester, MN
- 8. Patient Satisfaction and Residual Symptoms Following TKR and PKR: What Do the Patients Sav When We Aren't Around? Michael E. Berend, M.D. Mooresville, IN Ryan M. Nunley, M.D. St. Louis. MO Robert L. Barrack, M.D. St. Louis. MO Keith R. Berend, M.D. New Albany, OH Adolph V. Lombardi, Jr., M.D. New Albany, OH Craig J. Della Valle, M.D. Chicago, IL

9. Epidemiology of Periprosthetic Femur Fractures in 32.644 Primary Total Hip Arthroplasties: A 40-Year Experience *Chad D. Watts. M.D. Rochester, MN Matthew P. Abdel, M.D. Rochester, MN David G. Lewallen, M.D. Rochester, MN Daniel J. Berry, M.D. Rochester, MN 10. New TKA Designs: Did the Patients Notice? Ryan M. Nunley, M.D. St. Louis, MO Keith R. Berend, M.D. New Albany, OH Adolph V. Lombardi, Jr., M.D. New Albany, OH Douglas A. Dennis, M.D. Denver, CO Humaa A. Nvazee St. Louis, MO Craig J. Della Valle, M.D. Chicago, IL Michael E. Berend, M.D. Mooresville. IN Robert L. Barrack, M.D. St. Louis, MO

9:43 a.m. - 9:53 a.m. OREF Presentation

9:54 a.m. - 10:24 a.m. CLASSICS IN ORTHOPAEDICS The Proper Place for Damage Control Surgery Lawrence B. Bone, M.D. Buffalo. NY

- 10:25 a.m. 10:30 a.m. Historian's Report Thomas L. Schmidt, M.D. Prairie Village, KS
- 10:30 a.m. 10:40 a.m. First Business Meeting (MAOA Members only)

10:30 a.m. - 11:00 a.m. Poster viewing – presenters will be available. CME credit will be offered. (Poster Area)

10:30 a.m. - 11:00 a.m. Coffee Break in Exhibit Area

*Denotes Speaker

11:00 a.m. - 1:00 p.m. Breakout Sessions #1, #2, #3, #4, and #5 to run concurrently

BREAKOUT SESSION #1 HAND

11:00 a.m. - 1:00 p.m., Thursday, April 24, 2014

- Predicting Long-Term Outcomes in Proximal Row Carpectomy; a Longitudinal Study of 144 Cases Eric R. Wagner, M.D. Rochester, MN Dalibel Bravo, B.S. San Juan, PR Bassem T. Elhassan, M.D. Rochester, MN Steven L. Moran, M.D. Rochester, MN
- 12. Proximal Row Carpectomy vs. Four-Corner Fusion for Traumatic Wrist Arthropathy: A Systematic Review Jonathan M. Frank, M.D. Chicago, IL *Brvan M. Saltzman, M.D. Chicago, IL William Slikker, III, M.D. Chicago, IL Rachel M. Frank, M.D. Chicago, IL John J. Fernandez. M.D. Chicago, IL Mark S. Cohen. M.D. Chicago, IL Robert W. Wysocki, M.D. Chicago, IL
- Effect of Lunate Morphology in Kienbock's Disease

 *Peter C. Rhee, D.O.
 San Antonio, TX
 David B. Jones, M.D.
 Rochester, MN
 Steven L. Moran, M.D.
 Rochester, MN
 Alexander Y, Shin, M.D.
 Rochester, MN
- Failure of the RASL Procedure: Why the Reduction and Association of the Scaphoid and Lunate Procedure for Scapholunate Instability Should be Abandoned *Timothy B. Larson, M.D. Denton, TX Peter J. Stern, M.D. Cincinnati, OH

MAOA Preliminary Program

- Long-Term Pain and Function of Bilateral Total Wrist Arthrodesis Eric R. Wagner, M.D. Rochester, MN Bassem T. Elhassan, M.D. Rochester, MN Sanjeev Kakar, M.D. Rochester, MN
- Outcomes of Ulnar Shortening Osteotomy for the Treatment of Ulnar-Sided Wrist Pain
 *W. Ryan Mitchell, M.D. Mobile, AL

 Frederick N. Meyer, M.D. Mobile, AL
- 17. Soft Tissue Distal Radioulnar Interposition Arthroplasty for DRUJ Instability Eric R. Wagner, M.D. Rochester, MN Shumaila Sarfani Rochester, MN Sanjeev Kakar, M.D. Rochester, MN

 Superficial Dorsal Foot Vein Valves: Consideration in Use for Palmar Arch Reconstruction

 *John J. Lee, M.D.
 Ann Arbor, MI
 John R. Lien, M.D.
 Ann Arbor, MI
 David J. Ruta, M.D.
 Ann Arbor, MI
 Alex Brunfeldt, M.D.
 Ann Arbor, MI
 Kagan Ozer, M.D.
 Ann Arbor, MI

 Early Complications After Open Treatment of Distal Radius Fractures *Cameron W. Schick, M.D. Iowa City, IA Christopher T. Martin, M.D. Iowa City, IA Yubo Gao, Ph.D. Iowa City, IA Andrew J. Pugely, M.D. Iowa City, IA Apurva S. Shah, M.D. Iowa City, IA Brian D. Adams, M.D. Iowa City, IA

- Intraoperative Periprosthetic Fractures in PIP Arthroplasty; Analysis of 382 Consecutive Arthroplasties *Robert E. Van Demark, III, M.D. Rochester, MN Eric R. Wagner, M.D. Rochester, MN Steven L. Moran, M.D. Rochester, MN Marco Rizzo, M.D. Rochester, MN
- 21. Evaluating Intraoperative Periprosthetic Fractures Associated in an Analysis of 818 Consecutive MCP Arthroplasties Eric R. Wagner, M.D. Rochester, MN Robert E. Van Demark, III, M.D. Rochester, MN Steven L. Moran, M.D. Rochester, MN Marco Rizzo, M.D. Rochester, MN
- 22. Comparison of Open Drainage (OD) vs. Closed Catheter Irrigation (CCI) for Treatment of Purulent Flexor Tenosynovitis *Trevor R. Born, M.D. Rochester, MN Eric R. Wagner, M.D. Rochester, MN Sanjeev Kakar, M.D. Rochester, MN
- The Boutonniere Deformity: Mid- to Long-Term Outcomes of Non-Operatively Treated Patients *John C. Berschback, M.D. Cincinnati, OH
 Andrew D. Markiewitz, M.D. Cincinnati, OH
 Jonathan P. Edgington, B.S. Cincinnati, OH
 Xu Gao, B.S. Cincinnati, OH
 Peter J. Stern, M.D. Cincinnati, OH

BREAKOUT SESSION #2 SPORTS LOWER EXTREMITY 11:00 a.m. - 1:00 p.m., Thursday, April 24, 2014

- The Biomechanics of Femoral ACL Graft Malposition: A Finite Element Analysis
 *Robert W. Westermann, M.D. Iowa City, IA

 Brian R. Wolf, M.D., M.S. Iowa City, IA
 Jacob M. Elkins, M.D. Iowa City, IA
- Bio-Enhanced Anterior Cruciate Ligament Reconstruction Utilizing an Animal Technique in Humans *Courtney R. Fleissner, B.S. Rootstown, OH Paul R. Fleissner, Jr., M.D. Akron, OH
- Radiographic Anatomy of the Native Anterior Cruciate Ligament: A Systematic Review
 *Shane Cook, M.D. Iowa City, IA Jaron P. Sullivan, M.D. Iowa City, IA

 Brian R. Wolf, M.D., M.S. Iowa City, IA
- Incidence and Trends of Anterior Cruciate Ligament Reconstruction in the United States Nathan A. Mall, M.D. Chesterfield, MO Mario Moric, M.S. Chicago, IL
 *Peter N. Chalmers, M.D. Chicago, IL
 Brian J. Cole, M.D. Chicago, IL
 Bernard R. Bach, M.D. Chicago, IL
 George A. Paletta, Jr., M.D. Chesterfield, MO

- In Vivo Evaluation of Gold and Hydroxyapatite Nano-Grafts for Anterior Cruciate Ligament (ACL) Reconstruction

 *Richard A. White, M.D.
 Columbia, MO
 Sheila Grant, Ph.D.
 Columbia, MO
 Sarah Smith, B.S.
 Columbia, MO
 David Grant, B.S.
 Columbia, MO
- All-Arthroscopic Tibial Inlay Double-Bundle PCL Reconstruction: Early Experience with Two-Year Follow-Up Alexander E. Weber, M.D. Ann Arbor, MI Benjamin T. Bissell, M.D. North Platte, NE Edward M. Wojtys, M.D. Ann Arbor, MI
 *Jon K. Sekiya, M.D. Ann Arbor, MI
- 30. MPFL Tears in the Setting of Multi-Ligament Knee Injuries Rarely Cause Patellar Instability *Beniamin J. Allen, M.D. Rochester, MN Scott A. Kuzma, M.D. Rochester, MN Mark S. Collins. M.D. Rochester, MN Bruce D. Levv. M.D. Rochester, MN Diane L. Dahm. M.D. Rochester, MN Michael J. Stuart. M.D. Rochester, MN Aaron J. Krych, M.D. Rochester, MN
- Cadaveric Measurements of the Peroneal Nerve in Posterior Lateral Corner Reconstructions

 *Gregory R. Hildebrand, M.D.
 Minneapolis, MN
 Marc Tompkins, M.D.
 Bloomington, MN
 Jeffrey A. Macalena, M.D.
 Minneapolis, MN

- Novel Radiographic and Anatomical Evaluation of the Tibia Tubercle-Trochlear Groove Distance *Alicia F. Worden, M.D. St. Louis, MO Adnan Cutuk, M.D. St. Louis, MO Scott G. Kaar, M.D. St. Louis, MO
- Deep Vein Thrombosis Following Knee Arthroscopy: Evaluating Procedure-Specific Risk and a Thrombosis Risk Score William C. Graham, M.D. Columbus, OH
 *Nicole T. Meschbach, M.D.
 - Columbus, OH Peter H. Edwards, M.D. Columbus, OH
- 34. Acute Complications of Pediatric and Adolescent Knee Arthroscopy
 *Ali Ashraf, M.D. Rochester, MN Christy Christophersen Duluth, MN Lindsay R. Hunter Duluth, MN Diane L. Dahm, M.D. Rochester, MN Amy L. McIntosh, M.D. Rochester, MN
- Age Differences in the Incidence of Isolated Meniscal Tears

 *Mark A. McCarthy, M.D.
 lowa City, IA
 T. J. Ridley, B.S.
 lowa City, IA
 Matthew J. Bollier, M.D.
 lowa City, IA
 Brian R. Wolf, M.D., M.S.
 lowa City, IA
 Annunziato Amendola, M.D.
 lowa City, IA
- Comparing the Efficacy of Knee Cartilage Restoration Strategies: A Meta-Analysis

 *Andrew B. Campbell, B.S. Columbus, OH
 Joshua S. Everhart, M.D.
 Columbus, OH
 David C. Flanigan, M.D.
 Columbus, OH

BREAKOUT SESSION #3 TRAUMA 11:00 a.m. - 1:00 p.m., Thursday, April 24, 2014

- Periprosthetic Complications After Treatment of Trochanteric Hip Fractures with a Short Intramedullary Nail
 *Neil Sardesai, M.D. Rockford, IL James M. Gregory, M.D. Chicago, IL Anthony T. Sorkin, M.D. Indianapolis, IN
- Failures in High-Energy Intertrochanteric Femur Fractures Michael H. Amini, M.D. Memphis, TN *John J. Feldman, M.D. Memphis, TN John C. Weinlein, M.D. Memphis, TN
- 39. Intertrochanteric Hip Fractures: How Time to Surgery and Comorbidities Affect Mortality *Nicholas B. Frisch, M.D., M.B.A. Detroit. MI Michael A. Charters, M.D. Detroit. MI Christopher Dobson, B.S. Detroit. MI Clifford M. Les. Ph.D. Detroit. MI Joseph J. Hoegler, M.D. Detroit. MI William M. Hakeos, M.D. Detroit. MI S. Trent Guthrie, M.D. Detroit, MI
- 40. Gait Abnormalities After Closed Reduction and Percutaneous Screw Fixation for Posterior Pelvic Ring Disruption *Pooria Salari, M.D. St. Louis, MO Berton R. Moed, M.D. St. Louis, MO Lisa K. Cannada, M.D. St. Louis, MO

- Predictors of Operative Blood Loss for Acetabulum Fractures Fixed Through an Anterior Approach *Priya G. Sivasubramaniam, B.S. Nashville, TN Cesar S. Molina, M.D. Nashville, TN Andrew R. Fras, M.D. Nashville, TN Jason M. Evans, M.D. Nashville, TN Hassan R. Mir, M.D. Nashville, TN
- 42. Supplemental S1 Fixation for Type C Pelvic Fracture: Biomechanical Study of Long Iliosacral vs. Trans-Sacral Screw Pooria Salari, M.D. St. Louis, MO *Berton R. Moed, M.D. St. Louis, MO J. Gary Bledsoe, Ph.D. St. Louis, MO
- Nonoperative Treatment of Posterior Wall Fractures of the Acetabulum After Dynamic Stress Examination Under Anesthesia: Revisited *Andrew R. McNamara, M.D. St. Louis, MO John A. Boudreau, M.D. St. Louis, MO Berton R. Moed, M.D. St. Louis, MO
- 44. Acute Total Hip Arthroplasty for Select Acetabular Fractures *Nathan A. Nicholson, M.D. Iowa City, IA Brian O. Westerlind, B.S. Iowa City, IA
 J. Lawrence Marsh, M.D. Iowa City, IA
 Matthew D. Karam, M.D. Iowa City, IA

- 45. Femoral Head Bone Density Variance and Correlation with Proximal Femur Cortical Diameter John J. Lee. M.D. Ann Arbor, MI *Samuel L. Rosenbaum, M.D. Ann Arbor, MI Arun Hariharan, M.D. Ann Arbor, MI Ryan Selley, M.D. Ann Arbor, MI Sven A. Holcombe, M.D. Ann Arbor, MI Stewart C. Wang, M.D. Ann Arbor, MI James A. Goulet, M.D. Ann Arbor, MI
- 46. Systemic Proteomic Profiles Associated with Healing and Nonunion of Mid-Shaft Femur Fractures *Andrew P. Ringnes, M.D. Roval Oak. MI Melissa N. Zimel, M.D. Royal Oak, MI Denise Koueiter, M.S. Royal Oak, MI Tristan Maerz, M.S. Roval Oak, MI Timothy Geddes, B.S. Roval Oak. MI Kevin D. Grant. M.D. Roval Oak. MI Kevin C. Baker. Ph.D. Roval Oak. MI
- 47. Elution Profiles of Two Methods of Antibiotic Nail Preparations
 *Matthew Karek, M.D. Detroit, MI
 Nancy Jackson, Ph.D. Southfield, MI
 Jeff Flynn, Ph.D.
 Southfield, MI
 Raul Vaidya, M.D.
 Detroit, MI
 David C. Markel, M.D.
 Southfield, MI

MAOA Preliminary Program

 Health Related Quality of Life Outcomes After Surgical Treatment of Bisphosphonate-Associated Femur Fractures

 *Jonathon Spanyer, M.D. Louisville, KY
 Alexander Brown, B.S. Louisville, KY
 Michael Voor, Ph.D. Louisville, KY
 Madhusudhan Yakkatni, M.D. Louisville, KY

49. The Effect of Education on Orthopedic Surgery Residents' Ability to Objectively Evaluate a Simulated **Compartment Syndrome** *Michael R. Morris, M.D. Grand Rapids, MI Benjamin L. Harper, M.D. Grand Rapids, MI Scott Hetzel, M.S. Madison. WI Michael Shaheen, M.D. Grand Rapids, MI Alan Davis, Ph.D. Grand Rapids, MI Blaise A. Nemeth. M.D. Madison. WI Matthew A. Halanski, M.D. Madison. WI

BREAKOUT SESSION #4 REVISION HIP 11:00 a.m. - 1:00 p.m., Thursday, April 24, 2014

 Is There a Role for Routine Intraoperative Cultures to Diagnose Subclinical Periprosthetic Joint Infection During Revision Total Hip and Knee Arthroplasty? Eric Greber, M.D. Little Rock, AR
 *Paul K. Edwards, M.D. Little Rock, AR
 C. Lowry Barnes, M.D. Little Rock, AR

- 51. Fungal Periprosthetic Infection is Associated with a Poor Outcome *Colten D. Bracken, B.S. Rochester, MN Elie F. Berbari, M.D. Rochester, MN Arlen D. Hanssen, M.D. Rochester, MN Tad M. Mabry, M.D. Rochester, MN Douglas R. Osmon, M.D. Rochester, MN Rafael J. Sierra, M.D. Rochester, MN
- 52. Diagnosis of Periprosthetic Joint Infection in Revision Hip Arthroplastv with a Metal-on-Metal Bearing or Corrosion *Paul H, Yi Chicago, IL Michael B. Cross, M.D. Chicago, IL Mario M. Moric, M.S. Chicago, IL Brett R. Levine, M.D. Chicago, IL Scott M. Sporer, M.D. Chicago, IL Wayne G. Paprosky, M.D. Chicago, IL Joshua J. Jacobs. M.D. Chicago, IL Craig J. Della Valle, M.D. Chicago, IL
- 53. Structural Allograft Supporting a Trabecular Metal Cup Provides Durable Results in Complex Revision Arthroplastv *Michael E. Kralovec, M.D. Rochester, MN Hernan A. Prieto, M.D. Rochester, MN Rafael J. Sierra. M.D. Rochester, MN Daniel J. Berry, M.D. Rochester, MN Robert T. Trousdale, M.D. Rochester, MN Miquel E. Cabanela, M.D. Rochester, MN

- Construct Rigidity: Keystone for Reconstructing Pelvic Discontinuity *John R. Martin, M.D. Rochester, MN Ian J. Barrett, M.D. Rochester, MN Rafael J. Sierra, M.D. Rochester, MN David G. Lewallen, M.D. Rochester, MN Daniel J. Berry, M.D. Rochester, MN
- 55. Porous Tantalum Acetabular Augments in Complex Revision THA: Results at 5-12 Years Post Surgery Derek R. Jenkins, M.D. Rochester, MN *Andrew N. Odland, M.D. Rochester, MN Rafael J. Sierra, M.D. Rochester, MN Arlen D. Hanssen, M.D. Rochester, MN David G. Lewallen, M.D. Rochester, MN
- Ideal Component Positioning Prevents Excessive Metal Ion Levels in SRA, but not Metal-on-Metal THA James A. Keeney, M.D. St. Louis, MO Ryan M. Nunley, M.D. St. Louis, MO Humaa A. Nyazee St. Louis, MO John C. Clohisy, M.D. St. Louis, MO Robert L. Barrack, M.D. St. Louis, MO
- 57. MRI Findings Associated with Recalled Modular Neck Femoral Implants Christopher P. Walsh, M.D. Southfield, MI Joseph P. Nessler, M.D. St. Cloud, MN *David C. Markel, M.D. Southfield, MI

- 18.5% Failure Rate of Metal-on-Metal Hip Implants at 3.5 Years Follow-Up: The Case for Yearly Surveillance *Nazly Carrillo-Villamizar, B.S. Rochester, MN Hernan A. Prieto Saavedra, M.D. Rochester, MN Mark W. Pagnano, M.D. Rochester, MN Robert T. Trousdale, M.D. Rochester, MN Rafael J. Sierra, M.D. Rochester, MN
- Fisk Factors for Dislocation After Revision Total Hip Arthroplasty Robert D. Russell, M.D. Dallas, TX Soa-Yih Sher, B.S. Dallas, TX Matthew Judd, B.S. Dallas, TX
 *Timothy S. Brown, M.D. Dallas, TX
 Michael H. Huo, M.D. Dallas, TX
- Management of Polyethylene Wear and Osteolysis After Hip Replacement *Dalibel M. Bravo, B.S. San Juan, PR Miguel E. Cabanela, M.D. Rochester, MN
- Biomechanical Evaluation of Different Periprosthetic Femoral Fracture Fixations Using a Variable Angle Locked Periprosthetic Femur Plate System
 *Martin F. Hoffmann, M.D. Bochum, Germany Travis Burgers, Ph.D. Grand Rapids, MI Clifford B. Jones, M.D. Grand Rapids, MI James Mason, Ph.D. Grand Rapids, MI
 Debra L. Sietsema, Ph.D., R.N. Grand Rapids, MI

62. One-Stage Periprosthetic Hip Infection Revision Using a Prosthesis of Antibiotic Loaded Acrylic Cement (PROSTALAC) *Eric M. Greber, M.D. Little Rock. AR Donna K. Barron, P.A. Little Rock, AR D. Gordon Newbern, M.D. Little Rock, AR C. Lowry Barnes, M.D. Little Rock. AR Cara Petrus, B.S. Little Rock. AR Becky Wilson Little Rock, AR Paul K. Edwards, M.D. Little Rock. AR

BREAKOUT SESSION #5 PRIMARY KNEE ARTHROPLASTY 11:00 a.m. - 1:00 p.m., Thursday, April 24, 2014

- Extreme Variability in Posterior Slope of Proximal Tibia: Are We Accounting for Patients' Normal Anatomy in UKA?
 C. Lowry Barnes, M.D. Little Rock, AR
 Ryan M. Nunley, M.D. St. Louis, MO
 Cara L. Petrus, B.S. St. Louis, MO
- 64. Results of Oxford Phase III Mobile Bearing Medial Unicompartmental Knee Arthroplastv from an Independent Center - 467 Knees at a Mean Six-Year Follow-Up: Analysis of Predictors of Failure *R. Stephen Burnett, M.D., FRCS(C) Victoria, BC, Canada Raiesh Nair. M.D. Victoria, BC, Canada Christine A. Hall, M.D., FRCP(C) Victoria, BC, Canada Duncan Jacks, M.D., FRCS(C) Victoria, BC, Canada Lucas Pugh, M.D., FRCS(C) Victoria, BC, Canada Megan McAllister, BSc Victoria, BC, Canada

