

AOSSM

Annual Meeting **2016**

The Broadmoor • Colorado Springs, CO
July 7–10, 2016



PRELIMINARY
PROGRAM



The American Orthopaedic
Society for Sports Medicine

AOSSM

Annual Meeting 2016

The Broadmoor • Colorado Springs, CO
July 7 – 10, 2016



Allen F. Anderson MD
President



Kurt P. Spindler MD
2016 Program Chair

Don't miss AOSSM's 2016 Annual Meeting, July 7 – 10, 2016 in Colorado Springs, Colorado. This beautiful setting at the base of the Rocky Mountains at The Broadmoor will be an unprecedented learning experience. Kurt P. Spindler MD, 2016 Program Chair, and his committee have created an exciting and engaging meeting that incorporates three concurrent sessions, integrated surgical skills demonstrations, and enhanced afternoons of learning. A few key program highlights include:

- Presidential Guest Speaker, Sam Rutigliano, former Cleveland Browns head coach and ESPN Analyst
- Live surgical skills learning on pediatric ACLR tunnels, hip arthroscopy, biceps tendon repair, and chondral focal defects
- Round table case-based discussions on articular cartilage lesions, revision ACL, patella femoral instability, revision shoulder instability, large rotator cuff tear, and hip pathology
- 27 instructional courses
- 63 posters and afternoon discussions with the authors
- More than 50 scientific podium presentations covering the latest sports medicine research along with marketing and managing your practice, measuring patient outcomes, and roles of the team physician in return-to-play decisions
- Afternoon Medical Publishing Group Workshop

If you've never been to Colorado Springs or even if you have, there is no shortage of activities for the whole family, including Cheyenne Mountain Zoo, Garden of the Gods, Cave of the Winds, Manitou Incline, Pikes Peak, Royal Gorge, U.S. Olympic Training Center, hiking, horseback riding, and river rafting down the Arkansas River, just to name a few! Our meeting format is especially designed for attendees and their families to enjoy time together and participate in all that Colorado has to offer while still networking with colleagues and collaborating on ways to manage sports medicine issues and treatments.

Our Thursday opening reception will be held outdoors on the West Lawn of The Broadmoor. This fun, family-friendly ending to the first official day of the meeting will reconnect you with friends and colleagues. In addition, you'll need to grab your cowboy boots and jeans for our annual family party this year, which will be held on Saturday night around the outdoor pool at The Broadmoor. You won't want to miss master trick roper Loop Rawlins and magician Doc Eaton, along with a mechanical bull, mining sluice, and the Quick Draw Saloon Shoot Out. Horses, cattle, birds of prey, and socialized ambassador wolves will also be on hand to interact with and learn about their important roles in the Rocky Mountains.

We look forward to seeing you out West this upcoming July for the best in sports medicine education, research, and fellowship. For more information and to register, please visit www.sportsmed.org/aossmimis/annualmeeting. See you in Colorado Springs!

Allen F. Anderson MD

President



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To learn more about corporate partnerships, please contact Judy Sherr at judy@aooss.org or 847/655–8651.

CONFERENCE AGENDA



PROGRAM AT A GLANCE

In addition to the topics listed below by day, each session contains 3–5 podium presentations featuring the latest research in sports medicine.

THURSDAY, JULY 7

Instructional Courses	6:45am–8:15am
Exhibits	7:30am–12:30pm
General Session	8:30am–3:45pm

MORNING GENERAL SESSION

SHOULDER INSTABILITY OUTCOMES

Assessment of Bi-Polar Lesions, Management of Hill Sachs

Decision Making: Shoulder Instability

PATELLA FEMORAL

Troubleshooting MPFL – Getting it Right the First Time

MENISCUS

Summary of Meniscus with ACL

CONCURRENT SESSION A

ACL

One Biologic Approach to ACL Surgery

Panel Discussion: Management of Failed ACL

CONCURRENT SESSION B

OVERHEAD ATHLETE

The Science of Return to Sport

Panel Discussion: Adolescent Elbow

CONCURRENT SESSION C

THE BUSINESS OF SPORTS MEDICINE

Optimizing Exposure for Your Practice: Web-based Marketing and Social Media

Maximizing Ancillary Revenue Opportunities for Your Practice

ASC in the Changing Healthcare Environment: Why You Should Own One

Working in an Integrated Healthcare System: Advantages and Disadvantages

Doing It All: Maximizing Your Efficiency for Improved Productivity

AFTERNOON GENERAL SESSION

FOOT AND ANKLE

Studies on Injury Prevention

HIP ARTHROSCOPY OUTCOMES

FAI and the High-Level Athlete

How Do You Judge Outcomes of Hip Arthroscopy

Afternoon Workshops

AOSSM Medical Publishing Group Reviewers' Workshop

12:45pm–2:15pm

NIH Reviewer Information Session

4:00pm–5:00pm

FRIDAY, JULY 8

Instructional Courses	6:45am–8:15am
Exhibits	7:30am–12:30pm
General Session	8:30am–12:30pm
New: Round Table Case-Based Discussions	1:00pm–2:00pm

MORNING GENERAL SESSION

TEAM PHYSICIAN OUTCOMES

Stress Fractures

Return-to-Play Assessment: Can We Quantify?

OREF Presentation

Presidential Address

Hall of Fame Award Presentation

CONCURRENT SESSION A

PREVENTION OF INJURIES

STOP Sports Injuries Program

FIFA 11+

CONCURRENT SESSION B

HAND INJURIES FOR THE TEAM PHYSICIAN

Elbow

Wrist

Metacarpals

Fingers

Panel Discussion: Sideline Guidelines

CONCURRENT SESSION C

TEAM PHYSICIANS CONTROVERSIES/MMA INJURIES

Spine Boarding: Helmet On or Off?

Out-of-State Team Physician

Panel Discussion: Mixed Martial Arts Injuries

NEW: ROUND TABLE CASE-BASED DISCUSSIONS*

Articular Cartilage Lesions

Revision ACL

Patella Femoral Instability

Revision Shoulder Instability

Large Rotator Cuff Tears

Hip Pathology

Young Sports Medicine

Team Physician

PCL

Meniscus Repair

*Additional registration fee

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PROGRAM AT A GLANCE

SATURDAY, JULY 9

Instructional Courses	6:45am–8:15am
Exhibits	7:30am–12:30pm
General Session	8:30am–5:00pm
Guided Poster Tours	12:30pm–2:00pm

MORNING GENERAL SESSION

ACLR OUTCOMES

LIVE Surgical Demonstration: Pediatric ACLR Tunnels

Post Traumatic OA ACLR

Panel Discussion: How to Improve ACLR Outcomes

Presidential Guest Speaker

Robert E. Leach Sports Medicine Leadership Award

CONCURRENT SESSION A

HIP

Hip Instability

LIVE Surgical Demonstration: Hip Arthroscopy

CONCURRENT SESSION B

ROTATOR CUFF—PART 1

What I've Learned about Posterior Instability

Arthroscopic Shoulder Instability: Optimizing for Success

Successful Latarjet (video)

CONCURRENT SESSION C

POLICY AND EDUCATION

Policies That Will Effect You Within the Next Year

Alternative Payment Model

Role of Advocacy in Healthcare Change

Board Certification Process

AFTERNOON GENERAL SESSION

ROTATOR CUFF OUTCOMES—PART 2

LIVE Surgical Demonstration: Arthroscopic Treatment of the Biceps Tendon—Superpec and Subpec

Panel Discussion: Augmentation of Rotator Cuff—Non-arthritic (video-based)

KNEE ARTICULAR CARTILAGE

New Frontiers

LIVE Surgical Demonstration: Chondral Focal Defects

SUNDAY, JULY 10

Instructional Courses	6:45am–8:15am
General Session	8:30am–11:30am

MORNING GENERAL SESSION

Traveling Fellows Presentations

OUTCOME MEASURES SYMPOSIUM

Value and Meaning of Patient Outcomes

Value of Registry, Cohort Studies, and RCT

Panel Discussion: How Do You Implement in Your Practice?

INJURY EPIDEMIOLOGY AND PREVENTION

Update on Prevention of External Heat Illness

Measuring Return-to-Play Performance

PRESIDENTIAL GUEST SPEAKER

Sam Rutigliano

Character is a Matter of Choice

Saturday, July 9



Sam Rutigliano is the former NFL coach of the Cleveland Browns (1978–1984). He received the honor of NFL Coach of Year in 1980 and compiled a 47–50 record with the Browns. After his career with the Browns, he served as an analyst for NBC Sports and ESPN for three years. In 1988, he became Head Coach at Liberty University, and retired in 1999. After that,

Mr. Rutigliano went on to be an assistant coach for NFL Europe. Beginning in 2005, he became a Browns analyst in Cleveland for NBC, and also for SportsTime Ohio. In 2011, he moved to ABC TV to become a Browns analyst.

One of Rutigliano's greatest accomplishments was developing the "Inner Circle," an anonymous substance abuse support group for Cleveland Browns players. In 2007, Rutigliano was given the National Control on Alcoholism and Drug Dependence's Bronze Key Award for his work with Inner Circle.

THURSDAY, JULY 7, 2016

6:45am–8:15am **Instructional Courses**

7:30am–12:30pm **Exhibits**

8:30am–3:45pm **General Session**

8:30am–8:35am **Welcome**

Allen F. Anderson MD
Tennessee Orthopaedic Alliance, Nashville, TN
Kurt P. Spindler MD
Cleveland Clinic, Cleveland, OH

**Morning General Session—Shoulder Instability Outcomes
Broadmoor Hall A**

8:35am–9:45am **Moderators:**

Stephen F. Brockmeier MD
University of Virginia, Charlottesville, VA
John M. Tokish MD
Steadman Hawkins Clinic of the Carolinas,
Greenville, SC

8:35am–8:40am **Paper 100: Biomechanical Comparison of Acute Hill-Sachs Reduction and Remplissage to Treat Complex Anterior Instability: The Potential Benefits of Anatomic Reconstruction**

Joshua S. Dines MD¹, Grant Garcia MD¹,
Michelle H. McGarry MS², Thay Q. Lee PhD²,
Ryan Degen MD¹
¹Hospital for Special Surgery, New York, NY
²VA Healthcare System & University of California,
Irvine, Long Beach, CA

8:40am–8:45am **Paper 101: Outcomes of the Remplissage Procedure and Its Effects on Return to Sports: Average Five-Year Follow-Up**

Joseph N. Liu MD¹, Grant Garcia MD¹,
Hao-Hua Wu BA², G. Russell Huffman MD, MPH²,
John D. Kelly MD²
¹Hospital for Special Surgery, New York, NY
²University of Pennsylvania, Philadelphia, PA

8:45am–8:55am **Assessment of Bi-Polar Lesions, Management of Hill Sachs**

Matthew T. Provencher MD
Massachusetts General Hospital, Boston, MA

8:55am–9:05am **Question and Answer**

9:05am–9:10am **Paper 102: A Simple Population-Based Finite Element Model Eliminates the Need for Patient-Specific Models to Predict Instability of the Shoulder**

Anthony Miniaci MD¹, Piyush Walia DEng¹,
Stephen D. Fening PhD², Morgan H. Jones MD¹
¹Cleveland Clinic, Cleveland, OH
²Case Western Reserve University, Cleveland, OH

9:10am–9:15am

Paper 103: Outcomes After Arthroscopic Bankart Repair: First Time vs. Recurrent Dislocators

Tyler J. Marshall MD¹, Jose F. Vega²,
Marcelo BP Siqueira MD², Jonathan David Gelber MD²,
Robert Cagle MD², Paul M. Saluan MD²
¹Alabama Orthopedic Spine and Sports Medicine
Associates, Birmingham, AL
²Cleveland Clinic, Cleveland, OH

9:15am–9:20am

Paper 104: Factors Affecting Return to Baseline Function at Six Months following Anterior Shoulder Instability Surgery: A Multi-Center Orthopaedic Outcomes Network (MOON) Shoulder Group Cohort Study

Carolyn M. Hettrich MD, MPH¹,
Joseph Buckwalter MD, PhD¹, Brian R. Wolf MD, MS¹,
Matthew Bollier MD¹, Shoulder Group MOON²,
Natalie Glass PhD¹
¹University of Iowa Hospitals and Clinics, Iowa City, IA
²Vanderbilt University, Nashville, TN

9:20am–9:35am

Decision Making: Shoulder Instability

Robert A. Arciero MD
University of Connecticut Health Center,
Farmington, CT

9:35am–9:45am

Question and Answer

**General Session—Patella Femoral
Broadmoor Hall A**

9:45am–10:15am **Moderators:**

Elizabeth A. Arendt MD
University of Minnesota, Minneapolis, MN
David DeJour MD
Lyon-Ortho-Clinic, Lyon, France

9:45am–9:50am

Paper 105: Anisometry of Medial Patellofemoral Ligament Reconstruction in the Setting of Patella Alta and Increased Tibial Tubercle–Trochlear Groove (TT-TG) Distance

Lauren H. Redler MD¹, Kathleen N. Meyers MS¹,
Jacqueline Munch MD², Elizabeth R. Dennis MD³,
Joseph Nguyen MPH¹, Beth E. Shubin Stein MD¹
¹Hospital for Special Surgery, New York, NY
²Oregon Health & Science University, Portland, OR
³Columbia University Medical Center, New York, NY

9:50am–9:55am

Paper 106: A Novel Injective Approach For Osgood-Schlatter Disease: A Prospective Randomized Double-Blind Study

Junsuke Nakase MD, PhD¹, Hitoaki Numata MD¹,
Takeshi Oshima¹, Yasushi Takata MD¹,
Hiroyuki Tsuchiya MD, PhD¹
¹Kanazawa University Hospital, Kanazawa, Japan

THURSDAY, JULY 7, 2016

- 9:55am–10:00am **Paper 107: Tibial Tubercle Osteotomy for Anterior Knee Pain: Mid-Term Result and Analysis of Prognostic Factors**
Davide Bonasia¹, Umberto Cottino MD², Giorgio Governale MD¹, Valeria Cherubini MD², Federico Dettoni MD¹, Matteo Bruzzone MD¹, Roberto Rossi MD¹, Federica Rosso MD¹
¹AO Mauriziano Umberto I, Torino, Italy
²University of Torino, Torino, Italy
- 10:00am–10:15am **Troubleshooting MPFL–Getting it Right the First Time**
David R. Diduch MD
University of Virginia, Charlottesville, VA
- General Session–Meniscus Broadmoor Hall A**
- 10:15am–10:45am **Moderators:**
Richard D. Parker MD
Cleveland Clinic Foundation, Cleveland, OH
Matthew J. Matava MD
Washington University Orthopedics, Chesterfield, MO
- 10:15am–10:20am **Paper 108: Clinical Outcomes of Medial Meniscus Posterior Root Tears: High Rates of Subsequent Surgery and Worsening Arthritis at Five-Year Follow-Up**
Aaron John Krych MD¹, Patrick J. Reardon BS¹, Ayoosh Pareek BS¹, Logan Peter¹, Diane L. Dahm MD¹, Bruce A. Levy MD¹, Michael J. Stuart MD¹
¹Mayo Clinic, Rochester, MN
- 10:20am–10:25am **Paper 109: Arthroscopic Repair of Posterior Meniscal Root Tears: Comparing Outcomes of Medial and Lateral Root Repairs**
Lauren Matheny MPH¹, Samuel G. Moulton BA¹, Chase S. Dean MD¹, Robert F. LaPrade MD, PhD²
¹Steadman Philippon Research Institute, Vail, CO
²The Steadman Clinic, Vail, CO
- 10:25am–10:30am **Paper 110: Do Age and Weightbearing Films Affect Lateral Joint Space and Fibular Height Measurements in Patients with Discoid Lateral Meniscus?**
Matthew D. Milewski MD¹, Ryan Krochak MD², Andrew J. Duarte BA³, Joseph Marchese MD³, James Lee Pace MD⁴, Alexander M. Broom BA⁴, Matthew Solomito PhD¹
¹Connecticut Children's Medical Center, Farmington, CT
²Maimonides Medical Center, New York, NY
³University of Connecticut, Farmington, CT
⁴Children's Hospital Los Angeles, Los Angeles, CA

- 10:30am–10:40am **Summary of Meniscus with ACL**
Annunziato Amendola MD
Duke Sports Science Institute, Durham, NC
- 10:40am–10:45am **Question and Answer**
- 10:45am–11:30am **Break**

Concurrent Session A–ACL Broadmoor Hall A

- 11:30am–12:30pm **Moderator:**
Darren L. Johnson MD
University of Kentucky Sports Medicine, Lexington, KY
- 11:30am–11:40am **One Biologic Approach to ACL Surgery**
Martha M. Murray MD
Boston Children's Hospital, Boston, MA
- 11:40am–11:45am **Paper 111: Sex, Age, and Graft Size as Predictors of ACL Re-tear: A Multivariate Logistic Regression of a Cohort of 503 Athletes**
Duong Nguyen MD, FRCSC, MSc, FAAOS, CIME¹
¹William Osler Health System/McMaster University, Toronto, ON, Canada
- 11:45am–11:50am **Paper 112: Rehabilitation Predictors of Clinical Outcome following Revision ACL Reconstruction**
Rick W. Wright MD¹, MARS Group¹
¹Washington University, St Louis, MO
- 11:50am–11:55am **Paper 113: Excellence Award–Anatomic Anterolateral Ligament Reconstruction of the Knee Leads to Overconstraint at Any Fixation Angle**
Jason Schon BS¹, Alex Brady MSc¹, Gilbert Moatshe MD¹, Raphael Cruz MD¹, Jorge Chahla MD¹, Grant Dornan MSc¹, Travis L. Turnbull PhD¹, Lars Engebretsen MD, PhD²
¹Steadman Philippon Research Institute, Vail, CO
²Oslo University Hospital-Ullevaal, Oslo, Norway
- 11:55am–12:00pm **Question and Answer**
- 12:00pm–12:20pm **Management of Failed ACL Panel**
Moderator: Darren L. Johnson MD
University of Kentucky Sports Medicine, Lexington, KY
Panelists: Robert A. Arciero MD
University of Connecticut, Farmington, CT
Matthew J. Matava MD
Washington University Orthopedics, Chesterfield, MO
Rick W. Wright MD
Washington University Dept of Orthopaedic Surgery, St Louis, MO
- 12:20–12:30pm **Question and Answer**

