

AOSSM

Annual Meeting **2018**

Manchester Grand Hyatt • San Diego, CA

July 5–8, 2018

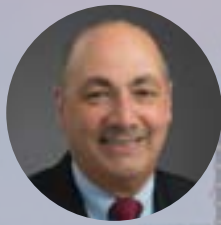
We Keep You in the Game.™

PRELIMINARY
PROGRAM



The American Orthopaedic
Society for Sports Medicine

JOIN US IN SAN DIEGO



Charles Bush-Joseph MD
President



Nikhil Verma MD
Annual Meeting
Program Committee Chair

The 2018 AOSSM Annual Meeting is THE meeting to attend for team physicians and any individual working in sports medicine! Nikhil Verma MD, 2018 Program Chair, and his committee have created a scientific program that will keep you engaged with your colleagues on the latest research, prevention and treatment developments and leave you inspired to implement changes into your practice.

LOOK FORWARD TO:

4 **live surgeries** including shoulder capsule reconstruction, shoulder resurfacing, hip arthroscopy and meniscal transplant

34 **instructional courses**, even some on Friday afternoon you don't have to wake up early for

50 **Posters**

MORE THAN
70 **research paper presentations**

Symposia discussion on injury prevention and current trends with the NCAA and National Federation of High School Sports



Presidential Guest Speaker, Bill Walton, UCLA and NBA star

Product demonstrations on innovative technologies in sports medicine

Personal interactions and discussions with the legends of orthopaedic sports medicine



Sunny San Diego and all it offers for you and your family, including the world-renowned [San Diego Zoo](#), [SeaWorld](#) and our annual Saturday family party on the [USS Midway](#).

REGISTER TODAY

www.sportsmed.org #AOSSM2018

2018 PROGRAM COMMITTEE

Nikhil N. Verma MD (Chair)	Matthew T. Provencher MD
David R. Diduch MD	Kurt P. Spindler MD
Lee D. Kaplan MD	Brian R. Wolf MD, MS

2018 ABSTRACT REVIEWERS

Christopher S. Ahmad MD	John D. Kelly MD
Asheesh Bedi MD	Robert F. LaPrade MD, PhD
John E. Conway MD	Lance E. LeClere MD, CDR, MC, USN
Daniel E. Cooper MD	Claude T. Moorman MD
Frank Cordasco MD, MS	Mary K. Mulcahey MD
Jonathan F. Dickens MD	Eric J. Strauss MD
Jeffrey R. Dugas MD	John M. Tokish MD
David C. Flanigan MD	Bryan G. Vopat MD

2017 – 2018 BOARD OF DIRECTORS

President

Charles A. Bush-Joseph MD

President-Elect

Neal S. ElAttrache MD

Vice President

James P. Bradley MD

Secretary

Mark D. Miller MD

Treasurer

Dean C. Taylor MD

Past President

Annunziato Amendola MD

Past President

Robert A. Arciero MD

Member-at-Large

Jeffrey R. Dugas MD

Member-at-Large

Robin Vereeke West MD

Member-at-Large

Anil S. Ranawat MD

Council of Delegates Chair (Ex Officio)

Eric C. McCarty MD

Ex-Officio

Non-Voting Members

Exec. Editor,
Medical Publishing Group
Editor-In-Chief *AJSM*, *OJSM*
Bruce Reider MD

Chief Executive Officer

Greg Dummer CAE

OTHER AOSSM LEADERSHIP

Communications Chair

C. David Geier MD

Education Chair

Steven B. Cohen MD

Research Chair

Matthew T. Provencher MD

TABLE OF CONTENTS

Program at a Glance	3–4
Presidential Guest Speaker	16
Conference Agenda.....	5–22
Instructional Courses.....	24–36
Workshops	
SPTS/AOSSM Pre-Conference Workshop.....	38
AOSSM Medical Publishing Group Reviewers Workshop	38
NIH Reviewers Workshop	38
Round Table Case Discussions.....	39
Posters.....	41–44
General Information.....	46
Social Functions.....	48
Industry Symposia.....	48
Upcoming Meetings	49
Abstract Submission Dates	49

AOSSM CORPORATE PARTNERS

AOSSM gratefully acknowledges the following companies and organizations for their 2017-2018 support:

Arthrex	RTI Surgical
Breg	Sanofi Biosurgery
DJO Global	Smith & Nephew
DePuy Synthes Mitek	Stryker
Ferring Pharmaceuticals	The Aircast Foundation
Flexion	Topical Gear
JRF Ortho	Vericel
ON Foundation	Zimmer Biomet
Ossur	



Partners as of March 2018

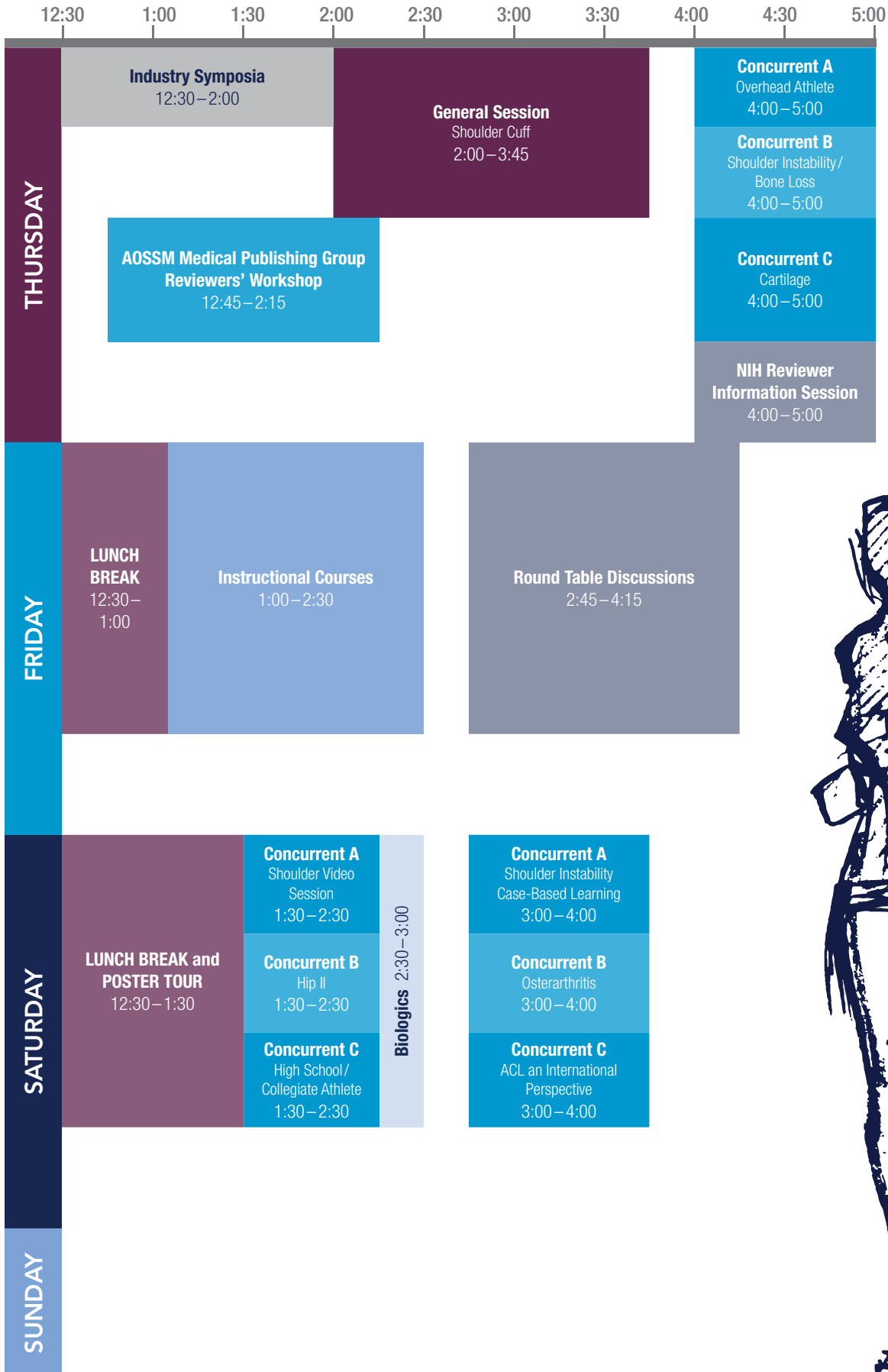
CONFERENCE AGENDA



PROGRAM AT A GLANCE

	7:00	7:30	8:00	8:30	9:00	9:30	10:00	10:30	11:00	11:30	12:00	12:30	
THURSDAY	Instructional Courses 6:45–8:15			General Session Knee Ligament/Meniscus 8:30–9:45			Concurrent A ACL Case-Based Learning 9:45–10:45		Break 10:45–11:30	Concurrent A Knee Video Demonstration 11:30–12:30			
							Concurrent B Business of Sports Medicine 9:45–10:45			Concurrent B Team Physician: Science of Injury 11:30–12:30			
						Concurrent C Hip I 9:45–10:45		Concurrent C Patellofemoral 11:30–12:30					
Exhibits 7:30–12:30													
FRIDAY	Instructional Courses 6:45–8:15			General Session Shoulder Instability 8:30–9:35			Presidential Intro 9:35–9:40	Presidential Address 9:40–10:10	Robert E Leach Award 10:10–10:20	Hall of Fame 10:20–10:30	Business Meeting 10:30–10:45	Break 10:45–11:30	Concurrent A Shoulder Rotator Cuff Case-Based Learning 11:30–12:30
										Concurrent B Outcomes in Sports Medicine: Is There Value? 11:30–12:30			
									Concurrent C Team Physician: Facial and Head Injuries 11:30–12:30				
Exhibits 7:30–12:30													
SATURDAY	Instructional Courses 6:45–8:15			General Session Biceps/SLAP 8:30–9:00		Live Surgery 9:00–10:00 Superior Capsule Reconstruction and Shoulder Resurfacing		Intro Guest Speaker 9:55–10:00	Presidential Guest Speaker 10:00–10:45		Medallion Exchange 10:45–10:55	Break 10:55–11:30	Live Surgery 11:30–12:30 Hip Arthroscopy and MPFL Reconstruction
Exhibits 7:30–12:30													
SUNDAY	Instructional Courses 6:45–8:15			Concurrent Session A Foot and Ankle 8:30–10:00			Concurrent B Pediatrics 8:30–10:00						

PROGRAM AT A GLANCE (CONT.)



8:15 am–8:20 am

Welcome

Charles A. Bush-Joseph MD
Midwest Orthopaedics at Rush, Chicago, IL

General Session – Knee Ligament/Meniscus

8:20 am–9:45 am

Moderators:

Freddie H. Fu MD
University of Pittsburgh Medical Center,
Pittsburgh, PA
Gehron Treme MD
University of New Mexico, Albuquerque, NM

8:20 am–8:25 am

Paper 101: Effect of Concomitant Cartilage Lesions on Patient-Reported Outcome After ACL-Reconstruction – A Nationwide Cohort Study from Norway and Sweden of 8,470 Patients with 5-Year Follow-Up

Svend Ulstein MD¹, Asbjorn Aroen MD, PhD¹,
Magnus L. Forssblad MD, PhD²,
Lars Engebretsen MD, PhD³,
Jan Harald Røtterud MD, PhD¹
¹Akershus University Hospital,
Lørenskog, Norway
²Karolinska Institutet, Stockholm, Sweden
³Oslo University Hospital-Ullevaal, Oslo, Norway

8:25 am–8:30 am

Paper 102: Return to Sport and Re-Operation Rates in Athletes Under the Age of 20 Following Primary Anterior Cruciate Ligament Reconstruction: Risk Profile Comparing Three Patient Groups Predicated Upon Skeletal Age

Frank A. Cordasco MD, MS,
Sheena Rachel Black MD,
Meghan Price BS, Colleen Wixted BS,
Lori Asaro PA-C, MS,
Michael Heller ATC, PES, CES,
Joseph Nguyen MPH, Daniel W. Green MD, MS
Hospital for Special Surgery, New York, NY

8:30 am–8:35 am

Paper 103: Current Return to Sport Criteria After ACL Reconstruction Fail to Identify Increased Risk of Second ACL Injury in Young Athletes

Mark V. Paterno PhD, PT¹,
Mitchell Rauh PhD, PT, MPH, FACSM²,
Staci Thomas MS³,
Timothy E. Hewett PhD, FACSM⁴,
Laura Schmitt PhD, PT⁵
¹Sports Medicine Biodynamics Center,
Cincinnati, OH
²San Diego State University, San Diego, CA
³Cincinnati Children's Hospital, Milford, OH
⁴Mayo Clinic, Rochester, MN
⁵The Ohio State University, Columbus, OH

8:35 am–8:40 am

Paper 104: Anterior Cruciate Ligament Reconstruction in Young Females: Patellar vs. Hamstring Tendon Autografts

Hytham Salem¹, Vahe Varzhapeyan¹,
Nimit Patel MD², Zaira Chaudhry¹,
Christopher C. Dodson MD¹,
Fotios P. Tjoumakaris MD³,
Kevin B. Freedman MD¹
¹Rothman Institute, Philadelphia, PA
²Thomas Jefferson University, Philadelphia, PA
³The Rothman Institute,
Egg Harbor Township, NJ

8:40 am–8:45 am

Paper 105: Double Bundle Posterior Cruciate Ligament Reconstruction in 100 Patients at a Mean 3-Years Follow-Up: Outcomes Were Comparable to Anterior Cruciate Ligament Reconstructions

Jorge Chahla MD, PhD¹, Mark Cinque²,
Andrew G. Geeslin MD², Grant Dornan²,
Gilbert Moatshe MD²,
Robert F. LaPrade MD, PhD³
¹Santa Monica Orthopaedic & Sports Medicine,
Santa Monica, CA
²Steadman Philippon Research Institute, Vail, CO
³The Steadman Clinic, Vail, CO

8:45 am–8:50 am

Paper 106: Arthroscopic Primary Repair of Proximal Anterior Cruciate Ligament Tears: With or Without Additional Suture Augmentation?

Anne Jonkergouw MD,
Jelle P. van der List MD, Gregory S. DiFelice MD
Hospital for Special Surgery, New York, NY

8:50 am–8:55 am

Q & A

8:55 am–9:00 am

Paper 107: Which Factors Increase the Risk of Re-Operation After Meniscus Surgery in the Skeletally Immature?

Neeraj M. Patel MD, MPH, MBS¹,
Surya Mundluru MD², Nicholas Beck MD¹,
Theodore J. Ganley MD¹
¹Children's Hospital of Philadelphia,
Philadelphia, PA
²Texas Scottish Rite Hospital, Dallas, TX

9:00 am–9:05 am

Paper 108: Excellence in Research Award: Tissue Engineered Meniscal Replacement Using a Fiber-Reinforced Scaffold in a Two-Year Ovine Model

Jay M. Patel PhD, Salim A. Ghodbane MD,
Andrzej Brzezinski MD, Charles J. Gatt MD,
Michael G. Dunn PhD
Rutgers Robert Wood Johnson Medical School,
New Brunswick, NJ

- 9:05 am–9:10 am **Paper 109: Non-Weight Bearing vs. Partial Controlled Early Weight Bearing After Reconstruction of the Fibular Collateral Ligament: A Randomized Control Trial**
Robert F. LaPrade MD, PhD¹,
 Nicholas N. DePhillipo MS, ATC, OTC, CSCS¹,
 Tyler Cram MS, ATC, OTC¹, Mark Cinque BS²,
 Mitchell Kennedy BS², Grant Dornan MS²,
 Luke O'Brien PT, M.Phty (Sports), SCS³
¹The Steadman Clinic, Vail, CO
²The Steadman Philippon Research Institute,
 Vail, CO
³Howard Head Sports Medicine, Vail, CO
- 9:10 am–9:15 am **Paper 110: Cabaud Memorial Award: The Influence of Graft Tensioning Sequence on Tibiofemoral Orientation During Bicruciate and Posterolateral Corner Knee Ligament Reconstruction: A Biomechanical Study**
Gilbert Moatshe MD¹, Jorge Chahla MD, PhD²,
 Alex Brady MSc¹, Grant Dornan¹,
 Kyle Muckenhirn¹, Bradley Kruckeberg BA¹,
 Lars Engebretsen MD, PhD³,
 Robert F. LaPrade MD, PhD⁴
¹Steadman Philippon Research Institute, Vail, CO
²Santa Monica Orthopaedic & Sports Medicine,
 Santa Monica, CA
³Oslo University Hospital-Ullevaal, Oslo, Norway
⁴The Steadman Clinic, Vail, CO
- 9:15 am–9:20 am **Q & A**
- 9:20 am–9:30 am **Debate: Anatomic Is the Only Way vs. It's All the Same**
 Volker Musahl MD
 University of Pittsburgh Medical Center,
 Pittsburgh, PA
 Rick W. Wright MD
 Washington University, Saint Louis, MO
- 9:30 am–9:37 am **Meniscal Root: When Should We Fix, Debride or Do Nothing?**
 Aaron John Krych MD
 Mayo Clinic, Rochester, MN
- 9:37 am–9:45 am **What Do We Do with the Meniscus and Does It Matter?**
 Robert W. Westermann MD
 University of Iowa, Iowa City, IA

Concurrent Session A—ACL Case-Based Learning

- 9:45 am–10:45 am **Moderators:**
 Jo A. Hannafin MD, PhD
 Hospital for Special Surgery, New York, NY
 Christopher C. Kaeding MD
 The Ohio State University, Columbus, OH
- 9:45 am–9:50 am **Paper 111: Bacterial Biofilms Are Associated with Tunnel Widening in Failed ACL Reconstructions**
David C. Flanagan MD,
 Joshua Scott Everhart MD, MPH,
 Alex DiBartola MD, MPH,
 James Moley BS, Devendra Dusane PhD,
 Robert A. Magnussen MD, MPH,
 Christopher C. Kaeding MD, Paul Stoodley PhD
 The Ohio State University, Columbus, OH
- 9:50 am–9:55 am **Paper 112: Internal Brace ACL Repair Is Associated with High Failure Rate in the First Two Years Post-Surgery**
 Alexia Georgia Gagliardi BA¹,
 Patrick M. Carry MS¹, Ariel Kiyomi Daoud BA²,
 Harin Bhavin Parikh², **Jay C. Albright MD¹**
¹Musculoskeletal Research Center, Orthopedics
 Institute, Children's Hospital Colorado,
 Aurora, CO
²University of Colorado, Aurora, CO
- 9:55 am–10:02 am **Q & A**
- 10:02 am–10:09 am **ACL Extra-Articular Augmentation: Practical Application**
 Alan M. Getgood MD, FRCS (Tr&Orth)
 Fowler Kennedy Sports Medicine Clinic,
 London, ON, Canada
- 10:09 am–10:16 am **Anatomy Revisited: Where Should We Be Putting the Tunnel?**
 Darren L. Johnson MD
 University of Kentucky Sports Medicine,
 Lexington, KY
- 10:16 am–10:23 am **Tunnel Healing: How Short Should We Go?**
 Chunbong Benjamin Ma MD
 University of California, San Francisco,
 San Francisco, CA
- 10:23 am–10:28 am **Q & A**

10:28 am–10:45 am **ACL Panel Discussion**
Moderator:
 Asheesh Bedi MD
 University of Michigan, Ann Arbor, MI
Panelists:
 Alan M. Getgood MD, FRCS (Tr&Orth)
 Fowler Kennedy Sport Medicine Clinic,
 London, ON, Canada
 Jo A. Hannafin MD, PhD
 Hospital for Special Surgery, New York, NY
 Darren L. Johnson MD
 University of Kentucky Sports Medicine,
 Lexington, KY
 Christopher C. Kaeding MD
 The Ohio State University, Columbus, OH
 Brett D. Owens MD
 Brown University, Providence, RI

Concurrent Session B—Business of Sports Medicine

9:45 am–10:45 am **Moderators:**
 Kevin D. Plancher MD
 Albert Einstein College of Medicine,
 New York, NY
 Geoffrey S. van Thiel MD, MBA
 Rockford Orthopedic Associates, Rockford, IL

9:45 am–9:57 am **ASC: Physician's Perspective**
 Michael G. Ciccotti MD
 Rothman Institute, Philadelphia, PA

9:57 am–10:09 am **Outpatient TJA Program: You Need to Do This!**
 Ruben Gobezie MD
 The Cleveland Shoulder Institute, Cleveland, OH

10:09 am–10:21 am **Biologics: Financially Feasible?**
 Brian J. Cole MD, MBA
 Midwest Orthopaedics at Rush, Chicago, IL

10:21 am–10:33 am **Your Reputation Is Online: Learn How to Manage It**
 Seth C. Gamradt MD
 University of Southern California,
 Los Angeles, CA

