

FREE COMMUNICATIONS PROGRAM

Monday, July 13, 2020

Oral Presentations 10:30 a.m. – 11:30 a.m.

Sport Specialization, (I, II)

The Association Between High School Cutting Policy and School Size With Sport Specialization Status and Multisport Participation

Mayrena Hernandez, MPH, LAT, ATC, University of Wisconsin at Madison

Early Sport Specialization and Subjective Hip & Groin Dysfunction in Collegiate Ice Hockey Athletes John Goetschius, PhD, ATC, Adrian College

Prior Sport Specialization is Associated With Lower Extremity Stress Fracture in Female Service Academy Cadets

Kenneth Cameron, PhD, MPH, ATC, John A. Feagin Jr. Sports Medicine Fellowship

Association Between Socioeconomic Status and Sport Specialization in High School Baseball Players Elizabeth Hibberd, PhD, LAT, ATC, University of Alabama

A Dyadic Analysis of Parent's Competitiveness and High School Athlete's Sport Specialization Dee Warmath, PhD, University of Georgia

Differences in Current Self-Reported Physical Activity Among Females With Varying Previous Sport Participation: A Report From the Active Women's Health Initiative Rachel Kleis, MS, LAT, ATC, University of Kentucky

Free Communications Awards Presentations, (II, IV, V)

The Experience of Professional Master's Athletic Training Students With Sexual Harassment During Clinical Education

Chaselyn Trentley, ATC, University of Lynchburg

Dry Cupping Therapy Improves Subcutaneous Hemodynamics and Pain Associated with Nonspecific Neck Pain

Stephanie Stephens, MS, University of Virginia

Limb Differences in Hamstring Muscle Function and Morphology 2-9 Years after Anterior Cruciate Ligament Reconstruction

Justin Rush, MS, ATC, University of Toledo

Gait Biofeedback and Impairment-based Rehabilitation for Chronic Ankle Instability: A Randomized Controlled Trial

Rachel Wolfe Koldenhoven, PhD, ATC, Texas State University



Neural Correlates of Knee Extension Exercise and Single Leg Hop Performance following Attentionally Focused Neuromuscular Training

Randy Schmitz, PhD, ATC, University of North Carolina at Greensboro

Tuesday, July 14, 2020

Rapid Fire Presentations, 9:00 a.m. – 10:00 a.m.

Social Determinants of Health in Athletic Healthcare, (I, II, V)

Socioeconomic Status Impacts Athletic Healthcare in U.S. Secondary Schools Robert Huggins, PhD, LAT, ATC,

The Impact of Sociodemographic Factors on Baseline King Devick Performance in High School Athletes Jessica Wallace, PhD, LAT, ATC, University of Alabama

The High School Athlete's Concussion Reporting Motivation in a Socioecological Context Andrew Winterstein, PhD, ATC, ATC, University of Wisconsin at Madison

The Relationship Between Athletic Trainers' Perceptions of and Experiences With Social Determinants of Health

Kelsey Picha, PhD, ATC, A.T. Still University

Athletic Trainers' Perceptions of and Experiences With Social Determinants of Health in the Secondary School Setting

Rhianna Freiburger, MS, ATC, A.T. Still University

Athletic Trainers' Perceptions of and Experience with Social Determinants of Health in the Collegiate and University Setting

Adrian Wright-FitzGerald, MS, ATC, A.T. Still University

Athletic Trainers' Perceptions of Social Determinants of Health Richelle Williams, PhD, ATC, Drake University

The Presence of Emergency Equipment in Secondary Schools With Athletic Training Services by Employment Provider

Erica Filep, MSEd, LAT, ATC, Korey Stringer Institute, University of Connecticut

Oral Presentations, 11:00 a.m. – 12:00 p.m.

Heat Illness Prevention Policies and Protocols, (I, II, III, V)

Athletic Trainers' Behaviors Considering the Adoption of Environmental Heat Policies in the Secondary School Setting

Samantha Scarneo-Miller, PhD, LAT, ATC, University of Connecticut

Exertional Heat Stroke Policy Adoption Across the Socio-ecological Framework Amanda Kuczo, University of Connecticut



Educational Factors, Facilitators and Barriers Associated With Implementation of the NATA-IATF Heat Acclimatization Guidelines

Aliza Nedimyer, MA, LAT, ATC, University of North Carolina at Chapel Hill

Emergency Medical Services Exertional Heat Stroke Protocols Across the U.S. Michael Szymanski, MS, LAT, ATC, University of Connecticut

The Ability of a Web-Based Questionnaire to Accurately Evaluate Best Practice Adoption in Secondary Schools

Zachary Malone, ATC, University of Connecticut

American Football Uniforms Cause Failures on the Heat Tolerance Test Ethan Launstein, Central Michigan University

Oral Presentations, 2:30 p.m. – 3:30 p.m.

Disablement and Quality of Life Among Athletes From Adolescents to Adults, (I, IV, V)

Health Related Quality of Life in Adolescent Athletes Pre and Post and Musculoskeletal Injury Nicholas Biello, MS, AT, Ohio University

Measures of Quality of Life in Middle School Students Utilizing the PedsQL Patricia Kelshaw, MS, LAT, ATC, George Mason University

Capturing the Patient Perspective at Return-to-Play Following an Ankle Sprain Injury: A Report from the Athletic Training Practice-Based Research Network

Ashley Marshall, PhD, ATC, Appalachian State University

Self-Perceived Lack of Recovery from Previous Injury Results in Lower Patient-Reported Outcome Scores and Increased Risk of Future Injury

Jennifer Tinsley, LAT, ATC, Appalachian State University

Disablement of the Physically Active in Former Division I Collegiate Athletes and Non-Collegiate Athletes Mallory Lorence, MS, AT, Ohio University

Current Health-Related Quality of Life is Lower in Former Division I Collegiate Athletes than in Noncollegiate Athletes: A Five Year Follow-up Janet Simon, PhD, AT, ATC, Ohio University

Wednesday, July 15, 2020

Rapid Fire Presentations, 9:00 a.m. – 10:00 a.m.

Adaptations in Overhead Athletes, (I, II)

Long Term Effects of Pitching on Muscle Characteristics of the Scapular Stabilizers in Professional Baseball Players

Ohsana Valle, MS, LAT, ATC, LaSalle University

Long-Term Effects of Pitching on Muscle Architecture of Posterior Rotator Cuff in Professional Pitchers Stephen Thomas, PhD, ATC, Temple University



Forearm Rotational Strength Characteristics Among Collegiate Baseball Players Using Hand-held Dynamometry

Jeffrey Williams, PhD, ATC, Franklin College

Relationship Between Shoulder Range of Motion, Strength and Posture and Injury Risk in Collegiate Baseball Athletes

Steven Tucker, PhD, ATC, University of Central Arkansas

Relationship Between Hip Range of Motion and Power Output in Collegiate Baseball Players Madison Osbourne, High Point University

Influence of Elbow Stretch on Flexor Carpi Ulnaris Motor Neuron Pool Excitability in Healthy Males Emily Loew, MS, ATC, University of Toledo

Plasma Concentration of Interleukin-10 and Interleukin-6 can Predict Pain at 48-Hours Following a Musculoskeletal Injury to the Shoulder External Rotator Muscles

Paul Borsa, PhD, ATC, University of Florida

Using A Pre-Season Movement Examination to Analyze Scapular Movement Patterns in NCAA Division I Swimmers

Oliver Silverson, MS, ATC, University of Minnesota

<u>Oral Presentations, 11:30 a.m. – 12:30 p.m.</u>

Mental Health Considerations for Athletic Trainers and Their Patients, (I, II, IV)

Examining ATC's Perceptions of Their Role in Athlete's Mental Health Leah Poloskey, PhD, ATC, CSCS, Merrimack College

Factors Influencing Stress and DS Among Collegiate Student-Athletes Kristina White, Baylor University

Psychosocial Characteristics of High-School Endurance Athletes Compared to Team Sport Athletes Olivia May, LAT, ATC, OTC, Children's Hospital Colorado

The Relationship Between Spiritual Well-Being and Burnout Among Collegiate Athletic Trainers Leslie Oglesby, PhD, LAT, ATC, University of Southern Mississippi

Preparedness, Confidence and Best Practices in Preventing, Recognizing, Managing Routine and Crisis Mental Health Cases in NCAA Affiliated Institutions Julia Young, ATC, Indiana State University

Mental Toughness, Anxiety and Depression Screening of Collegiate Athletes at Pre-Season, High-Stakes and Post-Season

Colleen Bohannan, MS, AT, ATC, University of Toledo



Oral Presentations, 3:00 p.m. - 4:00 p.m.

