Clinical Orthopaedic Society

105th Annual Meeting

September 13-16, 2017 ★ Crowne Plaza Union Station ★ Indianapolis, IN

Download the Complete Program
On a mobile device, in the Apple Store or Google Play store, search "DTMS" and download; on a laptop go online to https://datatrace.gatherdigital.com.
Grantor & Exhibitor Acknowledgements

The Clinical Orthopaedic Society is grateful for the support of its educational grantors and exhibitors. Thank you for your participation and commitment to COS.

Silver

Zimmer Biomet - Grantor

Bronze

Arthrex - Grantor
Stryker Orthopaedics

Exhibitor

CeramTec
ConforMIS, Inc.
DePuy Synthes - Grantor
Eli Lilly and Company
Ferring Pharmaceuticals Inc.
Halyard Health
Hanger Clinic
Orthopaedic Research and Education Foundation
OrthoScan
ProScan Reading Services
Reparel
Rotation Medical
U.S. Army Health Care
University of Tennessee Physician Executive MBA Program
Vericel Corporation
Dear Colleagues,

Thank you for saying “Yes to the COS” by attending the Clinical Orthopaedic Society’s 105th Annual Meeting in Indianapolis. It is with great pleasure that I welcome you to the historic Crowne Plaza Union Station Hotel and Conference Center.

The program committee has prepared a variety of unique topics that appeal to orthopaedic surgeons of all sub-specialties. Speakers represent the Indiana University School of Medicine, Indianapolis Motor Speedway, Indianapolis Colts, Indiana Pacers, several Indiana cities and other states.

We will continue the longstanding COS tradition with two patient presentations, and debut rapid fire sessions, which allow small-group interaction on relevant topics in multiple specialties. One symposium is devoted to advocacy, an important way for orthopedists to make a difference in political matters.

The presidential guest speakers are Dr. John Kelly of Philadelphia, Director of Shoulder Sports Medicine at the University of Pennsylvania’s Perelman School of Medicine, and Dr. Melissa Kacena, an Indiana University Department of Orthopaedic Surgery staff member who is working with the National Aeronautics and Space Administration on a major research project.

The J. Elmer Nix Award will be presented to the Operation Walk Program. Dr. Wesley Lackey will accept the award on behalf of the international humanitarian aid organization and discuss its volunteer mission to help poor people in developing countries.

Art and history are the focus of several social programs for spouses, family members and guests, and a “Dine Around” evening features popular downtown restaurants. Indianapolis is a fun and affordable city with many museums and other tourism opportunities.

If you have any questions, please contact me or our COS management team from Data Trace, who will assist members and guests at the registration booth throughout the conference.

Best Always,

John

John E. Garber, MD
President, Clinical Orthopaedic Society

---

**Presidential Guest Speakers**

**Melissa Kacena, PhD**  
*Indianapolis, IN*  
**Astro Orthopaedics**  
Thursday, 1:55 pm

**John D. Kelly IV, MD**  
*Philadelphia, PA*  
**Massive Cuff Tear: Alternatives to Reverse Shoulder Arthroplasty**  
Thursday, 11:40 am  
**How to Stay Energized for a Career in Orthopaedic Surgery**  
Friday, 1:10 pm
Wednesday, September 13

12:00 pm – 5:00 pm

**Board of Directors Meeting** Executive Boardroom

12:00 pm – 5:00 pm

**Exhibit Setup** Grand Central Station

12:00 pm – 5:00 pm

**Meeting Registration** Grand Central Station Foyer

12:00 pm – 5:00 pm

**Speaker Ready Area** Penn Station C

---

Thursday, September 14

6:00 am – 5:35 pm

**Speaker Ready Area** Penn Station C

6:30 am – 7:30 am

**Multimedia Education Session** Penn Station C

6:30 am – 5:35 pm

**Meeting Registration** Grand Central Station Foyer

7:00 am – 12:45 pm

**Technical Exhibits, Continental Breakfast, Coffee Breaks and Daily Drawing** Grand Central Station

7:30 am – 5:35 pm

**Scientific Program** Victoria Station

9:20 am – 9:40 am

**Break – Please visit Exhibits** Grand Central Station

10:30 am – 2:15 pm

**Spouse Hospitality / Indianapolis Museum of Art**
Meet in Lobby
A one-hour docent led tour at the renowned Indianapolis Museum of Art just north of downtown includes transportation and lunch. More than 50,000 works of art—notably paintings by Rembrandt, Rubens, El Greco, Monet, Renoir and Pissarro as well as unique sculptures and ceramics—date back many centuries from a variety of countries and cultures.