10:33 am–10:45 am **Discussion and Q & A**

Concurrent Session C—Hip 1

9:45 am–10:45 am **Moderators:**
 Joshua David Harris MD
 Houston Methodist Hospital, Houston, TX
 Marc R. Safran MD
 Stanford Sports Medicine Center,
 Redwood City, CA

9:45 am–9:50 am **Paper 113: Non-Operative Management of Femoroacetabular Impingement: A Prospective Study**
Andrew T. Pennock MD,
 James D. Bomar, MPH,
 Kristina Parvanta ATC, OPA-C,
 Vidyadhar Vinayak Upasani MD
 Rady Children's Hospital, San Diego, CA

9:50 am–9:55 am **Paper 114: Pre-Operative Predictors of Return to High Functional Status After Hip Arthroscopy for Femoroacetabular Impingement at 2-Year Minimum Follow-Up**
Austin V. Stone MD, PhD¹, William H. Neal BS¹,
 Brian Robert Waterman MD²,
 Shane Jay Nho MD, MS¹
¹Rush University Medical Center, Chicago, IL
²Wake Forest University School of Medicine,
 Winston-Salem, NC

9:55 am–10:00 am **Paper 115: Hip Arthroscopy vs. Physical Therapy for Acetabular Labral Tears: Analysis of a Prospective Randomized Controlled Trial**
 John W. Stelzer, MS¹, Ravi Agrawal¹,
 William Conaway¹, Noah J. Quinlan MD²,
 Shivam Upadhyaya MD¹, Kyle Alpaugh MD³,
 Jennifer Smith¹, **Scott D. Martin MD¹**
¹Massachusetts General Hospital, Boston, MA
²University of Utah, Salt Lake City, UT
³University of Massachusetts, Boston, MA

10:00 am–10:05 am **Paper 116: My First 100 Compared to My Last 100 Labral Reconstructions—The Role of Patient Selection in Increasing Survivorship**
Marc J. Philippon MD¹, Hajime Utsunomiya²,
 Karen K. Briggs MPH, MBA², Renato Locks²
¹Steadman Clinic, Vail, CO
²Steadman Philippon Research Institute,
 Vail, CO

10:05 am–10:10 am **Q & A**

- 10:10 am–10:18 am **Hip Dysplasia in the Athlete**
Bryan T. Kelly MD
Hospital for Special Surgery, New York, NY
- 10:18 am–10:26 am **How Do We Manage the Capsule in Hip Arthroscopy: What I Have Learned**
Shane Jay Nho MD, MS
Midwest Orthopaedics at Rush, Chicago, IL
- 10:26 am–10:45 am **Hip Panel Discussion**
Moderator:
Marc R. Safran MD
Stanford Sports Medicine Center,
Redwood City, CA
Panelists:
Joshua David Harris MD
Houston Methodist Hospital, Houston, TX
Bryan T. Kelly MD
Hospital for Special Surgery, New York, NY
Shane Jay Nho MD, MS
Midwest Orthopaedics at Rush, Chicago, IL
Marc J. Philippon MD
Steadman Clinic, Vail, CO

10:45 am–11:30 am **BREAK**

Concurrent Session A—Knee Video Demonstration

- 11:30 am–12:30 pm **Moderators:**
Bernard R. Bach Jr., MD
Midwest Orthopaedics at Rush, Chicago, IL
Nathan A. Mall MD, FACS
Cartilage Restoration Center of St. Louis,
St Louis, MO
- 11:30 am–11:37 am **Distal Femoral Osteotomy (DFO)**
David DeJour MD
Lyon-Ortho-Clinic, Lyon, France
- 11:37 am–11:44 am **Meniscal Root Repair**
Christopher D. Harner MD
University of Texas at Houston, Houston, TX
- 11:44 am–11:51 am **ITB Tenodesis During ACL Reconstruction**
Peter B. MacDonald MD, FRCS
PanAm Clinic, Winnipeg, MB, Canada
- 11:51 am–11:58 am **Osteochondral Allograft Transplant**
William Bugbee MD
Scripps Clinic, La Jolla, CA
- 11:58 am–12:05 pm **AMZ/MPFL Reconstruction**
Beth Shubin Stein MD
Hospital for Special Surgery, New York, NY
- 12:05 pm–12:12 pm **Meniscal Ramp Lesion Repair**
Robert A. Arciero MD
University of Connecticut Health Center,
Farmington, CT

- 12:12 pm–12:19 pm **PCL Reconstruction Using Tibial Socket**
Thomas M. DeBerardino MD
The San Antonio Orthopaedic Group,
San Antonio, TX
- 12:19 pm–12:30 pm **Q & A**

Concurrent Session B—Team Physician: Science of Injury

- 11:30 am–12:30 pm **Moderators:**
Timothy E. Hewett PhD, FACSM
Mayo Clinic, Rochester, MN
Thomas Sean Lynch MD
Columbia University, New York, NY
- 11:30 am–11:35 am **Paper 117: Relationship Between Pitcher Fatigue and Medial Elbow Torque in Baseball Pitchers: A Simulated Game Analysis**
Eric C. Makhni MD, MBA¹,
Jason E. Meldau BS¹, Jeff Stephens²,
Kelechi Okoroa MD¹, Vincent A. Lizzio BS¹,
Fabien Meta¹, Christopher S. Ahmad MD³,
Vasilios Moutzouros MD¹
¹Henry Ford Health System, Detroit, MI
²Wayne State University, Detroit, MI
³Columbia University, New York, NY
- 11:35 am–11:40 am **Paper 118: Fatigue Increases ACL Injury Risk in Youth Athletes: Risk Assessment Study Using Drop-Jump Test**
Mohsin S. Fidai MD¹, Kelechi Okoroa MD¹,
Jason E. Meldau BS¹, Peter A. Borowsky¹,
Fabien Meta¹, Vincent A. Lizzio BS¹,
Lauren H. Redler MD², Vasilios Moutzouros MD¹,
Eric C. Makhni MD, MBA¹
¹Henry Ford Health System, Detroit, MI
²Columbia University, New York, NY
- 11:40 am–11:45 am **Q & A**
- 11:45 am–11:52 am **When Does Load Become Overload?**
W. Ben Kibler MD
Lexington Clinic Sports Medicine Center,
Lexington, KY
- 11:52 am–11:59 am **New Modalities for Soft Tissue Recovery: Is There Science?**
Charles A. Thigpen PT, PhD, ATC
ATI Physical Therapy, Greenville, SC
- 11:59 am–12:06 pm **Use of Wearables to Measure Injury Risk**
E. Lyle Cain Jr., MD
Andrews Sports Medicine, Birmingham, AL
- 12:06 pm–12:13 pm **Return to Sport: When Are We Ready?**
Lynn Snyder-Mackler PhD, PT
University of Delaware, Newark, DE

12:13 pm–12:20 pm **Supplements: Should We Be Using More?**

John M. Tokish MD
Mayo Clinic Arizona, Phoenix, AZ

12:20 pm–12:30 pm **Q & A**

Concurrent Session C—Patellofemoral

11:30 am–12:30 pm **Moderators:**

Andrew J. Cosgarea MD
Johns Hopkins Sports Medicine, Lutherville, MD
Lutul D. Farrow MD
Cleveland Clinic Sports Health Center,
Garfield Heights, OH

11:30 am–11:35 am **Paper 119: Utility of Merchant View Radiographs for Assessment of Tt-tg: A Comparison to MRI**

David Bernholt¹, **Joseph D. Lamplot MD¹**,
Eric Eutsler¹, Jeffrey J. Nepple MD¹
¹Washington University, St. Louis, MO

11:35 am–11:40 am **Paper 120: The Role of Abnormal Tibiofemoral Rotation in Pediatric and Adolescent Patellar Instability**

David Bernholt¹, Joseph D. Lamplot MD²,
Eric Eutsler², **Jeffrey J. Nepple MD²**
¹Washington University Orthopedics,
St. Louis, MO
²Washington University, St. Louis, MO

11:40 am–11:45 am **Paper 121: Complications of Tibial Tubercle Surgery**

Anna Lundeen ATC, Elizabeth A. Arendt MD,
Kristin Mathson, Julie Agel MA, ATC,
Jeffrey A. Macalena MD
University of Minnesota, Minneapolis, MN

11:45 am–11:50 am **Paper 122: Isolated Medial Patellofemoral Ligament Reconstruction for Patellar Instability Regardless of the Tibial Tubercle Trochlear Groove Distance: Outcomes at 1 and 2 Years**

Brandon J. Erickson MD¹,
Joseph Nguyen MPH¹, Katelyn Gasik¹,
Jacqueline Brady MD²,
Beth E. Shubin Stein MD²
¹Hospital for Special Surgery, New York, NY
²Oregon, Portland, OR

11:50 am–11:55 am **Q & A**

11:55 am–12:02 pm **MPFL: Is That All We Need?**

Adam Blair Yanke MD
Midwest Orthopaedics at Rush, Chicago, IL

12:02 pm–12:09 pm **Trochleoplasty: When and How?**

David R. Diduch MD
UVA-Orthopaedics, Charlottesville, VA

12:09 pm–12:14 pm **Q & A**

12:14 pm–12:30 pm **Patellofemoral Panel Discussion**

Moderator:

Jack Farr II, MD
OrthoIndy South, Bargersville, IN

Panelists:

Andrew J. Cosgarea MD
Johns Hopkins Sports Medicine, Lutherville, MD
David DeJour MD
Lyon-Ortho-Clinic, Lyon, France
David R. Diduch MD
UVA-Orthopaedics, Charlottesville, VA
Lutul D. Farrow MD
Cleveland Clinic Sports Health Center,
Garfield Heights, OH
Adam Blair Yanke MD
Midwest Orthopaedics at Rush, Chicago, IL

12:30 pm–2:00 pm **Industry Symposia**

12:45 pm–2:15 pm **AOSSM Medical Publishing Group Reviewers' Workshop**

General Session—Shoulder Cuff

2:00 pm–3:45 pm **Moderators:**

John D. Kelly IV, MD
University of Pennsylvania, Philadelphia, PA
Alison P. Toth MD
Duke University, Durham, NC

2:00 pm–2:05 pm **Paper 123: Minimum Five-Year Outcomes and Clinical Survivorship Following Arthroscopic Double-Row Repair for Full-Thickness Supraspinatus Tears**

Jonas Pogorzelski MD¹, Erik M. Fritz MD¹,
Marilee P. Horan MPH¹, Zaamin B. Hussain BA¹,
Christoph Katthagen MD²,
Jonathan A. Godin MD, MBA¹,
Peter J. Millett MD, MSc³
¹Steadman Philippon Research Institute, Vail, CO
²Union Munster Hospital, Muenster, Germany
³Steadman Clinic, Vail, CO

2:05 pm–2:10 pm **Paper 124: Randomized Prospective Trial of Arthroscopic Rotator Cuff with or Without Acromioplasty: No Difference in Patient-Reported Outcomes at Long-Term Follow-Up**
Brian Robert Waterman MD¹,
 Jonathan Newgren MA², Anirudh K. Gowd BS²,
 Brandon C. Cabarcas BS²,
 Bernard R. Bach Jr., MD²,
 Brian J. Cole MD, MBA²,
 Anthony A. Romeo MD³, Nikhil N. Verma MD²
¹Wake Forest University, Winston-Salem, NC
²Midwest Orthopaedics at Rush, Chicago, IL
³Rothman Institute, New York, NY

2:10 pm–2:15 pm **Paper 125: Increasing Numbers of Pre-Operative Shoulder Injections Are Associated with a Higher Rate of Subsequent Revision Rotator Cuff Surgery**
Vishal Shwetal Desai¹,
 Christopher L. Camp MD¹,
 Jourdan M. Cancienne MD²,
 Joshua S. Dines MD³,
 Stephen F. Brockmeier MD²,
 Brian C. Werner MD²
¹Mayo Clinic, Rochester, MN
²University of Virginia, Charlottesville, VA
³Hospital for Special Surgery, New York, NY

2:15 pm–2:20 pm **Paper 126: The Use of a Bio-Inductive Collagen Patch to Supplement Repair of Large and Massive Rotator Cuff Tears Including Revisions: Clinical and Radiographic Outcomes at 2-Year Follow-Up**
Stephen Thon MD, Lawrence K. O'Malley MD,
 Michael John O'Brien MD, Felix H. Savoie III, MD
 Tulane University, New Orleans, LA

2:20 pm–2:25 pm **Paper 127: Why Do Patients Decide to Have Surgery for Their Symptomatic Rotator Cuff Tear? A Prospective Study**
Danielle Weekes MD¹, Weilong Jeffrey Shi²,
 Christopher Hadley², Kevin B. Freedman MD²,
 Matthew D. Pepe MD², Bradford S. Tucker MD¹,
 Fotios P. Tjoumakaris MD¹
¹The Rothman Institute,
 Egg Harbor Township, NJ
²Rothman Institute, Philadelphia, PA

2:25 pm–2:35 pm **Q & A**
 2:35 pm–2:45 pm **Pseudoparalysis: What Is It and What Does It Mean?**
 Anthony A. Romeo MD
 Rothman Institute, New York, NY

2:45 pm–2:55 pm **Pseudoparalysis: We Can Reverse It**
 Robert U. Hartzler MD
 San Antonio Orthopaedic Group, San Antonio, TX

2:55 pm–3:05 pm **Massive Cuff: My Treatment Algorithm**
 Robert T. Burks MD
 University of Utah Orthopaedic Center,
 Salt Lake City, UT

3:05 pm–3:45 pm **Massive Cuff Repair Panel Discussion**
Moderator:
 Kyle Anderson MD
 Michigan Orthopaedic Institute
 W. Bloomfield, MI
Panelists:
 John D. Kelly IV, MD
 University of Pennsylvania, Philadelphia, PA
 John E. Kuhn MD
 Vanderbilt Sports Medicine, Nashville, TN
 Robert U. Hartzler MD
 San Antonio Orthopaedic Group, San Antonio, TX
 Anthony A. Romeo MD
 Rothman Institute, New York, NY
 Patrick St. Pierre MD
 Desert Orthopedic Center
 Rancho Mirage, CA

Concurrent Session A—Overhead Athlete

4:00 pm–5:00 pm **Moderators:**
 James R. Andrews MD
 Andrews Research and Education Foundation,
 Gulf Breeze, FL
 Peter Nissen Chalmers MD
 Washington University Medical Center,
 St Louis, MO

4:00 pm–4:05 pm **Paper 128: Ulnar Collateral Ligament Repair with Internal Brace Augmentation in Amateur Overhead Throwing Athletes**
Jeffrey R. Dugas MD¹,
Christopher A. Looze MD²,
 Christopher Michael Jones MD³,
 Brian L. Walters MD²,
 Marcus A. Rothermich MD²,
 Benton A. Emblom MD¹, Glenn S. Fleisig PhD²,
 Kyle Aune MPH², E. Lyle Cain Jr., MD¹
¹Andrews Sports Medicine & Orthopaedic
 Center, Birmingham, AL
²American Sports Medicine Institute,
 Birmingham, AL
³University of South Alabama, Mobile, AL

4:05 pm–4:10 pm **Paper 129: Radiographic Predictors of Elbow Injury and Surgery in Major League Baseball Pitchers**
Grant Garcia MD¹, Anirudh K. Gowd BS¹,
 Brandon C. Cabarcas BS¹, Joseph N. Liu MD¹,
 Anthony A. Romeo MD², Nikhil N. Verma MD¹
¹Midwest Orthopaedics at Rush, Chicago, IL
²Rothman Institute, New York, NY

4:10 pm–4:15 pm

Paper 130: Comparative Analysis of the Nonoperative Treatment of Elbow Ulnar Collateral Ligament Injuries in Professional Baseball Players with and Without Platelet-Rich Plasma

Peter Douglas McQueen MD¹,
 Christopher L. Camp MD²,
Aakash Chauhan MD¹, Brandon J. Erickson MD³,
 Hollis G. Potter MD³, John D'Angelo⁴,
 Stephen Fealy MD³, Michael G. Ciccotti MD⁵,
 Jan Fronek MD⁶
¹Scripps Clinic, San Diego, CA
²Mayo Clinic, Rochester, MN
³Hospital for Special Surgery, New York, NY
⁴Major League Baseball, New York, NY
⁵Rothman Institute, Philadelphia, PA
⁶Scripps Clinic Medical Group, La Jolla, CA

4:15 pm–4:20 pm

Paper 131: Comparison of Outcomes Based on Graft Type and Tunnel Configuration for Primary Ulnar Collateral Ligament Reconstruction in Professional Baseball Pitchers

Timothy B. Griffith MD¹,
 Christopher S. Ahmad MD²,
 Michael G. Ciccotti MD³, John D'Angelo⁴, Joshua S. Dines MD⁵,
 David W. Altchek MD⁵,
 Christopher L. Camp MD⁶
¹Peachtree Orthopedics, Atlanta, GA
²Columbia University, New York, NY
³Rothman Institute, Philadelphia, PA
⁴Major League Baseball, New York, NY
⁵Hospital for Special Surgery, New York, NY
⁶Mayo Clinic, Rochester, MN

4:20 pm–4:25 pm

Q & A

4:25 pm–4:31 pm

Biceps Tendon: Friend or Foe?

James R. Andrews MD
 Andrews Research and Education Foundation,
 Gulf Breeze, FL

4:31 pm–4:37 pm

UCL: When to Operate and When to Wait

Mark S. Schickendantz MD
 Cleveland Clinic Sports Health, Cleveland, OH

4:37 pm–4:43 pm

The Truth About Weighted Ball Programs

Michael Thomas Freehill MD
 University of Michigan, Ann Arbor, MI

4:43 pm–5:00 pm

Overhead Athlete Panel Discussion

Moderator:

Christopher S. Ahmad MD
 Columbia University, New York, NY

Panelists:

James R. Andrews MD
 Andrews Research and Education Foundation,
 Gulf Breeze, FL
 Steven B. Cohen MD
 Rothman Institute, Philadelphia, PA
 John E. Conway MD
 Orthopedic Specialty Associates, Texas Health
 Physicians Group, Fort Worth, TX
 Jeffrey R. Dugas MD
 Andrews Sports Medicine & Orthopaedic Center,
 Birmingham, AL
 Mark S. Schickendantz MD
 Cleveland Clinic Sports Health, Cleveland, OH

Concurrent Session B—Shoulder Instability/Bone Loss

4:00 pm–5:00 pm

Moderators:

Stephen F. Brockmeier MD
 UVA-Orthopaedics, Charlottesville, VA
 Robert T. Burks MD
 University of Utah, Salt Lake City, UT

4:00 pm–4:05 pm

Paper 132: Incidence and Clinical Significance of Posterior Glenoid Deficiency in Patients with Posterior Glenohumeral Instability

Michael Eisenbeck MD¹, Jared Wolfe MD¹, Kyle E. Nappo MD¹, Daniel Christensen MD¹,
 Robert A. Waltz MD², Lance E. LeClere MD,
 LCDR, MC, USN³, **Jonathan F. Dickens MD¹**
¹Walter Reed National Military Medical Center,
 Bethesda MD
²Naval Medical Center San Diego, San Diego, CA
³US Naval Academy, Annapolis, MD

4:05 pm–4:10 pm

Paper 133: Automated 3D MRI Allows for Accurate Evaluation of Glenoid Bone Loss as Compared to 3D CT

Drew A. Lansdown MD¹, Robert Dawe²,
 Gregory L. Cvetanovich MD³,
 Nikhil N. Verma MD³, Brian J. Cole MD, MBA³,
 Bernard R. Bach Jr., MD³,
 Gregory P. Nicholson MD³,
 Anthony A. Romeo MD⁴, Adam Blair Yanke MD³
¹University of California, San Francisco,
 San Francisco, CA
²Rush University, Chicago, IL
³Midwest Orthopedics at Rush, Chicago, IL
⁴Rothman Institute, New York, NY

4:10 pm–4:15 pm

Paper 134: 90-Day Complications Following the Distal Tibia Allograft Procedure

Rachel M. Frank MD¹, Catherine Richardson BS², Bonnie Gregory MD³, Shelby Sumner MPH³, Michael C. O'Brien MA², Emon Bernardoni MS³, Nikhil N. Verma MD³, Brian J. Cole MD, MBA³, Gregory P. Nicholson MD³, Matthew T. Provencher MD⁴, Anthony A. Romeo MD⁵

¹University of Colorado, Aurora, CO
²Rush University Medical Center, Chicago, IL
³Midwest Orthopaedics at Rush, Chicago, IL
⁴The Steadman Clinic, Vail, CO
⁵Rothman Institute, New York, NY

4:15 pm–4:20 pm

Q & A

4:20 pm–4:28 pm

Glenoid Track: Practical Application

John M. Tokish MD
 Mayo Clinic Arizona, Phoenix, AZ

4:28 pm–4:36 pm

Remplissage: When and How

Felix H. Savoie III, MD
 Tulane University, New Orleans, LA

4:36 pm–5:00 pm

Complex Instability Panel Discussion

Moderator:
 Matthew T. Provencher MD
 The Steadman Clinic, Vail, CO
Panelists:
 Stephen F. Brockmeier MD
 UVA-Orthopaedics, Charlottesville, VA
 Robert T. Burks MD
 University of Utah, Salt Lake City, UT
 Felix H. Savoie III, MD
 Tulane University, New Orleans, LA
 Dean C. Taylor MD
 Duke Sports Medicine, Durham, NC
 John M. Tokish MD
 Mayo Clinic Arizona, Phoenix, AZ

Concurrent Session C—Cartilage

4:00 pm–5:00 pm

Moderators:

David C. Flanigan MD
 The Ohio State University, Columbus, OH
 Christian Lattermann MD
 University of Kentucky Medical Center,
 Lexington, KY

4:00 pm–4:05 pm

Paper 135: Efficacy of Osteochondral Allograft Transplantation in the Knee in Adults Forty Years and Older

Katlyn Robinson BS, **Dennis C. Crawford MD**
 Oregon Health and Science University,
 Portland, OR

4:05 pm–4:10 pm

Paper 136: Bone Marrow Concentrate Does Not Improve Osseous Integration of Osteochondral Allograft Transplants in the Knee: A Comparative Magnetic Resonance Imaging Analysis

Dean Wang MD, Kenneth Lin MD, Mollyann D. Pais BS, Alissa Burge MD, Riley J. Williams MD
 Hospital for Special Surgery, New York, NY

4:10 pm–4:15 pm

Paper 137: Clinical Outcomes of Multiple Osteochondral Allograft Transplantation of the Knee: An Analysis of Snowman Technique and Multifocal Lesions

Eric J. Cotter BS¹, Charles P. Hannon MD², Drew A. Lansdown MD³, Rachel M. Frank MD⁴, Brian Robert Waterman MD⁵, **Brian J. Cole MD, MBA⁶**

¹Georgetown University, Washington, DC
²Rush University Medical Center, Chicago, IL
³University of California-San Francisco, San Francisco, CA
⁴University of Colorado, Boulder, CO
⁵Wake Forest University, Winston-Salem, NC
⁶Midwest Orthopaedics at Rush, Chicago, IL

4:15 pm–4:20 pm

Q & A

4:20 pm–4:30 pm

Debate: Surface or Solid? What Should We Do?