Health Consequences Following Concussion

Association of Lower Extremity Non-Contact and Contact Injuries With Previous Concussion History in Adolescent Athletes

Kevin Biese, MA, ATC, University of Wisconsin at Madison

Additional Injuries When Football Athletes Sustain Sport-related Concussion: Findings from the Ivy League-Big Ten Epidemiology of Concussion Study

Douglas Wiebe, PhD, Perelman School of Medicine

Survey Responses and Self-Reported Concussion History Identify Persistent Concussion Effects on Musculoskeletal Injury among College Football Players

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

Kinesiophobia is Unrelated to Acute Musculoskeletal Injury Incidence Post-Concussion Xavier Thompson, ATC, University of Virginia

Serum S100B is Increased in Special Operations Forces Combat Soldiers WIth Mild Traumatic Brain Injury History

Jacob Powell, MS, ATC, University of North Carolina at Chapel Hill

A Prospective Study of the Impact of Concussions on Health Outcomes in High School Football Players Timothy McGuine, PhD, ATC, University of Wisconsin

Thursday, July 16, 2020

Oral Presentations, 9:00 a.m. – 10:00 a.m.

Concussion Education and Decision Making, (I, II, IV, V)

The Experiences of Peer Educators Implementing a Novel Peer Concussion Education Program With Collegiate Student-Athletes

William Ernst, MA, LAT, Texas A&M International University

Development and Initial Testing of a Theory-Based Intervention to Improve Athletic Training Students' Concussion-Related Decision-Making Intentions

Melissa Kay, PhD, LAT, ATC, University of Southern Mississippi

Compliance with State Law Components of Sport-Related Concussion Protocols in Pennsylvania High Schools

Erica Beidler, PhD, LAT, ATC, Duquesne University

Perceived Support for Return-to-Learn in Concussion Management by Secondary School Athletic Trainers and School Nurses

Anne Russ, PhD, LAT, ATC, Temple University

Analyzing Sideline Concussion Assessment Scores Across Time to Guide Return-to-Play After Concussion Rachel Le, MS, ATC, University of Georgia



Gender Differences in Discussions and Reporting about Concussions Meredith Kneavel, PhD, La Salle University

On-Demand Rapid Fire Presentations

Athletic Training Clinical Education: Developing the Future Athletic Trainer, (V)

Role Ambiguity in Athletic Training Students Within the Clinical Setting Maegan Daniels, EdD, LAT, ATC, James Madison University

Athletic Training Student Application of the Core Competencies During Clinical Education: A Report From the Athletic Training Clinical Education Network

Cailee Welch Bacon, PhD, ATC, A.T. Still University

The Influence of Student/Preceptor Gender Dyads on the Role of the Athletic Training Student During Clinical Experience: A Report from the Athletic Training Clinical Education Network

Julie Cavallario, PhD, ATC, Old Dominion University

Preceptor Perceptions of the Immersive Clinical Environment in Athletic Training Education Cameron Eldred, LAT, ATC, Indiana State University

Self-Efficacy and Coping After an 18-Week Immersive Clinical Experience Melissa Snyder, PhD, LAT, ATC, Western Carolina University

Athletic Training Student Patient Encounter Characteristics During Immersive and Non-Immersive Experiences: A Report from the Athletic Training Clinical Network
Bailey Jones, ATC, Old Dominion University

Characteristics of Patient Encounters for Professional Athletic Training Students: A Report From the Athletic Training Clinical Education Network

Bonnie Van Lunen, PhD, ATC, FNATA, Old Dominion University

Becoming an Athletic Trainer: Development of Newly Credentialed Athletic Trainers Through the Transition to Practice

Ashley Thrasher, EdD, LAT, ATC, Western Carolina University

Black Athletic Trainers' Experiences Joining and Being Part of the Athletic Training Profession Alexis Britford, ATC, Ohio University

Chronic Ankle Instability, (I, II, IV)

Associations of Diaphragm Contractility with Postural Control, Health-Related Quality of Life and Perceived Instability in a Chronic Ankle Instability Population

Masafumi Terada, PhD, ATC, Ritsumeikan University

Athletic Trainers' Perception on Treating and Managing Ankle Sprains Revay Corbett, PhD, ATC, PES, University of Virginia



Effect of Ankle Braces on Dynamic Balance in Individuals With and Without Chronic Ankle Instability: A Systematic Review

Robert Reyburn, MS, Indiana State University

History of Ankle Sprain and Functional Instability in U.S. Officer and Enlisted Service Members at Entry to Secondary Training

Carolyn Dartt, MEd, ATC, Henry M. Jackson Foundation

Lateral Ankle Complex Hysteresis in Individuals With Chronic Ankle Instability Cathleen Brown Crowell, PhD, ATC, Oregon State University

Over-Shoe Stabilization System Does Not Change Plantar Pressure Distribution in Patients with CAI Abbey Thomas, PhD, ATC, University of North Carolina at Charlotte

Relationships Between Fear of Re-injury, Balance Self-Efficacy and Dynamic Balance Performance in Those with Chronic Ankle Instability

Ashley Suttmiller, MSEd, ATC, Old Dominion University

Sensory Contributions with Postural Control Constraints in Individuals With Unilateral Chronic Ankle Instability and Healthy Controls

Yuki Sugimoto, MS, LAT, ATC, University of North Carolina at Greensboro

The Role of Hip Strength Deficits on Dynamic Function in Those With Chronic Ankle Instability Paige Clawson, ATC, University of Kentucky

Transversus Abdominis Muscle Contractility Deficits of Individuals With Chronic Ankle Instability Ryan McCann, PhD, ATC, CSCS, Old Dominion University

Heads Up on the Latest Concussion Findings, (II)

Head Acceleration in Collegiate Divers

Tyler Wood, PhD, ATC, Northern Illinois University

Prevalence and Causative Factors of Improperly Fitted Helmets in Youth Football Leagues Susan Yeargin, PhD, ATC, University of South Carolina

The Effects of the 2nd Skull Skullcap® to Attenuate Forces Resulting From Foul Ball Impacts Into Catchers Masks in Baseball.

