

VNATA 2020 Final Program*

**Subject to Change.*

Monday, July 13, 2020 – Thursday, September 10

VNATA 2020 is open 24/7 with On-Demand Education, Free Communications Poster Presentations, and access to the virtual AT Expo.

EBP Sessions on Demand

Application of Precision Sports Medicine to the Management of Sport-Related Concussion, (I, II, IV, V)

Skill Level: Mastery

CEUs: 1



Gary Wilkerson, EdD, ATC, FNATA, University of Tennessee at Chattanooga

Chad Prusmack, MD, Rocky Mountain Spine Clinic

Precision Sports Medicine refers to a personalized approach to the prevention, diagnosis, and treatment of injuries that integrates all available information about an individual's genetics, environment, and lifestyle. Long-term effects of mild traumatic brain injury (mTBI) can include some combination of neurologic, vestibular, biomechanical, endocrine, metabolic, and immuno-inflammatory dysfunction. Emerging evidence indicates that repetitive mTBI can perpetuate a cascade of immune-based neurochemical events that may not produce any overt symptoms. Personalized interventions require consideration of numerous aspects of patient status that may interact with one another, including subtle changes in perception-action coupling that may precede development of progressive neurodegenerative disease. There is a need for clinicians to gain an understanding of Precision Sports Medicine in order to develop personalized interventions that may improve long term function.

At the conclusion of this session, participants will be able to:

1. Explain how Precision Sports Medicine principles can be applied to the evaluation and management of sport-related concussion.
2. Relate the interrelationships among different physiological subsystems that can initiate an autoimmune response and perpetuate inflammation within the brain.
3. Formulate a personalized plan to address an individual patient's unique set of factors that could increase susceptibility to long-term neurodegeneration and impaired function.

Enhancing Secondary School Athletics Health and Safety Policies: Examining the Evidence, the Progress and the Challenges, (V)

Skill Level: Essential

Theme: Heat

CEUs: 1

Douglas Casa, PhD, ATC, FNATA, Korey Stringer Institute, University of Connecticut
Seth Smith, MD, CAQ-SM, PharmD, University of Florida



It is estimated that nearly 7.9 million students currently participate in secondary school (SS) athletics in the US. Current best practices on preventing and managing sudden death and catastrophic injuries in SS athletics were published in 2013 and a summary statement on appropriate medical care standards for organizations sponsoring SS athletics was published in 2019. Unfortunately, injuries in SS athletes are increasing with 752 fatalities occurring from 1982 to 2015. Despite significant literature suggesting that implementation of best practices reduces the risk of catastrophic injuries in SS athletics, adoption of these best practices by state governing entities has not been universal up to this point. The purpose of this presentation will be to present the current best practice standards, the evidence to support them and identify facilitators and barriers to state implementation of these policies. Barriers to proper implementation of policies and procedures known to reduce the leading causes of death at the secondary school level remain despite published risk mitigation strategies

At the conclusion of this session, participants will be able to:

1. Describe state-level compliance with current best practices for preventing sudden death and catastrophic injury in SS by state.
2. Explain barriers and strategies for successful implementation of best practice health and safety policies surrounding sudden death and catastrophic injury in SS athletics using recent improvements and struggles in the state of Florida as an example.
3. Review successful implementation of best practices at the statewide level by states who have recently adopted policy changes.
4. Discuss future opportunities for ongoing policy changes to implement best practices in SS athletes.

Evaluation and Treatment of Peripheral Vestibular Dysfunction: Demystifying Benign Paroxysmal Positional Vertigo (BPPV), (II, IV)

Skill Level: Advanced

CEUs: 1

David Wilkenfeld, EdD, LAT, ATC, Moravian College



Vestibular dysfunctions, which can present as dizziness, vertigo, or disorientation / balance issues, are one of the major complaints reported following a head injury and are often associated with prolonged symptom reporting. Of these vestibular dysfunctions, Benign Paroxysmal Positional Vertigo (BPPV) is commonly associated with post-concussive symptoms and is the most common cause of vertigo in the general public, affecting approximately 2.4% of individuals across their lifespan. Although not outside of their scope of practice, many athletic trainers do not receive the appropriate training during their professional education to appropriately identify and treat these conditions. This presentation will help fill this professional practice gap by providing athletic trainers with an evidence-based approach to the evaluation and treatment of BPPV.