Andreas H. Gomoll MD
 Brigham Women's Hospital, Chestnut Hill, MA
 James P. Stannard MD
 University of Missouri, Columbia, MO

4:30 pm–4:37 pm

Adjuvant Biologics with Cartilage Repair: Theoretical and Practical

Scott A. Rodeo MD
 Hospital for Special Surgery, New York, NY

4:37 pm–5:00 pm

Cartilage Panel Discussion

Moderator:
 Christian Lattermann MD
 University of Kentucky Medical Center,
 Lexington, KY
Panelists:
 Brian J. Cole MD, MBA
 Midwest Orthopaedics at Rush, Chicago, IL
 David C. Flanigan MD
 The Ohio State University, Columbus, OH
 Andreas H. Gomoll MD
 Brigham Women's Hospital, Chestnut Hill, MA
 Scott A. Rodeo MD
 Hospital for Special Surgery, New York, NY
 James P. Stannard MD
 University of Missouri, Columbia, MO

4:00 pm–5:00 pm

NIH Reviewers Workshop

General Session—Shoulder Instability

8:30 am–9:35 am

Moderators:

Timothy S. Leroux MD, MEd, FRCSC
University of Toronto, Toronto, ON, Canada
Orr Limpisvasti MD
Kerlan-Jobe Orthopaedic Clinic, Los Angeles, CA

8:30 am–8:40 am

Travelling Fellows Presentation

Daniel C. Wascher MD
University of New Mexico, Albuquerque, NM

8:40 am–8:45 am

Paper 138: Radiographic Analysis of Glenoid Morphology After Arthroscopic Latarjet vs. Distal Tibial Allograft in the Treatment of Anterior Shoulder Instability
Ivan H. Wong MD, FRCSC, MACM,

JP King MD, M.Sc, Gordon Boyd MD, Michael Mitchell MD, Catherine M. Coady MD, FRCSC
Dalhousie University, Halifax, NS, Canada

8:45 am–8:50 am

Paper 139: O'Donoghue Sports Injury Award: Arthroscopic vs. Open Anterior Shoulder Stabilization: A Prospective Randomized Clinical Trial with 15-Year Follow-Up and an Assessment of "On-Track" and "Off-Track" as a Predictor of Failure

Craig R. Bottoni MD, John D. Johnson DO, CPT, Liang Zhou MD, Sarah G. Raybin BA, MAJ, James J. Shaha MD, COL (ret), Kenneth K. Lindell MD, MAJ, David D. Thoma DO
Tripler Army Medical Center, Honolulu, HI

8:50 am–8:55 am

Paper 140: Arthroscopic Bankart Repair with and Without Arthroscopic Infrapinatus Remplissage in Anterior Shoulder Instability with Hill-Sachs Defect: Randomized Controlled Trial
Peter B. MacDonald MD, FRCS¹,

Jason Old MD FRCSC¹,
Randhir Mascarenhas MD²,
Sheila McRae PhD¹, Jon Marsh¹,
James Dubberley MD¹,
Gregory A. Stranges MD¹,
Jeff Leiter MSc, PhD¹, Peter Lapner MD³,
Sharad Prabhakar MD¹
¹PanAm Clinic, Winnipeg, MB, Canada
²University of Texas-Houston, Houston, TX
³The Ottawa Hospital, Ottawa, ON, Canada

8:55 am–9:00 am

Paper 141: Prospective Evaluation of Glenoid Bone Loss After First-Time and Recurrent Anterior Glenohumeral Instability Events

Jonathan F. Dickens MD¹, Sean E. Slaven MD¹,
Kenneth L. Cameron PhD, MPH, ATC²,
Adam M. Pickett MD³, Matthew A. Posner MD²,
Scot Campbell MD³, Brett D. Owens MD⁴
¹Walter Reed National Military Medical Center, Bethesda MD
²Keller Army Hospital, West Point, NY
³Brooke Army Medical Center, San Antonio, TX
⁴Brown University, Providence, RI

9:00 am–9:05 am

Paper 142: Distal Tibial Allograft Glenoid Reconstruction for Recurrent Shoulder Instability: Clinical Outcomes and Complications

Anthony F. De Giacomo MD, Hithem Rahmi,
Sevag Bastian, Christopher Klein, John Itamura
Kerlan Jobe Orthopaedic Clinic, Los Angeles, CA

9:05 am–9:10 am

Q & A

9:10 am–9:15 am

Paper 143: Non-Operative Management of Posterior Shoulder Instability: An Assessment of Survival and Predictors for Conversion to Surgery at 1 to 13 Years After Diagnosis

Jarret Murray Woodmass MD¹, Julia Lee MD²,
Nick R. Johnson BS³, Christopher L. Camp MD³,
Diane L. Dahm MD³, Aaron John Krych MD³
¹Boston Shoulder Institute, Boston, MA
²Sierra Pacific Orthopedics, Fresno, CA
³Mayo Clinic, Rochester, MN

9:15 am–9:22 am

Get It Right the First Time: Choosing the Right Procedure for the Right Patient

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

9:22 am–9:40 am

Shoulder Instability Panel Discussion
Moderator:

Dean C. Taylor MD
Duke University, Durham, NC

Panelists:

Robert A. Arciero MD
University of Connecticut Health Center,
Farmington, CT
Julie Bishop MD
The Ohio State University, Columbus, OH
Frank Cordasco MD, MS
Hospital for Special Surgery, New York, NY
Anthony F. De Giacomo MD
Kerlan Jobe Orthopaedic Clinic, Los Angeles, CA

9:40 am–9:45 am **Presidential Introduction**
Annunziato Amendola MD
Duke Sports Science Institute, Durham, NC

9:45 am–10:15 am **Presidential Address**
Charles A. Bush-Joseph MD
Midwest Orthopaedics at Rush, Chicago, IL

10:15 am–10:25 am **Robert E Leach Sports Medicine Leadership Award**

10:25 am–10:35 am **Hall of Fame Presentation**

10:35 am–10:50 am **Business Meeting**

10:50 am–11:30 am **BREAK**

Concurrent Session A—Shoulder Rotator Cuff Case-Based Learning

11:30 am–12:30 pm **Moderators:**
Justin W. Griffin MD
Jordan-Young Institute, Virginia Beach, VA
Claude T. Moorman III, MD
Duke Sports Medicine Center, Durham, NC

11:30 am–11:35 am **Paper 144: Failed Dermal Allograft Procedures in Irreparable Rotator Cuff Tears Can Still Improve Pain and Function. The "Biologic Tuberooplasty Effect"**
Sevag Bastian MD¹, **Raffy Mirzayan MD¹**,
Michael Allan Stone MD², Michael Batech DrPh³,
Daniel Acevedo MD⁴, Anshu Singh MD⁵
¹Kaiser Permanente, Baldwin Park, CA
²LAC+USC Medical Center, Los Angeles, CA
³Kaiser Permanente, Los Angeles, CA
⁴Kaiser Permanente, Panorama City, CA
⁵Kaiser Permanente, San Diego, CA

11:35 am–11:40 am **Paper 145: Latissimus Dorsi Tendon Transfer with or without Superior Capsular Reconstruction for Treatment of Irreparable Rotator Cuff Tears**
Anthony F. De Giacomo MD, Hithem Rahmi,
Sevag Bastian MD, Christopher Klein,
John Itamura
Kerlan Jobe Orthopaedic Clinic, Los Angeles, CA

11:40 am–11:45 am **Paper 146: Arthroscopic Superior Capsular Reconstruction in Males Provides Superior Outcomes to Reverse Total Shoulder or Debridement for Irreparable Rotator Cuff Tears**

John M. Tokish MD¹,
Michael J. Kissenberth MD², Ellen Shanley PhD³,
Stefan John Tolan MD², Kyle J. Adams⁴,
Ryan Alexander BS⁴, Sarah A. Babrowicz BS⁵,
Richard J. Hawkins MD, FRCSC⁴,
Charles A. Thigpen PT, PhD, ATC³
¹Mayo Clinic Arizona, Phoenix, AZ
²Steadman Hawkins Clinic of the Carolinas,
Greenville, SC
³ATI Physical Therapy, Greenville, SC
⁴Hawkins Foundation, Greenville, SC
⁵Center for Effectiveness Research in
Orthopedics, Greenville, SC

11:45 am–11:50 am **Q & A**

11:50 am–11:57 am **Cuff Pathology in the Young Athlete**
Keith Kenter MD
Western Michigan University, Kalamazoo, MI

11:57 am–12:06 am **Biologics and Cuff Repair**
Adam William Anz MD
Andrews Research and Education Foundation,
Gulf Breeze, FL

12:06 pm–12:30 pm **Shoulder Rotator Cuff Panel Discussion**

Moderator:
Mark H. Getelman MD
Southern California Orthopaedic Institute
Thousand Oaks, CA
Panelists:
Adam William Anz MD
Andrews Research and Education Foundation,
Gulf Breeze, FL
Keith Kenter MD
Western Michigan University, Kalamazoo, MI
Claude T. Moorman III, MD
Duke Sports Medicine Center, Durham, NC
John M. Tokish MD
Mayo Clinic Arizona, Phoenix, AZ

Concurrent Session B—Outcomes in Sports Medicine: Is There Value?

11:30 am–12:30 pm **Moderators:**
Eric C. Makhni MD
Henry Ford Hospital, Detroit, MI
Kurt P. Spindler MD
Cleveland Clinic Sports Health Center,
Garfield Heights, OH

- 11:30 am–11:35 am **Paper 147: Correlation of Patient Reported Outcome Measurement Information System Computer Adaptive Test (PROMIS-CAT) and Knee Injury and Osteoarthritis Outcome Score (KOOS) in Knee Osteotomy and Cartilage Procedures**
Seth L. Sherman MD,
Andrew James Garrone BS, Elliott E. Voss BS
University of Missouri, Columbia, MO
- 11:35 am–11:40 am **Paper 148: Demonstrating the Value of an ACL Registry**
Gregory B. Maletis MD¹,
Tadashi Ted Funahashi MD²,
Rebecca Love MPH³,
Ronald Wyatt MD⁴, Heather A. Prentice PhD³,
William Burfeind³, Liz Paxton MA⁵
¹Kaiser Permanente, Baldwin Park, CA
²Kaiser Permanente, Irvine, CA
³Kaiser Permanente, San Diego, CA
⁴Kaiser Permanente, Walnut Creek, CA
⁵Kaiser Permanente, El Cajon, CA
- 11:40 am–11:45 am **Paper 149: Socioeconomic Status Impacts Outcomes Following Anterior Cruciate Ligament Reconstruction Status**
Akash R. Patel BS, Ryan Smith BS,
Kavish Gupta BS, **Curtis Vandenberg MD**
Children's Hospital Los Angeles,
Los Angeles, CA
- 11:45 am–11:50 am **Paper 150: Prospective Validation of Patient-Reported Outcomes Measurement Information Systems (PROMIS) CAT Scores in a Hip Preservation Population**
Robert Kollmorgen DO¹, Brian Lewis MD²,
Richard C. Mather MD², Steven Olson MD²
¹University of California San Francisco,
San Francisco, CA
²Duke University, Durham, NC
- 11:50 am–11:55 am **Q & A**
- 11:55 am–12:03 pm **Outcomes Collection in the Real World: Cost and Benefit**
Geoffrey S. van Thiel MD, MBA
Rockford Orthopedic Associates, Rockford, IL
- 12:03 pm–12:11 pm **Outcomes: What Is the Least We Need?**
James J. Irrgang PT, PhD, ATC
University of Pittsburgh, Pittsburgh, PA
- 12:11 pm–12:19 pm **Outcomes: How Should the Data Be Used?**
Richard C. Mather III, MD
Duke University Medical Center, Durham, NC

- 12:19 pm–12:30 pm **Q & A and Discussion**
Kurt P. Spindler MD
Cleveland Clinic Sports Health Center,
Garfield Heights, OH
Panelists:
James J. Irrgang PT, PhD, ATC
University of Pittsburgh, Pittsburgh, PA
Eric C. Makhni MD
Henry Ford Hospital, Novi, MI
Richard C. Mather III, MD
Duke University Medical Center, Durham, NC
Geoffrey S. van Thiel MD, MBA
Rockford Orthopedic Associates, Rockford, IL

Concurrent Session C—Team Physician: Facial and Head Injuries

- 11:30 am–12:30 pm **Moderators:**
Rachel M. Frank MD
University of Colorado, Aurora, CO
Alexander E. Weber MD
University of Southern California,
Los Angeles, CA
- 11:30 am–11:40 am **Facial Trauma**
Christina Tragos MD
Rush University Medical Center, Chicago, IL
- 11:40 am–11:50 am **Oral/Dental Injuries: Triage and Management**
Kristopher Rappold DDS
Audubon Dental Group, New Orleans, LA
- 11:50 am–12:00 pm **AMSSM Exchange Lecture: Eye Injuries in Sports**
Kristina M. Colbenson MD
Mayo Clinic, Rochester, MN
- 12:00 pm–12:10 pm **On Field Management of Head and Neck Injuries**
Robert H. Brophy MD
Washington University Orthopedics,
Chesterfield, MO
- 12:10 pm–12:20 pm **ACSM Exchange Lecture: Concussion Update**
Andrew Peterson MD
University of Iowa Hospitals and Clinics,
Iowa City, IA
- 12:20 pm–12:30 pm **Q & A**
- 12:30 pm–1:00 pm **Lunch**
- 1:00 pm–2:30 pm **Instructional Courses**
- 2:45 pm–4:15 pm **Round Tables**

General Session – Biceps/SLAP

8:20 am – 9:00 am

Moderators:

Neal S. ElAttrache MD
Kerlan-Jobe Clinic, Los Angeles, CA
Brian C. Werner MD
University of Virginia, Charlottesville, VA

8:20 am – 8:25 am

Paper 151: Management of Failed Proximal Biceps Surgery: Clinical Outcomes After Revision to Subpectoral Biceps Tenodesis
David Savin MD¹, Brian Robert Waterman MD², Catherine Richardson³, Shelby Sumner³, Anthony A. Romeo MD⁴

¹Desert Orthopedic Center, Rancho Mirage, CA
²Wake Forest University, Winston-Salem, NC
³Rush University Medical Center, Chicago, IL
⁴Rothman Institute, New York, NY

8:25 am – 8:30 am

Paper 152: Arthroscopic SLAP IIb Repair Using Knot-Tying vs. Knotless Suture Anchors: Is There a Difference?

Justin W. Arner MD, Joseph De Groot MD,
James P. Bradley MD
University of Pittsburgh Medical Center, Pittsburgh, PA

8:30 am – 8:35 am

Paper 153: Supratoral vs. Intra Articular Biceps Tenodesis: A Comparison of Clinical Outcomes

Brian M. Godshaw MD,
Nicholas Kolodychuk BS,
Benjamin Bryan Browning MD, Gerard Williams¹,
Rachel Burdette, Deryk G. Jones MD
Ochsner Sports Medicine Institute,
New Orleans, LA

8:35 am – 8:40 am

Q & A

8:40 am – 8:47 am

SLAP: Who Should I Repair?

John E. Conway MD
Orthopedic Specialty Associates, Fort Worth, TX

8:47 am – 8:54 am

Biceps Tenodesis: Onlay or Inlay?

Steven B. Cohen MD
Rothman Institute, Philadelphia, PA

8:54 am – 9:01 am

Internal Impingement in the Overhead Athlete: My Algorithm

Neal S. ElAttrache MD
Kerlan-Jobe Clinic, Los Angeles, CA

9:00 am – 9:55 am

LIVE Surgery – Superior Capsule Reconstruction & Shoulder Resurfacing

Moderators:

Joseph Abboud MD
Rothman Institute, Philadelphia, PA
Patrick St. Pierre MD
Desert Orthopedic Center, Rancho Mirage, CA

Procedures:

Superior Capsule Reconstruction
Brian J. Cole MD, MBA
Midwest Orthopaedics at Rush, Chicago, IL
Shoulder Resurfacing
Gregory P. Nicholson MD
Midwest Orthopaedics at Rush, Chicago, IL

9:55 am – 10:00 am

Introduction of Presidential Guest Speaker

Charles A. Bush-Joseph MD
Midwest Orthopaedics at Rush, Chicago, IL

10:00 am – 10:45 am

Presidential Guest Speaker

Bill Walton
NBA Legend, San Diego, CA

10:45 am – 10:55 am

Presidential Medallion Exchange

10:55 am – 11:30 am

BREAK

11:30 am – 12:30 pm

LIVE Surgery – Hip Arthroscopy and Meniscal Transplant

Moderators:

Mark D. Miller MD
University of Virginia Healthsystem,
Charlottesville, VA
Marc J. Philippon MD
Steadman Philippon Research Institute, Vail, CO

Procedures:

Hip Arthroscopy
Shane Jay Nho MD, MS
Midwest Orthopaedics at Rush, Chicago, IL
MPFL Reconstruction
Adam B. Yanke MD
Midwest Orthopaedics at Rush, Chicago, IL

PRESIDENTIAL GUEST SPEAKER

BILL WALTON

Saturday, July 7 • 10:00 am

This year's Presidential Speaker, William (Bill) Theodore Walton, III, will enlighten attendees on how basketball and sports have shaped his life and ability to impact others. He was a member of two NCAA championship teams for UCLA compiling an NCAA record 88 consecutive game winning streak. Walton's professional career began when he was the number one overall pick in the 1974 NBA Draft by the Portland Trailblazers. He was a member of their championship team in 1977. Nine years later he earned another championship title with the Boston Celtics. He played with the Trailblazers from 1974-1979, the San Diego Clippers 1979-1984, the Los Angeles Clippers in 1985 and the Boston Celtics from 1985-1988. Currently, he lives in San Diego and serves as the executive chairman of Connect SD Sport Innovators (SDSI), a non-profit, business accelerating, trade organization that connects and drives the growth of Southern California's vibrant sports economy. He also authored the book, *Back from the Dead* (March 2016).