Rebecca Neal, ATC, NREMT, Adrian College

Pediatric Cognitive and Balance Performance at 4-Weeks Post-Concussion Does Not Differ by 5P Risk Classification

Elizabeth Teel, PhD, McGill University

Arterial Pulse Waveform Characteristics in Recently Concussed Female Athletes with Orthostatic Hypotension

Ryan Caruth, Seton Hall University

Does Sensation Seeking Behavior Predict Collegiate Student-Athletes' Concussion Care Seeking? Michelle Weber Rawlins, PhD, ATC, A.T. Still University



The Effects of Physical Exercise on Salivary microRNA Levels Thomas Campbell, MS, LAT, ATC, Old Dominion University

Age of First Exposure Influences Neurovascular Coupling in High School Football Athletes Patricia Roby, MEd, ATC, University of North Carolina at Chapel Hill

Secondary School Athletic Trainers' and School Nurses' Confidence in Assessment and Perceived Roles During Concussion Management

Jamie Mansell, PhD, LAT, ATC, Temple University

Lower Extremity Case Studies, (II, IV)

Pediatric ACL Reconstruction in a Skier Erin Boggs, LAT, ATC, The Steadman Clinic

Osteochondral Defects of the Knee: Arthroscopic Treatment With Bone Marrow Aspirate Concentrate and Biocartilage

Jessica Collum, Seton Hall University

Osteochondral Lesion in A Football Player: Late Diagnosis Marguerite Montjoy, MS, ATC, The Steadman Clinic

Traumatic Patellar Fracture in an Adolescent Football Player Following MPFL Reconstruction: A Case Study Katherine Helly, LAT, ATC, University of Kentucky

ORIF With a Bone Graft for an Anterior Mid-Tibia Stress Fracture in a Collegiate Basketball Player: Level 4 Clinical Case Study

Kelly Lumpkin, PhD, LAT, ATC, Liberty University

Pain Management Options for Post-Traumatic Ankle Osteoarthritis: A Case Study Miranda Kruse, MA, ATC, OTC, Vail Summit Orthopaedics & Neurosurgery

Iron Deficiency Anemia Induced Peripheral Neuropathy in an Adolescent Athlete: A Level 4 Rare Events CASE Study

Francesca Genoese, MS, LAT, ATC, Regis Jesuit High School

Management of an Absent Infrarenal Inferior Vena Cava in a Collegiate Dancer: A Case Report Laurel Trail, ATC, University of Texas at Tyler

Surgical Treatment of 1st Metatarsophalangeal Joint Kissing Lesions: Return to Professional Ballet Elizabeth Fioretti, MEd, LAT, ATC, The Steadman Clinic

Conservative Management of an Achilles Laceration in a Division I Collegiate Sprinter Shane Fitzpatrick, ATC, CES, University of Illinois



Muscular and Neural Adaptations Related to Lateral Ankle or Knee Injury, (I, II, IV)

Novel Brain Mechanisms Regulating Anterior Cruciate Ligament Injury Risk Biomechanics Utilizing a Motion Analysis System Integrated with Functional Magnetic Resonance Imaging During Lower Extremity Movement

Jed Diekfuss, Cincinnati Childrens Hospital Medical Center

Y-Balance Test as a Predictor of Lower Extremity Injuries in Division I Collegiate Football Players Tony Boucher, PhD, PT, ATC, Texas A&M University

Collegiate Soccer Athletes with a History of Recurrent Ankle Sprains Have Slower Visuomotor Reaction Time

Matthew Hoch, PhD, ATC, University of Kentucky

Neural Excitability of Fibularis Longus During Single-Leg Balance in Patients with Acute Lateral Ankle Sprain

Joosung Kim, MS, ATC, University of Miami

Gluteus Maximus Corticomotor Excitability of Individuals With Chronic Ankle Instability: A Pilot Study Trevor Thompson, MSAT, ATC, New York Jets

Contralateral Sensorimotor Connectivity is Related to Postural Control in the Non-Involved Lower Extremity of Older Adults With a History of Lateral Ankle Sprain

Katherine Bain, ATC, University of Kentucky

Postural Control Deficits Indicate Inadequate Neural Adaptation in Anterior Cruciate Ligament Reconstruction Patients

Yangmi Kang, MS, ATC, New Mexico State University

Measurements of Postural Control Error Signal During the Y Balance Test™ in ACL Reconstructed Individuals

Meredith Decker, MS, ATC, LAT, The University of Texas at Arlington

Preclinical Model of ACL Injury Reveals the Acute Time Course of Mitochondrial Dysfunction in the Vastus Lateralis

Steven Davi, MS, University of Connecticut

Non-Operative Management of a Proximal Anterior Cruciate Ligament Avulsion in an Adolescent Volleyball Player: A Case Study

Bridget Walsh, ATC, University of Kentucky

Tactical Athletes, (I, II, IV)

Association of Heart Rate Variability with Measures of Cognitive-Motor Status Among ROTC Cadets Ashley Grillo, University of Tennessee at Chattanooga

Association Between Symptom Burden at Initiation of a Graduated Return-to-Activity Protocol and Time to Return to Unrestricted Activity After Concussion in Service Academy Cadets
Michael Aderman, MS, ATC, U.S. Military Academy West Point



Effects of a Cognitive Load on Marksmanship Performance in ROTC Members Sean Buckley, MS, ATC, Nazareth College

A Testing Battery's Predictive Validity of Reporting an Injury During U.S. Army Basic Combat Training Amy Hand, PhD, SCAT, ATC, University of South Carolina

Examination of Referral Patterns During Army Basic Combat Training Rebecca Hirschhorn, MS, ATC, NRAEMT, University of South Carolina

Lower Extremity Loading Characteristics of Service Members With Transtibial Amputations During Drop-Landings from Varied Heights

Timothy Mauntel, PhD, ATC, Walter Reed National Military Medical Center

Benefits and Barriers Associated With Intention to Participate in an Exercise-Related Injury Prevention Program Within ROTC Cadets

Emily Gabriel, PhD, ATC, Mercer University

Ability of an Eye-Tracking Device for Detecting Concussion in Military Cadets: A Pilot Study Megan Houston, PhD, ATC, Keller Army Hospital

Multivariate Rate of ImPACT Failure in Post-Concussion Recovery in NCAA Athletes and Military Academy Cadets

Cynthia Marra, ATC, LAT, OTC, University of Florida

Circadian Rhythm Chronotypes and Sleep Quantity Related to Injury in Reserve Officers' Training Corps (ROTC) Cadets

Kara Radzak, PhD, ATC, University of Nevada at Las Vegas

Therapeutic Interventions, (II, IV)

Intramuscular Temperature of Rectus Femoris During and After Cold-Water Immersion: A Gender Comparison

Youngwook Kim, MA, ATC, Utah State University

Current Practices in Acute Musculoskeletal Injury Care: A National Survey of Athletic Trainers Tyler Beauregard, MS, ATC, Ohio State University

The Effects of Tissue Flossing on Muscular Tenderness in Collegiate Baseball Players Brandon Warner, MEd, LAT, ATC, Grand Canyon University

Dry-Needling of a Powerlifter With Cervicobrachial Pain Syndrome and Subscapular Nerve Impingement: A Level III Case Study

Grace Mills, Liberty University

Effectiveness of Talocrural and Fibular Mobilizations With Movement to Increase Ankle Joint Motion in Individuals With Chronic Ankle Instability

Cynthia Wright, PhD, ATC, Whitworth University



The Evaluation of Joint Mobilization Dosage on Measures of Motion in Individuals With Decreased Dorsiflexion and a History of an Ankle Sprain

Jennifer Meyer, LAT, ATC, Indiana State University

Conservative Management Improves Functional Movement and Clinical Outcomes in Patients with Nonarthritic Hip Pain

Ryan McGovern, PhD, LAT, ATC, Texas Health Sports Medicine

Effects of Blood Flow Restriction on Ratings of Perceived Exertion During Dynamic Balance Exercises in Individuals With Chronic Ankle Instability

Savannah Monette, MS, Adrian College

Analysis of Pronation in Recreational Runners Treated with Kinesio® Tape Janell Burkart, ATC, NREMT, North Dakota State University

