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
- **President 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.

**JOIN US IN SAN DIEGO**

**REGISTER TODAY**  www.sportsmed.org  #AOSSM2018
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Brian R. Wolf MD, MS

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Daniel E. Cooper MD  
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Mary K. Mulcahey MD
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Jeffrey R. Dugas MD  
John M. Tokish MD
David C. Flanigan MD  
Bryan G. Vopat MD

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PROGRAM AT A GLANCE (CONT.)

THURSDAY

Industry Symposia
12:30 – 2:00

AOSSM Medical Publishing Group
Reviewers’ Workshop
12:45 – 2:15

General Session
Shoulder Cuff
2:00 – 3:45

Concurrent A
Overhead Athlete
4:00 – 5:00

Concurrent B
Shoulder Instability/
Bone Loss
4:00 – 5:00

Concurrent C
Cartilage
4:00 – 5:00

NIH Reviewer
Information Session
4:00 – 5:00

FRIDAY

LUNCH BREAK
12:30 – 1:00

Instructional Courses
1:00 – 2:30

Round Table Discussions
2:45 – 4:15

SATURDAY

LUNCH BREAK and
POSTER TOUR
12:30 – 1:30

Concurrent A
Shoulder Video
Session
1:30 – 2:30

Concurrent B
Hip II
1:30 – 2:30

Concurrent C
High School/
Collegiate Athlete
1:30 – 2:30

Concurrent A
Shoulder Instability/
Case-Based Learning
3:00 – 4:00

Concurrent B
Osteoarthritis
3:00 – 4:00

Concurrent C
ACL: An International
Perspective
3:00 – 4:00

SUNDAY

1:00 1:30 2:00 2:30 3:00 3:30 4:00 4:30 5:00
## CONFERENCE AGENDA

### THURSDAY, JULY 5, 2018

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Presenters</th>
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</thead>
<tbody>
<tr>
<td>8:15 am – 8:20 am</td>
<td>Welcome</td>
<td>Charles A. Bush-Joseph MD</td>
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<tr>
<td></td>
<td></td>
<td>Midwest Orthopaedics at Rush, Chicago, IL</td>
</tr>
<tr>
<td>8:20 am – 8:25 am</td>
<td>General Session – Knee Ligament/Meniscus</td>
<td>Moderators: Freddie H. Fu MD, Gehron Treme MD</td>
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<tr>
<td></td>
<td></td>
<td>University of Pittsburgh Medical Center, Pittsburgh, PA, University of New Mexico, Albuquerque, NM</td>
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<tr>
<td>8:20 am – 8:25 am</td>
<td>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</td>
<td>Svend Ulstein MD, Asbjorn Aroen MD, PhD, Magnus L. Forssblad MD, PhD, Lars Engbretsen MD, PhD, Jan Harald Røtterud MD, PhD</td>
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<tr>
<td></td>
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<td>Akershus University Hospital, Lørenskog, Norway, Karolinska Institutet, Stockholm, Sweden, Oslo University Hospital-Ullevaal, Oslo, Norway</td>
</tr>
<tr>
<td>8:25 am – 8:30 am</td>
<td>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</td>
<td>Frank A. Cordasco MD, 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</td>
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<td>Hospital for Special Surgery, New York, NY</td>
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<tr>
<td>8:30 am – 8:35 am</td>
<td>Paper 103: Current Return to Sport Criteria After ACL Reconstruction Fail to Identify Increased Risk of Second ACL Injury in Young Athletes</td>
<td>Mark V. Paterno PhD, PT, Mitchell Rauh PhD, PT, MPH, FACSM, Staci Thomas MS, Timothy E. Hewett PhD, FACSM, Laura Schmitt PhD, PT</td>
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<td>Sports Medicine Biodynamics Center, Cincinnati, OH, San Diego State University, San Diego, CA, Cincinnati Children’s Hospital, Milford, OH, Mayo Clinic, Rochester, MN, The Ohio State University, Columbus, OH</td>
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<tr>
<td>8:35 am – 8:40 am</td>
<td>Paper 104: Anterior Cruciate Ligament Reconstruction in Young Females: Patellar vs. Hamstring Tendon Autografts</td>
<td>Hytham Salem, Vahe Varzhapeyan, Nimit Patel MD, Zaira Chaudhry, Christopher C. Dodson MD, Fotos P. Tjumakaris MD, Kevin B. Freedman MD</td>
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<td>Rothman Institute, Philadelphia, PA, Thomas Jefferson University, Philadelphia, PA, The Rothman Institute, Egg Harbor Township, NJ</td>
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<tr>
<td>8:40 am – 8:45 am</td>
<td>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</td>
<td>Jorge Chahla MD, PhD, Mark Cinque, Andrew G. Geeslin MD, Grant Dorman, Gilbert Moatshe MD, Robert F. LaPrade MD, PhD, Santa Monica Orthopaedic &amp; Sports Medicine, Santa Monica, CA, Steadman Philippon Research Institute, Vail, CO, The Steadman Clinic, Vail, CO</td>
</tr>
<tr>
<td>8:45 am – 8:50 am</td>
<td>Paper 106: Arthroscopic Primary Repair of Proximal Anterior Cruciate Ligament Tears: With or Without Additional Suture Augmentation?</td>
<td>Anne Jonkergouw MD, Jelle van der List MD, Gregory S. DiFelice MD</td>
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<td>Hospital for Special Surgery, New York, NY</td>
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<td>Children’s Hospital of Philadelphia, Philadelphia, PA, Texas Scottish Rite Hospital, Dallas, TX</td>
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<tr>
<td>8:55 am – 9:00 am</td>
<td>Q &amp; A</td>
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<tr>
<td>9:00 am – 9:05 am</td>
<td>Paper 108: Excellence in Research Award: Tissue Engineered Meniscal Replacement Using a Fiber-Reinforced Scaffold in a Two-Year Ovine Model</td>
<td>Jay M. Patel PhD, Salim A. Ghodbande MD, Andrzej Brzezinski MD, Charles J. Gatt MD, Michael G. Dunn PhD</td>
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<td>Rutgers Robert Wood Johnson Medical School, New Brunswick, NJ</td>
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</table>

