



Clinical Orthopaedic Society 114th Annual Meeting

August 26-29, 2026 | Omni Louisville | Louisville, KY

Excellence in Action



Preliminary Program

18.25 CME Credits Available



Cathleen Lewis, PhD
Presidential Guest
Speaker



Michelle D. Miller, PhD
Presidential Guest
Speaker



O. Alton Barron, MD
George W. Brindley, MD
Lectureship Speaker



Mary Lloyd Ireland, MD
Dr. & Mrs. J. Elmer Nix
Award Recipient



Accreditation Information

2026 PROGRAM COMMITTEE

The Clinical Orthopaedic Society gratefully acknowledges these orthopaedic surgeons, residents, and medical students for their contribution to the development of the Scientific Program:

President
Marlene DeMaio, MD, EdD

First President-Elect
Alfonso Mejia, MD, MPH

Secretary / Treasurer
Ramon F. Rodriguez, MD

Librarian / Historian
George W. Brindley, MD

Immediate Past President
Afshin E. Razi, MD

Past President
Brendan J. MacKay, MD

Member Under 40
Ryan Roach, MD

Members At Large
Curtis Burton, MD
Brandi Hartley, MD
Kartik Shenoy, MD
James Wittig, MD

Ex-Officio Members
Bess Brackett, MD
Robert R. Slater Jr, MD

Educational Committee
Marlene DeMaio, MD, EdD
Afshin E. Razi, MD
Alfonso Mejia, MD, MPH
James C. Wittig, MD
Paul Celestre, MD
Brandi Hartley, MD

HISTORY

In 1912, 38 orthopaedic surgeons in Chicago founded the Central States Orthopaedic Club with Dr. John Lincoln Porter of Chicago, Illinois as President. The members were from central states: Illinois, Indiana, Iowa, Kansas, Louisiana, Michigan, Minnesota, Missouri, Nebraska, Ohio, Tennessee, and Wisconsin. Some belonged to the American Orthopaedic Association which celebrated its silver anniversary that same year. The club was destined to become the premiere "show and tell" national orthopaedic organization. Specifically, the founders promoted "the observation in different cities of matters related to orthopaedic surgery and the free discussion amongst its members of orthopaedic methods and teaching."

By 1923, with increased membership, the club changed its name to the Clinical Orthopaedic Society (COS). In 1932, the COS became a regional society, and, along with American Orthopaedic Association, formed the American Academy of Orthopaedic Surgeons (AAOS). That same year, the first meeting of the AAOS was held in Chicago with the 20th meeting of COS. In 1990, COS became a national organization.

Today, the COS continues to promote learning through its annual meeting. In years past surgeons traveled by train to teach and operate together promoting the newest surgical techniques and care. Live patients were part of the presentation. Today, we still gather to learn in a national forum. Our meetings emphasize case-based formats and clinically relevant research. Since the 2024 presidency of Dr. Afshin Razi, COS focuses on trainees and early career orthopaedic surgeons. We now also welcome all orthopaedic providers to attend our annual meetings. COS supports critical thinking and encourages questions from the floor. Our motto "Learn by seeing, hearing, fellowship and Criticism" remains paramount!

MISSION AND VISION

To provide objective, unbiased, and in-depth education and a forum for knowledge sharing and fellowship among orthopedic surgery providers and to promote clinical excellence and mentorship in orthopedic surgery.

TARGET AUDIENCE

The 114th Annual Meeting of the Clinical Orthopaedic Society has been developed primarily for orthopaedic surgeons, residents, physician associates, and medical students.

CME ACCREDITATION

This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of the American Academy of Orthopaedic Surgeons and the Clinical Orthopaedic Society. The American Academy of Orthopaedic Surgeons is accredited by the ACCME to provide continuing medical education for physicians.

The American Academy of Orthopaedic Surgeons designates this COS Annual Meeting, August 26-29, 2026 to be held in



President's Message

Marlene DeMaio, MD, EdD, CAPT, Medical Corps, U.S. Navy (Ret.)

As President of the Clinical Orthopaedic Society, I invite you to attend our 114th Annual Meeting at the Omni Hotel in Louisville, Kentucky! I am truly honored and privileged to represent you in our quest for clinical excellence, experience, collegiality, and lifelong learning.

Our membership reflects a growing and engaged community. This past year, we've made strides reaffirming COS as a national leader in clinical orthopaedic education—a society that is interactive, forward-thinking and based in a strong foundation of clinical orthopaedic surgeons.

This year's Scientific Program Chair is Paul Celestre, MD, a fellowship-trained, board-certified, highly skilled, and busy academic spine surgeon at Norton Leatherman Spine Specialists in Louisville. The program, "Excellence in Action," will highlight the extraordinary history of orthopaedic surgery and clinical care in Louisville. Our Vice President, Dr. Alfonso Mejia, a former fellow of the Kleinert Kutz Hand Care Center, crafted two informative hand symposia. We also will learn about clinical decision making for equine athletes and their horses. Other key topics include important updates and current concepts with case-based learning across all specialties to elevate excellence in your practice.

We continue our special sessions for medical students and residents, spearheaded again by Drs. Brandi Hartley and Alfonso Mejia. New this year is the "Own the Bone" session, organized by the American Orthopaedic Association and the National Association of Orthopaedic Nurses, geared toward early career surgeons and advanced practice providers in musculoskeletal care.