- Differences in Short-Term Complications Between Unicompartmental and Total Knee Arthroplasty: A Propensity Score Matched Analysis *Kyle R. Duchman, M.D. Iowa City, IA Yubo Gao, Ph.D. Iowa City, IA
 Andrew J. Pugely, M.D. Iowa City, IA
 Christopher T. Martin, M.D. Iowa City, IA
 John J. Callaghan, M.D. Iowa City, IA
- 66. The Effect of Payer Type on Clinical Outcomes in Total Knee Arthroplasty *Brett D. Rosenthal, M.D. Chicago, IL Jonah B. Hulst, M.D. Chicago, IL Mario Moric, M.S. Chicago, IL Brett R. Levine, M.D. Chicago, IL Scott M. Sporer, M.D. Chicago, IL
- The Influence of Comorbidities on Hospital Costs and Length of Stay Following Total Knee Arthroplasty *Andrew J. Pugely, M.D. Iowa City, IA Yubo Gao, Ph.D. Iowa City, IA Christopher T. Martin, M.D. Iowa City, IA John J. Callaghan, M.D. Iowa City, IA
- Effect of Psychopathology and Obesity on Outcomes of Total Knee Arthroplasty Robert D. Russell, M.D. Dallas, TX *Brigham K. Au, M.D. Dallas, TX Krista J. Howard, Ph.D. Dallas, TX Robert W. Bucholz, M.D. Dallas, TX

- 69. Aseptic Protocol Decreases Surgical Site Infections Following Knee Arthroplasty

 *Joseph Lamplot, B.S.
 Chicago, IL
 Gaurav Luther, M.D.
 Boston, MA

 Tyler R. Krummenacher, M.D.
 Chicago, IL
 Mohammed Hussain, M.D.
 Chicago, IL
 Hue H. Luu, M.D.
 Boston, MA
 David W. Manning, M.D.
 Chicago, IL
- Predictors of Pain Following Total Knee Arthroplasty

 *Nicolas O. Noiseux, M.D.
 Iowa City, IA
 John J. Callaghan, M.D.
 Iowa City, IA
 Charles R. Clark, M.D.
 Iowa City, IA
 Kathleen A. Sluka, Ph.D.
 Iowa City, IA
 Barbara A. Rakel, Ph.D.
 Iowa City, IA
- Intravenous vs. Topical Tranexamic Acid in Total Knee Arthroplasty: A Prospective Randomized Study Jay Patel, B.S. Louisville, KY Jonathan Spanyer, M.D. Louisville, KY Langan Smith, B.S. Louisville, KY
 *Madhusudhan R. Yakkanti, M.D. Louisville, KY
 Arthur L. Malkani, M.D. Louisville, KY

72. The Impact of Patient Specific Guides and Mechanical and Kinematic Alignment on Patient Satisfaction and Function After TKA Robert L. Barrack, M.D. St. Louis. MO Ryan M. Nunley, M.D. St. Louis. MO Denis Nam. M.D. St. Louis. MO Keith R. Berend, M.D. New Albany, OH Adolph V. Lombardi, Jr., M.D. New Albany, OH Stephen M. Howell, M.D. Sacramento, CA

- 73. Does Implant Design Influence the Accuracy of Patient Specific Instrumentation in Total Knee Arthroplasty?
 *Nitin Goyal, B.S. Chicago, IL
 Anay R. Patel, M.D. Chicago, IL
 Mark A. Yaffe, M.D. Chicago, IL
 Michael Luo, B.S. Chicago, IL
 S. David Stulberg, M.D. Chicago, IL
- 74. Perceived Leg Length Discrepancy Following Primary Total Knee Arthroplasty Zachary H. Goldstein, B.S. Chicago, IL Paul H. Yi, B.S. Chicago, IL Matthew W. Tetreault, M.D. Chicago, IL
 *Brett R. Levine, M.D. Chicago, IL Craig J. Della Valle, M.D. Chicago, IL Scott M. Sporer, M.D. Chicago, IL
- 75. No Increased Risk of TKA Failure in Metal Hypersensitive Patients: A Matched Cohort Study Dalibel M. Bravo, B.S. San Juan. PR Ana I. Velazquez, B.S. Rochester, MN Eric R. Wagner, M.D. Rochester, MN Emily S. Pavey, M.S. Rochester, MN Mark P. Davis, M.D. Rochester, MN Mark W. Pagnano, M.D. Rochester, MN *Rafael J. Sierra. M.D. Rochester, MN

*Denotes Speaker

1:00 p.m. - 3:00 p.m. Ask the Expert Lawrence B. Bone, M.D. Buffalo, NY

Resurrection of an old format: A consultation session with Dr. Lawrence Bone, Classics Speaker and a recognized authority in trauma surgery, with cases brought by attendees. We encourage you to bring your HIPAA-compliant problem, difficult, and interesting trauma cases whether they have already been treated or not and present them. Bring these cases in digital format, as x-ray boxes will not be available.

Lunch on your own

1:15 p.m.

Optional Tour – River Walk, Riverboat, and Market Square (see page 64)

2:00 p.m.

Mid-America Tennis Tournament (see page 65)

- 6:00 p.m. 7:30 p.m. Poster viewing – presenters will be available. CME credit will be offered. (Poster Area)
- 6:00 p.m. 7:30 p.m. Reception sponsored by the Exhibitors (Exhibit Area) *Attire: Casual*

Dinner on your own

FRIDAY, APRIL 25, 2014

6:00 a.m. - 1:00 p.m. Registration

6:30 a.m. - 8:00 a.m. INSTRUCTIONAL COURSE I – The Isolated Humerus: Not All Belong in the Sarmiento

Continental breakfast will be available

Lisa K. Cannada, M.D., Moderator St. Louis, MO

Clifford B. Jones, M.D. Grand Rapids, MI

Matthew A. Mormino, M.D. Omaha NE

Objectives:

- 1. List at least three strategies of treatment for humeral shaft fractures
- 2. Define what approach for what level of fracture in ORIF
- 3. Discuss how to make brace treatment work

Isolated humeral shaft fractures are controversial. The standard treatment used to be nonoperative. This has been shown to have increased rates of malunion and nonunion. Through case presentations with strong consideration of patient variables, treatment strategies for the isolated humeral shaft will be discussed.

6:30 a.m.- 8:00 a.m.

INSTRUCTIONAL COURSE II – Office Ultrasound – A Valuable Tool in the Diagnosis and Management of Extremity Injury

Continental breakfast will be available

- Henry T. Goitz, M.D., Moderator Warren, MI
- J. Antonio Bouffard, M.D. Detroit, MI
- Fernando Jimenez, M.D., Ph.D. Toledo, Spain

This course describes how and when to use ultrasound in the clinic setting. Diagnosis of extremity injury, together with techniques of guided injection and aspiration, are demonstrated. Prepared for participants at all levels of knowledge base and experience.

7:30 a.m. - 12:30 p.m.

Exhibits/Posters Open (continental breakfast available from 7:30 a.m. - 9:00 a.m. in exhibit area)

8:30 a.m. - 10:30 a.m. Spouse/Guest Hospitality

10:30 a.m. - Noon

OPTIONAL ACTIVITY FOR SPOUSES/GUESTS: Salsa Making Class (see page 66)

SECOND PLENARY SESSION

8:00 a.m. - 10:30 a.m.

- 8:00 a.m. 8:03 a.m. Assemble/Announcements
- 8:03 a.m. 8:13 a.m. **MAOA Presidential Address** Craig S. Roberts, M.D., M.B.A. Louisville, KY
- 8:13 a.m. 8:43 a.m. PRESIDENTIAL GUEST SPEAKER Complications of Total Shoulder Arthroplasty: Treatment and Prevention Lynn A. Crosby, M.D.
 - Augusta, GA

76. Minimum 20-Year Follow-Up of Neer Shoulder Arthroplasty in Patients Less than 50 Years
*Bradley S. Schoch, M.D. Rochester, MN
Cathy D. Schleck, B.S. Rochester, MN
Robert H. Cofield, M.D. Rochester, MN

> John W. Sperling, M.D. Rochester, MN

- Cervical Radiculopathy Presenting as Shoulder Pain: Incidence and Results of Multidisciplinary Care

 *Troy A. Roberson, M.D.
 Memphis, TN
 Nicholas B. Jew, M.D.
 Memphis, TN
 Frederick M. Azar, M.D.
 Memphis, TN
 Benjamin M. Mauck, M.D.
 Memphis, TN
 John D. Dockery, M.D.
 Memphis, TN
 Thomas W. Throckmorton, M.D.
 Memphis, TN
- Early vs. Late Culture Growth Characteristics in P. acnes Positive Periprosthetic Shoulder Infections *Salvatore J. Frangiamore, M.D. Cleveland, OH Matthew J. Gross, M.S. Cleveland, OH Anas Saleh, M.D. Cleveland, OH Eric T. Ricchetti, M.D. Cleveland, OH Thomas W. Bauer, M.D. Cleveland, OH Joseph P. Iannotti, M.D. Cleveland, OH

MAOA Preliminary Program

79. Exercise Antagonizes Local and Systemic Inflammation vs. Suppression of NF-kB Activation *Derrick M. Knapik, B.S. Columbus, OH Alisa D. Blazek. M.S. Columbus, OH Priyangi Perera, M.S. Columbus, OH Lai-Chu Wu. Ph.D. Columbus, OH Nicholas A. Young, Ph.D. Columbus, OH Timothy Eubanks. Ph.D. Columbus, OH Wael N. Jarjour, Ph.D. Columbus, OH David C. Flanigan, M.D. Columbus, OH Sudha Agarwal, Ph.D. Columbus, OH

9:17 a.m. - 9:22 a.m. Presentation of Mid-America Orthopaedic Association Physician in Training Award Winners Edward D. Henderson Award

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

9:22 a.m. - 9:50 a.m.

- 80. Edward D. Henderson M.D. Award Presentation
- 81. E. W. Johnson, Jr., M.D. Award Presentation
- 82. Carl L. Nelson, M.D. Award Presentation
- 83. Dallas B. Phemister, M.D. Award Presentation

9:50 a.m. - 9:55 a.m. Introduction of Recipients of Traveling Fellowship, Multipurpose Resident Grants, and Education Grants

- 9:55 a.m. 10:00 a.m. Traveling Fellowship Presentation
- 10:00 a.m. 10:30 a.m. CLASSICS IN ORTHOPAEDICS Decision-Making in Soft Tissue Tumors Frank J. Frassica, M.D. Baltimore, MD

- 10:30 a.m. 11:00 a.m. Poster viewing – presenters will be available. CME credit will be offered. (Poster Area)
- 10:30 a.m. 11:00 a.m. Coffee Break in Exhibit Area
- 11:00 a.m. 1:00 p.m. Breakout Sessions #6, #7, #8, #9, and #10 to run concurrently

BREAKOUT SESSION #6 SHOULDER 11:00 a.m. - 1:00 p.m., Friday, April 25, 2014

- 84. Irrigation and Debridement for the Management of Infected Shoulder Arthroplasty
 *Taylor D. Dennison, M.D. Rochester, MN John W. Sperling, M.D. Rochester, MN
 Robert H. Cofield, M.D. Rochester, MN
 - 85. A Comparison of Perioperative Outcomes Following Total Shoulder Arthroplasty in Patients with and without Diabetes

 *Jimmy J. Jiang, M.D.
 Chicago, IL
 Aneet S. Toor, M.D.
 Chicago, IL
 Lewis L. Shi, M.D.
 Chicago, IL
 Jason L. Koh, M.D.
 Evanston, IL
 - Accuracy Testing of Four Physical Examination Maneuvers for Detecting Lateral Epicondylitis Robert F. Murphy, M.D. Memphis, TN Benjamin M. Mauck, M.D. Memphis, TN Frederick M. Azar, M.D. Memphis, TN Thomas W. Throckmorton, M.D. Memphis, TN (Presented by Michael H. Amini, M.D., Memphis, TN)

- A Comparison of Reverse Shoulder Arthroplasty Functional Outcomes with Two Different Glenosphere Sizes Vani J. Sabesan, M.D. Kalamazoo, MI Mark C. Callanan, M.D. Kalamazoo, MI Vinay Sharma, B.S. Kalamazoo, MI
- Patient Preoperative Confidence in Outcome Predicts Functionality After Total Shoulder Arthroplasty *Joseph P. Styron, M.D., Ph.D. Cleveland, OH Carlos A. Higuera, M.D. Cleveland, OH Gregory Strnad Cleveland, OH Joseph P. Iannotti, M.D., Ph.D. Cleveland, OH
- 89. A Quantitative Analysis of Baseplate and Glenosphere Position on Deltoid Tension in Reverse Total Shoulder Arthroplastv Thomas W. Throckmorton, M.D. Memphis. TN *Jonathan W. Wright, M.D. Memphis, TN Christopher A. Potts. M.D. Memphis. TN Mark P. Smyth, M.D. Memphis, TN Frederick M. Azar. M.D. Memphis. TN Lisa Ferrera. Ph.D. Memphis, TN John W. Sperling, M.D. Rochester, MN
- An Analysis of Perioperative Outcomes in Patients Following Total Shoulder Arthroplasty and Reverse Total Shoulder Arthroplasty Jimmy J. Jiang, M.D. Chicago, IL *Aneet S. Toor, M.D. Chicago, IL Lewis L. Shi, M.D. Chicago, IL Jason L. Koh, M.D. Evanston. IL

- Outcomes of Glenoid Bone Grafting in Revision Reverse Total Shoulder Arthroplasty Eric R. Wagner, M.D. Rochester, MN Timothy B. Griffith, M.D. Rochester, MN Matthew T. Houdek, M.D. Rochester, MN Robert H. Cofield, M.D. Rochester, MN Joaquin Sanchez-Sotelo, M.D. Rochester, MN John W. Sperling, M.D. Rochester, MN
- 92. Wear Characteristics of Vitamin E-Infused Polyethelene in a Reverse Shoulder Arthroplasty *Joshua B. Sykes, M.D. Memphis, TN Hani Haider, Ph.D. Omaha, NE John W. Sperling, M.D. Rochester, MN Thomas W. Throckmorton, M.D. Memphis, TN
- 93. The Rising Incidence of Operative Fixation of Acute Mid-Shaft Clavicle Fractures

 *Alan J. Micev, M.D.
 Chicago, IL
 Derek Hsu, B.S.
 Chicago, IL
 Sara L. Edwards, M.D.
 Chicago, IL
 Guido Marra, M.D.
 Chicago, IL
 Matthew D. Saltzman, M.D.
 Chicago, IL
- 94. Economic and Social Impact of Upper Extremity Fragility Fractures in Elderly Patients Vani J. Sabesan, M.D. Kalamazoo, MI Nathan Kolderman, B.S. Kalamazoo, MI Jouvana Currey, B.S. Kalamazoo, MI Juan Rango, B.S. Kalamazoo, MI Sergey Gukasov, B.S. Kalamazoo, MI Abby Childs, B.S. Kalamazoo, MI

- 95. Functional Outcomes of Floating Shoulder Injuries After Clavicular Fixation Only *Alex K. Gilde, B.S. Grand Rapids, MI Clifford B. Jones. M.D. Grand Rapids, MI Christiane G. Kruppa, M.D. Bochum, Germany Martin F. Hoffmann, M.D. Bochum, Germany Debra L. Sietsema, Ph.D., R.N. Grand Rapids, MI Matthew S. Nies, B.S. Grand Rapids. MI Charles G. Sierzant, B.S. Grand Rapids, MI
- 96. 30-Day Morbidity and Mortality Following Elective Shoulder Arthroscopy: A Review of 9,410 Cases
 *Christopher T. Martin, M.D. Iowa City, IA
 Andrew J. Pugely, M.D. Iowa City, IA
 Yubo Gao, Ph.D. Iowa City, IA
 Brian R. Wolf, M.D., M.S. Iowa City, IA

BREAKOUT SESSION #7 TUMOR/BASIC SCIENCE/RESIDENT EDUCATION 11:00 a.m. - 1:00 p.m., Friday, April 25, 2014

97. Has Best Available Evidence Changed the Treatment of Femoral Neck Fractures? A Look at ABOS Part 2 Examinees

*Benjamin J. Miller, M.D.
lowa City, IA
John J. Callaghan, M.D.
lowa City, IA

Matthew D. Karam, M.D.
lowa City, IA
J. Lawrence Marsh, M.D.
lowa City, IA
Nicolas O. Noiseux, M.D.
lowa City, IA

- 98. Long-Term Outcomes of Intramedullary Vascularized Fibulas with Massive Bone Allograft Matthew T. Houdek, M.D. Rochester, MN Eric R. Wagner, M.D. Rochester, MN Steven L. Moran, M.D. Rochester, MN
- 99. The Validity of a Rat Model for Analyzing miRNA in Chondrosarcoma Nicholas B. Frisch, M.D., M.B.A. Detroit, MI
 *Christopher Dobson, B.S. Detroit, MI
 Gary Gibson, Ph.D. Detroit, MI
 Theodore W. Parsons, M.D. Detroit, MI
 Michael P. Mott, M.D. Detroit, MI
- 100. Desmoid Tumors of the Upper Extremity Matthew T. Houdek, M.D. Rochester, MN *Peter S. Rose, M.D. Rochester, MN Sanjeev Kakar, M.D. Rochester, MN
- Factors Affecting Outcomes in Patients Treated Surgically for Upper Extremity Tumors and Tumor-Like Lesions *Jesse E. Otero, M.D. lowa City, IA
 Christopher M. Graves, M.D. lowa City, IA
 Joseph A. Buckwalter, M.S., M.D. lowa City, IA
 Benjamin J. Miller, M.D. lowa City, IA
- 102. The Effect of Suture Technique on Cutaneous Blood Flow and Immediate Wound Repair Strength *Adam M. Sunderland, M.D. Detroit, MI
 S. Trent Guthrie, M.D. Detroit, MI
 Richard Banglmaier, Ph.D. Detroit, MI

- 103. Polymer Scaffold and Biological Engineering to Enhance Ligament Regeneration Eric R. Wagner, M.D. Rochester, MN Dalibel Bravo, B.S. San Juan. PR Steven Chase, B.S. Rochester, MN Mahrokh Dadsetan, Ph.D. Rochester, MN Michael J. Yaszemski, M.D., Ph.D. Rochester, MN Sanieev Kakar, M.D. Rochester, MN
- 104. Nonoperative Hip Fracture Management in the Elderly: Patient Characteristics and Predictors of Mortality *Amanda Ly, M.S. St. Paul, MN
 David M. Wright, M.D. St. Paul, MN
 Sandy Vang, B.S. St. Paul, MN
 Julie A. Switzer, M.D. St. Paul, MN
- 105. Does Immediately Following a Dirty Case with a Clean Case Predict Infection?
 *Sean Baran, M.D. Rochester, MN Rishikesan Ramaesh Rochester, MN Kariline E. Bringe, M.D. Rochester, MN Alexander Y. Shin, M.D. Rochester, MN Sanjeev Kakar, M.D. Rochester, MN
- 106. The Impact of Resident Education on Short-Term Outcomes Following Orthopedic Surgery Andrew J. Pugely, M.D. Iowa City, IA Yubo Gao, Ph.D. Iowa City, IA Christopher T. Martin, M.D. Iowa City, IA John J. Callaghan, M.D. Iowa City, IA J. Lawrence Marsh, M.D. Iowa City, IA

- 107. Patient Attitudes Towards Resident and Fellow Participation in Orthopedic Surgerv Paul H. Yi, B.S. Chicago, IL Michael B. Cross. M.D. Chicago, IL Sina Akhavan, B.S. San Francisco. CA Paul Lichstein, B.S. Philadelphia, PA Mario Moric. M.S. Chicago, IL Javad Parvizi, M.D. Philadelphia, PA Kevin J. Bozic, M.D. San Francisco, CA *Craig J. Della Valle, M.D. Chicago, IL
- Pilot Studies for the Design and Implementation of an Orthopedic Surgical Training Laboratory for Basic Motor Skills Jonathan M. Christy, M.D. Columbus, OH
 *Gregory P. Kolovich, M.D., M.P.H. Columbus, OH
 Matthew D. Beal, M.D. Columbus, OH
 Joel L. Mayerson, M.D. Columbus, OH
- 109. An Analysis of References Used for the Orthopedic In-Training Examination *Bryan D. Haughom, M.D. Chicago, IL
 Zach Goldstein, B.S. Chicago, IL
 Michael D. Hellman, M.D. Chicago, IL
 Paul H. Yi, B.S. Chicago, IL
 Rachel M. Frank, M.D. Chicago, IL
 Brett R. Levine, M.D. Chicago, IL

MAOA Preliminary Program

BREAKOUT SESSION #8 PEDIATRIC SPINE/ADULT SPINE 11:00 a.m. - 1:00 p.m., Friday, April 25, 2014

