# 45th Annual
# Andrews Injuries in Baseball Course

**January 29 – 31, 2027**
**Hilton Orlando Lake Buena Vista at Walt Disney World Resort**
**Lake Buena Vista, FL**

**FRIDAY**

**January 29, 2027**

8:00 am **WELCOME**
James R. Andrews, MD
Kevin E. Wilk, PT, DPT, FAPTA
Glenn S. Fleisig, PhD

**SESSION I**
**ELBOW I**

Objective: Integrate functional anatomy and biomechanics with examination, treatment and rehabilitation of the baseball elbow

8:15 am Moderator/Faculty Introductions
Moderator: E. Lyle Cain, Jr., MD

8:20 am **VIDEO DEMONSTRATION**
Elbow Anatomy
Kevin Lehane, DO
William Allen, MD

8:40 am **LIVE DEMONSTRATION**
Clinical Examination of the Elbow
James R. Andrews, MD

Koco Eaton, MD
Marcus A. Rothermich, MD, MBA

9:00 am Biomechanics of the Elbow in Pitching
Glenn S. Fleisig, PhD

9:20 am Elbow Diagnostics and Imaging: From X-rays to MRI's, EMG's and Ultrasound
Marcus A. Rothermich, MD, MBA

9:40 am Non-UCL Elbow Injury Treatment
Christopher H. Garrett, MD

10:00 am Non-Operative Treatment for Elbow Injuries
Lenny Macrina, MSPT, CSCS

10:20 am **Panel Discussion**
Moderator: E. Lyle Cain, Jr., MD
James R. Andrews, MD
Koco Eaton, MD
Marcus A. Rothermich, MD, MBA
Glenn S. Fleisig, PhD
Christopher H. Garrett, MD
Lenny Macrina, MSPT, CSCS

10:40 am **BREAK**

**SESSION II**
**ELBOW II**

Objective: Describe current advances in the surgical treatment and management of UCL injuries

11:00 am Moderator/Faculty Introductions
Moderator: Daryl Osbahr, MD

11:05 am UCL Reconstruction including Hybrid / TJ3: Indications, Techniques & Outcomes
Timothy Griffith, MD

11:25 am UCL Repair with Internal Brace
Jeffrey R. Dugas, MD

11:45 am Revision UCL: Current trends and Outcomes
Koco Eaton, MD

12:05 am Rehab Following Internal Brace, Reconstruction, and Hybrid Elbow Surgeries
Kevin E. Wilk, PT, DPT, FAPTA

12:25 pm **Panel Discussion**
Moderator: Daryl Osbahr, MD
Timothy Griffith, MD
Jeffrey R. Dugas, MD
Koco Eaton, MD
Kevin E. Wilk, PT, DPT, FAPTA

12:45 pm **LUNCH**

**SESSION III**
**REHABILITATION**

Objective: Discuss emerging advances in the rehabilitation of baseball-related injuries

1:45 pm Moderator/Faculty Introductions
Kevin E. Wilk, PT, DPT, FAPTA

1:50 pm **LIVE DEMONSTRATION**
Techniques to Improve Thrower's Mobility
Lenny Macrina, MSPT, CSCS

2:10 pm Brain Response to Injury & Fatigue
Robert E. Mangine, MEd, PT, ATC

2:30 pm Neurocognitive & Neuromuscular Training for Throwers
Kevin E. Wilk, PT, DPT, FAPTA

2:50 pm Interval Throwing Programs
Michael M. Reinold, DPT, ATC, CSCS, C-PS

3:10 pm Recovery Techniques after Pitching & Play
Joseph Benge, ATC

3:30 pm Baseball Research Findings Conducted at ASMI
Matt Ithurburn, PhD, DPT

3:50 pm **Panel Discussion**
Moderator: Kevin E. Wilk, PT, DPT, FAPTA
Lenny Macrina, MSPT, CSCS
Robert E. Mangine, MEd, PT, ATC
Michael M. Reinold, DPT, ATC, CSCS, C-PS
Joseph Benge, ATC
Matt Ithurburn, PhD, DPT