THURSDAY, JULY 7, 2016

**Concurrent Session B – Overhead Athlete
International Center North**

- 11:30am–12:30pm Moderator:**
Michael G. Ciccotti MD
Rothman Institute, Philadelphia, PA
Grant L. Jones MD
The Ohio State University Sports Medicine Center,
Columbus, OH
- 11:30am–11:35am Paper 114: Open vs. Arthroscopic Tennis Elbow Release: Randomized Controlled Trial**
Jeff Leiter MSc, PhD¹, Tod Clark MD¹,
Sheila McRae PhD¹, James Dubberley MD¹,
Peter B. MacDonald MD, FRCS¹
¹Pan Am Clinic, Winnipeg, MB, Canada
- 11:35am–11:40am Paper 115: Vascularity Visualized by Doppler Sonography as a Predictor of Healing Potential of the OCD of the Humeral Capitellum**
Yoshikazu Kida MD¹, Toru Morihara MD²,
Yoshihiro Kotoura MD³, Tsuyoshi Sukenari MD²,
Ryuhei Furukawa MD², Yukichi Kabuto MD²,
Okihiro Onishi MD², Masataka Inami MD²,
Takashi Tsujihara MD², Tatsuya Hojo MD⁴,
Hiroyoshi Fujiwara MD², Toshikazu Kubo MD²
¹Fukuchiyama City Hospital, Kyoto, Japan
²Kyoto Prefectural University of Medicine,
Kyoto, Japan
³Nantan General Hospital, Kyoto, Japan
⁴Doshisha University, Kyoto, Japan
- 11:40am–11:45am Paper 116: MRI Predictors of Failure in Non-Operative Management of Ulnar Collateral Ligament Injuries in Professional Baseball Pitchers**
Salvatore Frangiamore MD, MS¹,
Thomas Sean Lynch MD²,
Michael Derek Vaughn MD¹, Lonnie Soloff ATC³,
Mark S. Schickendantz MD¹
¹The Cleveland Clinic Sports Health Ctr.,
Cleveland, OH
²Columbia Orthopaedics, New York, NY
³Cleveland Indians, Cleveland, OH
- 11:45am–11:50am Paper 117: The Prevalence and Clinical Characteristics of Medial Epicondyle Apophysitis in Juvenile Baseball Player – Ultrasonographic Assessment of 2,926 Cases**
Kenichi Otoshi MD, PhD¹
¹Fukushima Medical University, Fukushima, Japan
- 11:50am–12:00pm NATA Exchange Lecture: The Science of Return to Sport**
Thomas W. Kaminski PhD
University of Delaware, Newark, DE

- 12:00pm–12:20pm Case-Based Panel: Adolescent Elbow**
Moderator: Christopher S. Ahmad MD
Columbia University, New York, NY
Panelists: James R. Andrews MD
Andrews Research and Education Foundation, Gulf Breeze, FL
Mininder S. Kocher MD, MPH
Boston Children's Hospital, Boston, MA
- 12:20pm–12:30pm Question & Answer**

**Concurrent Session C – The Business of Sports Medicine
International Center South**

- 11:30am–12:30pm Moderator:**
Nikhil N. Verma MD
Rush University Medical Center, Midwest
Orthopaedics, Chicago, IL
- 11:30am–11:35am Introduction:**
Nikhil N. Verma MD
Rush University Medical Center, Midwest
Orthopaedics, Chicago, IL
- 11:35am–11:43am Optimizing Exposure for Your Practice: Web-based Marketing and Social Media**
Kristen Mapstone
eMedical Media, Dallas, TX
- 11:43am–11:51am Maximizing Ancillary Revenue Opportunities for Your Practice**
Charles A. Bush-Joseph MD
Rush University Medical Center,
Midwest Orthopaedics, Chicago, IL
- 11:51am–11:59am ASC in the Changing Healthcare Environment: Why You Should Own One**
Dan Tasset, Chairman
Nueterra Capital, Leawood, KS
- 11:59am–12:07pm Working in an Integrated Healthcare System: Advantages and Disadvantages**
Mark S. Schickendantz MD
Cleveland Clinic Sports Health, Cleveland, OH
- 12:07pm–12:15pm Doing It All: Maximizing Your Efficiency for Improved Productivity**
Brian J. Cole MD, MBA
Rush University Medical Center,
Midwest Orthopaedics, Chicago, IL
- 12:15pm–12:30pm Question & Answer**
- 12:45pm–2:00pm AOSSM Medical Publishing Workshop**

THURSDAY, JULY 7, 2016

**General Session—Foot and Ankle
Broadmoor Hall A**

- 2:00pm–2:50pm** **Moderators:**
Eric Giza MD
UC Davis Medical Group, Sacramento, CA
Kirk Anthony McCullough MD
Orthopaedic and Sports Medicine
Clinic of Kansas City, Leawood, KS
- 2:00pm–2:05pm** **Paper 118: Practice Patterns in the Care of Acute Achilles Tendon Ruptures: Is There an Association with Level I Evidence?**
Ujash Sheth MD¹, David Wasserstein MD²,
Rahim Moineddin PhD¹,
Richard Jenkinson MD, MSc, FRCSC¹,
Hans Kreder MD, MSc, FRCSC², Susan Jaglal PhD¹
¹University of Toronto, Toronto, ON, Canada
²Sunnybrook Health Sciences Centre,
Toronto, ON, Canada
- 2:05pm–2:10pm** **Paper 119: Treatment of Low-Energy Lisfranc Joint Injuries in a Young Athletic Population: Primary Arthrodesis Compared with Open Reduction and Internal Fixation**
Grant Cochran MD¹, Christopher Renninger¹,
Trevor Tompane², Joseph Bellamy¹, Kevin Kuhn¹
¹Naval Medical Center San Diego, San Diego, CA
²Emory University, Atlanta, GA
- 2:10pm–2:15pm** **Paper 121: Repair of Ankle Syndesmosis: A Biomechanical Analysis of Three Current Repair Techniques**
Jonathan D. Backus MD², Thomas O. Clanton MD²,
Scott R. Whitlow MD², Brady T. Williams, BS¹,
Daniel J. Liechti MD¹, Grant J. Dornan¹,
Adriana Saroki BS¹, Travis Lee Turnbull, PhD¹,
Robert LaPrade MD, PhD²,
¹Steadman Philippon Research Institute, Vail, CO
²The Steadman Clinic, Vail, CO, USA.
- 2:15pm–2:25pm** **Question and Answer**
- 2:25pm–2:45pm** **Studies on Injury Prevention**
Kirk Anthony McCullough MD
Orthopaedic and Sports Medicine
Clinic of Kansas City, Leawood, KS
Eric Giza MD
UC Davis Medical Group, Sacramento, CA
- 2:45pm–2:50pm** **Question and Answer**

**General Session—Hip Arthroscopy Outcomes
Broadmoor Hall A**

- 2:50pm–3:55pm** **Moderators:**
Asheesh Bedi MD
University of Michigan, Ann Arbor, MI
Bryan T. Kelly MD
Hospital for Special Surgery, New York, NY
- 2:50pm–2:55pm** **Paper 122: Recreational Athletes Return to Sport at a Comparable Rate to Elite Athletes Following Hip Arthroscopy for Femoroacetabular Impingement**
Alexander E. Weber MD¹, Benjamin Kuhns MS¹,
Gregory Cvetanovich MD¹, David Levy MD¹,
Shane Jay Nho MD, MS¹
¹Rush University Medical Center, Midwest
Orthopaedics, Chicago, IL
- 2:55pm–3:00pm** **Paper 123: Predictors of Length of Career Following Hip Arthroscopy for Femoroacetabular Impingement in Professional Hockey Players**
Travis Menge MD¹, Karen K. Briggs MPH, MBA¹,
Marc J. Philippon MD¹
¹Steadman Philippon Research Institute, Vail, CO
- 3:00pm–3:05pm** **Paper 124: The Fate of the Contralateral Hip in Femoroacetabular Impingement: Rates and Predictors of Short-term Symptom Development**
Jeffrey J. Nepple MD¹, Craig Louer MD¹,
John C. Clohisy MD¹
¹Washington University, St. Louis, MO
- 3:05pm–3:20pm** **FAI and the High-Level Athlete**
Bryan T. Kelly MD
Hospital for Special Surgery, New York, NY
- 3:20pm–3:25pm** **Paper 125: Clinical Outcomes Following Arthroscopic Micro-Fracture of the Hip**
John P. Begly MD¹, Brian Capogna MD¹,
Michael K. Ryan MD¹, Thomas Youm MD²
¹New York University Langone Hospital for Joint
Diseases, New York, NY
²RVC Orthopaedics PC, New York, NY
- 3:25pm–3:30pm** **Paper 126: Survivorship of Primary Hip Arthroscopy in New York State: A Population-Based Study**
Ryan Degen MD¹, Ting Pan MPH¹,
Danyal H. Nawabi MD¹, Anil S. Ranawat MD¹,
Bryan T. Kelly MD¹, Stephen Lyman PhD¹
¹Hospital for Special Surgery, New York, NY
- 3:30pm–3:45pm** **How Do You Judge Outcomes of Hip Arthroscopy?**
Richard 'Chad' Mather MD
Duke University Medical Center, Durham, NC
- 3:45pm–3:55pm** **Question and Answer**
- 4:00pm–5:00pm** **NIH Reviewer Information Session**

FRIDAY, JULY 8, 2016

6:45am–8:15am **Instructional Courses**
 7:30am–12:30pm **Exhibits**
 8:30am–12:30pm **General Session**
 1:00pm–2:00pm **New: Round Table Case-Based Discussions**

**General Session – Team Physician Outcomes
 Broadmoor Hall A**

8:30am–9:25am Moderators:
 Diane L. Dahm MD
 Mayo Clinic, Rochester, MN
 Eric C. McCarty MD
 CU Sports Medicine, University of Colorado
 School of Medicine, Boulder, CO

8:30am–8:40am Stress Fractures
 Christopher C. Kaeding MD
 The Ohio State University, Columbus, OH

8:40am–8:45am Paper 127: Comparison of Femoral Neck Stress Fractures in Pediatric vs. Young Adult Athletes
Benton E. Heyworth MD¹, Bridget Quinn MD¹,
 Lauren Ehrlichman MD¹, Sarah Bixby MD¹,
 Kathryn Ackerman MD, MPH¹, Yi-Meng Yen MD¹,
 Matthew John Boyle MD¹, Young-Jo Kim MD¹,
 Michael B. Millis MD¹
¹Boston Children's Hospital, Boston, MA

8:45am–8:50am Paper 128: Return-to-Play After Shoulder Instability Surgery in NCAA Division I Intercollegiate Football Athletes
Richard J. Robins MD¹,
 Jimmy Hoshang Daruwalla MD²,
 John W. Xerogeanes MD², Patrick E. Greis MD³
¹US Air Force Academy, Colorado Springs, CO
²Emory University, Atlanta, GA
³University of Utah Orthopaedic Center,
 Salt Lake City, UT

8:50am–8:55am Paper 129: Pectoralis Major Tendon Repair: Clinical Outcomes, Return to Sport, and Incidence of Second Surgery
Frank A. Cordasco MD, MS¹, Ryan Degen MD¹,
 Gregory Thomas Mahony BA¹, Nicholas Tsouris¹
¹Hospital for Special Surgery, New York, NY

8:55am–9:00am Paper 130: Hamstring Injuries in Major and Minor League Baseball: Are They Preventable?
James Zachazewski DPT, MS², Holly J. Silvers MPT¹,
 Bernard Li PT³, Lynn Snyder-Mackler PhD⁴,
 Stephanie Insler BA¹, Christopher S. Ahmad MD⁵,
 Bert R. Mandelbaum MD⁶
¹Santa Monica Sports Medicine Foundation, Los Angeles, CA
²Massachusetts General Hospital, Boston, MA
³Los Angeles Angels of Anaheim, Anaheim, CA
⁴University of Delaware, Newark, DE
⁵Columbia University, New York, NY
⁶Santa Monica Orthopaedic and Sports Medicine,
 Santa Monica, CA

9:00am–9:05am Paper 131: Does Choosing Autograft Hamstring vs. Patellar Tendon by Gender, Sport, Level of Competition, or Laxity in High School and College-Aged Athletes Improve KOOS, IKDC or Marx?
Laura J. Huston MS¹, Emily Reinke PhD²,
 Michael W. Kattan PhD³, Kevin Chagin MS³,
 Kurt P. Spindler MD³
¹Vanderbilt Orthopaedic Institute, Nashville, TN
²Vanderbilt University, Nashville, TN
³Cleveland Clinic, Cleveland, OH

9:05am–9:10am Question and Answer

9:10am–9:25am Return-to-Play Assessment: Can We Quantify?
 Timothy E. Hewett PhD, FACSM
 Mayo Clinic, Rochester, MN

9:25am–9:30am OREF Presentation

9:30am–9:35am Presidential Introduction
 Robert A. Arciero MD
 University of Connecticut Health Center,
 Farmington, CT

9:35am–10:05am Presidential Address
 Allen F. Anderson MD
 Tennessee Orthopaedic Alliance, Nashville, TN

10:05am–10:30am Hall of Fame Presentation

10:30am–10:45am Business Meeting

10:45am–11:30am Break

FRIDAY, JULY 8, 2016

Concurrent Session A – Prevention of Injuries Broadmoor Hall A

- 11:30am–12:30pm Moderators:**
Seth C. Gamradt MD
University of Southern California, Los Angeles, CA
Robin Vereeke West MD
University of Pittsburgh Medical Center,
Pittsburgh, PA
- 11:30am–11:40am STOP Sports Injuries Program**
James R. Andrews MD
Andrews Research and Education Foundation,
Gulf Breeze, FL
- 11:40am–11:45am Paper 132: Incidence, Mechanisms, and Severity of Game-Related High School Football Injuries Across Artificial Turf Systems of Various Infill Weight**
Michael Clinton Meyers PhD¹
¹Idaho State University, Pocatello, ID
- 11:45am–11:50am Paper 133: A Wearable Neuromuscular Device Reduces ACL Injury Risk in Female Soccer Athletes**
Michael John Decker PhD¹, Matthew Shaw¹, Casey Maddan¹, Julie Campbell¹, Bradley Davidson¹
¹University of Denver, Denver, CO
- 11:50am–11:55am Paper 134: Expected Time to Return to Athletic Participation Following Stress Fracture in Division I Collegiate Athletes**
Marissa Jamieson MD¹, Sonsecharae Everson ATC¹, Courtney Siegel ATC¹, Timothy Lee Miller MD¹
¹The Ohio State University, Columbus, OH
- 11:55am–12:10pm Question and Answer**
- 12:10pm–12:20pm FIFA 11+**
Bert R. Mandelbaum MD
Santa Monica Orthopaedic & Sports Medicine Group,
Santa Monica, CA
- 12:20pm–12:30pm Question and Answer**

Concurrent Session B Hand Injuries for the Team Physician International Center North

- 11:30am–12:30pm Moderators:**
Thomas Sean Lynch MD
Columbia Orthopaedics, New York, NY
Douglas R. Weikert MD
Vanderbilt Orthopaedics, Nashville, TN
- 11:30am–11:40am Elbow**
- 11:40am–11:50am Wrist**
- 11:50am–12:00pm Metacarpals**

- 12:00pm–12:10pm Fingers**
- 12:10pm–12:20pm Question and Answer**
- 12:20pm–12:30pm Sideline Guidelines**

Concurrent Session C Team Physicians Controversies/MMA Injuries International Center South

- 11:30am–12:30pm Moderators:**
Cory M. Edgar MD
University of Connecticut, Farmington, CT
Eric C. McCarty MD
CU Sports Medicine University of Colorado,
Boulder, CO
- 11:30am–11:40am Spine Boarding: Helmet On or Off?**
Robert H. Brophy IV, MD
Washington University, St. Louis, MO
- 11:40am–11:50am AMSSM Exchange Lecture: Out-of-State Team Physician (narcotics, license)**
Chad Asplund MD
The Ohio State University, Columbus, OH
- 11:50am–12:20pm Mixed Martial Arts: An Explosion in the United States**
History and Overview of MMA in the United States
Moderator: John A. Bergfeld MD
Cleveland Clinic, Cleveland, OH
Pre-Fight Examination, Unique MMA Submission Holds, Joint Locks and Choke-Out
Richard N. Weinstein MD
Westchester Health Ortho & Sports Medicine,
White Plains, NY
Problems of Extreme Weight Loss and Rapid Re-Hydration, Recognition of the Concussed Athlete who Continues to Fight Before Becoming Unconscious (knocked out)
Jonathan D. Gelber MD
Empire State Orthopedics, Bronx, NY
Association of Ringside Physicians: What is Being Done to Make this Sport Safer? Problems, Issues and Concerns, Ringside Physician Accreditation
Joseph J. Estwanik MD
Metrolina Orthopaedic & Sports Medicine Clinic,
Charlotte, NC
- 12:20pm–12:30pm Question and Answer**

