2019 NATA Convention Final Program

Themes for 2019

- Care Across the Lifespan
- Performing Arts
- Manual Therapy

MONDAY, JUNE 24, 2019

Advanced Tracks, 8:00a.m. - 12:00p.m.
Using Dry Needling to Treat Neuropathy in Sports, (I, II, IV), Advanced
Edo Zylstra, PT, DPT, OCS, KinetaCore
Paul Killoren, PT, DPT, KinetaCore

Joint Dislocations-Evaluation and Acute Management, (II, III), Essential
Mark Conroy, MD, CAQ-SM, Ohio State University Medical Center
Ryan McGrath, MD, Ohio State University Medical Center
Bryant Walrod, MD, CAQ-SM, Ohio State University Athletic Department

Advanced Tracks, 8:00a.m. - 3:00p.m.
Advanced Functional Cast Therapy for Orthopedic Injuries, (IV), Advanced
Katherine Bagnato, LAT, ATC, OTC, BSN Medical

Care and Suturing of Minor Skin Wounds, (II), Essential
Adam Cady, MHS, ATC, CSCS, Kerlan-Jobe Orthopaedic Clinic
Leslie Cardoza, MPAP, PA-C, ATC, Brea Urgent Care
Leah Dvorkin, MS, PA-C, ATC, The Steadman Clinic

Minicourses, 3:00p.m. - 4:00p.m.
Clinical Decision Making of the Rodeo Athletic Trainer, (I, II, III), Advanced
Tyler Oberlander, MS, LAT, ATC, Great Plains Health-Sports Medicine

Breathing Cues in Modern Dancers, (IV), Advanced
Katie Moos, MS, LAT, ATC, U.S. Military Academy

Musculoskeletal Ultrasound as a Clinical Evaluation Tool, (II), Advanced
Jennifer Ostrowski, PhD, LAT, ATC, Moravian College

**Minicourses, 4:15p.m. - 5:15p.m.**
Rodeo Sports Medicine-Illustrative Cases and Discussion Points, (I, II, III), Advanced
Nathan Jacobson, MD, Great Plains Health-Sports Medicine

A Pathoanatomical Paradigm for Iliotibial Band Pathology: A Synthesis of Evidence, (I, II, IV), Advanced
Paul Geisler, EdD, ATC, Ithaca College

Chronic Unusual Pain Syndromes, (I, IV), Advanced
David Priebe, MD, Lexington Regional Medical Center

**Minicourses, 5:30p.m. - 6:30p.m.**
Preventing Knee Injuries and Optimizing Long Term Joint Health, (I, II, IV), Advanced
Terry Grindstaff, PhD, PT, ATC, Creighton University

Facts and Fables About Exercise-Associated Muscle Cramps, (I, II, IV), Advanced
Kevin Miller, PhD, AT, ATC, Central Michigan University

TUESDAY, JUNE 25, 2019

**Best Practice Forum, 7:30a.m. - 8:30a.m.**
Head Impacts and Neck Workload: Applications in Military, Fast Jet Pilots, and Athletes, (I, II, IV), Advanced
Jeremy Witchalls, PhD, University of Canberra
Jason Mihalik, PhD, CAT(C), ATC, University of North Carolina at Chapel Hill

Dance Injuries: Biomechanics, Screening Tools and Treatments, (I, II, IV), Essential
Jatin Ambegaonkar, DAT, ATC, George Mason University
Jena Hansen-Honeycutt, DAT, ATC, George Mason University

**Peer-to-Peer, 7:30a.m. - 8:30a.m.**
You Are in the Position to Contribute! Give Your Thoughts on New Directions for the NATA Position Statements, (V), Essential
Jennifer Medina McKeon, PhD, ATC, CSCS, Ithaca College
Lindsay DiStefano, PhD, ATC, University of Connecticut
**Special Topics, 7:30a.m. - 8:30a.m.**
Exercise-Related Respiratory Conditions: Sorting Through the Differential Diagnoses, (II, III, IV), Advanced
Kitty Newsham, PhD, ATC, Saint Louis University

Legal, Ethical, and Education Issues Related to Anti-Doping Movement, (V), Essential
Kenneth Wright, DA, ATRet, University of Alabama

Commonly Misdiagnosed Injuries in the Pediatric/Adolescent Population, (II), Essential
Tanner Flatland, MS, LAT, Children's Hospital of Wisconsin

**Free Communication Oral Presentations, 7:30a.m. - 9:00a.m.**
Soft Tissue Mobilization And Myofascial Release
Treatment Order and Retention of Myofascial Release and Static Stretching on Hip Flexion Range of Motion
7:30a.m. - 7:45a.m.
Blaine Long, PhD, AT, ATC, Central Michigan University

Assessing the Effectiveness of Soft Tissue Mobilization on Pain, Point Tenderness and ROM in Physically Active Individuals with Muscle Soreness
7:45a.m. - 8:00a.m.
Kelly Harrison, PhD, LAT, ATC, East Stroudsburg University

Acute Effects of Instrument Assisted Soft Tissue Mobilization, Foam Rolling and Static Stretching on Hamstring and Quadriceps Flexibility
8:00a.m. - 8:15a.m.
Tony Boucher, PhD, LAT, ATC, Texas A&M University

Does a Light Pressure Instrument Assisted Soft Tissue Mobilization Technique Modulate Tactile Discrimination and Pressure Pain Threshold In Healthy Individuals with Delayed Onset of Muscle Soreness?
8:15a.m. - 8:30a.m.
Scott Cheatham, PhD, DPT, ATC, CSU Dominguez Hills

The Acute and Residual Effects of IASTM and Roller Massage Stick on Hamstring Active Range of Motion
8:30a.m. - 8:45a.m.
Johnny Lee, Weber State University

Effects of Dynamic Warm-Up Paired with IASTM Technique on Quadriceps ROM and Vertical Jump Performance
8:45a.m. - 9:00a.m.
Mackenzie Popp, Whitworth University
Sessions, 7:30a.m. - 9:30a.m.
Advancing Clinical Practice Through Educational Quality Assurance, (V), Essential
Presented by the Commission on Accreditation of Athletic Training Education
Advancing Clinical Practice Through Educational Quality Assurance: Building a Foundation
LesLee Taylor, PhD, LAT, ATC, Texas Tech University Health Sciences Center

Advancing Clinical Practice Through Educational Quality Assurance: Development of Clinical Specialists
Eric Sauers, PhD, ATC, FNATA, A.T. Still University

Effective Communication Strategies to Engage Your Stakeholders, (V), Essential
Presented by the NATA State Association Advisory Committee
Working Together to Achieve Consistent “Internal” Communication
David Csillan, MS, ATC, Ewing High School

Best Practices for External Communication of Information: Part I
Laura Harris, PhD, LAT, ATC, Ohio University

Best Practices for External Communication of Information: Part II
Scott Lawrance, DHSc, ATC, MSPT, Purdue University

Feature Presentation, 7:30a.m. - 9:30a.m.
Interdisciplinary Teams Working with Military Athletes, (I, II, IV), Essential
Randall Lazicki, PT, DPT, ATC, U.S. Army Special Operations Command
Terry Dewitt, PhD, ATC, EP-C, Ouachita Baptist University
JoEllen Sefton, PhD, ATC, Auburn University

Sexual Harassment and Its Impact on Athletic Training, (V), Essential
What is Sexual Harassment and Why Should We Care?
Dani Moffit, PhD, LAT, ATC, Idaho State University

Athletic Trainer’s Role of Reporting
Anne Russ, PhD, LAT, ATC, Temple University

Reducing the Risk of Sexual Harassment: Best Practices for Athletic Trainers
Jamie Mansell, PhD, LAT, ATC, Temple University

Learning Lab, 7:30a.m. - 9:30a.m.
Improving Shoulder Range of Motion: Instrument-Assissted Soft Tissue Mobilization Techniques for Increasing Functional Ability, (II, IV), Advanced
John Vardiman, PhD, ATC, Kansas State University

Unique Spinal Injury Management, (I, III), Advanced
Edward Strapp, TPC, FPC, ATC, Maryland State Police
**Free Communication Oral Presentations, 8:00a.m. - 9:00a.m.**

**Master's Oral Award Finalist**
The Relationship Between Injury-Related Fear and Visuomotor Reaction Time in Individuals After Anterior Cruciate Ligament Reconstruction
8:00a.m. - 8:15a.m.
Francesca Genoese, LAT, ATC, CES, University of Kentucky

Sport Sampling Affects LESS Scores and Physical Literacy Competency in Children
8:15a.m. - 8:30a.m.
Zachary Malone, ATC, LAT, University of Connecticut

Experiences of Transgender Athletes in the Athletic Training Setting: A Qualitative Study
8:30a.m. - 8:45a.m.
Emily Munson, AT, Ohio University

The Effect of Exercise on a Novel Dual-Task Assessment for Sport Concussion
8:45a.m. - 9:00a.m.
Juliana Jimenez, ATC, University of Virginia

**Special Topic, 8:30a.m. - 9:30a.m.**
Chopped: Treatment of Common Conditions by Tapping Into the Body's Reflex System, (II, IV), Advanced
Jaime Fulcher, DAT, LAT, ATC, Indiana Wesleyan University

**Free Communication Rapid Fire Presentations, 9:00a.m. - 10:15a.m.**

**Running Mechanics: Clinical And Laboratory Measures**
Mirror Gait Retraining on Kinematics in a Healthy Female Runner: A Case Study
Victoria Trzyna MS, AT, Ohio University

Navicular Drop in Collegiate Distance Runners
Virginia Kyle Johns, University of Lynchburg

Runners with Exercise-Related Lower Leg Pain Exhibit Increased Contact Time and Strength Deficits
Rachel Koldenhoven Rolfe, Med, ATC, University of Virginia

Expanded Pain Sensitivity and Altered Bilateral Kinematics in Runners with Iliotibial Band Syndrome
Karrie Hamstra-Wright, PhD, ATC, CHWC, University of Illinois at Chicago

Investigating Hip and Trunk Kinematic and Strength Differences Between Those with a History of Exertional Medial Tibial Pain and Healthy Controls
Allison Hocking, MS, ATC, University of Wisconsin at Milwaukee

Effects of a 4-Week Short Foot Exercise Program on Running Kinetics in Recreational Runners
Marisa Castaneda, MS, ATC, University of Wisconsin at Lacrosse

Treadmill Versus Outdoor Running: Prediction Using a Random Forest Classifier on Biomechanical Measures of 181,909 Steps
Natalie Kramer, MEd, ATC, University of Virginia
Unique Outdoor Running Activities Captured Using Wearable Sensors in Adult Competitive Runners
Alexandra Dejong, MEd, ATC, University of Virginia

Athletic Training Student Seminar, 9:00a.m. - 10:00a.m.
Back to the Future, (V), Essential
Marjorie Albohm, MS, ATRet, Ossur Americas

Free Communication Oral Presentations, 9:15a.m. - 10:15a.m.
Doctoral Oral Award Finalist
Low Self-Efficacy and Mental Health Disorders Predict Persistent Postoperative Pain 3-Months Following Hip Arthroscopy
9:15a.m. - 9:30a.m.
Kate Jochimsen, PhD, ATC, University of Kentucky

Rationale for a Parsimonious Measure of Subjective Knee Function After ACL Reconstruction: A Rasch Analysis
9:30a.m. - 9:45a.m.
Ryan Duckett, MA, University of Toledo

Challenges Associated with Clinical Immersion in Athletic Training Education: A Report from the Athletic Training Clinical Education Network
9:45a.m. - 10:00a.m.
Sarah Myers, MEd, ATC, University of Connecticut

Virginia Concussion Initiative: Stakeholder Perspectives of Disparities in Concussion Policy Implementation
10:00a.m. - 10:15a.m.
Esther Nolton, MEd, LAT, ATC, George Mason University

Free Communication Oral Presentations, 9:15a.m. - 10:45a.m.
Effective Treatment And Rehabilitative Approaches For Upper Extremity Conditions
Nonsurgical Management of UCL Injuries is Tentatively Successful in Overhead Athletes: A Critical Appraisal of Case Series
9:15a.m. -9:30a.m.
Nathan Oakes, ATC, Ithaca College

Use of a Motus Sleeve During the Care of a Medial Elbow Injury in the High School Baseball Athlete: Level 3 Case Report
9:30a.m. - 9:45a.m.
Joshua Brodersen Matrg, LAT, ATC, TRIA Orthopedics

Instrument Assisted Soft Tissue Mobilization to Improve Shoulder Joint Rotation Range of Motion
9:45a.m. - 10:00a.m.
Robyn Mitchell, University of Lynchburg
Comparison of Instrument-Assisted Soft Tissue Mobilization and Passive Stretching to Improve Glenohumeral Range of Motion and Function  
10:00a.m. - 10:15a.m.  
Troy Mendenhall, MS, ATC, LAT, Texas State University

Thoracic Outlet Syndrome in a College Volleyball Player  
10:15a.m. - 10:30a.m.  
Patrick Roosta, MS, LAT, ATC, Florida Memorial University

Use of Postural Restoration in Treating Chronic Rotator Cuff Pathology: A Level 3 CASE Study  
10:30a.m. - 10:45a.m.  
Jacob Waldron, LAT, ATC, University of Nevada at Las Vegas

**Best Practice Forum, 10:00a.m. - 11:00a.m.**  
Examining Adherence to Therapeutic Rehabilitation, (I, II, IV), Essential  
Jessica Rager, MS, ATC, University of South Carolina  
Jessica Kirby, MSEd, ATC, Ball State University

**Feature Presentation, 10:00a.m. - 11:00a.m.**  
What Can Influence Your Athletes’ Pain? From Placebo to the Biopsychosocial Model to Opioids, (II, IV), Advanced  
Expectation Interactions in Rehabilitation  
Paul Borsa, PhD, ATC, FACSM, University of Florida  
The Development of the Biopsychosocial Model for Pain and how it can Influence Injury Rehabilitation  
Geoff Dover, PhD, CAT(C), ATC, Concordia University  
Pharmacological Interventions for Treating Pain: Opioids, NSAIDs and Personalized Medicine  
Will Hedderson, MS, ATC, CAT(C), University of Central Arkansas

**Peer-to-Peer Discussion, 10:00a.m. - 11:00a.m.**  
How to Handle Sexual Harrassment and Abuse Reports?, (V), Advanced  
Dani Moffit, PhD, LAT, ATC, Idaho State University  
Gretchen Schlabach, PhD, ATC, Northern Illinois University

**Special Topic, 10:00a.m. - 11:00a.m.**  
Lower Body Movement Dysfunctions: As They Apply to the Golf Swing, (I, II, IV, V), Advanced  
Lance Gill, MS, ATC, Lance Gill Performance Inc., Titleist Performance Institute  
Putting Data to Work: Leveraging the Power of Clinical Data to Improve Patient Care, (I, II, IV, V), Essential  
Kevin Robell, MA, ATC, Preventicx, Inc.
Sessions, 10:00a.m. - 12:00p.m.
Presented by the NATA International Committee
The Importance of Physical Fitness and Physical Training for Injury Prevention in the Military
Joe Knapik, ScD, U.S. Army Research Institute of Environmental Medicine

Integrated Performance Strategies for Improving Resiliency and Durability of Military Personnel
Stefan Underwood, CSCS, XPS, EXOS

Use of Military Fitness Tests and Screening Tests to Predict Injury Risk in the Military
Jeremy Witchalls, PhD, University of Canberra

Your Best Yes: Embracing a Life of Service and Addressing Barriers to Volunteering, (V), Essential
Presented by the NATA Young Professionals’ Committee
Kenneth Games, PhD, LAT, ATC, Indiana State University
Jay Sedory, MEd, ATC, EMT-T, U.S. Marine Corps
Kelly Quinlin, MS, ATC, CSCS, Northwest Missouri State University
Marjorie Albohm, MS, ATRet, Ossur Americas

The Doctorate of Athletic Training: What Can We Do With DAT?, (V), Essential
Presented by the NATA Professional Development Committee
Current Status of the DAT Degree as a Pathway for Professional Advancement
Gary Wilkerson, EdD, ATC, FNATA, University of Tennessee at Chattanooga

Quality Assurance for the DAT: Is Accreditation the Answer?
Christopher Ingersoll, PhD, ATC, FNATA, University of Toledo

Opportunities and Challenges for the DAT in traditional AT Faculty Roles
David Perrin, PhD, FNATA, FACSM, University of Utah
“Not eligible for CEUs under Category A or D.”