4:10 pm **BREAK**

**SESSION IV**
**STRENGTH & CONDITIONING**

Objective: Identify current strategies in strength training and conditioning for baseball athletes

4:30 pm Moderator/Faculty Introductions
Rafael Escamilla, PhD, PT, CSCS, FACSM

4:35 pm Weighted Baseball Throwing Program: Safe & Effective
Rafael Escamilla, PhD, PT, CSCS, FACSM

4:55 pm Training the Hips and Legs for Baseball
Eric Cressey, CSCS

5:15 pm Developing Pre-Season & Off-Season Programs
Jeremiah Randall, PT, DPT, ATC, CSCS

5:35 pm Periodization in Baseball for Youth through Pros: Is there Such a Thing?
Eric Cressey, CSCS

5:55 pm Addressing Anabolic Steroids in Today's Athletes
Brian Parker

6:15 pm **Panel Discussion**
Moderator: Rafael Escamilla, PhD, PT, CSCS, FACSM
Eric Cressey, CSCS
Jeremiah Randall, PT, DPT, ATC, CSCS
Brian Parker

6:35 pm **EXHIBITOR EXPO and REGISTRANTS' RECEPTION**

**SATURDAY**
**January 30, 2027**

7:00 am **Roundtable Open Discussion**
**Strategies to Reduce Injuries in Baseball Pitchers at All Ages**
Moderator: Kevin E. Wilk, PT, DPT FAPTA
Panel:
James R, Andrews, MD
E. Lyle Cain, Jr., MD
Jeffrey R. Dugas, MD
Glenn S. Fleisig, PhD
Michael M. Reinold, DPT, ATC, CSCS, C-PS
Lenny Macrina, MSPT, CSCS
Robert E. Mangine, MEd, PT, ATC
Steve Donohue, ATC

8:00 am **Goldberg Mueller Keynote Address on Injury Prevention:**
Pitching Biomechanics to Prevent Injuries
Jonathan Slowik, PhD
*Educational grant provided by USA Baseball*

**SESSION V**
**SHOULDER I**

Objective: Integrate functional anatomy and biomechanics into the examination, treatment and rehabilitation of the baseball shoulder

8:20 am Moderator/Faculty Introductions
Moderator: Jeffrey R. Dugas, MD

8:25 am **VIDEO DEMONSTRATION**
Shoulder Anatomy
Jeremy Frederick, MD
Raees Seedat, MD

8:45 am **LIVE DEMONSTRATION**
Clinical Examination of the Shoulder
E. Lyle Cain, Jr., MD
Koco Eaton, MD
Timothy Griffith, MD

9:05 am Biomechanics of the Shoulder in Pitching
Glenn S. Fleisig, PhD

9:25 am Diagnostic Imaging of the Throwers Shoulder
Daryl C. Osbahr, MD

9:45 am Non-Operative Rehabilitation of Selected Shoulder Injuries
Michael M. Reinold, DPT, ATC, CSCS, C-PS

10:05 am **Panel Discussion**
Moderator: Jeffrey R. Dugas, MD
E. Lyle Cain, Jr., MD
Koco Eaton, MD
Timothy Griffith, MD
Glenn S. Fleisig, PhD
Daryl C. Osbahr, MD
Michael R. Reinold, DPT, ATC, CSCS, C-PS

10:25 am **BREAK**

**SESSION VI**
**SHOULDER II**

Objective: Describe current approaches to the evaluation and management of baseball-related shoulder injuries

10:45 am Moderator/Faculty Introductions
Moderator: Koco Eaton, MD

10:50 am Rotator Cuff Injuries in Throwing
Daryl Osbahr, MD

11:10 am Labrum Injuries in Baseball: SLAP & Instability
Timothy Griffith, MD

11:30 am The Squeeze Test: A New Test for Thoracic Outlet Syndrome
Koco Eaton, MD