10:30 am - Meet in lobby for departure
11:00 am - Docent Led Tour
12:15 pm - Lunch at IMA Café
2:15 pm - Depart Museum
Price: Included in Registration Fee

---

11:20 am – 11:40 am

**Break – Please visit Exhibits** Grand Central Station

11:40 am – 12:10 pm

**Presidential Guest Speaker** Victoria Station
John D. Kelly IV, MD
University of Pennsylvania

*Massive Cuff Tear: Alternatives to Reverse Shoulder Arthroplasty*

12:45 pm – 1:45 pm

**COS Luncheon with Exhibitors** Grand Central Station

1:55 pm – 2:25 pm

**Presidential Guest Speaker** Victoria Station
Melissa A. Kacena, PhD
NASA Consultant/Indiana University School of Medicine

*Astro Orthopaedics*

2:55 pm – 3:25 pm

**Patient Presentation** Victoria Station
Randall Loder, MD
Indiana University Health

3:35 pm – 3:55 pm

**Break – Please visit Exhibits** Grand Central Station

5:35 pm – 7:00 pm

**President’s Welcome Reception with Exhibitors** Grand Central Station
Before you go to dinner, start your evening off with drinks and hors d’oeuvres with COS.

**Attire:** Business Casual

**Price:** Included in Registration Fee

7:00 pm

**Dine Around**
Join your colleagues for a night of dining at one of the four reserved restaurants in Indianapolis. COS has made all of the arrangements for you. Just sign up on-site at registration with your friends and enjoy! Choose between Harry & Izzys’s, St. Elmo Steak House (6:45pm and 7:15 pm), Nada Restaurant (Mexican) and Yard House. This event is on your own and each individual will be responsible for their own bill.
Summary of Events
See Scientific Program for times for all CME Activities

Friday, September 15

6:00 am – 4:50 pm
Speaker Ready Area  Penn Station C

6:30 am – 7:45 am
Multimedia Education Session  Penn Station C

6:30 am – 4:50 pm
Meeting Registration  Grand Central Station

7:00 am – 4:50 pm
Technical Exhibits, Continental Breakfast, Coffee Breaks and Daily Drawing  Grand Central Station

7:45 am – 4:50 pm
Scientific Program  Victoria Station

8:30 am – 10:30 am
+Spouse/Children’s Hospitality Breakfast  Haymarket B
Join your friends and meet new spouses while enjoying a continental breakfast. David McDaniel, an Indiana State Museum curator, will revisit yesteryear with artifacts from days gone by.  
Price: Included in Registration Fee

8:45 am – 9:05 am
Break – Please visit Exhibits  Grand Central Station

10:45 am – 11:05 am
Break – Please visit Exhibits  Grand Central Station

11:35 am – 12:10 pm
*Dr. and Mrs. J. Elmer Nix Presentation and Lecture  Victoria Station

12:10 pm – 1:10 pm
COS Luncheon with Exhibitors  Grand Central Station

1:10 pm – 1:40 pm
*Presidential Guest Speaker  Victoria Station
John D. Kelly IV, MD
University of Pennsylvania
How to Stay Energized for a Career in Orthopaedic Surgery

2:15 pm – 2:35 pm
Break – Please visit Exhibits  Grand Central Station

4:50 pm – 6:00 pm
+Happy Hour Reception  Iron Horse
All COS attendees and guests are invited to attend the Iron Horse Reception. This is the first Union Station built in the United States and dates back to the 1850s. Discover the historic train station as you enjoy beverages and hors d’oeuvres with friends from the COS!
Price: Included in Registration Fee