At the conclusion of this session, participants will be able to:

1. Describe the pathophysiology behind BPPV.
2. Relate clinical signs and symptoms with diagnostic test findings to accurately diagnose BPPV in the AT clinic.
3. Identify appropriate referrals, return to activity criteria, and documentation coding for patients with BPPV.

Got Data? Using Patient Care Documentation to Drive Clinical Decisions and Improve Care, (V)

Skill Level: Advanced

CEUs: 1



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

Health care informatics includes collecting, analyzing, and using health care data to inform patient care decisions. Health care informatics has been identified as a standard and core competency for professional and post-professional education, respectively, by the Commission on Accreditation of Athletic Training Education. Evidence suggests that healthcare informatics can facilitate patient care by informing clinical decisions and supporting quality improvement initiatives. Yet, athletic trainers may lack the appropriate knowledge and strategies to effectively leverage health care informatics during routine patient care. The purpose of this presentation is to introduce the concepts associated with more advanced usage of health care informatics in athletic training clinical practice.

At the conclusion of this session, participants will be able to:

1. Describe global efforts to foster data-driven decision-making in business, health care, and athletic training (eg, professional standards, post-professional core competencies).
2. Discuss strategies for collecting, organizing, and analyzing patient data (eg, use of spreadsheet software, electronic medical records) to support clinical decisions and quality improvement efforts.
3. Describe real-life examples of the using patient data to improve patient care (eg, use of electronic medical records to evaluate the use/non-use of Ottawa Ankle Rules to guide imaging referral decisions).

Treatment of Ankle Sprains & Instability: Linking Theory to Practice, (II, IV)

Skill Level: Advanced

Theme: Motor Learning

CEUs: 1



Jay Hertel, PhD, ATC, FNATA, University of Virginia

Ankle sprains remain the most common injury incurred during sports participation and approximately 40% of patients who incur ankle sprain develop chronic ankle instability. The preponderance of negative outcomes clearly represents a practice gap. An updated model of ankle instability will be presented that aims to synthesize the contemporary understanding of the etiology of ankle instability and serve as a framework for the clinical assessment and rehabilitation of ankle sprain and instability patients. The model describes how injury to the ankle ligaments leads to a collection of pathomechanical, sensory perceptual, and motor behavioral impairments that influence a patient's outcome. With an underpinning of the biopsychosocial model, the concepts of self-organization and perception-action cycles derived from dynamic systems theory, and a patient-specific neurosignature, stemming from Melzak's neuromatrix of pain theory, are incorporated into the model to describe the integration of these interrelationships.

At the conclusion of this session, participants will be able to:

1. Describe the theoretical underpinnings on Hertel & Corbett's updated model of ankle instability.
2. Apply Hertel & Corbett's model of ankle instability using the "assess-treat-reassess" process.
3. Establish patient-specific rehabilitation goals based on impairments identified during clinical assessment.

On-Demand Sessions

All Hands On Deck! The Athletic Trainer's Role in the U.S. Opioid Epidemic, (I, V)

Skill Level: Essential

CEUs: .75

Kimberly Wise, EdD, ATC, Bridgewater State University

James Leone, PhD, MPH, ATC, Bridgewater State University

The U.S. opioid epidemic may seem relatively new to some, however, upon closer examination and relying on epidemiologic data, the "epidemic" has had long-standing roots in U.S. history. For nearly 35+ years, opioid and related drugs have transformed how the American medical system approaches pain management and to this end, patients also have fundamentally changed in their perception of pain as well. As the visibility and availability of these classifications of drugs became more popular and ever-present in healthcare settings, personal use, self-medicating, and recreational use also surged. Before the medical and health community could get a grasp on how pervasive of an issue opioid-related drug use and abuse had become, the issue had blossomed into a full-blown epidemic. As agents of public health, Athletic Trainers are well-positioned to help mitigate the epidemic by initiating preventative action plans and using screening instruments such as the Screening, Brief Intervention, and Referral to Treat (SBIRT). This evidence-based approach aims to identify those at risk through selected screening, use an intervention protocol, and referral for accessible treatment before potential for abuse goes unmitigated.