Topics, speakers and panelists are current at the time of publication and subject to change. Presenters are bold.
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, PhD, Nicholas N. DePhillipo MS, ATC, OTC, CSCS, Tyler Cram MS, ATC, OTC, Mark Cinque BS, Mitchell Kennedy BS, Grant Dorman MS, Luke O’Brien PT, M.Phty (Sports), SCS  
1 The Steadman Clinic, Vail, CO  
2 The Steadman Philippon Research Institute, Vail, CO  
3 Howard 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 MD, Jorge Chahla MD, PhD, Alex Brady MSc, Grant Dorman, Kyle Muckenhirn, Bradley Kruckeberg, Lars Engbretsen MD, PhD, Robert F. LaPrade MD, PhD  
1 Steadman Philippon Research Institute, Vail, CO  
2 Santa Monica Orthopaedic & Sports Medicine, Santa Monica, CA  
3 Oslo University Hospital-Ullevaal, Oslo, Norway  
4 The 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

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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</table>
| 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 |

<table>
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<tr>
<th>Time</th>
<th>Event</th>
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</table>
| 9:45 am – 9:50 am | **Paper 111: Bacterial Biofilms Are Associated with Tunnel Widening in Failed ACL Reconstructions**  
David C. Flanigan 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 |

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<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>9:50 am – 10:02 am</td>
<td><strong>Q &amp; A</strong></td>
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<tr>
<th>Time</th>
<th>Event</th>
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</table>
| 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 |

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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</table>
| 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 |

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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</table>
| 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 |

<table>
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<tr>
<th>Time</th>
<th>Event</th>
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<tr>
<td>10:23 am – 10:28 am</td>
<td><strong>Q &amp; A</strong></td>
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</table>
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, 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, PhD
William H. Neal BS
Brian Robert Waterman MD
Shane Jay Nho MD, MS
1 Rush University Medical Center, Chicago, IL
2 Wake 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, MS
Ravi Agrawal
William Conaway
Noah J. Quinlan MD
Shivam Upadhyaya MD
Kyle Alpaugh MD
Jennifer Smith
Scott D. Martin MD
1 Massachusetts General Hospital, Boston, MA
2 University of Utah, Salt Lake City, UT
3 University 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 MD, Hajime Utsunomiya
Karen K. Briggs MPH, MBA
Renato Locks
1 Steadman Clinic, Vail, CO
2 Steadman Philippon Research Institute, Vail, CO
<table>
<thead>
<tr>
<th>Time</th>
<th>Session Title</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>10:10 am – 10:18 am</td>
<td>Hip Dysplasia in the Athlete</td>
<td>Bryan T. Kelly MD Hospital for Special Surgery, New York, NY</td>
</tr>
<tr>
<td>10:18 am – 10:26 am</td>
<td>How Do We Manage the Capsule in Hip Arthroscopy: What I Have Learned</td>
<td>Shane Jay Nho MD, MS Midwest Orthopaedics at Rush, Chicago, IL</td>
</tr>
<tr>
<td>10:26 am – 10:45 am</td>
<td>Hip Panel Discussion</td>
<td><strong>Moderator:</strong> Marc R. Safran MD <strong>Panelists:</strong> Joshua David Harris MD, Bryan T. Kelly MD, Shane Jay Nho MD, Marc J. Philippon MD, Steadman Clinic, Vail, CO</td>
</tr>
<tr>
<td>10:45 am – 11:30 am</td>
<td>BREAK</td>
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<tr>
<td>11:30 am – 12:30 pm</td>
<td>Concurrent Session A – Knee Video Demonstration</td>
<td><strong>Moderators:</strong> Bernard R. Bach Jr., MD Midwest Orthopaedics at Rush, Chicago, IL, Nathan A. Mall MD, FACS Cartilage Restoration Center of St. Louis, Missouri, St Louis, MO</td>
</tr>
<tr>
<td>11:30 am – 11:37 am</td>
<td>Distal Femoral Osteotomy (DFO)</td>
<td>David DeJour MD Lyon-Ortho-Clinic, Lyon, France</td>
</tr>
<tr>
<td>11:37 am – 11:44 am</td>
<td>Meniscal Root Repair</td>
<td>Christopher D. Harner MD University of Texas at Houston, Houston, TX</td>
</tr>
<tr>
<td>11:44 am – 11:51 am</td>
<td>ITB Tenodesis During ACL Reconstruction</td>
<td>Peter B. MacDonald MD, FRCS PanAm Clinic, Winnipeg, MB, Canada</td>
</tr>
<tr>
<td>11:51 am – 11:58 am</td>
<td>Osteochondral Allograft Transplant</td>
<td>William Bugbee MD Scripps Clinic, La Jolla, CA</td>
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<tr>
<td>11:58 am – 12:05 pm</td>
<td>AMZ/MPFL Reconstruction</td>
<td>Beth Shubin Stein MD Hospital for Special Surgery, New York, NY</td>
</tr>
<tr>
<td>12:05 pm – 12:12 pm</td>
<td>Meniscal Ramp Lesion Repair</td>
<td>Robert A. Arciero MD University of Connecticut Health Center, Farmington, CT</td>
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**THURSDAY, JULY 5, 2018**