Saturday, September 16

6:00 am – 12:15 pm
Speaker Ready Area  Penn Station C

6:30 am – 8:15 am
Multimedia Education Session  Penn Station C

7:30 am – 12:15 pm
Meeting Registration  Grand Central Station Foyer

7:45 am – 8:15 am
Continental Breakfast  Victoria Station Foyer

8:15 am – 12:15 pm
Scientific Program  Victoria Station

9:45 am – 10:15 am
Patient Presentation  Victoria Station
Brian Mullis, MD
Indiana University School of Medicine

10:55 am – 11:05 am
Refreshment Break  Victoria Station Foyer

11:35 am – 12:00 pm
Clinical Orthopaedic Society Annual Membership & Business Meeting  Victoria Station Foyer
Thursday, September 14

6:30 am – 7:30 am
Multimedia Education Session  Penn Station C

7:30 am – 7:40 am
Welcome and Opening Remarks
John E. Garber, MD, President

Symposium 1
Moderator: John E. Garber, MD, Witham Orthopaedic Associates

7:40 am – 8:10 am
Indianapolis 500 and Evolution of Driver Safety
J. Douglas Boles, President, Indianapolis Motor Speedway

8:10 am – 8:40 am
Cervical Myelopathy
Richard C. Sasso, MD, Indiana Spine Group

8:40 am – 9:10 am
Stretching with a Purpose
David H. Craig, LAT, ATC, Former Indiana Pacers Trainer

9:10 am – 9:20 am
Discussion

9:20 am – 9:40 am
BREAK—Please visit Exhibits  Grand Central Station

Symposium 2A
Moderator: James A. Slough, MD, Excelsior Orthopaedics

9:40 am – 10:10 am
Trauma
Renn J. Crichlow, MD, OrthoIndy

10:10 am – 10:40 am
Throwing Injuries
Arthur C. Rettig, MD, Indianapolis Colts Orthopaedist/Methodist Sports Medicine

10:40 am – 10:45 am
Discussion

Rapid Fire Session 1A – Hip Arthroplasty  Penn Station A
Moderators: Frederick C. Flandry, MD, FACS, The Hughston Clinic & Ricardo J. Rodriguez, MD, Baton Rouge Orthopaedic Clinic, LLC

10:50 am – 10:54 am
Hip Arthroscopy in Patients with Childhood Hip Conditions: Is There a Functional Difference in Outcomes?
Brian M. Godshaw, MD, Ochsner Medical Center

10:54 am – 10:58 am
Hip Arthroscopy in Patients with a History of Cigarette Use: Is There a Difference Functional in Outcomes?
Brian M. Godshaw, MD, Ochsner Medical Center

10:58 am – 11:02 am
Outcomes of Direct Anterior Total Hip Arthroplasty (DA-THA) in the Elderly Population
Neel Gupta, MD, Hahnemann University Hospital/Drexel University College of Medicine

11:02 am – 11:05 am
Discussion

11:05 am – 11:09 am
Same Day Discharge Total Hip Arthroplasty: Who Failed the Program and Why?
Joseph I. Levieddin, New York University Medical Center
*Presented by Zlatan Cizmic, MD

11:09 am – 11:13 am
Total Hip Arthroplasty in Human Immunodeficiency Virus-Positive Patients—Up to 14 Year Follow-Up
David Novikov, BS, New York University Medical Center

11:13 am – 11:17 am
Risk Factors Associated with Persistent Chronic Opioid Use Following Total Hip Arthroplasty
**Scientific Program**  Victoria Station, Unless Otherwise Specified

**Symposium 2B**  
Moderator: James A. Slough, MD, Excelsior Orthopaedics

11:40 am – 12:10 pm  
**Massive Cuff Tear: Alternatives to Reverse Shoulder Arthroplasty**  
John D. Kelly IV, MD, Presidential Guest Speaker, University of Pennsylvania