At the conclusion of this session, participants will be able to:

1. Discuss the role of an athletic trainer in the shifting nature of the opioid epidemic.
2. Identify how healthcare policy can advance patient outcomes and overall population health by ameliorating the wide-reaching effects of opioid abuse, particularly in athletics.
3. Identify how Screening, Brief Intervention and Referral to Treatment (SBIRT), a comprehensive, integrated, public health approach may influence athletic use and abuse of opioids

An Athletic Trainer's Practical Guide to Utilizing Team-Based GPS Technology, (I)

Skill Level: Advanced

Theme: Biometrics/Analytics

CEUs: .75

Natalie Kupperman, MEd, ATC, University of Virginia

GPS tracking technology in team-based sports is becoming a staple at the collegiate and professional level. Often this technology is procured through coaching or sports performance staff without education for the team's athletic trainer. While research on the implications for GPS and biometric data in the context of injury risk mitigation is still preliminary, this technology is clearly a useful tool for monitoring training loads during training phases and return-to-sport. This

learning lab would focus on extracting key variables from GPS data and then visualize and analyze those variables for basic athlete monitoring and also for specific questions and goals.

At the conclusion of this session, participants will be able to:

1. Describe the key metrics output by GPS technology.
2. Choose and create the appropriate widget for the data they want to analyze.
3. Interpret the various widgets available on their athlete monitoring dashboard.

An Evidence-Informed Approach to Rehabilitation Following Orthobiologic Procedures, (IV)

Skill Level: Essential

CEUs: 1

Ken Mautner, MD, Emory Healthcare

Chris Cherian, MD, Emory Healthcare

This session will go through the evidence and science behind how we rehabilitate our patients after Orthobiologic procedures such as Platelet Rich Plasma (PRP) and stem cell procedures. As these procedures become more popular and common in sports medicine practices, this session will help guide the rehab specialist on how to optimize the healing environment following these procedures.

At the conclusion of this session, participants will be able to:

1. Describe the healing cascade of PRP and how we can initiate rehabilitation guidelines based on the healing cascade.
2. Describe the evidence behind cryotherapy for soft tissue injuries and why they should be avoided directly following Orthobiologic procedures.
3. Describe the affect of NSAID on soft tissue healing and thus Orthobiologic procedures.
4. Describe how PRP And Orthobiologics have an effect or cartilage and joint health and how this can facilitate our rehab protocols for these patients.

An Integrated Approach to the Multi-Systems Trauma Patient: Stop the Bleed and Beyond, (II, III, V)

Skill Level: Advanced

CEUs: .75

Darryl Conway, MA, AT, ATC, University of Michigan

Athletic trainers are often present and serve as first responders when traumatic injuries and/or mass casualty situations occur. These devastating events require concentrated focus and the athletic trainer to be knowledgeable and skilled in managing these emergent situations until emergency medical services arrive. However, cognitive knowledge is not the only necessary prerequisite. Understanding the role of and interrelatedness of the various protocols and techniques is paramount to successful management of a multi-systems trauma patient and integrating as a member of an interdisciplinary healthcare team. Failure to provide reasonable and/or appropriate care due to a lack of requisite knowledge and/or practice may be cause for negligence. Utilizing evidence-based practice, the session examines the application of didactic skills used to assess and manage traumatically injured individuals in the prehospital setting to ensure positive patient outcomes. Participants will execute acute triage, assessment, wound care, airway, breathing, and circulation, and other emergency management skills based on specific scenarios.