- Static and Dynamic Anterior Cervical 110. Plates: A Retrieval Analysis of Damage and Clinical Data *Okezie Aguwa M.D. Roval Oak. MI Erin Baker, M.S. Royal Oak, MI Kevin C. Baker. Ph.D. Royal Oak, MI Meagan Salisbury, B.S. Roval Oak. MI Daniel K. Park, M.D. Roval Oak. MI
- 111. At What Levels Are Free Hand Pedicle 114. Epidural Steroid Paste in Posterior Screws More Frequently Malpositioned? *Mark J. Heidenreich, B.S. Rochester, MN Yaser Baghdadi, M.D. Rochester, MN Amy L. McIntosh, M.D. Rochester, MN Mark B. Dekutoski, M.D. Phoenix, AZ William J. Shaughnessy, M.D. Rochester, MN A. Noelle Larson, M.D. Rochester, MN
- 112. Allograft and Polyetheretherketone (PEEK) Cage in Anterior Cervical Discectomy and Fusion (ACDF) Edward Ranier G. Santos, M.D. Minneapolis, MN Sharon C. Yson, M.D. Minneapolis, MN *Jonathan N. Sembrano, M.D. Minneapolis, MN

- 113. Lumbar Spine Posterior Subcutaneous Fat Thickness is a Risk Factor for Surgical Site Infection John J. Lee, M.D. Ann Arbor, MI *Khalid I. Odeh. M.D. Ann Arbor, MI Sven A. Holcombe, M.D. Ann Arbor, MI Stewart C. Wang, M.D. Ann Arbor, MI Rakesh D. Patel, M.D. Ann Arbor, MI James A. Goulet, M.D. Ann Arbor, MI Gregory A. Graziano, M.D. Ann Arbor, MI
- Lumbar Surgery: Surgical Site Complications in a Retrospective Case-Control Cohort Study *Eva U. Asomugha. M.D. Cleveland. OH Robert F. McLain, M.D. Cleveland, OH
- 115. The Utility of Inpatient Spine Surgery Consults in Patients Over the Age of 65 for Pain and Radiculopathy *Seuna J. Yi. M.D. Akron, OH Scott Shemory, M.D. Akron, OH Rai M. Patel, M.D. Rootstown, OH Richard S. Brower, M.D. Akron, OH Scott D. Weiner, M.D. Akron, OH Matthew F. Dilisio. M.D. Akron, OH

- 116. Do Preoperative Hospital Tours Alleviate Anxiety in Posterior Spinal Fusion Patients? A Prospective. Randomized Study Leslie Rhodes, M.S. Memphis. TN Cassie Nash Memphis. TN Donna Scott Memphis, TN *Kaku Barkoh. M.D. Memphis, TN William C. Warner, M.D. Memphis, TN Jeffrey R. Sawyer, M.D. Memphis, TN Derek M. Kellv. M.D. Memphis. TN
- 117. Hybrid Fixation with Sublaminar Polyester Bands in the Treatment of Neuromuscular Scoliosis: A Comparative Analysis *Michael C. Albert, M.D. Dayton, OH
 Brett LaFleur, M.D. Dayton, OH
- 118. Venous Thromboembolism Following Pediatric Spinal Surgery *Natasha T. O'Malley, M.D. Cleveland, OH George H. Thompson, M.D. Cleveland, OH Jochen P. Son-Hing, M.D. Cleveland, OH Christine K. Hardesty, M.D. Cleveland, OH Connie Poe-Kochert, M.D. Cleveland, OH
- 119. The Effect of Sagittal Alignment on Standing Balance: Correlation with Sway Path Length and Sway Velocity *Christopher M. Graves, M.D. lowa City, IA
 Monica Paliwal, M.S. lowa City, IA
 Zachary G. Ries, M.D. lowa City, IA
 Sergio A. Mendoza-Lattes, M.D. lowa City, IA

- 120. Use of Bipolar Sealer Device Reduces Blood Loss and Transfusions in Posterior Spinal Fusion for Neuromuscular Scoliosis Christina K. Hardesty, M.D. Cleveland, OH
 *Zachary Gordon, M.D. Cleveland, OH
 Jochen P. Son-Hing, M.D. Cleveland, OH
 Connie Poe-Kochert, R.N. Cleveland, OH
 George H. Thompson, M.D. Cleveland, OH
- 121. Success of Risser Casting in the Treatment of Scheurmann's Kyphosis *Christina K. Hardesty, M.D. Cleveland, OH Connie Poe-Kochert, R.N. Cleveland, OH Raj Gala, B.S. Cleveland, OH George H. Thompson, M.D. Cleveland, OH
- 122. Comparison of Uniplanar vs. Fixed Pedicle Screws in the Restoration of Thoracic Kyphosis in the Treatment of Adolescent Idiopathic Scoliosis (AIS) Siddharth Badve, M.D. Cleveland, OH *Ryan C. Goodwin, M.D. Cleveland, OH William F. Lavelle, M.D. Syracuse, NY Thomas E. Kuivila, M.D. Cleveland, OH David P. Gurd, M.D. Cleveland, OH

BREAKOUT SESSION #9 REVISION KNEE

- 11:00 a.m. 1:00 p.m., Friday, April 25, 2014
- 123. The Evaluation of the Efficacy of a Dilute Povidone-Iodine Lavage in Preventing Deep Postoperative Infection Before Wound Closure in Primary Total Knee Arthroplasty Adam J. Cien, D.O. Lansing, MI *Phillip C. Penny, D.O. Lansing, MI Charles J. Taunt, Jr., D.O. Lansing, MI

124. Does Operative Time Affect Infection Rate Following Primary Total Knee Arthroplastv? *Sameer M. Naranie, M.D. Minneapolis, MN Lisa Lendway, Ph.D. Minneapolis, MN Susan Mehle, B.S. Minneapolis, MN Terence J. Gioe, M.D. Minneapolis, MN 125. Is Malnutrition a Risk Factor for Septic Failure and Acute Postoperative Infection Following Revision Total Joint Arthroplasty? *Rachel M. Frank, M.D. Chicago, IL Paul H. Yi. M.D. Chicago, IL Elliott R. Vann, M.D. Abilene. TX Kevin Sonn. B.S. Chicago, IL Mario Moric, M.S. Chicago, IL Craig J. Della Valle, M.D. Chicago, IL 126. Morbidly Obese Patients Have a Significantly Higher Risk of Failure Following Revision Total Knee Arthroplasty for Infection Chad D. Watts. M.D. Rochester, MN Eric R. Wagner, M.D. Rochester, MN Matthew T. Houdek, M.D. **Rochester**, MN *David G. Lewallen, M.D. Rochester, MN Tad M. Mabry, M.D. Rochester, MN 127. Sonication for the Enhanced Diagnosis of Prosthetic Joint Infection Curtis W. Hartman, M.D. Omaha. NE Angela L. Hewlett, M.D. Omaha, NE Derrick Antoniak, M.D. Omaha. NE Beau S. Konigsberg, M.D. Omaha. NE Kevin L. Garvin, M.D. Omaha. NE

128. Mortality of Elderly Patients After Two-Stage Reimplantation for Total Joint Infection: A Case Control Study *Jonathan E. Webb, M.D. Rochester, MN David G. Lewallen, M.D. Rochester, MN Robert T. Trousdale, M.D. Rochester, MN
129. Are the Results of Two-Stage Reimplantation of a Prosthetic Joint Durable Over the Patient's Lifetime? Ryan E. Miller, M.D. Omaha, NE

Curtis W. Hartman, M.D. Omaha, NE Beau S. Konigsberg, M.D. Omaha, NE *Kevin L. Garvin, M.D. Omaha, NE

 Caution! High Rate of Positive Cultures in Referred Patients with Antibiotic Spacers *Kevin I. Perry, M.D. Rochester, MN Robert C. Sproul, M.D. Charlotte, NC Rafael J. Sierra, M.D. Rochester, MN Thomas K. Fehring, M.D. Charlotte, NC Arlen D. Hanssen, M.D. Rochester, MN

 Results of Patients Undergoing a Second Manipulation Under Anesthesia for Stiffness After Total Knee Arthroplasty *Jason R. Ferrel, M.D. Columbus, OH Richard L. Davis, II, M.D. Columbus, OH Joel R. Politi, M.D. Columbus, OH

 Revision Total Knee Arthroplasty in a Veteran Population Michael J. Anderson, M.D. Dayton, OH Michael J. Coffey, M.D. Dayton, OH
 *Anil B. Krishnamurthy, M.D. Dayton, OH 133. Comparison of Arthroscopic and Nonoperative Treatment of Patellofemoral Soft Tissue Impingement Following Total Knee Arthroplasty: Minimum Two-Year Follow-Up *John Hart. B.S. Iowa City, IA Bradlev S. Schoch. M.D. Rochester, MN John J. Callaghan, M.D. Iowa City. IA Steve S. Liu, M.D. Iowa Citv. IA Devon D. Goetz. M.D. West Des Moines, IA

134. Revision Total Knee Arthroplasty for Patients Less than 55 Years of Age James A. Keeney, M.D. St. Louis, MO Jeffrey B. Stambough, M.D. St. Louis, MO Angela D. Keith, M.S. St. Louis, MO Kelly Morris St. Louis, MO Geneva R. Baca, B.S. St. Louis, MO John C. Clohisy, M.D. St. Louis, MO

135. Surgical Measures to Correct Flexion Instability Associated with Well-Fixed Components

*Matthew P. Abdel, M.D.
Rochester, MN
Luis Pulido, M.D.
Rochester, MN
Erik P. Severon, M.D.
Rochester, MN
Arlen D. Hanssen, M.D.
Rochester, MN

BREAKOUT SESSION #10 HIP

11:00 a.m. - 1:00 p.m., Friday, April 25, 2014

- 136. Fixation and Wear with Contemporary Acetabular Components and Cross-Linked Polyethylene at 10 Years in Patients Age 50 and Under *Justin Greiner, B.S. Iowa Citv. IA Nicholas A. Bedard, M.D. Iowa City. IA Steve S. Liu, M.D. Iowa City. IA Yubo Gao, Ph.D. Iowa City, IA Devon D. Goetz. M.D. West Des Moines. IA John J. Callaghan, M.D. Iowa City. IA
- 137. Excellent Results at a Minimum 10 Years for Primary Uncemented Acetabular Components in THA for Protrusio Acetabuli *Yaser M. K. Baghdadi Rochester, MN
 A. Noelle Larson, M.D. Rochester, MN
 Rafael J. Sierra, M.D. Rochester, MN
- 138. True Sizing of the Acetabulum in Total Hip Arthroplasty: Off-the-Shelf vs. Factory-New Reamers *Gilbert C. Roc, M.D. Detroit, MI
 W. Trevor North, M.D. Detroit, MI
 Craig D. Silverton, D.O. Detroit, MI
 Stephen Yu, B.S. Detroit, MI
- 139. Results of Cementless Femoral Reconstruction in Primary THA for Treatment of DDH Kevin I. Perry, M.D. Rochester, MN Arlen D. Hanssen, M.D. Rochester, MN Daniel J. Berry, M.D. Rochester, MN

- 140. Early Subsidence is Minimized in a Modern Taper-Wedge Femoral Component Compared to a Traditional Fit-and-Fill Design

 *R. Michael Meneghini, M.D.
 Fishers, IN
 Luke Lovro, B.S.
 Fishers, IN
 David Licini, M.D.
 Fishers, IN
- 141. Cerclage Fixation for Cementless Total Hip Arthroplasty Complicated by Intraoperative Vancouver B1 Periprosthetic Fractures: A Biomechanical Analysis Nicholas B. Frisch, M.D., M.B.A. Detroit, MI Jakub Sikora-Klak, B.S. Detroit, MI *Craig D. Silverton, D.O. Detroit, MI
- 142. Total Hip Arthroplasty Dislocation Stratified According to BMI Eric R. Wagner, M.D. Rochester, MN Atul F. Kamath, M.D. Rochester, MN Kristin Fruth, M.D. Rochester, MN W. Scott Harmesen, M.S. Rochester, MN Daniel J. Berry, M.D. Rochester, MN
- 143. Range of Motion After Dual Mobility Total Hip Arthroplasty: Femoral Head Size and Surgical Approach - Does it Matter?
 *Amgad M. Haleem, M.D. New York, NY
 Sabir Ismaily, B.S. Houston, TX
 Morteza Meftah, M.D. Houston, TX
 Philip Noble, Ph.D. Houston, TX
 Stephen J. Incavo, M.D. Houston, TX

- 144. Radiographic Outcomes After Direct Anterior With Fluoroscopy vs. Mini-Posterior THA Without: Reliable, Reproducible, and Similar *Atul F. Kamath, M.D. Rochester, MN Kirsten L. Poehling-Monaghan, M.D. Rochester, MN Michael J. Taunton, M.D. Rochester, MN Mark W. Pagnano, M.D. Rochester, MN
- 145. Pain Patterns in Young, Active Patients Following Hip Arthroplasty Ryan M. Nunley, M.D. St. Louis, MO Peter J. Brooks, M.D. Cleveland, OH John C. Clohisy, M.D. St. Louis, MO Humaa Nyazee St. Louis, MO Robert L. Barrack, M.D. St. Louis, MO
- 146. Are Large Heads an Unqualified Benefit for Metal-on-Metal Total Hip Replacement? Stability vs.
 "Trunnionosis" Wear

 *Jacob Elkins, M.D.
 lowa City, IA
 John J. Callaghan, M.D.
 lowa City, IA

 Thomas Brown, Ph.D.
 lowa City, IA
- 147. Wear Analysis of Three Different Bearing Combinations in THA Curtis W. Hartman, M.D. Omaha, NE Jon Hedgecock, M.D. Omaha, NE Beau S. Konigsberg, M.D. Omaha, NE John M. Martell, M.D. Chicago, IL Kevin L. Garvin, M.D. Omaha, NE

148 Is There a Benefit to Modularity in "Simpler" Femoral Revision Surgerv? *Scott M. Sporer, M.D. Chicago, IL Matthew W. Tetreault, M.D. Chicago, IL Hany S. Bedair, M.D. Boston, MA James I. Huddleston, III, M.D. Stanford, CA Ho-Rim Choi, M.D. Boston, MA Michael Yu. M.D. Stanford, CA Stuart Goodman. M.D. Stanford, CA Craig J. Della Valle, M.D. Chicago, IL

Lunch on your own

1:00 p.m. - 3:00 p.m. MAOA Practice Management Symposium

1:00 p.m. – 1:05 p.m. Welcome and Introduction Frederick N. Meyer, M.D. Mobile, AL

1:05 p.m. – 1:35 p.m. Service-Line Co-Management Agreements Craig R. Mahoney, M.D. West Des Moines, IA

1:35 p.m. – 1:45 p.m. Questions and Discussion

1:45 p.m. – 2:15 p.m. ICD-10 Craig S. Roberts, M.D., M.B.A. Louisville, KY

- 2:15 p.m. 2:25 p.m. Questions and Discussion
- 2:25 p.m. 2:55 p.m. Running a More Efficient Practice Frederick N. Meyer, M.D. Mobile, AL
- 2:55 p.m. 3:00 p.m. Questions/Closing Remarks
- 1:30 p.m. Mid-America Golf Tournament (see page 65)

1:30 p.m. Optional Tour: Alamo, Mission San José, and Mission Concepción (see page 66)

6:30 p.m. - 7:30 p.m. Steel Lecture – Narrative in Medicine: Why We Need Stories in an Age of Evidence Vincent Lam, M.D. Emergency Room Physician and Author

Toronto, Ontario, Canada

From the expatriate Chinese community of Vietnam and born in Canada, Dr. Vincent Lam is an author and emergency room physician. His international bestseller. Bloodletting and Miraculous Cures. won Canada's most prestigious literary prize, the Giller Prize and was adapted for television and broadcast on HBO Canada. He is also a lecturer with the Department of Family and Community Medicine at the University of Toronto. Dr. Lam's latest book is The Headmaster's Wager, a riveting story of love, betrayal, and sacrifice which is set within the Chinese community of Saigon during the Vietnam War. A celebrated speaker, his keynotes explore the idea that both the medical and literary practices are, at their core, narrative arts, while making the case that the core of human caring must always remain an act of shared story-telling.

7:30 p.m. - 10:30 p.m. Friday Night Dinner/Dance <u>Price:</u> Included in Registration Fee for doctors, allied health, and registered spouses/guests <u>Exhibitor cost:</u> \$150/person <u>Attire:</u> Casual A special children's buffet will be available for \$30/child (ages 4-12). Children's tickets may be purchased via the MAOA web site when registering for the meeting.

SATURDAY, APRIL 26, 2014

6:00 a.m. - 1:00 p.m. Registration

6:30 a.m. - 8:00 a.m. INSTRUCTIONAL COURSE III – Your Traumatologist Isn't There When Needed...

Continental breakfast will be available

Joseph R. Cass, M.D., Moderator Rochester, MN

William W. Cross, III, M.D. Rochester, MN

Christopher M. McAndrew, M.D. St. Louis, MO

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

This will be a series of presentations combining didactic lectures and technique videos. The goals are to present very practical, succinct pearls for helping the general orthopedic surgeon care for the polytrauma patient when such a patient presents to their emergency unit. We plan to keep the didactic lecture to a relative minimum and use case-based and video-based vignettes. We hope to ensure that the participants leave with the skills necessary to assess accurately, emergently intervene appropriately, and stabilize for transfer adequately. The last third of the session will be dedicated to two audience participation cases of polytrauma victims where we hope to interact with them as both educators and "acceptors of referral patients", if you will,

6:30 a.m. - 8:00 a.m.

INSTRUCTIONAL COURSE IV – Current Concepts in the Diagnosis and Treatment of Forearm, Wrist, and Hand Issues in Upper Extremity Care with Attention to Common Problems, Anatomy, Diagnosis, Treatment, and Outcomes

Continental breakfast will be available

Andrew J. Markiewitz, M.D., Moderator Cincinnati, OH

David G. Dennison, M.D. Rochester, MN

Peter J. Evans, M.D., FRCS(C) Cleveland, OH

Jeffrey N. Lawton, M.D. Ann Arbor, MI

A select panel of hand surgeons from the University of Michigan, the Mayo Clinic, the Cleveland Clinic, and the Hand Surgery Specialists of Cincinnati will discuss a broad range of upper extremity concerns. While common problems occur commonly, symptoms can overlap and the diagnosis may be confused affecting treatment and outcome.

The panel will highlight the common upper extremity diagnoses in the forearm, wrist, and hand for which a general orthopedic surgeon will care. They will then highlight straightforward approaches to define the diagnosis and select the appropriate management course to optimize the patient's outcome. This will include bone, joint, tendon, and nerve issues from the elbow to the fingertip. Recent literature, salient articles, and examples will be provided to illuminate each diagnosis. Pertinent research, both clinical and basic science, will be reviewed to keep the practicing surgeon up to date. Case examples will keep the discussion frank and lively.

The attendee should benefit from learning what to look for, how to understand the cause, and how to intervene to optimize their patient's care and achieve the best results.

7:30 a.m. - 12:30 p.m.

Exhibits/Posters Open (continental breakfast available from 7:30 a.m. - 9:00 a.m. in exhibit area)

8:00 a.m. - 8:10 a.m. Second Business Meeting (MAOA Members only)

THIRD PLENARY SESSION

8:10 a.m. - 10:30 a.m.