12:10 pm – 12:40 pm  
**Superior Capsular Reconstruction**  
Brian L. Badman, MD, American Health Network

12:45 pm – 1:45 pm  
**COS Luncheon with Exhibitors**  
Grand Central Station

1:45 pm – 1:55 pm  
**ABOS Update**  
David F. Martin, MD, Wake Forest University

1:55 pm – 2:25 pm  
**Astro Orthopaedics**  
Melissa A. Kacena, PhD, Presidential Guest Speaker, NASA Consultant/Indiana University School of Medicine

2:25 pm – 2:55 pm  
**Recent Advances in the Pediatric Hip**  
Randall T. Loder, MD, Indiana University Health

2:55 pm – 3:25 pm  
**Patient Presentation**  
Randall T. Loder, MD, Indiana University Health

3:25 pm – 3:35 pm  
**Discussion**

3:35 pm – 3:55 pm  
**BREAK—Please visit Exhibits**  
Grand Central Station

**Symposium 4**  
Moderator: George W. Brindley, MD, Texas Tech University Health Sciences Center

3:55 pm – 4:25 pm  
**Physician Personal Finance: Knowledge to Avoid Mistakes**  
John T. Wortman, CFP, and J.P. Wyand, CFP, Valeo Financial Advisors
Friday, September 15

6:30 am – 7:45 am
Multimedia Education Session  Penn Station C

General Session 1: Resident Papers
Moderator: Ramon F. Rodriguez, MD, Tulane University

7:45 am – 7:51 am
Tourniquetless Surgery Decreases Opioid Consumption in Contemporary Total Knee Arthroplasty with Modern Perioperative Protocols
Mark J. Hood Jr., MD, Indiana University
*Presented by Seyedali R. Ghasemi, MD

7:51 am – 7:57 am
Serum D-Dimer: A New Test for Timing of Reimplantation
Alisina Shahi, MD, Rothman Institute at Thomas Jefferson University
*Presented by Seyedali R. Ghasemi, MD

7:57 am – 8:03 am
Home Health Services Are Not Required Following Total Hip Arthroplasty
David Novikov, BS, New York University Medical Center
*Presented by James Feng, MD

8:03 am – 8:09 am
The Early Immunologic Response in Multiply Injured Patients with Orthopaedic Injuries Is Associated with Organ Dysfunction
Robert P. Wessel, MD, Indiana University

8:09 am – 8:15 am
Cyclops Lesions after ACL Reconstruction: Bone-Tendon-Bone Autograft Compared to Hamstring Autograft
Zachary K. Pharr, MD, University of Tennessee Campbell Clinic

8:15 am – 8:21 am
Hip Arthroscopy in Obese Patients: Is There a Functional Difference in Outcomes?
Brian M. Godshaw, MD, Ochsner Medical Center

8:21 am – 8:27 am
Same Day Discharge for Unicompartmental and Total Knee Arthroplasty: Two-Year Experience in a Large Urban Academic Center
Matthew Siow, BA, New York University Hospital of Joint Diseases

8:27 am – 8:33 am
Resident Paper Award
Anterior Approach for Open Reduction and Internal Fixation of Acute Unstable Slipped Capital Femoral Epiphysis
Margaret A. Baldwin, MD, University of Oklahoma Health Science Center

8:33 am – 8:45 am
Discussion

8:45 am – 9:05 am
BREAK—Please visit Exhibits  Grand Central Station

Symposium 5
Moderator: John Dorris III, MD, Athens Bone & Joint Orthopedic Clinic

9:05 am – 9:35 am
Management of Musculoskeletal Tumors
L. Daniel Wurtz, MD, University Orthopaedics Associates

9:35 am – 10:05 am
Orthopaedic Injuries and Complications of the Civil War
Fred Schaefer, CSFA-OS, OrthoIndy

10:05 am – 10:35 am
Anterior Hip Arthroplasty in Obese Patients
Gregory P. McComis MD, North Point Orthopaedics