Feature Presentation, 10:00a.m. - 12:00p.m.
Regenerative Medicine: What Do We Know about Platelet-rich Plasma and Stem Cells , (IV), Advanced
Stephen Esser, MD, Southeast Orthopedic Specialists
Kelly Ward, PA, ATC, Piedmont Orthopedic Sports Medicine

Learning Lab, 10:00a.m. - 12:00p.m.
Prevention of Movement Patterned Conditions Beyond Competitive Years: Asymmetrical Movement Pattern Considerations, (I, II, IV), Mastery
Jason Masek, MA, PT, ATC, Hruska Clinic
Treating Physically Active Patients With a Joint Mobilizations as Functional as Them: Mulligan Concept for the Lower Quadrant, (II, IV), Advanced
Lucas Bianco, DAT, LAT, ATC, Biokinetix

**Athletic Training Student Seminar Breakouts, Round 1, 10:15a.m. - 11:00a.m.**
ATSS Breakout 1: Degree Change Panel, (V), Essential
Lindsey Eberman, PhD, LAT, ATC, Indiana State University
Brandie Martin, MS, ATC, OTC, The Steadman Clinic
Mark Merrick, PhD, ATC, FNATA, Ohio State University
Russell McKune, ATC, Nebraska Medicine

ATSS Breakout 2: Leadership Development, (V), Essential
Scott Lawrance, DHSc, LAT, ATC, Purdue University

ATSS Breakout 3: Branding Yourself, (V), Essential
Tory Lindley, MA, ATC, Northwestern University
Tim Weston, MEd, ATC, Colby College

ATSS Breakout 4: International Development, (V), Essential
Mark Gibson, MSEd, MS, AT, University of Wisconsin at La Crosse

ATSS Breakout 5: Innovations in Patient Care, (V), Essential
Mark Coberley, MS, ATC, LAT, Iowa State University

ATSS Breakout 6: Tactical Training Workshop, (V), Essential
Edward Strapp, TPC, FPC, ATC, Maryland State Police

**Free Communication Rapid Fire Presentations, 10:30a.m. - 11:30a.m.**
Employment In The Secondary School Setting For The Athletic Trainer
Facilitators and Influencing Factors to the Use of Athletic Trainers in Secondary Schools
Kelly Pagnotta, PhD, LAT, ATC, Jefferson University
The Influence of Median Income on Athletic Trainer Services in Florida Secondary Schools
Brandon Baker, University of South Florida

Socioeconomic Status Impacts Athletic Healthcare in Secondary Schools in the Eastern Athletic Trainers’ Association
Robert Huggins, PhD, LAT, ATC, Korey Stringer Institute, University of Connecticut

The Landscape of Athletic Training Services in Public and Private Secondary Schools: Student Athletes and Sports Offered
Kelly Coleman, MS, ATC, University of Connecticut
Secondary School Athletic Trainers, Employment Type, Setting and Reported Time Spent on Job-Related Tasks
Erica Filep, MSEd, LAT, ATC, University of Connecticut

The Impact of Athletic Trainers on the Incidence and Management of Concussions in High School Athletes
Timothy McGuine, PhD, ATC, University of Wisconsin School of Medicine and Public Health

Influence of Assessor on Arizona Secondary School AMCAT Score
David Mesman, DHA, Med, AT, ATC, Grand Canyon University

**Free Communication Oral Presentations, 10:30a.m. - 11:45a.m.**

**Factors Related To Sport Specialization And Injury**
Injury History is Associated With Sport Specialization Level in High School Volleyball Athletes
10:30a.m. - 10:45a.m.
Kevin Biese, MA, LAT, ATC, University of Wisconsin at Madison

Sport Sampling Affects LESS Scores and Physical Literacy Competency in Children
10:45a.m. -11:00a.m.
Zachary Malone ATC, LAT, University of Connecticut

Perceptions of Factors Related to Sports Specialization Between Parents and Children
11:00a.m. -11:15a.m.
Mayrena Isamar Hernandez, MPH, LAT, ATC, University of Wisconsin at Madison

A Comparison of Team Sport Volume Between High School and Club Sport Coaches
11:15a.m. -11:30a.m.
Eric Post, PhD, ATC, San Diego State University

Association Between Level of Sport Specialization Upon Entry to Military Service and Lower Extremity Injury During One Year of Follow-Up at a U.S. Service Academy
11:30a.m. -11:45a.m.
Story Miraldi, ATC, John A. Feagin Jr. Sports Medicine Fellowship, Keller Army Hospital

**Special Topic, 11:00a.m. - 12:00p.m.**
Social Determinants and Patient Advocacy: New Standards for Athletic Trainers, (II, V), Essential Rene’ Shingles, PhD, ATC, Central Michigan University

Abdominal Trauma in Sports
Glenn Barnes, DO, University of Nevada Las Vegas Primary Care Sports Medicine

**Feature Presentation, 11:00a.m. - 12:00p.m.**
Life After Athletics: Long-Term Considerations for Lower Extremity Injuries, (I, IV), Essential Lindsay DiStefano, PhD, ATC, University of Connecticut
Brian Pietrosimone, PhD, ATC, University of North Carolina at Chapel Hill
Mark Laursen, MS, ATC, Boston University
Free Communication Oral Presentations, 11:00a.m. - 12:00p.m.

Clinic Education Techniques And Challenges
Challenges Associated with Clinical Immersion in Athletic Training Education: A Report from the Athletic Training Clinical Education Network
11:00a.m. - 11:15a.m.
Sarah Myers, MEd, ATC, University of Connecticut

Student Burnout After a 15-Week Immersive Clinical Experience
11:15a.m. - 11:30a.m.
Melissa Snyder, PhD, LAT, ATC, Western Carolina University

Athletic Training Students’ Engagement in Interprofessional Education and Practice in the Classroom and During Clinical Education
11:30a.m. - 11:45a.m.
Kirk Armstrong, EdD, ATC, James Madison University

Athletic Training Student Seminar Breakouts, Round 2, 11:15a.m. - 12:00p.m.
ATSS Breakout 1: Degree Change Panel, (V), Essential
Lindsey Eberman, PhD, LAT, ATC, Indiana State University
Brandie Martin, MS, ATC, OTC, The Steadman Clinic
Mark Merrick, PhD, ATC, FNATA, Ohio State University
Russell McKune, ATC, Nebraska Medicine
ATSS Breakout 2: Leadership Development, (V), Essential
Scott Lawrance, DHSc, LAT, ATC, Purdue University

ATSS Breakout 3: Branding Yourself, (V), Essential
Tory Lindley, MA, ATC, Northwestern University
Tim Weston, MEd, ATC, Colby College

ATSS Breakout 4: International Development, (V), Essential
Mark Gibson, MSEd, MS, AT, University of Wisconsin at La Crosse

ATSS Breakout 5: Innovations in Patient Care, (V), Essential
Mark Coberley, MS, ATC, LAT, Iowa State University

ATSS Breakout 6: Tactical Training Workshop, (V), Essential
Edward Strapp, TPc, FPc, ATC, Maryland State Police

Free Communication Oral Presentations, 11:30a.m. - 12:30p.m.

Ankle Injury Risk Factors
Ankle Injury Risk Screening Tests Do Not Change Over the Course of a Single Season
11:30a.m. - 11:45a.m.
Melanie Mcgrath, PhD, LAT, ATC, University of Montana

Clinical Risk Factors for Recurrent Ankle Injury in Chronic Ankle Instability: A 1-Year Prospective Study
11:45a.m. - 12:00p.m.
S. Jun Son, PhD, ATC, CHA University

The Epidemiology of Ankle Injuries in Middle School Sports, 2015/16-2016/17 Academic Years
12:00p.m. - 12:15p.m.
Shane Caswell, PhD, ATC, CSCS, George Mason University

Return to Play Probabilities by Division After New and Recurrent Lateral Ankle Sprains in Collegiate Men and Women’s Basketball
12:15p.m. - 12:30p.m.
Sarah Morris, PhD, Datalys Center for Sports Injury and Prevention

Free Communication Rapid Fire Presentations, 11:45a.m. - 12:30p.m.

Current State Of The Throwing Shoulder
Do Baseball Players with Soft Tissue GIRD Have a Thicker Posterior Capsule?
Stephen Thomas, PhD, ATC, Temple University

Long-Term Loss of Motion Following Labral Surgery: A Level 3 Clinical CASE Study
Ashlee Myers, Appalachian State University

The Effects of Restricted Glenohumeral Horizontal Adduction Motion on Shoulder and Elbow Kinetics in Collegiate Baseball Pitchers
Kevin Laudner, PhD, ATC, Illinois State University

Acute and Longitudinal Effects of Pitching on Passive Range of Motion in Division I Athletes
Jacob Jelmini, MS, CSCS, Texas A&M University

Multiple Day Humeral Rotation Strength Deficits Following a Baseball Pitching Bout in Adolescent Pitchers
Brett Pexa, MA, ATC, University of North Carolina at Chapel Hill

Peer-to-Peer Discussion, 12:45p.m. - 1:45p.m.

Athletic Training and Medical Services at Extreme Sport Events, (III, V), Advanced
Christina Saffran, MS, ATC, Hoover High School / Medicine in Motion
Mike McKinney, MS, ATC, CSCS, Grand Canyon University

Special Topic, 12:45p.m. - 1:45p.m.

Chronic Hip Injuries and Pathology in Dance, (I, II, IV), Essential
Raena Steffan, MS, LAT, ATC, AllSports Medicine at Johns Hopkins All Children's Hospital

Evidence-Based Acute Wound Management: Challenges and Solutions for Clinical Practice, (II, IV), Advanced
Joel Beam, EdD, LAT, ATC, University of North Florida
**Session, 12:45p.m. - 2:45p.m.**
Sex and the Athletic Trainer: Talking to Athletes about STIs, (I, II), Essential
*Presented by the American College Health Association*
Lori Dewald, EdD, ATC, MCHES, American Public University
Cheryl Hug-English, MD, University of Nevada at Reno

Quality Improvement in Athletic Training, (V), Essential
*Presented by the NATA Professional Education Committee*
Defining and Measuring Quality Improvement in Athletic Training
Eric Sauers, PhD, ATC, FNATA, A.T. Still University

Educational Strategies for Implementing Quality Improvement
Alison Snyder-Valier, PhD, ATC, FNATA, A.T. Still University

Quality Improvement in Clinical Education and Practice Environments
Amy Valasek, MD, Nationwide Children's Hospital

**Feature Presentation, 12:45p.m. - 2:45p.m.**
Live Surgeries: Partial and Full Knee Replacements, (),
Roddy McGee, MD, Total Sports Medicine & Orthopedics

**Learning Lab, 12:45p.m. - 2:45p.m.**
Advanced Airway Management: Low Frequency Skill, High Potential of Risk When Not Performed Appropriately, (III), Advanced
David Berry, PhD, MHA, ATC, Saginaw Valley State University

Answering Clinical Questions, (II, IV), Essential
Liz Drake, EdD, ATC, Gustavus Adolphus College

**Special Topic, 1:45p.m. - 2:45p.m.**
Baseball/Softball Swing Mechanics and its Relationship to Musculoskeletal Injury, (I, II, IV), Advanced
Ellen Shanley, PhD, PT, OCS, South Carolina Center for Effectiveness Research in Orthopedics

Ankle impingement Syndromes, (II, IV), Essential
Eric Nussbaum, MEd, LAT, ATC, University Orthopaedic Associates

**BOC EBP Approved Program, 3:00p.m. - 4:00p.m.**
The Hydration Debate: Making Sense of the Mixed Messages, (I), Advanced
*Presented by the Gatorade Sports Science Institute*
Robert Kenefick, PhD, FACSM, U.S. Army Research Institute of Environmental Medicine
WEDNESDAY, JUNE 26, 2019

**Peer-to-Peer Discussion, 7:00a.m. - 8:00a.m.**  
Pediatric Athletes Are Not Small Adults: Key Factors to Proper Risk Factor Assessment and Rehabilitation, (I, IV), Essential  
Doug Wiesner, ATC, University of Kanses Youth Sport Performance

**Special Topic, 7:00a.m. - 8:00a.m.**  
Shoulder Replacement Surgery: Indications and Clinical Outcomes, (II, IV), Advanced  
Aimee Struk, MEd, ATC, University of Florida

Celiac Disease and Gluten Sensitivity: Considerations for Life and Sport, (I), Essential  
Breanna Hamilton, MEd, LAT, ATC, University of Texas at Arlington

**Rapid Fire Presentations, 7:00a.m. - 8:00a.m.**  
**Concussion Education and Reporting**  
Perceptions & Experiences of Faculty in Higher Education Regarding the Return-to-School Process Following Concussion  
Margaret Ha, MS, ATC, Sports Conditioning and Rehabilitation

Delayed Versus Immediate Reporting of Concussion and It’s Impact on Length of Recovery Among Athletes  
Mitchell Barnhart, ATC, A.T. Still University

Factors Impacting Concussion-Related Decision-Making by Certified Athletic Trainers  
Melissa Kay, MS, LAT, ATC, University of North Carolina at Chapel Hill

Perception of Child Concussion Risk in Adults without Children  
Steven Broglio, PhD, ATC, University of Michigan

Virginia Concussion Initiative: Stakeholder Perspectives of Disparities in Concussion Policy Implementation  
Esther Nolton, MEd, LAT, ATC, CSCS, George Mason University

Assessment of Taekwondo Athletes' Knowledge of and Attitude Toward Sport-Related Concussions  
Scott Freer, PhD, ATC, LAT, Barry University

**Free Communication Oral Presentations, 7:00a.m. - 8:00a.m.**  
**Hip and Pelvis Case Reports**  
Development, Recognition and Treatment of Bilateral Acetabular Labral Tears and FAI in a High School Female  
7:00a.m. - 7:15a.m.  
Chelsea Kuntz, AT, MEd, Cleveland Clinic
Greater Trochanteric Chondroblastoma in a Female Collegiate Soccer Player
7:15 a.m. - 7:30 a.m.
Jessica Trapp, MS, LAT, ATC, Jacksonville University

Implementing Patient Outcomes and Functional Assessment to Direct Treatment Interventions for Hip Pain: A Level 2 Case Series.
7:30 a.m. - 7:45 a.m.
Richard Patterson, DAT, LAT, ATC, Temple University

Osteitis Pubis: A Tale of Misdiagnoses
7:45 a.m. - 8:00 a.m.
Alyssa Irby, University of Nebraska at Omaha

**Free Communication Rapid Fire Presentations, 7:00 a.m. - 8:00 a.m.**

**Injury Risk and Health Care Consideration Among Tactical Athletes**
The Effects of Body Composition and Physical Fitness on IET Road Marches
Kaitlin Mcginnis, MS, LAT, ATC, Auburn University

Self-Reported General Health and Fitness Among U.S. Service Members Entering Secondary Training
Daniel Clifton, PhD, ATC, Uniformed Services University of The Health Sciences

The Impact of Limited Flexibility and Previous Musculoskeletal Injury on Likelihood of Injury in U.S. Service Members During Secondary Training
Brian Cone, PhD, CSCS, Uniformed Services University

Perception-Action Coupling Assessment and Training of ROTC Cadets
Alexis Williams, MS, LAT, ATC, University of Tennessee at Chattanooga

