38th Injuries in Baseball Course
January 24 –26, 2020
The Westin Buckhead Atlanta
Atlanta, GA

FRIDAY
January 24, 2020

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

SESSION I - SHOULDER I
Objective: Integrate shoulder anatomy with biomechanics, examination, treatment and rehabilitation of the unstable shoulder

8:05 a.m. Moderator/Faculty Introductions
James R. Andrews, MD

8:10 a.m. VIDEO DEMONSTRATION
Glenohumeral Joint Anatomy
Megan Flynn, MD
Travis Roth, MD

8:30 a.m. Biomechanics of the Shoulder in Throwing
Alek Z. Diffendaffer, MS

8:50 a.m. Clinical Examination of Shoulder Complex
Steve E. Jordan, MD

9:05 a.m. Non-Operative Rehabilitation of Specific Shoulder Lesions
Michael M. Reinold, DPT, SCS, CSCS
9:25 a.m.  SLAP Tears: When to Fix Them - When to Rehab Them – and Which Ones
E. Lyle Cain, Jr., MD

9:45 a.m.  **Panel Discussion**
Moderator: James R. Andrews, MD
Alek Z. Diffendaffer, MS
Steve E. Jordan, MD
Michael M. Reinold, DPT, SCS, CSCS
E. Lyle Cain, Jr., MD

10:05 a.m.  **BREAK**

**SESSION II - SHOULDER II**

Objective:  Apply current advances in treatment and rehabilitation to injuries of the throwing shoulder

10:25 a.m.  Moderator/Faculty Introductions
Jeffrey R. Dugas, MD

10:30 a.m.  Rotator Cuff Tears in the Overhead Athlete: Surgery, Orthobiologics, Rehab
Jeffrey R. Dugas, MD

10:50 a.m.  Post-Operative Rehabilitation Following Rotator Cuff Surgeries
Kevin E. Wilk, PT, DPT, FAPTA

11:10 a.m.  Return to Play Objective Criteria & Return to Play Throwing Programs
Tyler Opitz, DPT, SCS, CSCS

11:30 a.m.  What's New in the Biologic Field
Jack Marucci, ATC

11:50 a.m.  **Panel Discussion**
Moderator: Jeffrey R. Dugas, MD
Jeffrey R. Dugas, MD
Kevin E. Wilk, PT, DPT, FAPTA
Tyler Opitz, DPT, SCS, CSCS
Jack Marucci, ATC

12:10 p.m.  **SPECIAL REPORT**
How Biomechanics is Changing Baseball
Glenn S. Fleisig, PhD
SESSION III - REHABILITATION

Objective: Review current advances in the rehabilitation of injuries to the throwing shoulder

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

1:50 p.m. Postural Correction Exercises & Techniques
Lloyd Van Pamelen, PT, CSCS

2:05 p.m. Advanced Rehabilitation Techniques for Thrower Scapulothoracic Training
Russ Paine, PT

2:20 p.m. Rehabilitation Techniques for Thoracic Outlet Syndrome
Robert E. Mangine, PT, MEd, ATC

2:35 p.m. Interval Throwing Programs During the Rehab Program
Ken Crenshaw, ATC, CSCS

2:50 p.m. Throwing Program for UCL Surgery: When and Where
Stan Conte, PT, DPT, ATC

3:05 p.m. LIVE DEMONSTRATION
Restoring Mobility in the Thrower's Shoulder
Michael M. Reinold, DPT, SCS, CSCS

3:20 p.m. Panel Discussion
Moderator: Kevin E. Wilk, PT, DPT, FAPTA
Lloyd Van Pamelen, PT, CSCS
Russ Paine, PT
Robert E. Mangine, PT, MEd, ATC
Ken Crenshaw, ATC, CSCS
Stan Conte, PT, DPT, ATC
Michael M. Reinold, DPT, SCS, CSCS

3:40 p.m. BREAK
SESSION IV - STRENGTH & CONDITIONING

Objective: Identify and discuss current trends associated with training procedures in baseball

4:10 p.m. Moderator/Faculty Introductions
Raffaele Escamilla, PhD, PT, CSCS, FACSM

4:15 p.m. Appreciating the Hip as a Torque Converter
Eric Cressey, CSCS

4:35 p.m. Stretching and Warm-up Techniques for the Throwing Arm
George Poulis, ATC

4:55 p.m. Special Considerations in Conditioning for the Female Softball Player
Gina Lee, PT

5:15 p.m. Best Evidence-Based Exercises for the Throwing Shoulder
Raffaele Escamilla, PhD, PT, CSCS, FACSM

5:35 p.m. Panel Discussion
Moderator: Raffaele Escamilla, PhD, PT, CSCS, FACSM
Eric Cressey, CSCS
George Poulis, ATC
Gina Lee, PT