10:35 am – 10:45 am
Discussion

10:45 am – 11:05 am
BREAK—Please visit Exhibits  Grand Central Station

Rapid Fire Session 2A – Knee  Penn Station A
Moderators: James A. Slough, MD, Excelsior Orthopaedics
Bess E. Brackett, MD, Sutter Health

11:05 am – 11:09 am
Hyaluronic Acid Injections of the Knee: Predictors of Successful Treatment
Eric N. Bowman, MD, University of Tennessee Campbell Clinic
*Presented by Justin D. Hallock, MD

11:09 am – 11:13 am
Medial Patellofemoral Ligament Complex Reconstruction without Transosseous Patellar Fixation: A Technique
Description and Short-Term Outcomes
Eric N. Bowman, MD, University of Tennessee Campbell Clinic
*Presented by Justin D. Hallock, MD

11:13 am – 11:17 am
Trochlear Resection Variation and “Understuffing” with a Contemporary Total Knee Arthroplasty Design
Rodney W. Benner, MD, Shelbourne Knee Center

11:17 am – 11:20 am
Discussion

11:20 am – 11:24 am
Minimum 20-year Results of Anterior Cruciate Ligament Reconstruction with Patellar Tendon Autograft
K. Donald Shelbourne, MD, Shelbourne Knee Center

11:24 am – 11:28 am
Biomechanical Evaluation of Graft Preparation Systems in a Cadaveric Knee Model
Michael Mafilios, BA, Health Economics Associates
*Presented by Meghan Pusquali

11:28 am – 11:32 am
Treatment of Posterior Root Medial Meniscus Tears in Middle-Age Patients
K. Donald Shelbourne, MD, Shelbourne Knee Center

11:32 am – 11:35 am
Discussion

Rapid Fire Session 2B – Miscellaneous  Penn Station B
Moderators: Lawrence S. Halperin, MD, Orlando Orthopaedic Center
George W. Brindley, MD, Texas Tech University Health Sciences Center

11:05 am – 11:09 am
Outcomes of Reverse Shoulder Prosthesis without Latissimus Dorsi Transfer for Patients with Combined Loss of Active Elevation and External Rotation (CLEER)
Brandon Horn II, DO, Witham Hospital Lebanon/Anson

11:09 am – 11:13 am
Eighty-two Cases of Venous Thromboembolism: Analysis of Adherence to Accepted Methods of Prophylaxis
Joseph I. Levieddin, New York University Medical Center
*Presented by James Feng, MD

11:13 am – 11:17 am
Maintenance of Board Certification in Orthopaedics
Samrath Bhimani, MD, Ortho Georgia
*Presented by Guy D. Foulkes, MD

11:17 am – 11:20 am
Discussion

11:20 am – 11:24 am
Factors that Influence Same Day Discharge Failure Rates Following Unicompartmental and Total Knee Arthroplasty
Matthew Siow, BA, New York University Hospital of Joint Diseases

11:24 am – 11:28 am
Perioperative Orthopaedic Surgical Home (POSH): Optimizing Patient Health and Preventing Readmission in Total Joint Arthroplasty
Kelvin Kim, BA, New York University Medical Center
*Presented by Zlatan Cizmic, MD

11:28 am – 11:32 am
Predicting Next-Day Discharge in Total Joint Arthroplasty
Kelvin Kim, BA, New York University Medical Center
*Presented by David Novikov, BS

11:32 am – 11:35 am
Discussion

Symposium 6A
Moderator: John E. Garber MD, Witham Orthopaedic Associates

11:35 am – 12:10 pm
Dr. and Mrs. J. Elmer Nix Presentation and Lecture
Operation Walk - Merrill A. Ritter, MD
Wesley G. Lackey, MD, Midwest Center for Joint Replacement

12:10 pm – 1:10 pm
COS Luncheon with Exhibitors  Grand Central Station

Symposium 6B
Moderator: John E. Garber MD, Witham Orthopaedic Associates

1:10 pm – 1:40 pm
How to Stay Energized for a Career in Orthopaedic Surgery
John D. Kelly IV MD, Presidential Guest Speaker, University of Pennsylvania