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<th>Time</th>
<th>Session Title</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>12:12 pm – 12:19 pm</td>
<td>PCL Reconstruction Using Tibial Socket</td>
<td>Thomas M. DeBerardino MD The San Antonio Orthopaedic Group, San Antonio, TX</td>
</tr>
<tr>
<td>12:19 pm – 12:30 pm</td>
<td>Q &amp; A</td>
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**Concurrent Session B – Team Physician: Science of Injury**

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<th>Time</th>
<th>Session Title</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>11:30 am – 12:30 pm</td>
<td>Paper 117: Relationship Between Pitcher Fatigue and Medial Elbow Torque in Baseball Pitchers: A Simulated Game Analysis</td>
<td><strong>Eric C. Makhni MD, MBA</strong>¹, <strong>Jason E. Meldau BS</strong>², <strong>Jeff Stephens</strong>³, <strong>Kelechi Okoroha MD</strong>¹, <strong>Vincent A. Lizzio BS</strong>³, <strong>Fabien Meta</strong>³, <strong>Christopher S. Ahmad MD</strong>³, <strong>Vasilios Moutzouros MD</strong>¹ ¹Henry Ford Health System, Detroit, MI ²Wayne State University, Detroit, MI ³Columbia University, New York, NY</td>
</tr>
<tr>
<td>11:35 am – 11:40 am</td>
<td>Paper 118: Fatigue Increases ACL Injury Risk in Youth Athletes: Risk Assessment Study Using Drop-Jump Test</td>
<td><strong>Mohsin S. Fidai MD</strong>¹, <strong>Kelechi Okoroha MD</strong>¹, <strong>Jason E. Meldau BS</strong>¹, <strong>Peter A. Borowsky</strong>¹, <strong>Fabien Meta</strong>¹, <strong>Vincent A. Lizzio BS</strong>³, <strong>Lauren H. Redler MD</strong>³, <strong>Vasilios Moutzouros MD</strong>³, <strong>Eric C. Makhni MD, MBA</strong>¹ ¹Henry Ford Health System, Detroit, MI ²Wayne State University, Detroit, MI ³Columbia University, New York, NY</td>
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<tr>
<td>11:40 am – 11:45 am</td>
<td>Q &amp; A</td>
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<tr>
<td>11:45 am – 11:52 am</td>
<td>When Does Load Become Overload?</td>
<td>W. Ben Kibler MD Lexington Clinic Sports Medicine Center, Lexington, KY</td>
</tr>
<tr>
<td>11:52 am – 11:59 am</td>
<td>New Modalities for Soft Tissue Recovery: Is There Science?</td>
<td><strong>Charles A. Thigpen PT, PhD, ATC</strong> ATI Physical Therapy, Greenville, SC</td>
</tr>
<tr>
<td>11:59 am – 12:06 pm</td>
<td>Use of Wearables to Measure Injury Risk</td>
<td>E. Lyle Cain Jr., MD Andrews Sports Medicine, Birmingham, AL</td>
</tr>
<tr>
<td>12:06 pm – 12:13 pm</td>
<td>Return to Sport: When Are We Ready?</td>
<td><strong>Lynn Snyder-Mackler PhD, PT</strong> University of Delaware, Newark, DE</td>
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### Conference Agenda (Cont.)

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<tr>
<th>Time</th>
<th>Session</th>
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| 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

**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 Eutsler³, Jeffrey J. Nepple MD¹  
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 MD³  
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

### Industry Symposia

**12:30 pm – 2:00 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

**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., MD³,  
Brian J. Cole MD, MBA³,  
Anthony A. Romeo MD²,  
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 MD, Weilong Jeffrey Shi²,  
Christopher Hadley², Kevin B. Freedman MD²,  
Matthew D. Pepe MD², Bradford S. Tucker MD²,  
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

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**THURSDAY, JULY 5, 2018**

**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 MD, Christopher L. Camp MD, Aakash Chauhan MD, Brandon J. Erickson MD, Hollis G. Potter MD, John D’Angelov, Stephen Fealy MD, Michael G. Ciccotti MD, Jan Fronek MD  
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

4:43 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 Speciality 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

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 MD, Christopher S. Ahmad MD, Michael G. Ciccotti MD, John D’Angelo, Joshua S. Dines MD, David W. Altchek MD, Christopher L. Camp MD  
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

**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 Elsenbeck MD, Jared Wolfe MD, Kyle E. Nappo MD, John D’Angelov, S. Dines MD, David W. Altchek MD, Christopher L. Camp MD  
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**  
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 MD, Catherine Richardson BS², Bonnie Gregory MD³, Shelby Sumner MPH³, Michael C. O’Brien MA², Emon Bernardo MD³, Nikhil N. Verma MD³, Brian J. Cole MD, MBA¹, Gregory P. Nicholson MD³, Matthew T. Provencencher 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. Provencencher 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 BS², 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**
CONFERENCE AGENDA (CONT.)