11:50 am It's Not the Labrum! More Common Causes of Shoulder Pain

E. Lyle Cain, Jr., MD
*Educational grant provided by Medical Properties Trust*

12:10 pm **Russ Paine Memorial Lecture:**
Role of the Scapula & Importance in Rehabilitation
Robert E. Mangine, MEd, PT, ATC

12:30 pm **Panel Discussion**
Moderator: Koco Eaton, MD
Daryl Osbahr, MD
Timothy Griffith, MD
E. Lyle Cain, Jr., MD
Robert E. Mangine, MEd, PT, ATC

12:50 pm **JAMES R. ANDREWS, MD AWARD FOR EXCELLENCE IN BASEBALL SPORTS MEDICINE**

**DALE BAKER CAREER SERVICE AWARD**

1:00 pm **LUNCH**

**CONCURRENT SESSION VII-A**
**PRIMARY CARE**

Objective: Discuss primary care and nonsurgical orthopedic conditions that affect baseball athletes

2:00 pm Moderator/Faculty Introductions
Ricardo Colberg, MD

2:05 pm Tendon Anatomy, Pathology and Healing
Ricardo Colberg, MD

2:25 pm Workloads and Pitch Counts in Adolescent Baseball and Softball: Is It Time for an Updated Paradigm?
Jason L. Zaremski, MD, CAQSM, FACSM, FAAPMR, FAMSSM

2:55 pm Orthobiologic Interventions for Lower Extremity Tendinopathy in the Baseball Athlete
Robert L. Bowers, DO, PhD

3:15 pm Navigating the World of Dietary Supplements and Peptides
Brian Parker

3:35 pm Primary Care of UCL Injuries
Jason L. Zaremski, MD, CAQSM, FACSM, FAAPMR, FAMSSM

3:55 pm Lacertus Syndrome Revisited and Redefined
Gary M. Lourie, MD

4:15pm Hamstring Injuries in Baseball: Integrating Imaging, Risk, and Recovery Modifiers into Return-to-Play Decisions
Robert L. Bowers, DO, PhD

4:35 pm **Panel Discussion**
Moderator: Ricardo Colberg, MD
Jason L. Zaremski, MD, CAQSM, FACSM, FAAPMR, FAMSSM
Robert L. Bowers, DO, PhD
Brian Parker
Gary M. Lourie, MD
Robert L. Bowers, DO, PhD

4:55 pm **ADJOURN**

**CONCURRENT SESSION VII-B**
**REHABILITATION**

Objective: Apply current rehabilitation strategies to the management of injuries in baseball athletes

2:00 pm Moderator/Faculty Introductions
Moderator: Lenny Macrina, MSPT, CSCS

2:05 pm Advanced Rehab Phase & Phase Before Throwing
Lenny Macrina, MSPT, CSCS

2:25 pm Rehabilitation of Oblique Injuries
Robert E. Mangine, MEd, PT, ATC

2:45 pm Rehabilitation of Hamstring Injuries
Jeremiah Randall, PT, DPT, ATC, CSCS

3:05 pm Rehabilitation of Tendinitis and Tendinosis
Kevin E. Wilk, PT, DPT, FAPTA

3:25 pm Manual Rehabilitation Techniques for the Thrower's Arm and Core
Christopher A. Arrigo, PT, DPT, ATC

3:45 pm Lower Extremity Screening to Predict Shoulder Force in Female Softball Pitchers
Gretchen D. Oliver, PhD, FNAK, FISBS, FACSM, ATC, CES

4:05 pm Transition from Rehabilitation to Performance in Adolescent Players
Robert McCabe, PT, DPT, SCS, OCS, CSCS

4:25 pm Transition from Rehabilitation to Performance in College & Pro Players
Joseph Benge, ATC

4:45 pm Modalities in Rehabilitation: Stim, Laser, Dry Needles, Cupping
Robert McCabe, PT, DPT, SCS, OCS, CSCS