Shoulder and Cervical Musculoskeletal Asymmetries in Naval Special Operation Forces with Shoulder Injury: A Prospective Cohort Study
Anne Beethe, MA, ATC, CSCS, University of Pittsburgh

Perceived Barriers to Musculoskeletal Injury and Illness Reporting in the Fire Service
Kirsten Potts, DAT, LAT, ATC, Indiana State University

The Structural and Cultural Barriers to Reporting Musculoskeletal Injuries From the Lens of Fire Chiefs
Celcey Clark, MS, LAT, ATC, Indiana State University

**Session, 7:00 a.m. - 9:00 a.m.**
Don’t Bet on Your Career: Understanding the Issues of Sports Gambling and How It May Affect the Athletic Trainer, (V), Essential
*Presented by the NATA Committee on Professional Ethics*

Prevalence of Sports Gambling and Mental Health Disorders
Timothy Neal, MS, ATC, CSSIM, Concordia University at Ann Arbor

How Does the NATA Code of Ethics Address Sports Gambling?
Darryl Conway, MA, AT, ATC, University of Michigan

Case Scenarios in Sports Gambling for the AT to Consider
Zachary Garrett, DHSc, AT, ATC, Marshall University

**Feature Presentation, 7:00a.m. - 9:00a.m.**
Appropriate Medical Care in Secondary Schools - Implementing the Appropriate Care for Secondary School Aged Athletes Standards, (V), Advanced

Revision, Analysis, and Creation of Appropriate Care Standards in the Secondary Schools
Larry Cooper, MS, LAT, ATC

Implementing Appropriate Care Standards in the Secondary School Using the NATA Online Tool
Bart Peterson, MSS, ATC, Palo Verde Magnet High School

Developing an Appropriate Athletic Health Care Program A Case Study
Jamie Woodall, MPH, LAT, ATC, Brenham High School

Creating a High-Performance Environment: Considerations for the Profile of an Athlete, (I, V), Advanced

Athlete Architecture: Creating a Framework for Health and Performance
Jay Mellette, MS, ATC, Las Vegas Golden Knights

Developing a Performance Profile in a Unique Environment
Kerry Gordon, MS, ATC, Cirque du Soleil

The Athlete Centric Model: Implementation in the Trenches
Reggie Scott, MS, ATC, Los Angeles Rams

**Learning Lab, 7:00a.m. - 9:00a.m.**
Proprioceptive Neuromuscular Facilitation for the Lower Extremity, (IV), Essential
James Scifers, DScPT, PT, ATC, Moravian College

Clinical Examination Skills of the EENMT Minimizing Skill Delay Using Task Trainers, Simulators and Standardized Patients, (II), Essential
Robert Charles-Lipscombe, EdD, ATC, LAT, Mount St. Joseph University

**Free Communication Oral Presentations, 7:30a.m. - 9:00a.m.**

The Latest In Heat Illness Research
Core Temperature and Environmental Factors Among University Marching Band Musicians
7:30a.m. - 7:45a.m.
Dawn Emerson, PhD, ATC, University of Kansas

Validity of Common Body Core Temperature Measurement Sites in Hyperthermic Humans Wearing American Football Uniforms
7:45a.m. - 8:00a.m.
Kevin Miller, PhD, AT, ATC, Central Michigan University

Exertional Heat Stroke at The Falmouth Road Race: Incidence Rate and Survival

8:00a.m. - 8:15a.m.
Rachel Katch, MS, LAT, ATC, University of Connecticut

Exertional Heat Stroke Management Strategies: A Comparison of Practice and Intentions Between Athletic Trainers Who Did and Did Not Treat Cases During High School Football Preseason

8:15a.m. - 8:30a.m.
Aliza Nedimyer, MA, LAT, ATC, University of North Carolina at Chapel Hill

Examining the Need to Develop School-Specific Environmental Activity Modification Guidelines: Preliminary Analysis

8:30a.m. - 8:45a.m.
Yuri Hosokawa, PhD, ATC, Ritsumeikan University

Cold Water Immersion Preparedness for Exertional Heat Stroke in United States High School Football Preseason

8:45a.m. - 9:00a.m.
Zachary Kerr, PhD, MPH, University of North Carolina at Chapel Hill

Best Practice Forums, 8:00a.m. - 9:00a.m.
Designing Effective Concussion Education Programs to Impact Clinical Care: What's Working and What's Not?, (I), Essential
Debbie Craig, PhD, ATC, Northern Arizona University
Johna Register-Mihalik, PhD, ATC, University of North Carolina at Chapel Hill

Incorporating Patient-Reported Outcome Measures into Pediatric Care: Is Your Instrument Appropriate for Youth and Adolescent Athletes?, (I, IV), Advanced
Ashley Marshall, PhD, ATC, A.T. Still University
Kenneth Lam, ScD, ATC, A.T. Still University

Peer-to-Peer Discussion, 8:00a.m. - 9:00a.m.
Developing and Rehearsing Your Emergency Action Plan to Address Equipment Removal and Spine Boarding Procedures, (III), Essential
Gialuca Del Rossi, PhD, ATC, University of South Florida
Ian Graulich, MA, ATC, University of South Florida S.M.A.R.T. Institute

Special Topic, 8:00a.m. - 9:00a.m.
Wading Through the Athletic Recovery Landscape with So Many Gadgets, Gizmos, and Wearables - Tips from an Athletic Trainer Perspective, (I, IV), Essential
Thomas Kaminski, PhD, ATC, FNATA, University of Delaware
Stress Fracture Management, (I), Advanced
Kenneth Cameron, PhD, MPH, ATC, Keller Army Community Hospital

*Free Communication Oral Presentations, 8:15a.m. - 9:45a.m.*

**Electrical Stimulation Techniques For Pain and Muscle Strengthening**
Changes in Pain Perception, Aerobic and Resistance Exercise Progressions and the Amplitude of Electrotherapy During a Ten-Session Rehabilitation Program for Patients with Anterior Knee Pain
8:15a.m. - 8:30a.m.
Joohee Lee, Kyung Hee University

The Effects of Electrically Induced Vastus Lateralis Fatigue on Vastus Medialis Activity During Knee Extension
8:30a.m. - 8:45a.m.
James Kearney, ATC, Marist College

Effect of Functional Electrical Stimulation Applied to the Gluteus Medius During Resistance Training
8:45a.m. - 9:00a.m.
Matthew Robinson, MS, AT, ATC, University of Toledo

The Negative Effect of an Automatic Intensity Step-Down Function During NMES Treatments
9:00a.m. - 9:15a.m.
Cody Bremner, PhD, LAT, ATC, Southern Utah University

Effectiveness of the Kneehab® XP Electrical Stimulator on Motor Point Targeting
9:15a.m. - 9:30a.m.
William Holcomb, PhD, LAT, ATC, FNATA, Mercer University

Intrinsic Foot Muscle Training and Neuromuscular Electrical Stimulation Lead to Increased Arch Height Index and Improved Y-Balance Composite Scores
9:30a.m. - 9:45a.m.
Dave Gutekunst, PhD, MS, Saint Louis University

*Feature Presentation, 9:15a.m. - 10:15a.m.*

**The Management of Patient-Oriented and Clinician-Oriented Impairments Associated with Chronic Ankle Instability: A Focus on Therapeutic Exercise and Manual Therapy, (II, IV), Advanced**

Intervention Strategies to Address Common Impairments Associated with Chronic Ankle Instability
Cameron Powden, PhD, ATC, Indiana State University

Patient and Clinician-Oriented Outcome Measures for Assessing Patients with Chronic Ankle Instability
Megan Houston, PhD, ATC, Keller Army Community Hospital

Tracking Rehabilitation Progression for Chronic Ankle Instability Patients: A Clinical Outcomes Approach
Matthew Hoch, PhD, ATC, University of Kentucky
**Peer-to-Peer Discussion, 9:15a.m. - 10:15a.m.**
Overcoming Barriers to Successfully Manage Heat Stroke, (III), Advanced
Brendon McDermott, PhD, ATC, University of Arkansas
David Csillan, MS, ATC, Ewing High School

**Special Topic, 9:15a.m. - 10:15a.m.**
Menstrual Dysfunction: A Screening for All Female Athletes, (I, II), Essential
Julie Young, MA, ATC, PES, Nationwide Children's Hospital Sports Medicine

The Effects of Photobiomodulation (Light/Low-Level Laser) Therapy on Muscle Recovery Compared to Traditional Therapeutic Modalities, (IV), Essential
Justin Rigby, PhD, LAT, ATC, Texas State University

**Free Communication Oral Presentations, 9:15a.m. - 10:15a.m.**
**Perceptions and Strategies For Caring For LGBTQ Student Athletes**
Athletic Trainers’ Perceptions About Collegiate Transgender Student-Athletes’ Unfair Advantage in Sport Participation
9:15a.m. - 9:30a.m.
Emma Nye, DAT, LAT, ATC, Indiana State University

Athletic Trainers’ Perceived Competence and Educational Influences in Their Ability to Care for Collegiate Transgender Student-Athletes
9:30a.m. - 9:45a.m.
Daniel Walen, DAT, LAT, ATC, Indiana State University

Gender and Sexual Minority Athletes Willingness to Seek Medical Advice and Come Out to Athletic Trainers
9:45a.m. - 10:00a.m.
Kristine Ensign, PhD, AT, Ohio University

Experiences of Transgender Athletes in the Athletic Training Setting: A Qualitative Study
10:00a.m. - 10:15a.m.
Emily Munson, AT, Ohio University

**Sessions, 9:15a.m. - 11:15a.m.**
**Evidence Straight From the Source: Peer-Reviewed Publications in Athletic Training, (V), Essential**
*Presented by the NATA Journal Committee*

Journal of Athletic Training
Jay Hertel, PhD, ATC, FNATA, University of Virginia

International Journal of Athletic Therapy & Training
Jennifer Medina McKeon, PhD, ATC, CSCS, Ithaca College

Journal of Sport Rehabilitation
Carl Mattacola, PhD, ATC, FNATA, University of Kentucky

Athletic Training & Sports Health Care
Thomas Kaminski, PhD, ATC, FNATA, University of Delaware

Sports Health
Riamm Palmieri-Smith, PhD, ATC, FNATA, University of Michigan

Athletic Training Education Journal
David Berry, PhD, MHA, ATC, Saginaw Valley State University

Clinical Practice in Athletic Training
Cameron Powden, PhD, ATC, Indiana State University

Professional Integrity in Scholarly Writing, (V), Essential
Presented by the NATA Professional Responsibility in Athletic Training Committee
Plagiarism Pitfalls
Jeff Konin, PhD, PT, ATC, University of Rhode Island

Authorship Considerations
Elisabeth Rosencrum, PhD, ATC, CSCS, Plymouth State University

Research Integrity
Marisa Colston, PhD, ATC, University of Tennessee at Chattanooga

Feature Presentation, 9:15a.m. - 11:15a.m.
Clinical Specialists and Advanced Practice Leaders: Education Pathways to Enhance Athletic Training Practice and Optimize Patient Care, (V), Essential

Patient Care Pathways: The Continuum From Novice to Expert Clinician in Athletic Training
Eric Sauers, PhD, ATC, FNATA, A.T. Still University

Developing Clinical Specialists Through Residency Training Programs
Forrest Pecha, MS, LAT, ATC, St. Luke's Sports Medicine

Developing Advanced Practice Leaders Through Doctor of Athletic Training Programs
Brian Vesci, DAT, ATC, Northwestern University

Learning Lab, 9:15a.m. - 11:15a.m.
Using Classical Pilates to Rehabilitate the Overhead Athlete, (IV), Essential
Anthony Piegaro, Jr., MS, LAT, ATC, Cirque du Soleil

Thoracic Manual Therapy for the Treatment of Cervical and Shoulder Pain, (II, IV), Advanced
Michael Higgins, PhD, ATC, PT, University of Virginia

**Free Communication Rapid Fire Presentations, 9:30a.m. - 10:15a.m.**
Planning For and Managing Emergencies
Describing Sport-Related Genitourinary Injuries in Males Reporting to Emergency Departments: A National Electronic Injury Surveillance System Report
Gregory Janik, DAT, LAT, ATC, King’s College

An Analysis of Certified Athletic Trainers’ Ability to Provide High-Quality Cardiopulmonary Resuscitation Over Hockey Shoulder Pads
Adam Estabrooks, ATC, CKTP, North Dakota State University

The Effect of Lacrosse Protective Equipment on Time to First Compression and First Automated External Defibrillator Shock
Richard Boergers, PhD, ATC, Seton Hall University

A Novel Approach to Loop-Strap Cutting Utilizing a Motorized Oscillating Saw as Compared to a Traditional Cutting Tool
Mark Rotondi, ATC, Marist College

The Effect of Practice on Facemask Removal Timeliness with Lacrosse Helmets Used for at Least One Season of Play
Katherine Frick, MS ATC LAT, Venesco LLC

A Comparison of Spinal Motion in an Equipment Laden Patient During Three Different Transfer Techniques
Jolene Martinko, ATC, Marist College

**Free Communication Oral Presentations, 9:45a.m. - 11:15a.m.**
Patient Centered Outcomes Following ACLR
Increased Pain 4 Weeks Post ACL Reconstruction is Predictive of Lower Self-Reported Sports Function at 6 Months
9:45a.m. - 10:00a.m.
Emily Hunt, MS, ATC, University of Kentucky

Rationale for a Parsimonious Measure of Subjective Knee Function After ACL Reconstruction: A Rasch Analysis
10:00a.m. - 10:15a.m.
Ryan Duckett, MA, University of Toledo

The Relationship Between Injury-Related Fear and Visuomotor Reaction Time in Individuals After Anterior Cruciate Ligament Reconstruction
10:15a.m. - 10:30a.m.
Francesca Genoese, LAT, ATC, CES, University of Kentucky
Psychological Readiness of Athletes to Return-to-Play Following Injury
10:30a.m. - 10:45a.m.
Alyssa Monahan, MS, LAT, ATC, Georgia Southern University

The Association Between Psychological Readiness to Return-to-Sport and Self-Perceived Function After Anterior Cruciate Ligament Reconstruction
10:45a.m. - 11:00a.m.
Jacqueline Miller, ATC, A.T. Still University

Free Communication Oral Presentations, 10:00a.m. - 11:15a.m.