Changes of Ankle Dorsiflexion Using Compression Tissue Flossing: A Systematic Review Devin Kielur, LAT, ATC, Indiana State University

On-Demand Oral Presentations

Clinician-Oriented Lower Extremity Assessment, (I, II, IV)

Lower Extremity Musculoskeletal Screening Tool Practices of Athletic Trainers in Collegiate and Secondary School Settings

Megan Fowler, DAT, ATC, Indiana State University

Midfoot Kinematics Using Dynamic Navicular Drop Tests: Assessing Alternative Approaches Laura Kehr, Southern Utah University

Intra-Session and Inter-Session Reliability of the Trunk and Hip Strength Measurements Using the Portable Tension Dynamometer

Edgar Garza, University of Texas at San Antonio

The Impact of a Theoretical Leg Length Discrepancy on Normalized Star Excursion Balance Test Reach Distance in Adolescent Patients With Chronic Ankle Instability

Mary Cain, PhD, ATC, University of North Carolina at Chapel Hill

The Relationship Between Human-Rated Errors and Tablet-Based Postural Sway During the Balance Error Scoring System in Military Cadets

Jeremy Ross, MEd, CSCS, University of Kentucky

Functional Balance Measures in Ballet Dancers With Varying Visual Input Kelley Wiese, MS, LAT, ATC, Indiana University



Jumping and Landing Biomechanics and Motor Control, (I, IV)

Sex-Specific Brain Activation During Single-Leg Movements

Kyoungyoun Park-Braswell, MS, ATC, University of North Carolina at Greensboro

Dual Cognitive-Tactical Performance on Knee Kinematics and Kinetics

Gillian McCarren, ATC, Army West Point Athletic Association

Mental Fatigue Modifies Quadriceps Activation During an Unanticipated Jump Landing Task Jasmine Cash, MS, Appalachian State University

Movement Control Differs With Age in Children

Emma Zuk, MS, ATC, University of Connecticut

Altered Ankle Kinematics as a Strategy to Reduce Hip Moments During a Drop Vertical Jump in Individuals with Femoroacetabular Impingement Syndrome

Kate Jochimsen, PhD, ATC, LAT, Ohio State University

The Effect of Fatigue on Movement Patterns Using the Landing Error Scoring System Alanie Welch, SCAT, ATC, University of South Carolina

Lower Extremity Joint Loading in Cartilage Health Following Injury, (II, IV)

Lower Extremity Joint Loading During Gait Changes From Three Months to Time of Return-to-Sport Following Anterior Cruciate Ligament Reconstruction (ACL-R)

Craig Garrison, PhD, PT, ATC, Texas Health Sports Medicine

Changes in Patellofemoral Joint T1? Magnetic Resonance Imaging Relaxation Times Following ACL Reconstruction

Michelle Boling, PhD, LAT, ATC, University of North Florida

Comparison of Femoral Cartilage Health Between Individuals With and Without Patellofemoral Pain - Ultrasonographic Quality Analysis

Hyunjae Jeon, MS, ATC, University of North Carolina at Charlotte

Talar Cartilage Deformation Following Static Loading Associates With Mechanical and Sensorimotor Variables in Those With Chronic Ankle Instability

Erik Wikstrom, PhD, ATC, University of North Carolina at Chapel Hill

Ultrasonographic Assessment of Acute Talar Cartilage Deformation Following Static and Dynamic Loading in Those With and Without Chronic Ankle Instability

Kyeongtak Song, PhD, ATC, University of North Carolina at Chapel Hill

Auditory Feedback Improves Measures of Plantar Pressure During Functional Tasks in Individuals With Chronic Ankle Instability

Danielle Torp, MS, ATC, University of North Carolina at Charlotte



Monitoring of Movement and Physical Activity, (I, II, IV)

The Association Between Self-Reported, Accelerometer and Heart Rate-Derived Training Loads in Collegiate Soccer Athletes

Daniel Aube, Highpoint University

Wearable Sensors Identify Interlimb Asymmetries During Return-to-Sport Tests in a Collegiate Downhill Skier After Unilateral ACL Reconstruction

Shane Murphy, PhD, LAT, ATC, University of Montana

Comparison of Free-Living Step Accumulation Among Adolescent Patients Six Months After ACL Reconstruction and Healthy Controls

Christopher Kuenze, PhD, ATC, Michigan State University

Individuals With ACL Reconstruction Spend Fewer Weekly Minutes in Moderate-to-Vigorous Intensity Step Accumulation Compared to Healthy Participants

Caroline Lisee, MEd, ATC, Michigan State University

Trail Running Surface Does Not Affect Vertical Tibial Acceleration Micah Garcia, MS, University of Toledo

Influence of Sagittal Trunk Position on Lower Extremity Muscle Activation in Runners Allison Frymier, MS, ATC, Eastern Michigan University

Neuromuscular Considerations Following ACL Injury, (II, IV)

Research Dominance Definitions May Not Identify Higher Risk Limb for Anterior Cruciate Ligament Injury Paul Cacolice, PhD, LAT, ATC, Westfield State University

Systematic Review and Meta-Analysis of the Hamstrings Muscles in Individuals With ACL Reconstruction, Part I: Neuromuscular Function

David Sherman, PT, ATC, University of Toledo

Quadriceps Strength Characteristics Do Not Significantly Improve From 6- to 9-months After Anterior Cruciate Ligament Reconstruction

Thomas Birchmeier, MS, ATC, CSCS, Michigan State University

The Influence of Quadriceps Rate of Torque Development on Limb-Symmetry in Knee Moment During Double-Leg Jump Landings in ACL-Reconstructed and Healthy Females

Yu-Lun Huang, PhD, LAT, ATC, University of Wisconsin at Eau Claire

Associations Between Quadriceps Function and Changes in Gait Biomechanics Between Level and Downhill Walking Following Anterior Cruciate Ligament Reconstruction

Derek Dewig, MA, ATC, University of North Carolina at Chapel Hill

Multi-Joint Control Strategies Do Not Differ Between Limbs During Single-Leg Triple Hop Landing in ACL Reconstructed Females

Colin Mulligan, ATC, Oregon State University



Optimizing Patient Care, (I, II, III, V)

Odds of Having Standing Orders by Employment Provider Type and Status in Secondary School Athletic Trainers

Ayami Yoshihara, MS, LAT, ATC, University of Connecticut

The Perception and Utilization of Student Aides in the Secondary School Athletic Training Setting Andrea Kovalsky, MS, ATC, Athletico

The Effect of Lacrosse Equipment on Time to First Chest Compression and First Automated External Defibrillator Shock

Megan Murphy, Seton Hall University

Instructor Versus Feedback Manikin Assessment of CPR Skills

Emily Evans, EdD, ATC, University of Lynchburg

The Effect of Lacrosse Protective Equipment on Cardiopulmonary Resuscitation and Automated External Defibrillator Shock

Thomas Bowman, PhD, ATC, University of Lynchburg

Experiences of Athletic Training and Emergency Medical Service Students After Participating in an Interprofessional Mass Casualty Simulation

Kirk Armstrong, EdD, ATC, James Madison University

Psychological Considerations and Physical Function Following Knee Injury, (I, IV)

Self-Report of Pain, Function, Improvement and Disablement at Return-to-Play Following a Knee Sprain Injury: A Report from the Athletic Training Practice-Based Research Network.

Kenneth Lam, ScD, ATC, A.T. Still University

Greater Helplessness and Lower Self-Efficacy are Associated With Deficits in Physical Function Across Recovery After ACLR

Julie Burland, PhD, ATC, CSCS, University of Connecticut

Do Patients With Depression or Anxiety Experience Greater Levels of Pain Catastrophizing Before and After ACL Reconstruction?