At the conclusion of this session, participants will be able to:

1. Discuss SALT and START triage principles.
2. Discuss rapid assessment of a multi-systems trauma patient.
3. Examine and discuss the current scientific evidence related to the pre-hospital management of various emergency situations and/or traumatic injuries, specifically focusing on: (1) rapid assessment of a multi-systems trauma patient; (2) uncontrolled bleeding; (3) open chest wounds; and (4) ancillary devices and equipment.
4. Understand the need for the rapid identification and management of gross bleeding in the trauma patient.
5. Examine and discuss the current scientific evidence to determine the effectiveness and efficacy for various triage and rapid assessment methods.

Application of Diagnostic Ultrasound to Track Tissue Repair, (II, IV)

Skill Level: Mastery

CEUs: 1.25

Noelle Selkow, PhD, ATC, Illinois State University

Diagnostic ultrasound is proving to be a valuable imaging modality for clinicians in the assessment of tissue injury and repair. With proper understanding and experience with diagnostic ultrasound, imaging of various musculoskeletal tissue can enhance the general physical exam. With the countless hours clinicians apply therapeutic interventions to patients, diagnostic ultrasound provides an avenue to assess tissue repair and how well the interventions are working to improve healing. Whether it be therapeutic modalities, exercises, or manual therapies, diagnostic ultrasound allows clinicians the opportunity to monitor tissue changes in real time.

At the conclusion of this session, participants will be able to:

1. Compare abnormal and normal musculoskeletal tissue structures in static and dynamic views using diagnostic ultrasound.
2. Analyze changes in tissue repair following therapeutic intervention.
3. Review diagnostic ultrasound parameters and anatomy for optimal image capture.

Application of the CDC Guidelines for Pediatric Mild Traumatic Brain Injury for Athletic Trainers, (I, II, V)

Skill Level: Essential

CEUs: 1

Zachary Kerr, PhD, MPH, MA, University of North Carolina at Chapel Hill
Juliet Haarbauer-Krupa, PhD, Center for Disease Control and Prevention

In 2018, the Centers for Disease Control and Prevention (CDC) released clinical recommendations to assist healthcare providers in treating pediatric populations with concussion. It is essential for athletic trainers and public health organizations to understand guideline implementation and dissemination challenges and opportunities. This lecture will summarize the CDC Guideline for Pediatric Mild Traumatic Brain Injury, facilitators and barriers to implementation of concussion-related policy, and provide strategies for athletic trainers to address barriers to implementation of concussion-related processes and practices using the CDC Guideline, and potential future directions for concussion prevention and management.

At the conclusion of this session, participants will be able to:

1. Describe the opportunities with implementing recommendations for patient care by the CDC Guideline for Pediatric Mild Traumatic Brain Injury.
2. Describe the challenges with implementing the CDC's guidelines for managing patients with traumatic brain injuries.
3. Identify the best practice strategies for pediatric care for patients with traumatic brain injuries.

Athlete Well-Being and Training Load Monitoring on Any Budget, (I)

Skill Level: Advanced

Theme: Training Load

CEUs: 1



Brett Pexa, PhD, ATC, High Point University

Training load has been a hot and important topic in the field of sport science given its potential to influence performance and injury risk. Numerous platforms offer high tech solutions but low cost options are also effective. This forum presentation will discuss different options for monitoring athlete well-being and training load as well as challenges to implementation and data analysis.

At the conclusion of this session, participants will be able to:

1. Identify different athlete well-being monitoring metrics and tools.
2. Apply various techniques to their clinical practice to help them the monitor training load of their athletes.
3. Identify different athlete training load monitoring metrics and tools.

Athletic Trainers Working as Industrial Ergonomic Specialists, (I, V)

Skill Level: Advanced

CEUs: 1

Kelly Stetser, AT, ATC, MA, Herman Miller

Musculoskeletal Disorders (MSD) are the most common work-related injury in manufacturing, in the US. To mitigate MSDs many companies are utilizing Athletic Trainers (ATC) as injury/illness prevention specialist. In addition to evaluating injuries, ATCs can use their health care background to investigate the two key principles of ergonomics, force and posture, and get in front of the problem. Opportunities for Athletic Trainers to collaborate with engineers will develop ergonomic improvements by fitting the jobs to the capabilities and limitations of the worker to prevent injury. Hiring an ATC as an ergonomic specialist will support the safety goal to reduce MSDs by finding root causes, educating industrial athletes, and improving ergonomic systems.