Injury Screening and Outcomes In The Military
Patient and Injury Demographics of Athletic Training Medical Care for Reserve Officer Training Corps: A Report From the Athletic Training Practice-Based Research Network
10:00a.m. - 10:15a.m.
Kara Radzak, PhD, LAT, ATC, University of Nevada at Las Vegas

Association Between Performance on The Landing Error Scoring System and Bone Stress Injury Risk in U.S. Military Academy Cadets
10:15a.m. - 10:30a.m.
Timothy Eckard, PT, DPT, OCS, University of North Carolina at Chapel Hill

Evaluation of Landing Error Scoring System and High School Sport Participation in Army Reserve Officer Training Corps
10:30a.m. - 10:45a.m.
Hayley Ericksen, PhD, ATC, University of Wisconsin at Milwaukee

Association Between Movement Quality Upon Entry to a U.S. Service Academy and Lower Extremity Injury During One Year of Follow-Up
10:45a.m. - 11:00a.m.
Kenneth Cameron, PhD, MPH, ATC, John A. Feagin Jr. Sports Medicine Fellowship, Keller Army Hospital

Anterior Cruciate Ligament Reconstruction Survivability in the U.S. Military: A 5-Year Case-Control Study
11:00a.m. - 11:15a.m.
Timothy Mauntel, PhD, ATC, Walter Reed National Military Medical Center

Feature Presentation, 10:15a.m. - 11:15a.m.
Are We Walking Away From Chronic Dysfunction? Advanced Clinical Gait Assessment and Treatment, (I, II, IV), Advanced

Walk On By: Translating the Gait Assessment to the Clinical Environment
Christopher Kuenze, PhD, ATC, Michigan State University

Walk Hard: The Importance of Appropriate Loading Following Anterior Cruciate Ligament Reconstruction
Brittney Luc-Harkey, PhD, ATC, Brigham and Women's Hospital

Walk This Way: Using Low-Cost Instruments to Provide Feedback During Gait
Luke Donovan, PhD, ATC, University of North Carolina at Charlotte
**Special Topics, 10:15a.m. - 11:15a.m.**
Returning the Student-Athlete to the Classroom: Case-Based Scenarios, (IV), Advanced Tamara Valovich McLeod, PhD, ATC, FNATA, A.T. Still University

Career Progression Up the Health Care Management Ladder, (V), Advanced Aaron Hajart, MS, ATC, New Bridge Medical Center

**Free Communication Oral Presentations, 10:30a.m. - 11:15a.m.**

The Effects Of Cupping On Patient Outcomes
Cupping Therapy Does Not Influence Hamstring Range of Motion Compared to Control or Sham Conditions
10:30a.m. - 10:45a.m.
Matthew Schafer, MS, LAT, ATC, University of Louisiana at Lafayette

The Effects of Dry Cupping Massage Therapy on Delayed Onset Muscle Soreness
10:45a.m. - 11:00a.m.
Tricia Majewski-Schrage, EdD, ATC, LAT, University of Northern Iowa

The Influence of Dry Cupping Therapy on Collegiate Musicians with Chronic Neck Pain
11:00a.m. - 11:15a.m.
Aaron Ngor, MS, AT, Ohio University

**Free Communication Rapid Fire Presentations, 10:30a.m. - 11:15a.m.**

Intervention Strategies For Chronic Ankle Instability
A Randomized Controlled Trial Investigating the Effects of a 4-Week Ankle Rehabilitation Program on Dynamic Balance in High School Athletes with Chronic Ankle Instability
M. Spencer Cain, PhD, ATC, LAT, University of North Carolina at Chapel Hill

Eccentric Training with Anodal Transcranial Direct Current Stimulation Increases Muscle Activation in Individuals with Chronic Ankle Instability
Amelia Bruce, MS, Appalachian State University

Effects of Instrument Assisted Soft-Tissue Mobilization on Neuromuscular Control for Chronic Ankle Instability
Brittany Croft, University of Lynchburg

Evaluating Postural Control on Ankle Acupuncture
Hsin-Min Wang PhD, China Medical University

Effects of Blood Flow Restriction on Muscle Activation in Individuals with Chronic Ankle Instability
John Goetschius, PhD, ATC, Adrian College

Predicting Responders Following a 4-Week Multimodal Intervention in Patients with Chronic Ankle Instability
Cameron Powden, PhD, ATC, LAT, Indiana State University
**BOC EBP Approved Program, 11:45a.m. - 1:45p.m.**
Evolving Concussion Prevention and Care Across the Life Span, (I, II, IV), Advanced

Pediatric
Joel Stitzel, PhD, Wake Forest University

Young Adult
Johna Register-Mihalik, PhD, ATC, University of North Carolina at Chapel Hill

Retired Athletes
Kevin Carneiro, MD, University of North Carolina at Chapel Hill

**Special Topics, 5:15p.m. - 6:15p.m.**
Examining the Science Behind Stretching and Soft Tissue Manual Therapies: Are We Following the Evidence?, (IV), Advanced
Kenneth Cieslak, DC, ATC, CSCS, Teaneck Board of Education

Brain-Hacking: Can or Should We Correct the Cortical Adaptations that Happen After Injury?, (IV), Advanced
Alan Needle, PhD, ATC, CSCS, Appalachian State University

Advanced Comprehensive Athletic Trainer Assessment of the Ballet Dancer’s Foot En Pointe, (II), Advanced
Kimberly Perrella Veirs, PhD(C), ATC, MPT, University of Oklahoma Health Sciences Center

Treatment and Rehabilitation for Triathletes, (II, IV), Advanced
Mark Baughman, DPT, ATC, OCS, Coltman and Baughman Physical Therapy

**Free Communication Oral Presentations, 5:15p.m. - 6:15p.m.**

**Visual Concussion Assessment**
The Effect of Exercise on a Novel Dual-Task Assessment for Sport Concussion
5:15p.m. - 5:30p.m.
Juliana Jimenez, University of Virginia

Native Language May Affect Performance on the King-Devick Test, but Not the Impact
5:30p.m. - 5:45p.m.
Anthony Cosby Jr., Ithaca College

Executive Function is Related to Visuomotor Reaction Time in Collegiate Athletes
5:45p.m. - 6:00p.m.
Matthew Hoch, PhD, ATC, University of Kentucky
Clinical versus Functional Reaction Time: Implications for Post-Concussion Management
6:00p.m. - 6:15p.m.
Robert Lynall, PhD, ATC, University of Georgia

Free Communication Oral Presentations, 5:15p.m. - 6:30p.m.
Injury Risk Across Ages and Sports
Neuromechanical Factors Associated with College Football Injury Risk
5:15p.m. - 5:30p.m.
Rachael Anthony, MS, LAT, ATC, University of Tennessee at Chattanooga

The Association Between Injuries and Overtime Play in National Collegiate Athletic Association Soccer
5:30p.m. - 5:45p.m.
Erin Wasserman, PhD, Datalys Center for Sports Injury Research and Prevention

Predictive Value of Injury Risk Screening for Collegiate Volleyball Players
5:45p.m. - 6:00p.m.
Alexis Gaylor, MS, ATC, University of Tennessee at Chattanooga

Poor Balance as a Predictor of Injury in Adolescent Athletes
6:00p.m. - 6:15p.m.
Carl Lange, DAT, LAT, ATC, Temple University

A Pilot Study Examining the Effects of an Injury Prevention Program on Lower Extremity Injury in Middle School Boys’ Soccer
6:15p.m. - 6:30p.m.
Katherine Van Wert, MS, NHLAT, ATC, George Mason University

Free Communication Rapid Fire Presentations, 5:15p.m. - 6:30p.m.
Prevalence and Rehabilitation Outcomes of Mental Health Conditions In Active Populations
Validation of a Depression Screening Tool in Collegiate Student-Athletes
Branden Green, LAT, ATC, West Chester University

Pilot Study of Mental Health Symptoms in Collegiate Student-Athletes
Megan Simon LAT, ATC, University of North Carolina at Chapel Hill
Depression in Adolescent Athletes: Prevalence and Demographics
Ashley Long, PhD, LAT, ATC, Mt. Olive Family Medicine Center

Prevalence of Depression and Anxiety Among ROTC College Students
Allison Smith, MS, ATC, SCAT, University of South Carolina

Depression Following Concussion in Retired Professional Football Players
Ryan Thomson, LAT, ATC, Temple University

The Effect of Premorbid Anxiety on Rehabilitation Services and Recovery Times Following Pediatric Concussion
Elizabeth Teel, PhD, Mcgill University
Preseason Psychological Distress Affects College Student-Athletes' Health-Related Quality of Life: Findings From the Active Rehab Study
Johna Register-Mihalik, University of North Carolina at Chapel Hill

Poor Surgical Expectations for Patients with Shoulder Instability are Associated with Race and Mental Health
Nicole Cascia, MAT, ATC, CES, University of Kentucky

Low Self-Efficacy and Mental Health Disorders Predict Persistent Postoperative Pain 3-Months Following Hip Arthroscopy
Kate Jochimsen, PhD, ATC, University of Kentucky

**Free Communication Rapid Fire Presentations, 5:15p.m. - 6:45p.m.**

**Biomechanical and Neuromuscular Considerations For ACLR Rehabilitation**
Systemic Quadriiceps Muscle Failure Following ACL Reconstruction: Neural and Morphological Considerations
Adam Lepley, PhD, ATC, University of Connecticut

How Much Time is Needed Between Serial “Return-To-Play” Assessments to Achieve Clinically Important Strength Gains in Patients Recovering from ACL Reconstruction?
Stephan Bodkin, Med, ATC, University of Virginia

Personalized Sensor-Based Classification of ACL Reconstructed Patients Using Machine Learning is Affected by Muscle Strength and Symmetry
Joe Hart, PhD, ATC, FNATA, University of Virginia

Time Course of the Effects of Vibration on Quadriiceps Function in Individuals with Anterior Cruciate Ligament Reconstruction
Christopher Johnston, MS, ATC, University of North Carolina at Chapel Hill

Knee Loading Following ACL-R is Related to Quadriiceps Strength and Knee Extension Difference Across The Continuum of Care
Craig Garrison, PhD, PT, ATC, Texas Health Sports Medicine

How Does it All Measure Up? Interrelationships Between Biomechanical, Clinical Symmetry and Self-Reported Function After ACLR
Julie Burland, MS, ATC, CSCS, University of Connecticut

The Effects of Transcranial Direct Current Stimulation on Quadriiceps Neural Activity After Anterior Cruciate Ligament Reconstruction
Justin Rush, ATC, University of Connecticut

A Novel Test of Trunk Control Identifies Deficits in ACL Reconstructed Patients
Chelsey Roe, MS, ATC, University of Kentucky

Relationship Between Patient-Reported Outcome Measures and Sample Entropy During Dual-Task Balance Following Anterior Cruciate Ligament Reconstruction
Janet Simon, PhD, AT, Ohio University
Altered Gait Patterns in Patients with ACL Reconstructed Knees Performing Multiple Tasks
Kim Twait, Med, ATC, University of Virginia

**Sessions, 5:15p.m. - 7:15p.m.**
Transition to Practice, (V), Essential
*Presented by the NATA Executive Committee for Education*
Organization and Administration
Steve Nordwall, MA, ATC, University of Maryland

Mentoring and Clinical Practice
Brian Vesci, DAT, ATC, Northwestern University
“Not eligible for CEUs under Category A or D.”

Safe Space Ally Training for the Athletic Trainer, (I), Advanced
*Presented by the NATA LGBTQ+ Advisory Committee*
Patricia Aronson, PhD, LAT, ATC, University of Lynchburg
Rebecca Lopez, PhD, ATC, University of South Florida

**Feature Presentation, 5:15p.m. - 7:15p.m.**
Long-Term Athlete Development for the “Other” Overhead Sports, (I, II, IV), Essential

Long-Term Athlete Development and Application to Swimming and Tennis
Elizabeth Hibberd, PhD, LAT, ATC, University of Alabama

Long-Term Athlete Development in Softball
Erin Weaver-Cohen, MA, LAT, ATC, University of Alabama

Utilizing Strength and Conditioning for Long-Term Athlete Development
Michelle Martin Diltz, MS, SCCC, CSCS, University of Alabama

**Learning Lab, 5:15p.m. - 7:15p.m.**
Athletic Trainer’s: Utilization and Clinical Establishment of IV Access and Fluid Administration to Improve Patient Care, (III, IV), Essential
Eric Fuchs, PhD, ATC, Eastern Kentucky University
THURSDAY, JUNE 27, 2019

Free Communication Rapid Fire Presentations, 7:00a.m. - 7:45a.m.

Pediatric Athletics: Research in the Area of Pediatric Injuries and Pediatric Sports
Early Sport Specialization is Associated with Increased Chance Of Injury
Katherine McCall, Ithaca College

The Relationship Between Training Load and Neuromuscular Control in Adolescent Female Basketball Athletes
Eleanor Beltz, PhD, ATC, CSCS, Emory & Henry College

Self-Reported Physical Activity Volumes in Pediatric Patients with Overuse Knee Injuries
Julie Young, MA, ATC, PES, Nationwide Children's Hospital

Does a Parent’s Background Influence Their Child's Participation in Contact Sports?
Allyssa Memmini, MS, ATC, University of Michigan

ACL Injury Prevention Knowledge of Youth Sport Coaches
Jessica Martinez, PhD, ATC, Old Dominion University

The Prevalence of Patellofemoral Pain in the Community
Jennifer Thorpe, MS, ATC, CSCS, Concordia University of Wisconsin

Free Communication Rapid Fire Presentations, 7:00a.m. - 7:45a.m.

Epidemiology and Management of PFP
Performance on a Clinical Dynamic Balance Task is Different in Individuals with Patellofemoral Pain
Andrea Baellow, Med, ATC, University of Virginia

Effect of Biofeedback Electrical Stimulation on Lower Extremity Kinematics in Females with Patellofemoral Pain
Alex Springer, MS, AT, ATC, University of Toledo

Comparing Kinesio® Tape to KT Tape® for Individuals with Patellofemoral Pain
Benjamin Marcus, ATC, CKTP, North Dakota State University

Special Topic, 7:00a.m. - 8:00a.m.

Disordered Eating and Mental Health: When It Is More Than Body Shaming and Sport Expectations? (I, II, IV, V), Essential
Shelly Mullenix, MS, ATC, Louisiana State University

Bear in Mind: Clinical Impact of Brain and CNS Changes After Knee Injuries, (II, IV), Advanced
Adam Lepley, PhD, ATC, University of Connecticut
Free Communication Oral Presentations, 7:00 a.m. - 8:00 a.m.

Recover From and Treatment for Lateral Ankle Sprains
7:00 a.m. - 7:15 a.m.
Kenneth Lam, ScD, ATC, A.T. Still University

Comparison of Y Balance Test Scores at Baseline and 2-4 Weeks Following an Acute Lateral Ankle Sprain in Collegiate Athletes
7:15 a.m. - 7:30 a.m.
Bethany Wisthoff, MS, ATC, University of Delaware

Association Between Rehabilitation and Goal Achievement in Athletes Discharged From Care Following An Ankle Sprain: A Report From the Athletic Training Practice-Based Research Network
7:30 a.m. - 7:45 a.m.
Revay Corbett, MS, ATC, PES, University of Virginia

Comparison of Practice Patterns with International Ankle Consortium Recommendations for the Clinical Assessment of Lateral Ankle Sprain Injuries: A Report From The Athletic Training Practice-Based Research Network
7:45 a.m. - 8:00 a.m.
Ashley Marshall, PhD, ATC, A.T. Still University

Session, 7:00 a.m. - 9:00 a.m.

Common Lower Extremity Sports Injuries: Some Are Not as Obvious, (I, II, IV), Essential
Presented by the American Academy of Podiatric Sports Medicine
Brian Fullem, DPM, Elite Sports Podiatry

Feature Presentation, 7:00 a.m. - 9:00 a.m.

When Every Day is a Circus: Applying Athletic Principles to Aerialists and Acrobats, (III, IV, V), Advanced
Systematic Approach to Emergency Preparedness
Brian Oudyk, ATC, CAT(C), CES, Cirque du Soleil

Managing Workload in High Performance Settings
Roisin McNulty, MPhty, Cirque du Soleil

A Circus of Chronic Conditions
Katherine Perlsweig, MS, ATC, CSCS, Cirque du Soleil

Learning Lab, 7:00 a.m. - 9:00 a.m.