Megan Simon, MA, LAT, ATC, Emory University

Effects of Psychological Readiness on Biomechanics in Adolescent Athletes During Jump-Landing at Time of Return-to-Sports Following Anterior Cruciate Ligament Reconstruction

Shiho Goto, PhD, ATC, Texas Health Sports Medicine

Do Individuals with Patellofemoral Pain Exhibit Pain Sensitization?: A Meta-Analysis and Systematic Review

Kemery Sigmund, MS, AT, ATC, Concordia University at Wisconsin

The Relationship Between Injury-Related Fear and Physical Activity Levels in Patients with a History of Anterior Cruciate Ligament Reconstruction

Amy Barchek, LAT, ATC, University of Kentucky



Sports Injury Epidemiology and Surveillance, (I, II, IV)

Epidemiology of Boys' Club Lacrosse Injuries During the 2018 Summer Lacrosse Season lan McGinnis, MS, LAT, ATC, NXT Sports

Non-Time Loss and Time Loss Injuries in Secondary School Girls' Volleyball Athletes: A Report From the National Athletic Treatment, Injury and Outcomes Network
Kellie Bliven, PhD, ATC, A.T. Still University

The Incidence of Injuries in Youth Mountain Bike Racing Gregory Jancaitis, DAT, ATC, CSCS, Norwich University

Preparing for the Wildland Fire Season: Understanding Exercise and Injury History of Smokejumpers Valerie Moody, PhD, LAT, ATC, University of Montana

Epidemiology of Dance-Related Injuries Presenting to Emergency Departments in the U.S., 2014-2018 Joshua Honrado, MS, ATC, CSCS, Harkness Center for Dance Injuries

Reported Symptom Type and Time to Symptom Resolution Among Football Athletes in the Ivy League-Big Ten Epidemiology of Concussion Study

Bernadette D'Alonzo, MPH, University of Pennsylvania

Poster Presentations

Assessment of Overhead Athletes, (I, II, III)

Assessment of Upper Extremity and Trunk Neuromuscular Control in Throwing Athletes Drue Stapleton, PhD, ATC, CSCS, Rider University

Comparison of Arm Positions for Exercise of the Teres Minor Muscle During a Quadruped Position With Horizontal Abduction

Masaaki Tsuruike, PhD, ATC, San Jose State University

Concurrent Validity of an Electronic Version of the Kerlan-Jobe Orthopedic Clinic Overhead Athlete Shoulder and Elbow Score in Overhead College Athletes

Dan Tarara, EdD, ATC, LAT, High Point University

Determination of Kerlan-Jobe Orthopedic Clinic Scores in Competitive Tennis Players Alexis Walker, LAT, ATC, Lee Health-Lee School District

Inter-Rater Reliability of a Novel Movement Assessment Performed on Overhead Throwing Athletes Richard Boergers, PhD, ATC, Seton Hall University

Muscle Strength of Scapular Stabilizers in College Baseball Players With and Without a History of UCL Injury

Andy Waldhelm, PhD, PT, ATC, University of South Alabama

Relationship of a Novel Movement Assessment and Athletic Performance Tests in Softball Athletes Johnny Rodriguez, ATC, CFSC, Union High School



Upper Extremity Muscle Activation and Perceived Fatigue During Simulated Baseball Game Pitching Katsumi Takeno, MS, ATC, University of Toledo

Balance, (I, II, IV)

Abductor Hallucis Fatigue Influences Dynamic Balance Depending on Foot Type Leif Madsen, PhD, ATC, Indiana University

Change in Baseline BESS Performance Among High School Athletes Following Sport-Related Concussion Erin Baker, LAT, ATC, New Hampshire Musculoskeletal Institute

Relationships Between Direction-Specific Center of Pressure Outcomes and Lower Extremity Injury History in D-I Athletes

Stephen Glass, PhD, Radford University

The Effect of the TayCo External Ankle Brace on Dynamic Balance, Motion and Performance in Collegiate Athletes

Steven Smith, DAT, AT, ATC, University of Michigan

The Evidence for the Use of External Support to Control Subtalar Motion is Strong, but Outdated. A Systematic Review with Meta-Analysis

Jennifer Medina McKeon, PhD, ATC, CSCS, Ithaca College

The Investigation of Static and Dynamic Balance Among Levels of Joint Mobility Lauren Cox, DAT, ATC, Indiana State University

Visual Reweighting Using Stroboscopic Vision in Healthy Individuals Jaeho Jang, MA, ATC, University of North Carolina at Chapel Hill

Concussion Assessments and Insights from Stakeholders, (I, II, V)

Assessing Influencers of Perceived School-Level Concussion Care and Support Among Collegiate Student-Athletes

Christine Callahan, MS, University of North Carolina at Chapel Hill

Associations Between Contact/Collision Sport Participation and Key Concussion Care-Seeking Behaviors Among First-Year Collegiate Student-Athletes: The BANK Study Johna Register-Mihalik, PhD, LAT, ATC, University of North Carolina at Chapel Hill

Concussion Care Process Model Decreases Head CT Orders Among Providers in a Primary Care Setting Joshua Owen, MHS, LAT, ATC, Mission Hospital

Development of Vasovagal Syncope Following Sport Related Concussions in Collegiate Volleyball Player: Level Four Case Study

Rock Lee, University of Central Arkansas



Emergency Medical Technicians' Beliefs and Knowledge on Impact Related Concussions and Athletic Trainers' Duties

Stephanie Keator, University of Lynchburg

Exploring the Relationship Between Premorbid Depression or Anxiety and Baseline King-Devick Performance

Danae Delfin, ATC, CSCS, CES, University of Alabama

Factors Influencing Energy Expenditure and Energy Balance in Acute Sport Concussion Samuel Walton, PhD, LAT, ATC, University of North Carolina at Chapel Hill

Identifying Effects of Concussion on Behavioral and Hemodynamic Changes Using Functional Near-Infrared Spectroscopy

Allyssa Memmini, MS, ATC, University of Michigan

Intentions for Stakeholders to Intervene Following a Suspected Concussion in Collegiate-Sport Athletes Melissa Anderson, MS, University of Georgia

Long-Term Test-Retest Reliability of the BESS Test Using C3 Logix Platform in High School Athletes Melissa Hango, ATC, New Hampshire Musculoskeletal Institute

Parents' Emotions and Perception of the Long-Term Implications of Concussion in Youth Sport Sara Brenner, Duquesne University

Prefrontal Cortex Activation During Neurocognitive Test Using Functional Near-Infrared Spectroscopy (fNIRS) in Division-I Athletes Following Sports-Related Concussion

Hyung Rock Lee, PhD, LAT, ATC, University of Central Arkansas

Pupillary Responses Indicate Neurocognitive Processing Differences in Working Memory Following Concussion

Christina Vander Vegt, MS, LAT, ATC, University of North Carolina at Chapel Hill

Whole-Body Reactive Agility Testing Reveals Modifiable Impairments Among Elite Athletes With Self-Reported History of Sport-Related Concussion

Tyler Perry, MS, University of Tennessee at Chattanooga

Comparison of HRQL Across Recovery Following Sport-Related Concussion or Acute Ankle Injury: A Report From the Athletic-Training Practice-Based Research Network

Justin DiSanti, PhD, A.T. Still University

Concussion History is Associated with Elevated Physical and Psychological Symptomology in Former Collegiate Football Players