- 8:10 a.m. 8:12 a.m. Assemble/Announcements
- 8:12 a.m. 8:15 a.m. Presentation of Mid-America Orthopaedic Association Poster Award Winners
- 8:15 a.m. 8:45 a.m. Rapp Lecture Hip Arthroscopy in Athletes: A Personal Journey J. W. Thomas Byrd, M.D. Nashville, TN
- 8:46 a.m. 10:00 a.m.
- 149. Are Clinical Results of Periacetabular Osteotomy Generalizable? A Large, Prospective, Multicenter Cohort Study John C. Clohisv. M.D. St. Louis, MO Meghan C. Gottlieb St. Louis. MO Geneva Baca. B.S. St. Louis. MO Perry L. Schoenecker, M.D. St. Louis, MO Paul E. Beaule, M.D. Ottawa. Ontario Rafael J. Sierra. M.D. Rochester, MN Daniel J. Sucato. M.D. Dallas. TX Michael M. Millis. M.D. Rochester, MN Young-Jo Kim, M.D. Boston, MA Ernest L. Sink. M.D. New York, NY David A. Podeszwa, M.D. Dallas. TX Robert T. Trousdale, M.D. Rochester, MN Ira Zaltz, M.D. Roval Oak. MI
- 150. Intermediate Term Results of the Bernese Periacetabular Osteotomy for the Treatment of Acetabular Dysplasia Stephen T. Duncan, M.D. St. Louis, MO Angela D. Keith, M.S. St. Louis, MO Gail Pashos, B.S. St. Louis, MO Geneva Baca, B.S. St. Louis, MO Perry L. Schoenecker, M.D. St. Louis, MO John C. Clohisy, M.D. St. Louis, MO
- 151. Accuracy of Acetabular Correction in Periacetabular Osteotomy Stephen T. Duncan, M.D. St. Louis, MO Gail E. Pashos, B.S. St. Louis, MO Angela D. Keith, M.S. St. Louis, MO Geneva R. Baca, B.S. St. Louis, MO Perry L. Schoenecker, M.D. St. Louis, MO John C. Clohisy, M.D. St. Louis, MO
- 152. Does Psychotropic Medication Use Affect the Results of Hip Arthroscopy? *Sylvester T. Youlo, M.D. Madison, WI Chimnoya Nwagwu, M.D. Madison, WI James S. Keene, M.D. Madison, WI
- 153. Indirect Shoulder Magnetic Resonance Arthrography: A Novel Technique for Identifying Labral Pathology in Young Patients

 *Andrew J. Razzano, D.O.
 Massillon, OH
 Melanie A. Morscher, B.S.
 Akron, OH
 Richard P. Steiner, Ph.D.
 Akron, OH
 Kerwyn C. Jones, M.D.
 Akron, OH
 Azam A. Eghbal, M.D.
 Akron, OH

- 154. Cigarette Smoking Increases Complication Rate in Forefoot Surgery *Clayton C. Bettin, M.D. Memphis. TN Susan N. Ishikawa, M.D. Memphis. TN G. Andrew Murphy, M.D. Memphis, TN David R. Richardson, M.D. Memphis, TN Erin M. Dean. M.D. Memphis, TN Kelly R. McCormick, M.D. Memphis. TN Kellen H. Gower, M.D. Memphis, TN
- 155. Association Between Diabetes, Obesity, and Short-Term Outcomes Among Patients Surgically Treated for Ankle Fractures *Matthew J. Cavo, M.D. Dayton, OH
 Richard T. Laughlin, M.D. Dayton, OH
 Justin P. Fox, M.D. Dayton, OH

156. Rivaroxaban vs. Enoxaparin for Venous Thromboembolism Prophylaxis After Hip and Knee Arthroplasty: Our First Year Experience *Michael A. Charters, M.D. Detroit. MI Nicholas B. Frisch, M.D., M.B.A. Detroit. MI Nolan M. Wessell, M.D. Detroit. MI Stephen Yu. B.S. Detroit. MI Dobson Christopher, B.S. Detroit. MI Jakub Sicora-Klak, B.S. Detroit. MI James Jeffries, M.D. Detroit. MI Clifford M. Les, Ph.D. Detroit. MI Craig D. Silverton, D.O. Detroit. MI Michael W. Laker, M.D. Detroit. MI

- 157. Rivaroxaban Use for Thrombosis Prophylaxis is an Independent Risk Factor for Periprosthetic Joint Infection *Robert Molloy, M.D. Cleveland, OH Trevor G. Murrav. M.D. Cleveland, OH Chris Rose, R.N. Cleveland, OH Timothy Gajewski, M.D. Cleveland, OH Wael K. Barsoum, M.D. Cleveland, OH Carlos A. Higuera, M.D. Cleveland, OH
- 158. Bariatric Surgery May Decrease Acute Postoperative Total Knee Arthroplasty Complications in the Morbidly Obese: A Comparative Study Using an Electronically Pooled Database *Steven A. Widmer, M.D. Akron, OH
 Matthew F. Dilisio, M.D. Akron, OH
 Ian M. Gradisar, M.D. Akron, OH
- 159. BMI as a Continuous Variable in Long-Term Survival of Total Hip Arthroplasty Eric R. Wagner, M.D. Rochester, MN Atul F. Kamath, M.D. Rochester, MN Kristin Fruth, M.D. Rochester, MN W. Scott Harmsen, M.S. Rochester, MN Daniel J. Berry, M.D. Rochester, MN
- 10:00 a.m. 10:30 a.m. CLASSICS IN ORTHOPAEDICS Femur Fractures in Children and Adolescents...What Has Happened? James H. Beaty, M.D. Germantown, TN
- 10:30 a.m. 11:00 a.m. Poster viewing (Poster Area)
- 10:30 a.m. 11:00 a.m. Coffee Break in Exhibit Area
- 11:00 a.m. 1:15 p.m. Breakout Sessions #11, #12, #13, #14, and #15 to run concurrently

BREAKOUT SESSION #11 HIP PRESERVATION AND ARTHROPLASTY 11:00 a.m. - 1:15 p.m., Saturday, April 26, 2014

- 160. Does Relief from Intra-Articular Anesthetic Injection Predict Outcome After Hip Arthroscopy? Aaron J. Krych, M.D. Rochester, MN
 *William M. Engasser Rochester, MN Scott A. Kuzma, M.D. Rochester, MN
 Bruce A. Levy, M.D. Rochester, MN
- 161. The Effect of an Acetabular Labral Tear. Repair. Resection. and Reconstruction on the Hip Fluid Seal *Jeffrey J. Nepple, M.D. Vail, CO Kevin J. Campbell Vail. CO Coen A. Wijdicks, Ph.D. Vail, CO Kyle S. Jansson Vail. CO Grant J. Dornan Vail. CO Robert F. LaPrade, M.D. Vail. CO Marc J. Philippon, M.D. Vail. CO
- 162. 2-14 Year Clinical and Functional Outcomes After Isolated Arthroscopic Hip Labral Debridement *Aaron J. Krych, M.D. Rochester, MN Scott A. Kuzma, M.D. Rochester, MN Rudy Kovachevich, M.D. Denver, CO Allesandra Tellini, M.D. Alpignano-Turin, Italy Michael J. Stuart. M.D. Rochester, MN Bruce A. Levv. M.D. Rochester, MN William M. Engasser Rochester, MN

- Combined Surgical Hip Dislocation and Proximal Femoral Osteotomy for Severe Hip Deformities Stephen T. Duncan, M.D. St. Louis, MO Geneva R. Baca, B.S. St. Louis, MO Angela D. Keith, M.S. St. Louis, MO Perry L. Schoenecker, M.D. St. Louis, MO John C. Clohisy, M.D. St. Louis, MO
- 164. Comparison of the Amount of Iliopsoas Tendon Lengthening that Occurs After Arthroscopic Labral-Level and Lesser Trochanteric Tenotomies Jennifer L. Bayer, M.D. Madison, WI *James S. Keene, M.D. Madison, WI
- 165. Intermediate Results of the Bernese Periacetabular Osteotomy for the Treatment of Perthes-Like Hip Deformities Stephen T. Duncan, M.D. St. Louis. MO Angela D. Keith, M.S. St. Louis. MO Gail E. Pashos. B.S. St. Louis, MO Geneva R. Baca. B.S. St. Louis. MO Perry L. Schoenecker, M.D. St. Louis. MO John C. Clohisy, M.D. St. Louis, MO
- 166. Treatment of Femoral Acetabular Impingement with Reverse Periacetabular Osteotomy *R. Presley Swann, M.D. Rochester, MN Joshua Perrv. M.D. Rochester, MN Jill Erickson. M.D. Salt Lake City. UT Christopher L. Peters, M.D. Salt Lake City, UT Robert T. Trousdale, M.D. Rochester, MN Rafael J. Sierra, M.D. Rochester, MN

- 167. Does Tranexamic Acid Reduce Blood Loss and Transfusion Requirements Associated with the Periacetabular Osteotomy? Scott A. Wingerter, M.D. St. Louis, MO Angela D. Keith, M.S. St. Louis, MO Perry L. Schoenecker, M.D. St. Louis, MO Geneva R. Baca, B.S. St. Louis, MO John C. Clohisy, M.D. St. Louis, MO
- 168. Transfusion Rate After Periacetabular Osteotomy in the Absence of Mandatory Autologous Blood Donation *Matthew P. Fishman, M.D. Royal Oak, MI Drew D. Moore, M.D. Royal Oak, MI Kevin C. Baker, Ph.D. Royal Oak, MI Ira Zaltz, M.D. Royal Oak, MI
- 169. A Comparison of Radiographic Acetabular Measurements in Elderly Patients with and without Osteoarthritis *Hussein Darwiche, M.D. Detroit, MI
 Chris Elia, D.O. Detroit, MI
 Jason Samona, D.O. Detroit, MI
 Clifford Les, Ph.D. Detroit, MI
 Rahul Vaidya, M.D. Detroit, MI
 Bryan E. Little, M.D. Detroit MI
- 170. Prevalence of Femoroacetabular Impingement Imaging Findings in Asymptomatic Volunteers: A Systematic Review *Jonathan M. Frank. M.D. Chicago, IL Joshua D. Harris, M.D. Chicago, IL Brandon J. Erickson, M.D. Chicago, IL William Slikker, III, M.D. Chicago, IL Michael J. Salata, M.D. Cleveland, OH Shane J. Nho. M.D. Chicago, IL

- 171. Recent National Trends and Outcomes for Hip Resurfacing in the United States *Vincent M. Moretti, M.D. Chicago, IL Alexander C. Gordon, M.D. Chicago, IL
- 172. Total Hip Arthroplasty in the Pediatric Population

 *Robert D. Russell, M.D.
 Dallas, TX

 Brigid N. Maloney, M.S.
 Dallas, TX
 Adriana De La Rocha, M.S.
 Dallas, TX
 Michael H. Huo, M.D.
 Dallas, TX
 David A. Podeszwa, M.D.
 Dallas, TX

BREAKOUT SESSION #12 PEDIATRIC AND ADULT TRAUMA 11:00 a.m. - 1:15 p.m., Saturday, April 26, 2014

- 173. Complications Following Operative Treatment in Pediatric Both Bone Forearm Fractures *Christiane G. Kruppa, M.D. Bochum, Germany Justin Khoriaty, B.S. Grand Rapids, MI Debra L. Sietsema, Ph.D., R.N. Grand Rapids, MI Marcel Dudda, M.D. Bochum, Germany Clifford B. Jones, M.D. Grand Rapids, MI
- 174. Functional Outcomes After Adolescent Clavicle Fractures *Luke Robinson, M.D. Louisville, KY Gargoum Riyad, M.S. Louisville, KY Ronald Auer, M.D. Louisville, KY Chan Gilbert, M.D. Louisville, KY

- 175. Excision of Partial Physeal Arrest Followed to Skeletal Maturity Brandon J. Yuan, M.D. Rochester, MN Anthony A. Stans, M.D. Rochester, MN Dirk R. Larson, M.S. Rochester, MN *Ham Peterson, M.D. Rochester, MN
- 176. Does the Pediatric Pelvic Fracture Pattern Affect the Presence of Associated Injuries? *Christiane G. Kruppa, M.D. Bochum, Germany Justin D. Khoriaty, B.S. Grand Rapids, MI Debra L. Sietsema, Ph.D., R.N. Grand Rapids, MI Clifford B. Jones, M.D. Grand Rapids, MI
- 177. Distal Femoral Physeal Fractures: Radiographic Features that Influence Outcome *Ross J. Chapel, M.D. Oklahoma City, OK Thomas R. Lewis, M.D. Oklahoma City, OK Jacob A. Haynes, M.D. Oklahoma City, OK Kenton B. Panas, B.S. Oklahoma City, OK
- 178. Pediatric Talar Fractures Christiane G. Kruppa, M.D. Bochum, Germany Tyler Snoap, B.S. Grand Rapids, MI Debra L. Sietsema, Ph.D., R.N. Grand Rapids, MI *Clifford B. Jones, M.D. Grand Rapids, MI
- 179. Is the Axillary Nerve at Risk During a Deltoid-Splitting Approach for Proximal Humerus Fractures?
 *Jessica L. Traver, M.D. St. Louis, MO Miguel A. Guzman, M.D. St. Louis, MO Scott G. Kaar, M.D. St. Louis, MO Lisa K. Cannada, M.D. St. Louis, MO

- Percutaneous Reduction and Fixation with Screws Alone in Displaced Intra-Articular Fractures of the Calcaneus *Saran Tantavisut, M.D. lowa City, IA
 Phinit Phisitkul, M.D. lowa City, IA
 Brian Westerlind, M.D. lowa City, IA
 J. Lawrence Marsh, M.D. lowa City, IA
- 181. Postoperative Complications of Olecranon Fractures: Locked vs. Non-Locked Plates, a Comparison of Outcomes Jessica L. Traver, M.D. St. Louis, MO Heidi Israel, Ph.D. St. Louis, MO
 *Lisa K. Cannada, M.D. St. Louis, MO
 J. Tracy Watson, M.D. St. Louis, MO
- 182. Designing and Implementing a Bone Health and Fragility Fracture Service: Early Experience at a University Hospital *Alexander E. Weber, M.D. Ann Arbor, MI
 Karen Cummings, P.A. Ann Arbor, MI
 James A. Goulet, M.D. Ann Arbor, MI
- 183. Effectiveness of Vitamin D Therapy in **Orthopedic Trauma Patients** *Brett D. Crist. M.D. Columbia, MO Daniel S. Robertson, M.D. Columbia, MO Tyler Jenkins, M.D. Columbia. MO Yvonne M. Murtha, M.D. Columbia. MO Gregory J. Della Rocca, M.D. Columbia, MO David A. Volgas, M.D. Columbia, MO James P. Stannard, M.D. Columbia. MO

- 184. Outcomes of Displaced Femoral Neck Fractures Treated with Hemiarthroplasty Utilizing the Direct Anterior Approach
 *Thai Q. Trinh, M.D. Columbus, OH
 Jason R. Ferrel, M.D. Columbus, OH
 Benjamin R. Pulley, M.D. Columbus, OH
 Terry T. Fowler, M.D. Columbus, OH
- 185. Mobile Outreach: An Integral and Innovative Part of Comprehensive Elder Fracture Care *Julie A. Switzer, M.D. St. Paul, MN David M. Wright, M.D. St. Paul, MN Veronica L. Carson, M.S. St. Paul, MN Peter A. Cole, M.D. St. Paul, MN

BREAKOUT SESSION #13 PERIOPERATIVE MANAGEMENT IN TOTAL 190. JOINT ARTHROPLASTY 11:00 a.m. - 1:15 p.m., Saturday, April 26, 2014

- 186. Mobile vs. Fixed-Bearing Medial Unicompartmental Knee Arthroplasty: A Series of 375 Patients Robert F. Murphy, M.D. Memphis, TN Tyler W. Fraser, B.S. Memphis, TN William M. Mihalko, M.D. Memphis, TN
- 187. The Relative Impact of Study Interval vs. Incision Length on Hip Arthroplasty Results Ryan M. Nunley, M.D. St. Louis, MO Paul F. Yau, M.D. St. Louis, MO Erin L. Ruh, M.S. St. Louis, MO Robert L. Barrack, M.D. St. Louis, MO John C. Clohisy, M.D. St. Louis, MO

188. A Novel Predictor for 30-Day Readmission Following Total Hip and Knee Arthroplasty *Nathan W. Mesko, M.D. Nashville, TN Keith R. Bachmann, M.D. Cleveland, OH David Kovacevic, M.D. Cleveland, OH Mary Lograsso, R.N. Cleveland, OH Colin O'Rourke, M.D. Cleveland, OH Mark I. Froimson, M.D. Cleveland, OH

- 189. Decreased Hospital Length of Stay After Total Hip Arthroplasty is Not Associated with Increased Readmission Rates Jeffrey B. Stambough, M.D. St. Louis, MO Madelyn Curry, R.N. St. Louis, MO John C. Clohisy, M.D. St. Louis, MO
 - Effect of Day of Surgery on Length of Stay and Charges in Total Hip and Knee Arthroplasty Patients *Trevor G. Murray, M.D. Cleveland, OH Robert Molloy, M.D. Cleveland, OH
 Caleb Szubski Cleveland, OH
 Wael K. Barsoum, M.D. Cleveland, OH
 Viktor E. Krebs, M.D. Cleveland, OH
 Carlos A. Higuera, M.D. Cleveland, OH
- 191. Effect of Tranexamic Acid on Blood Utilization and Thromboembolic Events After Hip and Knee Surgery Scott A. Wingerter, M.D. St. Louis, MO Ryan M. Nunley, M.D. St. Louis, MO Ronald Jackups, M.D. St. Louis, MO Staci R. Johnson St. Louis, MO Robert L. Barrack, M.D. St. Louis, MO

- 192 Risk of Acute Kidney Injury After Primary and Revision THA and TKA Using a Multimodal Approach to Postoperative Pain Control Including Ketorolac and Celecoxib *Lucian C. Warth. M.D. Iowa City, IA Nicolas O. Noiseux, M.D. Iowa City. IA John J. Callaghan, M.D. Iowa City, IA Alison Klaassen, M.S. Iowa City, IA Steve S. Liu. M.D. Iowa Citv. IA
- 193. Preoperative Selection Criteria for Simultaneous Bilateral Total Knee Arthroplasty (TKA) *Jeffrey H. DeClaire, M.D. Rochester, MI Karthik Ramaseshan Rochester, MI Meredith Wood, P.A. Rochester, MI Shaunnah Anderson, P.A. Rochester, MI
- 194. Perioperative Outcomes of Bilateral Total Hip Arthroplasty *Nicholas B. Schraut, M.D. Chicago, IL Vincent M. Moretti, M.D. Chicago, IL Samuel J. Chmell, M.D. Chicago, IL
- 195. The "Cost" of Medicare Intermediary Denials of Hip and Knee Replacements
 C. Lowry Barnes, M.D. Little Rock, AR
 Paul K. Edwards, M.D. Little Rock, AR
 D. Gordon Newbern, M.D. Little Rock, AR

- 196. The Evaluation of Opioid Consumption. Hospitalization Costs. and Length of Stay Utilizing Surgical Site Infiltration of Liposomal Bupivacaine (Exparel) vs. Femoral Nerve Blocks with Patient-Controlled Analgesia in Patients Undergoing Primary Total Knee Arthroplasty *Adam J. Cien. D.O. East Lansing, MI Phillip C. Penny, D.O. East Lansing, MI Brandon J. Horn, D.O. East Lansing, MI Charles J. Taunt, Jr., D.O. East Lansing, MI
- 197. Vasopressor Support During ICU Admission Results in Poor Survivorship After Primary Total Hip Arthroplasty (THA)
 *Diren Arsoy, M.D. Rochester, MN Atul F. Kamath, M.D. Rochester, MN S. Andrew Sems, M.D. Rochester, MN Rafael J. Sierra, M.D. Rochester, MN Robert T. Trousdale, M.D. Rochester, MN
- 198. Significant Differences Between Clinician-Derived and Patient-Reported Outcome Measures After TJA Kevin I. Perry, M.D. Rochester, MN *Homayoun Siman, M.D. Rochester, MN Youlonda A. Loechler, M.D. Rochester, MN Rafael J. Sierra, M.D. Rochester, MN

BREAKOUT SESSION #14 FOOT AND ANKLE 11:00 a.m. - 1:15 p.m., Saturday, April 26, 2014

199. Foot and Ankle 30-Day Readmission Rate Data: Results from a Tertiary Care Center Nathan A. Nicholson, M.D. Iowa City, IA Andrew J. Pugely, M.D. Iowa City, IA *John J. Callaghan, M.D. Iowa City, IA Phinit Phisitkul, M.D. Iowa City. IA

- Current Procedural Terminology Coding in Foot and Ankle Surgery *Travis W. Littleton, M.D. Memphis, TN Robert F. Murphy, M.D. Memphis, TN Thomas W. Throckmorton, M.D. Memphis, TN David R. Richardson, M.D. Memphis, TN
- 201. Foot and Ankle Radiographic Parameters: Validity and Reproducibility of Biplane Imaging System vs. Conventional Radiography *Chamnanni Rungprai, M.D. Iowa Citv. IA Marut Arunakul, M.D. Iowa City. IA Jessica Goetz, M.D. Iowa City, IA John E. Femino, M.D. Iowa City, IA Annunziato Amendola, M.D. Iowa City, IA Phinit Phisitkul, M.D. Iowa City, IA
- 202. Complications of the Tornier Salto Talaris Total Ankle Prosthesis: A Single-Surgeon Experience *Garett J. Pangrazzi, M.D. Royal Oak, MI Erin Baker, M.S. Royal Oak, MI Paul T. Fortin, M.D. Royal Oak, MI
- 203. Long-Term Clinical and Functional Outcomes Following Bilateral Ankle Arthrodesis Matthew T. Houdek, M.D. Rochester, MN Benjamin K. Wilke, M.D. Rochester, MN Daniel B. Ryssman, M.D. Rochester, MN *Norman S. Turner, M.D. Rochester, MN

- 204. Knotted vs. Knotless Suture Bridge Repair of the Achilles Tendon Insertion: A Biomechanical Study *Joseph T. Cox, M.D. Dayton, OH Peter L. Shorten, B.S. Dayton, OH Gregory C. Gould, B.S. Davton, OH Ronald J. Markert, Ph.D. Dayton, OH Michael D. Barnett, Jr., M.D. Dayton, OH Richard T. Laughlin, M.D. Davton, OH
- 205. Outcomes Following Retrograde Intramedullary Nailing for Tibiotalocalcaneal Arthrodesis *Paul D. Butler, M.D. Grand Rapids, MI John G. Anderson, M.D. Grand Rapids, MI John D. Maskill, M.D. Grand Rapids, MI Jessica Hooper, B.S. Grand Rapids, MI Michelle A. Padley, B.S. Grand Rapids. MI Derek Axibal, B.S. Grand Rapids, MI Kevin Weaver, B.S. Grand Rapids, MI Donald R. Bohay, M.D. Grand Rapids, MI
- 206. Salvage Hindfoot Arthrodesis Using Internal and Ilizarov Fixation J. Tracy Watson, M.D. St. Louis, MO James M. Jackman, D.O. St. Louis, MO Brian A. Fissel, M.D. St. Louis, MO David E. Karges, D.O. St. Louis, MO *Brooke M. Crawford, M.D. St. Louis, MO
- 207. Analysis of Gradual Correction Techniques for the Treatment of Complex Midfoot and Hindfoot Deformities *Mohamed Saad, M.D. Royal Oak, MI Erin Baker, M.S. Royal Oak, MI Melisa Carrillo, B.S. Royal Oak, MI Paul T. Fortin, M.D. Royal Oak, MI

208.	The Prediction of Ulcer Location in
	Patients with Diabetes Using Clinical
	Evaluation, Radiographic Parameters,
	and Plantar Pressure
	Chamnanni Rungprai, M.D.
	Iowa City, IA
	Phinit Phisitkul, M.D.
	Iowa City, IA
	*John E. Femino, M.D.
	Iowa City, IA
	John Yack, Ph.D.
	Iowa City, IA
	Stephen Hillis, Ph.D.
	Iowa City, IA
	Patricia Yengle, Ph.D.
	Iowa City, IA
	Sue Gardner, Ph.D.
	Iowa City, IA

209. Analysis of Failed Fresh Osteochondral Allografts of the Talus *Ryan J. Pomajzl, M.D. Royal Oak, MI Erin Baker, M.S. Royal Oak, MI Kevin C. Baker, Ph.D. Royal Oak, MI Phillips Dylan, B.S. Royal Oak, MI Paul T. Fortin, M.D. Royal Oak, MI