At the conclusion of this session, participants will be able to:

1. Identify the need for ATCs as industrial ergonomic specialist.
2. Apply athletic training practice standards in the industrial setting with ergonomics as a core focus.
3. Develop work flows that allow for collaboration of ATC in ergonomic improvements.
4. Generate a positive safety culture by giving support to manufacturing team members through job assessments through the lens of a health care professionals.
5. Justify the need for more ATCs in the industrial setting to collaborate with other health care professionals, engineers, and safety specialist.

Best Practices in Transgender Patient Care, (I, V)

Skill Level: Essential

CEUs: 1

Lindsey Eberman, PhD, ATC, Indiana State University

Jennifer Chadburn, EdM, ATC, Boston University

Few athletic trainers report feeling competent treating transgender patients and specifically report feeling that they are not competent collaborating with endocrinologists, understanding the impact of hormone therapy on sport participation, or managing mental health concerns. However, athletic trainers overwhelmingly indicate a desire to know more to better serve their patients. The purpose of this presentation is to identify the health and healthcare disparities experienced by transgender patients, clarify the physiological responses to hormone therapy, demystify the perceptions of unfair advantage in sport, raise awareness and potentially mitigate the mental health comorbidities often seen in this population.

At the conclusion of this session, participants will be able to:

1. Identify the health and healthcare disparities by transgender patients.
2. Recall the physiological response to hormone therapy and describe the impact of hormone therapy on athletic performance.
3. Recognize and collaborate on a plan of care for mental health comorbidities in transgender patients.
4. Advocate for transgender patients within the American healthcare system and in competitive athletics.

Biometric Trends in the National Football League (NFL), (I, IV)

Skill Level: Advanced

Theme: Biometrics/Analytics

CEUs: 1.25

Michael Baum, MA, ATC, New York Giants

Ari Cowen, MS, ATC, Atlanta Falcons

Robby Hoenshel, PT, DPT, ATC, CSCS, Jacksonville Jaguars

Brian Buening, MS, LAT, ATC, Indianapolis Colts

Professional teams in the National Football League (NFL) have implemented the use of biometric systems to optimize the performance of athletes both on the field and in the rehabilitation process. This includes total workload to minimize overuse injuries. Staff members from multiple teams will discuss the systems and philosophies employed to optimize their care of athletes.

At the conclusion of this session, participants will be able to:

1. Identify the different biometric programs being implemented in the NFL
2. Recognize how biometric programs utilized in the NFL are being used to optimize performance and return to participation
3. Discuss different strategies utilized with the biometrics programs implemented in the NFL

Can I Say That? Addressing Racial Microaggressions in Athletic Training Clinical Practice, (I, V)

Skill Level: Essential

CEUs: 1

Karlita Warren, PhD, ATC, University of La Verne

Candace Parham, PhD, LAT, ATC, George Mason University

A myriad of factors contributes to racial and ethnic health disparities that persist in the United States. Racial and ethnic microaggressions are deemed as a contributing factor to these health disparities. Research has demonstrated that racial microaggressions have mental, physiological, and health implications for patients. The use of racial microaggressions in a healthcare setting has the potential to negatively impact patient compliance and care. There is a need for athletic training clinicians to become aware of the complexities of microaggressions and their impact on patients of color, and to develop strategies to eliminate their use.

At the conclusion of this session, participants will be able to:

1. Demonstrate an understanding of what constitutes a microaggression.
2. Distinguish the types and levels of microaggressions.
3. Analyze the impact microaggressions may have on patient care and patient compliance.
4. Evaluate the use of microaggressions in their clinical setting.
5. Develop strategies to address and eliminate racial microaggressions in a non-threatening manner.