Our meeting's focus includes national issues, the unique contributions of local surgeons in hand and spine surgery, problematic clinical practice guidelines, and important updates. Promoting COS' key initiatives and our strategic plan in support of your clinical practice, we are committed to our motto and remain true to our historical roots. In summary, our goal is to put our motto in action: "Learn by seeing, hearing, fellowship, and criticism."

The Omni Louisville Hotel is ideally situated near the city's most vibrant neighborhoods and iconic attractions such as the Muhammed Ali Museum, Main Street, Fourth Street Live!, Whiskey Row Distilleries and the Louisville Slugger Museum & Factory. Our social program combines exploration of this one-of-a-kind city with plenty of opportunity for camaraderie and networking with your colleagues, including a special Derby Night at Churchill Downs!

Spread the word! Invite your friends and colleagues. Have your personal reunion with us in Louisville. I look forward to seeing you in August!

marlene DeMaio





Presidential Guest Speaker Cathleen Lewis, PhD

Cathleen Lewis is Curator of International Space Programs and Spacesuits at the Smithsonian Institution's National Air and Space Museum, specializing in Soviet and Russian history. After graduating Friends School Baltimore in 1976, Lewis earned both bachelor's and master's degrees in Russian and East European Studies at Yale University and completed her PhD in History at the George Washington University.

As curator, she has collected artifacts that document the history of Soviet and Russian space activities, manages the world's largest collection of spacesuits, seeks out artifacts and archives that document Black American participation in aviation and spaceflight, and curates the museum's collections surrounding the efforts to study in impacts of spaceflight on human physiology.

Her most recent book is *Cosmonaut: A Cultural History*, a study of cosmonaut culture in the last six decades. She has written about artifacts in the Smithsonian's collection articles comparing the Soviet and American approaches to exhibiting and portraying spaceflight. Lewis's current research projects are a general history of the concept of spacesuits and a study of the development of spacesuit gloves.



Presidential Guest Speaker Michelle D. Miller, PhD

Dr. Michelle Miller is a cognitive psychologist, author, and researcher who helps educators navigate the challenges of teaching in today's fast-changing academic world. She works at the intersection of psychology, pedagogy, and technology—translating research into real-world strategies that faculty can use right away.

Dr. Miller is a professor in the Department of Psychological Sciences at Northern Arizona University, where she has taught and conducted research for over two decades. She has also worked with hundreds of faculty and campus leaders across the U.S. and internationally. Her books, including *Minds Online*, *Remembering and Forgetting in the Age of Technology*, and *A Teacher's Guide to Learning Student Names*, reflect her commitment to making the science of learning accessible and applicable to faculty across disciplines, including medicine.

When she speaks or leads a session, Dr. Miller brings the same mindset she brings to her classroom: clarity, curiosity, and a respect for the complexity of teaching. Whether the discussion is about attention, memory, motivation, educational technology, or critical thinking, she aims to leave people not just informed, but energized.

Accreditation Information

Louisville, KY for a maximum of 18.25 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

- 15.25 CME Credits for Scientific Program
- 3 CME Credits for Scientific Posters and ePosters

PURPOSE

1. To provide participants with an objective, unbiased educational experience that keeps them current in both the theoretical knowledge and practical skills of contemporary orthopaedic surgery.
2. To deliver a detailed, in-depth education on selected topics relevant to the practice of orthopaedic surgery.
3. To enable participants to identify and assess potential gaps or deficiencies in their knowledge related to orthopaedic surgery.
4. To offer participants ample opportunities to exchange ideas with presenters, faculty and fellow attendees through paper presentations, guest lectureships, symposia, multimedia educational sessions and poster exhibits.

OBJECTIVES

The educational objectives will be achieved through a combination of paper presentations, lectures, and workshops conducted in plenary, concurrent, and specialty sessions, with generous time allocated for open discussion. By the conclusion of this course, attendees will be expected to:

1. Enhance their diagnostic, treatment, and technical skills in managing orthopaedic conditions by integrating the latest scientific advances.
2. Discuss fundamental basic science concepts and translational medicine as they relate to current treatment developments.
3. Understand core principles of practice management in the orthopaedic field and musculoskeletal care.
4. Critically assess emerging trends in orthopaedic medicine and evaluate their evidence-based validity.
5. Apply the above points in prompt diagnosis, individualized management, and appropriate therapeutic interventions at the optimal time to ensure the best outcomes possible.

CEC CREDIT

Physician Associates can receive up to 18.25 credit hours toward Continuing Education Credits. AAPA accepts American Medical Association Category I CME credit for the Physician's Recognition Award from organizations accredited by the ACCME.

CEUs

Nursing CEUs will be available for select sessions.

DISCLAIMER

The products, procedures and opinions presented at this meeting reflect the viewpoint or approach of the presenter only and are not to be attributed to the Clinical Orthopaedic Society. The Clinical Orthopaedic Society presents such material for informational purposes only and does not endorse any such product or the content of any such presentation.

FORMAT

The educational sessions will be held on Thursday, August 27, from 7:15 am – 5:00 pm, Friday, August 28, from 7:00 am – 4:30 pm, and Saturday, August 29, from 7:30 am – 3:30 pm.

SCIENTIFIC ePOSTER SESSIONS

Scientific ePosters are an important feature of the COS Annual Meeting. ePosters will be on display each day of the Scientific Program and ePoster presenters will be available to answer questions before and after the Scientific Program sessions. Please note on the Scientific Program Schedule the designated times that the ePoster presenters will be available for discussion.

PHYSICIAN REGISTRATION FEE

Registration covers the Scientific Program, syllabus, ePoster sessions, daily continental breakfasts and coffee breaks, general meeting expenses, the Welcome Reception, and social events.