1:40 pm – 2:10 pm
Non-Operative Treatment of Knee Osteoarthritis and Rehabilitation after Total Knee Surgery
K. Donald Shelbourne, MD, Shelbourne Knee Center

2:10 pm – 2:15 pm
Discussion

2:15 pm – 2:35 pm
BREAK—Please visit Exhibits  Grand Central Station

Symposium 7
Moderator: J. Randall Riehl, MD, Decatur Orthopaedic Clinic
2:35 pm – 3:05 pm
Infection Management in Total Knee Arthroplasty and Total Hip Arthroplasty: A 2017 Update
Lucian C. Warth, MD, Indiana University Health

3:05 pm – 3:35 pm
Arthroscopic Abductor Tendon Repair
Ricardo J. Rodriguez, MD, Baton Rouge Orthopaedic Clinic, LLC

3:35 pm – 4:05 pm
Successful Implementation of a Reduced Opioid Program for Total Joint Replacement
Stephen F. Mitros, MD, Mitros Orthopaedics

4:05 pm – 4:15 pm
Discussion

Rapid Fire Session 3A – Upper Extremity
Penn Station A
Moderators: J. Randall Riehl, MD, Decatur Orthopaedic Clinic
John E. Garber MD, Witham Orthopaedic Associates

4:20 pm – 4:24 pm
Surgeon Experience, Sagittal Reduction, and Complications of Proximal Humerus Fractures
Tomas Liskutin, MS, Loyola University Chicago Stritch School of Medicine
*Presented by Elizabeth Harkin, MD

4:24 pm – 4:28 pm
Outcomes of Surgical Treatment for High-Energy Open Forearm Fractures
LT Kyle E. Nappo, MD, Walter Reed National Military Medical Center
*Presented by Sean Wade, MD

4:28 pm – 4:32 pm
The Tritomic Approach: A Triceps-Sparing Posterior Approach to the Elbow
Colton Webber, Mercer University School of Medicine
*Presented by Kimberly Gorton, BA

4:32 pm – 4:35 pm
Discussion

4:35 pm – 4:39 pm
Comparative Outcomes of Various Combinations of Bilateral Shoulder Arthroplasty
Brandon Horn II, DO, Witham Orthopaedic Associates

4:39 pm – 4:43 pm
Loss of Functional Internal Rotation Following Various Combinations of Bilateral Shoulder Arthroplasty
Brandon Horn II, DO, Witham Orthopaedic Associates

4:43 pm – 4:47 pm
Stenosing Tenosynovitis: An Exploration of Glucocorticoid Induced Heterotopic Ossification
Austinn Miller, BS, Mercer University

4:47 pm – 4:50 pm
Discussion

Rapid Fire Sessions 3B – Total Joint
Penn Station B
Moderators: E. Boone Brackett, MD, iTriage
Stephen F. Mitros, MD, Mitros Orthopaedics

4:20 pm – 4:24 pm
A Novel Skin Closure Device for Total Knee Arthroplasty: Randomized, Controlled Trial versus Staples
Rodney W. Benner, MD, Shelbourne Knee Center

4:24 pm – 4:28 pm
Third Place Resident/Fellow Rapid Fire Award
Are Tourniquets Indicated in Total Knee Arthroplasty in the Era of Tranexamic Acid: A Meta-analysis and Systematic Review
Rajkishen Narayanan, MS, New York University Hospital of Joint Diseases
*Presented by Seyedali R. Ghasemi, MD

4:28 pm – 4:32 pm
Preoperative Chronic Opioid Users in Total Knee Arthroplasty – Identification of At-Risk Patients for Continued Opioid Use after Surgery?
Mackenzie A. Roof, BS, New York University Hospital of Joint Diseases
*Presented by David Novikov, BS