 Interpositional Arthroplasty of the Great Toe Metatarsophalangeal Joint Using Autogenous Fascia Lata for Advanced Hallux Rigidus *John S. Gould, M.D. Birmingham, AL Mason N. Florence, M.D. Birmingham, AL

211. The Minimal Screw Length for Tricortical Syndesmosis Fixation in Ankle Fracture: A Cadaveric Study *Derrick O. Cote. M.D. Wichita, KS Alexander C. M. Chong, M.S. Wichita, KS Bradley R. Dart, M.D. Wichita, KS Nils Hakansson, Ph.D. Wichita, KS Michael Ward Wichita, KS Pie Pichetsurnthorn Wichita, KS Paul H. Woolev. Ph.D. Wichita, KS

BREAKOUT SESSION #15 SPORTS

11:00 a.m. - 1:15 p.m., Saturday, April 26, 2014

- 212. Results of Revision Anterior Stabilization Surgery in Adolescent Contact and Overhead Athletes Aaron J. Krych, M.D. Rochester, MN Scott A. Kuzma, M.D. Rochester, MN Diane L. Dahm, M.D. Rochester, MN *Andrew J. Blackman, M.D. Rochester, MN
- 213. Performance and Return-to-Sport After Tommy John Surgery in Major League **Baseball Pitchers** Brandon J. Erickson, M.D. Chicago, IL Anil K. Gupta, M.D. Chicago, IL *Joshua D. Harris, M.D. Chicago, IL Bernard R. Bach, M.D. Chicago, IL Geoffrey D. Abrams, M.D. Stanford, CA Angielyn M. SanJuan, B.S. Chicago, IL Brian J. Cole. M.D. Chicago, IL Charles Bush-Joseph, M.D. Chicago, IL Anthony A. Romeo, M.D. Chicago, IL
- Biomechanical Evaluation of the Incline Horizontal Mattress Stitch *Mark E. Rogers, M.D. Birmingham, AL
 Brent A. Ponce, M.D. Birmingham, AL
 Zane B. Hyde, B.S. Birmingham, AL
 Kevin T. Thompson, M.D. Birmingham, AL
 Gerald McGwin, Ph.D. Birmingham, AL

*Denotes Speaker

MAOA Preliminary Program

- Critical Neurovascular Structure Location for Posterior Portals in Knee Arthroscopy
 *Gary Edwards, B.S. Chicago, IL Vincent M. Moretti, M.D. Chicago, IL Nicholas B. Schraut, M.D. Chicago, IL Jonathan Yin, B.S. Chicago, IL Benjamin Goldberg, M.D. Chicago, IL
- 216. Return to Activity Following Medial Patellofemoral Ligament Reconstruction: A Systematic Review *George T. Matic, B.S. Columbus, OH David C. Flanigan, M.D. Columbus, OH Gregory P. Kolovich, M.D. Columbus, OH
- 217. Biomechanical Comparison of Patellar Fixation Techniques in Medial Patellofemoral Ligament Reconstruction Jeffrey A. Macalena, M.D. Minneapolis, MN
 *Samuel D. Russ, B.S. Minneapolis, MN
 Marc Tompkins, M.D. Minneapolis, MN
 David J. Nuckley, Ph.D. Minneapolis, MN
- 218. Incidence of Head and Neck Injuries in Extreme Sports Vani J. Sabesan, M.D. Kalamazoo, MI Juan Rango, B.S. Kalamazoo, MI Alexander Connaughton, B.S. Kalamazoo, MI Vinay Sharma, B.S. Kalamazoo, MI
- 219. Thromboembolism Following Shoulder Arthroscopy: A Retrospective Review Cameron W. Schick, M.D. Iowa City, IA *Brian R. Wolf, M.D., M.S. Iowa City, IA

- 220. Cytotoxic Effect of Corticosteroids and Local Anesthetics on Human Mesenchymal Stem Cells *Cody C. Wyles, B.S. Rochester, MN Matthew T. Houdek, M.D. Rochester, MN Eric R. Wagner, M.D. Rochester, MN Rafael J. Sierra, M.D. Rochester, MN
- 221 The Effect of Lateral Meniscal Boot Injuries on the Stability of the Anterior Cruciate Ligament Deficient Knee *Charles Vega, M.D. Houston, TX Theodore Shvbut, M.D. Houston, TX Jebran Haddad, M.D. Houston, TX Jerry Alelxander, B.S. Houston, TX Jonathan Gold, B.S. Houston, TX Philip C. Noble, Ph.D. Houston, TX Walter R. Lowe, M.D. Houston, TX
- 222. Patient Characteristics Affect the Anatomic Locations of Nearby Neurovascular Structures in Meniscus Repairs *Jonathan Yin, B.S. Chicago, IL Vincent M. Moretti, M.D. Chicago, IL Nicholas B. Schraut, M.D. Chicago, IL Gary Edwards, B.S. Chicago, IL Mark R. Hutchinson, M.D. Chicago, IL
- 223. The Prevalence of Meniscal Pathology in Asymptomatic Athletes: A Systematic Review *Corey T. Beals, M.D. Columbus, OH William C. Graham, M.D. Columbus, OH David C. Flanigan, M.D. Columbus, OH

224. Anterior Cruciate Ligament Graft Isometry is Affected by the Orientation of the Femoral Tunnel *Gregg M. Ebersole, M.D. St. Louis, MO Paul Eckerle, B.S. St. Louis, MO Lutul D. Farrow, M.D. Cleveland, OH Adrian Cutuk, M.D. St. Louis, MO J. Gary Bledsoe, M.D. St. Louis, MO Scott G. Kaar, M.D. St. Louis, MO

SUNDAY, APRIL 27, 2014

Departure

Lunch on your own

1:15 p.m. Board of Directors' Meeting

Dinner on your own

MAOA Preliminary Program

POSTER PRESENTATIONS

The following posters will be displayed in the San Antonio Ballroom Foyer from 7:30 a.m. to 12:30 p.m. on Thursday, Friday, and Saturday as well as on Thursday evening from 6:00 p.m. to 7:30 p.m.

The poster presenters will be available on Thursday and Friday during the coffee breaks (10:30 a.m. to 11:00 a.m.) and on Thursday evening from 6:00 p.m. to 7:30 p.m. to answer any questions. *AMA PRA Category 1 CreditTM* can be earned for poster viewing only when the presenters are available.

Practice Management/Education

- Septic Arthritis in Intravenous Drug Abusers: A Historical Comparison of Habits and Pathogens *Todd Peterson, D.O. Detroit, MI
 Claire Pearson, M.D. Detroit, MI
 Ian Hudson, D.O. Detroit, MI
 Mark Zekaj, B.S. Detroit, MI
 George Fakhouri, B.S. Detroit, MI
 Rahul Vaidya, M.D. Detroit, MI
- The Orthopedic Manifestations of Cartilage Hair Hypoplasia *Patrick M. Riley, Jr., M.D. Newton, MA Martin S. Dicintio Akron, OH Bonnie L. Leighley, R.N. Akron, OH Dennis S. Weiner, M.D. Akron, OH

- Effect of Vitamin E on Outcomes, Oxidative Stress Levels in Blood, Joint Fluid, and Synovial Tissue in Late Stage Knee Osteoarthritis *Saran Tantavisut, M.D. Iowa City, IA Aree Tanavalee, M.D. Bangkok, Thailand Yongsak Wangroongsub, M.D. Bangkok, Thailand Sittisak Honsawek, M.D. Bangkok, Thailand John J. Callaghan, M.D. Iowa City, IA
- Do Routine Radiographs Obtained at the Initial Outpatient Postoperative Visit Change Management?
 *Eric S. Grenier, M.D. Fort Sam Houston, TX
 Jeanne C. Patzkowski, M.D. Fort Sam Houston, TX
 David J. Tennent, M.D. Fort Sam Houston, TX
 Anthony E. Johnson, M.D. Fort Sam Houston, TX
 Joseph R. Hsu, M.D. Fort Sam Houston, TX
- Distribution and Growth of Orthopedic Residency Positions in the United States *Vincent M. Moretti, M.D. Chicago, IL

Alfonso Mejia, M.D. Chicago, IL

 Is It Time for Orthopedic Surgery to Have Its Own Residency Match: Results of Multiyear, Multicenter Questionnaire Data *Cory M. Stewart, M.D. Chicago, IL David W. Manning, M.D. Chicago, IL Douglas R. Dirschl, M.D. Chicago, IL Brian C. Toolan, M.D. Chicago, IL

- Resident Education and Total Knee Arthroplasty: Is There a "July Effect"? *Andrew J. Pugely, M.D. Iowa City, IA
 *Christopher T. Martin, M.D. Iowa City, IA
 Yubo Gao, Ph.D. Iowa City, IA
 J. Lawrence Marsh, M.D. Iowa City, IA
 John J. Callaghan, M.D. Iowa City, IA
- Optimizing Our Academic Medical Practice's Orthopedic/Radiology Workflow: A Resident's Involvement in Clinical Quality Improvement *Todd Pitts, M.D. San Antonio, TX John S. Toohey, M.D. San Antonio, TX Gregg W. Bean, M.D. San Antonio, TX Claudia Thames San Antonio, TX Mary L. Jew, B.S. San Antonio, TX

Tumor

9. Functional Outcome Measures Following Hemipelvectomy *Matthew T. Houdek, M.D. Rochester, MN Michael E. Kralovec, M.D. Rochester, MN Karen L. Andrews, M.D. Rochester, MN Peter S. Rose, M.D. Rochester, MN Thomas C. Shives, M.D. Rochester, MN Franklin H. Sim, M.D. Rochester, MN

Upper Extremity

 A Comparison of Perioperative Outcomes Following Total Elbow Arthroplasty in Patients with and without Diabetes *Aneet S. Toor, M.D. Chicago, IL Jimmy J. Jiang, M.D. Chicago, IL Lewis L. Shi, M.D. Chicago, IL Jason L. Koh, M.D. Evanston, IL

- 11. Reliability Testing of Two Classification Systems for Elbow Osteoarthritis and Post-Traumatic Arthritis *Michael H. Amini, M.D. Memphis, TN Stephen T. Olson, M.D. Memphis, TN Joshua B. Sykes, M.D. Memphis, TN Richard A. Smith, Ph.D. Memphis, TN Beniamin M. Mauck, M.D. Memphis, TN Frederick M. Azar. M.D. Memphis, TN Thomas W. Throckmorton, M.D. Memphis. TN
- Lateral Epicondylitis and Tobacco Use: A Case-Control Study Avery E. Michienzi, B.S. Minneapolis, MN Christopher P. Anderson, M.P.H., M.T. (ASCP) St. Paul, MN Sandy Vang, B.S. Minneapolis, MN
 *Christina M. Ward, M.D. Minneapolis, MN
- Use of Immediate and Acute Metacarpophalangeal Joint Arthroplasty in the Setting of Hand Trauma *Matthew T. Houdek, M.D. Rochester, MN Eric R. Wagner, M.D. Rochester, MN Robert E. Van Demark, III, M.D. Rochester, MN Marco Rizzo, M.D. Rochester, MN Steven L. Moran, M.D. Rochester, MN
- 14. Atypical Flexor Tenosynovitis Infection: A Rare Cause of Carpal Tunnel Syndrome

 Dalibel M. Bravo, B.S.
 San Juan, PR
 Eric R. Wagner, M.D.
 Rochester, MN
 Bassem T. Elhassan, M.D.
 Rochester, MN

- Biomechanics of the Radius Following Drilling of the Radial Tuberosity to Mimic an EndoButton Distal Biceps Repair *Nikhil R. Oak, M.D.
 - Ann Arbor, MI John R. Lien, M.D. Ann Arbor, MI Alexander Brunfeldt, M.S. Ann Arbor, MI
- 16. The Biocompatibility of a Novel Rotator Cuff Patch: An In Vivo Study *Mark E. Morrev. M.D. Rochester, MN Emilie Lostis, B.S. Oxford. United Kinadom Sarah L. Franklin, Ph.D. Oxford. United Kinadom Osnat Hakimi, Ph.D. Oxford, United Kingdom Pierre-Alexis Mouthuy, Ph.D. Oxford. United Kingdom Nasim Zargar Baboldashti, Ph.D. Oxford, United Kingdom Andrew Carr. M.D. Oxford, United Kingdom Jeffrey N. Lawton, M.D. Ann Arbor, MI
- Inferior Anchor Placement in Open and Arthroscopic Bankart Repair Ronald S. Paik, M.D. Los Angeles, CA *Austin W. Chen, M.D. Chicago, IL Neel Pancholi, B.S. Chicago, IL Mark R. Hutchinson, M.D. Chicago, IL
- The Effect of Axillary Hair on Surgical Antisepsis Around the Shoulder Geoffrey S. Marecek, M.D. Seattle, WA Brian M. Weatherford, M.D. Chicago, IL
 *Eric B. Fuller, M.D. Chicago, IL Matthew D. Saltzman, M.D. Chicago, IL

- Active Glenohumeral Internal Rotation is Similar to Passive Measurements in Patients with Unilateral Shoulder Pain *David J. Heinsch, M.D. Memphis, TN
 Frederick M. Azar, M.D. Memphis, TN
 Benjamin M. Mauck, M.D. Memphis, TN
 Thomas W. Throckmorton, M.D. Memphis, TN
- Intraoperative Periprosthetic Fractures in Revision Reverse Shoulder Arthroplasty
 *Eric R. Wagner, M.D. Rochester, MN Matthew T. Houdek, M.D. Rochester, MN Robert H. Cofield, M.D. Rochester, MN Joaquin Sanchez-Sotelo, M.D. Rochester, MN John W. Sperling, M.D. Rochester, MN
- Reverse Total Shoulder Arthroplasty vs. Hemiarthroplasty for Proximal Humerus Fractures: A Systematic Review Jason R. Ferrel, M.D. Columbus, OH *Thai Q. Trinh, M.D. Columbus, OH Richard A. Fischer, M.D. Columbus, OH
- 22. A Subcutaneous Plating Technique for Complex Humerus Fractures *George Hanson, M.D. Detroit, MI Steve Johnson, M.D. Southfield, MI Bryant W. Oliphant, M.D. Detroit, MI Paul J. Dougherty, M.D. Detroit, MI Rahul Vaidya, M.D. Detroit, MI

Pediatrics

- Which Pediatric Clavicle Fractures Are Managed Surgically?
 *Tianyi D. Luo, B.S. Rochester, MN Ali Ashraf, M.D. Rochester, MN A. Noelle Larson, M.D. Rochester, MN Amy L. McIntosh, M.D. Rochester, MN Anthony A. Stans, M.D. Rochester, MN
 William J. Shaughnessy, M.D. Rochester, MN
- Does Skeletal Maturity Affect Pediatric Pelvic Injury Patterns, Associated Injuries, and Treatment Intervention? *Christiane G. Kruppa, M.D. Bochum, Germany Debra L. Sietsema, Ph.D., R.N. Grand Rapids, MI Justin D. Khoriaty, B.S. Grand Rapids, MI Clifford B. Jones, M.D. Grand Rapids, MI
- Recent National Trends and Outcomes for Pediatric Supracondylar Humerus Fractures in the United States *Vincent M. Moretti, M.D. Chicago, IL Prasad V. Gourineni, M.D. Chicago, IL

Foot and Ankle

 Increasing Stiffness of Syndesmotic Fixation Causes Abnormal Talar Displacement During Simulated Weightbearing in a Cadaveric Model *Lucian C. Warth, M.D. Iowa City, IA Phinit Phisitkul, M.D. Iowa City, IA Chamnani Rungprai, M.D. Iowa City, IA Jessica Goetz, Ph.D. Iowa City, IA

- The Effect of Exercise and Glycemic Control on Diabetic (db/db) Mouse Achilles Tendons *Peter A. Knoll, M.D. Dayton, OH Justin Chu Dayton, OH Joseph Cox, M.D. Dayton, OH Ryan Hamilton, M.D. Dayton, OH Gregory P. Boivin Dayton, OH Richard T. Laughlin, M.D. Dayton, OH
- Open vs. Posterior Arthroscopic Subtalar Arthrodesis: A Comparative Study
 *Chamnanni Rungprai, M.D. lowa City, IA Marut Arunakul, M.D. lowa City, IA Phinit Phisitkul, M.D. lowa City, IA John E. Femino, M.D. lowa City, IA Annunziato Amendola, M.D. lowa City, IA
- The Arterial Anatomy of the Posterior Tibial Nerve in the Tarsal Tunnel *M. Claire Manske, M.D. St. Louis, MO Kathleen E. McKeon, M.D. St. Louis, MO Jeremy J. McCormick, M.D. St. Louis, MO Jeffrey E. Johnson, M.D. St. Louis, MO Sandra E. Klein, M.D. St. Louis, MO

Sports

 ACL Graft Failures: Correlations with Lateral Knee Anatomic Factors in Men *Robert W. Westermann, M.D. Iowa City, IA William Martin, M.D. Iowa City, IA Brian R. Wolf, M.D., M.S. Iowa City, IA

MAOA Preliminary Program

- 3D Characterization of the ACL's Femoral Footprint

 *Robert W. Westermann, M.D. Iowa City, IA
 Christian L. Sybrowsky, M.D. Sandy, UT
 Austin J. Ramme, M.D. Iowa City, IA
 Annunziato Amendola, M.D. Iowa City, IA
 Brian R. Wolf, M.D., M.S. Iowa City, IA
- 32. A Novel Technique for Pediatric Partial Transphyseal Anterior Cruciate Ligament Reconstruction *Clayton C. Bettin, M.D. Memphis, TN Frederick M. Azar, M.D. Memphis, TN Robert H. Miller, III, M.D. Memphis, TN Thomas W. Throckmorton, M.D. Memphis, TN
- Neurovascular Injuries in Acute Knee Dislocations: A Retrospective Review of Initial Vascular Evaluation Utilizing a Selective Angiography Algorithm *Troy A. Roberson, M.D. Memphis, TN Thomas W. Throckmorton, M.D. Memphis, TN Richard A. Smith, Ph.D. Memphis, TN Frederick M. Azar, M.D. Memphis, TN
- 34. Restoration of Neuromuscular Control During the Pitch After Operative Treatment of SLAP Tears *Peter N. Chalmers, M.D. Chicago, IL Johannes Cip, M.D. Chicago, IL Robert Trombley, M.S. Chicago, IL Emma Klosterman, M.S. Chicago, IL Marcus Wimmer. Ph.D. Chicago, IL Brian J. Cole. M.D. Chicago, IL Nikhil N. Verma, M.D. Chicago, IL Anthony A. Romeo, M.D. Chicago, IL
- 35. Upper Extremity Motion in the Overhand Pitch: Evaluation of Tenodesis and Repair for SLAP Tears *Peter N. Chalmers, M.D. Chicago, IL Johannes Cip. M.D. Chicago, IL Robert Trombley, M.S. Chicago, IL Emma Klosterman, M.S. Chicago, IL Marcus Wimmer, Ph.D. Chicago, IL Brian J. Cole. M.D. Chicago, IL Nikhil N. Verma, M.D. Chicago, IL Anthony A. Romeo, M.D. Chicago, IL
- Pitching Speed and Glenohumeral Adaptation in a High School Population
 *Robert A. Keller, M.D. Detroit, MI Nathan E. Marshall, M.D. Detroit, MI Nima Mehran, M.D. Detroit, MI Vasilios Moutzouros, M.D. Detroit, MI

- An Analysis of Major League Baseball Pitchers' Velocity Before and After Ulnar Collateral Ligament Reconstruction *Jimmy J. Jiang, M.D. Chicago, IL John M. Leland, M.D. Chicago, IL
- Analysis of Mechanical Failures After Anatomic Acromioclavicular Joint Reconstruction *Marcus D. Biggers, M.D. Memphis, TN Benjamin M. Mauck, M.D. Memphis, TN Richard A. Smith, Ph.D. Memphis, TN Frederick M. Azar, M.D. Memphis, TN Thomas W. Throckmorton, M.D. Memphis, TN
- Biomechanical Analysis of Humerus Fracture After Subpectoral Biceps Tenodesis with an Interference Screw E. Lyle Cain, Jr., M.D. Birmingham, AL James Duckett, M.D. Birmingham, AL
 *Jay P. Shah, M.D. Birmingham, AL
 Patrick W. Jost, M.D. Birmingham, AL
 David Beason, M.S. Birmingham, AL
- Average Glenoid Defect Size: A Systematic Review

 *Lionel J. Gottschalk, IV, M.D. Cleveland, OH
 Aaron J. Bois, M.D. Calgary, Alberta, Canada
 Marcus A. Shelby, B.S. Cleveland, OH
 Morgan H. Jones, M.D. Cleveland, OH
 Anthony Miniaci, M.D. Cleveland, OH

- Patterns of Injury Among Collegiate Wrestlers at an Elite Division I NCAA Wrestling Program: An Epidemiological Study *Christopher M. Graves, M.D. Iowa City, IA Jesse E. Otero, M.D. Iowa City, IA Yubo Gao, Ph.D. Iowa City, IA Matthew J. Bollier, M.D. Iowa City, IA
- 42. Variability of Brachial Artery Position with Elbow Flexion and Forearm Rotation

 *Vincent M. Moretti, M.D.
 Chicago, IL

 Olivia Wang, M.D.
 Chicago, IL
 Frank C. Bohnenkamp, M.D.
 Chicago, IL
 Leslie E. Schwindel, M.D.
 Chicago, IL
 Mark R. Hutchinson, M.D.
 Chicago, IL
- 43. The Functional Movement Screen as a Predictor of Injury in Professional Basketball Players

 *Michael G. Azzam, M.D.
 Memphis, TN

 Thomas W. Throckmorton, M.D.
 Memphis, TN
 Richard A. Smith, Ph.D.
 Memphis, TN
 Frederick M. Azar, M.D.
 Memphis, TN