FRIDAY, JULY 8, 2016

NEW: Round Table Case-Based Discussions*

- 1:00pm–2:00pm **RT1 Articular Cartilage Lesion**
Moderators: Christian Lattermann MD
 University of Kentucky Medical Ctr, Lexington, KY
 Seth L. Sherman MD
 University of Missouri, Columbia, MO
- 1:00pm–2:00pm **RT2 Revision ACL**
Moderators: Kurt P. Spindler MD
 Cleveland Clinic, Cleveland, OH
 Richard D. Parker MD
 Marymount Hospital, Chagrin Falls, OH
- 1:00pm–2:00pm **RT3 Patella Femoral Instability**
Moderator: David R. Diduch MD
 University of Virginia, Charlottesville, VA
- 1:00pm–2:00pm **RT4 Revision Shoulder Instability**
Moderator: Brian R. Wolf MD, MS
 University of Iowa Hospitals and Clinics, Iowa City, IA
 Stephen F. Brockmeier MD
 UVA Orthopaedics, Charlottesville, VA
- 1:00pm–2:00pm **RT5 Large Rotator Cuff Tear**
Moderators: Grant L. Jones MD
 Ohio State University, Columbus, OH
 Carolyn Hettrich MD, MPH
 University of Iowa, Iowa City, IA
- 1:00pm–2:00pm **RT6 Hip Pathology**
Moderators: Brian Busconi MD
 UMass Memorial Health Care, Worcester, MA
 F. Winston Gwathmey MD
 University of Virginia, Charlottesville, VA
- 1:00pm–2:00pm **RT7 Young Sports Medicine**
Moderator: Jefferson C. Brand MD
 Heartland Orthopedic Specialists, Alexandria, MN
- 1:00pm–2:00pm **RT8 Team Physician**
Moderator: Walter R. Lowe MD
 University of Texas Medical School at Houston,
 Houston, TX
- 1:00pm–2:00pm **RT9 PCL**
Moderator: Christopher D. Harner MD
 University of Texas, Houston, TX
- 1:00pm–2:00pm **RT10 Mensicus Repair**
Moderators: Steven B. Cohen MD
 Rothman Institute, Media, PA
 Geoffrey S. Baer MD, PhD
 University of Wisconsin Hospitals & Clinics

*Additional fee required

SATURDAY, JULY 9, 2016

- 6:45am–8:15am **Instructional Courses**
- 7:30am–12:30pm **Exhibits**
- 8:30am–5:00pm **General Session**
- 12:30pm–2:00pm **Guided Poster Tours**

General Session—ACLR Outcomes Broadmoor Hall A

- 8:30am–10:00am **Moderators:**
 Jo A. Hannafin MD, PhD
 Hospital for Special Surgery, New York, NY
 Eric Jason Strauss MD
 New York Hospital for Joint Diseases, New York, NY
- 8:30am–8:35am **Paper 135: Knee Hyperextension as a Predictor of Failure in Revision ACL Reconstruction: A Prospective Cohort Study**
Daniel E. Cooper MD¹, Warren R. Dunn MD, MPH²,
 Rick W. Wright MD³, Amanda Haas MA³,
 Laura J. Huston MS⁴
¹The Carrell Clinic, Dallas, TX
²University of Wisconsin, Madison, WI
³Washington University, St. Louis, MO
⁴Vanderbilt Orthopaedic Institute, Nashville, TN
- 8:35am–8:40am **Paper 136: Effect of Intraoperative Platelet-Rich Plasma Treatment on Post-Operative Donor Site Knee Pain in Patellar Tendon Autograft ACL Reconstruction: A Double-Blind Randomized Controlled Trial**
Brian L. Walters MD¹, Sarah Hobart MD²,
 David Porter MD², Daniel E. Hogan MS²,
 Malachy P. McHugh PhD², Benjamin B. Bedford MD²,
 Stephen J. Nicholas MD², Devon Klein MD, MPH²,
 Kendall Harousseau PA-C³
¹American Sports Medicine Institute, Birmingham, AL
²Lenox Hill Hospital North Shore LIJ, New York, NY
³New York Orthopedics, New York, NY
- 8:40am–8:45am **Paper 137: Multicenter Orthopaedic Outcome Network Early Anti-Inflammatory Treatment in Patients with Acute ACL Tear (MOON-AAA) Clinical Trial**
Christian Lattermann MD¹, Mary Proffitt PhD¹,
 Laura J. Huston MS², Lee Gammon MD¹,
 Darren L. Johnson MD¹, Virginia B. Kraus MD, PhD³,
 Kurt P. Spindler MD⁴
¹University of Kentucky Medical Ctr, Lexington, KY
²Vanderbilt Orthopaedic Institute, Nashville, TN
³Duke University, Durham, NC
⁴Cleveland Clinic, Cleveland, OH

SATURDAY, JULY 9, 2016

General Session – ACLR Outcomes (cont.)
Broadmoor Hall A

- 8:45am – 8:50am **Paper 138: Magnetic Resonance Imaging of Cartilage Contact and Bound Water in ACL-Deficient and ACL-Reconstructed Knees**
Geoffrey Scott Baer MD, PhD¹, Jarred Kaiser², Michael Vignos², Fang Liu PhD², Colin Robert Smith², Richard Kijowski MD², Darryl Thelen PhD²
¹University of Wisconsin Hospitals & Clinics, Madison, WI
²University of Wisconsin, Madison, WI
- 8:50am – 8:55am **Paper 139: O'Donoghue Award – Early Changes in the Knee Joint Center of Rotation during Walking Following Anterior Cruciate Ligament Reconstruction Correlate with Later Changes in Patient-Reported Outcomes**
Matthew Titchenal MS¹, Constance R. Chu¹, Jennifer C. Erhart-Hledik², Thomas P. Andriacchi¹
¹Stanford University, Stanford, CA
²VA Palo Alto, Palo Alto, CA
- 8:55am – 9:00am **Question and Answer**
- 9:00am – 9:30am **Live Surgical Demonstration: Pediatric ACLR Tunnels**
Moderator: Carl W. Nissen MD
Connecticut Children's Medical Center, Farmington, CT
Procedure: Paul M. Saluan MD
Cleveland Clinic Foundation, Cleveland, OH
- 9:30am – 9:40am **Post-Traumatic OA ACLR**
C. Benjamin Ma MD
University of California at San Francisco Medical Center, San Francisco, CA
- 9:40am – 10:00am **How to Improve ACLR Outcomes Panel**
Moderator: David R. McAllister MD
UCLA Department of Orthopaedic Surgery, Los Angeles, CA
Panelists: Lynn Snyder-Mackler PhD
University of Delaware, Newark, DE
Braden C. Fleming PhD
Brown University, Providence, RI
- 10:00am – 10:05am **Introduction of Presidential Guest Speaker**
Allen F. Anderson MD
Tennessee Orthopaedic Alliance, Nashville, TN
- 10:05am – 10:35am **Presidential Guest Speaker Character is a Matter of Choice**
Sam Rutigliano
- 10:35am – 10:45am **Robert E. Leach Sports Medicine Leadership Award**
- 10:45am – 10:50am **Presidential Medallion Exchange**
- 10:50am – 11:30am **Break**

Concurrent Session A – Hip
Broadmoor Hall A

- 11:30am – 12:30pm **Moderators:**
Marc R. Safran MD
Stanford University, Redwood City, CA
Shane Jay Nho MD, MS
Rush University Medical Center, Midwest Orthopaedics, Chicago, IL
- 11:30am – 11:35am **Paper 140: Pre-Operative Thresholds for Achieving Meaningful Clinical Improvement After Arthroscopic Treatment of Femoroacetabular Impingement**
Benedict U. Nwachukwu MD, MBA¹, Kara G. Fields MS¹, Danyal H. Nawabi MD¹, Bryan T. Kelly MD¹, Anil S. Ranawat MD¹
¹Hospital for Special Surgery, New York, NY
- 11:35am – 11:45am **Hip Instability**
Stephen Kenji Aoki MD
University of Utah, Salt Lake City, UT
- 11:45am – 11:50am **Question and Answer**
- 11:50am – 12:20pm **Live Surgical Demonstration: Hip Arthroscopy**
Moderator: Struan H. Coleman MD
Hospital for Special Surgery, New York, NY
Procedure: Richard 'Chad' Mather III, MD
Duke University Medical Center, Durham, NC
- 12:20pm – 12:30pm **Question and Answer**

Concurrent Session B – Rotator Cuff Part 1
International Center North

- 11:30am – 12:30pm **Moderators:**
Jas Chahal MD
Women's College Hospital, Toronto, ON, Canada
John E. Kuhn MD
Vanderbilt Sports Medicine, Nashville, TN
- 11:30am – 11:35am **Paper 141: Minimally Important Differences and Change Across Time in Patients Treated Surgically and Non-Surgically for Full-Thickness Rotator Cuff Tears**
Joel Joseph Gagnier ND, PhD¹, Christopher Robbins¹, Bruce S. Miller MD, MS¹
¹University of Michigan, Ann Arbor, MI
- 11:35am – 11:40am **Paper 142: Is There an Association Between the "Critical Shoulder Angle" and Clinical Outcome After Rotator Cuff Repair?**
Jacob Matthew Kirsch MD¹, Amit Nathani MD¹, Christopher Robbins¹, Joel Joseph Gagnier ND, PhD¹, Asheesh Bedi MD¹, Bruce S. Miller MD, MS¹
¹University of Michigan, Ann Arbor, MI
- 11:40am – 11:45am **Question and Answer**

SATURDAY, JULY 9, 2016

Concurrent Session B—Rotator Cuff Part 1 (cont.)
International Center North

- 11:45am–11:55am **What I've Learned about Posterior Instability**
- 11:55am–12:00pm **Question and Answer**
- 12:00pm–12:10pm **Arthroscopic Shoulder Instability: Optimizing for Success**
Felix H. Savoie MD
Tulane University, New Orleans, LA
- 12:10pm–12:15pm **Question and Answer**
- 12:15pm–12:25pm **Successful Latarjet**
Brian R. Wolf MD, MS
University of Iowa Hospitals and Clinics, Iowa City, IA
- 12:25pm–12:30pm **Question and Answer**

Concurrent Session C—Policy and Education
International Center South

- 11:30am–12:30pm **Moderators:**
Rick D. Wilkerson DO
Northwest Iowa Bone, Joint & Sports Surgeons,
Spencer, IA
Carolyn M. Hettrich MD, MPH
University of Iowa, Iowa City, IA
- 11:30am–11:40am **Policies that Will Effect You Within the Next Year**
Frederick M. Azar MD
University of Tennessee—Campbell Clinic,
Memphis, TN
- 11:40am–11:50am **Alternative Payment Model**
Thomas Friermood MD
Panorama Orthopedics & Spine Center, Golden, CO
- 11:50am–12:05pm **Role of Advocacy in Healthcare Change**
Carolyn M. Hettrich MD, MPH
University of Iowa, Iowa City, IA
- 12:05pm–12:15pm **Question and Answer**
- 12:15pm–12:25pm **Board Certification Process**
David Martin MD
Wake Forest University, Winston Salem, NC
- 12:25pm–12:30pm **Question and Answer**

Guided Poster Tours
International Center Foyer

- 12:30pm–1:15pm **Tour I**
- 1:15pm–2:00pm **Tour II**

General Session—Rotator Cuff Part 2
Broadmoor Hall A

- 2:00pm–3:35pm **Moderators:**
William N. Levine MD
Columbia-Presbyterian Medical Center, New York, NY
Mark S. Schickendantz MD
Cleveland Clinic Sports Health, Cleveland, OH
- 2:00pm–2:05pm **Paper 143: Repair Integrity and Clinical Outcomes Following Arthroscopic Rotator Cuff Repair: A Prospective, Randomized Trial of Early and Delayed Motion Protocols**
Ariel A. Williams MD¹, Mark P. Cote RPT¹,
Jessica Megan DiVenere BS¹,
Stephen Austin Klinge MD¹, Robert A. Arciero MD¹,
Augustus D. Mazzocca MD, MS¹
¹University of Connecticut Health Center,
Farmington, CT
- 2:05pm–2:10pm **Paper 144: Prospective Randomized Study of Arthroscopic Proximal vs. Open Subpectoral Biceps Tenodesis: Is One Better?**
Reuben Gobeze MD¹, Yousef Shishani MD¹,
Janice Flocken MS¹
¹The Cleveland Shoulder Institute, Cleveland, OH
- 2:10pm–2:15pm **Paper 145: Patient-Reported Outcomes for Rotator Cuff Disease—Which PRO Should You Use?**
Eric Chugh Makhni MD, MBA¹,
Jason Taizo Hamamoto BS¹, John Higgins BS¹,
Taylor Patterson¹, Anthony A. Romeo MD¹,
Nikhil N. Verma MD¹
¹Rush University Medical Center, Midwest
Orthopaedics, Chicago, IL
- 2:15pm–2:20pm **Question and Answer**
- 2:20pm–2:50pm **Live Surgical Demonstration—Arthroscopic Surgical Treatment of the Biceps Tendon—Superpec and Subpec**
Moderator: William N. Levine MD
Columbia-Presbyterian Medical Center, New York, NY
Procedure: Anthony A. Romeo MD
Rush University Medical Center, Midwest Orthopaedics,
Chicago, IL
- 2:50pm–3:00pm **Question and Answer**

SATURDAY, JULY 9, 2016

**General Session—Rotator Cuff Part 2
Broadmoor Hall A**

- 3:00pm–3:25pm **Management of Large Rotator Cuff Tears in Non-Arthritic Patients**
Moderator: Augustus D. Mazzocca MD, MS
University of Connecticut Health Center,
Farmington, CT
Panelists: Stephen S. Burkhart MD (Superior Capsule)
San Antonio Orthopedic Group, San Antonio, TX
Warren Dunn MD, MPH (Non-Operative Management)
University of Wisconsin, Madison, WI
Anthony A. Romeo MD (Tendon Transfer)
Rush University Medical Center, Midwest
Orthopaedics, Chicago, IL
Felix H. Savoie MD (Partial Marginal Convergence)
Tulane University School of Medicine,
New Orleans, LA
Asheesh Bedi MD
Domino's Farms, University of Michigan,
Ann Arbor, MI
- 3:25pm–3:35pm **Question and Answer**

**General Session—Knee Articular Cartilage
Broadmoor Hall A**

- 3:35pm–5:00pm **Moderators:**
Christian Lattermann MD
University of Kentucky Medical Ctr, Lexington, KY
Andreas H. Gomoll MD
Brigham and Women's Hospital, Chestnut Hill, MA
- 3:35pm–3:45pm **New Frontiers**
Brian J. Cole MD, MBA
Rush University Medical Center, Midwest
Orthopaedics, Chicago, IL
- 3:45pm–3:55pm **Question and Answer**

- 3:55pm–4:00pm **Paper 146: Return to Sport and Recreational Activity Following Osteochondral Allograft Transplantation in the Knee**
William Bugbee MD¹, Evan Scott Nielsen MD¹,
Julie C. McCauley MPH¹, Pamela Pulido BSN¹
¹Scripps Clinic, La Jolla, CA
- 4:00pm–4:05pm **Paper 147: Non-Operative Treatment Outcomes of Stable Juvenile Osteochondritis Dissecans Lesions of the Knee**
Frances Tepolt MD¹, Benton E. Heyworth MD¹,
Mininder S. Kocher MD, MPH¹
¹Boston Children's Hospital, Boston, MA
- 4:05pm–4:10pm **Paper 148: Risk Factors at Time of Primary ACL Reconstruction that Contribute to Significant Chondral Surface Change at Time of Revision ACL Reconstruction: A Prospective Study from the MOON and MARS Cohorts**
Christopher Kaeding MD¹, MARS Group²
¹The Ohio State University Sports Medicine Center,
Columbus, OH
²Washington University, St. Louis, MO
- 4:10pm–4:20pm **Question and Answer**
- 4:20pm–4:50pm **Live Surgical Demonstration—Chondral Focal Defects**
Moderator: Brian J. Cole MD, MBA
Rush University Medical Center, Midwest Orthopaedics,
Chicago, IL
Procedure: Mark D. Miller MD
University of Virginia, Charlottesville, VA
- 4:50pm–5:00pm **Question and Answer**

SUNDAY, JULY 10, 2016

6:45am–8:15am **Instructional Courses**

8:30am–11:30am **General Session**

**General Session
Broadmoor Hall A**

- 8:30am–8:55am** TBD
- 8:40am–8:45am** **Paper 149: Cabaud Award: Platelet Rich Plasma Activates Pro-Inflammatory Signaling Pathways and Induces Oxidative Stress in Tendon Fibroblasts**
Joshua L. Hudgens MD¹,
 Christopher Mendias PhD, ATC¹,
 Kristoffer B. Sugg MD¹, Jeremy A. Grekin MS¹,
 Jonathan P. Gumucio BS¹, Asheesh M. Bedi MD¹
¹University of Michigan, Ann Arbor, MI
- 8:45am–8:55am** **Question and Answer**
- 8:55am–9:15am** **Traveling Fellows Presentation**
- 9:15am–9:25am** **Question and Answer**