FRIDAY, JULY 6, 2018

General Session – Shoulder Instability

8:30 am – 9:35 am
Moderators:
Timothy S. Leroux MD, MEd, FRCSC
University of Toronto, Toronto, ON, Canada
Orr Limpsivasti 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
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. Lindeil 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 Infraspinatus Remplissage in Anterior Shoulder Instability with Hill-Sachs Defect: Randomized Controlled Trial
Peter B. MacDonald MD, FRCS1, Jason Old MD FRCS2, Randhir Mascarenhas MD2, Sheila McRae PhD1, Jon Marsh1, James Dubberley MD1, Gregory A. Stranges MD1, Jeff Leiter MSc, PhD1, Peter Lapner MD2, 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 MD3, Scot Campbell MD1, 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
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

Topics, speakers and panelists are current at the time of publication and subject to change. Presenters are bold.
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<tr>
<th>Time</th>
<th>Session categoryId</th>
<th>Title</th>
<th>Presenters</th>
</tr>
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<tbody>
<tr>
<td>9:40 am – 9:45 am</td>
<td>Presidential Introduction</td>
<td>Annunziato Amendola MD, Duke Sports Science Institute, Durham, NC</td>
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<td>9:45 am – 10:15 am</td>
<td>Presidential Address</td>
<td>Charles A. Bush-Joseph MD, Midwest Orthopaedics at Rush, Chicago, IL</td>
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<td>10:15 am – 10:25 am</td>
<td>Robert E Leach Sports Medicine Leadership Award</td>
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<td>10:25 am – 10:35 am</td>
<td>Hall of Fame Presentation</td>
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<td>10:35 am – 10:50 am</td>
<td>Business Meeting</td>
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<td>10:50 am – 11:30 am</td>
<td>BREAK</td>
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<tr>
<td>11:30 am – 12:30 pm</td>
<td>Concurrent Session A – Shoulder Rotator Cuff Case-Based Learning</td>
<td>moderators: Justin W. Griffin MD, Jordan-Young Institute, Virginia Beach, VA, Claude T. Moorman III, MD, Duke Sports Medicine Center, Durham, NC</td>
<td>Presenters: Sevag Bastian MD, Raffy Mirzayan MD, Michael Allan Stone MD, Michael Batech DrPh, Daniel Acevedo MD, Anshu Singh MD, Kaiser Permanente, Baldwin Park, CA, LAC+USC Medical Center, Los Angeles, CA, Kaiser Permanente, Los Angeles, CA, Kaiser Permanente, Panorama City, CA, Kaiser Permanente, San Diego, CA</td>
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<tr>
<td>11:45 am – 11:50 am</td>
<td>Q &amp; A</td>
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<td>11:50 am – 11:57 am</td>
<td>Cuff Pathology in the Young Athlete</td>
<td>Keith Kenter MD, Western Michigan University, Kalamazoo, MI</td>
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<td>11:57 am – 12:06 am</td>
<td>Biologics and Cuff Repair</td>
<td>Adam William Anz MD, Andrews Research and Education Foundation, Gulf Breeze, FL</td>
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<tr>
<td>11:30 am – 12:30 pm</td>
<td>Concurrent Session B – Outcomes in Sports Medicine: Is There Value?</td>
<td>moderators: Eric C. Makhni MD, Henry Ford Hospital, Detroit, MI, Kurt P. Spindler MD, Cleveland Clinic Sports Health Center, Garfield Heights, OH</td>
<td>Presenters: Eric C. Makhni MD, Henry Ford Hospital, Detroit, MI, Kurt P. Spindler MD, Cleveland Clinic Sports Health Center, Garfield Heights, OH</td>
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**CONFERENCE AGENDA (CONT.)**

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<th>Time</th>
<th>Event</th>
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</table>
| 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 PhD⁵  
William Burfeind⁶  
Liz Paxton MA⁷  
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 |
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 – 12:03 pm | **Q & A**  
**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. Irgang 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. Irgang 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 |
| 12:30 pm – 1:00 pm | **Lunch** |
| 1:00 pm – 2:30 pm | **Instructional Courses** |
| 2:45 pm – 4:15 pm | **Round Tables** |

**Concurrent Session C – Team Physician: Facial and Head Injuries**

<table>
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<th>Time</th>
<th>Event</th>
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</table>
| 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 – 12:30 pm | **ACSM Exchange Lecture: Concussion Update**  
Andrew Peterson MD  
University of Iowa Hospitals and Clinics, Iowa City, IA |

Topics, speakers and panelists are current at the time of publication and subject to change. Presenters are bold.
CONFERENCE AGENDA (CONT.)

SATURDAY, JULY 7, 2018

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 MD, Brian Robert Waterman MD, Catherine Richardson, Shelby Sumner, Anthony A. Romeo MD
1 Desert Orthopedic Center, Rancho Mirage, CA
2 Wake Forest University, Winston-Salem, NC
3 Rush University Medical Center, Chicago, IL
4 Rothman Institute, New York, NY

8:25 am – 8:30 am
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
Brian M. Godshaw MD, Nicholas Kolodychuk BS, Benjamin Bryan Browning MD, Gerard Williams, 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

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

8:54 am – 9:01 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

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).