Avinash Chandran, PhD, University of North Carolina at Chapel Hill

Effects of Concussion History on Baseline Balance and Vestibular/Ocular Motor Assessment Haleigh Gray, ATC, University of Alabama



Interleukin-6 Concentrations are Not Affected by Concussion History, Lifetime Incidence, or Recency in Special Operations Forces Combat Soldiers

Jamie DeCicco, University of North Carolina at Chapel Hill

Sport-Related Concussion Recovery Trajectories Among Men's and Women's Collegiate Sports Abigail Bretzin, Phd, ATC, University of Pennsylvania

The Effect of Sex on Length of Recovery from Sport Concussion in Collegiate Athletes Holly Carrington, University of Virginia

Dance, Band and Performing Arts, (1)

Body Composition Measures and Injury Rates Within Collegiate Acrobatics and Tumbling Athletes Ashlyne Vineyard, MAT, LAT, ATC, Baylor University

Collegiate Dancers' Aerobic Fitness Remains Similar Across their Collegiate Careers Victoria Fauntroy, ATC, George Mason University

Examination of Eating Disorder Risk Among University Marching Band Artists Nancy Uriegas, MS, SCAT, ATC, University of South Carolina

Self-Reported Injury History and Health-Related Quality of Life in Competitive, Collegiate Baton Twirlers Breanna Dufour, ATC, Halifax County High School, Rehab Associates of Central VA

Upper Body Strength-Endurance and Power Norms in Healthy Collegiate Dancers: A 10-year Prospective Study

Sarah Coogan, MS, ATC, VATL, George Mason University

Impact of Turnout Variance on Static Balance in Collegiate Classical Ballet Dancers Marissa Ramos, MS, LAT, ATC, Indiana University

Education, (I, V)

Athletic Training Perceptions of Community Service and Civic Engagement Following a Service-Learning Experience

Kelli Snyder, EdD, ATC, University of Northern Iowa

Developing, Validating and Establishing Reliability of a Standardized Patient Evaluation Tool to Measure Healthcare Core Competency

Lindsey Eberman, PhD, ATC, Indiana State University

Educator and Preceptor Roles in Athletic Training Student Development Gary Cohen, ATC, Old Dominion University

Perceived Stress and Coping Skills in Professional Master's Level Athletic Training Students Emily Madrak, MS, ATC, LAT, Oklahoma State University

Practice-Based Research Experiences of Doctor of Athletic Training Degree Graduates Matthew Rivera, DAT, LAT, ATC, Indiana State University



Preceptors' Leadership Behavior Frequency Changes With Years of Experience Brandy Clemmer, EdD, LAT, Wingate University

Recruiting and Retaining Racially Minoritized Students into Professional Post-Baccalaureate Athletic Training Programs

Kimberly White, MA, LAT, ATC, Indiana State University

Standardized Patient Encounters Impact Teaching Pedagogy and Programmatic Improvements Jamie Frye, PhD, LAT, ATC, James Madison University

Emerging Modalities, (I, III, IV)

A Systematic Dry Needling Treatment Supports Recovery Post-Training for Division I Ice Hockey Athletes: Level 2 Exploration Case Series

Brian Brewster, MAT, AT, ATC, A.T. Still University

Intramuscular Heating Rates of a Chattanooga Intelect Legend XT® Therapeutic Ultrasound with a 3 MHz Frequency and 1.0 W/cm2 Intensity at Three Depths up to 2.5 cm.

Meghan Smith, ATC, North Dakota State University

Practical Blood Flow Restriction Rehabilitation in Patients With Acute Musculoskeletal Injury: A Case Series Dexter Lising, MS, LAT, ATC, Texas State University

The Effects of Blood Flow Restriction Training on Upper Body Strength of Collegiate Softball Athletes Destiny Lalaguna, Montana State University at Billings

The Effects of Dry Cupping Therapy on Grip Strength in Healthy Individuals Stephen Cage, MEd, ATC, LAT, University of Texas at Tyler

Treatment of a Collegiate Soccer Player Following Multi-Compartment Fasciotomies With Dry Needling: A Case Report

Diana Gallegos, ATC, University of Texas at Tyler

Environmental Stressors, (I, III)

Effect of Forearm Ice Towels on Cooling Rates Following Exercise-Induced Hyperthermia William Adams, PhD, ATC, University of North Carolina at Greensboro

Influence of Physical Characteristics on Thermoregulation and Predicted Heat Safety in Runners Rachel Katch, MS, LAT, ATC, University of Connecticut

Hydration and Physiological Measures of Heat Stress in High School Football Preseason Practice in the Heat

Rebecca Lopez, PhD, LAT, ATC, University of South Florida

Heat Tolerance Test Results Following A Runners First and Second Exertional Heat Stroke Episodes Rebecca Stearns, PhD, ATC, University of Conneticut



Gait, (II, IV)

Altered Lower Extremity Biomechanics Exhibited in Walking, Not Running Following Anterior Cruciate Ligament Reconstruction

Katherine Collins, MS, Michigan State University

Hamstrings-to-Quadriceps Strength Imbalance Associates With Coactivation During Walking Gait in Healthy Females

Grant Norte, PhD, ATC, CSCS, University of Toledo

Longitudinal Changes in Tandem Gait in Healthy Football Players During Single and Dual Task Tonya Parker, PhD, AT, ATC, Grand Valley State University

General Medicine, Trunk, Head and Face, (I, II, III, IV)

Apophysitis of the Left Anterior Superior Iliac Spine in High School Golf Athlete Andre Figueroa, Florida International University

Assessing the Readability of Metered-Dose Inhaler and Epinephrine Auto-Injector Pinterest Pins: A Content Analysis

Elizabeth Holmes, Saginaw Valley State University

Atypical Presentation of a Coccyx Dislocation in a High School Football Player Quentin Archuleta, ATC, Marshall University

Evaluation and Treatment of a Closed Temporal Fracture With Subsequent Hearing Loss in a Division II Collegiate Baseball Player

Anne McGrath, University of South Florida

Incarcerated Umbilical Hernia in a Female Volleyball Athlete

Marissa Sciabarra, LAT, ATC, Virginia Military Institute

Management of Collegiate Volleyball Player With Functional Scoliosis Caused by Leg Length Discrepancy: A Case Report

Marc Eilers, MS, ATC, Grand Canyon University

Management Of Lumbar Disc Herniation In A Division I Women's Basketball Player With Congenital Conjoined L5-S1 Nerve Roots-Level 4 Clinical Case Report

Claudia Simpson, Georgia Southern University

Nicotine Overdose in a High School Football Athlete

Levi Roberts, ATC, Marshall University

Pulmonary Contusion and Enlarged Spleen in a Collegiate Football Player Kyle Daly, Kean University

Pulmonary Emboli in a Collegiate Male Basketball Player: A Chronic Occurrence Marae Watkins, MS, LAT, ATC, Southern Arkansas University



Retinal Neovascularization in Collegiate Football Player: Level 4 Case Study Courtney Miller, MS, LAT, ATC, Jacksonville University

Right Lower Quadrant Pain in a Women's Soccer Player John Mosier, Ithaca College

Septic Bursitis in Competitive Cyclists: A Case Series
Adam Thompson, PhD, LAT, ATC, Indiana Wesleyan University

Vocal Cord Dysfunction in Women's Soccer James Keddy, Kean University

Orbital Blowout and Maxillary Sinus Fractures With Nerve Entrapment in a Semi-Professional Soccer Goalkeeper – Level 4 Clinical Case Report Sarah O'Connor, Georgia Southern University

Chronic Idiopathic Urticaria and Angioedema in a Division I Long Jumper Haley Holz, ATC, University of Illinois