**General Session–Outcome Measures Symposium
Broadmoor Hall A**

- 9:25am–10:20am** **Moderator:**
 James J. Irrgang PhD, PT, ATC
 University of Pittsburgh Medical Center,
 Pittsburgh, PA
- 9:25am–9:40am** **Value and Meaning of Patient Outcomes**
 James J. Irrgang PhD, PT, ATC
 University of Pittsburgh Medical Center,
 Pittsburgh, PA
- 9:40am–9:55am** **Value of Registry, Cohort Studies, and RCT**
 Jon Karlsson MD, PhD
 Sahlgrenska University Hospital Molndal,
 Floda, Sweden
- 9:55am–10:10am** **Panel Discussion: How Do You Implement in Your Practice?**
 Morgan H. Jones MD
 Cleveland Clinic, Cleveland, OH
 MaCalus Vinson Hogan MD
 Pittsburgh Medical Center, Pittsburgh, PA
 Stephen Lyman PhD
 Hospital for Special Surgery, New York, NY
- 10:10am–10:20am** **Question and Answer**

**General Session–Injury Epidemiology and Prevention
Broadmoor Hall A**

- 10:20am–11:30am** **Moderators:**
 Dain Allred
 US Air Force Academy, Colorado Springs, CO
 James L. Carey MD, MPH
 University of Pennsylvania, Philadelphia, PA
- 10:20am–10:35am** **ACSM Exchange Lecture: Update on Prevention of External Heat Illness**
 Francis O'Connor MD
 Uniformed Services University, Bethesda, MD
- 10:35am–10:50am** **Measuring Return-to-Play Performance**
 Brian J. Sennett MD
 Penn Sports Medicine Center, Philadelphia, PA
- 10:50am–10:55am** **Paper 150: The Rise of Concussions in the Adolescent Population**
Alan L. Zhang MD¹, David C. Sing BS¹,
 Caitlin Marie Rugg MD¹, Brian T. Feeley MD¹,
 Carlin Senter MD¹
¹University of California, San Francisco,
 San Francisco, CA
- 10:55am–11:00am** **Paper 151: Recovery of Psychological Readiness May Differ Between Genders Following ACL Reconstruction in Adolescent Athletes**
Matthew David Milewski MD¹,
 Regina Kostyun MEd¹, Julie P. Iannicelli MS, ATC²,
 Kyle J. Kostyun MS, ATC¹, Matthew Solomito BSBE¹,
 Carl W. Nissen MD¹,
¹Connecticut Children's Medical Center,
 Farmington, CT
²University of Connecticut, Farmington, CT

SUNDAY, JULY 10, 2016

General Session – Injury Epidemiology and Prevention (cont.)
Broadmoor Hall A

- 11:00am – 11:05am **Paper 152: Quality of Movement for Athletes Six Months Post ACL – Reconstruction**
Polly deMille¹, Joseph Nguyen MPH¹, Allison Brown PT, PhD², Huong Do MA¹, Elizabeth Selvaggio¹, Theresa Chiaia PT¹
¹Hospital for Special Surgery, New York, NY
²Rutgers University, Newark, NJ
- 11:05am – 11:10am **Paper 153: Vertical Jump Test as a Functional Test after Anterior Cruciate Ligament Reconstruction**
Jin Goo Kim MD, PhD¹, Sang Bum Kim MD¹, Kyu-Sung Chung MD², Jeong Ku Ha³
¹KonKuk University Medical Center, Seoul, Korea
²KEPCO Medical Center, Seoul, Korea
³Seoul Paik Hospital, Seoul, Korea
- 11:10am – 11:15am **Paper 154: Influence of Combinations of Shoulder, Elbow, and Trunk Orientation on Elbow Joint Loads in Youth Baseball Pitchers**
Hiroshi Tanaka MS¹, Toyohiko Hayashi PhD², Hiroaki Inui MD, PhD¹, Hiroki Ninomiya MD¹, Tomoyuki Muto MD, PhD¹, Katsuya Nobuhara PhD¹
¹Nobuhara Hospital and Institute of Biomechanics, Tatsuno, Japan
²Niigata University, Niigata, Japan
- 11:15am – 11:30am **Question and Answer**
Meeting adjourns



INSTRUCTIONAL COURSES



THURSDAY, JULY 7, 2016

6:45am – 8:15am

IC101 CASE-BASED**Complex Knee Surgery**

Mark D. Miller MD, Darren L. Johnson MD,
Robert G. Marx MD, MSc, FRCSC

Three presenters share complex knee cases, including multiple ligament injuries, revision ACL reconstruction, and pediatric knee injuries, in an alternating fashion. At periodic intervals the presenter will stop and ask the other faculty and the audience to weigh in on treatment choices. Different treatment options and critical decision-making options are discussed.

Objectives:

- Discuss the rationale for timing, surgical options, and acute and chronic management of multiple ligament knee injuries
- Describe operative treatment options for pediatric knee injuries
- Detail key factors that contribute to ACL graft failure and how to avoid repeating these mistakes in revision ACL surgery
- Discuss post-operative management options in the treatment of complex knee injuries

IC102**The Specificity of the ACL Injury in the Young Athlete: Prevention, Surgical Care, and Return-to-Sport**

Bert R. Mandelbaum MD, Robert H. Brophy IV, MD, Christopher S. Ahmad MD, Mininder S. Kocher MD, MPH

Understanding the mechanisms of injury and prevention of an ACL injury in the pediatric adolescent is a challenge. Once injured it requires a multidisciplinary team that can decipher the mechanism of injury, develop pre-rehabilitation along with a specific type of surgical procedure related to the particular athlete, and a post-operative and return-to-sport program that is reflective of gender and level of participation. The purpose of this instructional course lecture is to address the progressive detail and level of specificity in this population to optimize care and result.

Objectives:

- Assess how ACL injury and re-injury in the 14- to 18-year-old athlete is significantly high and increases with level of participation and types of sport participation
- Discuss ACL injury biomechanics and how there are specific mechanisms of injury in this age group that are biomechanically and neuromuscularly based
- Discuss opportunities for modulation and prevention
- Describe surgical nuances and options in this age group that are very specific and vary with respect to degree of physal closure, gender, age, type of sport participation, and long-term goals
- Discuss return-to-sports issues and criteria of post-operative programs, including understanding of initial mechanisms of injury, rehabilitation, preventative approaches, and specific return-to-sport progressions and criteria for success and re-injury prevention

IC103**Foot and Ankle Issues Facing the Sports Medicine Surgeon**

John Jasko MD, Robert C. Schenck MD, Annunziato Amendola MD,
Kevin Willits MD, FRCS

Surveillance data from high school, college, and professional sports reveal injuries of the foot and ankle are some of the most common injuries occurring during practice and competition. While often categorized as “just a sprain,” these injuries can often cause significant limitations of performance and rank second only to knee injuries as a cause of missed games or matches. The goal of this course is to dissect common injuries of foot and ankle frequently encountered by the sports medicine physician. We will discuss the mechanism of injury, diagnosis, treatment, and return-to-play guidelines of Achilles tendon injury, ankle sprains and syndesmosis injuries, and 5th MT and navicular fractures. We will outline the relevant anatomy, surgical and nonsurgical treatment options, current data, and controversies. Also new this year, we will discuss tendon transfers for peroneal nerve injury secondary to knee dislocation.

Objectives:

- Discuss the diagnosis and treatment of foot and ankle injuries
- Discuss how to counsel players, coaches on implications for return to play and performance
- Describe how to best counsel and treat patients with peroneal nerve injury and foot drop after knee dislocation

IC104**Fix the Cuff: How to Reverse Reversomania**

Stephen S. Burkhart MD, John D. Kelly IV, MD, Alison P. Toth MD

This course will elaborate on the growing and perhaps inappropriate usage of reverse shoulder arthroplasty (RSA). Indications for repair, the value of partial cuff repair, and the significance of the subscapularis will be emphasized. The role of graft augmentation and superior capsule reconstruction will also be highlighted.

Objectives:

- Identify the skyrocketing role of RSA and discuss its legitimate applications
- Explain the importance of the role of partial repair and the critical role of the subscapularis in attaining a balanced force couple
- Discuss the role of graft and biologic augmentation as a means of compensating for tissue deficiency
- Explain the role of superior capsule reconstruction as an alternative to RSA in cases of massive retracted tears

THURSDAY, JULY 7, 2016

6:45am – 8:15am

IC105 CASE-BASED**Articular Cartilage Repair in Athletes: Current Concepts and Case Reviews**

Riley J. Williams III, MD, Deryk G. Jones MD, Aaron J. Krych MD, C. Benjamin Ma MD

This course will update attendees on the current state of knee articular cartilage repair in the United States. Moreover, athletic return to sport as an endpoint will be the focus of this course. Clinical indications, surgical techniques, postoperative rehabilitation strategies, and functional outcomes, as these relate to knee cartilage repair methods, will be presented. This is a case-based course designed to encourage an interaction and discussion between the faculty and audience.

Objectives:

- Describe the current standards of care in the treatment of articular cartilage defect of the knee using a case-based teaching approach
- Discuss the appropriate use of imaging studies in the preoperative and postoperative management of patients with articular cartilage defects of the knee
- Explain which surgical and rehabilitation strategies work best for a return to athletics
- Describe the relative advantages and disadvantages of each cartilage repair approach described. A review of the peer-reviewed literature will serve as the basis of the discussion relevant to expected surgical outcomes and indications

IC106 CASE-BASED**Shoulder Instability: Dilemmas in the Elite and In-Season Athlete**

C. Dain Allred MD, Lance E. LeClere MD, LT MC, USNR, Jonathan F. Dickens MD, Steven J. Svoboda MD

This course will focus on shoulder instability in the athlete. Cases will be taken from NCAA athletes at the US Air Force Academy, the US Naval Academy, and the US Military Academy. Emphasis will be placed on decision-making in the in-season athlete with shoulder instability. Cases will also illustrate teaching points and generate discussion regarding recurrent instability, ALPSA lesions, pan-labral injuries, glenoid bone loss, and Hill-Sachs lesions. Case solutions will include illustrations of arthroscopic and open surgical techniques for soft tissue and bony reconstructions. Strategies for non-operative and post-operative rehabilitation of shoulder instability will be presented.

Objectives:

- Discuss and understand the appropriate treatment of shoulder instability in in-season athletes
- Discuss treatment algorithms for athletes with shoulder instability, including first-time dislocations, recurrent instability, and instability with bone loss
- Describe the state-of-the-art surgical techniques for shoulder instability, including arthroscopic and open procedures. Current rehabilitation strategies will also be discussed

THURSDAY, JULY 7, 2016
6:45am – 8:15am

IC107 CASE-BASED

Unicompartmental Knee Arthritis in the Athletic Patient – Return to Sport: A Case-Based Approach

Kevin D. Plancher MD, C. Thomas Vangsness MD, Jack Farr II, MD, Thomas M. DeBerardino MD

Unicompartmental knee arthritis is a challenging disease entity in the athletic patient to successfully return patients to sporting activities. Experts will present four cases and discuss the best operative treatment regimens, including the utilization of stem cells, cartilage implantation, malalignment, and unicompartmental arthroplasty for patients with unicompartmental knee arthritis to manage expectations and outcomes. The course will discuss the indications, contraindications, advances in technology and surgical techniques, postoperative rehabilitation regimens, and complications as a result of surgical intervention to enhance the knowledge of the participant and to enable them to treat the athletic, arthritic knee successfully.

Objectives:

- Discuss the indications for operative management of unicompartmental arthritis in the active patient
- Discuss the advantages and disadvantages of surgical treatment outcomes and discuss surgical tips and tricks to yield successful outcomes
- Discuss potential complications of surgical treatment options
- Analyze and discuss the current literature surrounding the different treatment options for the athletic, arthritic knee to assist surgeons in making evidence-based decisions when treating their patients and how to avoid and address complications when they arise

IC108 CASE-BASED

Management of PCL Injuries: A Case-Based Approach

Volker Musahl MD, Asheesh Bedi MD, Christopher D. Harner MD

PCL injuries in athletes are not uncommon. Management of PCL injuries presents a unique challenge. This course will review acute and chronic PCL injuries and discuss management in a case-based format. Physical examination and advanced imaging will be presented. The decision on non-operative versus surgical management will be described in a case-based format. The role for arthroscopic approaches, open surgeries, and osteotomy will be discussed. Special focus will be given to surgical techniques and surgical management.

Objectives:

- Describe the non-operative vs. surgical management of PCL injuries
- Discuss the issues related to surgical techniques of PCL reconstruction, specifically tunnel- and inlay-based reconstructions as well as the role of osteotomy
- Explain surgical technique acute and chronic PCL injuries

FRIDAY, JULY 8, 2016
6:45am – 8:15am

IC201 CASE-BASED

The Baseball Athlete: From the Hips to the Fingertips

Thomas S. Lynch MD, Mark S. Schickendantz MD, Thomas J. Graham MD

Shoulder and elbow injuries in baseball are often publicized in the mass media; however, little attention is given to the hip and the hand. They play an important role in the baseball athlete and are often at risk for injury. The purpose of this instructional course is to aid physicians who take care of this athlete population to appropriately manage their injuries and get them back on the field. Clinical cases will be reviewed by the speakers, all of whom are currently involved in the care of professional athletes.

Objectives:

- Describe what every baseball doctor should know regarding hips
- Discuss what is normal and what is not in a thrower, when to fix a SLAP and when to tenodesis, and is GIRD really a problem
- Describe why there are so many Tommy John surgeries occurring and a practical approach to reducing this epidemic in your community
- Describe why batting and throwing cause so many injuries to fingers and how to fix them

IC202

Failed Cartilage Repair: Why and What's the Next Step?

Andreas H. Gomoll MD, Jack Farr II, MD, Brian J. Cole MD, MBA, Christian Lattermann MD

Cartilage repair is becoming increasingly common, and multiple new treatment options are available. Even with good understanding of indications and techniques for primary procedures, failure of cartilage repair occurs in approximately 20% of patients. This course will review the failure mechanisms of primary cartilage repair and discuss the indications, techniques, and outcomes of revision procedures.

Objectives:

- Identify potential failure mechanisms
- Determine which patient is a candidate for revision
- Formulate a treatment plan, including concurrent procedures
- Describe the role of the many currently available cartilage repair procedures in a revision setting

FRIDAY, JULY 8, 2016
6:45am – 8:15am

IC203 CASE-BASED

Controversies in Rotator Cuff Surgery

William N. Levine MD, Anthony A. Romeo MD, Neal S. ElAttrache MD, Charles Mitchell Jobin MD

The goals of this course are to encourage the registrants to interact in a lively, case-based style with minimal didactics and significant interaction with the faculty. Controversial topics, including approaches for rotator cuff repair (e.g., number of rows, transosseous vs. double-row suture bridge), decision-making on management of the biceps tendon and labrum, and biologic enhancement for cuff repair will be addressed.

Objectives:

- Review current trends in rotator cuff surgery and highlight controversies
- Review current trends in biologic enhancement for rotator cuff surgery
- Review current trends with management of the biceps tendon during rotator cuff surgery
- Review current trends with management of the labrum during rotator cuff surgery

IC204 CASE-BASED

The Use of Osteotomy in the Management of Complex Knee Disorders

Scott A. Rodeo MD, Thomas L. Wickiewicz MD, Thomas M. DeBerardino MD, Annunziato Amendola MD

This course will review indications for various types of osteotomy around the knee, specific types of tibial and femoral osteotomy, and pre-operative planning. Cases will be presented that illustrate the use of osteotomy in conjunction with ligament reconstruction, cartilage resurfacing, and meniscus transplantation. Cases will also include special circumstances such as tibial osteotomy to change tibial slope and femoral rotational osteotomy and trochlear osteotomy for patellar instability

Objectives:

- Review indications and techniques for tibial osteotomy and femoral osteotomy. Major teaching points will be illustrated with case examples
- Discuss use of osteotomy in conjunction with surgery for knee instability, cartilage resurfacing, and meniscus transplantation. Representative cases will be shown
- Discuss the use of osteotomy in the treatment of patellofemoral instability and patellofemoral arthrosis
- Discuss complications specific to various types of osteotomy

IC205

Recurrent Patellar Instability: How and When to Fix It and How to Avoid Complications

Beth E. Shubin Stein MD, Sabrina M. Strickland MD, Robin Vereeke West MD

Through a mix of literature, personal experience, and illustrative cases, attendees will fine tune their treatment algorithm for recurrent patellar instability. Surgical techniques and specific pearls will be discussed to gain confidence in treating these challenging problems. Specific topics that will be covered: 1) MPFL reconstruction: How and when to do it and how to avoid disasters. 2) The tibial tubercle: When and how much to move it and what happens when it doesn't work. 3) Resulting cartilage injury: The black hole. What to do when instability is no longer the only problem. Other sub-topics to be covered include how treatment changes in the setting of a skeletally immature patient as well as rehabilitation and return to play.

Objectives:

- Identify those patients who are candidates for isolated MPFL reconstruction vs. those patients who would benefit from a tibial tubercle transfer in addition to the MPFL
- Recognize and treat common complications relating to patellar instability surgery
- Identify and treat cartilage defects resulting from patellar instability
- Describe appropriate post-operative rehab guidelines and return-to-play parameters

FRIDAY, JULY 8, 2016

6:45am – 8:15am

IC206 CASE-BASED**Strategies to Diagnose and Address Rotational Laxity of the Knee: A Case-Based Approach**

Alan M. Getgood MBChB, MD, Volker Musahl MD, Andrew Pearle MD, Robert F. LaPrade MD, PhD, Asheesh Bedi MD

The patient with the high-grade rotationally unstable ACL-deficient knee is a challenge that we all face in our practice. There may be a number of causes why this high-grade rotational laxity is present, which will be discussed during this course. The aim of this course is to break the high-grade rotationally unstable knee into its component parts, giving surgeons a clear and concise pragmatic approach of how to address this difficult problem. Talks will be delivered with case examples throughout to illustrate the key principals. The following important topics will be addressed: examination and diagnosis of clinical deficiencies and how these relate to investigations; performance of a straight-forward, reproducible ACL reconstruction based on current evidence; assessment of the deficient pathological structures and how to tackle them surgically, including: meniscus medial side lateral side. By the end of this course, participants will be provided with a systematic approach to treating the grossly unstable ACL-deficient knee that will be easy to adopt irrespective of practice setting.