Current Trends Regarding the Cause, Treatment and Prevention of Exercise-Associated Muscle Cramps, (I, III, IV)



Skill Level: Essential

Theme: Heat

CEUs: 1

Brendon McDermott, PhD, ATC, University of Arkansas

Kevin Miller, PhD, AT, ATC, Central Michigan University

Many people suffer from painful exercise-associated muscle cramps (EAMC). Past research suggested hypohydration and sodium losses as causative factors for EAMCs. New theories suggest a multi-factorial origin with factors affecting central nervous system excitability as the main cause. Current evidence suggests individualizing prevention plans based on a person's unique intrinsic and extrinsic risk factors is most effective. Gentle, static stretching remains the most evidence-based treatment approach for acute EAMC though numerous anecdotal remedies also exist.

At the conclusion of this session, participants will be able to:

1. Discuss the current leading theories regarding the causes of exercise-associated muscle cramps.
2. Develop an evidence-based plan to prevent exercise-associated muscle cramps in patients.
3. Discuss effective treatment strategies for patients experiencing exercise-associated muscle cramps.

Concussion Monitoring: A Video Review That Gives Unique Perspectives That May Be Unseen From the Sidelines, (II, III)

Skill Level: Advanced

CEUs: 1

Rod Walters, DA, ATC, Walters, Inc.

The recent years have seen a tremendous increase in concern and interest in the incidence and management of concussive injuries. While the Centers for Disease Control and Prevention estimates the incidence at 3.8 million per year, the medical community has studied this problem to determine the best practices for assessment and return to participation. Most centers are using a multifactorial approach to address the treatment of the sports-related concussion. Care should be provided by a broad array of practitioners including physicians, athletic trainers, physical therapists and the vestibular-trained physical therapist. Video might be used to trigger a concussion evaluation, or to help the clinician diagnose concussion. At the professional level, AFL, NFL, NHL, NRL and rugby union use video to identify possible concussion events, differentiate between mandatory and discretionary concussion signs and, in select cases, assist with return to sport decisions. Video-review improves the sensitivity of concussion identification and accurate identification of the mechanism(s) of injury. Clinicians can view (with replay, slow-motion and multiple viewing angles) the incident, often from perspectives that are not observable on the sideline. Training will focus on assessment and identification of mandatory signs of concussion requiring appropriate action and identification of discretionary signs which may also alert clinicians to concussive injury. Through identification of concussive signs, clinicians will be better equipped to provide quality patient-focused care and thus improve the health-related quality of life in the athletic population. This workshop will review the injury and expose attendees to the findings of the most current research. The focus will focus on monitoring of physical activity for the incidence of concussive injury, especially those situations where injury may have occurred and the injury was not observed by team medical personnel.

At the conclusion of this session, participants will be able to:

1. Identify the signs indicative of concussive injury.
2. Integrate the components of discretionary concussive signs warranting further intervention and advancement of concussion protocols.
3. Identify those clinical presentations which demand immediate termination of activity and appropriate concussive assessment.

Connecting Academic Programs and Clinical Practice Together to Inform System Improvement, (V)

Skill Level: Advanced

CEUs: 1

Christopher O'Brien, PhD, LAT, ATC, Seton Hall University
Anthony Breitbach, PhD, ATC, FASAHP, Saint Louis University
Laura Dailey, PhD, Kindred Healthcare

Presented by the Association of Schools Advancing Health Professions

Health care system improvement requires shared commitment from academic programs and the healthcare industry. However, developing solutions/strategies collaboratively has logistical challenges. Through original research with an extensive review of the literature, ASAHP's Clinical Education Task Force (CETF) developed 5 recommendations to improve Clinical Education. The CETF then engaged with the ASAHP Professional Education Committee in a Summit designed to provide academic and healthcare industry stakeholder feedback on these recommendations with implementation strategies for academic and clinical settings to inform system improvement and enhance health

outcomes. This session details the research methodology and presents recommendations and strategies for athletic trainers' use in education and clinical practice.

At the conclusion of this session, participants will be able to:

1. Describe the ASAHP Clinical Education Task Force recommendations and implementation strategies.
2. Describe the process used to develop these recommendations and strategies.
3. Develop processes to improve clinical education, interprofessional collaboration and system improvement in specific athletic training context.