Faster: Running Efficiency for Lower Extremity Injury Prevention, (I, II, IV), Essential
Donald Kessler, MEd, ATC, U.S. Naval Warfare Center
Expecting Immediate Changes in Shoulder Dysfunction: A Systematic Approach to Enhance Clinical Decision-Making, (II, IV), Advanced
Miguel Quintero, DAT, ATC, Viewpoint High School

**Free Communication Rapid Fire Presentations, 7:45a.m. - 9:00a.m.**

**Hip Muscle Function and Lower Extremity Mechanics**
Influence of Hip Strength Testing Position on Lower Extremity Muscle Activity
Neal Glaviano PhD, AT, ATC, University of Toledo

EMG and Force Analysis of a Weightbearing Squat-Hold Position Compared to Traditional Hip Strength Assessment Positions
Kemery Sigmund, MS, LAT, ATC, Concordia University, Wisconsin

Relationships Among Knee, Hip, & Trunk 2-Dimensional Angles and Gluteal Muscle Activity During Squatting
David Bazett-Jones, PhD, AT, ATC, University of Toledo

The Relationship Between Hip Strength and Multiplanar Running Kinematics at the Hip and Knee
Victoria Holmes, MS, AT, Ohio University

Gluteal Muscle Activation in Participants With and Without Low Back Pain During a Dynamic Balance Task
Adrienne Fedyna Dembeck, University of Virginia

Assessment of Gluteal Neuromuscular Function with the Central Activation Ratio
Daniel Gilfeather, MS, AT, ATC, University of Toledo

Examining the Relationship Between Hip Strength and Time to Stabilization in Collegiate Volleyball Players
Sara Skammer, LAT, ATC, Montana State University

Relationship Between Hip Strength and LESS Scores in Youth Athletes Across Stages of Maturation
Gregory Crisafulli, BS, LAT, ATC, University of Alabama

Relationship Between Hip Strength, Lower Extremity Movement During a Single-Leg Step-Down Task and Upper Extremity Injury in Professional Baseball Players
Hannah Dove, PT, DPT, ATC, University of Southern California

**Best Practice Forum, 8:00a.m. - 9:00a.m.**

Sacrificing Long-Term Health for Quick Return-to-Play: Ankle Sprain to Ankle Osteoarthritis, (I), Advanced
Tricia Hubbard-Turner, PhD, ATC, University of North Carolina at Charlotte
Janet Simon, PhD, ATC, Ohio University

**Peer-to-Peer Discussion, 8:00a.m. - 9:00a.m.**

Communicating With Youth Sport Stakeholders About Specialization, (I), Advanced
David Bell, PhD, ATC, University of Wisconsin at Madison
Lindsay DiStefano, PhD, ATC, University of Connecticut
**Special Topics, 8:00a.m. - 9:00a.m.**

Outcomes That Support Utilizing ATCs in the Integrated Occupational Health Model, (I), Advanced
Diana Burns, ATC, CEIS, CEES, ATI Worksite Solutions

Facilitating Intrinsic Foot Muscle Training, (IV), Advanced
Kitty Newsham, PhD, ATC, Saint Louis University

**Free Communication Oral Presentations, 8:00a.m. - 9:00a.m.**

**Athletic Training Documentation and Patient Reported Outcomes**
Unique Challenges and Needs for Patient Care Documentation in The Secondary School Setting
8:00a.m. - 8:15a.m.
Tricia Kasamatsu, PhD, ATC, California State University at Fullerton

Athletic Trainers’ Perceptions of Patient Reported Outcomes Integration
8:15a.m. - 8:30a.m.
Lauren Gardner, MS, ATC, Michigan State University

Athletic Trainers’ Knowledge and Application of Medical Documentation Following an Evidence-Based Educational Intervention
8:30a.m. - 8:45a.m.
Elizabeth Neil, MS, LAT, ATC, Indiana State University

Aspects of Technology That Influence Athletic Trainers’ Current Patient Care Documentation Strategies In The Secondary School
8:45a.m. - 9:00a.m.
Sara Nottingham, EdD, LAT, ATC, University of New Mexico

**Free Communication Rapid Fire Presentations, 8:00a.m. - 9:00a.m.**

**Preparing and Supporting the Newly Credentialed AT**
Transition To Practice: Challenges and Facilitators to Professional Identity Development Following Graduation from a Professional Master’s Level Program
Brianne Kilbourne, EdD, ATC, Emory & Henry College

Career Aspirations of Athletic Trainers in Their First Year of Employment Following Graduation from a Professional Preparation Masters Level Program
Jessica Barrett, PhD, ATC, Springfield College

Comparison of New Clinically Trained Faculty Socialization Experiences with New Non-Clinically Trained Faculty In Higher Education
Jennifer Plant, EdD, LAT, ATC, University of Central Florida

Grit: The Perseverance of Recently Credentialed Athletic Trainers During Their Transition to Practice
Ryan Rompola, DAT, LAT, ATC, Indiana State University

Developing a Comprehensive Theory of Professional Readiness in Athletic Training
Philip Szlosek, PhD, LAT, ATC, Bridgewater State University
Newly Credentialed Athletic Trainers’ Onboarding Needs During the Transition to Practice
Ashley Thrasher, EdD, LAT, ATC, Western Carolina University

Onboarding Provided for Newly Credentialed Athletic Trainers’ During the Transition to Practice
Stacy Walker, PhD, ATC, FNATA, Ball State University

Professional Program Preparation, Orientation and Mentoring Tactics Used in Developing Professional Responsibility in Early-Career Athletic Trainers
Amanda Szabo, DAT, LAT, ATC, Indiana State University

**BOC EBP Approved Program, 9:15a.m. - 10:15a.m.**
Managing Back Pain Using Manual Therapy Techniques, (IV), Advanced
Sue Falsone, PT, MS, ATC, Structure & Function Education, PLLC

Lengthening Your Perspective: Using Eccentric Exercise to Treat Neural and Morphological Deficits After Injury, (IV), Advanced
Lindsey Lepley, PhD, ATC, University of Connecticut

**Best Practice Forum, 10:45a.m. - 11:45a.m.**
Enhancing Rehabilitation Outcomes Following Knee Injury: Overcoming Psychological Barriers, (I, II, IV), Advanced
Grant Norte, PhD, ATC, Toledo University
Neal Glaviano, PhD, ATC, Toledo University

**Special Topic, 10:45a.m. - 11:45a.m.**
The Who, What, and Why of Sport Specialization, (I, II), Essential
Eric Post, PhD, ATC, San Diego State University

Dawn Weatherwax, RD, CSSD, ATC, Sports Nutrition 2Go

**Free Communication Oral Presentations, 10:45a.m. - 11:45a.m.**
**Concussion Reporting Behaviors and Intentions**
Examining the Relationship Between Coping Strategies and Intentions to Report Concussion Among Intercollegiate Athletes
10:45a.m. - 11:00a.m.
Rachel Le, MS, ATC, University of Georgia
Sport-Related Concussion Education, Concussion History and Chronic Traumatic Encephalopathy Beliefs of Collegiate Student-Athletes
11:00a.m. - 11:15a.m.
Erica Beidler, PhD, LAT, ATC, Duquesne University

Influence of Developmental and Sociological Factors on Concussion Knowledge, Attitudes and Self-Reporting Intentions
11:15a.m. - 11:30a.m.
Avinash Chandran, PhD, MS, University of North Carolina at Chapel Hill

The Influence of Concussion Knowledge and Years of Clinical Experience on Athletic Trainers’ Concussion Healthcare Practices
11:30a.m. - 11:45a.m.
Landon Lempke, MEd, LAT, ATC, University of Georgia

The Influence of Attitudes, Social Pressure and Perceived Control on Intention to Report Concussion Symptoms in Collegiate Athletes
11:45a.m. - 12:00p.m.
Daniel Baer, PhD, LAT, ATC, West Chester University of Pennsylvania

Free Communication Rapid Fire Presentations, 10:45a.m. - 11:45a.m.
Gait Neuromechanics in Those with Chronic Ankle Instability
The Foot and Ankle Ability Measure-Sport is Related to Spatiotemporal Gait Measures in Individuals with Chronic Ankle Instability
Rae Allison, LAT, ATC, University of Kentucky

Sagittal Plane Ankle Kinematics and Variability During Walking and Running in Individuals With and Without Chronic Ankle Instability
Yuki Sugimoto, MS, LAT, ATC, University of North Carolina at Greensboro

Chronic Ankle Instability Effects Sural Nerve Reflexes in the Gastrocnemius During the Early Stance Phase of the Gait Cycle
Leif Madsen, PhD, ATC, Indiana University

Sudden Ankle Inversion Perturbation During Walking Alters Gait Kinematics in Chronic Ankle Instability Patients
Seunguk Han, MS, ATC, Brigham Young University

How Patients with Chronic Ankle Instability React After Ankle Inversion Perturbation During Walking
Hwigeum Jeong, MS, LAT, ATC, Brigham Young University

Altered Muscle Activation Patterns During Walking Following Sudden Inversion Perturbation in Patients with Chronic Ankle Instability
Hyunsoo Kim, PhD, ATC, West Chester University

Differences in the Shank-Rearfoot Joint Coupling, Kinematics and Kinetics Among Subject with Chronic Ankle Instability, Coper and Controls During Jogging
Inje Lee, CSCS, Yonsei University
**Free Communication Oral Presentations, 10:45a.m. - 12:15p.m.**

**Foot and Ankle Case Reports**

Functional Outcome Measures in Collegiate Athletes After Turf Toe Injuries: A Level 2 Case Series  
10:45a.m. - 11:00a.m.  
Kevin Shubow, MEd, ATC, University of Virginia  

Navicular Fracture in a Collegiate Soccer Player: A Level 3 Clinical Case Study  
11:00a.m. - 11:15a.m.  
Emily Kruithof, LAT, ATC, CSCS, University of Kentucky  

The Use of Blood Flow Restriction as Part of a Non-Operative Rehabilitation Program for a Talus Fracture in a Professional Hockey Player: A Case Report  
11:15a.m. - 11:30a.m.  
Geoff Dover, PhD, CAT(C), ATC, Concordia University  

Achilles Tendon Re-Rupture Proximal to the Primary Repair in a Collegiate Football Punter  
11:30a.m. - 11:45a.m.  
Christine Poole, MS, ATC, OTC, The Steadman Clinic  

Reconstruction of a Pathological Pes Planovalgus Deformity in a Female High School Athlete  
11:45a.m. - 12:00p.m.  
Sean Dorrian, Marist College  

Diagnosis and Treatment of a Left Talus Lateral Process Fracture and Subtalar Loose Bodies  
12:00p.m. - 12:15p.m.  
Jared Sweigard, MS, ATC, The Steadman Clinic  

**Sessions, 10:45a.m. - 12:45p.m.**

**Biologic Treatments, (IV), Advanced**  
*Presented by the NATA Research & Education Foundation*  
Steven Singleton, MD, Texas Health Physicians Group  

The Athletic Training Milestones: How Do We Assess and Promote Progressive Clinical Behaviors?, (V), Advanced  
*Presented by the NATA Professional Education Committee*  

Competency-Based Theory and Science of the Athletic Training Milestones  
Eric Sauers, PhD, ATC, FNATA, A.T. Still University  
Hollie Walusz, MA, ATC, PES, Boston University  
Forrest Pecha, MS, LAT, ATC, St. Luke's Sports Medicine  

Using the Athletic Training Milestones to Assess Clinical Competence to Enhance Clinician Performance  
R. Mark Laursen, MS, ATC, Boston University  

The Active Attacker: How To Prevent, Prepare, and Perform in Times of Crisis, (I, III, V), Essential  
*Presented by the NATA Secondary School Athletic Trainers’ Committee*  

Breaking Point: Mental Health EAP for Potentially Violent Students
Stacey Ritter, MS, ATC, San Luis Sports Therapy

Collaboration, Communication and Care: The Link Between Athletic Trainer and EMS During an Active Attacker Event
Leslie Shaffer, CCT-P, NREMT-P, American Medical Response

Appropriate Implementation of Emergency Action Plan for Active Attacker Scenario: Best Practices and Methods
Brian Driscoll, LAT, ATC, Clark County School District
James Hamburg, MS, LAT, ATC, Clark County School District

**Feature Presentation, 10:45a.m. - 12:45p.m.**
For Better or for Worse? Chasing the Elusive Symmetry, (V), Essential

Symmetry in Soccer Before and After Injury
J. Craig Garrison, PhD, PT, ATC, Texas Health Sports Medicine

Symmetry in Baseball Before and After Injury
Ellen Shanley, PhD, PT, OCS, ATI Physical Therapy

Symmetry in Swimming Before and After Injury
Bobby Jean Lee, PT, DPT, SCS, Texas Health Sports Medicine

**Learning Lab, 10:45a.m. - 12:45p.m.**
Manual Therapy for the Dancer's Lower Extremity, (IV), Essential
Megan Bane, MS, ATC, OSU Wexner Medical Center

Science Meets Practice: Advancing Utilization of Upper Extremity Plyometrics Based on Kinematic, Kinetic and Volume Dosage Evidence, (IV), Advanced
Bryan Riemann, ATC, Georgia Southern University

**Peer-to-Peer Discussion, 11:45a.m. - 12:45p.m.**
Identifying and Mitigating Lower Leg Injury Risk Factors in Tactical and Traditional Athletes, (I), Advanced
Timothy Mauntel, PhD, ATC, Walter Reed National Military Medical Center
Kenneth Cameron, PhD, MPH, ATC, Keller Army Community Hospital

**Special Topic, 11:45a.m. - 12:45p.m.**
Advanced Implementation of Weight Charts to Determine Hydration Changes Across Sport Settings, (I, II), Essential
Susan Yeargin, PhD, ATC, University of South Carolina

The Traditional AT's Guide to the Performing Patient, (IV), Essential
Laura Mertz, MS, LAT, ATC, Behind the Scenes Medical Consulting
Free Communication Oral Presentations, 12:00 p.m. - 1:00 p.m.

Professional Issues Facing College Athletic Trainers’ Work-Family Guilt in Collegiate Athletic Trainers
12:00 p.m. - 12:15 p.m.
Kelsey Rynkiewicz, MS, LAT, ATC, University of Connecticut

The Work Life Balance: A Perspective of the Athletic Trainer's Spouse
12:15 p.m. - 12:30 p.m.
Stephanie Mazerolle, PhD, ATC, FNATA, University of Connecticut

Leadership, Job Satisfaction and Intent to Leave in NCAA Division I Athletic Trainers
12:30 p.m. - 12:45 p.m.
Lindsey Schroeder, EdD, LAT, ATC, University of North Carolina at Wilmington

The Relationship Between Burnout and Substance Use in Collegiate Athletic Trainers
12:45 p.m. - 1:00 p.m.
Leslie Oglesby, PhD, LAT, ATC, University of Southern Mississippi

Free Communication Oral Presentations, 12:00 p.m. - 1:15 p.m.

Lower Extremity Post-Traumatic Osteoarthritis and Cartilage Health
The Epidemiological Study of Post-Traumatic Knee Osteoarthritis After Cruciate Ligament Injury in the Young & Middle-Aged Population Using Korean National Health Insurance Sharing Service 201,051 Cohort Data
12:00 p.m. - 12:15 p.m.
Sae Yong Lee, PhD, ATC, CSCS, Yonsei University

Talar Cartilage T1rho MRI Based Volume is Associated with Talar Cartilage Ultrasonography Based Thickness
12:15 p.m. - 12:30 p.m.
Kyeongtak Song, MS, ATC, University of North Carolina at Chapel Hill

Dominant to Non-Dominant Limb Measures of Knee Cartilage Thickness
12:30 p.m. - 12:45 p.m.
Hsin-Min Wang PhD, China Medical University

Ankle Cartilage Composition Associates with Physical Activity and Fear-Avoidance in Those with Chronic Ankle Instability
12:45 p.m. - 1:00 p.m.
Erik Wikstrom, PhD, ATC, University of North Carolina at Chapel Hill

Ultrasonographic Analysis of Acute Cartilage Morphological Alteration Following Conventional Rehabilitative Exercises in Patellofemoral Pain Individuals
1:00 p.m. - 1:15 p.m.
Hyunjae Jeon, MS, ATC, University of North Carolina at Charlotte

Free Communication Oral Presentations, 12:15 p.m. - 12:45 p.m.