Objectives:

- Interpret the examination of the grossly rotationally unstable ACL-deficient knee, relating the clinical findings to biomechanical deficiencies and diagnostic tests
- Perform a reproducible ACL reconstruction with current concepts based upon up-to-date evidence base
- Recognize and diagnose specific meniscal lesions, including posterior root tears and 'ramp' lesions of the posteromedial meniscus. Repair techniques will be demonstrated
- Diagnose and appropriately surgically address medial- and lateral-sided injuries

IC207 CASE-BASED**Controversies in Hip Arthroscopy: A Case-Based Approach**

Aaron John Krych MD, Bruce A. Levy MD, Marc J. Philippon MD, Benjamin G. Domb MD

Hip arthroscopy has become a key technique in the care of active patients with femoroacetabular impingement and pre-arthritic extra-articular and intra-articular conditions of the hip. As such, a basic understanding of the fundamentals of hip arthroscopy is critical to achieving successful outcomes and avoiding complications. In this course, a systematic case-based approach to patient selection, imaging assessment, skillful surgical planning, and intraoperative execution will be emphasized, including treatment of proximal femoral and acetabular deformity, labral tears, and capsular management. The role for open or combined surgical approaches will also be discussed, and some gender- and sport-specific considerations reviewed.

Objectives:

- Gain a systematic approach to evaluating the active patient with hip pain: history, physical exam, and imaging
- Recognize and select appropriate patients for hip arthroscopy procedures
- Discuss the detailed preoperative planning and successful intraoperative execution of planned bony resection on the acetabular and femoral sides, labral repair, and capsular management
- Describe pearls and pitfalls of how to avoid complications during hip arthroscopy procedures

IC208 CASE-BASED**Challenging Cases in Shoulder Instability: Decision Making and Technical Solutions**

John M. Tokish MD, Richard J. Hawkins MD, FRCSC, Jeffrey S. Abrams MD, Robert A. Arciero MD

A case-based approach to the critical questions and answers in shoulder instability with an emphasis on technical solutions.

Objectives:

- Describe the advantages and disadvantages to the different surgical approaches of shoulder instability
- Apply the available literature to case scenarios that can translate into improvements in clinical care
- Discuss the technical aspects of surgical procedures directed toward stabilization of the shoulder and the role of revision surgery in anterior instability

SATURDAY, JULY 9, 2016

6:45am – 8:15am

IC301

Biological Treatments for Orthopaedic InjuriesCecilia Pascual-Garrido MD, Jorge Chahla MD,
Robert F. LaPrade MD, PhD, Johnny Huard PhD

This course will provide an update of the biologic treatments in the field of orthopaedics. Significant advances in biologics have been accompanied by parallel challenges, including: indications, implications of FDA regulation, and the complexity of translating basic sciences into clinical practice. The use of minimally manipulated progenitor cells, regeneration and augmentation in soft tissue repair, and the future of novel scaffolds and bioprinting in the field of orthopaedics will be discussed. Discussion of where we are now and what we need to do to improve biologic treatments will be discussed, as well.

Objectives:

- Explain the challenges of translating basic science into clinical practice. Clinician and industrial perspective will be discussed. How do we need to work with the FDA to advance the clinical use of stem cells
- Describe the role of PRP and minimally manipulated progenitors cells as a therapy for orthopaedic injuries. Evaluating clinical outcomes from biological treatments
- Describe the role of biologics as an augmentation of soft tissue repair along with the new frontiers of cartilage, tendon, and muscle repair
- Discuss novel scaffolds and the future of bioprinting

IC302 **CASE-BASED****Meniscus Tear: Simple to Complex: Innovative Solutions to Complex Problems: A Case-Based Approach**

Darren L. Johnson MD, Mark D. Miller MD, Matthew J. Matava MD

Using case-based examples, this course will cover each and every meniscal problem one encounters, from simple meniscectomy to complex isolated meniscal repair. Presenters will also cover how to treat meniscal injuries combined with other ligament problems within the knee.

Objectives:

- Explain how to diagnosis meniscal injury patterns using MRI and physical exam
- Describe meniscal anatomy on the tibial plateau in relation to the cruciate ligaments and how to approach all meniscal injuries in a safe anatomic zone
- Review pearls for performing simple meniscectomy and meniscal repair. All types of meniscal repair will be reviewed and outlined
- Discuss biological alternatives to assist with meniscal repair

IC303

Challenges and Controversies in the Separated ShoulderJohn M. Tokish MD, Richard J. Hawkins MD, FRCSC,
Peter B. MacDonald MD, FRCSC, Stefan John Tolan MD

A state-of-the-art discussion on decision making and technical challenges and solutions in getting the separated shoulder “right.” Discussion will focus on who and when to operate and how to get this “operation waiting to fail” to be a reproducible success.

Objectives:

- Identify the technical challenges and best solutions in patients with separated shoulders
- Identify the type and timing of surgical intervention

IC304 **CASE-BASED****Surgical Considerations in Revision ACL Reconstruction**Michael J. Alaia MD, Freddie H. Fu MD, Robert A. Arciero MD,
Laith M. Jazrawi MD

This course reviews practical information and technical tips for surgeons who perform revision anterior cruciate ligament (ACL) reconstruction. The case presentations highlight decision-making skills and solutions to common challenging problems.

Objectives:

- Discuss preparation and indications for a revision ACL reconstruction as well as trying to determine cause of failure of initial ACL reconstruction
- Discuss and address concomitant pathology to reduce failure rate (i.e., multiligamentous instability, malalignment, and meniscal insufficiency)
- Review technical tips for surgeons “How to approach the revision ACL on the day of surgery”

SATURDAY, JULY 9, 2016

6:45am – 8:15am

IC305 CASE-BASED**From Cradle to Grave: How to Deal with a Symptomatic Patellofemoral Joint**

Christian Lattermann MD, David DeJour MD, Daniel W. Green MD, Elizabeth A. Arendt MD

This course is designed to answer the preeminent questions regarding operative and non-operative treatment of patellofemoral instability and pain. Specifically, proximal alignment procedures have become extraordinarily popular and can yield excellent outcomes; however, more in-depth concepts have to be understood by the treating physician to assure best treatment results. Aim of this course is to introduce these additional concepts in an easy and understandable fashion using a case-based approach. Current treatment concepts for acute and chronic patella dislocations, instability, and early to late osteoarthritis in children and adults will be thoroughly covered. Careful evaluation of the current evidence base will guide the discussion and presentation of techniques and concepts presented. The attendee will leave this course with a comprehensive toolbox of safe and evidence-based concepts to treat difficult patellofemoral problems in children and adults.

Objectives:

- Discuss non-operative evaluation and treatment concepts and show the value and limits of non-operative treatment options
- Discuss clinical findings and imaging to correctly evaluate and diagnose patellofemoral instabilities after acute and chronic patella dislocations and their treatment options. This will provide the participant with a firm basis to understand and treat these difficult patient populations
- Discuss patella instability in the young and very young. Syndromic and congenital patella alta, acute and chronic dislocations, and their available treatment options as well as principals of guided growth for genu valgum associated with patellofemoral instability
- Discuss treatment options for early and advanced isolated patellofemoral arthritis. Concepts of biological as well as non-biological treatment of PFOA will be discussed from minimally invasive options such as debridement or facetectomy to more invasive options such as cell-based and allograft treatment and PF arthroplasty. This case-based segment will be focused on principles rather than specific technical aspects of individual procedures

IC306 CASE-BASED**Shoulder Arthritis in the Aging Athlete: Management Strategies for 2016**

Lawrence V. Gulotta MD, Frank A. Petrigliano MD, Seth C. Gamratt MD, Stephen F. Brockmeier MD

As the population ages and continues to be active, degenerative conditions such as shoulder arthritis will continue to rise. A significant portion of these patients will be treated by sports medicine specialists. The purpose of this course is to outline the management options for the aging athlete with shoulder arthritis. The talks will be case-based when applicable and will address the work-up, techniques, rehabilitation, and expectations on return to sports.

Objectives:

- Discuss viable non-arthroplasty options for the management of shoulder arthritis
- Discuss the indications and expected results for partial resurfacing of the shoulder
- Discuss the indications for total shoulder replacement, technical considerations when performed on athletes, and their expected return to sports following the procedure
- Discuss the role for reverse shoulder arthroplasty, techniques that may improve functional outcomes, and expectations on return to sports

IC307 CASE-BASED**Treatment of Biceps Pathology: From Shoulder to Elbow**

E. Lyle Cain MD, Stephen S. Burkhart MD, Michael D. Maloney MD, Lee D. Kaplan MD

This course will present current understanding of the biceps complex, including anatomy, biomechanical function, and treatment. Lectures will include evaluation and treatment of the entire structure from the proximal attachment in the shoulder (labral origin – SLAP), through proximal tendon pathology, and ending with treatment of distal biceps tendon tears. The last part of the course will include case presentations with audience participation and faculty discussion.

Objectives:

- Describe the anatomy, biomechanics, and function of the biceps muscle-tendon complex
- Evaluate and treat injuries of the proximal biceps/labral complex
- Evaluate and treat injuries of the proximal biceps tendon, including biceps tendinitis and instability
- Evaluate and treat injuries of the distal biceps tendon at the elbow

SATURDAY, JULY 9, 2016
6:45am – 8:15am

IC308 **CASE-BASED**

Osteochondritis Dissecans and Chondral Injuries of the Knee, Elbow, and Ankle: Treatment in Adolescent Athletes

Matthew D. Milewski MD, Kevin G. Shea MD, John Polousky MD, Carl W. Nissen MD

Articular cartilage injuries in pediatric and adolescent athletes provide challenges to the sports medicine provider in both the acute setting and due to their potential long-term consequences. This course is designed to use evidence-based medicine in a case-based review to examine diagnostic and treatment strategies for articular cartilage injuries in young athletes. Knee, elbow, and ankle pathology will be discussed. This course will be focused on discussing the treatment of these injuries specifically in adolescent and skeletally immature athletes. A focus will include but not be limited to a discussion of the treatment of osteochondritis dissecans (OCD) in each of these anatomic areas with the experience and research from the Research on Osteochondritis Dissecans of the Knee (ROCK) group highlighted. This course is designed to give all sports medicine providers evidence-based treatment strategies for articular cartilage injuries in the young athlete and to get these athletes back to their activities and to minimize future degenerative issues.

Objectives:

- Describe the potential etiologies, pathoanatomy, and diagnostic criteria of articular cartilage injuries, particularly knee osteochondritis dissecans
- Discuss the implications and different treatment options for patellar instability in the setting of articular cartilage injuries about the knee
- Describe the potential etiologies and natural history of capitellar osteochondral injuries along with treatment options particularly in the setting of young overhead athletes
- Describe the potential etiologies and treatment options for talar osteochondral and OCD lesions and the implications of ankle instability in the setting of young athletes

SUNDAY, JULY 10, 2016
6:45am – 8:15am

IC401

Improved Patient Care through Lawsuit Protection and Prevention

Larry Oxenham, Michael J. Rogal MD, JD, FACS

This course teaches proven and effective strategies to prevent and protect against lawsuits, allowing physicians the peace of mind necessary to focus on improved patient care. You will learn lawsuit protection strategies most advisors are unaware of. Sources of lawsuits physicians are exposed to and how to protect against them: failure/delay to diagnose, failure/delay to refer, negligence by staff/employees, premise liability, etc. How physicians can protect 100% of their professional and personal assets from lawsuits. How physicians should structure their practice. How physicians can protect their practice, property, and personal assets in the event of a judgment in excess of liability insurance or an exclusion in a policy. How to avoid the most common asset protection mistakes made by physicians and their advisors, such as putting assets into a spouse's name. How physicians can avoid the serious problems that can result from operating as a sole proprietor. How physicians can minimize vicarious liability for the acts of other professionals and staff.

Objectives:

- Discuss how to focus on improved patient care rather than lawsuit defense
- Describe how to structure your practice for lawsuit protection and prevention
- Discuss how to reduce liability insurance costs

SUNDAY, JULY 10, 2016

6:45am – 8:15am

IC402

The Baseball Thrower: What Can Non-Surgeons Teach Us?**Michael T. Freehill MD, Thomas F. Walter, Jeff Strahm ATC, Matt Hobbs, Kevin E. Wilk PT, DPT, Christopher S. Ahmad MD**

This course will be a very unique experience diving deeper into the baseball thrower. A unique experience for the orthopaedic surgeon to learn the non-surgeon's perspective of the throwing athlete. Two of the most common thrower pathologies will be reviewed (one elbow and one shoulder). Treatment, timing issues, and road blocks for orthopaedic surgeons from all communities and all levels would benefit. Further discussions will include throwing protocols and critical knowledge we should have available for our patients but the shortcomings of what we actually have proven scientifically; expert physical therapy discussion for these common diagnosis—both in the non-operative and operative setting and what to expect with realistic timetable expectations as well as common questions from a Division 1A head coach—what they want to know, what you can give them, and how to all stay on the same page.

Objectives:

- Discuss what coaches are using for pitchers' arm strengthening and maintenance
- Discuss the implications of throwing arm pathology and timing of surgery as it pertains to a college scholarship
- Describe the personalization of rehabilitation for a thrower as it pertains to specific throwing arm injury and degree of treatment
- Discuss pitching mechanics and the aid of coaches, and ATCs, with prescribing a focused treatment plan

IC403

CASE-BASED**Management of Concussion and Spine Injury in Athletes: A Multi-Disciplinary Approach****Darren Campbell MD, Dain Allred MD, Laura Baugh MD, Brian T. Ragel MD, FAANS**

This course will focus on concussion and spine injury in the athlete. The teaching and discussion will be case-based; representative cases will come from the US Air Force Academy concussion clinic. Each case illustrates a unique, challenging dynamic in concussion and spine injury diagnosis and management. Emphasis will be placed on differentiating patterns of clinical presentation of concussion such as primary visual or vestibular dysfunction. Principles for developing an active, patient-specific treatment plan will be discussed. Cases allow for teaching points covering return-to-play and return-to-learn guidelines and protocols. The faculty will also include neurology, neurosurgery, and primary care sports medicine.

Objectives:

- Define concussion in athletes and the diagnostic criteria for concussion as well as the use of vestibulo-ocular testing and advanced neurocognitive examination
- Explain how to differentiate patterns of clinical presentation in concussion such as primary vestibular or visual dysfunction along with understanding the roles and importance of a multi-disciplinary team in the effective management of concussion
- Describe the effects of prior concussion, history of migraine, gender, and other factors when managing concussion in athletes
- Discuss the use of the primary medications used in the treatment of concussion
- Describe the use of a multi-disciplinary team approach to an active, patient-specific treatment plan. This includes separate return-to-learn and return-to-play guidelines and protocols
- Describe the guidelines for the management of spinal injury in athletes. Criteria outlining no contraindication, relative contraindication, and absolute contraindication will be discussed as it relates to return to play

WORKSHOPS



2016 AOSSM / SPTS PRE-CONFERENCE PROGRAM

WEDNESDAY, JULY 6, 2016

(All are invited to attend this complimentary course)

Location

Colorado Hall E

- | | |
|-------------------|--|
| 11:50am – 12:00pm | Welcome & Introductions
Kevin E. Wilk PT, DPT, FAPTA |
| 12:00pm – 1:00pm | Surgical Management of Hamstring Injury
Benjamin B. Bedford MD
Rehabilitation of Hamstring Injury: Can We Prevent the Reoccurrences?
Timothy F. Tyler PT |
| 1:00pm – 2:00pm | Key Concepts in the Surgical Repair of the Rotator Cuff Repair
W. Ben Kibler MD
Key Rehabilitation Concepts Following Rotator Cuff Repair
Todd S. Ellenbecker PT |
| 2:00pm – 3:00pm | Key Concepts in ACL Rehabilitation – What the Surgeon Needs to Know
Darren L. Johnson MD
Prevention of Post-Operative Complications Following ACL Surgery
Terry R. Malone PhD, PT |
| 3:00pm – 4:00pm | The Dehydrated Amnion Membrane in Sports Medicine
Angelo J. Colosimo MD
Rehabilitation of Athletes After Amnion Membrane Injection
Robert E. Mangine MEd, PT, ATC |
| 4:00pm – 5:00pm | Changing Dynamics with Rotator Cuff Treatments: When to Do Surgery, When to Do Rehabilitation, and How? Accelerated vs. Decelerated Rehab?
Eric C. McCarty MD
George J. Davies MEd, PT |
| 5:00pm | Workshop Adjourns |



AOSSM MEDICAL PUBLISHING GROUP REVIEWERS' WORKSHOP

Program Planners

Bruce Reider MD
Robert H. Brophy IV, MD
James L. Carey MD, MPH

Location

International Center North

Program Cost

All meeting attendees are eligible to participate. Complimentary for *AJSM*, *Sports Health*, and *OJSM* reviewers; \$50.00 for non-reviewers. Register online for this workshop or via the registration form included in this program. Boxed lunch is included.

Program Description

James L. Carey MD, MPH
University of Pennsylvania
Philadelphia, PA

Statistics in Orthopaedic Sports Medicine Research

Dr. Carey will discuss some basic and advanced statistical methods used in orthopaedic sports medicine research. Special emphasis will be placed on choosing the appropriate statistical tests based on the type of data and study design. Some specific statistical issues that will be reviewed include the use (and misuse) of agreement, reliability, odds ratios, risk ratios, relative risk reduction, absolute risk reduction, risk prediction, and screening strategies. Examples taken directly from the orthopaedic sports medicine literature will be used to highlight key principles.