6:00 p.m. ADJOURN

6:15 p.m. REGISTRANTS’ RECEPTION
SATURDAY
January 25, 2020

7:00 a.m.  **Roundtable Open Discussion**  
Weighted Ball Throwing Programs: Are they safe and effective?  
Moderator:  Kevin E. Wilk, PT, DPT, FAPTA  
James R. Andrews, MD  
Raffaele Escamilla, PhD, PT, CSCS, FACSM  
Glenn S. Fleisig, PhD  
Lenny Macrina, MSPT, SCS, CSCS  
Eric Makhni, MD  
George Poulis, ATC  
Michael M. Reinold, DPT, SCS, CSCS  
Ken Crenshaw, ATC, CSCS

SESSION V - ELBOW I

Objective:  Review current concepts associated with anatomy, biomechanics, examination and treatment of the elbow

8:00 a.m.  Moderator/Faculty Introductions  
E. Lyle Cain, Jr., MD

8:05 a.m.  **LIVE DEMONSTRATION**  
Elbow Joint Anatomy  
Jack McKay, MD  
Justen Elbayar, MD

8:25 a.m.  Biomechanics of the Elbow in Throwing  
Jonathan S. Slowik, PhD

8:45 a.m.  Clinical Examination of the Elbow  
James R. Andrews, MD  
David Altchek, MD  
George Paletta, MD

9:05 a.m.  Non-Operative Rehab of Elbow Lesions  
Lenny Macrina, MSPT, SCS, CSCS

9:25 a.m.  Advanced Treatment for Failed Tommy John Procedure  
George Paletta, MD

9:45 a.m.  **Panel Discussion**  
Moderator:  E. Lyle Cain, Jr, MD  
Jonathan S. Slowik, PhD
SESSION VI - ELBOW II

Objective: Discuss the treatment and rehabilitation of injuries to the elbow

10:00 a.m. BREAK

10:20 a.m. Moderator/Faculty Introductions
George Paletta, MD

10:25 a.m. Incidence of UCL Surgery in Collegiate Baseball
Marc Rothermich, MD

10:45 a.m. UCL Repair: Indications, Procedure and Outcomes
Jeffrey R. Dugas, MD

11:05 a.m. UCL Reconstruction: Indications, Procedures and Outcomes
E. Lyle Cain, Jr., MD

11:25 a.m. UCL Hybrid Procedure: Indications, Procedures and Outcomes
George Paletta, MD

11:45 a.m. Post-Operative Rehab Following UCL Procedures
Kevin E. Wilk, PT, DPT, FAPTA

12:05 p.m. Revision UCL in Pro Baseball: Current Trends and Outcomes
Stan Conte, PT, DPT, ATC

12:25 p.m. KEYNOTE ADDRESS
Elbow Pain in Elite Throwing Athletes: What I Have Learned in My Career
David Altchek, MD

12:45 p.m. Panel Discussion and Case Presentations
Moderator: George Paletta, MD
Marc Rothermich, MD
Jeffrey R. Dugas, MD
E. Lyle Cain, Jr., MD
Kevin E. Wilk, PT, DPT, FAPTA
Stan Conte, PT, DPT, ATC
David Altchek, MD

1:15 p.m.  JAMES R. ANDREWS AWARD FOR EXCELLENCE IN BASEBALL SPORTS MEDICINE

ASMI CAREER SERVICE AWARD

1:25 p.m.  Lunch

CONCURRENT SESSION VII-A
ULTRASOUND WORKSHOP:
Evaluating and Treating Injuries in the Thrower's Arm

Objective: Review ultrasound guided procedures in the thrower's upper and lower extremities

2:25 p.m.  Moderator /Faculty Introductions
Gary Lourie, MD

2:30 p.m.  Common Ultrasound Guided Procedures of the Upper and Lower Extremity in Throwers
Josh Hackel, MD

2:55 p.m.  Common Pitfalls in Ultrasound Guided Procedures
Ricardo Colberg, MD

3:25 p.m.  Orthobiologics for Lower Extremity Injuries
Robert L. Bowers, DO, PhD

3:55 p.m.  Orthobiologics for Upper Extremity Injuries
Cleo Stafford, MD, MS

4:25 p.m.  Hand and Wrist Injuries in Baseball
Gary Lourie, MD

4:45 p.m.  LIVE SCANNING WORKSHOP OF THE LOWER EXTREMITY
Moderator: Gary Lourie, MD
Josh Hackel, MD
Robert L. Bowers, DO, PhD
Cleo Stafford, MD, DO

5:45 p.m.  ADJOURN
CONCURRENT SESSION VII - B
COACHING

Objective: Compare current concepts in prevention and treatment of injuries in the pitcher