12:30 pm–1:30 pm Lunch and Poster Tours	
Concurrent Session A—Shoulder Video Session	
1:30 pm–2:30 pm	Moderators: Jonathan F. Dickens MD Walter Reed National Military Medical Center, Bethesda MD Moin Khan MD McMaster University, Burlington, ON, Canada
1:30 pm–1:37 pm	Advanced Labrum Repair James P. Bradley MD University of Pittsburgh Medical Center, Pittsburgh, PA
1:37 pm–1:44 pm	Arthroscopic Subscapularis Repair Larry D. Field MD Mississippi Sports Medicine and Ortho Center Ridgeland, MS
1:44 pm–1:51 pm	Suprascapular Nerve Decompression Brian R. Waterman MD Wake Forest University, Winston-Salem, NC
1:51 pm–1:56 pm	Q & A
1:56 pm–2:03 pm	AC Joint Reconstruction: Don't Forget the AC Ligaments Matthew Bollier MD University of Iowa Hospitals and Clinics, Iowa City, IA
2:03 pm–2:10 pm	Arthroscopic Bony Bankart Repair Peter J. Millett MD, MSC Steadman Clinic, Vail, CO
2:10 pm–2:17 pm	Arthroscopic Rotator Cuff Patch Augmentation Stephen F. Brockmeier MD UVA-Orthopaedics, Charlottesville, VA
2:17 pm–2:24 pm	Arthroscopic Biceps Tenodesis Timothy S. Leroux MD, MEd, FRCS University of Toronto, Toronto, ON, Canada
2:24 pm–2:30 pm	Q & A
Concurrent Session B—Hip 2	
1:30 pm–2:30 pm	Moderators: J. W. Thomas Byrd MD Nashville Sports Medicine Foundation, Nashville, TN F. Winston Gwathmey MD UVA-Orthopaedics, Charlottesville, VA

1:30 pm–1:35 pm	Paper 154: The Borderline Dysplastic Hip: Arthroscopy or PAO? George Grammatopoulos MD ¹ , Cecilia Pascual-Garrido MD² , Jeffrey Nepple MD ² , Christopher M. Larson MD ³ , Asheesh Bedi MD ⁴ , ANCHOR Group ² , Paul Beaulé MD ⁵ , John C. Clohisy MD ² ¹ University of Oxford, Oxford, United Kingdom ² Washington University, Saint Louis, MO ³ Minnesota Orthopaedic Sports Medicine Institute at Twin Cities Orthopedics, Edina, MN ⁴ University of Michigan, Ann Arbor, MI ⁵ The Ottawa Hospital, Ottawa, ON, Canada
1:35 pm–1:40 pm	Paper 155: Does Time from Injury to Surgery Affect Outcomes Following Surgical Repair of Partial and Complete Proximal Hamstring Ruptures? Brady C. Shambaugh DO ¹ , Suzanne Laura Miller MD ² , Thomas H. Wuerz MD³ ¹ Orthopaedic Associates, Inc., Cranston, RI ² Boston Sports and Shoulder Center, Waltham, MA ³ New England Baptist Hospital, Needham, MA
1:40 pm–1:45 pm	Paper 156: Endoscopic Repair of Partial Thickness Under-Surface Tears of the Abductor Tendon (pusta): Clinical Outcomes with Minimum Two-Year Follow-Up David Edward Hartigan MD ¹ , Itay Perets MD ² , Sherwin S.W. Ho MD BA ³ , John P. Walsh ⁴ , Leslie Yuen BA ⁴ , Benjamin G. Domb MD² ¹ Mayo Clinic Arizona, Phoenix, AZ ² Hinsdale Orthopaedics and American Hip Institute, Westmont, IL ³ University of Chicago, Chicago, IL ⁴ American Hip Institute, Westmont, IL
1:45 pm–1:50 pm	Paper 157: Outcomes After Arthroscopic Management of Subspinous Impingement in Borderline Hip Dysplasia Daniel Fegghi MD , Srino Bharam MD, Jonathan Shearin Lenox Hill Hospital, New York, NY
1:50 pm–1:55 pm	Q & A
1:55 pm–2:02 pm	Athletic Pubalgia: Hip, Hernia or Both? Christopher M. Larson MD Minnesota Orthopaedic Sports Medicine Institute at Twin Cities Orthopedics, Edina, MN
2:02 pm–2:09 pm	Extra-Articular Impingement in the Athlete Asheesh Bedi MD University of Michigan, Ann Arbor, MI

2:09 pm–2:16 pm **Endoscopic Hamstring Repair Technique**

Carlos A. Guanche MD
Southern California Orthopedic Institute,
Van Nuys, CA

2:16 pm–2:23 pm **Abductor Repair: Surgical Technique**

Brian D. Busconi MD
UMass Memorial Health Care, Worcester, MA

2:23 pm–2:30 pm **Q & A**

Concurrent Session C—High School and Collegiate Athlete

1:30 pm–2:30 pm

Moderators:

Eric C. McCarty MD
University of Colorado, Boulder, CO
Mary K. Mulcahey
Tulane University, New Orleans, LA

1:30 pm–1:40 pm **Update on Catastrophic Injuries in High School and College**

Barry P. Boden MD
The Orthopaedic Center, Rockville MD

1:40 pm–1:50 pm

NCAA Injury Surveillance: What Have We Learned?

John Parsons PhD, ATC
NCAA Sport Science Institute, Indianapolis, IN

1:50 pm–2:00 pm

National Federation of State High School Associations: Who Are We and How We Can Partner with You

Bob Colgate
Indianapolis, IN

2:00 pm–2:10 pm

NCAA Team Physician: Separating Medicine from Sports

John Parsons PhD, ATC
NCAA Sport Science Institute, Indianapolis, IN

2:10 pm–2:15 pm

2:15 pm–2:30 pm

Q & A

Game Day Pain Management in the Amateur Athlete: What Is Appropriate? Panel Discussion

Moderator:

Eric C. McCarty MD
University of Colorado, Boulder, CO

Panelists:

Geoffrey Scott Baer MD, PhD
University of Wisconsin Hospitals & Clinics,
Madison, WI
Robert Alexander Creighton MD
University of North Carolina, Chapel Hill, NC
Seth C. Gamradt MD
University of Southern California,
Los Angeles, CA
Darren L. Johnson MD
University of Kentucky Sports Medicine,
Lexington, KY

General Session—Biologics

2:30 pm–3:00 pm

Moderators:

Lee D. Kaplan MD
University of Miami, Miami, FL
Jorge Chahla MD, PhD
Santa Monica Orthopaedic & Sports Medicine,
Santa Monica, CA

2:30 pm–2:35 pm

Paper 158: Influence of Naproxen, Age and Body Mass Index on the Biological Composition of Leukocyte Rich Platelet-Rich Plasma: A Prospective, Therapeutic, Cohort Study

Sandeep Mannava MD, PhD¹,
Kaitlyn E. Whitney BS², Jillian King BS²,
Mitchell Kennedy BS², Katarina Klett²,
Grant Dornan², Jorge Chahla MD, PhD³,
Thos A. Evans MD², Johnny Huard PhD⁴,
Robert F. LaPrade MD, PhD⁵
¹University of Rochester Medical Center,
Rochester, NY
²Steadman Philippon Research Institute,
Vail, CO
³Santa Monica Orthopaedic & Sports Medicine,
Santa Monica, CA
⁴University of Texas Health Science Center,
Houston, TX
⁵The Steadman Clinic, Vail, CO

2:35 pm–2:40 pm

Paper 159: Anti-Inflammatory Effects of Bone Marrow Aspirate Concentrate on Joint Tissues in Patients Undergoing ACL Reconstruction

Kyla Huebner¹, Ayten Hijazi¹, Andrew Firth²,
Frank Beier¹,

Alan M. Getgood MD, FRCS (Tr&Orth)²

¹University of Western Ontario,
London, ON, Canada

²Fowler Kennedy Sport Medicine Clinic,
London, ON, Canada

2:40 pm–2:45 pm

Paper 160: Incidence of Heterotopic Ossification Among NFL Athletes Following Platelet-Rich Plasma (PRP) for Treatment of Core Muscle Injuries (CMI)

Alexander Edward Poor MD¹,
Johannes B. Roedl MD², Adam C. Zoga MD²,
William C. Meyers MD¹
¹Vincera Institute, Philadelphia, PA
²Thomas Jefferson University Hospital,
Philadelphia, PA

2:45 pm–2:53 pm

Biologics and the Knee: What Should You Be Using

Robert F. LaPrade MD, PhD
The Steadman Clinic, Vail, CO

2:53 pm–3:00 pm

Q & A

Concurrent Session A—Shoulder Instability Case-Based Learning

- 3:00 pm–4:00 pm** **Moderators**
 Keith M. Baumgarten MD
 Ortho Institute, Sioux Falls, SD
 Lance E. LeClere MD, LCDR, MC, USN
 US Naval Academy, Annapolis, MD
- 3:00 pm–3:05 pm** **Paper 161: Direction of Capsular Strain Implies Surgical Repair Following Recurrent Anterior Shoulder Dislocation**
Tetsuya Takenaga MD, PhD¹, Albert Lin MD², Calvin Chan, MS¹, Volker Musahl MD², Richard Debski PhD¹, Masahito Yoshida MD, PhD³
¹University of Pittsburgh, Pittsburgh, PA
²University of Pittsburgh Medical Center, Pittsburgh, PA
³Nagoya City University, Nagoya, Japan
- 3:05 pm–3:10 pm** **Paper 162: Risk Factors for Recurrent Shoulder Instability After Arthroscopic Revision Anterior Stabilization**
 Favian Su BS, Marcin Kowalczyk MD, Stephenson Amanze Ikpe MD, Hannah Lee MD, PhD, Soheil Sabzevari MD, **Albert Lin MD**
 University of Pittsburgh Medical Center, Pittsburgh, PA
- 3:10 pm–3:15 pm** **Paper 163: Arthroscopic Shoulder Stabilization in the High-Risk Young Athlete: Return to Sport and Second Surgery Rates**
 Frank A. Cordasco MD, MS, Brian Lin BS, Daphne Ling PhD, MPH, **Jacob G. Calcei MD**
 Hospital for Special Surgery, New York, NY
- 3:15 pm–3:20 pm** **Q & A**
- 3:20 pm–3:27 pm** **Latarjet: Tips to Get It Right**
 Robert B. Litchfield MD, FRCS
 University of Western Ontario, London, ON, Canada
- 3:27 pm–3:34 pm** **First Time Dislocator: Time to Take a Stand**
 Dean C. Taylor MD
 Duke Sports Medicine, Durham, NC
- 3:34 pm–3:41 pm** **Approach to MDI in 2018**
 Geoffrey D. Abrams MD
 VA Palo Alto, Palo Alto, CA

3:41 pm–4:00 pm

Shoulder Instability Panel Discussion

- Moderator:**
 Brian R. Wolf MD, MS
 University of Iowa Hospitals and Clinics, Iowa City, IA
- Panelists:**
 Geoffrey D. Abrams MD
 VA Palo Alto, Palo Alto, CA
 Keith M. Baumgarten MD
 Ortho Institute, Sioux Falls, SD
 Robert B. Litchfield MD, FRCS
 University of Western Ontario, London, ON, Canada
 Dean C. Taylor MD
 Duke Sports Medicine, Durham, NC

Concurrent Session B—Osteoarthritis

- 3:00 pm–4:00 pm** **Moderators:**
 Jorge Chahla MD, PhD
 Santa Monica Orthopaedic & Sports Medicine, Santa Monica, CA
 Seth L. Sherman MD
 University of Missouri, Columbia, MO
- 3:00 pm–3:05 pm** **Paper 164: Prospective, Randomized, Double Blind Evaluation of the Efficacy of a Single Dose Hyaluronic Acid for the Treatment of Patellofemoral Chondromalacia**
 Joseph M. Hart PhD, ATC, Chris Kuenze MA, Stephan Bodkin, Jennifer Hart PA-C, Claire Denny PA-C, **David R. Diduch MD**
 University of Virginia, Charlottesville, VA
- 3:05 pm–3:10 pm** **Paper 165: Unloader Knee Brace Increases Medial Compartment Joint Space During Gait in Knee Osteoarthritis Patients**
Kanto Nagai MD, PhD, Shumeng Yang, Freddie H. Fu MD, William Anderst PhD
 University of Pittsburgh Medical Center, Pittsburgh, PA
- 3:10 pm–3:15 pm** **Q & A**
- 3:15 pm–3:22 pm** **Biologics and OA: What Is the Evidence**
 Jason L. Drago MD
 Stanford Medicine, Redwood City, CA
- 3:22 pm–3:29 pm** **HA: The Debate Continues**
 Kevin G. Shea MD
 Intermountain Orthopaedics, Boise, ID
- 3:29 pm–3:36 pm** **The Role of Rehabilitation in the Early Arthritic Knee**
 Kevin E. Wilk PT, DPT
 Champion Sports Medicine, Birmingham, AL

- 3:36 pm–3:48 pm **Debate: Osteotomy vs. Uni for the Athletically Active Knee**
Annunziato Amendola MD
Duke Sports Science Institute, Durham, NC
Richard D. Parker MD
The Cleveland Clinic Foundation, Cleveland, OH
- 3:48 pm–3:54 pm **Contemporary Technique: Tibial Osteotomy**
Peter CM Verdonk MD, PhD
Antwerp Orthopaedic Center,
Zwijnaarde, Belgium
- 3:54 pm–4:00 pm **Q&A**

Concurrent Session C—ACL an International Perspective

- 3:00 pm–4:00 pm Moderators:**
David Figueroa MD
Clinica Alemana, Santiago, Chile
Robert A. Magnussen MD, MPH
The Ohio State University, Columbus, OH
Marc R. Safran MD
Stanford Sports Medicine Center,
Redwood City, CA
- ACL: Latin American Perspective**
- 3:00 pm–3:05 pm **Our Experience with Retrodrill**
David Figueroa MD
Clinica Alemana, Santiago, Chile
- 3:05 pm–3:10 pm **Portal Medial, Tips and Recommendations**
Rodrigo Maestu MD
Center of Study and Treatment of Joint Disease,
Buenos Aires, Argentina
- 3:10 pm–3:15 pm **Remnant Management**
Manuel Mosquera MD
Clinica La Carolina, Bogota, Colombia
- 3:15 pm–3:20 pm **Transtibial Technique**
Jorge Negrete-Corona MD
Hospital Angeles, Cuauhtemoc Delegation,
Mexico City, Mexico
- 3:20 pm–3:30 pm **Q & A**
- The ISAKOS Perspective**
- 3:30 pm–3:37 pm **Uncertainties of the Pediatric ACL Graft**
Moises Cohen MD, PhD
Unifesp-Fed University of Sao Paulo,
Sao Paulo, Brazil
- 3:37 pm–3:44 pm **Does a Thicker Hamstring Graft or a BPB Graft Reduce ACLR Failure in Young Patients**
Mark Clatworthy MD
Auckland Bone and Joint Surgery,
Remuera, New Zealand
- 3:44 pm–3:51 pm **Controlling Rotation with Lateralplasty in ACL Reconstruction—20 Year Results**
Stefano Zaffagnini MD
Lab Di Biomechanica, Bologna, Italy

- 3:51 pm–4:00 pm **Q & A**

ANNUAL MEETING INTERNATIONAL PARTNER: INTERNATIONAL SOCIETY OF ARTHROSCOPY, KNEE SURGERY AND ORTHOPAEDIC SPORTS MEDICINE (ISAKOS)

ISAKOS is an international medical society representing more than 3,000 surgeons from 93 countries. Their mission is to advance the worldwide exchange and dissemination of education, research and patient care in arthroscopy, knee surgery (both preservation and arthroplasty) and orthopaedic sports medicine. ISAKOS is comprised of surgeons, many of whom are pre-eminent in their countries, as well as physician representatives for professional sports teams, the Olympics, FIFA and other global sports organizations. ISAKOS has a partnership with the major sports medicine societies in the world, including the AOSSM, ESSKA, APKASS and SLARD.



SOCIETY OF LATIN AMERICAN ARTHROSCOPY, KNEE AND SPORTS (SLARD)

SLARD's mission is to promote the education and development of science in an ongoing manner, seeking the permanent progress of the sports medicine specialty in the Latin American region. They support development and learning of arthroscopic surgery, knee and sports medicine. In addition, they facilitate the exchange and learning among their members of the 78 regional organizations and 26 participating countries.

Concurrent Session A – Foot and Ankle

- 8:30 am – 10:00 am** **Moderators:**
 Mark C. Drakos MD
 Hospital for Special Surgery, New York, NY
 Bryan George Vopat MD
 University of Kansas, Overland Park, KS
- 8:30 am – 8:35 am** **Paper 166: Posterior Translation of the Fibula Is a Critical Factor in the Stability of the Syndesmosis After Injury and Repair**
Neel Patel MD, Thomas Rudolf Pfeiffer MD, Jan-Hendrik Naendrup BS, Conor Murphy MD, Jason Zlotnicki MD, Richard Debski PhD, MaCalus Vinson Hogan MD, Volker Musahl MD
 University of Pittsburgh Medical Center, Pittsburgh, PA
- 8:40 am – 8:45 am** **Paper 168: Early Return to Play After Intramedullary Screw Fixation of Jones Fractures in Collegiate Athletes: 23 Year Experience**
Scott Thomas Watson MD¹, Amy Trammell², Stephanie Tanner MS¹, Rebecca Snider BS¹, Steven Martin³, Larry S. Bowman MD³
¹Greenville Health System, Greenville, SC
²University of South Carolina, Greenville, SC
³Blue Ridge Orthopaedics, Seneca, SC
- 8:45 am – 8:50 am** **Paper 169: Cost Comparison and Complication Rate of Lisfranc Injuries Treated with Open Reduction Internal Fixation vs. Primary Arthrodesis**
Brandon Barnds MD, William Tucker MD, Brandon L. Morris MD, John Paul Schroepel MD, Scott M. Mullen MD, Armin Tarakemeh BA, Bryan George Vopat MD
 University of Kansas Medical Center, Kansas City, KS
- 8:50 am – 8:55 am** **Paper 170: Complete Radiographic Healing and Related Factors in Juvenile Osteochondritis Dissecans of the Talus**
Jigar S. Gandhi PharmD¹, Kunbo Park MD², Divya Talwar PhD¹, **John Todd R. Lawrence MD, PhD¹**
¹Children's Hospital of Philadelphia, Philadelphia, PA
²Yonsei University College of Medicine, Seoul, Korea

- 8:55 am – 9:05 am** **Q & A**
- 9:05 am – 9:15 am** **The Dreaded High Ankle Sprain: How to Diagnose and How to Manage**
 Thomas O. Clanton MD
 The Steadman Clinic, Vail, CO
- 9:15 am – 9:25 am** **Navicular Stress Fractures: Beware!**
 Kirk Anthony McCullough MD
 Cleveland Clinic Foundation, Cleveland, OH
- 9:25 am – 9:30 am** **Q & A**
- 9:30 am – 9:50 am** **Foot and Ankle Case Panel Discussion**
Moderator:
 Thomas O. Clanton MD
 The Steadman Clinic, Vail, CO
Panelists:
 Mark C. Drakos MD
 Hospital for Special Surgery, New York, NY
 Kirk Anthony McCullough MD
 Cleveland Clinic Foundation, Cleveland, OH
 Bryan George Vopat MD
 University of Kansas, Overland Park, KS
- 9:50 am – 10:00 am** **Q & A**

Concurrent Session B – Pediatrics

- 8:30 am – 10:00 am** **Moderators:**
 Eric W. Edmonds MD
 Rady Children's Specialists San Diego, San Diego, CA
 Nicole A. Friel MD
 Rush University Medical Center, Chicago, IL
- 8:30 am – 8:35 am** **Paper 171: Operative and Non-Operative Management of Osteochondritis Dissecans in the Knee of Skeletally Immature Patients: Rates of Persistent Knee Pain, Osteoarthritis, and Arthroplasty at Mean 14-Years Follow-Up**
Mario Hevesi MD¹, Thomas L. Sanders MD¹, Ayoosh Pareek MD¹, Todd Milbrandt MD¹, Bruce A. Levy MD¹, Daniël B. Saris MD, PhD², Aaron John Krych MD¹
¹Mayo Clinic, Rochester, MN
²University Medical Center Utrecht, Utrecht, Netherlands

- 8:35 am–8:40 am **Paper 172: Long-Term Follow-Up of Arthroscopically Repaired Meniscal Tears in a Pediatric Population**
Michella Hagmeijer¹, **Nicholas I. Kennedy MD¹**, Adam J. Tagliero¹, Michael J. Stuart MD¹, Diane L. Dahm MD¹, Aaron John Krych MD¹
¹Mayo Clinic, Rochester, MN
- 8:40 am–8:45 am **Paper 173: Exceeding Pitch Count Recommendations in Youth Baseball Increases the Elbow Injuries**
Tetsuya Matsuura MD, **Toshiyuki Iwame**, Koichi Saiyo
University of Tokushima, Tokushima, Japan
- 8:45 am–8:50 am **Paper 174: The Latarjet Procedure for Anterior Shoulder Instability in Pediatric and Adolescent Athletes**
Benton E. Heyworth MD¹, **Mark Wu BS²**, Dennis E. Kramer MD¹, Donald S. Bae MD¹
¹Boston Children's Hospital, Boston, MA
²Harvard University, Boston, MA
- 8:50 am–8:55 am **Paper 175: Prevention of Elbow Injuries in Young Baseball Players: A 6-Year Longitudinal Study**
Yoshihiro Kotoura MD¹, Toru Morihara MD², Yoshikazu Kida MD², Tsuyoshi Sukenari², Ryuhei Furukawa MD², Tatsuya Hojo MD³, Hiroyoshi Fujiwara MD², Toshikazu Kubo MD²
¹Kyoto Chubu Medical Center, Kyoto, Japan
²Kyoto Prefectural University of Medicine, Kyoto, Japan
³Doshisha University, Kyoto, Japan

- 8:55 am–9:05 am **Q & A**
- 9:05 am–9:15 am **Throwing Injuries in the Adolescent Athlete**
Jonathan C. Riboh MD
Duke Sports Science Institute, Durham, NC
- 9:15 am–9:25 am **Unstable Patella and Open Growth Plates: What to Do**
Beth E. Shubin Stein MD
Hospital for Special Surgery, New York, NY
- 9:25 am–9:35 am **OCD Update**
Matthew D. Milewski MD
Connecticut Children's Medical Center, Farmington, CT
- 9:35 am–9:45 am **When Is an Adolescent ACL a Pediatric Case?**
Mininder S. Kocher MD, MPH
Boston Children's Hospital, Boston, MA
- 9:45 am–10:00 am **Q & A**
- Meeting Adjourns**

REGISTER TODAY www.sportsmed.org **#AOSSM2018**

2018 ONLINE MEETING SUBSCRIPTION

Revisit the general session presentations from the 2018 Annual Meeting and the 2018 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. Simply add this option to your online registration!