Robert H. Brophy IV, MD
Washington University
St. Louis, MO

How to Evaluate Economic Analysis Studies

With the growing emphasis on evidence-based medicine and value-based care, it is increasingly important to understand how to evaluate economic analyses in the medical literature. Today, and even more so in the near future, these studies will be used by healthcare decision makers to guide payment decisions regarding care. The goals of the presentation are to review the types of economic analyses and how they have been used in healthcare in general as well as in orthopaedic surgery and sports medicine in particular. Participants will have a better understanding of how to read, review, and design these types of studies.

THURSDAY, JULY 7, 2016

12:45pm – 2:15pm

Workshop Objectives

Upon completion of this live educational activity, participants will be able to:

- Properly identify advanced statistical methods used in orthopaedic sports medicine research
- Review types of economic analyses and how they are used in healthcare and particularly in sports medicine

Target Audience

This workshop is designed for practicing orthopaedic surgeons, physicians, and allied health professionals in the field of sports medicine or related fields of practice who would like to improve their ability to critically evaluate the orthopaedic sports medicine literature.

Program Information

AOSSM attests that the people responsible for the development of this live educational activity did so independently and were not influenced by commercial supporters.

Accreditation and AMA Credit Statements

The American Orthopaedic Society for Sports Medicine is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

The American Orthopaedic Society for Sports Medicine designates this live educational activity for a maximum of 1.5 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Continuing Education for Athletic Trainers



The American Orthopaedic Society for Sports Medicine (AOSSM) is recognized by the Board of Certification, Inc. to offer continuing education for Certified Athletic Trainers.

NIH REVIEWER INFORMATION SESSION

THURSDAY, JULY 7, 2016

4:00pm – 5:00pm

Location

Donald Ross Room

Serving on an NIH study section and reviewing grant applications can enhance your professional development and be beneficial to your career while providing valuable clinical perspective and expertise to NIH study sections. This session will explore the structure of NIH grant reviews and offer helpful advice for approaching reviews as a member of an NIH study section through presentations from members with experience reviewing grants for the NIH. This session also details AOSSM's Bart Mann Award for the Advancement of Sports Medicine, which is given to five AOSSM members that serve as a first-time grant application reviewer on an NIH study section.

Fee

Complimentary

NEW ROUND TABLE, CASE-BASED DISCUSSIONS

FRIDAY, JULY 8, 2016

1:00pm – 2:00pm

Location

International Center Pavillions (outdoor)

Round table case-based discussions will include a moderator who will present the case, and up to 8 attendees who will debate the case. The cases will be relevant to current clinical practice and require that dilemmas be solved and decisions made, have at least one teaching point, and include controversies or a conflict in management. The moderator will ask open-ended questions and, as in clinical practice, the case will unfold gradually with new information and interaction among the participants. Sign up to join your colleagues at one of the following tables:

- RT1 Articular Cartilage Lesions
- RT2 Revision ACL
- RT3 Patella Femoral Instability
- RT4 Revision Shoulder Instability
- RT5 Large Rotator Cuff Tears
- RT6 Hip Pathology
- RT7 Young Sports Medicine
- RT8 Team Physician
- RT9 PCL
- RT10 Meniscus Repair

Each round table topic is limited to 8-10 people.
Register online or on the form at the end of this program.

Fee

\$40 per person



POSTERS



GUIDED POSTER TOURS

Take a guided tour of posters and interact directly with the authors. Expert moderators will lead attendees on tours that include question and answer sessions with the author(s). Tours will be held on Saturday, July 9 as follows:

12:30pm – 1:15pm Guided Tour I

1:15pm – 2:00pm Guided Tour II

1 Two-Year Outcomes following Arthroscopic Treatment for Snapping Scapula Syndrome

Travis Menge MD¹, Marilee P. Horan MPH¹, Justin Mitchell MD¹, Dimitri S. Tahal MSc¹, Peter J. Millett MD, MSc²

¹Steadman Philippon Research Institute Program, Vail, CO

²Steadman Clinic, Vail, CO

2 Arthroscopic Treatment for Shoulder Instability with Glenoid Bone Loss Using Distal Tibia Allograft Augmentation – Short Term Results

Ivan Wong MD¹, Eyal Amar MD¹, Catherine M. Coady MD¹, Daryl B. Dilman MD¹, Ben Smith MD²

¹Dalhousie University and the Division of Orthopaedic Surgery, Queen Elizabeth Health Sciences Center, Capital District Health Authority, Halifax, NS, Canada

²Joseph Brant Memorial Hospital, Burlington, ON, Canada

3 Hemiarthroplasty vs. Total Shoulder Arthroplasty for Shoulder Osteoarthritis: A Matched Comparison of Return to Sports

Grant Garcia MD¹, Joseph N. Liu MD¹, Gregory Thomas Mahony BA¹, Hao-Hua Wu BA², Russell F. Warren MD¹, David M. Dines MD⁵, Edward V. Craig MD¹, Lawrence Vincent Gulotta MD³

¹Hospital for Special Surgery, New York, NY

²University of Pennsylvania, Philadelphia, PA

³Tria Orthopaedic Ctr., Minneapolis, MN

4 Risk of Fragments in Ulnar Collateral Ligament Injuries of Baseball Players

Kozo Furushima MD, PhD¹, Yoshiyasu Itoh MD, PhD¹, Yasuhiro Mitsui MD, PhD¹, Hiroshi Kusano MD¹

¹Keiyu Orthopaedic Hospital, Tatebayashi, Gunma, Japan

5 Early Postoperative Magnetic Resonance Imaging Findings After Autologous Osteochondral Plug Grafts for Osteochondritis Dissecans of the Humeral Capitellum

Masahiro Maruyama MD¹, Masatoshi Takahara MD, PhD², Mikio Harada MD, PhD², Hiroshi Satake MD, PhD¹, Tomohiro Uno MD¹, Michiaki Takagi MD, PhD¹

¹Yamagata University, Yamagata, Japan

²Center for Hand, Elbow, and Sports Medicine, Izumi Orthopaedic Hospital, Sendai, Japan

6 Teres Minor Hypertrophy is a Common and Negative Predictor of Outcomes After Rotator Cuff Repair

John M. Tokish MD¹, Charles A. Thigpen PT, PhD, ATC², Michael J. Kissenberth MD¹, Quinn Hunt³, Stefan John Tolan MD¹, S. Dane Swinehart³, Christina Shelley³, Richard J. Hawkins MD, FRCSC¹

¹Steadman Hawkins Clinic of the Carolinas, Greenville, SC

²Proaxis Therapy, Greenville, SC

³University of South Carolina-Greenville, Greenville, SC

7 Systematic Review and Meta-Analysis of Osteochondral Autograft Transplantation vs. Debridement in the Treatment of Osteochondritis Dissecans of the Capitellum

Seth Bowman MD¹, Jacob Braunstein MD¹, Justin Rabinowitz MD¹, William R. Barfield PhD, FACS¹, Bobby Chhabra MD², Marc Scott Haro MD¹

¹Medical University of South Carolina, Charleston, SC

²University of Virginia, Charlottesville, VA

8 Survivorship after Arthroscopic Management of Glenohumeral Osteoarthritis with a Minimum Five-Year Follow-up

Justin Mitchell MD¹, Marilee P. Horan MPH¹, Joshua A. Greenspoon BSc¹, Travis Menge MD¹, Dimitri S. Tahal MSc¹, Peter J. Millett MD, MSc²

¹Steadman Philippon Research Institute, Vail, CO

²Steadman Clinic, Vail, CO

10 Minimum Two-Year Outcomes after Resection Arthroplasty of the Sternoclavicular Joint

Jan Christoph Katthagen MD¹, Dimitri S. Tahal MSc¹, Travis Menge MD¹, Marilee P. Horan MPH¹, Peter J. Millett MD, MSc²

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12 The Effect of Excessive Glenohumeral Internal Rotation Deficit on Subacromial Joint Space and Forward Scapular Posture among Baseball Pitchers

Kevin G. Laudner PhD¹, Regan Wong², Jim Latal¹, Keith Meister MD²

¹Illinois State University, Normal, IL

²TMI Sports Medicine, Arlington, TX

13 Rotator Cuff Tear Shape Characterization: A Prospective Comparison of Two-Dimensional Imaging and Three-Dimensional Magnetic Resonance Reconstructions

David Steven Goodwin MD¹, Daniel James Kaplan BA², David Fralinger², Soterios Gyftopoulos², Robert J. Meislin MD³, Laith M. Jazrawi MD¹

¹New York University Hospital for Joint Diseases, New York, NY

²New York University Medical Center, New York, NY

³New York University Langone Center for Musculoskeletal Care, New York, NY

- 14 Characterization of Posterior Glenoid Bone Loss**
Adam Blair Yanke MD¹, Rachel M. Frank MD¹, Jason J. Shin MD², Geoffrey S. Van Thiel MD, MBA³, Nikhil N. Verma MD¹, Brian J. Cole MD, MBA¹, Anthony A. Romeo MD¹, Matthew T. Provencher MD⁴
¹Rush University Medical Center, Midwest Orthopaedics, Chicago, IL
²University of Saskatchewan, Saskatoon, SK, Canada
³Rockford Orthopedic Associates, Rockford, IL
⁴Massachusetts General Hospital, Boston, MA
- 15 Should We Limit Innings Pitched Following Ulnar Collateral Ligament Reconstruction in Major League Baseball Pitchers?**
Brandon J. Erickson MD¹, Gregory Cvetanovich MD¹, Bernard R. Bach MD¹, Charles A. Bush-Joseph MD¹, Nikhil N. Verma MD¹, Anthony A. Romeo MD¹
¹Rush University Medical Center, Midwest Orthopaedics, Chicago, IL
- 16 Analysis of Glenoid Inter-Anchor Distance with an All-Suture Anchor System**
Jonathan Kramer MD¹, Sean Robinson MD¹, Pascual Dutton MD¹, Ephraim Dickinson MD², John Paul Rodriguez MD³, William Camisa⁴, Jeremi M. Leasure MS⁴, William H. Montgomery MD¹
¹San Francisco Orthopedic Residency Program, San Francisco, CA
²OrthoCarolina Sports Medicine Center, Charlotte, NC
³Andrews Research and Education Foundation Program, Gulf Breeze, FL
⁴The Taylor Labs, San Francisco, CA
- 17 Cumulative Incidence of Osteochondritis Dissecans of the Capitellum in Child and Adolescent Baseball Players**
Toshiyuki Iwame², Naoto Suzue¹, Tetsuya Matsuura MD¹, Koichi Sairyo¹
¹Tokushima University, Tokushima, Japan
²Tokushima Prefectural Central Hospital, Tokushima, Japan
- 18 Use of the Knee Injury and Osteoarthritis Outcomes Survey (KOOS) in a Normal US Population**
Robby Singh Sikka MD¹, Tyler Williamson¹, Marc Tompkins MD¹, Bradley J. Nelson MD²
¹Tria Orthopaedic Center, Minneapolis, MN
²University of Minnesota, Minneapolis, MN
- 19 Predictors of Lateral Compartment Joint Space Difference at a Minimum of Two Years After ACL Reconstruction: Data from the MOON Onsite Cohort**
Morgan H. Jones MD¹, Emily Reinke PhD², Jeffrey Duryea PhD³, Braden C. Fleming PhD⁴, Nancy Obuchowski PhD¹, Carl S. Winalski MD¹, Kurt P. Spindler MD¹
¹Cleveland Clinic, Cleveland, OH
²Vanderbilt University, Nashville, TN
³Harvard University, Boston, MA
⁴Bioengineering Labs, Providence, RI

- 20 The Youth Throwing Score: Validating Injury Assessment in Young Baseball Players**
Christopher S. Ahmad MD¹, Ajay S. Padaki BS¹, Manish Suresh Noticewala MD¹, Eric Chugh Makhni MD², Charles Aaron Popkin MD¹
¹Columbia University, New York, NY
²Rush University Medical Center, Midwest Orthopaedics, Chicago, IL
- 21 Deficits in Sagittal and Frontal Plane Mechanics During Drop Jump in Young Athletes with Recent Anterior Cruciate Ligament Reconstruction**
James Lee Pace MD¹, Christopher Brophy¹, Nicole Mueske¹, Mia Katzel DPT¹, Bitte S. Healy MSPT¹, Tishya Wren PhD¹
¹Children's Hospital Los Angeles, Los Angeles, CA
- 22 Effect of ACL Graft Type on Side-Step Cutting in Young Athletes**
James Lee Pace MD¹, Nicole Mueske MS¹, Ricardo A. Padilla MS¹, Mia Katzel DPT¹, Bitte S. Healy MSPT¹, Tishya Wren PhD¹
¹Children's Hospital Los Angeles, Los Angeles, CA
- 23 Patient Perception of Reimbursement for Arthroscopic Meniscectomy and ACL Reconstruction**
Kelechi Okoroha MD¹, Robert A. Keller MD¹, Nathan E. Marshall MD¹, John-Michael Guest², Jonathan Lynch MD², Terrence R. Lock MD¹, Brian K. Rill MD¹
¹Henry Ford Hospital, Detroit, MI
²Wayne State University, Detroit, MI
- 24 Can a Smartphone Replace the Operative Note?**
Joseph Featherall BS¹, Sameer Oak BS¹, Jose F. Vega BS, MA¹, Greg Strnad MS¹, Kurt P. Spindler MD¹
¹Cleveland Clinic, Cleveland, OH
- 25 Improved Squat and Gait Biomechanics Six-Months Post-Arthroscopic Surgery for Femoroacetabular Impingement**
Gregory Cvetanovich MD¹, Gary Jordan Farkas BS¹, Kumar Rajan¹, Alejandro Espinoza PhD¹, Shane Jay Nho MD, MS¹
¹Rush University Medical Center, Midwest Orthopaedics, Chicago, IL
- 26 Mass Screening of Youth Athletes for High-Risk Landing Patterns Using a Portable and Inexpensive Motion Sensor Device**
Seth Lawrence Sherman MD¹, Trevor R. Gulbrandsen BS¹, Scott M. Miller BS¹, Trent Guess PhD¹, Bradley W. Willis PT¹, Kyle M. Blecha ATC¹, Zhiyu Huo BS¹, Marjorie Skubic PhD¹, Aaron D. Gray MD¹
¹University of Missouri, Columbia, MO

28 Experience Rate of Elbow Pain and Morphological Abnormality of Humeral Medial Epicondyle Among Youth Baseball Players

Yoshihiro Kotoura MD¹, Toru Morihara MD², Yoshikazu Kida MD³, Tsuyoshi Sukenari², Ryuhei Furukawa MD², Yukichi Kabuto MD², Masataka Minami MD², Okihiro Onishi MD², Takashi Tsujihara MD², Tatsuya Hojo MD⁴, Hiroyoshi Fujiwara MD², Toshikazu Kubo MD²

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²Kyoto Prefectural University of Medicine, Kyoto, Japan

³Fukuchiyama City Hospital, Kyoto, Japan

⁴Doshisha University, Kyoto, Japan

29 Responsiveness Comparison of the EQ-5D, PROMIS Global Health, and VR-12 Questionnaires in Knee Arthroscopy

Sameer Oak BS¹, Greg Strnad MS¹, James Bena MS¹, Lutul D. Farrow MD¹, Richard D. Parker MD¹, Morgan H. Jones MD¹, Kurt P. Spindler MD¹

¹Cleveland Clinic, Cleveland, OH

31 Dynamic Loading Assessment at the Fifth Metatarsal in Elite Athletes with a History of Jones Fracture

Kenneth Hunt MD¹, Yannick Goeb²

¹University of Colorado, Aurora, CO

²Stanford University, Redwood City, CA

34 Physeal Disruption During ACL Reconstruction in Skeletally Immature Patients: Does Independent Femoral Tunnel Drilling Place the Physis at Greater Risk?