<u>Spine</u>

44. Reduction in Deep Surgical Site Infections After Implementation of a Multimodal Infection Control Protocol for Pediatric Instrumented Spine Surgeries *Vedant Vaksha, M.D. Akron. OH Melanie A. Morscher, B.S. Akron. OH Tina L. Bair. R.N. Akron. OH Debbie Hawk, R.N. Akron. OH Todd F. Ritzman, M.D. Akron. OH Kerwyn C. Jones, M.D. Akron. OH

- 45. The Effect of Common Arm Positions Used for X-ray Measurements of Sagittal Alignment on the Gravity Line: Which Position Most Resembles the Anatomic Position? *Christopher M. Graves, M.D. Iowa City, IA Monica Paliwal, M.S. Iowa City, IA
 Zachary G. Ries, M.D. Iowa City, IA
 Sergio A. Mendoza-Lattes, M.D. Iowa City, IA
 46. Treatment of Neuromuscular Scoliosis
 - with Universal Clamp Fixation *Christina K. Hardesty, M.D. Cleveland, OH Connie Poe-Kochert, R.N. Cleveland, OH Jochen P. Son-Hing, M.D. Cleveland, OH George H. Thompson, M.D. Cleveland, OH
- 47. True Length of the Spine in Patients with Idiopathic Scoliosis *Michal Szczodry, M.D. Chicago, IL Marcin Tyrakowski, M.D. Warsaw, Poland Dominika Wojtera-Tyrakowska, Ph.D. Poznan, Poland Nicholas B. Schraut, M.D. Chicago, IL Tomasz Kotwicki, M.D. Poznan, Poland Jaroslaw Czubak, M.D. Warsaw, Poland Krzysztof B. Siemionow, M.D. Chicago, IL
- Pediatric Pancreatitis After Scoliosis Surgery
 *Natasha T. O'Malley, M.D. Cleveland, OH Connie Poe-Kochert, M.D. Cleveland, OH Christine K. Hardesty, M.D. Cleveland, OH George H. Thompson, M.D. Cleveland, OH

- 49. Increasing Hospital Charges for Adolescent Idiopathic Scoliosis in the United States *Christopher T. Martin, M.D. Iowa City, IA Andrew J. Pugely, M.D. Iowa City, IA Sergio A. Mendoza-Lattes, M.D. Iowa City, IA
 Ryan M. Ilgenfritz, M.D. Iowa City, IA
 Stuart L. Weinstein, M.D. Iowa City, IA
- Comparison of S2-Alar Iliac Screw and Iliac Bone Pelvic Fixation in the Reconstruction of Adult Spine Deformities

 *Niranjan U. Kavadi, M.D. Birmingham, AL
 Trevor D. Ramsey, B.S. Birmingham, AL
 Donald A. Deinlein, M.D. Birmingham, AL
 Steven M. Theiss, M.D. Birmingham, AL
- Thoracic Volume Modeling in Adolescent Idiopathic Scoliosis: The Effect of Increasing Cobb Angle and Sagittal Contour on Pulmonary Function *Jennifer K. Wozniczka, M.D. Minneapolis, MN Charles Gerald T. Ledonio, M.D. Minneapolis, MN David W. Polly, Jr., M.D. Minneapolis, MN David Nuckley, Ph.D. Minneapolis, MN Benjamin Rosenstein, M.D. Minneapolis, MN
- 52. Plate Fixation in Cervical Spine: Paramedian Screw Configuration Compared to Unilateral Configuration Prasath Mageswaran, Ph.D. Cleveland, OH
 *Robert F. McLain, M.D. Cleveland, OH
 Robb Colbrunn, Ph.D. Cleveland, OH
 Tara Bonner, M.S. Cleveland, OH
 Elijah Hothem, M.D. Cleveland, OH
 Elijah Hothem, M.D. Cleveland, OH
 Adam Bartsch, Ph.D. Cleveland, OH

- 53. Perioperative Outcomes in Patients with and without Workers' Compensation Claim Treated with Spinal Fusion Michal Szczodry, M.D. Chicago, IL *Nicholas B. Schraut, M.D. Chicago, IL Vincent M. Moretti, M.D. Chicago, IL Marcin Tyrakowski, M.D. Warsaw, Poland Fernando Techv. M.D. Chicago, IL Krzysztof B. Siemionow, M.D. Chicago, IL
- National Trends in Utilization of Kyphoplasty and Vertebroplasty Michal Szczodry, M.D. Chicago, IL *Nicholas B. Schraut, M.D. Chicago, IL Vincent M. Moretti, M.D. Chicago, IL Marcin Tyrakowski, M.D. Warsaw, Poland Krzysztof B. Siemionow, M.D. Chicago, IL Fernando Techy, M.D. Chicago, IL
- Correlation Between the Type of Implant and Its Sagittal Position After Anterior Cervical Corpectomy *Michal Szczodry, M.D. Chicago, IL Kushal R. Patel, M.D. Chicago, IL Marcin Tyrakowski, M.D. Warsaw, Poland Caroline Bednarski, M.S. Chicago, IL Sergey Neckrysh, M.D. Chicago, IL Krzysztof B. Siemionow, M.D. Chicago, IL

- 56. Effects of Sequential Unilateral Facetectomy on Cervical Spinal Stability
 *Prasath Mageswaran, Ph.D. Cleveland, OH
 Stephen R. Tolhurst, M.D. Flower Mound, TX
 Robb Colbrunn, Ph.D. Cleveland, OH
 Tara Bonner, M.S. Cleveland, OH
 Fernando Techy, M.D. Cleveland, OH
 Robert F. McLain, M.D. Cleveland, OH
- Comparison of Subsidence Rates Between Large and Small Footprint Cages in Anterior Cervical Interbody Fusion Jonathan N. Sembrano, M.D. Minneapolis, MN *Sharon C. Yson, M.D. Minneapolis, MN Edward Rainier G. Santos, M.D. Minneapolis, MN
- 58. Lumbar Spine Posterior Subcutaneous Fat Thickness: Correlation with Body Mass Index

 John J. Lee, M.D.
 Ann Arbor, MI
 Alex Martusiewicz, M.D.

 ar Ann Arbor, MI
 Rakesh D. Patel, M.D.
 Ann Arbor, MI
 James A. Goulet, M.D.
 Ann Arbor, MI
 Gregory A. Graziano, M.D.
 Ann Arbor, MI
 - Obstacles to Early Mobilization After Spinal Fusion and Effect on Hospital Length of Stay

 *Jason R. Ferrel, M.D.
 Columbus, OH
 Jared C. Bentley, M.D.
 Columbus, OH
 Roger E. Wiltfong, M.D.
 Columbus, OH
 Derek L. Snook, M.D.
 Columbus, OH
 David N. Hannallah, M.D.
 Columbus, OH

- 60. Stand Alone Anterior Lumbar Interbody Fusion for Degenerative Disc Disease of the Lumbar Spine: Results with a Two-Year Follow-Up *John J. Lammli, M.D. Wichita, KS M. Camden Whitaker. M.D. Wichita, KS Alan Moskowitz, M.D. Wichita, KS Brent D. Adam. M.D. Wichita, KS Jennifer Doung, B.S. Wichita, KS Frank Dong, Ph.D. Wichita, KS Paul H. Woolev. Ph.D. Wichita, KS Elizabeth Ablah. Ph.D. Wichita, KS Lara N. Felts Wichita, KS Geoffrey Konye, R.N. Wichita, KS
- A Granulomatous Mass Surrounding a Maverick Total Disc Replacement Causing Iliac Vein Occlusion and Spinal Stenosis: A Five-Year Follow-Up *Sean A. Tabaie, M.D. St. Louis, MO

Dirk H. Alander, M.D. St. Louis, MO

 Biomechanical Evaluation of Thoracic Spine Stability Following a Simulated T9 Burst Fracture Tiffany Perry, M.D. Cleveland, OH Prasath Mageswaran, Ph.D. Cleveland, OH Robb Colbrunn, Ph.D. Cleveland, OH Tara Bonner, M.S. Cleveland, OH Thomas E. Mroz, M.D. Cleveland, OH Robert F. McLain, M.D. Cleveland, OH

- Biomechanical Stability of Uniplanar, Monoaxial, and Polyaxial Pedicle Screw Configurations in a Porcine Single-Level Lumbar Burst Fracture Model
 *Andrew R. McNamara, M.D. St. Louis, MO
 J. Gary Bledsoe, Ph.D. St. Louis, MO
 Dirk H. Alander, M.D. St. Louis, MO
- 64. 30-Day Morbidity After Single Level ACDF: Identification of Risk Factors and Emphasis on the Safety of Outpatient Procedures *Christopher T. Martin, M.D. Iowa City, IA
 Andrew J. Pugely, M.D. Iowa City, IA
 Yubo Gao, Ph.D. Iowa City, IA
 Sergio A. Mendoza-Lattes, M.D. Iowa City, IA

<u>Trauma</u>

- Negative Pressure Wound Therapy and the Financial Impact of Delay in Discharge for Self-Pay and Medicaid Patients *Brett D. Crist, M.D. Columbia, MO Linda K. Anderson, B.S. Columbia, MO Yvonne M. Murtha, M.D. Columbia, MO Gregory J. Della Rocca, M.D. Columbia, MO
- Clinical Outcomes of Use of a Constant Tension External Tissue Expander for Complex Wound Management *Brett D. Crist, M.D. Columbia, MO Graig Yager, M.D. Columbia, MO Gregory J. Della Rocca, M.D. Columbia, MO David A. Volgas, M.D. Columbia, MO James P. Stannard, M.D. Columbia, MO

- 67. Comparison of Free Composite Serratus Anterior Rib and Free Fibula Flaps for Acute One-Stage Reconstruction of Traumatic Gustilo IIIB and IIIC Injuries *Matthew T. Houdek, M.D. Rochester, MN Chad C. Watts, M.D. Rochester, MN Thomas J. Sanders, M.D. Rochester, MN Steven L. Moran, M.D. Rochester, MN
- 68. Intravenous Application of CD271-Selected Mesenchymal Stem Cells During Fracture Healing *Tina K. Dreger, M.D. St. Louis. MO J. Tracy Watson, M.D. St. Louis. MO Walter Akers. Ph.D. St. Louis. MO Jeremy Molligan, M.D. Baltimore. MD Samuel Achilefu. Ph.D. St. Louis. MO Lew C. Schon. M.D. Baltimore. MD Zijun Zhang, M.D. Baltimore. MD
- Corrective Effect of Suture-Button Fixation on latrogenic Syndesmotic Malreduction: A Cadaveric Study *Robert W. Westermann, M.D. Iowa City, IA Rungprai Chamnanni, M.D. Iowa City, IA Jessica Goetz, M.D. Iowa City, IA John E. Femino, M.D. Iowa City, IA Annunziato Amendola, M.D. Iowa City, IA Phinit Phisitkul, M.D. Iowa City, IA
- Recent National Trends and Outcomes for Traumatic Hip Dislocation in the United States

 *Vincent M. Moretti, M.D. Chicago, IL
 Samuel J. Chmell, M.D. Chicago, IL

- 71. Radiographic Evidence of Femoroacetabular Impingement Increases the Risk of Traumatic Dislocation of the Hip *Leslie E. Schwindel, M.D. Chicago, IL Vincent M. Moretti, M.D. Chicago, IL Frank C. Bohnenkamp, M.D. Chicago, IL Domenic Esposito, M.D. Chicago, IL Prasad V. Gourineni, M.D. Chicago, IL
- 72. Time to Surgery for Definitive Fixation of Hip Fractures: A Look at Outcomes Based Upon Delay *Hasham M. Alvi, M.D. Chicago, IL Rachel E. Mednick, M.D. Chicago, IL Varun Krishnan, B.S. Chicago, IL Mary J. Kwasny Chicago, IL David W. Manning, M.D. Chicago, IL
- 73. Combined Open Reduction and Internal Fixation of Ipsilateral Clavicle and Multiple Rib Fractures: Effects on Luna Volume *Johnathon M. Aho. M.D. Rochester, MN Jov D. Hughes. M.D. Rochester, MN Terry P. Nickerson, M.D. Rochester, MN Martin D. Zielinski, M.D. Rochester, MN Brian D. Kim. M.D. Rochester, MN William W. Cross, III, M.D. Rochester, MN

74. A Freely-Available Electronic Toolbox for Fracture Templating and Surgical Planning Using Microsoft PowerPoint[™] *Jon B. Carlson, M.D. Detroit, MI Robert Guglielmo, B.S. Detroit, MI Bryant W. Oliphant, M.D. Detroit, MI Paul J. Dougherty, M.D. Detroit, MI Rahul Vaidya, M.D. Detroit, MI

*Denotes Presenter

- Arthroscopically Assisted Fixation of Unicondylar Intra-Articular Tibial Plateau Fractures Ryan P. Dunlay, M.D. Bloomington, MN *Marc F. Swiontkowski, M.D. Minneapolis, MN
- Bilateral Tibial Shaft Fractures: A Multicenter Analysis
 *Shari Cui, M.D.
 St. Louis, MO
 Jennifer M. Bauer, M.D.
 Nashville, TN
 Jonathan R. Helms, M.D.
 Chapel Hill, NC
 Hassan R. Mir, M.D.
 Nashville, TN
 Lisa K. Cannada, M.D.
 St. Louis, MO
- Osteomyoplastic Amputations: Results in Trauma Patients

 *James R. Gregory, M.D.
 Oklahoma City, OK
 William J. J. Ertl, M.D.
 Oklahoma City, OK
 Scott T. Marberry, M.D.
 Oklahoma City, OK
 Julie A. Stoner, Ph.D.
 Oklahoma City, OK
- Functional Outcomes After Both Bone Forearm Fractures in Adults
 *Mary K. Grady St. Louis, MO Rahul Vaidya, M.D. Detroit, MI Maxwell K. Langfitt, M.D. Winston-Salem, NC Ndidi Onwudiwe Detroit, MI Eben A. Carroll, M.D. Winston-Salem, NC Lisa K. Cannada, M.D. St. Louis, MO

79. Vertical Displacement in Lateral Compression Type 2 (LC-2) Pelvic Fractures

*Robert D. Russell, M.D.
Dallas, TX

Thomas Moore, Jr., M.D.
Dallas, TX
Rahul Banerjee, M.D., F.A.C.S.
Dallas, TX
Ashoke K. Sathy, M.D.
Dallas, TX
Adam J. Starr, M.D.
Dallas, TX

<u>Hip</u>

- Bonding Strength of Polycaprolactone/Polyvinyl Alcohol Nanofibers to the Titanium Implant Surface *David C. Markel, M.D. Southfield, MI Wei Song, M.S. Detroit, MI Nancy Jackson, Ph.D. Southfield, MI Weiping Ren, Ph.D. Detroit, MI
- The Source Effect of Donor Site, Gender, and Age on Mesenchymal Stem Cells Obtained During Arthroplasty
 *Glenn D. Wera, M.D. Cleveland, OH Matthew J. Kraay, M.D. Cleveland, OH Donald Lennon, M.D. Cleveland, OH Arnold I. Caplan, Ph.D. Cleveland, OH
- 82. Surgical Hip Dislocation is a Versatile and Safe Approach for Diverse Hip Pathologies *Nazly Carrillo-Villamizar, B.S. Rochester, MN Derek R. Jenkins, M.D. Rochester, MN Robert T. Trousdale, M.D. Rochester, MN Rafael J. Sierra, M.D. Rochester, MN

- 83. Is There Variability in the Volume of the Hip Joint Capsule? Quantifications of Hip Capsular Volume Using a Novel Technique *Jonathan M. Frank. M.D. Chicago, IL Frank McCormick, M.D. Chicago, IL Mark Jordan, M.D. Rockford, IL Austell Bryce, M.D. Chicago, IL William Slikker, III, M.D. Chicago, IL Michael J. Salata, M.D. Cleveland, OH Shane J. Nho. M.D. Chicago, IL
- 84. Intermediate Term Results of the Bernese Periacetabular Osteotomy for the Treatment of Severe Acetabular Dvsplasia Stephen T. Duncan, M.D. St. Louis, MO Angela D. Keith. M.S. St. Louis, MO Gail E. Pashos, B.S. St. Louis. MO Geneva R. Baca, B.S. St. Louis. MO Perry L. Schoenecker, M.D. St. Louis, MO *John C. Clohisy, M.D. St. Louis. MO
- Does Previous Hip Osteotomy Compromise Total Hip Arthroplasty Procedures and Outcomes? A Systematic Review Stephen T. Duncan, M.D. St. Louis, MO Scott A. Wingerter, M.D. St. Louis, MO Susan Fowler St. Louis, MO
 *John C. Clohisy, M.D. St. Louis, MO

- 86. Multimodal Analgesia with Fascia Iliaca Blockade for Acute Pain Management Following Hip Arthroscopy Aaron J. Krych, M.D. Rochester, MN *Sean Baran, M.D. Rochester, MN Scott A. Kuzma, M.D. Rochester, MN Hugh M. Smith, M.D. Rochester, MN Rebecca Johnson, M.D. Rochester, MN Bruce A. Levv. M.D. Rochester, MN
- 87. Avoidance of Femoral Neck Fractures After Hip Resurfacing in a High Risk Population Carlos A. Higuera, M.D. Cleveland, OH Adekunle Elegbede, M.D. Cleveland, OH Heather Kellerman, P.A. Cleveland, OH Amar Mutnal, M.D. Cleveland, OH
 *Peter J. Brooks, M.D. Cleveland, OH
- Using the Circle Theorem to Estimate Acetabular Version from a Single Anteroposterior Hip Radiograph *Vincent M. Moretti, M.D. Chicago, IL Jeffrey R. Thormeyer, M.D. Fort Leonard Wood, MO Samuel J. Chmell, M.D. Chicago. IL
- 89. An Analysis of the Accuracy of Radiographic Reference Markers for Digital Templating in Total Hip Arthroplasty Curtis W. Hartman, M.D. Omaha, NE
 Emily A. Kraus, M.D. Omaha, NE
 *Beau S. Konigsberg, M.D. Omaha, NE
 Kevin L. Garvin, M.D. Omaha, NE

MAOA Preliminary Program

- Acute Delayed Infection: Increased Risk in Failed Metal-on-Metal Total Hip Arthroplasty?

 *Hernan A. Prieto, M.D.
 Rochester, MN
 Elie F. Berbari, M.D.
 Rochester, MN
 Rafael J. Sierra, M.D.
 Rochester, MN
- 91. Synovial Inflammatory Response to the Failed Metal-on-Metal Total Hip Arthroplasty *Peter N. Chalmers, M.D. Chicago, IL David M. Walton, M.D. Chicago, IL Scott M. Sporer, M.D. Chicago, IL Brett R. Levine, M.D. Chicago, IL
- 92. Successful Detection of Failed Recalled Metal-on-Metal (MoM) Hip Replacements After Surgeon Initiated Follow-Up *Nazly Carrillo-Villamizar, B.S. Rochester, MN Hernan A. Prieto Saavedra, M.D. Rochester, MN Robert T. Trousdale, M.D. Rochester, MN Rafael J. Sierra, M.D. Rochester, MN
- 93. Systemic Inflammatory Markers and Joint Aspirate Cell-Count Are Unable to Differentiate Between Bacterial or Fungal Periprosthetic Infections *Colten D. Bracken, B.S. Rochester, MN Elie F. Berbari, M.D. Rochester, MN Arlen D. Hanssen, M.D. Rochester, MN Tad M. Mabry, M.D. Rochester, MN Douglas R. Osmon. M.D. Rochester, MN Rafael J. Sierra, M.D. Rochester, MN

- 94. A Novel Protocol to Classify Hip Aspirates in the Evaluation of Patients with Dual-Taper Femoral Stems *Shyam K. Vekaria, M.D. Chicago, IL Victoria A. Brander, M.D. Chicago, IL
 S. David Stulberg, M.D. Chicago, IL
- 95. Chromium and Cobalt Levels and Associated MARS MRI Findings in Previously Unreported Design of Chrome Cobalt Modular Neck *Christopher T. Parks, M.D. Little Rock, AR C. Lowry Barnes, M.D. Little Rock, AR Marty Bushmiaer, R.N. Little Rock, AR
- 96. Radiation Exposure During Fluoroscopic Guided Direct Anterior Approach for Total Hip Arthroplasty *Michael J. Taunton, M.D. Rochester, MN Robert T. Trousdale, M.D. Rochester, MN Benjamin M. Howe, M.D. Rochester, MN Beth A. Schueler, M.D. Rochester, MN
- 97. Introducing the Direct Anterior Approach to THA Into Your Practice: A Senior Surgeon's Look at If, How, and Why Bernard N. Stulberg, M.D. Cleveland, OH Jayson D. Zadzilka, M.S. Cleveland, OH *Matthew Stover, D.O. Cleveland, OH Brian D. Rutt Cleveland, OH

- 98. Predictors and Complications of Blood Transfusion in Total Hip and Knee Arthroplastv Nicholas B. Frisch, M.D., M.B.A. Detroit, MI *Nolan M. Wessell, M.D. Detroit. MI Michael A. Charters, M.D. Detroit. MI Jakub Sikora-Klak, B.S. Detroit. MI Christopher Dobson, B.S. Detroit, MI Stephen Yu. M.S. Detroit. MI James Jeffries, M.D. Detroit. MI Craig D. Silverton, D.O. Detroit. MI Michael W. Laker, M.D. Detroit, MI 99. The Effect of BMI on Outcomes in Total Joint Arthroplastv *Rachel E. Mednick, M.D. Chicago, IL Hasham M. Alvi, M.D.
 - Chicago, IL Lauren Miotin, B.S. Chicago, IL David W. Manning, M.D. Chicago, IL
- Primary Total Hip Arthroplasty for Osteonecrosis of the Femoral Head in Patients with Human Immunodeficiency Virus *Kenneth A. Estrera, M.D. Dallas, TX Timothy S. Brown, M.D. Dallas, TX John C. Chao, M.D. Dallas, TX Richard E. Jones, M.D. Dallas, TX Michael H. Huo, M.D. Dallas, TX
- Primary Total Hip and Knee Arthroplasty: The Impact of Payer Mix *Nicholas B. Frisch, M.D., M.B.A. Detroit, MI Nima Mehran, M.D. Detroit, MI Craig D. Silverton, D.O. Detroit, MI