INSTRUCTIONAL COURSES



INSTRUCTIONAL COURSES

COST PER COURSE: \$75

THURSDAY
JULY 5, 2018
6:45 am–8:15 am

IC101

CASE-BASED

Knee Ligament Injuries in the Skeletally Immature Patient: Case-Based Analysis of Treatment Options

IC102

CASE-BASED

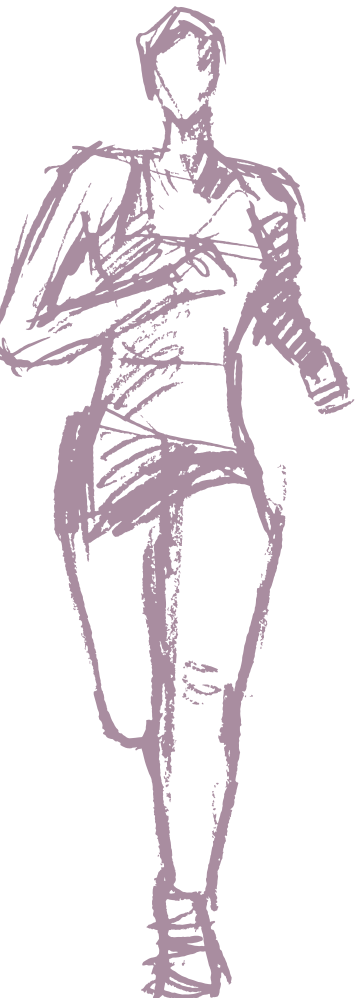
Controversies in Rotator Cuff Surgery

IC103

Approach to the Patient with Failed Hip Arthroscopy

IC104

Joint Preservation Techniques for the Knee in 2018: The Utility of Biologics, Osteotomies and Cartilage Restoration Procedures



FRIDAY
JULY 6, 2018
6:45 am–8:15 am 1:00 pm–2:30 pm

IC201

CASE-BASED

Biologics Treatments for Orthopaedic Injuries

IC202

CASE-BASED

UCL Reconstruction: Epidemiology, Surgical Technique, and Return to Play

IC203

CASE-BASED

Complex Knee Ligament Surgery

IC204

New Paradigms in the Thrower's Shoulder

IC205

CASE-BASED

How to Deal with a Symptomatic Patellofemoral Joint

IC206

Extraarticular Reconstruction in ACL Deficient Knee: Back to the Future?

IC207

CASE-BASED

Shoulder Instability—From the Weekend Warrior to the High Caliber Athlete- How to Get this Right

IC208

Hip Arthroscopy Basics and How to Incorporate into Your Sports Practice

IC209

Business School for the Sports Medicine Practitioner

IC210

CASE-BASED

Complex and Multi-Ligamentous Injuries of the Knee: MCL, PCL, PLC

IC211

Evolving Concepts in the Care of Women in Sports: An Update in 2018

IC212

The Specificity of Meniscal and Cartilage Injury in the Young Athlete: Prevention, Orthobiological Surgical Care and Return to Sport

IC213

CASE-BASED

MPFL, MQTFL, and MPFC Reconstruction for Patellar Instability: Anatomy, Indications and Surgical Technique

IC214

CASE-BASED

Innovative Techniques for ACL Revision Surgery

IC215

CASE-BASED

Current Update on Biologic Augmentation Approaches for Soft Tissue Healing

IC216

Brew versus Wine: Avoiding Physician Burnout—How Orthopaedic Surgeons Venture into and Succeed in the Beer and Wine Industry

IC217

Sports Medicine Ultrasound: Tips on How to Use, When to Use, Its Uses and Outcomes

IC218

CASE-BASED

Cartilage Injuries in the Middle-Aged Athlete and Return to Pivoting Sports

SATURDAY
JULY 7, 2018
6:45 am–8:15 am

IC301

CASE-BASED

Meniscus Management Algorithm—When to Debride, Repair or Transplant

IC302

CASE-BASED

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

IC303

CASE-BASED

Controversies in Utilizing Grafts and Patches in Rotator Cuff Surgery: Augmentation, Interposition, Superior Capsule Reconstruction and Bio-Inductive Scaffolds

IC304

Return to Play Criteria After ACL Reconstruction: From Basic Science to Clinical Outcome

IC305

CASE-BASED

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

IC306

CASE-BASED

Making Osteotomy Part of Your Routine Clinical Practice: A Case-Based Guide to Success

IC307

CASE-BASED

In-Season Management of American Football Injuries

IC308

CASE-BASED

Hip and Groin Pain in the Athlete

IC309

CASE-BASED

Shoulder Arthritis in the Aging Athlete—Management Strategies for 2018

SUNDAY
JULY 8, 2018
6:45 am–8:15 am

IC401

CASE-BASED

Problem Procedures in Sports Medicine: Shoulder, Elbow, Hip, and Knee. It's Complicated!

IC402

CASE-BASED

Medico-legal Update for the Orthopaedic Team Physician

IC403

CASE-BASED

Shoulder Instability with Bone Loss

THURSDAY, JULY 5, 2018
6:45 am – 8:15 am

IC101 **CASE-BASED**

Knee Ligament Injuries in the Skeletally Immature Patient: Case-Based Analysis of Treatment Options

Darren L. Johnson MD, Charles A. Popkin MD

This course is designed for the orthopaedic surgeon that treats acute knee injuries in the skeletally immature athlete. We will use a case-based format to discuss the treatment of cruciate and collateral knee ligament injuries that occur in the truly skeletally immature patient. We will also include injuries of the MPFL (patellar instability) and management strategies to surgically address these complex problems.

Objectives:

- Evaluate and implement a treatment strategy for the management of acute knee ligament injuries in the skeletally immature patient
- Accurately define surgical treatment options for knee ligament injuries in the immature athlete
- Develop a treatment algorithm for any knee ligament injury in the skeletally immature athlete which includes diagnosis to treatment, non-operative versus operative, and return to play

IC102 **CASE-BASED**

Controversies in Rotator Cuff Surgery

William N. Levine MD, Anthony A. Romeo MD,
Christopher S. Ahmad MD, Brian J. Cole MD, MBA

Current state-of-the-art information will be provided on maximizing clinical outcomes in rotator cuff surgery. Cases will be used throughout to emphasize key points and hot topics, including management of partial tears, use of biologic augmentation, and salvage procedures, including superior capsular reconstruction and balloon interposition.

Objectives:

- Discuss the most recent evidence and technical pearls on biologic augmentation for rotator cuff repair enhancement
- Discuss the most recent evidence and technical pearls for partial rotator cuff repair
- Discuss the most recent evidence and technical pearls for superior capsular reconstruction

IC103

Approach to the Patient with Failed Hip Arthroscopy

Shane J. Nho MD, MS, Christopher M. Larson MD, Bryan T. Kelly MD,
Eric C. Makhni MD

Hip arthroscopy for femoroacetabular impingement (FAI) is becoming increasingly common. With this growth is a rise in the number of patients requiring revision surgery for persistent symptoms or inadequate relief from primary surgery. Therefore, clinicians performing hip arthroscopy must be able to accurately diagnose and manage conditions related to failed hip arthroscopy. The goal of this review is to provide a diagnostic overview to this growing clinical challenge, as well as review treatment options—operative and non-operative—for successfully managing these challenging patients. Traditionally, failed hip arthroscopy was attributed to under-resection of bony deformity. However, recent evidence has identified numerous additional causes of failure following initial arthroscopy, including those related to inadequate rehabilitation, persistence of bony deformities, iatrogenic damage, over-resection of labral tissue, and capsular deficiency. The goal of this course will be to assist clinicians in not only diagnosing the precise cause of failure following hip arthroscopy, but also in successfully managing these patients as well.

Objectives:

- Perform a comprehensive assessment, including diagnostic and imaging evaluation of the patient with hip pain following hip arthroscopy
- Describe indications and patient selection criteria for revision hip arthroscopy
- Learn various surgical options and technical pearls for undertaking revision hip arthroscopy
- Describe how rehabilitation post-operatively may help optimize or impair outcomes following hip arthroscopy

IC104

Joint Preservation Techniques for the Knee in 2018: The Utility of Biologics, Osteotomies and Cartilage Restoration Procedures

Rachel M. Frank MD, Eric J. Strauss MD, Andreas H. Gomoll MD

The goal of this course is to provide a comprehensive overview of joint preservation techniques for the knee, including biologic and reconstructive approaches, with an emphasis on evidence-based treatment guidelines for young, high-demand patients.

Objectives:

- Describe the role of osteotomy as an adjunct to cartilage / meniscal restoration
- Discuss technical pearls for performing combined cartilage restoration, meniscus transplantation, ligament reconstruction, and/or realigning osteotomies
- Discuss indications for biologic augmentation to joint preservation techniques in the setting of cartilage and/or meniscal restoration

FRIDAY, JULY 6, 2018
6:45 am – 8:15 am

IC201 CASE-BASED

Biologics Treatments for Orthopaedics Injuries

Lars Engebretsen MD, PhD, Jorge Chahla MD, PhD,
Bert R. Mandelbaum MD, Robert F. LaPrade MD, PhD

This course will provide an up-to-date discussion 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. Where we are now and what do we need to do to improve biologic treatments will also be discussed. A case-based approach will introduce the presentations and guide the audience through the different treatment options.

Objectives:

- Describe the challenges of translating basic science into clinical practice. Clinician and industrial perspectives 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, growth factors concentration, and hematocrit as a therapy for different orthopaedics injuries. How to prepare it, in which cases and how to evaluate clinical outcomes.
- Discuss bone marrow aspirate concentrate and progenitor cells. Where we are now, what can we use, and how do we move forward.
- Describe the role of biologics as an augmentation of soft tissue repair. What are the new frontiers of ligaments, cartilage, and muscle repair.

IC202 CASE-BASED

UCL Reconstruction: Epidemiology, Surgical Technique, and Return to Play

Steven B. Cohen MD, James R. Andrews MD, Michael G. Ciccotti MD,
John E. Conway MD

Elbow injuries in baseball are often publicized in the media, especially ulnar collateral ligament (UCL) tears. The UCL is a critical structure in the baseball athlete and is often at risk for injury in the baseball pitcher. The purpose of this course is to aid physicians who take care of these athletes to appropriately manage UCL 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 why there are so many Tommy John surgeries occurring and provide a practical approach to reducing this epidemic in your community
- Define the risk factors for UCL tears
- Review the current technique available for UCL reconstruction
- Discuss the return to play considerations and rates after UCL reconstruction

IC203 CASE-BASED

Complex Knee Ligament Surgery

Robert G. Marx MD, MSc, FRCSC, Mark D. Miller MD,
Bruce A. Levy MD

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

IC204

New Paradigms in the Thrower's Shoulder

John D. Kelly IV, MD, Brian J. Sennett MD, W. Ben Kibler MD

This course will help the attendee appreciate the pathomechanics of soft tissue injury to the thrower's shoulder. A discussion of the pathologic cascade, risk factors for injury and dysfunctional throwing mechanics will enhance understanding of the role of prevention. Subtle nuances of the physical exam, as well as identifying 'high risk' pitching patterns will be elucidated. Finally, contemporary and evidence-based means of surgical treatment to cuff, labral and capsular injury will be discussed.

Objectives:

- Describe the pathomechanics of the disabled throwing shoulder
- Discuss the role of scapula dyskinesis, capsular contracture and laxity, muscular tightness and humeral retroversion in the disabled throwing shoulder
- Recognize subtle exam findings indicative of cuff and labral injury, as well as dysfunctional pitching mechanics
- Describe contemporary and evidence-based surgical treatment approaches to labral and cuff injury in the throwing athlete

FRIDAY, JULY 6, 2018
6:45 am – 8:15 am

IC205 CASE-BASED

How to Deal with a Symptomatic Patellofemoral Joint

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

This case-based course is designed to cover the most common patellofemoral pathologies in children, adolescents, and adults. Concepts ranging from non-surgical to surgical options in patients of all age groups, including techniques such as guided growth, pediatric MPFL reconstruction, tibial tubercle transfer, rotational deformity correction, and non-arthroplasty treatment of the unstable arthritic patellofemoral joint, will be covered. The format of this course is based on brief introductory talks outlining the basic theoretical and diagnostic concepts for different age groups followed by specific case discussions. Great emphasis is put on the differences between pediatric and adult therapeutic options, as well as the distinction between the “painful” patella and the “unstable” patella. During this course, audience participation will be encouraged for every case discussion.

Objectives:

- Recognize specific treatment challenges of patellofemoral instability in skeletally immature individuals
- Evaluate simple and complex patellofemoral instabilities and design appropriate treatment plans
- Discuss the concept of patellofemoral risk factors and the major factors that need to be considered when evaluating patellofemoral instability or patellofemoral pain.
- Approach new patients presenting with complex patellofemoral pathologies in a structured and scientific manner based on evidence-based concepts
- Describe treatment options short of arthroplasty for early OA in the patellofemoral joint

IC206

Extraarticular Reconstruction in ACL Deficient Knee: Back to the Future?

Edoardo Monaco MD, Andrea Ferretti MD, Bertrand Sonnery-Cottet MD, Alan Getgood MD, FRCS (Tr&Orth), James L. Carey MD, MPH

Understanding biomechanics and surgical techniques of extraarticular reconstructions will provide surgeons with tools for a more comprehensive treatment of rotatory instability in ACL deficient knee.

Objectives:

- Describe biomechanics of rotatory instability in ACL deficient knee
- Explain how to select cases for using extraarticular reconstructions along with ACL reconstructions. Role of MRI and physical examination
- Describe how to perform an extraarticular reconstruction: anatomic/non-anatomic; acute/chronic

IC207 CASE-BASED

Shoulder Instability – From the Weekend Warrior to the High Caliber Athlete- How to Get this Right

Matthew T. Provencher MD, John M. Tokish MD, Robert A. Arciero MD, Anthony A. Romeo MD, Kevin E. Wilk PT, DPT

This case-based course will be a comprehensive review of the clinical evaluation, radiographic assessment, clinical decision-making, and the non-operative and operative treatment of shoulder instability from the weekend warrior to the high caliber athlete. In order to provide a thorough overview capable of implementation into the participant's practice, cases from basic to complex will be comprehensively reviewed with a focus on relevant anatomy, biomechanics, clinical evaluation, imaging, objective and subjective clinical outcomes, physical therapy guidelines and principles as well as potential complications. The presenters will discuss indications and contraindications for the latest surgical techniques with a particular focus on arthroscopic, open, and bony augmentation procedures via bone grafts. Case presentations will highlight the differences in clinical decision-making and factors contributing to the eventual treatment plan. In addition, there will be a focus on rehabilitation and therapy – from the first time dislocator to how to handle after surgery or multiple injuries to the shoulder. Ultimately, participants will learn fundamental practical information that will be immediately transferrable to clinical practice.

Objectives:

- Determine workup, with an emphasis on history, examination and imaging for a patient with shoulder instability – including anterior, posterior and multidirectional via case-based learning
- Determine how best to treat a variety of shoulder instability conditions and how to recognize what to do from a thorough history, examination, and imaging through case-based learning
- Describe the range of factors, including age, sport participation, chronicity of injury, and extent of bone loss, which ultimately guide clinical decision-making, as well as how to add in outcomes collection for your practice
- Describe the various treatment possibilities, including non-operative and post-operative management, as well as principles and evidence based medicine for rehabilitation for success

FRIDAY, JULY 6, 2018
6:45 am – 8:15 am

IC208

Hip Arthroscopy Basics and How to Incorporate into Your Sports Practice

Travis Maak MD, Shane J. Nho MD, MS, Michael J. Salata MD, Richard C. Mather III, MD

This course will feature a four-part approach to hip arthroscopy basics and incorporation into an orthopaedic practice. First, team setup, surgical preparation, and patient selection. Then surgery set-up and surgical techniques. Third, peritrochanteric space, snapping hip, getting out of intra-operative trouble, among others, and lastly, post-operative rehab, complaints/complications and insurance authorization/collections.

Objectives:

- Design a hip arthroscopy practice, including the support staff, operating room equipment, insurance invocation and basic patient evaluation/surgical indication
- Describe the basics of OR setup, patient positioning, traction application, portal positioning, accessing the hip and addressing basic central and peripheral compartment pathologies
- Explain simple pearls to tackle basic intra-operative and post-operative complications, including difficulty accessing the hip due to traction problems, broken or protruding anchors, suture pullout, excessive bleeding/poor visualization, post-operative pain, numbness and instability

IC209

Business School for the Sports Medicine Practitioner

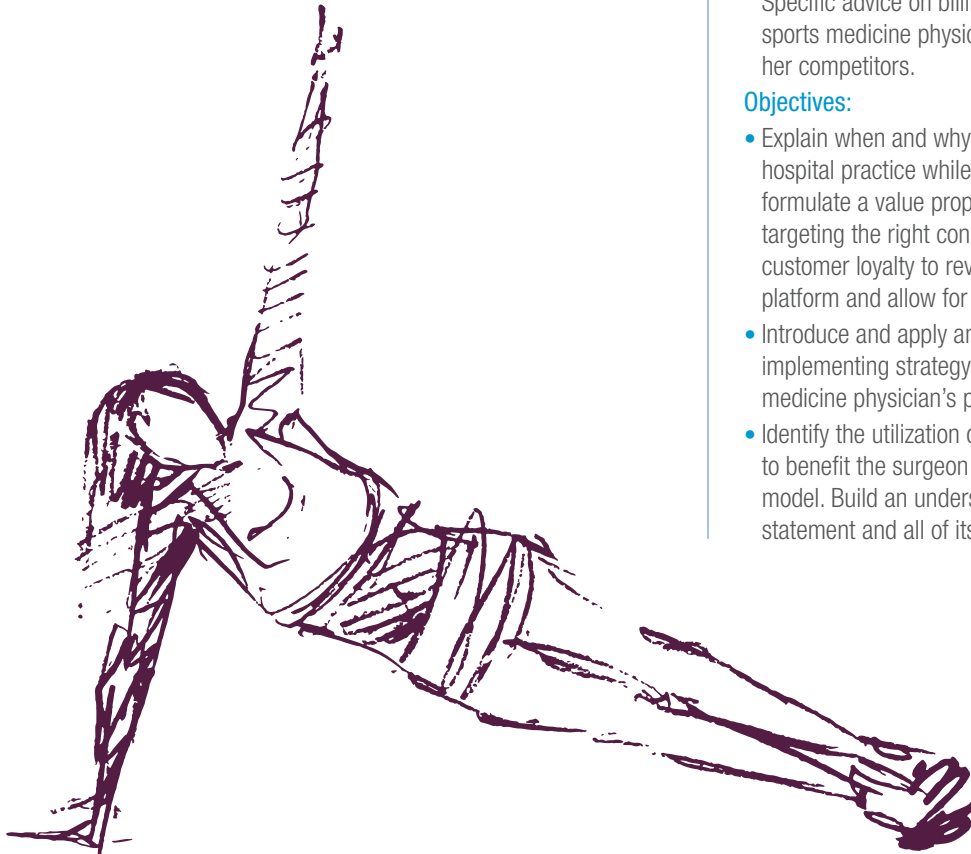
Kevin D. Plancher MD, George A. Paletta Jr., MD, Allston J. Stubbs IV, MD, MBA

The penetration of business in sports medicine has created an industry that requires the sports medicine physician to have a full understanding of his/her administrators. This course will build the foundation to allow the physician a comfort level within the business aspects of a successful practice. Introductory lectures, no different than while attaining an Executive MBA, will be utilized. Topics will include:

- **Marketing and Social Media**—This lecture will allow the sports medicine physician to understand consumer needs, building brand loyalty, market segmentation, crisis communication, gorilla marketing and the utilization of metrics to allow for a successful sports medicine practice.
- **Financial Accounting**—An introduction to a new set of terminology to allow the sports medicine physician to actively take a role when negotiating contracts and understanding the intricate finances of a practice or department of orthopaedics.
- **Strategic Management**—This lecture will cover the importance of a mission and vision for your sports medicine practice to allow the organization to compete effectively in the marketplace. Identification of diverse and conflicting stakeholders with shared goals will also be discussed to avoid financial disaster.
- **Human Resources and Utilization of Resources**—This lecture will review the use of physician extenders in the clinical workplace. Specific advice on billing and coding will be covered to allow the sports medicine physician success as well as gain advantage over his/her competitors.