Aristides Ignacio Cruz MD¹, Nikita Lakomkin², Peter D. Fabricant MD, MPH³, John Todd R. Lawrence MD, PhD⁴

¹Hasbro Children's Hospital, Providence, RI

²Vanderbilt University Medical Center, Nashville, TN

³Boston Children's Hospital, Boston, MA

⁴Children's Hospital of Philadelphia, Philadelphia, PA

35 Outcomes of Autologous Chondrocyte Implantation in the Knee Following Failed Microfracture

Andrew Joseph Riff MD¹, Adam Blair Yanke MD¹, Annemarie K. Tilton BS¹, Brian J. Cole MD, MBA¹

¹Rush University Medical Center, Midwest Orthopaedics, Chicago, IL

36 Cell-seeded Autologous Chondrocyte Implantation (cs-ACI) – A Simplified Implantation Technique with Maintained Clinical Outcomes

Luiz Felipe Morlin Ambra MD², Amy Phan BS¹, Marissa Mastrocola BS¹, Andreas H. Gomoll MD¹

¹Brigham and Women's Hospital, Chestnut Hill, MA

²Federal University of São Paulo, São Paulo, Brazil

37 Does Ligamentous Laxity Protect Against Chondral Injury in Patients with Patellofemoral Instability?

Lauren H. Redler MD¹, Gabrielle M. Mayer BA¹,

Irene L. Kalbian BA¹, Joseph Nguyen MPH¹,

Beth E. Shubin Stein MD¹, Sabrina M. Strickland MD¹

¹Hospital for Special Surgery, New York, NY

38 Treatment of Achilles Tendinopathy with Autologous Adipose-Derived Stromal Vascular Fraction: Results of a Randomized Prospective Clinical Trial

Laura de Girolamo PhD¹, Miriam Grassi¹, Marco Viganò¹,

Carlotta Perucca Orfei¹, Umberto Alfieri Montrasio¹,

Federico Uselli MD¹

¹Galeazzi Orthopaedic Institute, Milan, Italy

39 Body Mass Index, Modulated by Lateral Posterior Tibial Slope, Predicts ACL Injury Risk

Katherine M. Bojicic BS¹, Melanie L. Beaulieu MSc¹,

Daniel Imaizumi Krieger¹, James A. Ashton-Miller PhD¹,

Edward M. Wojtys MD¹

¹University of Michigan, MedSport, Ann Arbor, MI

40 Development and Validation of Cognitive Rehearsal as a Training Strategy for Arthroscopic Surgery

David Kovacevic MD¹, Justin Lane Hodgins MD¹, Dylan T. Lowe¹, Janice He MD¹, Charles Aaron Popkin MD¹, Thomas Sean Lynch MD¹, Christopher S. Ahmad MD¹

¹Columbia University, New York, NY

41 Retrospective Cohort Study of 207 Cases of Osteochondritis Dissecans of the Knee: Risk Factors and Outcomes Associated with Surgical Treatment

Maria Tuca MD¹, John Arbucci¹, Jason Silberman¹,

Eva Luderowski¹, Tyler J. Uppstrom BA¹, Joseph Nguyen MPH¹,

Daniel W. Green MD¹

¹Hospital for Special Surgery, New York, NY

42 Successful Return to Sport Following Distal Femoral Varus Osteotomy

Pramod Babu Voleti MD¹, Ryan Degen MD¹, Danielle Tetreault BA¹, Aaron John Krych MD², Riley J. Williams MD¹

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²Mayo Clinic, Rochester, MN

43 Mechanical Risk Factors for Stress Fracture in Elite Runners

Kenneth Hunt MD¹, Nathan Wilcox-Fogel², Rishi Trikha², Adam Tenforde MD³

¹University of Colorado, Aurora, CO

²Stanford University, Redwood City, CA

³Harvard University, Boston, MA

44 Cartilage Thickness and Surface Roughness Patterns in Healthy and Osteoarthritic Knees: Novel 3D Analysis of Subjects from the Osteoarthritis Initiative

Tristan Maerz PhD¹, Michael Daniel Newton BS¹, Jeffrey D. Osborne MD¹, Karissa Marie Bassett Gawronski¹, Kevin Baker PhD¹, Kyle Anderson MD¹

¹Beaumont Health System, Royal Oak, MI

45 Subsequent Surgery After Revision Anterior Cruciate Ligament Reconstruction: Rates and Risk Factors from a Multicenter Cohort

David Ding MD¹, MARS Group²

¹University of California San Francisco School of Medicine, San Francisco, CA

²Washington University, St Louis, MO

46 NFL Combine Athletic Performance After ACL Reconstruction

Nathan E. Marshall MD¹, Robert A. Keller MD¹, Nima Mehran MD, MS², William Austin¹, Vasilios Moutzourous MD¹

¹Henry Ford Hospital, Detroit, MI

²Kerlan-Jobe Orthopaedic Clinic Program, Los Angeles, CA

47 Predictors of Outcomes After Arthroscopic Double-Row Rotator Cuff Repair in 155 Cases: A Propensity Score Weighted Analysis of Knotted vs. Knotless Self-Reinforcing Repair Techniques at a Minimum of Two Years

Peter J. Millett MD, MSc¹, Christopher Espinoza-Ervin MD², Marilee P. Horan MPH³, Charles P. Ho MD, PhD³, Ryan J. Warth MD³, Grant Dornan MSc³, Jan Christoph Katthagen MD³

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³Steadman Philippon Research Institute, Vail, CO

48 Pharmacological Inhibition of Myostatin Protects Against Atrophy and Weakness after ACL Tear

Caroline Nicole Wolfe MD¹, Jonathan P. Gumucio BS², Jeremy Grekin MS², Roger Karl Khouri BS², Asheesh Bedi MD², Christopher Mendias PhD, ATC²

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²University of Michigan, Ann Arbor, MI

49 Biomarker Changes in ACL-Deficient Knees Compared with Contralaterals

Eric Jason Strauss MD¹, Daniel James Kaplan², Laith M. Jazrawi MD¹

¹New York University Hospital for Joint Diseases, New York, NY

²New York University Medical Center, New York, NY

50 Engaging Hill-Sachs Defects: Diagnosis in Cadaveric Shoulders

David Burns MD¹, Jaskarndip Chahal MD, FRCSC¹, Shahram Shahrokhi MD, FRACS¹, Patrick Henry MD, FRCSC¹, David Wasserstein MD, FRCSC¹, Cari Whyne PhD², John S. Theodoropoulos MD, FRCSC¹, Darrell Ogilvie-Harris MD, FRCSC¹, Tim Dwyer MBBS, FRCSC, FRACS, PhD(c)¹

¹University of Toronto, Toronto, ON, Canada

²Sunnybrook Research Institute, Toronto, ON, Canada

51 MRI Abnormalities are Common in Little League Players' Elbows: A Longitudinal Study

Andrew T. Pennock MD¹, Joanna Helena Roocroft MA¹, Tracey P. Bastrom MA¹, Peter Kruk MD¹

¹Rady Children's Hospital, San Diego, CA

52 Quantitative MRI Evaluation of Articular Cartilage Using T2 Mapping Following Hip Arthroscopy for Femoroacetabular Impingement

Stephanie W. Mayer MD¹, Naomi Wagner BS², Kara G. Fields MS², Catherine Wentzel MD², Alissa Burge MD², Hollis G. Potter MD², Stephen Lyman PhD², Bryan T. Kelly MD²

¹Childrens Hospital Colorado, Aurora, CO

²Hospital for Special Surgery, New York, NY

53 Customized Platelet-Rich Plasma for Skeletal Muscle Injuries

Justin James Hicks¹, Hongshuai Li MD, PhD¹, Marc J. Philippon MD², Shepard R. Hurwitz MD³, Johnny Huard PhD⁴, MaCalus Vinson Hogan MD¹

¹University of Pittsburgh Medical Center, Pittsburgh, PA

²Steadman Clinic, Vail, CO

³University of North Carolina, Chapel Hill, NC

⁴Steadman Philippon Research Institute, Vail, CO

54 The Synergistic Role of the Lateral Meniscus Posterior Root and the ALL in Providing Anterolateral Rotational Stability of the Knee

Alan M. Getgood MD, MBChB¹, Timothy Lording MBBS, FRACS², Gillian Corbo¹, Tim A. Burkhart PhD, EIT, Reg Kin¹

¹Fowler Kennedy Sport Medicine Clinic, London, ON, Canada

²Melbourne Orthopaedic Group, Melbourne, Australia

55 3D Computed Tomography (CT) Comparison of the Pre-Injury and Post-Repair Syndesmosis to Assess Anatomic Reduction

Travis L. Turnbull PhD¹, Jason Schon BS¹, Brady T. Williams BS¹, Melanie Venderley¹, Grant Dornan¹, Jonathon D. Backus MD², Robert F. LaPrade MD, PhD², Thomas O. Clanton MD²

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56 Differences in Acetabular Rim Thickness in Patients with Unilateral Symptomatic Pincer-Type Femoroacetabular Impingement

Alexander E. Weber MD¹, Benjamin Kuhns MS¹, Gregory Cvetanovich MD¹, Nozomu Inoue MD, PhD¹, Shane Jay Nho MD, MS¹

¹Rush University Medical Center, Midwest Orthopaedics, Chicago, IL

57 Perivascular Stem Cells Diminish Muscle Atrophy and Retain Viability in a Rotator Cuff Tear Model

Claire Eliasberg BA¹, Andrew Jensen MD, MBE¹, Ayelet Dar PhD¹, Tomasz J. Kowalski MD, PhD¹, Iain Murray MD², Adam Z. Khan BS¹, Kyle Natsuhara MD¹, Cameron Garagozlo¹, David R. McAllister MD¹, Frank A. Petrigliano MD¹

¹University of California, Los Angeles, Los Angeles, CA

²University of Edinburgh, Edinburgh, United Kingdom

58 The Effect of Purified Multi-Potent Human Bone Marrow-Derived Mesenchymal Stem Cells on Rotator Cuff Tendon Healing in an Athymic Rat: Is Regenerative Healing Possible?

Ryan Degen MD¹, Andrew Carbone BS¹, Camilia Carballo¹, Jianchun Zong¹, Tony Chen PhD¹, Lilly Ying, VS¹, Amir Lebaschi MD¹, Xiang-Hua Deng MD¹, Scott A. Rodeo MD¹

¹Hospital for Special Surgery, New York, NY

59 PDGFR α + Progenitor Cells Contribute to Muscle Fibroadipogenesis Following Massive Rotator Cuff Tears in a Mouse Model

Andrew Jensen MD, MBE¹, Ayelet Dar PhD¹, Claire Eliasberg¹, Benjamin Kelley¹, Sai Devana¹, David R. McAllister MD¹, Frank A. Petrigliano MD¹

¹University of California, Los Angeles, Los Angeles, CA

60 The Use of Platelet-Rich and Platelet-Poor Plasma to Enhance Differentiation of Skeletal Myoblasts: Implications for the Use of Autologous Blood Products for Muscle Regeneration

Jason L. Dragoo MD¹

¹Stanford University Medical Center, Redwood City, CA

62 Transtibial vs. Anteromedial Portal ACL Reconstruction: Can a Hybrid Approach Achieve the Best of Both?

Jonathan Kelsie Jennings MD¹, Daniel Leas MD², Richard Dennis Peindl PhD², Nahir A. Habet MS², James E. Fleischli MD¹, Donald D'Allessandro MD¹, Dana P. Piasecki MD¹

¹OrthoCarolina, Charlotte, NC

²Carolinas HealthCare System, Charlotte, NC

63 Sustained Release of Bone Morphogenetic Protein 2 via Coacervate Improves Muscle-Derived Stem Cell-Mediated Cartilage Regeneration in MIA-Induced Osteoarthritis

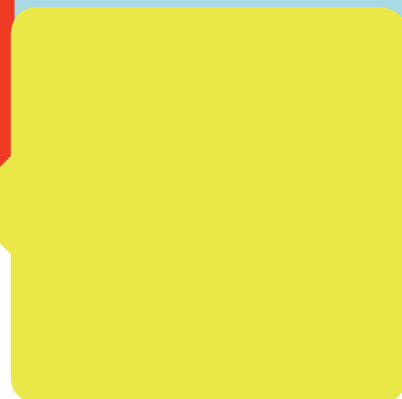
Justin James Hicks¹, Jorge Luis Rocha BA¹, Hongshuai Li MD PhD¹, Johnny Huard PhD², Yadong Wang PhD¹, MaCalus Vinson Hogan MD¹

¹University of Pittsburgh Medical Center, Pittsburgh, PA

²Steadman Philippon Research Institute, Vail, CO



GENERAL INFORMATION



GENERAL INFORMATION

DESCRIPTION

This live activity is designed to identify areas of recent research in the field of orthopaedic sports medicine relevant to practicing physicians, surgeons, and allied health professionals. This information is provided through scientific paper presentations, hot topics, updates, question and answer sessions, surgical video demonstrations, spotlights on surgical techniques, symposia, current concepts, overviews, clinical insights, case-based discussions, and/or debates.

MEETING OBJECTIVES

Upon completion of this educational activity, learners should be able to:

- Implement an effective evaluation algorithm, based on recent research, for musculoskeletal and medical sports medicine conditions
- Assess and apply surgical and non-surgical treatment recommendations and rehabilitation protocols for the management of musculoskeletal and medical conditions germane to the practice of orthopaedic sports medicine
- Integrate prevention strategies with healthcare team(s) to improve musculoskeletal and medical health in their patient population

TARGET AUDIENCE

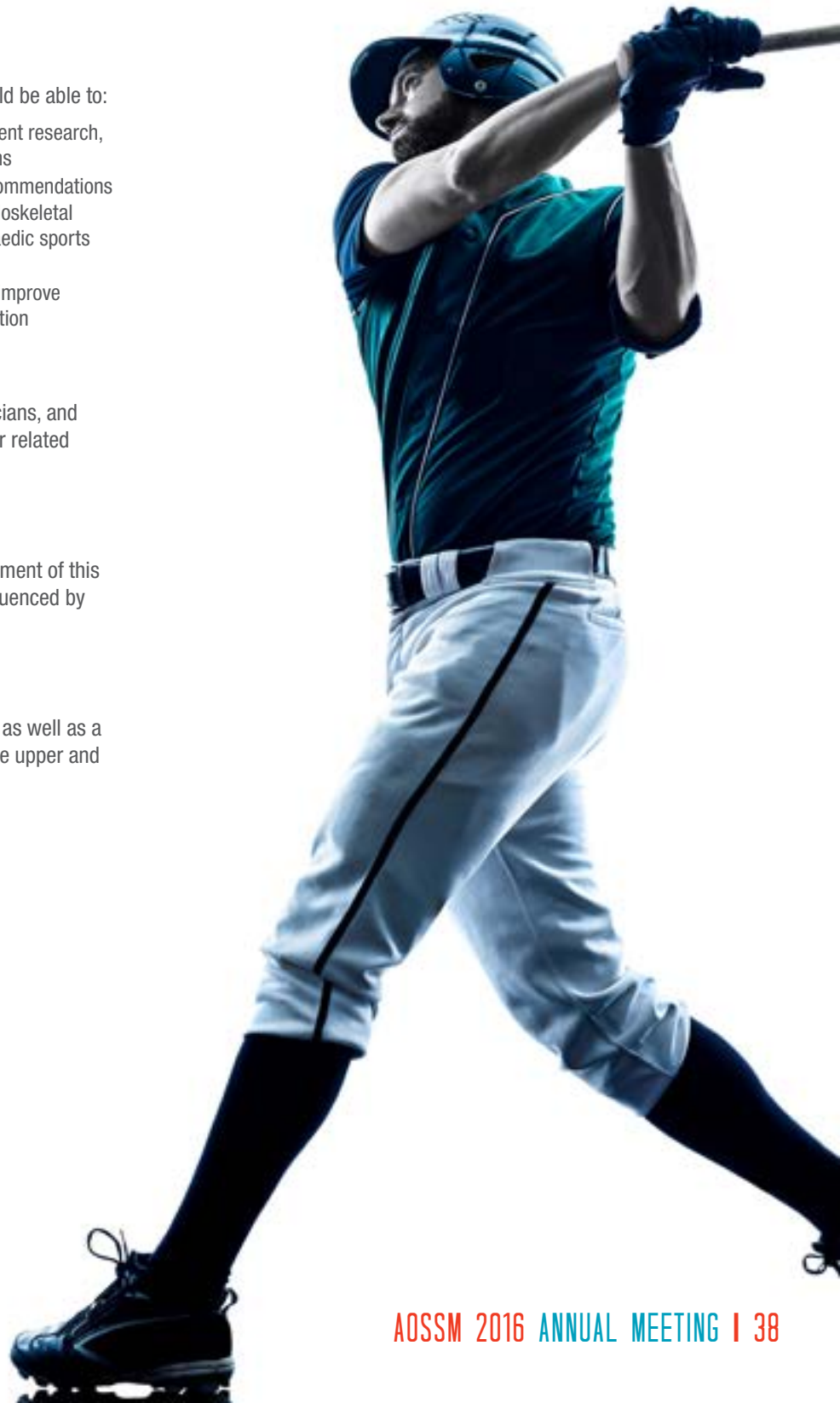
This program is designed for orthopaedic surgeons, physicians, and allied health professionals in the field of sports medicine or related fields of practice.

INDEPENDENCE

AOSSM attests that the people responsible for the development of this educational activity did so independently and were not influenced by commercial supporters.

PREREQUISITES

A basic understanding of the mechanics of sports injuries, as well as a familiarity with the pertinent anatomy and physiology of the upper and lower extremities and the spine, is suggested.



GENERAL INFORMATION (CONT.)

LOCATION

The Broadmoor is a AAA Five Diamond Resort in Colorado Springs, CO. The hotel opened in 1918 and has 19 restaurants, including the Penrose Room, Colorado's only Five-Star, Five-Diamond restaurant, 54 holes of championship golf, six tennis courts, an indoor and outdoor pool, retail shops, full-service spa, and numerous activities for guests of all ages. The most recent attraction opened in late 2015, Seven Falls, which is the only waterfall in Colorado to make National Geographic's list of international waterfalls. The hotel also offers a renowned fly fishing school led by world-class instructors. The Broadmoor, as well as the other two hotels being utilized for the meeting, The Hilton Antlers and Cheyenne Mountain Resort, are easily accessible by either flying into Colorado Springs Airport, only a 15-minute drive, or Denver International Airport, a scenic 75-minute drive. For more information visit www.Broadmoor.com.

In addition, Colorado Springs has a wide variety of nearby attractions to see, including the Cheyenne Mountain Zoo, Pikes Peak, Garden of the Gods, the U.S. Olympic Training Center, Cheyenne Mountain State Park, Manitou Springs, and Cave of the Winds. For more information on local attractions visit www.visitcos.com.

TRAVEL

CorpTrav is the official travel agency of AOSSM. Reservations can be made by calling 800/770-6697, 24-hours-a-day. Service fees may apply.

RENTAL CARS

AOSSM has negotiated special rates for rental cars during the meeting. Visit Hertz.com or call 800/654-2240 for your discount using CV#CV04YW0003.