Dr. & Mrs. J. Elmer Nix Award Recipient Mary Lloyd Ireland, MD

Mary Lloyd Ireland, MD is an Orthopaedic Surgeon and Full Clinical Professor in the University of Kentucky's Department of Orthopaedic Surgery and Sports Medicine. She received her Medical Degree from the University of Tennessee Center for the Health Sciences in Memphis. Her Orthopedic residency was at the University of California, Irvine. She did two fellowships in Sports Medicine: Boston Children's Hospital, Harvard University in Boston, Massachusetts, and Hughston Orthopaedic Clinic in Columbus, Georgia.

Dr. Ireland is involved in numerous endeavors regarding gender differences, injury patterns, treatment, and prevention of injuries of the knee and shoulder. She founded the Active Women's Health Initiative through the College of Health Sciences at the University of Kentucky in 2018. She is the Co-Director of this Initiative with the mission of Optimizing health and promoting physical activity and wellness for girls and women across the lifespan. The "Girls Can" initiative was started in 2019. Now renamed the Active Girls Healthy Women's Initiative Endowment opportunities are in place.

She is a philanthropist, creating the James E. Ireland Foundation in 1994 and an advocate for women in professional and athletic arenas. She is a staunch supporter of resident education and shows expertise and skills in caring for patients.

Dr. Ireland served as a Team Physician for EKU for 18 years and Team Physician for the University of Kentucky for 11 years as well as Medical Coordinator and Head Physician for the Bluegrass State Games for 11 years. She was honored to serve in the US Olympic Sports Medicine program for numerous teams and was the Head Physician at the Olympic Sports Festival in Minneapolis, Minnesota in 1990 and served as a Medical Staff Member at the Olympics in Barcelona, Spain in 1992.

Dr. Ireland is a member of many professional societies and participates in various capacities on a regular basis. She is a fellow of the American Academy of Orthopaedic Surgeons and the American College of Sports Medicine. She is a member of the American Orthopaedic Society for Sports Medicine, Ruth Jackson Orthopaedic Society, and an affiliate member of the National Athletic Trainers Association.

Dr. Ireland has served on multiple AOSSM committees including Nominating, Hall of Fame, and Youth Sports STOP project. She has served on the Kentucky Medical Association's Committee on School Health, Physical Education, and Medical Aspect of Sports since 1989. She has been a member of the Kentucky State Advisory Council on Athletic Trainers since 1992.

Dr. Ireland was named Southeast Athletic Trainer's Association (SEATA) Sports Medicine Person of the Year in 1997, was the recipient of the President's Challenge Award for the National Athletic Trainer's Association (NATA) in 1998, and was inducted into the AOSSM Hall of Fame in 2023.



George W. Brindley, MD Lectureship Speaker O. Alton Barron, MD

Dr. Barron is a board certified, fellowship-trained shoulder, elbow, and hand surgeon based in New York City since 1996. He specializes in both routine and complex problems of the upper limb, including all sports injuries, severe arthritis requiring shoulder and elbow arthroplasty, nonunions and malunions of bones, and severe nerve injuries requiring tendon transfers and microsurgery. He is a Clinical Associate Professor of Orthopedic Surgery at NYU Langone Medical Center, and a Senior Attending Physician at the Roosevelt Hand to Shoulder Center at OrthoManhattan. He is Medical Director of Pinnacle Surgery Center in Austin and has clinical practices in both Austin and Manhattan.

A native Texan, Dr. Barron received his undergraduate degree in Engineering with honors from the University of Texas at Austin, where he was a Tau Beta Pi. He was awarded his medical degree from Tulane University, where he also completed his orthopedic surgery residency, receiving multiple honors during medical school and residency. He was awarded fellowships in shoulder surgery at Columbia-Presbyterian Hospital and hand surgery at Roosevelt Hospital. Dr. Barron has been teaching and conducting research for his entire career and has numerous peer-reviewed journal publications, book chapters, and national presentations.

Dr. Barron is a member of multiple professional societies, including the American Academy of Orthopedic Surgeons, American Shoulder and Elbow Surgeons, American Society for Surgery of the Hand, and New York Society for Surgery of the Hand, for which he served as Treasurer (2007-08) and President (2011-2012). Dr. Barron was a Fordham University Team Physician from 2002-2014 and has been a treating doctor for the New York Philharmonic Orchestra and Metropolitan Opera for the past 17 years. He is a consultant for the New Jersey Devils NHL team. He previously held academic teaching positions in Orthopedic Surgery at Columbia College of Physicians and Surgeons from 1998-2014, and the Mt. Sinai Icahn School of Medicine from 2014-2015. He was a Senior Attending Physician in the Department of Orthopedic Surgery at St. Luke's-Roosevelt Hospital Center from 1999-2015, and a Senior Attending Hand/Upper Extremity Surgeon at the CV Starr Hand Surgery Center at Roosevelt Hospital, the oldest teaching hand service in the country, from 1996 through 2015.

In 2017, Dr. Barron founded the Musician Treatment Foundation. This nonprofit is the first of its kind, in scope and breadth, and is dedicated to facilitating free upper limb orthopedic care for professional musicians when they cannot afford the care they need. MTF created a nationwide Physicians for Musicians (P4M) network of over 60 like-minded doctors in dozens of cities across the country so that injured musicians can seek care both at home and on the road. In eight years, MTF has helped hundreds of injured musicians with care valued at over \$3 million. Many of those musicians have shared their experience of a potentially career-ending injury and how MTF helped them get care to keep the music playing.