Lyme Disease in a Women's Basketball Athlete Karli Dill, MA, ATC, Emory University

Return-to-Sport Following Bowel Perforation in a High School Athlete Maureen Burke, MS, LAT, ATC, Coordinated Health-Dunmore High School

Injury Epidemiology, (I, II, IV, V)

Demographic Characteristics and Their Association with Instantaneous Lower Extremity Injury Risk in a Division I Athletic Population

Jennifer Hogg, PhD, ATC, University of Tennessee at Chattanooga

Exploring Time between Primary and Subsequent ACL Reconstructions: A Preliminary Analysis Brooke Torres, ATC, Emory University

Patient, Injury and Treatment Characteristics of Hip Injuries Presenting to Athletic Training Clinics: A Report From the Athletic Training Practice-Based Research Network

Lusmer Quintana, ATC, A.T. Still University

Lower Extremity, (I, II, III, IV)

Utilization of the Landing Error Scoring System-Real Time (LESS-RT) to Detect Kinematic Changes Following Three Different Functional Exercise-Induced Muscle Damage Protocols

Justin Goins, PhD, ATC, CSCS, University of South Carolina

A Non-Contact Femur Fracture in a High School Football Player: A Case Study Victoria Hunt, Texas A&M University

A Unique ACL Tibial Avulsion Without Bony Fragment in an Adolescent Football Player Chelsea Richardson, ATC, OTC, Emory Healthcare



Cellulitis in Women's Soccer Preseason Gabrielle Gonzalez, Kean University

Conservative Treatment of a Fibular Torus Fracture in a Collegiate Football Player Jaclyn Ouellette, Florida International University

Cyclops Lesion Accompanied by Pigmented Villonodular Synovitis in a Collegiate Baseball Athlete Scott Freer, PhD, LAT, ATC, Barry University

Gluteal Activation and Discomfort During the Superimposed Burst Technique Between Healthy Males and Females

Neal Glaviano, PhD, ATC, University of Toledo

Iliac Crest Apophysitis in a Female Collegiate Distance Runner **Nicolas Merritt, DAT, ATC, Furman University**

Leg Pain in a High School Athlete

David Jacobs, ATC, University of Kentucky

Minimally Depressed Fracture Involving the Anterolateral Margin of the Lateral Tibial Plateau with Marrow Edema in a High School Football Player

Teresse Rehwoldt, Florida International University

Multiligament Knee Injury with Capsular Avulsion in a Collegiate Football Player James Galdieri, MS, LAT, ATC, East Stroudsburg University

Mysterious Presentation of Mid-Shaft Femoral Fracture Emily Malinak, Boston University

Non-Contact Femoral-Tibial Dislocation With Peroneal Nerve Palsy in a High School Football Linebacker Mason Briles, MS, LAT, ATC, Emory Healthcare

Non-Contact Total Knee Dislocation of the Posterolateral Corner in a College Football Player Kayli Rudd, Florida International University

Non-Operative Treatment of an Unstable Acetabulum Fracture in a Collegiate Football Player: A Case Report

Cody Oliver, LAT, ATC, University of Texas at Tyler

Non-Surgical Treatment for Medial Ankle Sprain with Avulsion Fracture Mark Perez, Florida International University

Post-Surgical Complications Following Hip Labral Tear Repair in Professional Hockey Player: A Level 4 Clinical Case Report

McKenzie Makar, LAT, ATC, Old Dominion University



The Development of Achilles Tendinopathy and Medial Tibial Stress Syndrome in Two Runners During an Experimental Transition to Maximal Running Shoes

Andrew Traut, MS, ATC, CSCS, Oregon State University

Tibial Tubercle Avulsion Fracture in Two Different High School Athletes Jenne DeAngelis, ATC, University of Kentucky

Torque Complexity of Maximal Knee Extensor Isometric Contraction in Individuals Following ACL Reconstruction

Stephan Bodkin, MEd, ATC, University of Virginia

Traumatic Intramuscular Hematoma of the Vastus Medialis Oblique and Vastus Intermedius in a High School Softball Player

Lauryn Lanzer, LAT, ATC, University of Kentucky

Two-Stage Revision Anterior Cruciate Ligament Reconstruction in a Professional Football Player Ricardo Squillantini, MSAT, ATC, OTC, The Steadman Clinic

Current Dynamic Warm-Up Practices in Secondary Schools Lauren Sheldon, MS, ATC, University of Connecticut

Individuals With Previous Exposure to Injury Prevention Programs Have More Positive Attitudes Towards Participating in Injury Prevention Programs than Those With No Previous Exposure Elisha Scott, Mercer University

Influence of Rating of Perceived Exertion on Collegiate Cross-Country Athletes' Running Biomechanics Alexandra DeJong, MEd, ATC, University of Virginia

Neuromuscular Characteristics Are Altered in Female Soccer Athletes Following 9-Weeks of Elevated Training Load

Elena D'Argenio, ATC, University of North Carolina at Chapel Hill

Preventive Training Programs Implemented During a Non-Traditional Season Provide Retention of Motor Control Improvements in Collegiate Soccer Athletes

Eleanor Beltz, PhD, ATC, CSCS, Emory & Henry College School of Health Sciences

Sprinters Report Poorer MTSS Outcomes Compared to Endurance Runners over the Course of a Competitive Track Season

Leah Balsamo, MS, LAT, ATC, West Chester University

The Relationship Between Lower Extremity Strength and Drive Leg Rate of Force Development in Softball Pitchers

Erin Pletcher, PhD, ATC, CSCS, Rowan University

Toe Out Angle During Squatting is Associated With Lower Extremity Structural Alignment Jeremiah Tate, PhD, East Tennessee State University



Management of a Proximal Femoral Stress Reaction Utilizing Incremental Running and Cyclical Bone Strengthening in a DI Track and Field and Cross Country Athlete

Jackson Brunner, LAT, ATC, University of Illinois

Sex Differences and Hip Muscle Strength After ACL-Reconstruction Amelia Bruce, MS, University of Virginia

The Effects of Virtual Reality Immersion on Drop Landing Biomechanics Philip Brazalovich, MS, LAT, ATC, Memorial Hospital of Union County

Anticipation of Jump Task Impacts Lower Extremity Biomechanics During A Jump-Cut Maneuver Zachary Ripic, MS, University of Miami

Mental Fatigue Impacts Ankle Joint Biomechanics During Anticipated and Unanticipated Jump-Stop Manuevers

Elisa Godoy, MS, Appalachian State University

The Effect of Anterior Cruciate Ligament Reconstruction on Circulating Biomarkers of Muscle Hypertrophy and Atrophy

Jae Hui Park, Inha University

Neither Sensory Nor Motor Threshold Transcutaneous Electrical Nerve Stimulation Alters Proprioception After Exercise-Induced Muscle Damage

Alan Needle, PhD, ATC, CSCS, Appalachian State University

Dis-inhibitory Interventions for Chronic Ankle Instability: A Systematic Review and Meta-Analysis Kyung-Min Kim, PhD, LAT, ATC, University of Miami

Perceptions and Psychological Behavior, (I, IV)

A Comparison of Hardiness Between Athletes and Non-Athletes in a Collegiate Setting Leah Kilchrist, LAT, ATC, MSAT, Texas State University

Effectiveness of In Vivo Exposure Therapy on Decreasing Injury-Related Fear in Patients Post ACL Reconstruction: An Exploratory Study

Shelby Baez, PhD, ATC, Michigan State University

Perceptions and Beliefs on Preventative Training Programs Amongst Female Collegiate Gymnasts Ja'Naya Alexander, MS, LAT, ATC, Thomas Jefferson University