HOUSING

Housing for attendees is available at www.sportsmed.org via OnPeak, which is the AOSSM's official housing company. While other hotel resellers may contact you offering housing for your trip, they are not endorsed nor affiliated with AOSSM. You can also make reservations by calling 855/416-4093.

All scientific sessions and exhibits will be held at The Broadmoor. Daily transportation will be provided from The Broadmoor to the Hilton Antlers and Cheyenne Mountain Resort.

The housing reservation deadline is June 5, 2016. Rooms are guaranteed until this date pending availability. Attendees are encouraged to book early.

REGISTRATION

WAYS TO REGISTER

- Visit www.sportsmed.org/aossmimis/annualmeeting
- Fax the registration form at the end of this document to 847/292-4905

Advanced registration deadline is June 10th, 2016. After this date all registrations are subject to a \$100 surcharge.

LATE / ON-SITE REGISTRATION

On-site registration is available for an additional charge of \$100 plus the pre-registration fee.

REFUND POLICY

Refunds will be subject to a non-refundable \$150 processing fee. Requests for refunds must be received in writing at the Society office no later than June 10th, 2016. No refunds will be issued after this date for registration fees, instructional courses, or social events.

ATTIRE

Meeting attire is casual, including all social events. Consider dressing in layers to accommodate all temperatures.

EXHIBITS

Exhibits will be located in Broadmoor Hall B. A complete listing of commercial exhibitors, including exhibit hours, will be printed in the Final Program. Continental breakfast and coffee breaks will be held in the exhibit hall. Admission to the exhibit hall requires a badge. Children under 16 are not permitted into the exhibit hall. The AOSSM attendee raffle will be located in the exhibit hall.

INSTRUCTIONAL COURSES

Instructional Courses are offered Thursday through Sunday from 6:45am-8:15am. Attendance in instructional courses is by ticket only and the fee is \$70 per course. One must register and pay the fee in order to enroll. This fee is applicable to ALL registrants. Some instructional courses may have limited capacity, and space is assigned as registrations are received. The instructional course handouts are available as a complete package in electronic format at a price of \$70.

NO REFUNDS FOR INSTRUCTIONAL COURSES WILL BE ISSUED.

ONLINE MEETING SUBSCRIPTION - 2016/17

Revisit the general session presentations from the 2016 Annual Meeting and the 2017 Specialty Day at your convenience! For only \$200, you receive online access to the slides synced with the audio of the speaker's presentation. Review presentations, hear missed talks, and reference sessions at any time. To register, check the "Online Meeting" box on the registration form in this program or during online registration.

AAPA

AAPA accepts certificates of participation for educational activities certified for *AMA PRA Category 1 Credit™* from organizations accredited by ACCME or a recognized state medical society.

DISCLAIMER

The material presented in this continuing medical education program is being made available by the AOSSM for educational purposes only. This material is not intended to represent the only methods or procedures appropriate for the medical situation discussed, but rather it is intended to present an approach, view, statement, or opinion of the faculty, which may be helpful to others who face similar situations. Neither the content (whether written or oral) of any course, seminar, or other presentation in the program, nor the use of a specific product in conjunction therewith, nor the exhibition of any materials by any parties coincident with the program, should be construed as indicating endorsement or approval of the views presented, the products used, or the materials exhibited by the AOSSM, or its Committees, Commissions, or Affiliates. The AOSSM makes no statements, representations, or warranties (whether written or oral) regarding the Food and Drug Administration (FDA) status of any product used or referred to in conjunction with any course, seminar, or other presentation being made available as part of this course. Faculty members shall have sole responsibility to inform attendees of the FDA status of each product that is used in conjunction with any course, seminar, or presentation and whether such use of the product is in compliance with FDA regulations.

DISCLOSURE STATEMENT

In accordance with the guidelines of the ACCME, it is the policy of the AOSSM that faculty and planners disclose to the learners all financial relationships during the past twelve months with any commercial interest (any entity producing, marketing, re-selling, or distributing healthcare goods and services consumed by, or used on, patients). Any and all disclosures will be provided in the final program that is distributed at the meeting. In accordance with AOSSM policy, faculty participation is predicated upon timely submission and review of AOSSM disclosures. Non-compliance results in faculty being stricken from the program.

AMERICANS WITH DISABILITIES ACT

The AOSSM wishes to take those steps to ensure that no individual with a disability is excluded, denied services, segregated, or otherwise treated differently than other individuals because of the absence of auxiliary aids and services. If you require any of the auxiliary aids or services identified in the Americans with Disabilities Act in order to attend this program, please contact AOSSM prior to arrival at info@aossm.org.

CONTINUING MEDICAL EDUCATION CREDITS

The American Orthopaedic Society for Sports Medicine (AOSSM) is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

Scientific Sessions: AOSSM designates this live activity for a maximum of 17.5 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Instructional Courses: AOSSM designates this live activity for a maximum of 1.5 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Round Table Case-Based Discussions: AOSSM designates this live activity for a maximum of 1.0 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

CONTINUING EDUCATION FOR ATHLETIC TRAINERS



The American Orthopaedic Society for Sports Medicine (AOSSM) is recognized by the Board of Certification, Inc. to offer continuing education for Certified Athletic Trainers.

QUESTIONS

Email AOSSM at info@aossm.org

SOCIAL FUNCTIONS



SOCIAL FUNCTIONS

THURSDAY, JULY 7, 2016

Welcome Reception

6:30pm – 8:00pm

Join us outdoors on The West Lawn at The Broadmoor for this year's Welcome Reception. Everyone and their families are welcome to attend.

Fee: No Charge

FRIDAY, JULY 8, 2016

Garden of the Gods & Jeep Tour

1:30pm – 4:00pm

Escape for a few hours to take in the beauty of the Colorado Springs area, including Helen Hunt Falls, the old Shortline Railroad tunnels, 100-mile views, Garden of the Gods, and two National Historic Districts, all while in a 4 x 4 safari style Jeep with a cowboy guide. Along the tour, your guide will share historical stories about Colorado and the West. The drive will end with a tour of the Garden of the Gods and its spectacular rock formations. Bottled water is included.

Advance registration required.

Fee: \$115 Adults

\$70 Children 11 and under

SATURDAY, JULY 9, 2016

AOSSM Wild West Fest

7:00pm – 10:00pm

Grab your cowboy boots and jeans, gather up the herd, and enjoy an evening featuring some of the best entertainment in Colorado. You'll be amazed by Loop Rawlins, master trick roper, and Doc Eaton, the clever and engaging magician. A number of interactive western games will be available and appropriate for all ages, including a mechanical bull, mining sluice, and the Quick Draw Saloon Shoot Out. Don't miss the horses and cattle that will be on hand for viewing, petting, and feeding. In addition, you'll encounter some birds of prey and socialized ambassador wolves. A dinner buffet will be served while enjoying the sounds of a local DJ.

Please register in advance and indicate the number of adults and children when registering.

Fee: No Charge.



**INDUSTRY
SYMPOSIA/**

**INDUSTRY
THEATERS**



INDUSTRY SYMPOSIA

Join your colleagues for a 90-minute, lunch-time learning session where you can become more familiar with the latest products, services, and newest findings. Lunch will be provided, and pre-registration is encouraged. The afternoon scientific session resumes at 2:00pm.

The following symposia are not presented, endorsed, or otherwise sanctioned by the American Orthopedic Society for Sports Medicine and NO CME CREDIT WILL BE AWARDED for participation. The view and techniques presented are not necessarily those of AOSSM or its members. AOSSM assumes no responsibility or liability for the use or misuse of any information, materials, or techniques described, and it makes no warranty, guarantee, or representation as to the absolute validity or sufficiency of any information provided.

THURSDAY, JULY 7, 2016

12:30pm – 2:00pm

IS 1

Broadmoor Hall C

Zimmer Biomet

The Subchondroplasty® Procedure featuring AccuFill® Bone Substitute Material

Steven B. Cohen MD

IS 2

Broadmoor Hall D

DJO Global

Definitive Treatment for Chronic Tendonosis: Percutaneous Ultrasonic Tenotomy

Bernard F. Morrey MD

A clinical presentation together with a hands-on demonstration will provide attendees information on the Tenex Health TX System designed to treat patients suffering from chronic tendonosis and fasciosis. The minimally invasive procedure is completed in an out-patient setting offering patients a safe solution and opportunity to return to activity quickly. The TX System has successfully treated over 35,000 patients with tendonosis in the shoulder, elbow, knee, foot, and ankle.

IS 3

Broadmoor Hall E

AlloSource

ProChondrix® Cartilage Restoration Matrix – Early Clinical and Pre-Clinical Results

Vishal Mehta MD, Laurie Goodrich DVM, PhD, ACVS Diplomate

Cartilage Repair the Way Nature Intended - ProChondrix® is a natural treatment option for your most active patients suffering from articular cartilage defects. AlloSource invites you to learn more from our experts about ProChondrix®, a cellular 3D fresh cartilage matrix that provides live functional cells and other biological components necessary for the natural regeneration of hyaline cartilage tissue. When it comes to healing, nature's way is always the best.

IS 4

Broadmoor Hall F

Smith & Nephew

TBD

IS 5

Colorado Hall A

Fidia Pharma USA Inc.

Hymovis: A Breakthrough in Viscoelastic Technology

Clarence L. Shields Jr. MD, Francesco Benazzo MD, Lawrence Bonassar PhD

Hymovis® is a next-generation hyaluronan intra-articular (IA) therapy indicated for the treatment of pain in osteoarthritis (OA) of the knee. Hymovis® was intentionally bioengineered using a proprietary process to increase its lubrication and shock absorption properties. The formulation allows the molecule to recover its original structure, even after repetitive mechanical stress. Due to reversible hydrophobic interactions, the non-crosslinked Hymovis has increased elasticity, viscosity and residence time in the joint. Hymovis® has a treatment cycle of only two intra-articular injections, given a week apart. The development, optimal lubricating characteristics and global clinical data with Hymovis® will be presented.

INDUSTRY THEATERS

The theater is located inside the Exhibit Hall. 30-minute theater sessions starting on the 1/2 hour provide you with up-to-date information from industry about the products, equipment, and services they offer via demonstrations or presentations in the Exhibit Hall. Theaters will take place between 7:30am – 12:00pm.

THURSDAY, JULY 7, 2016

IT 3

9:30am – 10:00am

Orteq Sports Medicine

Rene Verdonk MD, PhD

Novel Concepts for Cartilage Repair: Why Resect if you Can Replace the Meniscus?

IT 4

10:30am – 11:00am

Smith & Nephew

TBD

FRIDAY, JULY 8, 2016

IT 7

7:30am – 8:00am

Smith & Nephew

TBD

IT 10

10:30am – 11:00am

Smith & Nephew

TBD

ADVANCE REGISTRATION FORM

AOSSM
Annual Meeting **2016**

Online Registration available at www.sportsmed.org/aossmimis/annualmeeting

Advance Registration closes June 10, 2016.

After June 10th, a \$100 surcharge will be assessed to all registrations.

NAME		PLEASE TYPE OR PRINT CLEARLY	DEGREE(S)
SPOUSE / GUEST NAME (IF ATTENDING)			
ADDRESS			
CITY	STATE	ZIP	
OFFICE PHONE	OFFICE FAX		
E-MAIL			

REGISTRATION CATEGORIES & FEES

All fees below are listed in US Dollars (The cost of meeting registration does not include hotel).

A) MEETING REGISTRATION

	OFFICIAL HOUSING	**OTHER HOTEL	
☐ Member	\$100	\$250	
☐ Non-Member MD	\$750	\$900	
☐ Resident / Fellow	\$350	\$500	
☐ Military	\$300	\$450	
☐ Allied Health	\$350	\$500	
☐ Faculty	N/C	\$150	

A) Registration Subtotal

B) EDUCATIONAL RESOURCE MATERIALS

Instructional Course Materials x \$70
(Complete set of IC handouts, online access only)

Online Meeting Subscription x \$200

General session presentations from the 2016 Annual Meeting and 2017 Specialty Day (powerpoints synced with audio)

B) Educational Resource Materials Subtotal

* IC Faculty will be contacted directly regarding their complimentary IC Materials.

** Note on Fee Differential: Registration costs are predicated on attendees staying at official meeting hotels. A \$150 differential fee is assessed to registrants staying at other hotels to offset expenses incurred. Meeting registrants will be confirmed with hotel master list.

No refunds after June 10, 2016 on any of the above registration fees.

All refunds are subject to a \$150 non-refundable processing fee.



The American Orthopaedic
Society for Sports Medicine

C) INSTRUCTIONAL COURSES, WORKSHOPS & ROUND TABLE, CASE-BASED DISCUSSIONS

Instructional Courses

IC registrations are non-refundable. On-site registration is subject to availability.

	IC NUMBER	
☐ Thursday, July 7, 2016	1 st Choice x \$70	
	Alternate	
☐ Friday, July 8, 2016	1 st Choice x \$70	
	Alternate	
☐ Saturday, July 9, 2016	1 st Choice x \$70	
	Alternate	
☐ Sunday, July 10, 2016	1 st Choice x \$70	
	Alternate	

Workshops

☐ AOSSM Medical Publishing Group Reviewers' Workshop	
AJSM / SPH / OJSM Reviewers	N / C
Non-AJSM / SPH / OJSM Reviewers	x \$50
☐ Industry Symposia Session	1 st Choice N / C
	Alternate N / C
☐ NIH Reviewer Information Session	N / C

Round Table Case-Based Discussions

	DISCUSSION TOPICS	
☐ Friday, July 8, 2016	1 st Choice x \$40	
	Alternate	

Discussion Topics

RT1 Articular Cartilage Lesion	RT6 Hip Pathology
RT2 Revision ACL	RT7 Young Sports Medicine
RT3 Patella Femoral Instability	RT8 Team Physician
RT4 Revision Shoulder Instability	RT9 PC
RT5 Large Rotator Cuff Tear	RT10 Meniscus Repair

C) Instructional Courses, Workshops, Round Table Case-Based Discussions

ADVANCE REGISTRATION FORM

Online Registration available at www.sportsmed.org/aossmimis/annualmeeting
Advance Registration closes June 10, 2016.

After June 10, a \$100 surcharge will be assessed to all registrations.

AOSSM

Annual Meeting **2016**

NAME _____ PLEASE TYPE OR PRINT CLEARLY

D) SOCIAL FUNCTIONS

Garden of the Gods & Jeep Tour

Friday, July 8

ADULTS (AGES 12 AND UP) x \$115
CHILDREN 4–11 x \$70

AOSSM Family Night Wild West Fest

Saturday, July 9

ADULTS (AGES 12 AND UP) N/C
CHILDREN 4–11 N/C
UNDER 4 N/C

D) Social Functions Subtotal

FEES ENCLOSED

A) Registration Subtotal (FROM SIDE 1)

B) Educational Resource Materials (FROM SIDE 1)

C) Instructional Courses, Workshop, Round Table Case-Based Discussions (FROM SIDE 1)

D) Social Functions Subtotal (FROM SIDE 2)

PAYMENT IS REQUIRED WITH THE SUBMISSION OF A REGISTRATION FORM

Mail form and payment to AOSSM, 2884 Momentum Place, Chicago, IL 60689–5328. Make check payable in US Dollars to American Orthopaedic Society for Sports Medicine (AOSSM) or provide credit card information and fax form to 847/292–4905. Your canceled check is your receipt.

☐ Check Enclosed ☐ Visa ☐ MasterCard ☐ American Express

CARD NUMBER _____ CCV CODE _____ EXP. DATE _____

NAME (AS IT APPEARS ON CARD) _____

SIGNATURE (I AGREE TO PAY ACCORDING TO THE CREDIT CARD ISSUER AGREEMENT) _____

DATE _____

AOSSM Image/Likeness/Voice Release

I understand and agree that, as a result of participating in an AOSSM educational conference or meeting, my image, likeness, or voice may be photographed and/or recorded. If family members are attending the meeting with me, their image, likeness, and voice may also be photographed and/or recorded. I hereby grant irrevocable and unrestricted permission to AOSSM and its staff to use my or my family's image, likeness, or performance in any medium and for any purpose they deem appropriate. I hereby waive any right to inspect or approve such use of materials. Submission of this form for meeting registration acknowledges acceptance of these terms.

AOSSM UPCOMING ANNUAL MEETINGS



AOSSM

Annual Meeting **2017**

July 20–23, 2017
Toronto, ON, Canada



AOSSM

Annual Meeting **2018**

July 5–8, 2018
San Diego, CA



AOSSM

Annual Meeting **2019**

July 11–14, 2019
Boston, MA

UPCOMING MEETINGS AND COURSES

Football Sports Medicine 2016:
The Playbook for the NFL & Beyond
May 5–7, 2016
Denver, CO

AOSSM/AAOS Orthopaedic
Sports Medicine Review Course
August 12–14, 2016
Chicago, IL

Surgical Skills
Osteotomies around the Knee: From
Ligament Insufficiency to Chondrosis
September 23–25, 2016
Rosemont, IL

Advanced Team Physician
Course (ATPC)
December 8–11, 2016
Coronado, CA

Specialty Day 2017
March 18, 2017
San Diego, CA

AOSSM ABSTRACT SUBMISSIONS

AOSSM 2017 Specialty Day

Online submissions open **April 1, 2016**

To submit an abstract for the AOSSM 2017 Specialty Day, please visit www.sportsmed.org. Deadline for submissions is May 18, 2016. Abstracts will only be accepted via the website. No exceptions will be made for late abstracts.

AOSSM 2017 Annual Meeting

Online submissions open **August 1, 2016** and close on **October 3, 2016**