WEDNESDAY, AUGUST 26

- 12:00 pm – 5:00 pm **Meeting Registration**
- 12:00 pm – 5:00 pm **Exhibitor Setup**
- 1:00 pm – 5:00 pm **Board of Directors Meeting**

THURSDAY, AUGUST 27

- 6:00 am – 7:00 am **Scientific Poster & ePoster Session**
Presenters are available to answer questions
- 7:00 am – 7:20 am **Presentation of Colors, Welcome and Opening Remarks**
CAPT Marlene DeMaio, Medical Corps, US Navy (ret), MD, EdD, COS President
Paul Celestre, MD, Scientific Program Chair

Symposium 1 – Horse Sense: Learning from Horses. Advancements in Equine Health Care and How it Translates to Our Patients
Moderator: CAPT Marlene DeMaio, Medical Corps, US Navy (ret), MD, EdD
*CME Credit not available

- 7:20 am – 7:25 am Introduction
CAPT Marlene DeMaio, Medical Corps, US Navy (ret), MD, EdD
- 7:25 am – 7:45 am Veterinary Insights to Equine Welfare and Safety at Churchill Downs
William Farmer, DVM, Equine Medical Director, Churchill Downs Incorporated
- 7:45 am – 8:05 am TBD
- 8:05 am – 8:15 am Questions
- 8:15 am – 8:35 am **Focused Breakfast Presentation**
*CME Credit not available
- 8:45 am – 9:05 am **BREAK — Please visit exhibits**

Symposium 2 – Jockey Health Care Program
Moderator: Brian M. Grawe, MD, Cincinnati College of Medicine

- 9:05 am – 9:25 am Jockey Health Care Program Panel Discussion
Jennifer FitzPatrick, MD, Colorado State University – Pueblo
William Farmer, DVM, Equine Medical Director, Churchill Downs Incorporated
Victor J. Kremser, DO, Norton Sports Health Performance & Wellness Center
- 9:25 am – 9:30 am Questions
- 9:30 am – 9:50 am How the Organized Care of Performance Athletes Improves Outcomes and Patient Health
Victor J. Kremser, DO, Norton Sports Health Performance & Wellness Center
- 9:50 am – 10:00 am When the Doctor is the Program
Jennifer FitzPatrick, MD, Colorado State University – Pueblo
- 10:00 am – 10:10 am Questions

Symposium 3 – Reimagining Hand Surgery Training: Legacy, Mastery, and the Future of Specialization
Moderator: Rodrigo Moreno, MD, Kleinert Kutz Hand Care Center

- 10:10 am – 10:25 am Kleinert and Kutz: Vision, Innovation, and Global Influence
Rodrigo Moreno, MD, Kleinert Kutz Hand Care Center
- 10:25 am – 10:40 am Flexor Tendon Surgery before and after Kleinert
Dan Mass, MD, University of Illinois
- 10:40 am – 10:55 am Education Debate: A Pro Early Specialization
Amit Gupta, MD, Norton Healthcare
- 10:55 am – 11:10 am Education Debate: Anti Early Specialization
Brendan J. MacKay, MD, Texas Tech Physicians
- 11:10 am – 11:20 am Questions

- 11:20 am – 11:40 am **BREAK — Please visit exhibits**
- 11:40 am – 12:40 pm **Rapid Fire Sessions 1A – 1E**
- 12:40 pm – 1:10 pm **Focused Lunch Presentation**
*CME Credit not available
- 1:10 pm – 1:40 pm **Dessert Break with Exhibitors**
- Symposium 4 – Promoting Excellence in Your Practice: Updates from the Experts**
Moderator: Frederick C. Flandry, MD, FACS, Hughston Clinic
- 1:40 pm – 1:50 pm Bony Metastasis: Risk Factors, Presentation, Workup, and Management
R. Lor Randall, MD, University of California, Davis
- 1:50 pm – 2:00 pm Bony Metastasis: Imaging of Bony Metastasis
Shawn Adams, MD, Norton Neuroscience Institute
- 2:00 pm – 2:10 pm Questions
- 2:10 pm – 2:20 pm Intentional Hypotension in Spine Surgery
Steven D. Glassman, MD, Norton Leatherman Spine Institute
- 2:20 pm – 2:30 pm Intentional Hypotension in Shoulder Surgery
Guido Marra, MD, Rush University
- 2:30 pm – 2:40 pm Questions
- 2:40 pm – 3:00 pm **Debate: Timing of External Fixation with Vascular Injury**
- 2:40 pm – 2:50 pm Pro: External Fixation before Vascular Repair
Greg Della Rocca, MD, PhD, University of Missouri
- 2:50 pm – 3:00 pm Con: External Fixation before Vascular Repair
Jana M. Davis, MD, Penn State Bone and Joint Institute
- 3:00 pm – 3:10 pm Questions / Discussion
- General Session 1: Dr. & Mrs. Elmer Nix Ethics Award**
Moderator: CAPT Marlene DeMaio, Medical Corps, US Navy (ret), MD, EdD
- 3:10 pm – 3:15 pm Introduction
CAPT Marlene DeMaio, Medical Corps, US Navy (ret), MD, EdD
- 3:15 pm – 3:50 pm Dr. and Mrs. Elmer Nix Ethics Awardee
Mary Lloyd Ireland, MD, University of Kentucky College of Medicine, UK Healthcare Sports Medicine Clinic
- 3:50 pm – 4:10 pm **BREAK — Please visit exhibits**
- Symposium 5 – Interpreting and Implementing Multifaceted Clinical Practice Guidelines (CPG)**
Moderator: Daniel K. Guy, MD, MS, Emory University
- 4:10 pm – 4:20 pm AAOS CPG: Thromboprophylaxis
Paul Celestre, MD, Norton Leatherman Spine Institute
- 4:20 pm – 4:30 pm AAOS CPG: Pediatric Long Bone Fractures
COL (ret) Kathleen A. McHale, US Army, MD, MSED, Uniformed Services University of the Health Sciences
- 4:30 pm – 4:40 pm AAOS CPG: Knee Osteoarthritis, Non-Operative Aspects
Carla Scanzello, MD, PhD, University of Pennsylvania
- 4:40 pm – 4:50 pm AAOS CPG: Knee Osteoarthritis, Surgical Management
Joseph W. Green, MD, Louisville Institute of Orthopaedics
- 4:50 pm – 5:00 pm AAOS CPG: Prevention of Surgical Site Infections after Major Trauma: The Lower Extremity
Paul J. Juliano, MD, Penn State Hershey Medical Center
- 5:00 pm – 5:10 pm Discussion