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Presences are bold
### Concurrent Session A – Shoulder Video Session

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<th>Time</th>
<th>Event</th>
<th>Presenters</th>
</tr>
</thead>
<tbody>
<tr>
<td>12:30 pm – 1:30 pm</td>
<td>Lunch and Poster Tours</td>
<td></td>
</tr>
<tr>
<td>1:30 pm – 2:30 pm</td>
<td>Moderators:</td>
<td>Jonathan F. Dickens MD, Walter Reed National Military Medical Center, Bethesda MD, Moin Khan MD, McMaster University, Burlington, ON, Canada</td>
</tr>
<tr>
<td>1:30 pm – 1:37 pm</td>
<td>Advanced Labrum Repair</td>
<td>James P. Bradley MD, University of Pittsburgh Medical Center, Pittsburgh, PA</td>
</tr>
<tr>
<td>1:37 pm – 1:44 pm</td>
<td>Arthroscopic Subscapularis Repair</td>
<td>Larry D. Field MD, Mississippi Sports Medicine and Ortho Center, Ridgeland, MS</td>
</tr>
<tr>
<td>1:44 pm – 1:51 pm</td>
<td>Suprascapular Nerve Decompression</td>
<td>Brian R. Waterman MD, Wake Forest University, Winston-Salem, NC</td>
</tr>
<tr>
<td>1:51 pm – 1:56 pm</td>
<td>Q &amp; A</td>
<td></td>
</tr>
<tr>
<td>1:56 pm – 2:03 pm</td>
<td>AC Joint Reconstruction: Don’t Forget the AC Ligaments</td>
<td>Matthew Bollier MD, University of Iowa Hospitals and Clinics, Iowa City, IA</td>
</tr>
<tr>
<td>2:03 pm – 2:10 pm</td>
<td>Arthroscopic Bony Bankart Repair</td>
<td>Peter J. Millett MD, MSC, Steadman Clinic, Vail, CO</td>
</tr>
<tr>
<td>2:10 pm – 2:17 pm</td>
<td>Arthroscopic Rotator Cuff Patch Augmentation</td>
<td>Stephen F. Brockmeier MD, UVA-Orthopaedics, Charlottesville, VA</td>
</tr>
<tr>
<td>2:17 pm – 2:24 pm</td>
<td>Arthroscopic Biceps Tenodeisis</td>
<td>Timothy S. Leroux MD, MEd, FRCS, University of Toronto, Toronto, ON, Canada</td>
</tr>
<tr>
<td>2:24 pm – 2:30 pm</td>
<td>Q &amp; A</td>
<td></td>
</tr>
</tbody>
</table>

### Concurrent Session B – Hip 2

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Presenters</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:30 pm – 2:30 pm</td>
<td>Moderators:</td>
<td>J. W. Thomas Byrd MD, Nashville Sports Medicine Foundation, Nashville, TN, F. Winston Gwathmey MD, UVA-Orthopaedics, Charlottesville, VA</td>
</tr>
<tr>
<td>1:30 pm – 1:35 pm</td>
<td>Paper 154: The Borderline Dysplastic Hip: Arthroscopy or PAO?</td>
<td>George Grammatopoulos MD, Cecilia Pascual-Garrido MD, Jeffrey Nepple MD, Christopher M. Larson MD, Ashesh Bedi MD, ANCHOR Group, Paul Beaule MD, John C. Clohisy MD</td>
</tr>
<tr>
<td>1:35 pm – 1:40 pm</td>
<td>Paper 155: Does Time from Injury to Surgery Affect Outcomes Following Surgical Repair of Partial and Complete Proximal Hamstring Ruptures?</td>
<td>Braidy C. Shambaugh DO, Suzanne Laura Miller MD, Thomas H. Wuerz MD</td>
</tr>
<tr>
<td>1:40 pm – 1:45 pm</td>
<td>Paper 156: Endoscopic Repair of Partial Thickness Under-Surface Tears of the Abductor Tendon (pusta): Clinical Outcomes with Minimum Two-Year Follow-Up</td>
<td>David Edward Hartigan MD, Itay Perets MD, Sherwin S.W. Ho MD BA, John P. Walsh, Leslie Yuen BA, Benjamin G. Domb MD</td>
</tr>
<tr>
<td>1:45 pm – 1:50 pm</td>
<td>Paper 157: Outcomes After Arthroscopic Management of Subspinous Impingement in Borderline Hip Dysplasia</td>
<td>Daniel Feghhi MD, Srino Bharam MD, Jonathan Shearin</td>
</tr>
<tr>
<td>1:50 pm – 1:55 pm</td>
<td>Q &amp; A</td>
<td></td>
</tr>
<tr>
<td>1:55 pm – 2:02 pm</td>
<td>Athletic Pubalgia: Hip, Hernia or Both?</td>
<td>Christopher M. Larson MD, Minnesota Orthopaedic Sports Medicine Institute at Twin Cities Orthopedics, Edina, MN</td>
</tr>
<tr>
<td>2:02 pm – 2:09 pm</td>
<td>Extra-Articular Impingement in the Athlete</td>
<td>Ashesh Bedi MD, University of Michigan, Ann Arbor, MI</td>
</tr>
<tr>
<td>Time</td>
<td>Session</td>
<td>Presenter(s)</td>
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<tr>
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</tbody>
</table>
| 2:09 pm – 2:16 pm | **Endoscopic Hamstring Repair Technique**  
Southern California Orthopedic Institute, Van Nuys, CA | Carlos A. Guanche MD                                                                                   |
| 2:16 pm – 2:23 pm | **Abductor Repair: Surgical Technique**  
UMass Memorial Health Care, Worcester, MA | Brian D. Busconi MD                                                                                   |
| 2:23 pm – 2:30 pm | **Q & A**                                                                 |                                                                                                        |
| 1:30 pm – 1:40 pm | **Update on Catastrophic Injuries in High School and College**  
Barry P. Boden MD  
The Orthopaedic Center, Rockville MD | John Parsons PhD, ATC  
NCAA Sport Science Institute, Indianapolis, IN                                                       |
| 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 | **Q & A**                                                                 |                                                                                                        |
| 2:15 pm – 2:30 pm | **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 |                                                                                                        |
| 2:30 pm – 3:00 pm | **General Session—Biologics**  
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**  
Sanjeev Mannava MD, PhD  
Kaitlyn E. Whitney BS, Jillian King BS, Mitchell Kennedy BS, Katarina Klett, Grant Dorman, Jorge Chahla MD, PhD, Thos A. Evans MD, Johnny Huard PhD, Robert F. LaPrade MD, PhD  
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 Huebner, Ayten Hijazi, Andrew Firth, Frank Beier  
Alan M. Getgood MD, FRCS (Tr&Orth)  
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 MD  
Johannes B. Roedl MD, Adam C. Zoga MD, William C. Meyers MD  
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 Imply Surgical Repair Following Recurrent Anterior Shoulder Dislocation**  
Tetsuya Takenaga MD, PhD, Albert Lin MD, Calvin Chan, MS, Volker Musahl MD, Richard Debbski PhD, Masahito Yoshida MD, PhD  
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 Kowalczuk 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