4:32 pm – 4:35 pm
Discussion

4:35 pm – 4:39 pm
Obstructive Sleep Apnea is a Potential Risk Factor for Regional Anesthesia Failure in Total Joint Arthroplasty
David Novikov, BS, New York University Hospital of Joint Diseases

4:39 pm – 4:43 pm
Second Place Resident/Fellow Rapid Fire Award
Risk Factors of a Major Cause of In-Hospital Mortality in Total Hip and Knee Arthroplasty Patients; In-Hospital Venous Thromboembolism
Alisina Shahi, MD, Rothman Institute at Thomas Jefferson University
*Presented by Seyedali R. Ghasemi, MD

4:43 pm – 4:47 pm
The Utility of Synovial Absolute Neutrophil Count in Diagnosing Periprosthetic Joint Infection
Alisina Shahi, MD, Rothman Institute at Thomas Jefferson
### Saturday, September 16

#### General Session 3 - Resident Papers

**Moderator: Ramon F. Rodriguez, MD, Tulane University**

- **8:15 am – 8:21 am**
  - Use of the Risk Assessment Prediction Tool (RAPT) to Determine if Total Joint Patients Will Benefit from Extending Length of Stay to Avoid Discharge to Post-Acute Rehabilitation Facilities
  - **Joseph Levieddin, MD, New York University Medical Center**
  - Presented by Zlatan Cizmic, MD

- **8:21 am – 8:27 am**
  - Posterior Malleolar Fixation Reduces the Need for Trans Syndesmotic Fixation in Rotational Ankle Fractures
  - **Rajkishen Narayanan, MS, New York University Hospital of Joint Diseases**

- **8:27 am – 8:33 am**
  - Do Local Antibiotics Reduce Periprosthetic Joint Infections?
  - **Craig A. Winkler, MD, Texas Tech University Health Sciences Center**

- **8:33 am – 8:39 am**
  - The Effects of Preoperative Chronic Opioid Use in Total Hip Arthroplasty
  - **Mackenzie A. Roof, BS, New York University Hospital of Joint Diseases**
  - Presented by James Feng, MD

- **8:39 am – 8:45 am**
  - Flexible Distal Femur Fracture Constructs Lead to Decreased Nonunion Rate
  - **Michael R. Koerner, MD, Greenville Health System**

- **8:45 am – 8:51 am**
  - Robotic vs. Traditional Unicompartmental Knee Arthroplasty: A Short-Term Comparative Analysis
  - **Kelvin Kim, BA, New York University Hospital of Joint Diseases**
  - Presented by David Novikov, BS

#### Symposium 8

**Moderator: Ricardo J. Rodriguez, MD, Baton Rouge Orthopaedic Clinic, LLC**

- **9:15 am – 9:45 am**
  - Risks of Anemia vs. Transfusion in Orthopaedic Trauma Patients
  - **Brian H. Mullis, MD, Indiana University School of Medicine**

- **9:45 am – 10:15 am**
  - Patient Presentation
  - **Brian H. Mullis, MD, Indiana University School of Medicine**

- **10:15 am – 10:45 am**
  - Osteoporosis Management
  - **Emily Frank, MD, Carmel, IN**

- **10:45 am – 10:55 am**
  - Discussion

**Symposium 9**

**Moderator: John E. Garber MD, Witham Orthopaedic Associates**

- **11:05 am – 11:35 am**
  - Ankle Fractures—Syndesmosis Injuries in the Athlete
  - **David A. Porter, MD, Methodist Sports Medicine**

- **11:35 am – 12:00 pm**
  - Clinical Orthopaedic Society Annual Membership & Business Meeting
  - **John E. Garber MD, Witham Orthopaedic Associates**

- **12:00 pm – 12:15 pm**
  - Presidential Address/Passing of the Gavel/Adjournment
  - **John E. Garber MD, Witham Orthopaedic Associates**
Complete your CME records online at www.cosociety.org

🌟 St. Elmo Steakhouse  127 South Illinois St.
Harry & Izzy’s  153 South Illinois St.

🌟 Nada Restaurant  11 West Maryland St.
Yard House  15 West Maryland St.