- 6:00 am – 7:00 am **Scientific Poster & ePoster Session**
Presenters are available to answer questions.
- 7:00 am – 8:00 am **Rapid Fire Sessions 2A – 2E**
- 8:05 am – 8:25 am **Focused Breakfast Presentation**
*CME Credit not available
- 8:35 am – 8:55 am **BREAK — Please visit exhibits**
- 8:55 am – 9:00 am **Announcements**
Paul Celestre, MD, Scientific Program Chair
- Symposium 6 – Should We Train Surgeons or Leaders? Innovation, Judgment, and Accountability in Modern Hand Surgery**
Moderator: Alfonso Mejia, MD, MPH, University of Illinois Medical College
- 9:00 am – 9:15 am Incorporating Innovation Safely and Intentionally
Robert R. Slater Jr., MD, Private practice, Folsom, CA and Clinical Professor, University of California, Davis
- 9:15 am – 9:30 am From Competence to Accountability: Training Fellows for Ownership of Outcomes
Steven Grindell, MD, Medical College of Wisconsin
- 9:30 am – 9:45 am Teaching Clinical Judgment in an Era of Expanding Indications and Options
Mark Gonzalez, MD, PhD, University of Illinois College of Medicine
- 9:45 am – 10:00 am Preparing Fellows for the System They Will Lead
Alfonso Mejia, MD, MPH, University of Illinois Chicago College of Medicine
- 10:00 am – 10:30 am Questions/Discussion
- Symposium 7 – Translational Research**
Moderator: George Muschler, MD, Cleveland Clinic
- 10:30 am – 10:38 am OREF Award Lecture: Excellence in Orthopaedic Advancement
TBD
- 10:38 am – 10:46 am OREF Award Lecture: Excellence in Orthopaedic Advancement
TBD
- 10:46 am – 10:54 am Current Concepts: Where are We Now? Current Treatments Using Cell Biology and Future Developments for Your Practice
George Muschler, MD, Cleveland Clinic
- 10:54 am – 11:00 am Questions / Discussion
- 11:00 am – 11:20 am **BREAK — Please visit exhibits**
- Symposium 8 – Innovation that Elevates Clinical Excellence**
Moderator: Ira Kirschenbaum, MD, Bronx Healthcare System
- 11:20 am – 11:30 am Quantifying the Manual Motor Examination
Joseph H. Schwab, MD, MS, Cedars-Sinai Medical Center
- 11:30 am – 11:40 am The Accidental Inventor: Negative Pressure For Closed Wound Healing and Tissue Regeneration.



- 20 Year Follow-up with Anecdotes.
Stephen K. Bubbs, MD, FAAOS, MDD
Regenerative LLC
- 11:40 am – 11:50 am A New Approach to Orthopaedic Journals
Ira Kirschenbaum, MD, Bronx Healthcare System
- 11:50 am – 12:00 pm Questions / Discussion
- General Session 2 – Presidential Guest Speaker**
Moderator: CAPT Marlene DeMaio, Medical Corps, US Navy (ret), MD, EdD *CME Credit not available
- 12:00 pm – 12:05 pm Introduction
CAPT Marlene DeMaio, Medical Corps, US Navy (ret), MD, EdD
- 12:05 pm – 12:40 pm Spacesuits and Surgical Suits: Parallel Paths in Human Protection and Contamination Containment
Cathleen Lewis, PhD, Smithsonian Institution's National Air and Space Museum
- 12:40 pm – 1:10 pm **Focused Lunch Presentation**
*CME Credit not available
- 1:10 pm – 1:40 pm **Dessert Break with Exhibitors**
- Symposium 9 – Wellness for Providers**
Moderator: Nicholas DiNubile, MD, MedFit Education Foundation
- 1:40 pm – 1:55 pm Health Optimization Built for the Demands of a Loaded OR Schedule
Michael Coval, BS, Coval Fitness
- 1:55 pm – 2:10 pm Ergonomics
Molly A. Hartzler, MD, Wake Forest University
- 2:10 pm – 2:25 pm Radiation Safety
John R. Dimar, MD, Norton Leatherman Spine Institute
- 2:25 pm – 2:40 pm Buddy Aid: When Sadness is a Diagnosis
TBD
- 2:40 pm – 2:50 pm Questions / Discussion
- General Session 3 – George W. Brindley, MD Lecturer**
- 2:50 pm – 2:55 pm Introduction
George W. Brindley, MD, University of Texas
- 2:55 pm – 3:25 pm Solipsism, Soliloquies, and Syllogism: Patient Words and Music AI Cannot Hear
O. Alton Barron, MD, NYU Langone Medical Center
- 3:25 pm – 3:45 pm **BREAK — Please visit exhibits**
- Symposium 10 – Advances in Spine Surgery Translate to Excellence in Clinical Practice**
Moderator: Steven D. Glassman, MD, Norton Leatherman Spine Center
- 3:45 pm – 3:53 pm Spine Registry and Your Practice
Steven D. Glassman, MD, Norton Leatherman Spine Center
- 3:53 pm – 4:01 pm Preoperative Bone Health Optimization
John R. Dimar, MD, Norton Leatherman Spine Center
- 4:01 pm – 4:09 pm Understanding Contemporary Orthopaedic Surgery Literature
Leah Y. Carreon, MD, MSc, Norton Leatherman Spine Center
- 4:09 pm – 4:17 pm The Future of Spine Surgery
Jeffrey L. Gum, MD, Norton Leatherman Spine Center
- 4:17 pm – 4:25 pm Questions / Discussion