5:05 pm **Panel Discussion**
Moderator: Lenny Macrina, MSPT, CSCS
Robert E. Mangine, MEd, PT, ATC
Jeremiah Randall, PT, DPT, ATC, CSCS
Kevin E. Wilk, PT, DPT, FAPTA
Christopher A. Arrigo, PT, DPT, ATC
Gretchen D. Oliver, PhD, FNAK, FISBS, FACSM, ATC, CES
Robert McCabe, PT, DPT, SCS, OCS, CSCS
Joseph Benge, ATC

5:25 pm **ADJOURN**

**CONCURRENT SESSION VII-C**
**EMERGENCY MANAGEMENT IN PROFESSIONAL BASEBALL**

Objective: Demonstrate appropriate assessment and management of emergency conditions occurring during baseball activities

2:00 pm Moderator/Faculty Introductions
Ron Courson, DAT, ATC, PT, SCS, NRAEMT, CSCS

2:05 pm Emergency Preparedness in Baseball

Ron Courson, DAT, ATC, PT, SCS, NRAEMT, CSCS

2:20 pm Emergency Assessment
Glenn R. Henry, MA, EMT-P

2:35 pm Preventing Exertional Incidents
Rod Walters, DA, LAT, ATC

2:55 pm New Concepts in Sudden Cardiac Arrest Management
Glenn R. Henry, MA, EMT-P

3:05 pm Emergency Medications
Ron Courson, DAT, ATC, PT, SCS, NRAEMT, CSCS

3:15 pm **Lab Demonstration**
Ron Courson, DAT, ATC, PT, SCS, NRAEMT, CSCS
Glenn R. Henry, MA, EMT-P
Rod Walters, DA, LAT, ATC
- Emergency Assessment
- High Quality CPR/AED
- Airway
- Exertional Heat Illness
- Emergency Medications
- Head and Spine Injury Management

4:45 pm **ADJOURN**

**SUNDAY**
**January 31, 2027**

**SESSION VIII**
**BEYOND THE SHOULDER AND ELBOW**

Objective: Discuss current approaches to the diagnosis and treatment of musculoskeletal injuries in baseball athletes beyond the shoulder and elbow

8:00 am Moderator/Faculty Introductions
Benton A. Emblom, MD

8:05 am Hip Injuries in Baseball
Benton A. Emblom, MD

8:25 am Rehabilitation Following Hip Injuries & Surgery
Robert E. Mangine, MEd, PT, ATC

8:45 am Hand and Wrist Injuries in Baseball
Gary M. Lourie, MD

9:05 am Knee Injuries in Baseball
Christopher H. Garrett, MD

9:25 am Rehabilitation Following ACL Injury with/without Surgery
Kevin E. Wilk, PT, DPT, FAPTA

9:45 am **Panel Discussion**
Moderator: Benton A. Emblom, MD
Robert E. Mangine, MEd, PT, ATC
Gary M. Lourie, MD
Christopher H. Garrett, MD
Kevin E. Wilk, PT, DPT, FAPTA

10:05 am **BREAK**

**SESSION IX – BIOMECHANICS AND COACHING**

Objective: Apply biomechanical principles to injury prevention and performance enhancement in baseball athletes

10:25 am Moderator/Faculty Introductions
Glenn S. Fleisig, PhD

10:30 am High School Pitching Biomechanics that Lead to Future Success!
Jonathan Slowik, PhD

10:50 am How Pronation and Supination Affect a Pitcher's Arsenal
Scott Emerson

10:50 am Relationship Between Hip-Shoulder Rotation and Bat Speed
Gretchen D. Oliver, PhD, FNAK, FISBS, FACSM, ATC, CES

11:10 am Throwing Biomechanics for Infielders
Glenn S. Fleisig, PhD

11:30 am **Roundtable Discussion**
**How Biomechanics is Used for Safety and Performance in Major League Baseball**
Moderator: Glenn Fleisig, PhD
Scott Emerson
William R. Johnson, PhD, CPSS,*D, CSCS,*D
Mike McNally, PhD, CPSS, CSCS

12:10 pm **CLOSING**
James R. Andrews, MD
Kevin E. Wilk, PT, DPT, FAPTA
Glenn S. Fleisig, PhD

12:20 pm **ADJOURN**