Objectives:

- Explain when and why marketing can positively affect a medical or hospital practice while analyzing the competitive marketplace to formulate a value proposition and apply it to a market segmentation targeting the right consumer. Discuss the role of branding and customer loyalty to review the importance of an integrated marketing platform and allow for interpretation of key metrics
- Introduce and apply an analytic framework used in formulating and implementing strategy to create a mission and vision for the sport medicine physician's practice through managerial skills
- Identify the utilization of physician assistants and nurse practitioners to benefit the surgeon to create an efficient and successful financial model. Build an understanding of a P&L balance sheet and income statement and all of its new terminology



FRIDAY, JULY 6, 2018
1:00 pm – 2:30 pm

IC210 **CASE-BASED**

Complex and Multi-Ligamentous Injuries of the Knee: MCL, PCL, PLC

Robert F. LaPrade MD, PhD, Matthew T. Provencher MD,
Scott C. Faucett MD, Lars Engebretsen MD, PhD

This case-based course will provide an evidence-based overview of the evaluation and management of complex and multi-ligament injuries of the knee, specifically of the medial collateral ligament (MCL), posterior cruciate ligament (PCL), and posterolateral corner (PLC). Comprehensive cases will be presented which will allow participants to focus on current and relevant basic science, anatomy, biomechanics, clinical evaluation, complications, imaging, and objective and subjective clinical outcomes. Additionally, as part of the review of the cases, the presenters will compare-and-contrast indications and contraindications for repair and reconstruction using the most up-to-date surgical techniques, including the indications for primary repairs or anatomic reconstructions of the superficial MCL, PCL, and PLC. Case presentations will highlight the latest controversies in multi-ligament injuries focusing on the history, examination, imaging findings, and treatment strategies. Attendees will receive essential practical information that will be immediately transferrable to clinical practice.

Objectives:

- Discuss current and relevant concepts in MCL, PCL, and PLC anatomy and biomechanics
- Determine the extent of an acute or chronic multi-ligament injury of the knee using appropriate clinical and radiographic evaluations to form a strategic treatment plan
- Recognize the indications and contraindications for and understand the techniques of surgical repair and reconstruction of complex ligamentous injuries to the knee using relevant cases to guide the audience through a real case scenario
- Identify factors that may influence treatment outcomes—from history, examination and imaging findings during the workup of a knee injury

IC211

Evolving Concepts in the Care of Women in Sports: An Update in 2018

Mary K. Mulcahey MD, Jo A. Hannafin MD, PhD, Karen M. Sutton MD,
Elizabeth A. Arendt MD

With passage of Title IX in 1972, women were granted access to athletic programs that had previously been reserved for their male counterparts. Women began to participate in a wider variety of sports, receive scholarships for their athletic achievements, and compete at increasingly elite levels. The influx of female athletes was accompanied by an increase in athletic-related injuries. It is now widely accepted that female athletes are more susceptible to certain musculoskeletal (MSK) injuries and conditions, including stress fractures, patellofemoral pain syndrome, and anterior cruciate ligament (ACL) tears. Throughout the past 30 years, there has been a great deal of research describing the anatomical and physiological differences underlying MSK injuries in men and women. As the medical community has developed a more sophisticated understanding of athletic injuries in women, there has also been a transformation in treatment approaches. Institutions such as the Hospital for Special Surgery and Brigham and Women's Hospital have created women's sports medicine programs to comprehensively address the unique needs of the female athlete. This course will review the benefits and rationale behind creating an interdisciplinary team to care for active women. The non-modifiable and modifiable risk factors that place women at increased risk for ACL tears as well as recommendations for injury prevention will also be discussed. Additionally, the latest guidelines on bone health, nutrition, and energy availability in female athletes will be reviewed. Patellofemoral pathology in female athletes will also be covered in detail.

Objectives:

- Discuss the most recent data on musculoskeletal injuries that are unique to or more common in women
- Discuss the factors that place women at higher risk for ACL tears and the options for injury prevention
- Describe the up-to-date diagnoses of patellofemoral joint pathology in active women and latest treatment options

REGISTER TODAY

www.sportsmed.org #AOSSM2018

FRIDAY, JULY 6, 2018
1:00 pm – 2:30 pm

IC212

The Specificity of Meniscal and Cartilage Injury in the Young Athlete: Prevention, Orthobiological Surgical Care and Return to Sport

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

Meniscal and cartilage injury in the young athlete is a challenge to understand the mechanisms of injury, athletic dysfunction and consequences, such as early osteoarthritis. Sport specialization versus diversification by age have benefits and risks that are central to participation and judgements for athletes, parents and physicians. Once injured, the young athlete requires a multidisciplinary team that can decipher the mechanism of injury, pre-rehabilitation, specific type of non-operative, orthobiological or surgical procedure that relates to the specificity of the particular athlete. In addition, the management team must develop a postoperative, chondroprotective, prevention and return to sport program that is reflective of gender and level of participation in specific or multiple sports. The purpose of this course is to address the progressive detail and level of specificity in this population to optimize care and results.

Objectives:

- Define opportunities for modulation and prevention and the world of specialization in the young athlete
- Define epidemiology and risk of injury and re-injury in the young athlete and how it varies with level of participation and types of sport participation
- Define surgical and non-surgical nuances and options in management of OCD in this age group surgical options are very specific and vary with respect to degree of physeal closure, gender, age, type of sport participation, and long-term goals
- Define the problems of articular cartilage and meniscal injury and deficiency and the role of repair, resurfacing, transplantation and chondroprotection
- Define the specific mechanisms of injury in this age group that are biomechanical and neuromuscularly based and modifiable with prevention, rehabilitation and return to sports programs

IC213

CASE-BASED

MPFL, MQTFL, and MPFC Reconstruction for Patellar Instability: Anatomy, Indications and Surgical Technique

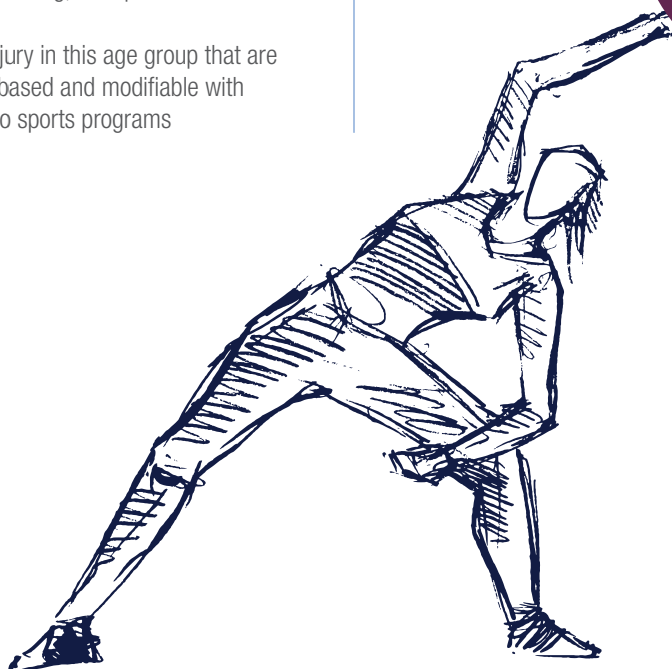
Miho J. Tanaka MD, John P. Fulkerson MD, Jack Farr II, MD, Andrew J. Cosgarea MD

Many surgical options exist in the treatment of patellar instability. In addition to MPFL reconstruction, newer procedures, including MQTFL and MPFC reconstructions can be confusing for those interested in patellofemoral surgery. In this course, these procedures are discussed in terms of their indications and techniques, with an emphasis on anatomy, key surgical concepts such as graft tensioning and indications, when to add osteotomy, and tips to avoid complications. Case-based discussions with expert panelists will also be utilized to highlight these teaching points.

Objectives:

- Discuss the anatomy and biomechanics of the medial soft tissue patellar stabilizers
- Explain the indications and technique options for soft tissue based stabilization procedures
- Explain the indications and options for alternative or concurrent procedures
- Describe the complications that can occur and how to avoid them

ADVANCED REGISTRATION
DEADLINE
JUNE 5, 2018



FRIDAY, JULY 6, 2018
1:00 pm – 2:30 pm

IC214 CASE-BASED

Innovative Techniques for ACL Revision Surgery

Davide Edoardo Bonasia MD, Robert A. Arciero MD, Christopher D. Harner MD, Roberto Rossi MD, Brian R. Wolf MD, MS
Revision ACL reconstruction has shown inferior outcomes compared with primary ACL reconstruction, and this can be due to different factors, including bone defects, concomitant misdiagnosed peripheral instability, malalignment, chondral and meniscal lesions/degeneration. In some cases, mostly when primary ACL tunnels are malpositioned and there is no significant bone loss, ACL revision can be a relatively straightforward procedure. However, in most patients with failed ACL reconstruction, many factors should be considered during the planning and pre-operative work-up. During the first part of the course, participants will be provided with the tools to understand the reasons for ACL failure and correctly plan the ACL revision surgery. In ACL revision surgery, there are no standardized procedures and the surgery should be tailored for each specific case. When approaching this type of surgery, the surgeon should be familiar with unconventional ACL revision techniques to deal with different scenarios. In the second part of the course, various uncommon surgical procedures will be described. These techniques can sometimes be valuable tools to avoid problems like proximal graft fixation, interference with previous tunnels, marked rotatory instability, malalignment, cartilage damage, and meniscal deficiency. The course will focus on the following topics: pre-operative planning and decision making, two stage ACL revision, one stage ACL revision with lateral plasty and anatomic/non-anatomic ACL reconstruction: Marcacci, Saragaglia, Yamaguchi techniques, one stage revision with over the top femoral position, combined ACL revision and medial meniscus transplant and combined ACL revision and HTO.

Objectives:

- Describe correct planning and pre-operative work-up in ACL revision surgery
- Discuss various unconventional techniques to avoid intraoperative troubles in ACL revision surgery
- Describe indications and technical aspects of procedures combined to ACL revision: meniscal transplant and high tibial osteotomy

IC215 CASE-BASED

Current Update on Biologic Augmentation Approaches for Soft Tissue Healing

Scott A. Rodeo MD, Constance R. Chu MD, Jason L. Dragoo MD, Asheesh Bedi MD

There is increasing interest in “biologic augmentation” techniques to improve tissue healing and regeneration. The marketing and clinical use have outpaced rigorous basic science and clinical data to support use of these approaches. Faculty will present a contemporary update on options for cell-based therapy, PRP and other blood products, as well as systemic agents that may be used to augment soft tissue healing. Each of these agents/approaches will be discussed relative to specific real world clinical scenarios encountered in everyday clinical practice. In addition to the “usual suspects” (PRP, cells), the use of systemic agents that may augment or inhibit soft tissue healing will also be discussed. The possibility of using commonly available osteoinductive agents or agents that inhibit bone resorption to improve bone-to-soft tissue healing in ACL reconstruction and rotator cuff repair will be part of the course. A critical goal is to not just simply rehash the basic science data, but rather to make this very practical for the clinician. The over-arching purpose is to cover real life patients/clinical scenarios, describing what the experts currently use today, what to tell patients as far as expectations, and current data to support use of these techniques.

Objectives:

- Identify appropriate uses for PRP that are supported by rigorous clinical data. The participant will be able to identify the optimal PRP formulation for different tissues
- Identify appropriate uses for stem cell therapy that are supported by rigorous clinical data. The participant will understand the limitations of currently available techniques, as well as the potential use of new cell sources (amion, placental cells, induced pluripotent cells, etc.)
- Describe the potential use of systemic agents that may augment or inhibit soft tissue healing, and to identify commonly available osteoinductive agents or agents that inhibit bone resorption to improve bone-to-soft tissue healing in ACL reconstruction, rotator cuff repair

FRIDAY, JULY 6, 2018
1:00 pm – 2:30 pm

IC216

Brew versus Wine: Avoiding Physician Burnout – How Orthopaedic Surgeons Venture into and Succeed in the Beer and Wine Industry

Patrick St. Pierre MD, Benjamin DuBois MD, Joseph Longo III, MD

Course attendees will be exposed to orthopaedic surgeons' involvement in the beer and wine industry by sharing experiences of current surgeons who are very involved or owners in the industry. Course instructors include an orthopaedic surgeon who is a certified specialist in wine and runs a wine club, an orthopaedic surgeon who owns a winery in San Diego, and an orthopaedic surgeon who is a part owner of a winery in the Willamette Valley in Oregon.

Objectives:

- Describe how other surgeons have been able to get involved and be successful in the beer and wine industry outside of orthopaedic surgery
- Explain how to taste and describe wine using the Sommelier's Grid
- Describe differences between New and Old-world wines from France, Italy, Spain, Australia, New Zealand and the United States
- Describe beer and wine characteristic of beers from the Bay City Brewing Co., San Diego, CA and wines from Tesori Winery, Willamette Valley, OR
- Introduce ways for further involvement of members if desired

IC217

Sports Medicine Ultrasound: Tips on How to Use, When to Use, Its Uses and Outcomes

Henry T. Goitz MD, Antonio J. Bouffard MD

This course provides the participant with a clear understanding of diagnostic and therapeutic ultrasound through an understanding of normal and pathologic clinical cases. Discussion will outline when this technique is valuable in clinical decision making via case scenarios and surgical confirmation.

Objectives:

- Describe normal and pathologic anatomy and the clinical value of diagnostic and guided therapeutic ultrasound
- Discuss the appropriate use of ultrasound with clinical correlations via clinical case studies that illustrate pre-op findings with post op outcomes.
- Outline appropriate indications of ultrasound use in the office and surgical suite
- Provide the sports surgeon with a general overview of how ultrasound can be used in the management of simple and complex presentations of athletic injury
- Describe the relative value of ultrasound vs MRI in assisting the clinician in the management of the athlete

IC218

CASE-BASED

Cartilage Injuries in the Middle-Aged Athlete and Return to Pivoting Sports

Thomas R. Carter MD, Brian J. Cole MD, MBA,
Christian Lattermann MD, Alan M. Getgood MD, FRCS (Tr&Orth),
Kevin D. Plancher MD

Cartilage injuries are a challenging disease entity in the cutting and pivoting athletic patient to treat successfully. Faculty will present five cases with a history, plain radiographs, MRI or CT scan for the audience to vote using an ARS system on what the appropriate treatment should be. Faculty will then discuss the available options and the chosen treatment regime with arthroscopic photos or video which will reveal the treatment algorithm selected with 2-year follow-up. Understanding the variety of options and ensuring long-term outcomes will be evaluated. The role of alignment and its success with a discussion of complications and precautions associated with all cartilage procedures will be discussed in depth.

Objectives:

- Discuss the indications for operative management of cartilage deficiencies in cutting and pivoting athletes and the variety of procedures for their treatment
- Discuss the advantages and disadvantages of surgical treatment outcomes, complications, and return to sport success
- Analyze appropriate imaging studies to utilize when making a preoperative decision with the patient with an articular cartilage defect
- Review the literature of evidence-based medicine and understanding the reality of return to sport when performing various surgical interventions for cartilage defects

SATURDAY, JULY 7, 2018
6:45 am – 8:15 am

IC301 **CASE-BASED**

Meniscus Management Algorithm – When to Debride, Repair or Transplant

Jorge Chahla MD, PhD, Scott C. Faucett MD, Andrew T. Pennock MD, Scott A. Rodeo MD

The aim of this course is to provide a comprehensive overview of the algorithm of treatment of different techniques for meniscus pathology, including debridement, meniscus repair, ramp and root repairs, and transplantation, based on the anatomical biomechanical pyramid.

Objectives:

- Discuss the indications for meniscus repair, the different available techniques, and when to perform a debridement. Why is it important to preserve the meniscus and the role of biologics in meniscus repair
- Discuss why a root, radial and ramp lesions constitute different entities that should be addressed in a different manner than a simple meniscus tear. Cases will be presented to illustrate which treatment approach is more suitable for each case.
- Review the functional and objective outcomes of meniscus related procedures and possible complications. Rehabilitation and return to sports after each procedure will be added to each case to better demonstrate how to fully address this pathology.

IC302 **CASE-BASED**

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

Beth E. Shubin Stein MD, Sabrina M. Strickland MD, Jacqueline Brady 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:

- MPFL reconstruction: How and when to do it and how to avoid disasters
- The tibial tubercle: When and how much to move it and what happens when it doesn't work
- 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
- Describe appropriate post-operative rehab guidelines and return-to play parameters

IC303 **CASE-BASED**

Controversies in Utilizing Grafts and Patches in Rotator Cuff Surgery: Augmentation, Interposition, Superior Capsule Reconstruction and Bio-Inductive Scaffolds

Richard K. N. Ryu MD, F. Alan Barber MD, Mark H. Getelman MD, John M. Tokish MD

This course will focus on the biology and mechanics of rotator cuff patches and grafts, the clinical indications for graft usage in augmentation, bridging and superior capsule reconstruction, and the novel use of bio-inductive in-growth scaffolds. Surgical techniques, contraindications, and complications will be highlighted. In addition to didactic presentations, a robust, interactive, audience-driven case-presentation session will be implemented.

Objectives:

- Interpret the role of grafts and patches in rotator cuff surgery
- Apply the clinical indications for graft usage
- Evaluate the surgical technique for graft usage and potential complications

IC304

Return to Play Criteria after ACL Reconstruction: From Basic Science to Clinical Outcome

Fotios P. Tjoumakaris MD, Christopher D. Harner MD, Bernard R. Bach Jr., MD, Kevin B. Freedman MD

The decision to return an athlete to the athletic field of play after ACL reconstruction is complex. Currently, there are no validated guidelines for returning high-demand athletes to play after a successful ACL surgery. Clinicians are often left with their clinical exam skills, limited functional assessment tools, and anecdotal experience when assessing how soon an athlete can return to play. Patient factors such as concomitant injury, sport, position on the field, and training demands, as well as surgical factors such as graft choice, graft incorporation, and anatomic tunnel placement can all influence the rehabilitation and outcome of ACL-reconstructed athletes.

Objectives:

- Identify the basic science and biomechanical principles of ACL reconstruction that influence graft healing and successful return to play.
- Describe the surgical and rehabilitation principles of graft fixation, graft and tunnel placement, and graft type as they relate to return to play after ACL reconstruction.
- Review the most current evidence-based principles of functional assessments and use this knowledge to develop a checklist that allows athletes a safe return to play after ACL reconstruction.

SATURDAY, JULY 7, 2018
6:45 am – 8:15 am

IC305 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 and its faculty 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. The course will also discuss articular cartilage injuries in the setting of patellar instability and strategies for treatment of concomitant cartilage and instability. Capitellar osteochondral lesions and OCD in young athletes particularly in overhead throwing athletes and gymnasts will be discussed. Finally, talar osteochondral lesions and OCD lesions will be discussed in young athletes along with the implications of potential concomitant instability and associated pathology. This course is designed to give all sports medicine providers evidence based treatment strategies for articular cartilage injuries in the young athlete to get these athletes back to their activities and to minimize future degenerative issues.