6:00 am – 7:00 am	Scientific Poster Session Presenters are available to answer questions
7:00 am – 7:30 am	COS Business Meeting *CME Credit not available
7:30 am – 7:35 am	Announcements Paul Celestre, MD, Scientific Program Chair
Symposium 11 – Mass Casualty – Gun Violence, Part 1. Responding to External Events	
Moderator: Alfonso Mejia, MD, MPH, University of Illinois College of Medicine	
7:35 am – 7:47 am	Definitions and Background Alfonso Mejia, MD, MPH, University of Illinois College of Medicine
7:47 am – 7:59 am	Priorities Day of Event Craig Roberts, MD, MBA, University of Louisville Medical Center
7:59 am – 8:11 am	Planning for the Day It Comes to Your Area Andrew N. Pollak, MD, University of Maryland Medical System
8:11 am – 8:23 am	Lessons Learned from Las Vegas Christopher Fischer, MD, Desert Surgical Associates
8:23 am – 8:35 am	Questions / Discussion
8:35 am – 9:05 am	Breakfast with Exhibitors
Symposium 12 – Your Office Matters	
Moderator: Wayne A. Johnson, MD, Asst Clinical Professor Orthopaedic Surgery OUHSC, Chief Orthopedics OKC VAHC	
9:05 am – 9:13 am	Nurse Navigation Vanessa Chambers, RN, BSN, Care for Lives
9:13 am – 9:21 am	Artificial Intelligence Christian A. Péan, MD, Duke University
9:21 am – 9:29 am	Optimizing Patient Satisfaction and Engagement Brian M. Grawe, MD, University of Cincinnati College of Medicine
9:29 am – 9:35 am	Questions / Discussion

General Session 4 – Resident Paper Presentations	
Moderator: Afshin E. Razi, MD, Maimonides Medical Center	
9:35 am – 10:10 am	Abstract Presentations
General Session 5 – Presidential Guest Speaker Michelle D. Miller, PhD	
Moderator: CAPT Marlene DeMaio, Medical Corps, US Navy (ret), MD, EdD	
10:10 am – 10:15 am	Introduction CAPT Marlene DeMaio, Medical Corps, US Navy (ret), MD, EdD
10:15 am – 10:50 am	Advancements in Adult Learning Michelle D. Miller, PhD, Northern Arizona University
General Session 6 – Presidential Address and Turnover	
Moderator: CAPT Marlene DeMaio, Medical Corps, US Navy (ret), MD, EdD	
10:50 am – 11:40 am	Leadership CAPT Marlene DeMaio, Medical Corps, US Navy (ret), MD, EdD
11:40 am – 12:10 pm	Introduction of 2026-2027 President Alfonso Mejia, MD, University of Illinois Chicago
12:10 pm	Final Announcements
1:00 pm – 2:00 pm	“Fireside Chat” with Dr. Michelle D. Miller Meet Dr. Miller in person and chat with her in a relaxed environment. Bring your comments and questions.
1:00 pm – 3:30 pm	Medical Student and Resident Educational Breakout Sessions
1:00 pm – 3:30 pm	Own the Bone Session Take charge of bone health – attend this AOA-hosted certificate course. Earn approximately 8 hours of AMA PRA Category 1 Credits™, and 8 hours of Category A nursing contact hours for full participation of this event. PreRegistration Required.

Don't miss our Meet the Speaker webinars. Information coming soon!

WEDNESDAY, AUGUST 26

- 12:00 pm – 5:00 pm **Meeting Registration**
- 12:00 pm – 5:00 pm **Exhibit Setup**
- 12:00 pm – 8:00 pm **Speaker Ready Room**
- 1:00 pm – 5:00 pm **Board Meeting**