### Shoulder Instability Panel Discussion

**3:41 pm – 4:00 pm**  
**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**  
**Q & A**

**3:15 pm – 3:22 pm**  
**Biologics and OA: What Is the Evidence**  
Jason L. Dragoo 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 – 3:05 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, California

**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 physicians representing 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

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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</table>
| 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  
**Presenters:** 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  
**Affiliations:** 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  
**Presenters:** Scott Thomas Watson MD, Amy Trammell, Stephanie Tanner MS, Rebecca Snider BS, Steven Martin, Larry S. Bowman MD  
**Affiliations:** Greenville Health System, Greenville, SC, University of South Carolina, Greenville, SC, Blue 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  
**Presenters:** Brandon Barnds MD, William Tucker MD, Brandon L. Morris MD, John Paul Schroeppel MD, Scott M. Mullen MD, Armin Tarakemeh BA, Bryan George Vopat MD  
**Affiliations:** University of Kansas Medical Center, Kansas City, KS |
| 8:50 am – 9:05 am | Q & A  
**Moderator:** Thomas O. Clanton MD  
**Location:** The Steadman Clinic, Vail, CO |
| 9:05 am – 9:15 am | The Dreaded High Ankle Sprain: How to Diagnose and How to Manage  
**Presenters:** Thomas O. Clanton MD  
**Affiliations:** The Steadman Clinic, Vail, CO |
| 9:15 am – 9:25 am | Navicular Stress Fractures: Beware!  
**Presenters:** Kirk Anthony McCullough MD  
**Affiliations:** Cleveland Clinic Foundation, Cleveland, OH |
| 9:25 am – 9:30 am | Q & A  
**Moderator:** Thomas O. Clanton MD  
**Location:** The Steadman Clinic, Vail, CO |
| 9:30 am – 9:50 am | Foot and Ankle Case Panel Discussion  
**Moderators:** Mark C. Drakos MD, Kirk Anthony McCullough MD, Bryan George Vopat MD  
**Panelists:** Hospital for Special Surgery, New York, NY, University of Kansas, Overland Park, KS, University of Kansas Medical Center, Kansas City, KS, University of Pittsburgh Medical Center, Pittsburgh, PA, The Steadman Clinic, Vail, CO |
| 9:50 am – 10:00 am | Q & A |