Continuing Your Certification: A New Approach for Continuing Education, (V)

Skill Level: Essential

CEUs: .75



Susan McGowen, PhD, ATC, EMT, University of New Mexico
Shannon Fleming, MA, ATC, Board of Certification

Presented by the Board of Certification

Continuing certification is what we currently recognize as recertification. In 2016, the BOC Board charged a task force with developing a recommendation for a new system which integrates professionalism, assessment, lifelong learning and advancing practice to determine continuing certification status. Critical to this redevelopment is the need for the BOC to establish standards within each component. The Board believes that by raising standards, such as the 2016 revisions to the approved provider program, the elevated quality of learning activities that, in turn, will serve to enhance the continued competence of the clinician. Continuing certification is a means to promote lifelong learning rather than the collection of continuing education hours or credits. The three components include: 1) Professionalism, 2) Life-Long Learning and 3) Practice Performance.

At the conclusion of this session, participants will be able to:

1. Describe the history and importance of advancing continuing certification for Athletic Trainers.
2. Identify the components of a continuing certification program as well as elements within each component that the BOC is currently piloting.
3. Recognize the purpose of assessment modules and how they can improve patient care.

Documentation Strategies for Modern Health Care, (V)

Skill Level: Essential

CEUs: 1

Deena Kilpatrick, MS, ATC, LAT, San Antonio Fire Department

In today's societal norm of lawsuits, documentation is not merely a recommendation but rather a requirement. Documentation protects you from licensing questions, legal liability, and can support improvements in your athletic training program. Whether defending yourself against complaints or working toward improvements in your program, documentation is an integral skill that all athletic trainers must learn and consistently utilize regardless of practice setting. This lecture will illustrate how to demonstrate worth, determine which information is vital to your stakeholders, and the possible detrimental results in meager documentation.

At the conclusion of this session, participants will be able to:

1. Distinguish the necessary components of documentation to protect yourself against undesirable outcomes such as standard operating procedures and clearly defined injury details.
2. Construct reports utilizing metrics based on your documentation that support improvements within your athletic training program.
3. Evaluate the potential pitfalls of inadequate documentation such as State AT Board review or legal cases/case law.

Essential Updates to NATA Position Statements: What the Practicing Clinician Needs to Know, (V)

Skill Level: Essential

CEUs: 1

Patrick McKeon, PhD, ATC, Ithaca College

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

Presented by the NATA Pronouncements Committee

The NATA Position Statements serve as clinical practice tools derived from the best-evidence to help guide clinical decision-making. In this lecture, we provide the NATA membership with updates to the position statement format. Specific updates include 1) the use of contemporary biopsychosocial language into position statements, 2) the inclusion of clinician- and patient-oriented outcomes to capture the effectiveness of recommendations, 3) the necessity for documentation of clinical decisions based on the recommendations, and 4) the addition of an interprofessional practice section within position statements to clarify the unique role the athletic trainer plays as part of an interprofessional healthcare team.

At the conclusion of this session, participants will be able to:

1. Describe the essential domains of the International Classification of Functioning, Health, and Disability and how this biopsychosocial framework will be incorporated into future position statements.
2. Differentiate between clinician- and patient-oriented outcomes and their respective roles in evidence-based practice and position statements.
3. Defend the necessity for appropriate and consistent clinical documentation to validate the recommendations in position statements at the level of patient care.
4. Discuss the emerging trends in interprofessional practice and how they will be incorporated into future position statements to clarify the roles and responsibilities of the athletic trainer.

Evidence-Based Practice in Prehospital Care of the Spine-Injured Athlete in American Football: The Delphi Process Part One-Spine Injury in Sport Group, (III, V)

Skill Level: Advanced

CEUs: 1

Ron Courson, ATC, PT, NRAEMT, University of Georgia
Ron Ellis, MD, FACEP, Prisma Health Medical Group – Midlands
Stanley Herring, MD, University of Washington
Glen Henry, MA, EMT-P, Athens Technical College
Briana Mills, PhD, University of Washington
Lovie Tabron, MS, LAT, ATC, California University at Pennsylvania

This presentation will highlight a case study and the Delphi research process that was utilized during the May 2019 Spine Injury in Sport Group Meeting. Through the Delphi process, conclusions and recommendations were generated through group consensus, ultimately creating an update to the current recommendations in best practice of prehospital care of the spine-injured athlete. This manuscript is being submitted for publication in JAT. Included in this presentation will be discussion of the literature review performed and further understanding of how questions of topics were generated.