- 102. The Influence of Comorbidities on Hospital Costs and Length of Stay Following Total Hip Arthroplasty *Andrew J. Pugely, M.D. Iowa City, IA Christopher T. Martin, M.D. Iowa City, IA Yubo Gao, Ph.D. Iowa City, IA John J. Callaghan, M.D. Iowa City, IA
- 103. Radiographic Identification of Pelvic Discontinuity in Revision THA John R. Martin, M.D. Rochester, MN
 *Ian J. Barrett, M.D. Rochester, MN
 Rafael J. Sierra, M.D. Rochester, MN
 David G. Lewallen, M.D. Rochester, MN
 Daniel J. Berry, M.D. Rochester, MN
- High Failure Rates of Current Reconstructive Strategies for Bilateral Pelvic Discontinuity *John R. Martin, M.D. Rochester, MN Ian J. Barrett, M.D. Rochester, MN Rafael J. Sierra, M.D. Rochester, MN David G. Lewallen, M.D. Rochester, MN Daniel J. Berry, M.D. Rochester, MN
- 105. Tantalum Revision Shell with Liner Cementation Provides Excellent Outcomes in Primary Total Hip Arthroplasty
 *Diren Arsoy, M.D. Rochester, MN
 Robert T. Trousdale, M.D. Rochester, MN
 Atul F. Kamath, M.D. Rochester, MN
 Joseph R. Cass, M.D. Rochester, MN

106. Early Survival Difference of Two Porous Metal Acetabular Components After Hip Arthroplasty Revision *Karim A. Elsharkawy, M.D. Cleveland, OH Bishov Gad. M.D. Cleveland, OH Carlos A. Higuera, M.D. Cleveland, OH Wael K. Barsoum, M.D. Cleveland, OH Viktor E. Krebs. M.D. Cleveland, OH Robert Mollov, M.D. Cleveland, OH Trevor G. Murray, M.D. Cleveland, OH

Knee

Financial Impact of a Multi-Disciplinary 107. Preoperative Risk Stratification Program for Joint Arthroplasty *Neil L. Duplantier, M.D. New Orleans, LA David Briski, M.D. New Orleans, LA John L. Ochsner, M.D. New Orleans, LA Mark S. Meyer, M.D. New Orleans, LA Daryl Stanga, M.D. New Orleans, LA George F. Chimento, M.D. New Orleans, LA

108. Evaluation of the 3-D. Weightbearing Orientation of the Normal Adult Knee Using Low Dose Radiation Denis Nam. M.D. St. Louis. MO Ritesh R. Shah. M.D. St. Louis. MO *Ryan M. Nunley, M.D. St. Louis. MO Brandon M. Williams St. Louis. MO Erin L. Ruh. M.S. St. Louis. MO Staci R. Johnson St. Louis. MO Robert L. Barrack, M.D. St. Louis, MO

- Defining a Vascular "Safe Zone" for Lateral Release in Total Knee Arthroplasty: A Clinical MRI Study *James E. Ho, M.D. Chicago, IL Vincent M. Moretti, M.D. Chicago, IL Samuel J. Chmell, M.D. Chicago, IL
- A Comparison of Continuous Femoral Nerve vs. Adductor Canal Block for Postoperative Pain Management Following Total Knee Arthroplasty *Justin L. Gettings, M.D. Chicago, IL Lalit Puri, M.D. Chicago, IL
- Preoperative Lab Values Correlated with Surgical Outcomes in Total Knee Arthroplasty Patients *Lindsey H. Edwards, M.S. Chicago, IL Zachary H. Goldstein, B.S. Chicago, IL Brett R. Levine, M.D. Chicago, IL
- 112. Vasopressor Support During ICU Admission Predicts Poor Survivorship After Primary Total Knee Arthroplasty (TKA) *Diren Arsoy, M.D. Rochester, MN Atul F. Kamath, M.D. Rochester, MN Rafael J. Sierra, M.D. Rochester, MN Robert T. Trousdale, M.D. Rochester, MN
- 113. Risk Factors for Manipulation After Total Knee Arthroplasty: A Pooled Electronic Health Record Database Study
 Kiel J. Pfefferle, M.D. Akron, OH
 *Scott T. Shemory, M.D.
 Akron, OH
 Matthew F. Dilisio, M.D.
 Akron, OH
 Stephen D. Fening, Ph.D.
 Akron, OH
 Ian M. Gradisar, M.D.
 Akron, OH

- 114. Impact of Postoperative Wound Complications on Functional Outcomes After Primary Total Knee Arthroplastv Muyibat A. Adelani, M.D. St. Louis. MO Staci R. Johnson St. Louis, MO Robert L. Barrack, M.D. St. Louis. MO *James A. Keeney, M.D. St. Louis. MO Anticoagulation After Total Joint Arthroplasty *Ryan M. Nunley, M.D. St. Louis. MO James A. Keeney, M.D. St. Louis. MO John C. Clohisy, M.D. St. Louis. MO Staci R. Johnson
- St. Louis. MO Douglas J. McDonald, M.D. St. Louis. MO Robert L. Barrack, M.D. St. Louis, MO
- 116. Dodging Wound Problems in Complex Revision TKA: Laser-Assisted Indocvanine Green Angiography for Assessing Intraoperative Wound Viabilitv *Michael J. Taunton. M.D. Rochester, MN Robert T. Trousdale, M.D. Rochester, MN Rafael J. Sierra, M.D. Rochester, MN Steven Jacobson, M.D. Rochester, MN Nho Tran. M.D. Rochester, MN
- Recent National Trends and Outcomes 117. for Pulmonary Embolism After Total Knee Arthroplastv in the United States *Vincent M. Moretti, M.D. Chicago, IL Ritesh Shah. M.D. Chicago, IL

- 118. Popliteal Artery Location in Total Knee Arthroplastv *Nicholas B. Schraut, M.D. Chicago, IL Vincent M. Moretti, M.D. Chicago, IL Gary Edwards, B.S. Chicago, IL Jonathan Yin. B.S. Chicago, IL Mark H. Gonzalez, M.D. Chicago, IL
- 115. Wound Complications with Therapeutic 119. Prepatellar Fat Thickness Ratio as an Indicator of Infection Risk Following Total Knee Arthroplasty *John R. Burge, B.S. Fort Worth, TX Jared McFarlin, M.S. Fort Worth, TX Kelly Bowers, M.P.H., M.T. (ASCP) Fort Worth, TX Hugo Sanchez, M.D. Fort Worth, TX Russell A. Wagner, M.D. Fort Worth, TX
 - 120. Medial Knee Fat Thickness: Correlation with BMI and Cross-Sectional Area of the Knee *John J. Lee. M.D. Ann Arbor, MI Samuel L. Rosenbaum, M.D. Ann Arbor, MI Stewart C. Wang, M.D. Ann Arbor, MI James A. Goulet. M.D. Ann Arbor, MI
 - 121. Is Screening for Periprosthetic Joint Infections Using ESR and CRP per AAOS Clinical Guidelines Cost Effective? *Eric Greber, M.D. Little Rock. AR C. Lowry Barnes, M.D. Little Rock, AR Marty Bushmiaer, R.N. Little Rock. AR

- 122 Synovial Aspirate Characteristics: Do Successful and Failed Total Knee Arthroplasties Differ? *Peter N. Chalmers, M.D. Chicago, IL David M. Walton, M.D. Chicago, IL Scott M. Sporer, M.D. Chicago, IL Brett R. Levine, M.D. Chicago, IL 123. Serum Inflammatory Markers for Periprosthetic Knee Infection in Obese vs. Non-Obese Patients Jane Liu Cleveland, OH *Anas Saleh. M.D. Cleveland, OH Alison K. Klika, M.S.
 - Cleveland, OH Wael K. Barsoum, M.D. Cleveland, OH Carlos A. Higuera, M.D. Cleveland, OH
- 124. Cementless vs. Cemented Tibial Implants in Primary Total Knee Arthroplasty
 *Omar A. Behery, M.P.H., M.T. (ASCP) Chicago, IL Mark Belkin Chicago, IL Brett R. Levine, M.D. Chicago, IL
- 125. Total Knee Arthroplasty in Blount Disease and Blount-Like Deformity Roman Natoli, M.D. Maywood, IL Adam P. Schiff, M.D. Maywood, IL
 *Christina Nypaver, B.S. Maywood, IL Karen Wu, M.D. Maywood, IL
 William J. Hopkinson, M.D. Maywood, IL
 Harold W. Rees, M.D. Maywood, IL

- 126. Severe Coronal Plane Deformity in Total Knee Arthroplasty Utilizing Patient Specific Instrumentation *Hasham M. Alvi, M.D. Chicago, IL Rushi Talati, B.S. Chicago, IL Anay R. Patel, M.D. Chicago, IL Mark A. Yaffe, M.D. Chicago, IL S. David Stulberg, M.D. Chicago, IL
- 127. Total Knee Arthroplasty without Superficial Medial Collateral Ligament Release for Varus Arthrosis *Joshua M. Murphy, M.D. Ann Arbor, MI Joseph D. Maratt, M.D. Ann Arbor, MI J. David Blaha, M.D. Ann Arbor, MI
- 128. Highly Cross-Linked vs. Conventional Polyethylene in Posterior-Stabilized Total Knee Arthroplasty at a Minimum Five-Year Follow-Up
 *R. Michael Meneghini, M.D. Fishers, IN
 Luke Lovro, B.S. Fishers, IN
 Shelly Smits, R.N. Fishers, IN
 Philip H. Ireland, M.D. Fishers, IN
- 129. Flexion-Extension Gap in Cruciate-Retaining vs. Posterior-Stabilized Total Knee Arthroplasty: A Cadaveric Study *Joshua M. Matthews, M.D. Wichita, KS
 Alexander C. M. Chong, M.S. Wichita, KS
 David A. McQueen, M.D. Wichita, KS
 Justin D. O'Guinn, M.D. Wichita, KS
 Paul H. Wooley, Ph.D. Wichita, KS

- 130. Preoperative Patient Education for Hip and Knee Arthroplasty: Financial Benefit?
 *Mark A. Tait, M.D. Little Rock, AR
 C. Lowry Barnes, M.D. Little Rock, AR
- Equivalence Testing of Traditional Electrocautery, Argon Beam Coagulation, and Bipolar Sealer in Primary Total Knee Arthroplasty *Brett D. Rosenthal, M.D. Chicago, IL Bryan D. Haughom, M.D. Chicago, IL Brett R. Levine, M.D. Chicago, IL
- 132. Recent National Trends and Outcomes for Unilateral and Bilateral Total Knee Arthroplasty in the United States *Vincent M. Moretti, M.D. Chicago, IL Alexander C. Gordon, M.D. Chicago. IL
- Correlation of Patient Confidence in Attaining Treatment Goals and Outcomes After Knee Arthroplasty *Carlos A. Higuera, M.D. Cleveland, OH
 Joseph F. Styron, M.D., Ph.D. Cleveland, OH
 Gregory Strnad Cleveland, OH
 Joseph P. Iannotti, M.D., Ph.D. Cleveland, OH
- 134. Total Knee Arthroplasty in the 80-Year-Old and Older Patient Population

 *Jeffrey H. DeClaire, M.D.
 Rochester, MI
 Karthik Ramaseshan
 Rochester, MI
 Meredith Wood, P.A.
 Rochester, MI
 Shaunnah Anderson, P.A.
 Rochester, MI
 Tatjana Savich, M.S.
 Rochester, MI
 Inga Azatyan
 Rochester, MI

- 135. Technique Does Affect Resection Symmetry and Thickness of the Patella During Total Knee Arthroplasty: A Prospective, Randomized Controlled Trial of Three Techniques *Christopher L. Camp. M.D. Rochester, MN John R. Martin. M.D. Rochester, MN Luke Spencer-Gardner, M.D. Rochester, MN Michael J. Taunton, M.D. Rochester, MN Mark W. Pagnano, M.D. Rochester, MN Robert T. Trousdale, M.D. Rochester, MN
- 136. Less Invasive Surgical Approaches Do Not Affect Patellar Tilt and Tracking After Knee Arthroplasty *Clint J. Wooten, M.D. Rochester, MN Taylor D. Dennison, M.D. Rochester, MN Nazly T. Carillo-Villamizar, M.D. Rochester, MN Yaser M. Baghdadi, M.D. Rochester, MN Rafael J. Sierra, M.D. Bochester, MN
- Polymethyl Methacrylate Utilization in Primary Total Knee Arthroplasty: Potential Cost Savings *Roger E. Wiltfong, M.D. Columbus, OH
 Jared C. Bentley, M.D. Columbus, OH
 Robert N. Steensen, M.D. Columbus, OH
- 138. The Effect of Obesity on the Revision Rate of Total Knee Arthroplasty: A Population Based Validation Study of a Pooled Electronic Healthcare Database *Kiel J. Pfefferle, M.D. Akron, OH
 Karen M. Gil, Ph.D. Akron, OH
 Stephen D. Fening, Ph.D. Akron, OH
 Matthew F. Dilisio, M.D. Akron, OH

- 139. Revision Total Knee Arthroplasty in the 144. Setting of Infection Using a Semi-Constrained Prosthesis *Benjamin K. Wilke, M.D. Rochester, MN Eric R. Wagner, M.D. Rochester, MN Robert T. Trousdale, M.D.
- 140. Perioperative Outcomes of Revision Total Knee Arthroplasty *Nicholas B. Schraut, M.D. Chicago, IL Vincent M. Moretti, M.D. Chicago, IL Samuel J. Chmell, M.D. Chicago, IL

Rochester, MN

- 141. Tibial Plateau Coverage in UKA: A Comparison of Patient Specific and Standard Implants
 *Dylan P. Carpenter, M.D. Little Rock, AR
 C. Lowry Barnes, M.D. Little Rock, AR
- 142. Patellar Fracture Following Patellofemoral Arthroplasty *Alexander H. King Rochester, MN William M. Engasser Rochester, MN Diane L. Dahm, M.D. Rochester, MN
- 143. Correctable Tibiofemoral Subluxation Should Not Be Considered a Contraindication to Mobile Bearing UKA *Taylor D. Dennison, M.D. Rochester, MN Clint J. Wooten, M.D. Rochester, MN Nazly T. Carillo-Villamizar, M.D. Rochester, MN Yaser M. Baghdadi, M.D. Rochester, MN Rafael J. Sierra, M.D. Rochester, MN

Patient-Specific Instrumentation in Fixed-Bearing Unicompartmental Knee Arthroplasty: Early Clinical Results *Jeffrey H. DeClaire, M.D. Rochester, MI Karthik Ramaseshan Rochester, MI Meredith Wood, P.A. Rochester, MI Shaunnah Anderson, P.A. Rochester, MI 145. Patient Specific Instrumentation with Pre-Existing Ipsilateral Hardware *Hasham M. Alvi. M.D. Chicago, IL Michael Luo. B.S. Chicago, IL Rushi Talati. B.S. Chicago, IL Patrick Sweeney, B.S. Chicago, IL Anay R. Patel, M.D. Chicago, IL Mark A. Yaffe, M.D. Chicago, IL

- S. David Stulberg, M.D. Chicago, IL
- 146. The Next Generation: Monitored Realtime Patient Specific TKA *Bernard N. Stulberg, M.D. Cleveland, OH Jayson D. Zadzilka, M.S. Cleveland, OH
- 147. Postoperative Alignment in Patient-Specific vs. Conventional Total Knee Arthroplasty
 *Mark A. Eilers, M.D. Springfield, IL
 Brian P. Dahl, M.D. Springfield, IL
 Christopher Betzle, B.S. Springfield, IL
 D. Gordon Allan, M.D. Springfield, IL
- 148. Modern Computer Navigation in Total Knee Arthroplasty Provides Value by Reducing Blood Loss *David Licini, M.D. Indianapolis, IN R. Michael Meneghini, M.D. Fischers, IN

- 149. Femoral Bow Predicts Postoperative Malalignment in Revision Total Knee Arthroplasty
 *Arjun S. Sebastian, M.D. Rochester, MN Benjamin K. Wilke, M.D. Rochester, MN Michael J. Taunton, M.D. Rochester, MN Robert T. Trousdale, M.D. Rochester, MN
- 150. Magnetic Resonance Imaging vs. Long-Standing Radiography in Assessment of Preoperative Mechanical Axis in Total Knee Arthroplasty *Nitin Goyal, B.S. Chicago, IL S. David Stulberg, M.D. Chicago, IL
- 151. Sagittal Plane Placement of the Femoral Component in TKR: How Should It Be Measured? *Adam Norton, B.S. Iowa City, IA Justin Greiner, B.S. Iowa City. IA Steve S. Liu, M.D. Iowa City. IA Yubo Gao, Ph.D. Iowa City, IA Annunziato Amendola, M.D. Iowa City, IA Phinit Phisitkul, M.D. Iowa City. IA John J. Callaghan, M.D. Iowa City, IA
- 152. Patient Specific Instrumentation Does Not Improve Coronal Plane Alignment in Total Knee Arthroplasty *Robert D. Russell, M.D. Dallas, TX
 Timothy S. Brown, M.D. Dallas, TX
 Michael H. Huo, M.D. Dallas, TX
 Richard E. Jones, M.D. Dallas, TX

IMPORTANT INFORMATION REGARDING THIRTY-SECOND ANNUAL MEETING

WHAT IS INCLUDED IN YOUR REGISTRATION FEE?

See page 4 regarding the registration fee for the Wednesday, April 23, 2014, pre-meeting course "The Shoulder: Current Concepts on Sports, Trauma, and Reconstruction".

Physician Registration

- Continental Breakfast in Exhibit Area on Thursday, Friday, and Saturday
- · Coffee Breaks in the Exhibit Area
- · Welcome Reception and Buffet Dinner on Wednesday
- Dinner/Dance on Friday
- Meeting Expenses As with all meetings, your registration fee helps to cover all expenses of the annual meeting, such as name badges, printing, postage, audiovisual equipment, etc.

Spouse/Guest Registration

- Continental Breakfast at Spouse/Guest Hospitality on Thursday and Friday
- · Welcome Reception and Buffet Dinner on Wednesday
- · Dinner/Dance on Friday
- Name badge

Controlling Registration Fees

Charges for functions, meeting space, and amenities are ameliorated in direct ratio to the number of rooms booked through the Association's block. Consolidating our reservations helps control registration fees.

The 2014 meeting registration fees are as follows:

	On or before	After
	March 21, 2014	March 21, 2014
Member	\$850.00	\$950.00
Nonmember	\$1,250.00	\$1,350.00
Resident/Fellow/Allied Health	\$500.00	\$600.00
Spouse/Guest of Members and Nonmembers	\$100.00	\$100.00
Spouse/Guest of Residents, Fellows, and Allied Health	\$0.00	\$0.00
Exhibitor—company representative (includes Wed. & Fri. dinners)	\$295.00	\$295.00
Exhibitor—company representative (includes Wed. dinner)	\$145.00	\$145.00
Exhibitor—company representative (includes Fri. dinner)	\$150.00	\$150.00
Exhibitor—company representative (no dinners included)	\$0.00	\$0.00

POLICY REGARDING CHILDREN'S ATTENDANCE

Children

All children attending the Thirty-Second Annual Meeting are welcome to attend various functions with a parent. Should children wish to attend the evening functions in the MAOA program, a ticket must be purchased in advance for each event. Children's evening meal tickets (ages 4-12) for the Wednesday and Friday children's buffet may be purchased via the MAOA web site when registering for the meeting. At the La Cantera Hill Country Resort, children age 18 and under stay free of charge, when sharing a room with an adult.

LA CANTERA HILL COUNTRY RESORT

Nestled in the beautiful Texas Hill Country just north of San Antonio, the **La Cantera Hill Country Resort** provides breathtaking views of the surrounding hill country, the La Cantera Golf Course, and downtown San Antonio. The resort is located 12 miles from the San Antonio International Airport and 15 miles from the Alamo and River Walk. It is adjacent to the Six Flags® Fiesta Texas and 15 minutes from Sea World of San Antonio.

Built over an old limestone quarry that gave the resort its name, the La Cantera Hill Country Resort was designed to reflect the traditions and culture of South Texas, in both landscape and architecture. This lavish hilltop retreat features 508 spacious guest rooms, including more than 25 suites and 38 uniquely appointed rooms in an exclusive Casita Village. The resort offers a variety of activities including a Kids Club. The Tom Weiskopf/Jay Morrish La Cantera Golf Course surrounds the resort. In addition, there is a second 18-hole championship golf course designed by Arnold Palmer. The resort features unique dining, as well as six pools, three hot tubs, two tennis courts, and hiking trails. The 7,600 square foot Health Center includes a luxurious Spa and wonderful cardiovascular equipment.

MAOA has been allotted "Run of the House" accommodations as well as Club Rooms, suites, and Casita rooms. This means that our special MAOA "Run of House" room rate will include rooms in all categories, other than concierge level. Accommodations will be assigned in the order received. Early registration is recommended for choice room assignments. These special MAOA group room rates are valid three (3) days preceding and three (3) days following the meeting.