Role and Hiring of DAT Credentialed Athletic Trainers’
Academic Employers’ Impressions Regarding the Qualifications of Athletic Trainers with the Doctor of Athletic Training Degree  
11:45 a.m. - 12:00 p.m.  
Cailee Welch Bacon, PhD, ATC, A.T. Still University

Academic Employers’ Perceived Benefits and Deterrents of Hiring a Doctor of Athletic Training Credentialed Faculty Member  
12:00 p.m. - 12:15 p.m.  
Lindsey Eberman, PhD, LAT, ATC, Indiana State University

The Role of Academic Debt and Benefits to the Profession on the Interest of Professional Post-Baccalaureate Athletic Training Students’ in a Doctor of Athletic Training Degree  
12:15 p.m. - 12:30 p.m.  
Gary Cohen, MS, LAT, ATC, Old Dominion University

**Free Communication Oral Presentations, 12:30 p.m. - 1:45 p.m.**

**Head Impact Outcomes**

Kinematic Head Impacts and Subjective Responses in Youth Australian Footballers  
12:30 p.m. - 12:45 p.m.  
Mark Hecimovich, PhD, ATC, University of Northern Iowa

Comparison of Head Impact Mechanisms and Type of Play for Women’s Lacrosse Over 4 Years  
12:45 p.m. - 1:00 p.m.  
Jessica Riquelme, University of Lynchburg

Efficacy of 3D Multiple Object Tracking and Head Impacts and Cognitive Performance in Division III Lacrosse  
1:00 p.m. - 1:15 p.m.  
Erin Marchesseault, ATC, LAT, Southeastern Louisiana University

Comparing Men’s Soccer Head Impact Characteristics Over a Three Year Time Period  
1:15 p.m. - 1:30 p.m.  
Karlie Ennis, University of Lynchburg

Effect of Head Impacts on Vestibular Function  
1:30 p.m. - 1:45 p.m.  
Theresa Miyashita, PhD, ATC, Concordia University at Chicago

**Special Topic, 1:15 p.m. - 2:15 p.m.**

Using Continuous Quality Improvement to Evaluate and Improve Your Concussion Management Plan, (V), Advanced  
Tamara Valovich McLeod, PhD, ATC, FNATA, A.T. Still University

**Can We Patch the Potholes?: Treatment Options and Expectations for Return-to-Sport and Long-Term Outcomes for Articular Cartilage Injuries, (IV), Advanced**  
Jennifer Howard, PhD, LAT, ATC, Appalachian State University
Free Communication Oral Presentations, 1:15p.m. - 2:15p.m.

Real Life Education Standardized Patients and IPE

Athletic Trainers’ Preparation, Expectations and Outcomes From a Standardized Patient Encounter
1:15p.m. - 1:30p.m.
Brett Boddicker, DAT, LAT, ATC, Indiana State University

The Long-Term Impact of Standardized Patient Encounters During Professional Education on Athletic Training Professional Practice
1:30p.m. - 1:45p.m.
Amanda Jarriel, PhD, ATC, LAT, Georgia College & State University

Experiences of Professional Athletic Training and Clinical Psychology Students After Participating in an Interprofessional Standardized Patient Encounter
1:45p.m. - 2:00p.m.
Stacey Gaven, PhD, LAT, ATC, University of Indianapolis

Assessing Changes in Student Knowledge and Attitudes Following an IPE Experience
2:00p.m. - 2:15p.m.
Scott Heinerichs, EdD, LAT, West Chester University

Free Communication Rapid Fire Presentations, 1:15p.m. - 2:15p.m.

The Burden of Injury In The Performing Arts

Posterior Tibial Nerve Entrapment in a Classical Ballet Dancer
Leslie Deleget, MS, ATC, Harkness Center For Dance Injuries

Concussion Recovery in Two Dancers: A Case Study
Lauren McIntyre, ATC, Harkness Center For Dance Injuries

Epidemiology of Injury and Illness in a Mid-Atlantic WGI Independent World Indoor Drumline
Giulia Disanto, NREMT, VAEMT, CSCS, Furman University

Incidence of Musculoskeletal Injuries in a World-Class Drum Corps
Zachary Dangel, MS, LAT, ATC, Indiana University

Injury Incidence and Exposure in Collegiate Dancers - A 2-Year Prospective Study
Victoria Fauntroy, LAT, ATC, George Mason University

Dancers’ Perceptions and Utilization of Strength Training and Conditioning: A Qualitative Approach
Miriam Rosenthal, MS, LAT, ATC, University of Maryland

Evaluating Movement Dysfunctions in Performing Artists Using the Selective Functional Movement Assessment
Jena Hansen-Honeycutt, DAT, LAT, ATC, George Mason University

Do FMS Scores Predict Injury Risk in Collegiate Dancers - A Prospective Analysis
Sarah Coogan, MS, LAT, ATC, George Mason University
Sessions, 1:15p.m. - 3:15p.m.
From the Office to the Field: The AT and Multicredentialing Orthopedic Technologists Certified Bridging the Gap, (V), Essential
Presented by the National Association of Orthopaedic Technologists
Katherine Bagnato, LAT, ATC, OTC, BSN Medical
Anthony Lungstrum, ATC, OTC, Missouri Orthopaedic Institute

A Three Year Review of the AT's Understanding and Confidence of Critical Incident Stress Management, (V), Essential
Presented by the NATA ATs Care Committee
David Middlemas, EdD, ATC, CCISM, Montclair State University
Kathleen Scott, MS, ATC, National Athletic Trainers' Association
Patrick Karns, MA, ATC, ProAdvocates

The Relationship of the Team Dentist to the Sports Medicine Team, (I, II, III), Essential
Presented by the Academy of Sports Dentistry

Immediate vs Delayed Treatment
Hans Stasiuk, DMD, Stasiuk Dentistry

Digital Fabrication of Custom Mouthguards and Oral Appliances
Byron Blasco, DMD, Byron Blasco LTD

Shoulder Instability, Clavicle Fractures, AC Joint Injuries to the Contact Athlete, (II, IV), Advanced
Presented by the American Orthopedic Society for Sports Medicine
Pre-season, In-Season and Post-Season Management
Brian Busconi, MD, UMass Memorial Health Care

Anterior and Posterior Dislocations
Jennifer Brodeur, MS, ATC, CES, UMass Memorial Health Care

Mid-shaft Clavicle Fractures
Anthony Cerundolo, MS, ATC, LAT, College of the Holy Cross

Feature Presentation, 1:15p.m. - 3:15p.m.
Achilles Heel No Longer! Prevention Strategies and Specific Interventions for Achilles Tendon Injury in Elite Athletes, (I, IV), Advanced
Tendon Basics: A Review of Current Evidence on Importance of Mechanical Load in Tendon, and Implications of Load Tolerance on Injury Prevention, Rehabilitation and Performance
Jodi Schneider, MS, ATC, Princeton University

How to Design a Protocol to Assess Tendon Properties and Reduce Tendon Injury Through a Competitive Season
Sarah Lyons, MS, ATC, PES, Stanford University
Effective Implementation of Rehabilitation Techniques to Treat Achilles Tendinopathy in Elite Runners
Kimberly Detwiler, MS, ATC, CSCS, University of Colorado

Learning Lab, 1:15p.m. - 3:15p.m.
MARCH Trauma Assessment: Best Practice Recommendations for Implementing the MARCH Assessment in the Pre-Hospital Environment, (II, III), Advanced
Edward Strapp, TPc, FPC, ATC, Maryland State Police

Treating Adolescent Throwing Injuries, (II, IV), Essential
Herman Hundley, AT, CSCS, Nationwide Children's Hospital

Free Communication Oral Presentations, 1:30p.m. - 3:00p.m.
Risk Factor for Shoulder and Elbow Injuries in Overhead Athletes
Predicting Injury History in High School Pitchers from Two- and Three-Dimensional Kinematics
1:30p.m. - 1:45p.m.
Aaron Struminger, PhD, ATC, Eastern Michigan University

Preseason Neck Mobility is Associated with Throwing-Related Shoulder and Elbow Injury, Pain and Disability in College Baseball Pitchers
1:45p.m. - 2:00p.m.
Laurie Devaney, PT, ATC, PhD, University of Connecticut

Relationship Between Spine and Hip Range of Motion, Hip Strength and Injury Risk in Collegiate Baseball Athletes
2:00p.m. - 2:15p.m.
Steven Tucker, PhD, ATC, University of Central Arkansas

Predictors of Shoulder Injuries in Female Collegiate Swimmers
2:15p.m. - 2:30p.m.
Eric Lippincott, PhD, LAT, ATC, Lock Haven University

The Acute:Chronic Workload Ratio is Associated with Injury in Adolescent Tennis Players
2:30p.m. - 2:45p.m.
Guadalupe Mexicano, ATC, LAT, Texas State University

The Acute: Chronic Internal Workload Ratio in Relation to Joint Pain in Adolescent Tennis Players
2:45p.m. - 3:00p.m.
Kristin Aguilar, ATC, LAT, Texas State University

Free Communication Oral Presentations, 2:00p.m. - 3:15p.m.
Emergency Care Considerations In The Secondary School Setting
Athletic Directors’ Perceptions Regarding the Value Of Athletic Trainers Employed in the Secondary School Setting
2:00p.m. - 2:15p.m.
Stephanie Clines, PhD, LAT, ATC, Sacred Heart University

The Odds of Having Venue-Specific Emergency Action Plans When Standing Orders are in Place in Schools with an Athletic Trainer
2:15p.m. - 2:30p.m.
Brad Endres, MS, ATC, CSCS, University of Connecticut

Prevalence of a Best Practice Emergency Action in Montana Class AA Secondary Schools
2:30p.m. - 2:45p.m.
Alexandra Davis, University of Connecticut

Adherence to State Concussion Legislation in High Schools with Varying Levels of Access to Certified Athletic Trainers
2:45p.m. - 3:00p.m.
Jacob Resch, PhD, AT, University of Virginia

Knowledge and Health Behavior of School Nurses’ Related to Emergency Action Plans Adoption in Secondary School Athletics
3:00p.m. - 3:15p.m.
Samantha Scarneo, PhD, ATC, Korey Stringer Institute

Special Topic, 2:15p.m. - 3:15p.m.
Marching Band/Color Guard Injuries and Treatment Emphasizing the Role of Athletic Trainers for These Artistic Athletes, (I, II, IV), Advanced
Mary Mundrane-Zweiacher, MPT, ATC, CHT, Premier Physical Therapy and Sports Performance
Myofascial Interventions: An Evidence-Based Update, (II, IV), Essential
Scott Cheatham, PhD, DPT, ATC, CSU Dominguez Hills

Olympic Lifts in Injury Prevention and Rehabilitation, (I, IV), Essential
Brian Gearity, PhD, FNSCA, ATC, Denver University

Free Communication Oral Presentations, 2:30p.m. - 3:30p.m.
Experiences of ATs Providing Medical Care to Elite Athletes
Experiences of Athletic Trainers Working in the Professional Setting
2:30p.m. - 2:45p.m.
Katelyn Zweigle, DAT, LAT, ATC, Indiana State University

Experiences of Athletic Trainers Working in the Professional Setting
2:45p.m. - 3:00p.m.
Nick Spangler, DAT, LAT, ATC, Indiana State University

Collegiate Athletic Trainers’ Experiences with External Pressures Faced During Medical Care Decision-Making
3:00p.m. - 3:15p.m.
Alicia Pike, MS, ATC, University of Connecticut
Identification of Professional Values for The Athletic Training Profession: A Pilot Study
3:15 p.m. - 3:30 p.m.
Carrie Baker, PhD, ATC, University of Tennessee At Chattanooga

Free Communication Oral Presentations, 2:30 p.m. - 3:30 p.m.
Injury and Wellness In Public Safety Individuals
The Influence of Firefighter Equipment and Gear on Dynamic Postural Stability
2:30 p.m. - 2:45 p.m.
Roger Kollock, PhD, ATC, CSCS, University of Tulsa

Barriers to Promoting Injury and Illness Prevention in the Fire Service: A Qualitative Report From Fire Chiefs
2:45 p.m. - 3:00 p.m.
Kenneth Games, PhD, LAT, ATC, Indiana State University

Time-Loss From Work Due to Musculoskeletal Injuries in Public Safety Employees: A Systematic Review
3:00 p.m. - 3:15 p.m.
Elisa Guerra, DAT, LAT, ATC, University of Arizona

Fire Chiefs Perceived Barriers to Reporting Mental and Behavioral Illnesses in the Fire Service
3:15 p.m. - 3:30 p.m.
Bradley Jackson, MS, LAT, ATC, Indiana State University

Free Communication Rapid Fire Presentations, 3:15 p.m. - 4:15 p.m.
Nutrition Related Screening
Disordered Eating Risk and Body Image Dissatisfaction in Physically Active College-Aged Students
Courtney Bradley, ATC, SCAT, University of South Carolina

Disordered Eating Behaviors and Body Image Factors Influencing Body Mass Index in Male High School Athletes
Sarah Tracey, Marshall University

Clinical Use of the EAT-26: Prevalence of Eating Disorder Risk in Male and Female Collegiate Student-Athletes During Non-Anonymous Screening
Jordan Crills, LAT, ATC, West Chester University of Pennsylvania

Comparing Blood Serum Values of Vitamin D and Calcium in Division I Female Athletes
Katie Lyman, PhD, ATC, NREMT, North Dakota State University

Serum Vitamin D Levels are Less Associated with Bone Mineral Density in Athletes Living in the Southern United States
Jeffrey Parr, PhD, LAT, ATC, University of Southern Mississippi

Special Topics, 3:30 p.m. - 4:30 p.m.
The Relationship Between Carpal Kinematics and Wrist Pain in the Athlete, (I, IV), Essential Rachel Fraser, OTR/L CHT, Hartford Healthcare
**Sessions, 3:30p.m. - 5:30p.m.**

Sports Vision Training Theory to Application, (I), Essential
*Presented by the American Optometric Association - Sports Vision Section*
Derek Cunningham, OD, Dell Laser Consultants
Keith Smithson, OD, Northern Virginia Doctors of Optometry
Fraser Horn, OD, Pacific University

Your Profession Under Attack Threats to Your Practice, (V), Advanced
*Presented by the NATA Government Affairs Committee*
Scot Raab, PhD, AT, ATC, Northern Arizona University
Amy Brugge, EdD, LAT, CHDA, Minnesota State University at Mankato
Shannon Fleming, MA, ATC, Board of Certification

Post-Professional Advancement in Athletic Training: Roadmap to the Future, (V), Essential
*Presented by the NATA Post Professional Education Committee*

Educational Pathways in Athletic Training: The Current Road Map
Jordan Hamson-Utley, PhD, LAT, ATC, University of St. Augustine for Health Sciences

Educational Pathways in Athletic Training: Making Data-Driven Decisions
Bonnie Van Lunen, PhD, ATC, FNATA, Old Dominion University

Educational Pathways in Athletic Training: The Future Road Map
Barton Anderson, DHSc, AT, A.T. Still University

Safety, Well-Being and Cheerleading, (I), Essential
Understanding Cheerleading and Reducing Injury Rates at all Levels of Cheerleading
Karen Lew Feirman, DHSc, LAT, ATC, USA Cheer
Summer Ott, PsyD, McGovern Medical School at UT Health

**Feature Presentation, 3:30p.m. - 5:30p.m.**

Get Off My Back!: Why Moods and Attitudes Are an Important Sport-Related Concussion Consideration, (I, II), Advanced

Getting More From Your Baseline Testing Through Patient-Oriented Outcomes
Tamara Valovich McLeod, PhD, ATC, FNATA, A.T. Still University

Emotion Dysregulation: What Is It and Why Should You Care?
Melissa Fraser, PhD, ATC, Texas State University

Psychosocial Pressures Experienced by Athletic Trainers: The Effect on Concussion Outcomes and Collaborative Management Strategies
Melissa Kay, MS, ATC, University of North Carolina at Chapel Hill

**Learning Lab, 3:30p.m. - 5:30p.m.**
Neuromuscular Function Concepts, (IV), Advanced
Joseph Micca, PT, DPT SCS, Buffalo Bills

Gail Ayotte, MSEd, ATC, LAT, Rockettes Radio City Music Hall

FREE COMMUNICATION POSTER PRESENTATIONS

ACL and Meniscal Injury
Brain Activation During Anterior Knee Joint Loading
Kyoungyoun Park-Braswell, MS, ATC, University of North Carolina at Greensboro

Clinical Evaluation of Sport-Related Meniscal Pathologies: A Report From the Athletic Training Practice-Based Research Network
Kaitlyn Jones, ATC, A.T. Still University