### Concurrent Session B – Pediatrics

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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</thead>
</table>
| 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  
**Presenters:** Mario Hevesi MD, Thomas L. Sanders MD, Ayosh Pareek MD, Todd Milbrandt MD, Bruce A. Levy MD, Daníel B. Saris MD, PhD  
**Affiliations:** Mayo Clinic, Rochester, MN, University Medical Center Utrecht, Utrecht, Netherlands |
| 8:30 am – 8:35 am | Paper 170: Complete Radiographic Healing and Related Factors in Juvenile Osteochondritis Dissecans of the Talus  
**Presenters:** Jigar S. Gandhi PharmD, Kunbo Park MD, Divya Talwar PhD  
**Affiliations:** Children’s Hospital of Philadelphia, Philadelphia, PA, Yonsei University College of Medicine, Seoul, Korea |
| 8:40 am – 8:45 am | Paper 172: Cost Comparison and Complication Rate of Lisfranc Injuries Treated with Open Reduction Internal Fixation vs. Primary Arthrodesis  
**Presenters:** Brandon Barnds MD, William Tucker MD, Brandon L. Morris MD, John Paul Schroeppel MD, Scott M. Mullen MD, Armin Tarakemeh BA, Bryan George Vopat MD  
**Affiliations:** University of Kansas Medical Center, Kansas City, KS |
| 8:45 am – 9:00 am | Q & A  
**Moderator:** Thomas O. Clanton MD  
**Location:** The Steadman Clinic, Vail, CO |
| 9:00 am – 9:10 am | The Dreaded High Ankle Sprain: How to Diagnose and How to Manage  
**Presenters:** Thomas O. Clanton MD  
**Affiliations:** The Steadman Clinic, Vail, CO |
| 9:10 am – 9:20 am | Navicular Stress Fractures: Beware!  
**Presenters:** Kirk Anthony McCullough MD  
**Affiliations:** Cleveland Clinic Foundation, Cleveland, OH |
| 9:20 am – 9:30 am | Q & A  
**Moderator:** Thomas O. Clanton MD  
**Location:** The Steadman Clinic, Vail, CO |
| 9:30 am – 9:50 am | Foot and Ankle Case Panel Discussion  
**Moderators:** Mark C. Drakos MD, Kirk Anthony McCullough MD, Bryan George Vopat MD  
**Panelists:** Hospital for Special Surgery, New York, NY, University of Kansas, Overland Park, KS, University of Kansas Medical Center, Kansas City, KS, University of Pittsburgh Medical Center, Pittsburgh, PA, The Steadman Clinic, Vail, CO |
| 9:50 am – 10:00 am | Q & A |
### 2018 AOSSM Annual Meeting

#### Sunday, July 8, 2018

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Presenters</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:35 am – 8:40 am</td>
<td>Paper 172: Long-Term Follow-Up of Arthroscopically Repaired Meniscal Tears in a Pediatric Population</td>
<td>Michella Hagmeijer&lt;sup&gt;1&lt;/sup&gt;, Nicholas I. Kennedy MD&lt;sup&gt;1&lt;/sup&gt;, Adam J. Tagliero&lt;sup&gt;1&lt;/sup&gt;, Michael J. Stuart MD&lt;sup&gt;1&lt;/sup&gt;, Diane L. Dahn MD&lt;sup&gt;1&lt;/sup&gt;, Aaron John Krych MD&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
<tr>
<td>8:40 am – 8:45 am</td>
<td>Paper 173: Exceeding Pitch Count Recommendations in Youth Baseball Increases the Elbow Injuries</td>
<td>Tetsuya Matsuura MD, Toshiyuki Iwame, Koichi Saino</td>
</tr>
<tr>
<td>8:45 am – 8:50 am</td>
<td>Paper 174: The Latarjet Procedure for Anterior Shoulder Instability in Pediatric and Adolescent Athletes</td>
<td>Benton E. Heyworth MD&lt;sup&gt;1&lt;/sup&gt;, Mark Wu BS&lt;sup&gt;2&lt;/sup&gt;, Dennis E. Kramer MD&lt;sup&gt;1&lt;/sup&gt;, Donald S. Bae MD&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
<tr>
<td>8:50 am – 8:55 am</td>
<td>Paper 175: Prevention of Elbow Injuries in Young Baseball Players: A 6-Year Longitudinal Study</td>
<td>Yoshihiro Kotoura MD&lt;sup&gt;1&lt;/sup&gt;, Toru Morihara MD&lt;sup&gt;2&lt;/sup&gt;, Yoshikazu Kida MD&lt;sup&gt;2&lt;/sup&gt;, Tsuyoshi Sukenari&lt;sup&gt;2&lt;/sup&gt;, Ryuhei Furukawa MD&lt;sup&gt;2&lt;/sup&gt;, Tatsuya Hojo MD&lt;sup&gt;3&lt;/sup&gt;, Hiroyoshi Fujiwara MD&lt;sup&gt;2&lt;/sup&gt;, Toshikazu Kubo MD&lt;sup&gt;3&lt;/sup&gt;</td>
</tr>
<tr>
<td>8:55 am – 9:05 am</td>
<td>Q &amp; A</td>
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<tr>
<td>9:05 am – 9:15 am</td>
<td>Throwing Injuries in the Adolescent Athlete</td>
<td>Jonathan C. Riboh MD</td>
</tr>
<tr>
<td>9:15 am – 9:25 am</td>
<td>Unstable Patella and Open Growth Plates: What to Do</td>
<td>Beth E. Shubin Stein MD</td>
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<tr>
<td>9:25 am – 9:35 am</td>
<td>OCD Update</td>
<td>Matthew D. Milewski MD</td>
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<tr>
<td>9:35 am – 9:45 am</td>
<td>When Is an Adolescent ACL a Pediatric Case?</td>
<td>Mininder S. Kocher MD</td>
</tr>
<tr>
<td>9:45 am – 10:00 am</td>
<td>Q &amp; A</td>
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</table>

#### 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

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
CASE-BASED
Approach to the Patient with Failed Hip Arthroscopy

IC104
CASE-BASED
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

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
CASE-BASED
New Paradigms in the Thrower’s Shoulder

IC205
CASE-BASED
How to Deal with a Symptomatic Patellofemoral Joint

IC206
CASE-BASED
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
CASE-BASED
Hip Arthroscopy Basics and How to Incorporate into Your Sports Practice

IC209
CASE-BASED
Business School for the Sports Medicine Practitioner

IC210
CASE-BASED
Complex and Multi-Ligamentous Injuries of the Knee: MCL, POL, PLC