2:25 p.m. Moderator/Faculty Introductions
David Osinski, MA

2:30 p.m. Kinematic Chain to Maximize Pitching Performance
Alek Z Diffendaffer, MS

2:50 p.m. Differences Between Overhand, Three-quarter and Sidearm Pitching
Jonathan S. Slowik, PhD

3:10 p.m. Use of Radar Gun and Motus Sleeve in Training and Rehabilitation
Eric Makhni, MD

3:30 p.m. Mastering Technique for Professional Baseball Players
Eric Young

3:50 p.m. Hitting Mechanics
E. David Osinski, MA

4:10 p.m. Pitching Mechanics on a Dirt Mound Versus a Turf Mound
Raffaele Escamilla, PhD, PT, CSCS, FACSM

4:30 p.m. Pitching Biomechanics after Return from Surgery
Glenn S. Fleisig, PhD

4:50 p.m. Panel Discussion
Moderator: E. David Osinski, M.A.
Alek Z. Diffendaffer, M.S.
Jonathan S. Slowik, PhD
Eric Makhni, MD
Eric Young
Raffaele Escamilla, PhD, PT, CSCS, FACSM
Glenn S. Fleisig, PhD

5:10 p.m. ADJOURN
CONCURRENT SESSION VII-C
REHABILITATION

Objective: Recognize the importance of current techniques for today's athlete

2:25 p.m. Moderator/Faculty Introductions
Lenny Macrina, MSPT, SCS, CSCS

2:30 p.m. Breathing Exercises & Thoracic Region Treatment
Ken Crenshaw, ATC, CSCS

2:50 p.m. Advanced Dynamic Stabilization Drills for the Thrower
Michael M. Reinold, DPT, SCS, CSCS

3:10 p.m. Non-Operative Treatment of ACL Injuries: Does Everyone Need Reconstruction?
Robert E. Mangine, PT, MEd, ATC

3:30 p.m. Hamstring Injury Trends in MLB
Stan Conte, PT, DPT, ATC

3:50 p.m. Hip-Shoulder Separation in Rotational Athletes
Eric Cressey, CSCS

4:10 p.m. Connecting the Rehabilitation Progress to Conditioning: Advanced Phase Rehabilitation
Lenny Macrina, MSPT, SCS, CSCS

4:30 p.m. Rehabilitation of Low Back Pain
Adam Finck, PT, DPT, SCS, OCS

4:50 p.m. Instrumented Soft Tissue Technique, Dry Needling and Cupping: Technique and Evidence
Rob Andrews PT, DPT

5:10 p.m. Panel Discussion
Moderator: Lenny Macrina, MSPT, SCS, CSCS
Ken Crenshaw, ATC, CSCS
Michael M. Reinold, DPT, SCS, CSCS
Robert E. Mangine, PT, MEd, ATC
Stan Conte, PT, DPT, ATC
Eric Cressey, CSCS
Adam Finck, PT, DPT, SCS, OCS
Rob Andrews PT, DPT

5:30 p.m.  ADJOURN
SESSION VIII - Youth & High School Baseball

Objective: Examine current techniques in prevention of injuries in youth and high school baseball pitchers

8:00 a.m. Introduction of Keynote Address
Glenn S. Fleisig, PhD

8:05 a.m. GOLDBERG MUELLER KEYNOTE ADDRESS ON INJURY PREVENTION (Sponsored by USA Baseball)
Why So Many of Our Young Baseball Players are Getting Injured
James R. Andrews, MD

8:25 a.m. Should Youth Pitchers Use Lightweight Baseballs?
Eric Makhni, MD

8:45 a.m. Should Youth Pitchers Throw Curveballs?
Glenn S. Fleisig, PhD

9:05 a.m. How Pitching Distance and Mound Height Affect Adolescent Pitchers
Megan Stewart, M.S.

9:25 a.m. How to Safely Enhance Performance in Youth Throwers
Michael M. Reinold, DPT, SCS, CSCS

9:45 a.m. BREAK

SESSION IX - The KNEE

Objective: Identify and report current concepts in the treatment and rehabilitation of injuries to the knee

10:05 a.m. Moderator/Faculty Introductions
Benton Emblom, MD

10:10 a.m. Common Hip Disorders & Treatment
Benton Emblom, MD

10:30 a.m. Non-Operative Treatment of Patellofemoral Pain and Dysfunction
Russ Paine, PT
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<td>ACL Surgery: Graft Source, Procedure and Management of Concomitant Procedures</td>
<td>Steve E. Jordan, MD</td>
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<td>11:10 a.m.</td>
<td>Post-Operative Rehab Following ACL Surgery</td>
<td>Lenny Macrina, MSPT, SCS, CSCS</td>
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<td>11:30 a.m.</td>
<td>Management of Meniscus Lesions &amp; Articular Cartilage Lesions</td>
<td>Adam Anz, MD</td>
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