THURSDAY, AUGUST 27

- 6:00 am – 8:00 pm **Speaker Ready Room**
- 6:00 am – 5:00 pm **Meeting Registration**
- 6:30 am – 5:00 pm **Technical Exhibits, Continental Breakfast, Coffee Breaks & Daily Drawing**
- 8:30 am – 10:00 am **Spouse/Guest and Children's Hospitality Breakfast**
All guests are invited to gather for breakfast! Relax and enjoy a leisurely start to the day while connecting with old friends and new.
Price: Included in Registration Fee or \$30 Unregistered Adult Guest | \$20 Unregistered Child (5-17)
- 11:30 am – 2:30 pm **Louisville Legends: Downtown Derby City Food, Booze & History Tour**
Take a delicious walk through the heart of downtown Louisville and explore the culinary legends that shaped Bourbon City. As you stroll along historic Whiskey Row and Museum Row, you'll taste must-try Louisville dishes like the iconic Hot Brown, Derby Pie, Modjeskas, bourbon truffles, and more. Along the way, uncover the stories of Louisville's most iconic figures - from Muhammad Ali to Louisville Slugger and the Kentucky Derby - on a tour that's part history, part foodie bucket list, and all Louisville!
Price: \$185 per person
- 5:30 pm – 7:00 pm **President's Welcome & Exhibitor Reception**
Join the COS and its exhibitors to kick off the evening with drinks and hors d'oeuvres.
Price: Free for all Meeting Attendees

FRIDAY, AUGUST 28

- 6:00 am – 8:00 pm **Speaker Ready Room**
- 6:00 am – 4:25 pm **Meeting Registration**
- 6:30 am – 4:25 pm **Technical Exhibits, Continental Breakfast, Coffee Breaks & Daily Drawing**
- 8:30 am – 10:00 am **Spouse/Guest and Children's Hospitality Breakfast**
All guests are invited to gather for breakfast! Relax and enjoy a leisurely start to the day while connecting with old friends and new.
Price: Included in Registration Fee or \$30 Unregistered Adult Guest | \$20 Unregistered Child (5-17)
- 1:00 pm – 3:00 pm **Sip & Style: Derby Hat Making**
Discover the rich history, craftsmanship, and cultural significance of the hats of Louisville. Sip on a glass of wine as you unleash your creativity during a hands-on hat-making experience in preparation for Derby Night at Churchill Downs. During this interactive visit to a local milliner's shop, all materials will be provided as you design your own one-of-a-kind hat or fascinator - perfect for embracing the iconic style of the Kentucky Derby later in the evening!
Price: Fascinator - \$110 per person | Men's Fedora - \$200 per person | Women's Flat-brimmed Hat - \$200 per person



7:00 pm – 10:00 pm

Derby Night at Churchill Downs

Enjoy an unforgettable evening at Churchill Downs as COS members gather for a lively reception in one of Kentucky's most iconic settings. Take in the atmosphere of this legendary venue while connecting with colleagues over a famous mint julep. The highlight of the night will be a special live performance by the COS Band, bringing energy and entertainment to a memorable Derby-inspired evening.

Requested Attire: Guests are encouraged to wear 1920s-inspired cocktail attire

Price: Included in Registration Fee or \$100 Unregistered Adult Guest | \$30 Unregistered Child (5-17)



SATURDAY, AUGUST 29

6:00 am – 3:30 pm

Speaker Ready Room

6:00 am – 12:10 pm

Meeting Registration

6:30 am – 12:10 pm

Technical Exhibits, Continental Breakfast, Coffee Breaks & Daily Drawing

8:30 am – 10:00 am

Spouse/Guest and Children's Hospitality Breakfast

All guests are invited to gather for breakfast! Relax and enjoy a leisurely start to the day while connecting with old friends and new.

Price: Included in Registration Fee or \$30 Unregistered Adult Guest | \$20 Unregistered Child (5-17)



1:00 pm – 3:30 pm

Medical Student & Resident Educational Sessions

1:00 pm – 3:30 pm

Own the Bone Session

Orthopaedic practices across the U.S. are taking charge of bone health to address the most common disease affecting bones – osteoporosis. Take advantage of this AOA certificate course, the Own the Bone Symposium, where you will hear from orthopaedic surgeons, APPs, and other experts doing this work in orthopaedic practices across the country and learn the clinical skills and business rationale for your ortho service line. Earn approximately 8 hours of AMA PRA Category 1 Credits™, and 8 hours of Category A nursing contact hours for full participation of this event.

Price: Free for Registered APP Attendees (PreRegistration required)



1:30 pm – 3:00 pm

Behind the Bar Cocktail Making Class at Angel's Envy Distillery

Step into the world of bourbon craftsmanship with an exclusive cocktail-making experience at Angel's Envy Distillery. Located in the heart of downtown Louisville, this immersive session invites you to learn the art of crafting both classic and contemporary bourbon cocktails under the guidance of an expert mixologist. Whether you're a seasoned bourbon enthusiast or new to the spirit, this interactive class offers a perfect blend of education, flavor, and fun, all against the backdrop of one of Louisville's most celebrated distilleries.

Price: \$75 per person





Omni Louisville

400 S 2nd St
Louisville, KY 40202

Reservation Deadline: August 3, 2026

At Omni Louisville Hotel, experiences are tailored to the history and rhythm of the city. Take a dip in the heated rooftop pool, dine with family or bowl with friends while sipping signature cocktails at Pin + Proof, a Prohibition-style speakeasy. Relax at the full-service Mokara Spa or enjoy built-in entertainment and uninterrupted connectivity in one of 612 charming guest accommodations.

This downtown Louisville hotel is steps from the Kentucky International Convention Center and plenty of things to do in the city. Main Street, Fourth Street Live, Whiskey Row Distilleries and Louisville Slugger Museum & Factory are all less than a mile away. You'll also be a quick drive away from Churchill Downs, home of the Kentucky Derby, and University of Louisville.