Effects of Knee Injury History on Femoral Articular Cartilage Response Following a Competitive Rugby Season: A Prospective Observational Study
Miyuki Hori, ATC, Ritsumeikan University

Assessment of The Foundational Evidence Supporting the Efficacy of ACL Ipps: A Systematic Review
Yu-Lun Huang, MS, ATC, Oregon State University

Effect of Delayed Anterior Cruciate Ligament Reconstruction on the Medial Meniscus: A Critically Appraised Topic
Hayden Lounsbury, Duquesne University

Patient Reported Outcomes for Use of Platelet Rich Plasma in the Treatment of Post Surgical Pain
Meghan Maume Miller, MS, ATC, Ohio State University

Cognitive Training Improves Joint Stiffness Regulation and Knee Function in ACLR Patients
Yong Woo An, PhD, ATC, New Mexico State University

Relationship Between Quadriceps Corticomotor and Neuromechanical Function After ACL Reconstruction
Sarah Scheurer, MS, ATC, University of Toledo

Acute Upper Extremity Case Studies
Posterior Shoulder Instability in a Professional Basketball Player: A Level 3 CASE Report
Michelle Anumba, PT, DPT, University of Texas at Arlington

Acute Subluxation and Multi-Directional Instability in a Male, Collegiate Basketball Patient: A Level 3 Exploration Case Study
Connor Burton, DAT, LAT, ATC, Indiana State University

Acromioclavicular Joint Sprain in a College Football Athlete
Robert Fouda, Florida Gulf Coast University
Bilateral Sternoclavicular Joint Reconstruction in a Collegiate Swimmer with Chronic Sternoclavicular Joint Instability
Hanna Mundy, MS, ATC, The Steadman Clinic

Outpatient Clinic Setting: Thoracic Pain in a Recreational Weightlifter
Joanna McClelland, MS, LAT, ATC, University of Florida

The Evaluation and Treatment of Scapular Body and Coracoid Process Fractures in a High School Football Athlete: Level 4 CASE Study
Andrea Harpestad, University of South Florida

Biceps Tendon Pathology in a Minor League Baseball Athlete
Lexa Smith, Florida Gulf Coast University

Distal Triceps Brachii Tendon Rupture and Ulnar Collateral Ligament Sprain in a Collegiate Basketball Player
Mark Gildard, MS, ATC, Marist College

Acute First Rib Fracture in a Batting Athlete
Danielle Vitale, University of Georgia

Adaptations In Those with Chronic Ankle Instability
The Relationship Between Mechanical Laxity and Perceived Instability Among High School Athletes with Chronic Ankle Instability
Yoshiki Imazaki, MA, ATC, CSCS, Alderson Broaddus University

Single Leg Landing Energetics in Individuals with Chronic Ankle Instability
Cathleen Brown, PhD, ATC, Oregon State University

The Effect of Progressive Visual Occlusion on Postural Control Response in Those With and Without Chronic Ankle Instability
Lilly VanDeMark, LAT, ATC, University of North Carolina at Chapel Hill

Differences in Sensory Organization Between Chronic Ankle Instability and Control Participants
Adam Rosen, PhD, ATC, University of Nebraska at Omaha

Sagittal Ankle ROM Gain During Squats Associated with Increased Frontal Hip and Transverse Knee ROM for Chronic Ankle Instability Individuals
Christine Samson, PhD, ATC, Southern Utah University

Spinal Reflexive Excitability of Lower Extremity Musculature in Individuals With and Without Chronic Ankle Instability: A Systematic Review and Meta-Analysis
Ryan McCann, PhD, ATC, CSCS, Old Dominion University

Plantar Cutaneous Sensation Deficits in Those with Chronic Ankle Instability: A Systematic Review
Matthew Rivera, DAT, LAT, ATC, Indiana State University
Corticomotor Excitability in the Lower Extremity Musculature in Individuals with Chronic Ankle Instability: A Systematic Review and Meta-Analysis
Ashley Suttmiller, MSEd, ATC, Old Dominion University

Kinesiophobia Found to be Associated with Chronic Ankle Instability
Jeremy Schimmel, George Mason University

Predicting Movement Strategies in Chronic Ankle Instability
J. Ty Hopkins, PhD, ATC, FNATA, Brigham Young University

Chronic Ankle Instability Impairs Submaximal Force Steadiness
Hyunwook Lee, MS, ATC, LAT, Brigham Young University

Decreased Isometric Peak Torque at the Ankle And Hip in Young and Middle-Aged Adults with Chronic Ankle Instability
Katherine Bain, ATC, PT, University of Kentucky

Abductor Hallucis Cross-Sectional Area And Activation in Individuals with Chronic Ankle Instability
Christina Jones, LAT, ATC, University of Kentucky

Towards a More Functional Test in Athletes with a History of Lateral Ankle Sprains
Sarah Coronel, MEd, ATC, University of Virginia

Sagittal Plane Knee Angle at Initial Contact From Landing is Related to Self-Reported Function in Individuals with Chronic Ankle Instability
Jacob Hartzell, LAT, ATC, University of Kentucky

Bacterial and Fungal Infections
Effectiveness of Four Decontamination Techniques on Strength Training Equipment After Use in an NCAA D-II Collegiate Weight Room
Lawrence Bogner, Saginaw Valley State University

Sanitation Efficacy of 70% Isopropyl Alcohol vs Blue Light Treatment on Reusable Electrodes
Rylie Miller, Southern Utah University

Bacterial and Fungal Infections Initiated From Corneal Abrasion in a Collegiate Basketball Athlete
Nicolle Galletti, MA, Florida International University

Staphylococcus Aureus Bacterial Infection of Biceps Femoris– Level 4 Clinical CASE Study
Heather Key, SCAT, ATC, University of South Carolina

Baseline Concussion Assessments
Association Between Symptom Cluster Severity and Baseline Neurocognitive Scores in Collegiate Student-Athletes
Thomas Bowman, PhD, ATC, University of Lynchburg
Prevalence of Unexpected Brain MRI Findings and Relative Risk of Concussion Diagnosis During Sports Participation: A Prospective Longitudinal Imaging Study
Kim Barber Foss, MS ATC, Cincinnati Children's Hospital

Quality of Life and Presence of Symptom Clusters During Baseline Neurocognitive Testing
Emily Asewicz, University of Lynchburg

Current Evidence in Management of Concussion Baseline Testing in ADHD and Learning Difficulties Patients
Mindi Fisher, DAT, LAT, ATC, Temple University

Gender Differences on Baseline Child Sport Concussion Assessment Tool 5th Edition Performance Among Middle School Students
Patricia Kelshaw, MS, LAT, ATC, George Mason University

The Association of Baseline Child Sport Concussion Assessment Tool 5th Edition Performance and Primary Language Spoken at Home Among Middle School Students
Vanessa Abrams, MAT, LAT, ATC, George Mason University

Examining Age Differences on Baseline Child Sport Concussion Assessment Tool 5th Edition Performance Among Middle School Students
Eric Piatchek, LAT, ATC, George Mason University

Baseline Differences Between High School and Collegiate Athletes on the Sport Concussion Assessment Tool 5 (SCAT5)
Kyle Petit, MS, ATC, Michigan State University

Examining Neurocognitive Performance Across Varying Levels of College Contact Sports
Abigail Bretzin MS, ATC, Michigan State University

Case Studies
Comparison of Secondary School Boys’ and Girls’ Lacrosse Injuries Sustained Above the Transverse Plane
Sara Quetant, LAT, ATC, Med, Datalys Center for Sports Injury Research And Prevention

Outcomes Following Multi-Ligament Knee Reconstruction and Novel Meniscus Radial Repair Technique: Return to Olympic Level Skiing.
Kevin Berning, MS, ATC, The Steadman Clinic

Non-Contact Femoral Fracture with No Preexisting Pathology in a High School Football Player: Level 4 Clinical CASE Study
Treven Gezella, LAT, ATC, University of Florida

Parsonage Turner Syndrome in a Tactical Athlete: A Case Study
Savannah Bailey, DAT, LAT, ATC, A.T. Still University

Hemiplegic Migraines in a Female Collegiate Basketball Student-Athlete
Kathryn Waddell,
Idiopathic Intracranial Hypertension in a Collegiate Softball Player: A Case Report
Adam Thompson, PhD, LAT, ATC, Indiana Wesleyan University

Closed Displaced Fracture of the Coracoid Process and Vitamin D Deficiency in Adolescent Athlete
Michael Palumbo, Youngstown State University

Torn Plantar Plate and Os Trigonum Irritation in Female Collegiate Soccer Athlete
Kara Trella, Youngstown State University

15-Year-Old Athlete Disqualified from Sport After Accumulation of Concussions
Anne Skjoldahl, Florida International University

Plantar Plate Fracture in Male Collegiate Football Player
Joel Acosta, Florida International University
Spontaneous Knee Effusion in an Adolescent Soccer Player: Level 4 Case Study
Christopher Joyce, PhD, ATC, LAT, University of North Florida

Myositis Ossificans Leads to Coupled Diagnosis of Vastus Intermedius Tear in Elite Junior Hockey Athlete
Amy Abdelrasoul, Youngstown State University

Mild Jugular Compression Reduces White Matter Alterations in High School-Aged Males Playing Collision Sports
Megan Nye, ATC, Select Physical Therapy

**Concussion Assessment Techniques**

Factors Affecting the Timed Tandem Gait Test in Healthy Physically Active College-Aged Individuals
Ashley Littleton Santo, PhD, LAT, ATC, Towson University

Motor Performance During Single and Dual-Task Administration of a Novel Dual-Task Assessment for Sport Concussion
Nicholas Erdman, MS, AT, University of Virginia

The Influence of Dual Task Paradigm on Reaction Time Utilizing a Light Board
Nicholas Hattrup, ATC, CSCS, A.T. Still University

Exploring the Effects of a Neck Strengthening Program on Neurocognition Following Purposeful Soccer Heading
Katelyn Waring, University of Lynchburg

Examination of Concussions and Their Effect on Functional Movement Screen Scores in Collegiate Athletes
Sarah Roger, MS, ATC, University of Delaware

Establishing Reliability of the Dynavision D2 Reaction Tests in Female Adolescent Athletes
Hannah Gray, ATC, Xavier College Preparatory
Concussion History
Comparison of Symptom Frequency and Symptom Severity in Recently Concussed Athletes and Orthopedic Controls
Phillip Worts, MS, LAT, ATC, Tallahassee Orthopedic Clinic

Concussion History Influences Neurovascular Coupling Response to Visual Tasks in Special Operations Forces Personnel
Patricia Combs, Med, ATC, University of North Carolina at Chapel Hill

Dynamic Postural Stability Deficits in Collegiate Athletes with a History of Concussion
Nicholas Heebner, PhD, ATC, University of Kentucky

The Influence of Concussion History on Postural Stability in Collegiate Athletes
Daniel Rosenblum, University of Virginia
Ultrasound Imaging of Neck Musculature in Individuals With and Without History of Concussion
Samantha Paisz, MEd., ATC, University of Virginia

The Influence of Concussion History on Kinesiophobia in Collegiate Athletes
Kyle Manetz, University of Virginia

Persistent Neurological Impairment is Not Present Six Months Following Unrestricted Return-To-Play From Concussion
Xavier Thompson, MS, ATC, University of Virginia

(GT)N Promotor Polymorphisms and Concussion Recovery: An Exploratory Study
Jane McDevitt, PhD, LAT, ATC, Temple University

Characteristics and Cost Savings of a Telehealth Consultation Service For Sport-Related Concussion
Shelli Herseth, MA, ATC, Barrow Neurological Institute

Test-Retest Reliability of the Brief Symptom Inventory-18 In United States Service Academy Cadets: Findings from the NCAA-DOD CARE Consortium
Haley Bookbinder, MEd, ATC, The Geneva Foundation - West Point Military Academy

Effect of Concussion History on Instrumented and Clinical Balance Performance
Jennifer Gaudet, LAT, ATC, Apache Junction High School

The Treatment of Sports-Related Concussion with Co-Morbid Whiplash: A Systematic Review
Rebecca Ramirez-Mckinley, DAT, LAT, ATC, Salve Regina University

Self-Reported Sports and Recreational Concussion History in Male Collegiate Gymnasts
Rebekah Gardiner AT, ACT, LMT, A.T. Still University

Concussion Recovery Outcomes
Predicting Time to Symptom Resolution in Collegiate Athletes Diagnosed with Sport Concussion: A Cross-Validation Study
Jasmine Monge, University of Virginia
Relationship Between Symptom Score and Cognitive Test Performance Following Concussion in High School and Collegiate Athletes
Adam Lake, MED, ATC, CSCS, Cleveland Clinic

The Effects of Aerobic Exercise on Post-Concussion Symptoms in Patients with Persistent Symptoms
Timothy Kulpa, DAT, LAT, ATC, Temple University

Headache Impact Test-6 Scores Pre-to Post-Concussion In Service Academy Cadets
Steven Malvasi, LAT, ATC, Keller Army Community Hospital

**Concussion Visual Assessment**
Effect of Administrative Variance on Near Point of Convergence in a Health, Active Population
Ian McGinnis, LAT, ATC, Temple University

Pre-Season Baseline and Post-Concussion Near Point of Convergence in High School and College Student-Athletes: Findings From the Active Rehab Study
Anna Klotz, LAT, Froedtert Hospital Sports Medicine

The Effect of Sex, Sport Participation and Concussion History on Gaze Stabilization in Division I Collegiate Athletes
Carolina Quintana, MA, ATC, University of Kentucky

Accommodative Insufficiency in Pediatric And Adolescent Student-Athletes Following Sport-Related Concussion
Christina Vander Vegt, MS, ATC, University of North Carolina at Chapel Hill

Normative Values for Near Point of Convergence in High School Student Athletes
Anna Griffiths, MS, ATC, University of South Florida

Examining Near Point of Convergence in High School Athletes
Wes Sellars, MS, LAT, ATC, Premier Physical Therapy & Sports Performance

Comparison of King-Devick Test and Senaptec Sensory Station Scores at Preseason in High School and Collegiate Athletes
Emily Manfresca, MS, AT, Ohio University

The Relationship Between the Impact and Senaptec Neurocognitive Assessments
Lexus Blunt, MS, AT, Ohio University

Clinical Utility of The Senaptec Sensory Station, Impact and King-Devick as Concussion Assessment Tools
Michelle Spataro, Ohio University

Age Related Vestibular and Ocular Motor Symptom Outcomes Following Sport-Related Concussion
Christopher Tomczyk, MS, LAT, ATC, Michigan State University

Test-Retest Reliability of a Coincidence Anticipation Timing Assessment: Implications for Concussion Management
Kou Yang, University of North Carolina at Chapel Hill

The Effect of an Interval Fatigue Protocol on Vestibular/Ocular Motor Screening Performance
Jenna Ratka, MS, LAT, ATC, Temple University

**Concussions In Female Athletes**  
Comparing the Incidence of Head Impacts Sustained in Conference Versus Non-Conference Women’s Soccer Games  
Courtney Acors, University of Lynchburg

The Effect of Hormonal Contraceptives on Length of Recovery in Female Collegiate Athletes  
Holly Carrington, University of Virginia

The Influence of Gender Differences on Neck Strength and Head Acceleration During Soccer Heading: A Systematic Review  
Rebecca Carson, Saginaw Valley State University

Concussion Prevention Strategies: A Survey of Division I and Division II Female Soccer Teams  
Kori Jeffries, MS, LAT, ATC, University of Nevada at Las Vegas

Return-To-Play Protocols Following Sport-Related Concussion in NCAA Gymnastics  
Alison Horner, AT, ATC, Dignity Health

**Cryotherapy And Thermal Modalities**  
The Heating Rates of Intramuscular Tissue Using a Portable Ultrasound Unit: An Exploratory Study  
Ke’La Porter, Western Carolina University

Effects of Ten-Sessions of Strengthening Exercise With or Without the Use of Cryo-Electrotherapy on Quadriceps Function in Individuals with Anterior Knee Pain: A Randomised Clinical Trial  
Yuyeon Roh, Kyung Hee University