Objectives:

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

IC306 CASE-BASED

Making Osteotomy Part of Your Routine Clinical Practice: A Case-Based Guide to Success

Alan M. Getgood MD, FRCS (Tr&Orth), Robert B. Litchfield MD, FRSC, Michael J. Stuart MD, Annunziato Amendola MD

Everything you need to know to perform a routine, safe valgus proximal tibial osteotomy and varus producing distal femoral osteotomy in 1.5 hours. This course will dispel the myth that osteotomy is a difficult, complicated operation. Using real case examples, faculty will clearly demonstrate pre-operative planning, surgical decision making, operative technique and post-operative rehabilitation and function. Each point will be illustrated by a real case example. Attendees should leave the course armed with the required knowledge to be able to perform a routine osteotomy safely and reproducibly.

Objectives:

- Describe the indications for realignment osteotomy
- Calculate the desired correction of the mechanical axis pertaining to the pathology being treated
- Discuss exposure to surgical pearls to safely perform a valgus proximal tibial osteotomy and varus producing distal femoral osteotomy in an efficient and reproducible manner
- Discuss the accelerated rehabilitation protocols now possible with newer fixation devices resulting in a quicker return to function

IC307 CASE-BASED

In-Season Management of American Football Injuries

Kevin W. Farmer MD, James R. Andrews MD, Darren L. Johnson MD, E. Lyle Cain Jr., MD, Jeffrey A. Guy MD

In-season management of injuries can present unique challenges compared to off-season management. Safe return to play is paramount, but timely return to play is also emphasized. Managing injuries during the season, with the plan of surgical repair after the season, also presents unique difficulties and safety concerns. These concerns are magnified on the highest levels of football. With this course, faculty will discuss, through case-based examples, injuries that are commonly encountered by team physicians. A discussion balancing the challenges of a safe return in a timely manner will also be given. Other topics for discussion will include non-operative and operative approaches as needed, methods for minimizing missed time and emerging technology and treatments.

Objectives:

- Discuss management of in-season football injuries, with a focus on a safe, timely return to play
- Discuss managing injuries during the season with the goal of surgery after the season
- Discuss emerging technology and techniques utilized to minimize missed time

SATURDAY, JULY 7, 2018

6:45 am – 8:15 am

IC308 CASE-BASED

Hip and Groin Pain in the Athlete

Marc R. Safran MD, J.W. Thomas Byrd MD,
Christopher M. Larson MD, Brian D. Busconi MD

Hip and groin injuries are being seen more frequently in the sports medicine practice. This course will use a case-based approach, with team physicians who are hip and groin experts, to discuss the evaluation and treatment of injuries in athletes. Real cases will be introduced, including radiographs and MRI. Videos of the pertinent physical examination will also be included. Each panel member will provide their input into the diagnosis, treatment and pearls for evaluation and management. Diagnoses discussed include femoroacetabular impingement (FAI), hip instability, labral tears, hamstring avulsions, ischial tuberosity avulsions, sports hernia/core muscle injury/athletic pubalgia, and adductor injuries. Operative and non-operative approaches will be discussed, including surgical technique. Further, the panelists will provide their experience and discuss return to play considerations for these diagnoses. Opportunity for attendee participation is encouraged throughout the case discussions.

Objectives:

- Discuss the presentation and pathophysiology of FAI and its treatment options
- Discuss the presentation and pathophysiology of hip instability and its treatment options
- Discuss the presentation and pathophysiology of core muscle injury and its treatment options

IC309 CASE-BASED

Shoulder Arthritis in the Aging Athlete – Management Strategies for 2018

Seth C. Gamradt MD, Frank A. Petrigliano MD,
Stephen F. Brockmeier MD

As the population ages and continues to be active, incidence of 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, non-operative options, including rehabilitation and biologics, surgical options and techniques, and expectations on return to sports. The specific areas to be addressed include: Non-arthroplasty options of the athlete with shoulder osteoarthritis ranging from rehabilitation, injections, and arthroscopy; partial shoulder replacement: hemiarthroplasty with and without biologic glenoid resurfacing and shoulder resurfacing; total shoulder arthroplasty: technique considerations in athletes and expectation on return to sports; reverse shoulder arthroplasty: indications and technique for the procedure, the rehabilitation and expectations for return to sports, and pearls and pitfalls.

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

REGISTER TODAYwww.sportsmed.org #AOSSM2018

SUNDAY, JULY 8, 2018
6:45 am – 8:15 am

IC401 CASE-BASED

Problem Procedures in Sports Medicine: Shoulder, Elbow, Hip, and Knee - It's Complicated

Mark D. Miller MD, William N. Levine MD, Felix H. Savoie III, MD, F. Winston Gwathmey Jr., MD

This is a reprisal of a popular AOSSM 2017 IC in which faculty present case-based complications that occur with common sports medicine procedures. Experts in shoulder, knee, hip, and elbow surgery "share their dirty laundry" with the audience to help them identify and avoid iatrogenic complications in their practice. Each faculty will spend 15-20 minutes highlighting common problems, complications, and how to avoid and/or correct them.

Objectives:

- Identify the most common complications that occur with sports medicine procedures
- Describe the various steps necessary to identify, avoid, or correct complications in sports medicine procedures
- Discuss how to reduce complications with performing common sports medicine procedures

IC402 CASE-BASED

Medico-Legal Update for the Orthopaedic Team Physician

Christopher C. Kaeding MD, Matthew J. Matava MD, Peter A. Indelicato MD, Eric C. McCarty MD

With the ever-increasing scrutiny, regulation, and mandates of the sports medicine physician, this course will provide a medical/legal update on issues that affect the orthopaedic team physician. Using case-based scenarios, the topics covered will include: the roles and responsibilities of the team physician, including the increasing emphasis on independent medical care; legal issues for the traveling team physician, including licensure/malpractice coverage when out of home state and the transportation of controlled substances; the risks/benefits/liability of game day injections; update on medical/legal aspects of concussions in athletes; and a review and update of pre-participation medical clearance and importance of appropriate exit physicals. These issues will be addressed from the youth, high school, collegiate and professional team perspectives. The session will close with a panel discussion and "Pearls for the Team Physician."

Objectives:

- Describe the role and responsibilities of the team physician
- Describe the medical/legal issues around game day injections
- Explain the importance of pre-participation and exit physicals
- Describe the medical/legal issues around team physicians traveling across state lines

IC403 CASE-BASED

Shoulder Instability with Bone Loss

Ivan H. Wong MD, FRCSC, Richard K. N. Ryu MD, Paul J. Favorito MD

Shoulder instability with bone loss has been a significant concern for higher failure rates from shoulder surgery. There have been significant advances in the detection and surgical management of shoulder instability with bone loss. Faculty will discuss the decision-making process for treatment of shoulder instability with bone loss and discuss techniques and outcomes of various arthroscopic treatment options. There will be interactive case-based presentations at the conclusion of the didactic lectures, focusing on complex decision-making and advanced surgical techniques.

Objectives:

- Describe best practice pre-operative measurement of bone loss in shoulder instability
- Describe decision making process for addressing bone loss on humeral side
- Describe arthroscopic technique and early outcomes of Latarjet
- Describe arthroscopic technique and early outcomes using distal clavicle bony augment
- Describe arthroscopic technique and outcomes of distal tibia allograft



WORKSHOPS



WORKSHOPS

SPTS/AOSSM PRE-CONFERENCE WORKSHOP

WEDNESDAY, JULY 4

12:00 pm–5:00 pm

The purpose of the AOSSM/Sports Physical Therapy Section (SPTS) pre-conference course is to provide attendees a team approach to the treatment of various sports medicine type lesions and injuries. Through dual presentations, the physician and a physical therapist will present the most recent and state of the art treatment for specific sports injuries.

Fee: No Charge

12:00 pm–12:30 pm **Special Considerations for the Female Athlete**

Barbara Hoogenboom DPT, ATC, SCSC

12:30 pm–1:30 pm **Age Related Changes Seen in Throwers - Little League to College**

Scott Mair MD

Rehabilitation and Functional Recommendations for Throwers Little League to College

Terry Malone PT, EdD, ATC

1:30 pm–2:30 pm **Ulnar Collateral Ligament Repair with Internal Brace: My 5 Year Experience**

Jeffrey R. Dugas MD

Rehabilitation Following UCL Surgery: Repair and Reconstruction and Return to Throwing Objective Criteria

Kevin E. Wilk DPT

2:30 pm–3:00 pm **ACL Reconstruction: What Are the Expected Outcomes**

Mark V. Paterno PhD, PT

3:00 pm–3:30 pm **How to Reduce Re-Injury Rate Following ACL Injury & Surgery**

Lynn Snyder-Mackler ScD, PT

3:30 pm–4:00 pm **Objective Functional Outcomes Following ACL Surgery**

Russel M. Paine PT

4:00 pm–5:00 pm **Advances in Sports Science to Reduce Injury and Promote Recovery**

Robert E. Mangine Med, PT, ATC

Marsha Mangine DPT

AOSSM MEDICAL PUBLISHING GROUP REVIEWERS WORKSHOP

THURSDAY, JULY 5

12:45 pm–2:15 pm

Fee: No charge for reviewers
\$50 non-reviewers

Reviewing and assessing quality scientific papers is a skill. The AOSSM medical publishing editorial staff will present two separate discussions:

ETHICAL ISSUES IN MEDICAL RESEARCH AND PUBLICATION

AJSM and OJSM Editor-in-Chief, Bruce Reider MD will discuss how and why numerous ethical issues arise when conducting and publishing medical research. This presentation will deal with three common ones: authorship, ethical standards for the conduct of research, and potential conflicts of interest on the part of authors. Dr. Reider will also review common standards for each of these. Attendees should gain an understanding of common guidelines for each issue and how AJSM and OJSM currently approach them.

TIME ZERO

Time zero biomechanical studies are popular and comprise approximately 15% of the papers submitted to AJSM. While many of these studies provide important baseline information for clinicians and researchers, they do not include the biophysical effects of healing and hence have limitations. Braden Flemming, PhD will discuss how to review the strengths and weaknesses of Time Zero studies, the steps required to improve the success of publishing a Time Zero study; and how to identify criteria as a reviewer.

NIH REVIEWERS WORKSHOP

THURSDAY, JULY 5

4:00 pm–5:00 pm

Fee: No Charge

Serving on an NIH study section and reviewing grant applications can enhance your professional development. 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. CME is not available for this session.



WORKSHOPS

ROUND TABLE CASE DISCUSSIONS

FRIDAY, JULY 6
2:45 pm–4:15 pm

Fee: \$75

Don't miss your opportunity to learn about relevant, current clinical practice issues in a small, case-based discussion group. The cases will require that dilemmas be solved and decisions made. These discussions will include controversies or conflicts in management, as well as pertinent teaching points. The moderator will ask open-ended questions of participants, and as in clinical practice, the case(s) will unfold gradually with new information being offered during discussion.

ROUND TABLE TOPICS

RT01 Shoulder Instability

Matthew T. Provencher MD
Steadman Clinic, Vail, CO
Brian R. Wolf MD, MS
University of Iowa Hospitals and Clinics,
Iowa City, IA

RT02 Large Cuff Tear

Mark H. Getelman MD
Southern California Orthopaedic Institute,
Thousand Oaks, CA
Reuben Gobeze MD
The Cleveland Shoulder Institute,
Cleveland, OH

RT03 Revision ACL

Daniel E. Cooper MD
The Carrell Clinic Center, Dallas, TX
Darren L. Johnson MD
University of Kentucky Sports Medicine,
Lexington, KY

RT04 Cartilage Defect

Annunziato Amendola MD
Duke Sports Science Institute, Durham, NC
Seth L. Sherman MD
University of Missouri, Columbia, MO

RT05 Hip

Brian D. Busconi MD
UMass Memorial Health Care, Worcester, MA
F. Winston Gwathmey MD
UVA-Orthopaedics, Charlottesville, VA

RT06 Pediatric ACL

Mininder S. Kocher MD, MPH
Boston Children's Hospital, Boston, MA
Jonathan C. Riboh MD
Duke Sports Science Institute, Durham, NC

RT07 Patellofemoral

David DeJour MD
Lyon-Ortho-Clinic, Lyon, France
David R. Diduch MD
UVA-Orthopaedics, Charlottesville, VA

RT08 Meniscus Repair

Asheesh Bedi MD
University of Michigan, Ann Arbor, MI
Matthew J. Matava MD
Washington University Orthopedics,
Chesterfield, MO

RT09 Complex Knee Ligament

Robert F. LaPrade MD, PhD
The Steadman Clinic, Vail, CO
Bruce A. Levy MD
Mayo Clinic of Rochester Minnesota,
Rochester, MN

RT10 ACL Controversies

Bernard R. Bach Jr., MD
Midwest Orthopaedics at Rush, Chicago, IL
Kurt P. Spindler MD
Cleveland Clinic Sports Health Center,
Garfield Heights, OH

RT11 Foot and Ankle

Thomas O. Clanton MD
The Steadman Clinic, Vail, CO
Bryan George Vopat MD
University of Kansas, Overland Park, KS

RT12 Failed Cuff

Stephen F. Brockmeier MD
UVA-Orthopaedics, Charlottesville, VA
John M. Tokish MD
Mayo Clinic Arizona, Phoenix, AZ

RT13 Hip 2

Benjamin G. Domb MD
Hinsdale Orthopaedics and American Hip
Institute, Westmont, IL
Christopher M. Larson MD
Minnesota Orthopaedic Sports Medicine
Institute at Twin Cities Orthopedics,
Edina, MN

REGISTER TODAY

www.sportsmed.org **#AOSSM2018**

POSTERS



Take a tour of posters and interact directly with the authors. Tours will be held on Saturday from 12:30 pm – 1:30 pm and will take place outside the Exhibit Hall.

201 Jones Fractures Identified at the National Football League Scouting Combine: Assessment of Prognostic Factors, Computed Tomography Findings, and Initial Career Performance

Robert C. Spang MD¹, Daniel B. Haber MD¹, Brendin Beaulieu-Jones², Kristen Stupay MD¹, George Sanchez³, James M. Whalen MSEd⁴, Joseph J. Van Allen MS, PT, SCS, ATC, CSCS⁴, Mark D. Price MD, PhD¹, Matthew T. Provencher MD⁵

¹Massachusetts General Hospital, Boston, MA

²Dartmouth University, Hanover, NH

³Steadman Philippon Research Institute, Vail, CO

⁴New England Patriots, Foxboro, MA

⁵The Steadman Clinic, Vail, CO

202 Efficacy of an Arthroscopic Virtual Based Simulator for Orthopedic Surgery Residents by Year in Training

Shahram Yari MD¹, Chanakya Jandhyala MD¹, Behnam Sharareh MD¹, Aravind Athiviraham MD², Theodore B. Shybut MD¹

¹Baylor University, Houston, TX

²University of Chicago, Chicago, IL

203 Retroarticular Drilling with Supplemental Bone Marrow Aspirate Concentrate for the Treatment of Osteochondritis Dissecans of the Knee

Crystal Perkins MD¹, Kelsey Davidson MD¹, Nathan L. Grimm², Melissa A. Christino MD¹, S. Clifton Willimon MD¹, Michael T. Busch MD¹

¹Children's Orthopaedics of Atlanta, Atlanta, GA

²Duke University Medical Center, Durham, NC

204 Is Edema at the Posterior Medial Tibial Plateau Indicative of Ramp Lesion? An Examination of 852 Patients with Anterior Cruciate Ligament Reconstruction

Neil Kumar MD, **Tiahna Spencer BS**, Edward Hochman BS, Mark P. Cote RPT, Robert A. Arciero MD, Cory M. Edgar MD, PhD
University of Connecticut Health Center, Farmington, CT

205 Trans-Osseous vs. Anchor Repair of Acute Patellar Tendon Ruptures

James A. O'Dowd MD¹, David Lehoang BS¹, Rebecca K. Butler ScM², David De Witt PA-C³, Raffy Mirzayan MD³

¹University of Southern California, Los Angeles, CA

²Kaiser Permanente, Pasadena, CA

³Kaiser Permanente, Baldwin Park, CA

206 Tibial Tubercle Fractures in Children and Adolescents

Daniel B. Haber MD¹, Frances Tepolt MD², Michael P. McClincy MD², Leslie Kalish ScD², Mininder S. Kocher MD, MPH²

¹Massachusetts General Hospital, MA

²Boston Children's Hospital, Boston, MA

207 Focal Periphyseal Edema (FOPE): A Newly Reported Cause of Knee Pain in Adolescent Athletes

Mark Wu BS, Sarah Bixby MD, Dennis E. Kramer MD, Benton E. Heyworth MD¹

Boston Children's Hospital, Boston, MA

208 Contralateral Lateral Femoral Condyle Allografts Provide an Acceptable Surface Match for Simulated Classic Osteochondritis Dissecans Lesions of the Medial Femoral Condyle

Nabeel Salka MSE, **John A. Grant MD, PhD, FRCSC**

University of Michigan, Ann Arbor, MI

209 Preoperative Outcome Scores Are Predictive of Achieving the Minimal Clinically Important Difference After Treatment of Focal Cartilage Defects of the Knee with Osteochondral Grafts

Dean Wang MD, Brenda Chang MS, MPH, Francesca R. Coxo, Mollyann D. Pais BS, Thomas L. Wickiewicz MD,

Russell F. Warren MD, Scott A. Rodeo MD, Riley J. Williams MD
Hospital for Special Surgery, New York, NY

210 Tunnel Bone Grafting in Revision Anterior Cruciate Ligament Reconstruction Cruciate Ligament Reconstruction

Brett D. Owens MD¹, MARS Group²

¹Brown University, Providence, RI

²Washington University, St Louis, MO

211 A Cam Shaped Femur Might Be a Risk Factor for ACL Injuries

Thomas Rudolf Pfeiffer¹, Jeremy M. Burnham MD¹, Ajay C. Kanakamedala¹, Jonathan Daniel Hughes MD², James J. Irrgang PT, PhD, ATC¹, Richard Debski PhD¹, Volker Musahl MD¹

¹University of Pittsburgh Medical Center, Pittsburgh, PA

²Scott & White Roney Bone & Joint Institute, Temple, TX

212 Allograft Augmentation of Hamstring Anterior Cruciate Ligament Grafts Is Associated with Increased Graft Failure

Crystal Perkins MD, Michael T. Busch MD,

Melissa A. Christino MD, **S. Clifton Willimon MD**

Children's Healthcare of Atlanta, Atlanta, GA

213 Is Medial Tibial Slope Associated with Non-Contact ACL Tears? An Analysis of Primary and Revision ACL Reconstruction Patients

Alvin Wei-i Su MD, PhD¹, Ljiljana Bogunovic MD², Matthew V. Smith MD², Simon Gortz MD³, Robert H. Brophy MD², Rick W. Wright MD², Matthew J. Matava MD²
¹University of Connecticut, Farmington, CT
²Washington University Orthopedics, St. Louis, MO
³The CORE Institute, Phoenix, AZ

214 Advanced Patellar Tendinopathy Is Associated with Increased Rates of Bone-Patellar Tendon-Bone Autograft Failure in Anterior Cruciate Ligament Reconstructions

Alexander Leandros Lazarides MD¹, Eduard Alentorn-Geli¹, Emily Vinson MD¹, Kristian Samuelsson MD, PhD, MSc², Alison P. Toth MD¹, Claude T. Moorman MD¹, William E. Garrett MD, PhD³, Dean C. Taylor MD¹
¹Duke University, Durham, NC
²Sahlgrenska University Hospital, Molndal, Sweden
³Duke Sport Sciences Institute, Durham, NC

215 Patellar Tendon Thickness and Failure After Anterior Cruciate Ligament Reconstructions with Bone-Patella Tendon-Bone Autograft

Ryan Roach MD, Mark Kramarchuk, Hien Pham MD, Michele Masti MD, Amos Dai, Michael Joseph Alaia MD, Guillem Gonzalez-Lomas MD
 NYU Langone Orthopedic Hospital, New York, NY

216 Accuracy of MRI and Varus Stress Radiographs in Diagnosing Fibular Collateral Ligament Injuries

Matthew T. Provencher MD¹, **Patrick W. Kane MD²**, Nicholas N. DePhillipo¹, Mark Cinque², Gilbert Moats MD², Colin Murphy², Anthony Sanchez², Robert F. LaPrade MD, PhD¹
¹The Steadman Clinic, Vail, CO
²Steadman Philippon Research Institute, Vail, CO

217 Whole-Body Muscle Activity During Baseball Pitching Exercise

Yasushi Takata MD, Junsuke Nakase MD, PhD, Kengo Shimozaki, Hiroyuki Tsuchiya MD, PhD
 Kanazawa University, Kanazawa, Japan

218 Performance and Return to Sport Following Latissimus Dorsi and Teres Major Injuries in Professional Baseball Pitchers