Physical Activity and Quality of Life in Women With Current Injury: A Report From the Active Women's Health Initiative

Johanna Hoch, PhD, ATC, University of Kentucky

Sexual Behaviors of Collegiate Student-Athletes
Amanda Flanscha, SCAT, ATC, University of South Carolina



Differences in Perceived Sport Demands and Sport Specialization During High School Athletics in Male and Female Athletes

Amanda Fenton, University of Wisconsin at Madison

Professional Practice, (I, II, III, IV, V)

A Theoretical Model of Transition to Practice
Brianne Kilbourne, EdD, ATC, Emory & Henry College

Assessing Healthcare Professional' Knowledge of the Female Athlete Triad: A Pilot Study Allison Smith, MS, SCAT, ATC, University of South Carolina

Assessment of Leadership Education Through Graduates of Doctorate in Athletic Training Programs Elena Robinson, LAT, ATC, Indiana State University

Association Between Work Activities and Situations and Work-Related Injuries and Symptoms Among Athletic Trainers

Kristen Kucera, PhD, LAT, ATC, University of North Carolina at Chapel Hill

Athletic Trainer Services by Locale and Employment Provider in the Secondary School Setting: The Athletic Training Locations and Services Project 2019 Update

Kelly Coleman, MS, ATC, University of Connecticut

Athletic Trainers' Attitudes, Beliefs and Use of Patient-Reported Outcome Measures Vary by Educational Background

Jennifer Howard, PhD, LAT, ATC, Appalachian State University

Athletic Trainers' Perceptions of Accessibility to Healthcare Delivery Resources for Those Working Per Diem Services

Ellis Mair, ATC, Indiana State University

Athletic Trainers' Perceptions of Accessibility to Informatics Resources for Those Working Per Diem Services

Tara Armstrong, ATC, Indiana State University

Athletic Trainers' Perceptions of Accessibility to Legal Resources for Those Working Per Diem Services Alisha Pennington, MS, ATC, The ATvantage

Athletic Trainers' Perspectives of Telemedicine

Spencer Connell, ATC, ATC, CEIS, Indiana State University

Athletic Training and Wildland Fire: Providing Athletic Training Services to Smokejumpers Isabella Callis, MS, LAT, ATC, Missoula Bone and Joint

Auditing Medical Documentation: A Quality Improvement Project

Elizabeth Neil, PhD, ATC, Xavier University



Body Composition and Iron-Related Biomarkers are Influenced by Years of Cross-Country Collegiate Participation

Danielle McCormick, Weber State University

Clinical Utility of Mental Toughness Measures: A Systematic Review of Measurement Properties James Farnsworth, PhD, LAT, ATC, Texas State University

Delegation of Medical Authority from Supervising Physicians to Athletic Trainers in Texas Kristen Sims-Koenig, ATC, Christus Trinity Mother Frances

Educators' Perceptions of Student Competence in Athletic Training Education: A Report from the Athletic Training Clinical Education Network

Alicia Lacy, PhD, ATC, A.T. Still University

Emotional Intelligence Among Athletic Trainers
Ashley Harris, PhD, ATC, CSCS, Aurora University

Examination of Energy Needs and Dietary Prolife Among Male and Female Athletic Trainers Kacey Ohlemeyer, SCAT, ATC, University of South Carolina

Incoming Cadets Perception of Athletic Training Kristin Cunningham, Tarleton State University

Indiana Secondary School Athletic Directors Perceptions of Athletic Training Services and Influences on Hiring Athletic Trainers

Thomas Greffly, LAT, ATC, Indiana State University

Investigating the Relationship Between Self-Efficacy and Cardiopulmonary Resuscitation Quality in Certified Athletic Trainers

Lucas Lammert, LAT, ATC, NREMT, North Dakota State University at Fargo

Knowledge and Perception of Cannabis Amongst Health Care Students Anne Skjoldahl, Florida International University

Parental Perceptions of the Importance and Effectiveness of Patient-Centered Care Delivery Sadie Morway, AT, ATC, CSCS, Indiana State University

Perceived Leadership Self-Efficacy in Athletic Trainers Matthew Drescher, LAT, Indiana State University

Routine and Crisis Mental Health Policy Reviews in NCAA Affiliated Institutions Kelcey Granger, MS, Indiana State University

The Collegiate Student-Athletes' View of Patient-Centered Care in Athletic Training Services Ansley Redinger, LAT, ATC, Indiana State University



Work-Family Conflict Among Athletic Trainers Who are Parents in the Collegiate and Secondary School Settings

Kelsey Rynkiewicz, MS, NREMT, ATC, University of Connecticut

Work-Family Conflict Experienced by Collegiate Certified Strength and Conditioning Specialists Taylor Hoekwater, ATC, EMTB, Central Michigan University

Investigation of Athletic Trainers Self-Reported Uses of Electronic Medical Records Systems in the Collegiate Settings

Kendall Dennison, ATC, Indiana State University

Reaction Time-Decision Making, (I, II)

Association of Visual-Cognitive-Motor Integration With Core and Lower Extremity Injury in College Football Katherine Rogers, MS, ATC

Clinical vs. Functional Reaction Time Assessments Under a Dual-Task Paradigm: Implications for Post-Concussion Management

Landon Lempke, MEd, ATC, University of Georgia

The Reliability of an Upper-Extremity and Lower-Extremity Visuomotor Reaction Time Task Caitlin Brinkman, ATC, University of Kentucky

The Role of Task Demands on Decision Making in Dynamic Environments Jeromy Alt, MS, ATC, University of Cincinnati

Upper Extremity Case Studies, (II, IV)

Carpometacarpal Joint Fusion for Severe Post-Traumatic Arthrosis in a Professional Football Player Haley Simmons, MS, LAT, ATC, The Steadman Clinic

Chronic Inflammatory Demyelinating Polyradiculoneuropathy in a Division II Baseball Pitcher Bryce Lawson, MS, ATC, CSCS, Phoebe Putney Memorial Hospital

Chronic Type IV Acromioclavicular Joint Separation in a 25-Year-Old Recreational Ski Athlete Emma Young, LAT, ATC, The Steadman Clinic

Clinical Case Study: Ulnar Nerve Injury at the Wrist with Isolated Motor Symptoms Michael Donohue, ATC, OTC, Vail-Summit Orthopaedics and Neurosurgery

Conservative Treatment of Inferior Labral Tear, Chondral Defect and Non-Displaced Clavicular Fracture Following a Traumatic Shoulder Dislocation: A Case Report Lauren Simard, University of South Florida

Isolated Intramuscular Tear of the Triceps Medial Head in a Collegiate Football Athlete Kevin Rojas, Florida International University

Isolated Scapular Body Fracture in a High School Football Player Robert Casmus, LAT, ATC, Novant Health Sports Medicine



Parsonage-Turner Syndrome in a Female Collegiate Track Athlete Kelly Bachmann, Capital University

Return-to-Professional Football Following Latarjet Natalie Reynolds, ATC, CSCS, The Steadman Clinic

Scaphoid Lunate Advanced Collapse Wrist in a Collegiate Rugby Player Debbie-Ann Garricks, Florida International University

Traumatic Thoracic Injury in a Ninja/Parkour Athlete: A Level 4 Rare Events Case Study Ann Francis, Western Carolina University

Blood Biomarkers for Bone Remodeling are Expressed Differently Between Collegiate Cross-Country Athletes With and Without a History of Lower Extremity Stress Fracture Ryosuke Sakai, Weber State University

Vitamin D3 Supplementation May Spare Bone Mineral Density In Athletes During Periods of Intense Training

Jeffrey Parr, PhD, LAT, ATC, University of Southern Mississippi