Temperature Effects of a Novel Iceless Cryotherapy/Thermotherapy Device in Humans  
Mark Merrick, PhD, ATC, FNATA, Ohio State University

Synergistic Effects of Ice and TENS on Knee and Hip Neuromechanics During Painful Running  
Sunku Kwon, MS, LAT, ATC, University of Utah

**Education**  
Differences in Spatial Ability and Mental Effort Among Health Professions Students  
Saskia Richter, PhD, ATC, A.T Still University

Accuracy of Athletic Training Student Performance Factors for Determining BOC Exam First-Time Pass Outcomes  
Zachary Hobson, BS, ATC,

Athletic Trainers’ Selection Behaviors Related to Multi-Session Continuing Education Conferences  
Adam Babiarz, DAT, LAT, ATC, Indiana State Univeristy

Cultural Competence of Athletic Training Educators  
Destinee Grove, LAT, ATC, Temple University
The Prevalence of Vocal Cord Dysfunction Education in Athletic Training Curriculum
Leslie Rippon, MS, ATC, Seton Hall University

Debrief Improves Athletic Training Students’ Confidence After Multi-Station Objective Structured Clinical Examination
Jamie Frye, PhD, LAT, ATC, James Madison University

Education and Research
Examining Historical Research Trends within The Journal Of Athletic Training Using Text Mining
James Farnsworth II, PhD, AT, Texas State University

Differences Among Post-Professional Athletic Training Students' Knowledge and Confidence of Evidence-Based Practice
Rachel Reimann, A.T. Still University

A Comparison of Post-Professional Athletic Training Students’ Accessibility to Resources and Perceived Challenges of Implementing Concepts of Evidence-Based Practice in Clinical Practice
Brittany Iaieannaro, ATC, A.T. Still University

Post-Professional Athletic Training Students’ Attitudes and Beliefs Regarding Evidence-Based Practice
Te Shondra Abner, MA, ATC, A.T. Still University

The Role of Curricular Content and Influential Factors on the Interest of Professional Post-Baccalaureate Athletic Training Students’ in a Doctor of Athletic Training Degree
Emma Hoffman, Old Dominion University

Epidemiology and Injury Risk
Gender-Specific Differences in Upper Quarter Closed Kinetic Chain Performance After Return To Play in Overhead Athletes
Youngwook Kim, MA, ATC, Utah State University

Functional Movement Pattern Proficiency is Similar Across Stroke Type Dominance in Collegiate Swimmers
Jessica Pokryfke, Nova Southeastern University

Erica Thornton, MS, LAT, ATC, A.T. Still University

The Effect of Previous Medical History on Student-Athlete Quality of Life
Rachael Watkins, University of Lynchburg

Quantifying External Load Among Collegiate Men’s Lacrosse Players: Implications for Position Specific Injury Risk
Bridget Sullivan, High Point University
External Loads In Collegiate Women’s Lacrosse Players Differ Throughout a Season and Between Event Types: Implications for Increased Injury Risk
Anna Myers,

Rib Stress Injuries Among Female NCAA Collegiate Rowers: A Prospective Epidemiological Pilot Study
Kate Madison, MS, LAT, ATC, Seattle Children’s Hospital

Factors Influencing Biomechanics During Functional Tasks
Athletic Surface Type Does Not Affect Landing Error Scoring System Scores
Emily Burbulys, California State University at Fresno

Validity of a Real-Time Clinical Checklist to Assess Jump-Landing Biomechanics of the Single Leg Hop for Distance
Annabelle Herron, MS, AT, Ohio University

The Relationship Between Knee Joint Biomechanics and Single Leg Hop Performance in High School Athletes
Kyle Thompson, MS, AT, Ohio University

The Influence of Fatigue on Sauté Jump Kinematics and Kinetics in Dancers
Erick Tuesta, ATC, California State University at Northridge

Influence of Anticipation and Dual-Tasking on Cutting Biomechanics in Healthy Males
Grant Norte, PhD, AT, ATC, University of Toledo

Does Restricting Anterior Movement of the Knees During a Barbell Back Squat Alter Lower Extremity Biomechanics?
Lucy Koshewa, MS, CSCS, University of Wisconsin at Milwaukee

Relationship Between Mechanics on Single Limb Stepdown and During Running Gait
Cassidy Schreiber, LAT, ATC, Montana State University

The Effects of a Fatiguing Run on Dynamic Balance
Jessica Tom, LAT, ATC, University of Nevada at Las Vegas

Relationship Between Functional Hop Performance and ACL-Injury Related Knee Biomechanics in the Sagittal Plane During a Single-Leg Jump Cut
Colin Mulligan, MA, ATC, Oregon State University

Acute and Delayed Effects of Fatigue on Biomechanical Risk Factors for ACL Injury
Darin Padua, PhD, ATC, University of North Carolina at Chapel Hill

Different Quadriceps Strength Characteristics Predict Sagittal Plane Movement During Activities of Daily Living and Sport Specific Movements.
Caroline Lisee, MEd, ATC, Michigan State University

Factors Contributing to Lower Limb Asymmetry in Healthy Adults Performing Unilateral Hopping Tests
Raya Booth, MS, ATC, Georgia Tech
Foot and Ankle Pathology Interventions
A Novel Technique for Improving Tibial Internal Rotation Range of Motion
Justin Stanek, EdD, ATC, Illinois State University

Validity of a Novel Cross-Line Laser for Predicting Lateral Plantar Pressure in Individuals with Chronic Ankle Instability
Danielle Torp, MS, ATC, University of North Carolina at Charlotte

Normative Data on Ankle Dorsiflexion Range of Motion Measured Using the Weight-Bearing Lunge Test
Rick Loutsch, DAT, ATC, Northwestern College

The Effect of the Figure-Eight on Sagittal Plane ROM During Prophylactic Ankle Taping of NCAA Division I Athletes
Adam Hollien, Southern Utah University

Ankle Bracing as a Mediator of the Influence of Attentional Foci on Landing Mechanics in Healthy Females
Mackenzie Haines, MS, ATC, University of Toledo

Individuals with Plantar Heel Pain Demonstrate Altered Foot Posture, Plantar Fascia Thickness and Plantar Cutaneous Sensation
Kathleen Hogan, ATC, LAT, Old Dominion University

Optimal Therapeutic Interventions Administered by Athletic Trainers in the Management of Pain and Function From Plantar Fasciitis: A Systematic Review
Bailey Liedel, Saginaw Valley State University

Plantar Pressure Analysis in Walking Orthoses After 1st Metatarsophalangeal Joint Arthrodesis
Dana Johnson, MEd, ATC, University of Virginia

Opioid and Non-Opioid Prescribing Rates for Ankle Sprains in Emergency Departments Across the United States Between 2006 And 2015
Kyle Kosik, PhD, ATC, University of Kentucky

Functional Movement Screening and Whole Body Assessment Technique
Movement Strategies Change Y Balance Test Performance Variability
Yo-Rong Chen, LAT, ATC, Texas Tech University Health Sciences Center

Video Analysis of the Injury Mechanism of Athletes at the 2017 Muju World Taekwondo Championship
Jeong HS, Yonsei University

A Comparison of Balance, Postural Sway, Jump-Landing Mechanics, Reaction Time and Visual Motor Processing Speed in NCAA Division II Athletes With and Without History of Concussion
Haley Anderson, MS, LAT, ATC, Sparta High School

Risk Classification of Army Reserve Officer Training Corps Cadets Based on FMS and Y-Balance Performance Testing
Jennifer Earl-Boehm, PhD, ATC, FNATA, University of Wisconsin at Milwaukee
Functional Movement Screen Improvement Over a 3 Month Period in Army Reserve Officer Training Corps
Samantha Atkielski, University of Wisconsin at Milwaukee

Examining the Functional Movement Screen and Y Balance Test Scores in a Cohort of Intercollegiate Athletes Before and After a Training Intervention
Jenna Liljeberg, MS, CSCS, University of Delaware

Whole-Body Reactive Agility Asymmetries Among Athletes with Concussion History are Modifiable
Gary Wilkerson, EdD, ATC, FNATA, University of Tennessee at Chattanooga

Gen Med Case Studies
Arteriovenous Malformation in a Collegiate Athlete: A Case Study
Kristen Moore, Gannon University

Diagnosis and Treatment of Idiopathic Benign Paroxysmal Positional Vertigo in Collegiate Dancers
Koreen Boydstun, University of Idaho

Nerve Hydrodissection Treatment for Chronic Exertional Abdominal Cutaneous Nerve Entrapment Syndrome: A Level 3 CASE Study
Cody Wimpee, University of Texas at Arlington

Blunt Trauma to the Colon in a Football Player—A Level 4 Case Study
Robert Casmus, MS, LAT, ATC, Novant Health, Forsyth Medical Center

Ibuprofen Induced Intestinal Bleeding Presenting as Crohn’s in a Collegiate Baseball Player: A Case Report
Brandon Warner, MEd, LAT, ATC, University of Texas at Tyler

Complex Regional Pain Syndrome in a Middle School Female Field Hockey Player
Mallory Winkler, LAT, ATC, Baylor Scott & White Texas Spine & Joint Hospital-Azalea Orthopedics

Repair of a Testicular Fracture in a Collegiate Baseball Player: A Case Study
Amelia Martin, Liberty University

Dystonia Diagnosis in Horseback Riding Patient
Leeza Jimenez, Florida International University

Grade 4 Kidney Laceration in a High School Football Player
Trayvon Simmons, Western Carolina University

Exertional Syncope of an Unknown Origin in a Collegiate Women's Basketball Player: A Level 4 Rare Events Case Study
Shelly Fetchen Dicesaro, PhD, LAT, ATC, California University of Pennsylvania
Idiopathic Chest Pain in Division I Collegiate Track and Field Athlete: A Case Study
Alyson Grimshaw, LAT, ATC, University of Central Florida

Psychogenic Nonepileptic Seizures in a Collegiate Diver: A Case Study
Nicole Skuratoni, Ithaca College

Idiopathic Gastroparesis in a Female Collegiate Swimmer
Sara Nestrowitz, Marist College

Recurrent Dizziness and Fainting in a Female Collegiate Rower: A Case Report
Kyle Bahr, LAT, ATC, University of Central Florida

DVT in D1 Collegiate Rower
Eric Linnell, MS, LAT, ATC, University of Wisconsin at Madison

Spontaneous and Atypical Rhabdomyolysis in a Collegiate Tennis Athlete
Jaime Fulcher, DAT, LAT, ATC, Indiana Wesleyan University

Exertional Rhabdomyolysis in an International Student Athlete
Jordan Carmosino, MS, LAT, ATC, Case Western Reserve University

Differences in Return-to-Play Between Two American Collegiate Football Players Diagnosed with Exertional Rhabdomyolysis: A Level 4 CASE Series
Daniel Bareis, ATC, LAT, CSCS, University of Nevada at Las Vegas

Paget-Schroetter Syndrome and Complications in a Division 1 Men’s Lacrosse Athlete
Justin Unislawski, Marist College

Hamstrings And Quadriceps
Relationships Between Quadriceps Thickness and Knee Extension Rate of Torque Development
Eun Wook Chang, PhD, ATC, Inha University

The Effects of Soft Tissue Flossing on Hamstring Flexibility and Lower Extremity Power
Zachary Maust, University of Lynchburg

Lower Extremity Injury Following a Hamstring Strain in Division 1 Collegiate Football Athletes
Jennifer Sanfilippo, MS, LAT, University of Wisconsin at Madison

Patients with Unilateral Anterior Knee Pain Present Bilateral Deficits in Quadriceps Neuromuscular Function and Hip Joint Flexibility: A Cross-Sectional Study
Sungwan Kim, Kyung Hee University

Hamstring Syndrome in Collegiate Track Athlete
Spencer Daddario, Youngstown State University

Quantitative Comparison of Individual Lower Limb Muscle Volumes Between Soccer and Basketball Players
Xue Feng, PhD, University of Virginia
Hydration in Various Settings
Fluid Replacement Behaviors of Active Firefighters
Whitney Graves, DAT, LAT, ATC, East Alabama Orthopaedics & Sports Medicine

Hydration Status and Perception of Fluid Loss in Male and Female University Rugby Union Players
Trev Muth, MS, LAT, ATC, Midland University

Perceived Gastrointestinal Distress Symptoms Among University Marching Band Musicians
Nancy Uriegas, LAT, SCAT, ATC, University of South Carolina

Hydration Status, Fluid Intake and Thirst Among University Marching Band Musicians
Susan Yeargin, PhD, ATC, University of South Carolina

Gastrointestinal Distress, Core Temperature and Hydration Among Marathon Runners Using and Not Using Nsaids
Melani Kelly, MS, LAT, ATC, University of Kansas

A Comparison of Sweat Rate and Sweat Sodium Concentrations Between the First and Second Hours of Running While Using Two Different Hydration Strategies
Danielle Hunt, LAT, ATC, West Chester University

A Comparison of the Sex Differences in the Physiological Effects of Drinking to Thirst Versus Drinking to a Generic Schedule During 2 Hours of Running in Thermoneutral Conditions
Michelle Stehman, LAT, ATC, The HEAT Institute at West Chester University

Low Back Pain Assessment and Rehabilitation
Muscle Activation of The Lumbo-Pelvic-Hip Complex During Incline Walking
Erika Zambarano, MS, AT, ATC, University of Toledo

Effectiveness of an Exercise Program on Range of Motion, Strength and Lumbopelvic Stability in Division I Collegiate Baseball Players
Shannon Meggs, PT, DPT, ATC, University of Southern California

Using Myokinesthetic™ System in Treatment of Low-Back Pain
Matthew Klein, Florida International University

Spondylolisthesis in a Field Hockey Player
Kelly Lumpkin, PhD, LAT, ATC, Liberty University

Pain Education with Therapeutic Exercise in Chronic Non-Specific Low Back Pain Rehabilitation
Evelyn Tocco, A.T. Still University

Muscle Activity Differences of the Lumbar Multifidus During Rehabilitation Exercises in Patients With and Without Non-Specific Low Back Pain
Kyle Morris, MEd, ATC, University of Virginia
Transverse Abdominis and Lumbar Multifidus Activity in Individuals With and Without Low Back Pain During Walking
Kaitlyn Hill, MEd, ATC, University of Virginia

Comparison of Core Muscle Activity In Patients with Non-Specific Low Back Pain, Patellofemoral Pain and Healthy Individuals in Static and Dynamic Positions
L. Colby Mangum, PhD, ATC, University of Central Florida

Lower Extremity Case Studies
The Role of Athletic Identity in the Etiology of Medial Tibial Stress Syndrome in Collegiate Runners
Leah Reeder, LAT, ATC, Texas State University

The Comparison of Sports-Related Stress Fractures Among Collegiate and High School Athletes
Christy Collins, PhD, Datalys Center For Sports Injury Research and Prevention

An Unusual Mechanism of Injury for Compartment Syndrome in a Collegiate Softball Player
Troy Siler, Idaho State University

Effectiveness of Surgical Repair Techniques for Ankle Dislocation with Weber B Fibular Fracture and Associated Complete Deltoid Ligament Rupture in a Collegiate Football Athlete
Emily Sagstetter, Purdue University

Spontaneous Hip Dislocations in a High School Basketball Player
Laurie Blunk, MS, LAT, University of Kentucky

Platelet-Rich Plasma Injection in a Second-Degree Strain of the Peroneus Longus
Heather Deal, Liberty University

Ankle Reconstruction and Microfracture Chondroplasty in a Basketball Player
Kelly Lumpkin, PhD, LAT, ATC, Liberty University

Hip Complications Post-Multiple Surgeries in a College Football Athlete
Sawyer Swanson, Florida Gulf Coast University

Foot Pain in a High School Girls' Basketball Player
David Jacobs, MA LAT ATC, University of Kentucky

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