Brandon J. Erickson MD¹, **Peter Nissen Chalmers MD²**, John D'Angelo³, Kevin Ma³, Anthony A. Romeo MD⁴
¹Hospital for Special Surgery, New York, NY
²Washington University Medical Center, St Louis, MO
³Major League Baseball, New York, NY
⁴Rothman Institute, New York, NY

220 Endoscopic Proximal Hamstring Repair: Portal Site Anatomy - A Cadaveric Study

Michael K. Ryan MD¹, David P. Beason MS², Benton A. Emblom MD¹
¹Andrews Sports Medicine & Orthopaedic Center, Birmingham, AL
²American Sports Medicine Institute, Birmingham, AL

221 Biomechanical Comparison of Open and Endoscopic Proximal Hamstring Repair Techniques

Michael K. Ryan MD¹, **Matthew W. Crozier MD²**, David P. Beason MS², Benton A. Emblom MD¹
¹Andrews Sports Medicine & Orthopaedic Center, Birmingham, AL
²American Sports Medicine Institute, Birmingham, AL

222 Reduction of Hip Arthroscopy Post-Operative Pain Using Ultrasound-Guided Fascia-Iliaca Block: A Prospective Randomized Control Trial

John Larson Glomset MD¹, Eugene J. Kim MD¹, John M. Tokish MD², Suzanne D. Renfro MD¹, Tyler B. Seckel BS³, Kyle J. Adams BS³, Jason Folk MD¹
¹Steadman Hawkins Clinic of the Carolinas; Greenville Health System, Greenville, SC
²Mayo Clinic Arizona, Phoenix, AZ
³Hawkins Foundation, Greenville, SC

224 What Is the Impact of PAO Surgery on Patient Function and Activity Levels?

Jeff Petrie MD¹, Tonya An BS¹, Perry Schoenecker MD¹, Ira Zaltz MD², Young-Jo Kim MD³, Michael B. Millis MD³, Paul Beaulé MD⁴, Rafael J. Sierra MD⁵, Robert Trousdale MD⁵, Daniel J. Sucato MD, MS⁶, David Podeszwa MD⁶, Ernest Sink MD⁷, **John C. Clohisey MD¹**
¹Washington University, Saint Louis, MO
²Beaumont Hospital, Royal Oak, MI
³Children's Hospital, Boston, MA
⁴The Ottawa Hospital, Ottawa, ON, Canada
⁵Mayo Clinic, Rochester, MN
⁶Texas Scottish Rite Hospital for Children, Dallas, TX
⁷Hospital for Special Surgery, New York, NY

225 Patient-Specific Parameters Associated with Traction Stiffness in Primary and Revision Hip Arthroscopy

Ashley L. Kapron PhD¹, Michael Karns MD², Stephen Kenji Aoki MD¹, Temitope F. Adeyemi MPH¹, Elizabeth A. Baillargeon BS¹, Melissa K. Hartley BS¹, Jocelyn N. Todd BS¹, **Travis Maak MD¹**
¹University of Utah, Salt Lake City, UT
²University Hospitals Cleveland Medical Center, Cleveland, OH

226 Indomethacin Does Not Reduce Heterotopic Ossification in Two-Incision Distal Biceps Repairs

Justin Hudson MD¹, Taylor R. Dunphy MD¹, Rebecca K. Butler ScM², Raffy Mirzayan MD³
¹University of Southern California, Los Angeles, CA
²Kaiser Permanente, Pasadena, CA
³Kaiser Permanente, Baldwin Park, CA

227 Incidence and Risk Factors for Failure of Arthroscopic Posterior Capsulolabral Reconstruction

James P. Bradley MD, Justin W. Arner MD, Sachidhanand Jayakumar BS, **Dharmesh Vyas MD, PhD**
 University of Pittsburgh Medical Center, Pittsburgh, PA

228 Does Labral Reconstruction Prevent Osteoarthritis After Posterior Shoulder Instability: A Population-Based Study

Julia Lee MD¹, Jarret Murray Woodmass MD², Isabella Wu³, Christopher L. Camp MD³, Diane L. Dahm MD³, Aaron J. Krych MD³
¹Sierra Pacific Orthopedics, Fresno, CA
²Boston Shoulder Institute, Boston, MA
³Mayo Clinic, Rochester, MN

229 Comparison of Short-Term Biodex Results After Anatomic ACL Reconstruction Between Three Autografts

Jonathan Daniel Hughes MD¹, Jeremy M. Burnham MD², Angela Hirsh², Volker Musahl MD², Freddie H. Fu MD², James J. Irrgang PT PhD ATC², Andrew D. Lynch PT, PhD²
¹Baylor Scott and White, Temple, TX
²University of Pittsburgh Medical Center, Pittsburgh, PA

230 Correlation Between Synovial Fluid Biomarker Concentrations and Bone Marrow Edema Lesion Volume in Patients with Acute ACL Ruptures

Utkarsh Anil, Jordan Werner MD, Neha Jejurikar, Lena Kenny MS, Hien Pham MD, James Liu MD, Michele Mastio MD, Christopher Burke MD, Eric Jason Strauss MD
 NYU Langone Orthopedic Hospital, New York, NY

231 Effect of Meniscal Ramp Repair on Knee Kinematics, ACL in Situ Force and Bony Contact Forces - A Biomechanical Study

Thomas Rudolf Pfeiffer MD, Jan Hendrik Naendrup, Calvin Chan, Kanto Nagai MD, PhD, João V. Novaretti, Richard Debski PhD, Volker Musahl MD
 University of Pittsburgh Medical Center, Pittsburgh, PA

232 Graft-Recipient Anteroposterior Mismatch Does Not Affect the Clinical Outcomes of Osteochondral Allograft Transplantation of the Femoral Condyle

Francesca R. Coxe¹, Dean Wang MD¹, George Christian Balazs MD¹, Brenda Chang MS, MPH¹, Kristofer J. Jones MD², Scott A. Rodeo MD¹, Riley J. Williams MD¹
¹Hospital for Special Surgery, New York, NY
²University of California, Los Angeles, Los Angeles, CA

233 Talar Motion Is Constrained by Tricortical Screw Fixation of the Syndesmosis: A Cadaveric Robotic Study

Neel K. Patel MD, Thomas Rudolf Pfeiffer MD, Jan-Hendrik Naendrup BS, Conor Murphy MD, Jason Zlotnicki MD, Richard Debski PhD, Volker Musahl MD, MaCalus Vinson Hogan MD
 University of Pittsburgh Medical Center, Pittsburgh, PA

234 Jones Fracture in the Elite Athlete: Patient Reported Outcomes Following Fixation with BMAC

Dwayne Carney¹, Monique C. Chambers MD, MSL¹, Joseph James Kromka¹, Dukens LaBaze¹, Robin Vereeke West MD², Volker Musahl MD¹, Bryson P. Lesniak MD¹, **MaCalus Vinson Hogan MD¹**
¹University of Pittsburgh Medical Center, Pittsburgh, PA
²Inova Sports Medicine, Fairfax, VA

235 Surgical Implications of the Distal Tibia Morphology at the Incisura for Glenoid Augmentation

Kenneth Aaron Shaw DO¹, Colleen M. Moreland DO¹, Mickey S. Chabak MD¹, Matthew T. Provencher MD², **Stephen Parada MD³**
¹Eisenhower Army Medical Center, Fort Gordon, GA
²The Steadman Clinic, Vail, CO
³EAMC Orthopaedics, Augusta, GA

236 Epidemiology of Surgical Treatment of Youth Sports Injuries in the United States

Nicholas Bonazza MD¹, Nicholas Sterling PhD¹, Djibril Ba MPH¹, Guodong Liu PhD¹, William L. Hennrikus MD¹, Aman Dhawan MD¹
¹Penn State Hershey Medical Center, Hershey, PA

237 Surgical Repair of Distal Triceps Tendon Injuries: Short-Term Clinical Outcomes and Re-Rupture Rate

Brian Robert Waterman MD¹, Robert Dean², Shreya S. Veera³, Brian J. Cole MD, MBA², Anthony A. Romeo MD⁴, Robert Wysocki MD², Mark S. Cohen MD², John Fernandez², Nikhil N. Verma MD²
¹Wake Forest University, Winston-Salem, NC
²Midwest Orthopaedics at Rush, Chicago, IL
³Rush University Medical Center, Chicago, IL
⁴Rothman Institute, New York, NY

238 Release Location in a Risk Factor for Ulnar Collateral Ligament Reconstruction in Major League Baseball Pitchers

Daniel Aaron Portney¹, Lucas T. Buchler MD¹, Jake M. Lazaroff¹, Stephen Gryzlo MD¹, Matthew Saltzman MD¹
¹Northwestern University, Chicago, IL

239 The Effect of Humeral and Ulnar Tunnel Placement on Achieving UCL Graft Isometry

Ajay C. Lall MD¹, David P. Beason MS¹, Jeffrey R. Dugas MD², E. Lyle Cain Jr., MD²
¹American Sports Medicine Institute, Birmingham, AL
²Andrews Sports Medicine & Orthopaedic Center, Birmingham, AL

240 Performance and Return to Sport Following Ulnar Nerve Transposition/Decompression in Professional Baseball Players

Brandon J. Erickson MD¹, Peter Nissen Chalmers MD², John D'Angelo³, Kevin Ma³, Anthony A. Romeo MD⁴
¹Hospital for Special Surgery, New York, NY
²Washington University Medical Center, St Louis, MO
³Major League Baseball, New York, NY
⁴Rothman Institute, New York, NY

241 Human Amniotic Membrane Improves Healing in a Chronic, Massive Rotator Cuff Repair Model

David Kovacevic MD¹, Robert Suriani¹, Maarouf Saad¹, Steven Tommasini PhD¹, Christopher Mendias PhD, ATC², Chad Carroll PhD³, Theodore A. Blaine MD¹
¹Yale University, New Haven, CT
²University of Michigan, Ann Arbor, MI
³Midwestern University, Downers Grove, IL

242 Anterior Cable Reconstruction Using the Proximal Biceps Tendon for Large Rotator Cuff Defects Limits Superior Migration and Subacromial Contact Without Restricting Range of Motion

Maxwell C. Park MD¹, Charles Lin², Adam Kantor², Yasuo Itami MD³, Michelle H. McGarry MS², Thay Q. Lee PhD²
¹Woodland Hills Medical Center, Woodland Hills, CA
²Tibor Rubin VA Long Beach Healthcare System, Long Beach, CA

243 Risk Factors for Biceps Related Complications Following Arthroscopic Tenotomy of the Long Head of the Biceps Tendon

Raffy Mirzayan MD¹, Christopher L. McCrum MD², Rebecca K. Butler ScM³, **Ram Kirin Alluri MD⁴**
¹Kaiser Permanente, Baldwin Park, CA
²University of Texas, Southwestern, Dallas, TX
³Kaiser Permanente, Pasadena, CA
⁴University of Southern California, Los Angeles, CA

245 Type VIII Slap Repair: Patient-Reported Outcomes of 34 Patients with Minimum 4-Year Follow-Up

Justin W. Arner MD, Mitchell Stephen Fourman MD, Steven Bayer BS, **Darren L. de Sa MD, FRCSC**, Dharmesh Vyas MD, PhD, James P. Bradley MD
 University of Pittsburgh Medical Center, Pittsburgh, PA

246 Shoulder Injection Prior to Rotator Cuff Repair is Associated with Increased Risk of Subsequent Surgery

Sophia Traven MD, Daniel Brinton MHA, MAR, Kit Simpson DrPH, Zachary Adkins MD, Alyssa Althoff, John Andrew Palsis MD, Harris Slone MD
 Medical University of South Carolina, Charleston, SC

247 Effectiveness of ASA for VTE Prophylaxis in Arthroscopic Rotator Cuff Repair

Luke Austin MD¹, Charles Dante Wowkanec BS¹, Bret Cypel BS¹, Eric Gordon Alyea DO², Tara Gaston DO², Manuel Pontes PhD², Gerald R. Williams MD¹
¹The Rothman Institute, Philadelphia, PA
²Rowan University School of Osteopathic Medicine, Stratford, NJ

248 A Randomized Controlled Trial and Cost Analysis Assessing the Value of Physical Therapy for Treatment of Adhesive Capsulitis

John W. Stelzer MS, **Ravi Agrawal**, William Conaway, Jennifer Smith MD, Scott D. Martin MD
 Massachusetts General Hospital, Boston, MA

249 Pre-Operative and Post-Operative Alpha Angles Are Significant Independent Predictors of Patient-Reported Outcome Measures at Two Years After Hip Arthroscopy

Drew A. Lansdown MD¹, Kyle Kunze BS¹, Gift Ukwuani MD¹, Brian Robert Waterman MD², William H. Neal BS¹, Shane Jay Nho MD, MS³
¹Rush University Medical Center, Chicago, IL
²Wake Forest University, Winston-Salem, NC
³Midwest Orthopaedics at Rush, Chicago, IL

250 Biomechanical Analysis of All-Suture Anchor Fixation for Rotator Cuff Repair

Eamon Bernardoni MS¹, Rachel M. Frank MD², Shreya S. Veera BS³, Justin W. Griffin MD³, Brian Robert Waterman MD⁴, Elizabeth Shewman MS³, Brian J. Cole MD, MBA¹, Anthony A. Romeo MD⁵, **Nikhil N. Verma MD¹**
¹Midwest Orthopaedics at Rush, Chicago, IL
²University of Colorado, Aurora, IL
³Rush University Medical Center, Chicago, IL
⁴Wake Forest University, Winston-Salem, NC
⁵Rothman Institute, New York, NY

GENERAL INFORMATION



GENERAL INFORMATION

LOCATION

California's second largest city, San Diego, will play host to the 2018 AOSSM Annual Meeting. San Diego's ideal climate provides numerous opportunities for attendees and their families, including 70 miles of pristine beaches, more than 90 golf courses, the San Diego Zoo, Wild Animal Park, Sea World San Diego and Legoland California just to name a few. In addition, San Diego's culinary arts are booming with numerous highly rated restaurants in the Gaslamp Quarter and Old Town. For more information on the city visit www.sandiego.org.

The Manchester Grand Hyatt is located on the waterfront and only three miles from San Diego International Airport. The hotel is within walking distance to several restaurants and attractions including Seaport Village, Midway Museum and Petco Park. For more information on the hotel visit www.manchestergand.hyatt.com.

REGISTER

- Visit www.sportsmed.org to register and for complete fee details.
- Advance registration deadline is **June 5, 2018**.

REGISTRATION FEES

	EARLY BIRD RATE UNTIL JUNE 5	STAYING AT OTHER HOTEL	AFTER JUNE 5	STAYING AT OTHER HOTEL
Member	\$175	\$325	\$325	\$475
Non-Member MD	\$775	\$925	\$925	\$1075
Resident/Fellow	\$375	\$525	\$525	\$675
Military	\$325	\$475	\$475	\$625
Allied Health	\$375	\$525	\$525	\$675
Faculty	\$175	\$350	\$325	\$475

To offset Society meeting expenses, a \$150 fee will be added to all registrations not staying at official meeting hotels. Registrants will be confirmed with hotel master list.

HOUSING

Housing for the meeting is available at www.sportsmed.org via OnPeak who is the AOSSM's official housing company. Rooms at the discounted AOSSM rate of \$244 will sell quickly so be sure to book your hotel early for the best selection and price. Reservations can also be made by calling **855/416-4093**. All scientific sessions and exhibits will be held at the Manchester Grand Hyatt. Housing rates will be available until June 5, pending availability.

IMPORTANT NOTE

AOSSM has designated onPeak as the ONLY official housing provider. There are companies and organizations that will try to present themselves as official partners of the AOSSM Annual Meeting and offer you potential room reservations that might not be guaranteed or available. OnPeak is the only official housing provider.

RENTAL CARS

AOSSM has negotiated special rates for rental cars through Hertz during the Annual Meeting.

Visit www.sportsmed.org and click on the rental car link or call **1-800/654-2240/1-405/720-3316** for your discount using code CV 04YW0006.

EDUCATIONAL 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

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.

General Scientific Sessions: AOSSM designates this live activity for a maximum of 16.50 *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.

Roundtable Discussions: 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.

AOSSM Medical Publishing Group Reviewers Workshop: 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.

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.

AAPA

AAPA accepts certificates of participation for educational activities certified for *AMA PRA Category 1 Credit*[™] from organizations accredited by ACCME.

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 5, 2018. No refunds will be issued after this date for registration fees, instructional courses or social events.

SOCIAL FUNCTIONS / INDUSTRY SYMPOSIA



THURSDAY, JULY 5

INDUSTRY SYMPOSIA

12:30 PM – 2:00 PM

2nd Level

Join your colleagues for a 90 minute, lunch-time learning session where you can become more familiar with the latest products, services, and newest procedures.

Lunch will be provided, and pre-registration is encouraged.

Room:

Zimmer Biomet	LaJolla AB
Arthrex	Gaslamp C & D
Smith & Nephew	Gaslamp A & B
Stryker	Old Town A & B



SOCIAL FUNCTIONS

THURSDAY, JULY 5

2018 ANNUAL MEETING FUN RUN/WALK

6:00 am – 6:30 am

Fee: No Charge

Kick off your day with AOSSM's 1st Annual Fun Run/Walk! Participants will run or walk one mile around the beautiful San Diego Harbor and get their steps in early before catching all the action packed education of the meeting. All ages and abilities welcome!

FRIENDS OF SOMOS (SOCIETY OF MILITARY ORTHOPAEDIC SURGEONS) AND MILITARY SPORTS ASSOCIATES RECEPTION

5:00 pm – 6:00 pm

Fee: No Charge

Join AOSSM and SOMOS for the first ever combined reception of military members from AOSSM and SOMOS. All are welcome to attend this inaugural event that recognizes and celebrates sports medicine in the military. If you are current military, former military, a colleague or friend who cares for those who serve or who have served our country, please join us on the Seaview Terrace for light appetizers and beverages.

WELCOME RECEPTION

6:30 pm – 8:00 pm

Fee: No Charge

Join us on the pool deck overlooking the beautiful San Diego Harbor for this year's Welcome Reception. Everyone and their families are welcome to attend.

SATURDAY, JULY 7

FAMILY NIGHT ON THE USS MIDWAY

6:30 pm – 10:30 pm

Fee: No Charge

Join us for a private event on the longest-serving aircraft carrier in U.S. Navy history, the USS Midway. Explore galleys, the 4-acre flight deck to see restored fighter jets and helicopters, take a ride on a simulator, visit the museum store, or enjoy a docent lead tour to ensure you gain a greater appreciation of courage, freedom and service to our country. A buffet dinner will be offered while you enjoy music and dancing with a local DJ. The event is approximately a 10-minute walk from the Manchester Grand Hyatt, however limited transportation will be offered for those who need additional assistance. Please register in advance and indicate the number of adults and children when registering.



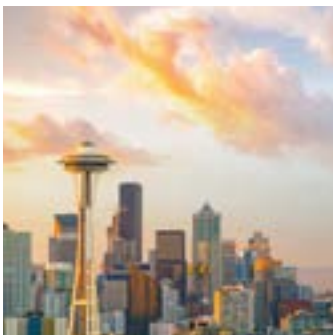
AOSSM UPCOMING ANNUAL MEETINGS



AOSSM

Annual Meeting **2019**

July 11 – 14, 2019
Boston, MA



AOSSM

Annual Meeting **2020**

July 9 – 12, 2020
Seattle, WA



AOSSM

Annual Meeting **2021**

July 8 – 11, 2021
Music City Center, Nashville, TN

UPCOMING MEETING AND DATES

AOSSM / AAOS Orthopaedic Sports Medicine Review Course

August 10 – 12, 2018
Westin Michigan Ave.
Chicago, IL

Keep Your Edge:

Hockey Sports Medicine 2018

August 17 – 19, 2018
Hilton Toronto
Toronto, Ontario, Canada

OrthoBiologics: Integrating Biologics and Clinical Ultrasound into Your Practice

October 12 – 13, 2018
OLC Education & Conference Center,
Rosemont, IL

2019 Specialty Day

March 16, 2019
Sands Expo
Las Vegas, NV

AOSSM / NFL Football Sports Medicine 2019

March 29 – 31, 2019
Omni Nashville
Nashville, TN

AOSSM Surgical Skills Course – Osteotomy / Joint Preservation

April 12 – 14, 2019
OLC Education & Conference Center,
Rosemont, IL

AOSSM 2019 Annual Meeting

July 11 – 14, 2019
John B. Hynes Veterans
Memorial Convention Center
Boston, MA

ABSTRACT SUBMISSION DATES

Specialty Day 2019 Abstracts

April 2 – May 16, 2018

Annual Meeting 2019

Instructional Course Proposals

June 1 – August 29, 2018

Annual Meeting 2019 Abstracts

August 1 – October 3, 2018