Transportation Information

Closest Airports

Louisville Muhammad Ali International Airport (SDF) – 7 miles
Cincinnati/Northern Kentucky International Airport (CVG) – 105 miles
Lexington Blue Grass Airport (LEX) – 72 miles

Transportation

Uber and Lyft are readily available from all airports.

Parking

Valet Parking: \$45 per night

Additional public self-parking options are available directly behind the hotel and can be accessed from 3rd Street. These garages do not have direct access into the hotel. Please be prepared to walk 1-2 blocks, depending upon the garage you choose. Rates vary based upon the garage, but you can expect rates to range between \$15 and \$27 per night without in & out privileges.



Annual Meeting Registration Form

Clinical Orthopaedic Society's 114th Annual Meeting

August 26-29, 2026 | Omni Louisville | Louisville, KY
 www.cosociety.org | Phone: 888-695-0515 | Fax: 410-494-0515

Name	Degree	Sub-Specialty
Company/Institution		Department
Address	City	State ZIP
Office Phone	Email Address	

Physician/Allied Health Registration Fee Includes:

Scientific Sessions, Scientific Poster & ePoster Sessions, Symposia, Continental Breakfasts, Workshops, Breaks, the President's Welcome Reception on Thursday evening, and Derby Night at Churchill Downs on Friday night.

Spouse/Guest Registration Fee Includes:

The President's Welcome Reception on Thursday evening, Derby Night at Churchill Downs on Friday night, and Hospitality Breakfasts on Thursday, Friday and Saturday.

#	Registrant Category	Fee
	COS Member Physician	\$895
	NEW 2026 COS Member Physician	\$448
	Non Member Physician - Includes 1 year free COS membership	\$995
	Emeritus Member	\$345
	Active Duty Military Physician	\$200
	Physician Daily Rate - Th Fri Sat	\$400
	APP (CRNP, RN, BSN, PA) Entire Meeting	\$495
	APP (CRNP, RN, BSN, PA) Daily Rate - Th Fri Sat	\$295
	Athletic Trainer	\$200
	Resident/Fellow	\$175
	Medical Student	\$150
	Spouse/Guest	\$225
	Child Guest (5-17 years old)	\$35
	Child Guest (under 5)	Free

TOUR/ACTIVITY CANCELLATION POLICY

Full refund will be granted if a cancellation is made prior to 30 business days before the meeting date. No refund will be guaranteed within 30 business days of the meeting. COS will attempt to sell unwanted tickets on a first-come, first-served basis. If COS successfully sells your unwanted ticket, you will receive a full refund of the ticket cost.

COS reserves the right to cancel an activity if the minimum number of participants has not purchased tickets prior to 30 business days before the meeting date.

#	Tours/Activities	Fee
	Downtown Food, Booze & History Tour - Thu 8/27 (\$185)	
	Derby Hat Making - Fascinator - Fri 8/28 (\$110)	
	Derby Hat Making - Men's Fedora - Fri 8/28 (\$200)	
	Derby Hat Making - Women's Flat-Brimmed Hat - Fri 8/28 (\$200)	
	Cocktail Making Class at Angel's Envy Distillery - Sat 8/29 (\$75)	

ONLY complete the section below for UNREGISTERED spouses, guests and children who wish to attend the events. These events are already included for registered spouses, guests and children.

#	Unregistered Guest Events	Fee
	Spouse/Guest Breakfast - Adult - Thu 8/27 (\$30)	
	Spouse/Guest Breakfast - Child (5-17) - Thu 8/27 (\$20)	
	President's Welcome Reception - Thu 8/27 (Free)	
	Spouse/Guest Breakfast - Adult - Fri 8/28 (\$30)	
	Spouse/Guest Breakfast - Child (5-17) - Fri 8/28 (\$20)	
	Derby Night at Churchill Downs - Adult - Fri 8/28 (\$100)	
	Derby Night at Churchill Downs - Child (5-17) - Fri 8/28 (\$30)	
	Spouse/Guest Breakfast - Adult - Sat 8/29 (\$30)	
	Spouse/Guest Breakfast - Child (5-17) - Sat 8/29 (\$20)	

Please provide the information below for each of your adult guests so we can include their name badges in your registration packet.

Spouse/Guest Name	City	State
Guest Name	City	State
Guest Name	City	State
Guest Name	City	State

- I would like to opt out of receiving promotional emails.
- Do not share my information with third party vendors.

CANCELLATION POLICY: Full refund (less \$50 administrative fee) will be granted if a cancellation is made prior to 10 business days before the meeting date; a 50% refund if canceled between 5 and 10 business days before the meeting date. No refund will be granted within 5 business days of the meeting, or anytime thereafter.

SPECIAL NEEDS: If you have hearing, vision or mobility impairment and need appropriate accommodations in order to participate fully in this activity, check here and notify us by August 1, 2026. You will be contacted by the COS Management Company, DTMS, to discuss your needs.

Saturday Afternoon Breakout Program Registration

I will attend the Breakout Program below:

Resident Breakout
 Medical Student Breakout
 Own the Bone

Physician/APP Registration Fee \$ _____
 Guest Registration Fees \$ _____
 Tours/Activities Fees \$ _____
TOTAL \$ _____

- Check Enclosed (payable to Clinical Orthopaedic Society)
- Charge my: Visa MasterCard American Express

Credit Card Number	Exp Date	CW
Name on Card		
Billing Address		
City	State	ZIP



Clinical
Orthopaedic
Society

110 West Road, Suite 227
Towson, MD 21204

See you in Louisville

114th COS Annual Meeting
August 26-29, 2026 | Omni Louisville