IC211
CASE-BASED
Evolving Concepts in the Care of Women in Sports: An Update in 2018

IC212
CASE-BASED
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
CASE-BASED
Brew versus Wine: Avoiding Physician Burnout—How Orthopaedic Surgeons Venture into and Succeed in the Beer and Wine Industry

IC217
CASE-BASED
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
CASE-BASED
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

IC401
CASE-BASED

IC402
CASE-BASED
Medico-legal Update for the Orthopaedic Team Physician

IC403
CASE-BASED
Shoulder Instability with Bone Loss

SUNDAY
JULY 8, 2018
6:45 am – 8:15 am

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

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

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

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
IC201  CASE-BASED

Biologics Treatments for Orthopaedics Injuries
Lars Engerbretsen 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, FRCS, 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  CASE-BASED

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
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
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
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

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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
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
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: Maraccci, 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 (amnion, 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

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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 Tresori 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  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
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.
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

Alain 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
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
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 bone augment
• Describe arthroscopic technique and outcomes of distal tibia allograft
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.
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
206 Tibial Tubercle Fractures in Children and Adolescents
Daniel B. Haber MD, Frances Tepolt MD, Michael P. McLincy MD, Leslie Kalish ScD, Mininder S. Kocher, MPH
1Massachusetts General Hospital, Boston, MA
2Boston Children’s Hospital, Boston, MA

207 Focal Peripheysal 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 MD
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. Coxe, 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
Brett D. Owens MD, MARS Group
1Brown University, Providence, RI
2Washington University, St Louis, MO

211 A Cam Shaped Femur Might Be a Risk Factor for ACL Injuries
Thomas Rudolf Pfeiffer, Jeremy M. Burnham MD, Ajay C. Kanakamedala, Jonathan Daniel Hughes MD, James J. Irgang PT, PhD, ATC, Richard Debski PhD, Volker Musahl MD
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, Lijilana Bogunovic MD2, Matthew V. Smith MD3, Simon Gortz MD3, Robert H. Brophy MD4, Rick W. Wright MD4, 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-Geli2, Emily Vinson MD1, Kristian Samuelsson MD1, PhD, MSc3, Alison P. Toth MD2, Claude T. Moorman MD2, William E. Garrett MD, PhD1, 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 Alia MD, Guillem Gonzalez-Lomas MD
NYU Langone Orthopedic Hospital, New York, NY

216 Accuracy of MRI and Varus Stress Radiographs in Diagnosing Filbar Collateral Ligament Injuries
Matthew T. Provencer MD1, Patrick W. Kane MD2, Nicholas N. DePhillip1, Mark Cinque2, Gilbert Moatshe MD2, Colin Murphy2, Anthony Sanchez2, Robert F. LaPrade MD, PhD1
1The Steadman Clinic, Vail, CO
2American Sports Medicine Institute, Birmingham, AL

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. Emblo 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. Emblo 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 MD1, Michael B. Millis MD3, Paul Beaule MD4, Rafael J. Sierra MD3, Robert Trousdale MD5, Daniel J. Sucato MD, MS6, David Podeszwa MD6, Ernest Sink MD7, John C. Clohisy 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 MD2, Diane L. Dahm MD3, Aaron J. Krych MD3
1Sierra Pacific Orthopedics, Fresno, CA
2University of California, Los Angeles, CA
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 Hirsh3, Volker Musahl MD2, Freddie H. Fu MD2, James J. Irgang PT PhD ATC1, 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
Utakarsh Anil, Jordan Werner MD1, 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, MPH2, Kristofer J. Jones MD2, Scott A. Rodeo MD1, Riley J. Williams MD1
1Hospital for Special Surgery, New York, NY
2University of California, 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 MD2, Bryson P. Lesniak MD3, 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 MD², Jake M. Lazaroff³, Stephen Gryzlo MD⁴, Matthew Saltzman MD³
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, 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 Lim², Adam Kantor³, Yasuo Itami MD³, Michelle H. McCarry MS⁴, Thay Q. Lee PhD⁵
¹Woodland Hills Medical Center, Woodland Hills, CA
²Tibor Rubin VA Long Beach Healthcare System, Long Beach, CA
³University of Southern California, Los Angeles, 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 ScMP³, Ram Kirin Alluri MD⁴
¹Kaiser Permanente, Baldwin Park, CA
²Kaiser Permanente, Palmdale, CA
³University of Texas, Southwestern, Dallas, TX
⁴Midwest Orthopaedics at Rush, Chicago, IL

244 Type VIII Slap Repair: Patient-Reported Outcomes of 34 Patients with Minimum 4-Year Follow-Up
Justin W. Amer 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

245 Shoulders 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 Sline MD
Medical University of South Carolina, Charleston, SC

246 Effectiveness of ASA for VTE Prophylaxis in Arthroscopic Rotator Cuff Repair
Luke Austin MD¹, Charles Dante Wowkanech 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

247 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

248 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

249 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 MD², Brian Robert Waterman MD³, Elizabeth Shewman MS³, Brian J. Cole MD, MBA⁴, Anthony A. Romeo MD⁴, 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
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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.manchestergrand.hyatt.com.

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

REGISTRATION FEES

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<th>EARLY BIRD RATE UNTIL JUNE 5</th>
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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 16.50 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, lunchtime 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

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

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