The MAOA daily room rate is as follows:

Single or Double Run of House Room	\$225.00
Club Rooms - Concierge Floor	\$275.00
Junior Suites	\$325.00
Casita Rooms with Parlor	\$350.00

Note: The above European Plan (no meals included) rates are subject to applicable state and local taxes, which are currently 16.75% and subject to change.

RESORT AMENITIES PROGRAM: The La Cantera Hill Country Resort charges a daily resort fee of \$29.00 per room per day. This fee has been waived for all attendees of the **MAOA meeting who are booked through MAOA registration.** The resort fee includes: self parking; local and domestic long distance phone calls; no access charge for credit card and 800 number calls; basic Internet access in guest rooms; Wi-Fi in lobby, Henrietta's Market, Steinheimer's Lounge, and Gantry bar area; shuttle service within the Resort, to the Palmer Course, Six Flags® Fiesta Texas theme park, and The Shops at La Cantera; the use of the Workout Fitness Studio facilities including the tennis courts; and resort activities including yoga and Zumba classes, access to Discovery Junction, fireside s'mores, family movie displays, and more. It also includes golf bag storage and transfer between the resort's two courses and 20% discount on the golf practice facility.

REGISTER EARLY

Early registration is recommended. It is Fiesta time while we are in San Antonio, and the town will be filled with activities. The La Cantera Hill Country Resort is holding a block of rooms for attendees, and these rooms may be obtained by making reservations through the MAOA web site (www.maoa.org). This allows MAOA members first choice of these rooms. Reservation requests from MAOA members will be given priority until March 21, 2014. Following that date, reservations will be accepted on space availability basis, and if the group rate is not available, the prevailing hotel rack rates will apply.

GENERAL

HOW TO REGISTER AND RESERVE A HOTEL ROOM

Visit the Mid-America Orthopaedic Association web site (<u>www.maoa.org</u>) to register for the meeting and reserve a hotel room. Click on "2014 Annual Meeting". If you encounter any problems registering or making your room reservation, please call the MAOA office at 507-281-3431. Room reservations will be closed March 21, 2014, or earlier if all hotel space has been allocated.

HOTEL CONFIRMATION AND CANCELLATION POLICY

When requesting your room reservation, you will need a valid American Express, Diners Club, Discover Card, Visa, or MasterCard number and expiration date. Your credit card number will be held to confirm your room.

Reservations must be canceled by 6:00 p.m. hotel time at least three (3) days prior to arrival in order to avoid a one-night cancellation penalty. In the event your reservation is not canceled with the hotel, and you do not check in on the confirmed arrival date, you will be charged one night's room and tax on your credit card and the remaining nights of the reservation will be canceled. Reservations may be reinstated based on availability of the hotel, at the prevailing rate. Special consideration will be given in cases of illness or death of immediate family member, supported by medical certification.

MEETING REISTRATION FEE CANCELLATION POLICY

Full meeting registration fees (less \$50.00 administrative fee) will be refunded if notice is received by March 21, 2014. All meeting cancellations must be received in writing. No refund of meeting registration fee will be granted if notice is received March 22, 2014, or later.

GROUND TRANSPORTATION

AIRPORT/HOTEL TRANSPORTATION

To/From San Antonio International Airport (SAT)

The *La Cantera Hill Country Resort* is located 12 miles/20 minutes from the San Antonio International Airport. City Tours Transportation Co. operates a shuttle service from the San Antonio International Airport to the resort every 20-25 minutes or less based on requests. The present cost of the shuttle is \$29.25 per person one way and \$50.50 roundtrip. However, MAOA meeting attendees who make advanced reservations will be charged a special rate of \$46.00 per person, roundtrip. Reservations can be made online (www.maoa.org) when registering for the meeting or by calling 210-281-9900 and using

the code MAOA2014. Local taxi service is available at approximately \$40.00 one way.

WEATHER

San Antonio, Texas has a delightful warm temperate climate. You will find warm days and cool evenings. The month of April is characterized by rising daily high temperatures increasing from 78°F to 85°F, while the evening low temperatures range from 57°F to 67°F. The average probability that some form of precipitation will be observed in a given day is 28%, with little variation over the course of the month.

SUGGESTED CLOTHING

Business attire is recommended for all podium/poster presenters. Casual dress will be the appropriate attire for all other Mid-America activities. Comfortable and elegant casual resort wear best describes the customary dress for all evening functions. We do suggest you pack a sweater or light jacket for the evenings.

HOTEL DINING

You are free to dine on your own on Thursday and Saturday. Outstanding dining awaits you at the La Cantera Hill Country Resort, where choices range from exquisite cuisine that delights sophisticated palates to casual fare perfect for the whole family. The jewel in the crown is Francesca's at Sunset, an award-winning restaurant whose gourmet menu shows off the best of fine Southwest dining. Off property, you will also find an array of outstanding restaurants at The Shops at La Cantera and the River Walk.

Francesca's at Sunset

Step into the Francesca's at Sunset sensory dining experience. Here, South Texas cuisine meets Southwestern flair to bring you distinctive, profound flavors. Working with Uncertain Farms, just outside San Antonio, the new, evolving "Farm-to-Table" menu features locally and naturally nurtured produce, resulting in seasonal, fresh fare. Enhance your culinary journey with a selection from the award-winning, hotel sommelier-developed wine list. Food and wine pairings are available. Entertain your visual senses with commanding views of the sunset inside an artistically inspired ambiance.

BRANNON'S CAFÉ

Brannon's offers a variety of regionally inspired dishes to meet everyone's tastes. Offering a casual, yet festive atmosphere with a wide variety of menu selections, it provides the perfect place to enjoy the panoramic views of the Lost Quarry Pools. Enjoy fresh, indigenous products and a super menu.

STEINHEIMER'S LOUNGE

For a relaxing cocktail, stop in at the resort's signature bar, Steinheimer's. You may find yourself regaled with tales of Karl Steinheimer's gold while enjoying expansive Hill Country views from the patio terrace, but the real treasure to be discovered is the pleasant company you will encounter. With richly-appointed furnishings and exceptionally-gleaming accents, Steinheimer's is truly a luxurious, relaxing experience.

THE GANTRY

Spending the day at the Quarry Pool complex? Grab a bite or a beverage at The Gantry, the convenient poolside cafe. Healthy salads and hot and cold sandwiches make the perfect light lunch and you might even tear the kids away from the waterslide long enough to munch a hot dog, grilled cheese, or PB&J. Blended tropical drinks, ice-cold beer, sodas, smoothies, and all kinds of snacks round out the refreshment offerings.

THE LA CANTERA GRILLE

After a long day on the links or a few hours poolside, the La Cantera Grille is the perfect spot for a casual meal. Enjoy a variety of breakfast, lunch, and afternoon snacks in the Resort Course Clubhouse.

THE PALMER GRILLE AT LA CANTERA

Located in the Palmer Clubhouse overlooking the 18th green, The Palmer Grille offers continental breakfast and lunch daily. Visit "The 19th Hole," also known as Jasper's Bar, for your favorite cocktail.

SPA

Castle Rock Spa

Your total well-being is the foremost concern at the La Cantera Hill Country Resort. The Castle Rock Health Club & Spa was designed to pamper guests in body, mind, and spirit.

Visit the beautiful, newly renovated spa, which adjoins the 7,600-square-foot Workout Fitness Studio. Perk up your complexion and relax your mind with one of the many cleansing and refreshing facials. Massages and body treatments offer head-to-toe pampering, while our full-service nail salon focuses on beautiful hands and feet. For the ultimate indulgence, book one of the "journey" packages. Administered by experienced, licensed therapists, all treatments use holistic, certified natural and organic products or cosmeceutically advanced, scientific skincare products exclusively by Naturopathica® and SkinCeuticals®.

This soothing sanctuary is open seven days a week, and reservations are recommended. They recommend that you arrive 30 minutes prior to your appointment time in order to don a luxurious robe and a pair of cozy slippers, and have a soothing cup of Tea Forte before delving into a superlative spa experience.

FITNESS CENTER

The newly renovated Workout Fitness Studio will entice you to exercise a little longer with spectacular views of the Lost Quarry pools. The 7,600-square-foot, state-of-the-art gym is fully equipped for all your favorite workouts. Sweat it out on treadmills, stationary bikes, and other Life Fitness® cardio machines. Build muscle with a full range of free weights and strength-training machines. Flex your limbs in open areas with ample room for stretching or yoga.

Or go for a self-guided jog or refreshing walk on our three- or five-mile route winding around the resort's natural surroundings. Visit the Castle Rock Spa or Concierge desk for your pocket-sized running map. The Workout Fitness Studio is located on the second level of the main resort building and is also accessible from the Lost Quarry pool complex outside. Entry is complimentary to all resort guests aged 12 years and older, but children aged 12 to 16 years must be accompanied by an adult.

LA CANTERA KIDS CLUB

Discover the best the La Cantera Hill Country Resort has to offer families with a visit to the Kids Club. It welcomes kids aged 5 to 12 years with three daily Discovery Day Camp sessions packed full of exciting activities. Parents can relax and enjoy the resort, knowing their children are well taken care—and having the time of their lives.

Experienced, caring staff lead fun-filled activities that vary daily and cover a variety of themes—from a Discovery Tour or Taste Adventure to a Kids Workout, Local Vocal singing session, and others. With arts and crafts sessions such as painting, mobile-making, bead art, and more, kids create personal souvenirs to take home. Free play time every day lets them pick what they want to do from an endless set of choices. Indoor fun includes everything from board games to movies, while outside adventures include tennis, an obstacle course, nature walks, water balloon games, and much more. They promise that all children will find something to delight them. The Discovery Day Camp season runs from mid-March through Labor Day, offering a morning, afternoon, and evening session. Children ages 5 through 12 may attend, and are limited to one session per day. The cost is \$35 per child, and reservations are required.

ACTIVITIES

Guests can enjoy year-round golfing at the resort's two championship golf courses, or take a dip in one of six outdoor pools. The surrounding Texas Hill Country provides opportunity for bicycle rides or nature walks. Sunny-day attractions, including Sea World San Antonio and Six Flags® Fiesta Texas, are just minutes away. Home to the Alamo, museums, and several historic sites, San Antonio also offers many cultural attractions. Just across the street from the Alamo is the River Walk, a popular waterfront promenade flanked by charming restaurants and boutiques.

SHOPPING

Serious shoppers beware: Once you visit the La Cantera Hill Country Resort, you may never want to leave. Start with a trip to Padre's General Store, our on-site boutique selling beautiful clothing and handicrafts from local artisans—perfect for souvenirs or gifts for those back home.

For a bigger shopping fix, hop on our complimentary shuttle to The Shops at La Cantera, a San Antonio favorite just a mile down the road. You'll delight in the sophisticated stores and restaurants at this open-air marketplace, surrounded by lush greenery and soothing water. Choices include department stores like Neiman Marcus and Nordstom, plus every brand in the alphabet, from Ann Taylor to Zales.

If you still haven't had your fill, the best south Texas malls are an easy drive. Just 10 minutes away is Huebner Oaks, a 400,000-square-foot "lifestyle center" offering endless shops, restaurants, a multiplex movie theater, and more. San Antonio's internationally acclaimed NorthStar Mall is a 25-minute drive and home to more than 200 specialty stores.

EXCLUSIVE MAOA ACTIVITIES

Thursday, April 24, 2014

1:15 p.m. <u>River Walk, River Boat, and Market Square:</u> – Leave the resort for a short drive to downtown San Antonio where you will visit the famous River Walk and Market Square. Then take a relaxing cruise down the beautiful Paseo Del Rio, shaded by towering cypresses, oaks, and willows bordered by gardens of flowering ornamental foliage one level below the hustle and bustle of the city streets. Approximately 4 hours Cost: \$45.00 per person

TENNIS

Keep your backhand sharp and your serve strong at the two La Cantera outdoor tennis courts. Sign up for the MAOA tennis tournament via the MAOA web site (www.maoa.org). To play at other times, make your reservation in advance through the Castle Rock Health Club.

MAOA TENNIS TOURNAMENT

Tournament registration can be done via the MAOA web site (<u>www.maoa.org</u>). The tournament is scheduled as follows:

Thursday, April 24, 2014 @ 2:00 p.m. \$45.00 per person

CHAMPIONSHIP GOLF

Two World Class Golf Courses

Beautifully integrated into the surrounding Texas Hill Country, two championship courses at the La Cantera Hill Country Resort offer 36 exciting holes to satisfy any golfer. Both are open 7:00 a.m. to dusk and feature all the amenities you'd expect, including driving range, pro shop, and preferred tee times for resort guests. It's a short and easy walk from the main resort grounds to the adjacent Resort Course, while the Palmer Course is a bit farther out. Complimentary shuttle service is available to both courses and your clubs stored until you're ready to use them.

Remember it's Fiesta Time while we're in San Antonio and golf tee times will be at a

premium. The MAOA tournament this year will be played on the Resort Course beginning at 1:30 p.m. on Friday, April 25, 2014. We have secured a limited number for the tournament, *so register early*. We will be playing a Scramble Format with a Shotgun Start. The rate is \$120.00 per player, which includes green fees for 18 holes, shared cart, and range privileges prior to play. Reservations will be taken on a first come basis.

MAOA GOLF TOURNAMENT – SCRAMBLE FORMAT (shotgun start)

Tournament registration can be done via the MAOA web site (<u>www.maoa.org</u>). The tournament is scheduled as follows:

Friday, April 25, 2014 @ 1:30 p.m. at the Resort Course \$120.00 per person

Friday, April 25, 2014

10:30 a.m. <u>Spouse/Guest Salsa Making Class:</u> With expert instructions from one of the La Cantera's Executive Chefs, you will make salsa as mild or spicy as you want. You will jar up the salsa and either take it home or enjoy it during your stay. Approximately 1 1/2 hours Cost: \$35 per person

1:30 p.m. <u>Alamo and the Missions</u>: Depart the hotel for the Alamo, the most famous spot in Texas. Then off to the Mission of San José, founded in 1720. It became the largest of the Texas Missions with up to 300 inhabitants. Our next visit will be Mission Concepción where you will be transported back in time to the era of Spanish conquest, and experience the strength of the Friars who Christianized the Native Americans. Learn how the Native Americans lived and worked in the mission era. View the original frescos still visible within the rooms of the mission. Mission Concepción is the oldest, unrestored stone church in America today and it is still an active parish. Approximately 4 hours Cost: \$35 per person

BREAKOUT SESSIONS

Each Breakout Session will be devoted to a specific area of orthopedics and will allow sufficient time for discussion. The Breakout Sessions have been scheduled for Thursday, April 24; Friday, April 25; and Saturday, April 26. The Category 1 credits earned by attending the Breakout Sessions are included in the total number awarded by our 2014 Annual Meeting.

INSTRUCTIONAL COURSES

Instructional Courses have been scheduled for Friday, April 25 and Saturday, April 26. There is no additional cost to attend these courses. Please indicate your attendance at these four instructional courses when you register online so plans can be made accordingly. Continuing medical education credit for the instructional courses is included in the 31.25 hours of Category 1 time as outlined on page 1.

RESPONSIBILITY

MAOA, its Board members, officers, employees, and agents are not responsible for any personal injury, death, property damage or other loss an attendee, or any person accompanying the attendee, incurs while participating in, attending, attempting to attend, or returning from any MAOA activity or event which arises from any act or omission by any air carrier, public transport company, car rental company, hotel, subcontractor, or other person, organization, or entity, whether providing any services or facilities related thereto. All tickets, vouchers, and invitations are issued or provided subject to the foregoing. MAOA accepts no responsibility for any reason such as losses or expenses due to delay or changes in schedules, flight cancellations or misconnections, sickness, quarantine, weather, acts of God, strikes, government actions, war, terrorism, or other circumstances beyond its control.

Questions?? Contact:

Sue McKinley or Pam Kluck Mid-America Orthopaedic Association Kahler Mezzanine Level 20 Second Avenue, S.W. Rochester, MN 55902-3013 Telephone: (507) 281-3431 Fax: (507) 281-0291 e-mail: midamerica@maoa.org Web Site: www.maoa.org

FUTURE MEETINGS

April 23-27, 2014	La Cantera Hill Country Resort San Antonio, TX
April 22-26, 2015	The Westin Hilton Head Island Resort Hilton Head Island, SC
April 13-17, 2016	Hyatt Regency Coconut Point Resort Bonita Springs, FL
April 19-23, 2017	Omni Amelia Island Plantation Amelia Island, FL

MAOA 2014 ANNUAL MEETING AT A GLANCE

Wednesday, April 23	Thursday, April 24
REGISTRATION San Antonio Ballroom Foyer 6:30 a.m 8:00 p.m.	REGISTRATION San Antonio Ballroom Foyer 6:00 a.m 1:00 p.m.
SPEAKER READY ROOM San Lorenzo 6:30 a.m 8:00 p.m.	SPEAKER READY ROOM San Lorenzo 6:00 a.m 1:00 p.m.
MAOA/ICJR PRE-MEETING COURSE The Shoulder: Current Concepts on Sports, Trauma, and Reconstruction San Antonio GHI 7:00 a.m 5:00 p.m.	EXHIBITS/POSTERS OPEN San Antonio DEF and San Antonio Ballroom Foyer 7:30 a.m 12:30 p.m.
7.00 a.m 5.00 p.m.	PLENARY SESSION San Antonio GHI 8:00 a.m 10:30 a.m.
	SPOUSE/GUEST HOSPITALITY Emily's Rose Court 8:30 a.m 10:30 a.m.
	SPOUSE/GUEST WELCOME Emily's Rose Court 9:30 a.m.
	SPOUSE/GUEST PROGRAM Emily's Rose Court 9:45 a.m 10:15 a.m.
	FIRST BUSINESS MEETING San Antonio GHI 10:30 a.m 10:40 a.m.
	POSTER VIEWING San Antonio Ballroom Foyer 10:30 a.m 11:00 a.m.
	BREAKOUT SESSIONS 11:00 a.m 1:00 p.m.
BOARD OF DIRECTORS' MEETING San Gabriel 5:00 p.m.	ASK THE EXPERT San Miguel 1:00 p.m 3:00 p.m.
EXHIBIT (COMPANY REP) MEETING San Antonio DEF 6:30 p.m.	OPTIONAL TOUR River Walk, River Boat, and Market Square 1:15 p.m 5:15 p.m.
	MID-AMERICA TENNIS TOURNAMENT La Cantera Tennis Courts 2:00 p.m.
WELCOME RECEPTION AND BUFFET Plaza San Saba 7:00 p.m 9:00 p.m.	EXHIBITORS' RECEPTION San Antonio DEF 6:00 p.m 7:30 p.m.
	POSTER VIEWING San Antonio Ballroom Foyer 6:00 p.m 7:30 p.m.

DINNER AT LEISURE

La Cantera Hill Country Resort • San Antonio, Texas

La Cantera Hill Co	untry Resort • San	Antonio, lexas	
Friday, April 25	Saturday, April 26	Sunday, April 27	
REGISTRATION San Antonio Ballroom Foyer 6:00 a.m 1:00 p.m.	REGISTRATION San Antonio Ballroom Foyer 6:00 a.m 1:00 p.m.	Departures	
SPEAKER READY ROOM San Lorenzo 6:00 a.m 1:00 p.m.	SPEAKER READY ROOM San Lorenzo 6:00 a.m 1:00 p.m.		
INSTRUCTIONAL COURSES IC I – San Antonio A IC II – San Antonio B 6:30 a.m 8:00 a.m.	INSTRUCTIONAL COURSES IC III – San Antonio A IC IV – San Antonio B 6:30 a.m 8:00 a.m.		
EXHIBITS/POSTERS OPEN San Antonio DEF and San Antonio Ballroom Foyer 7:30 a.m 12:30 p.m.	EXHIBITS/POSTERS OPEN San Antonio DEF and San Antonio Ballroom Foyer 7:30 a.m 12:30 p.m.		
PLENARY SESSION San Antonio GHI 8:00 a.m 10:30 a.m.	SECOND BUSINESS MEETING San Antonio GHI 8:00 a.m 8:10 a.m.		
POSTER VIEWING San Antonio Ballroom Foyer 10:30 a.m 11:00 a.m.	PLENARY SESSION San Antonio GHI 8:10 a.m 10:30 a.m. BREAKOUT SESSIONS 11:00 a.m 1:15 p.m.	PLENARY SESSION San Antonio GHI 8:10 a.m 10:30 a.m. BREAKOUT SESSIONS	
OPTIONAL ACTIVITY FOR SPOUSES/GUESTS Salsa Making Class 10:30 a.m Noon			
BREAKOUT SESSIONS 11:00 a.m 1:00 p.m.			
PRACTICE MANAGEMENT SYMPOSIUM San Miguel 1:00 p.m 3:00 p.m.	BOARD OF DIRECTORS' MEETING San Gabriel 1:15 p.m.		
MID-AMERICA GOLF TOURNAMENT Resort Course 1:30 p.m.			
OPTIONAL TOUR Alamo, Mission San José, and Mission Concepción 1:30 p.m 5:30 p.m.			
STEEL LECTURE San Antonio GHI 6:30 p.m 7:30 p.m.	DINNER AT LEISURE		
DINNER/DANCE San Antonio Ballroom Terrace 7:30 p.m 10:30 p.m.			

BOARD OF DIRECTORS 2013-2014

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- Social Committee Chair Theresa Corrigan, M.D. 5803 Apache Road Louisville, KY 40207-1760

MAOA Preliminary Program

Notes

Notes





FUTURE MEETINGS

April 23-27, 2014 La Cantera Hill Country Resort San Antonio, Texas April 13-17, 2016 Hyatt Regency Coconut Point Resort Bonita Springs, Florida

April 22-26, 2015 The Westin Hilton Head Island Hilton Head Island, South Carolina April 19-23, 2017 Omni Amelia Island Plantation Amelia Island, Florida