At the conclusion of this session, participants will be able to:

1. Summarize the best practices in transfer and equipment removal techniques of the spine injured athlete (Comprehension).
2. Summarize the Delphi process (evaluation).
3. Develop and employ a pre-hospital care protocol for the spine injured athlete that meets best practice standards for their respective institution (Synthesis).

Exertional Heat Stroke: Best Practices for Prehospital Providers, (III)

Skill Level: Advanced

Theme: Heat

CEUs: 1

Luke Belval, PhD, ATC, CSCS, Institute for Exercise and Environmental Medicine
John Jardine, MD, Our Lady of Fatima Hospital

Exertional heat stroke is one of the most serious medical emergencies athletic trainers encounter. Appropriate care of a heat stroke patient requires coordination between athletic trainers and EMS providers. This session will focus on the consensus statement on prehospital care of exertional heat stroke, featuring perspectives from an athletic trainer and an emergency physician/EMS medical director. A specific focus will be how athletic trainers, EMS and emergency departments can work together to develop policies and procedures that empower providers to follow best practices.

At the conclusion of this session, participants will be able to:

1. Compare and contrast the strengths and weaknesses of athletic trainers and EMS systems with regards to exertional heat stroke care.
2. Develop policies and procedures that incorporate best practices for exertional heat stroke care, while considering the resources available.
3. Relate the evidence for prehospital care of exertional heat stroke to EMS providers and medical directors in an effective manner.

Immediate Care and Management of Joint Dislocations, (I, III)

Skill Level: Essential

CEUs: 1



Scott Doberstein, MS, ATC, LAT, University of Wisconsin at La Crosse

Scott Kuzma, MD, Mayo Clinic Health System

The NATA Position Statement has been developed to provide athletic trainers the tools for best practice when managing joint dislocations.

At the conclusion of this session, participants will be able to:

1. Explain procedures for immediate care and management of joint dislocations.
2. Recognize the techniques available for joint relocations.
3. Describe the best practice guidelines for physician protocols for AT's management of joint dislocations.

Implementing Mental Health America's B4Stage4 Philosophy: Assisting the Athletic Trainer in Recognizing and Referring a Patient for Mental Health Care, (I, II, III)

Skill Level: Essential

CEUs: 1

Timothy Neal, MS, ATC, CCISM, Concordia University Ann Arbor

Jessica Kennedy, Mental Health America

Mental health disorders are rising in the United States. Learning principles of early detection and intervention of mental health disorders may help prevent the worst stage of mental health crisis, self-harm. Mental Health America (MHA) is the nation's oldest community-based nonprofit dedicated to addressing the needs of those living with mental illness, and has developed the Before4Stage4 philosophy of early mental illness detection. The athletic trainer plays an integral role in the recognition and referral of potential mental health disorders in their patients. This presentation will assist the attendee in understanding the principles of Mental Health America's B4Stage4 philosophy, and the important role the athletic trainer plays in the detection and referral to mental health professionals in the early stages to provide holistic care to their patients.

At the conclusion of this session, participants will be able to:

1. Describe the prevalence of mental health disorders in the United States and the principles of Mental Health America's B4Stage4 philosophy.
2. Explain the value of early identification of mental health disorders in their patients.
3. Apply the principles of early intervention in patients displaying mental health disorders.

Leadership and Diversity: How to Grow Leadership in the Future, (V)

Skill Level: Essential

CEUs: 1

Lyn Nakagawa, MS, ATC, CSCS, University of Hawaii at Manoa
David Gallegos, MA, ATC, Cert MDT, FYZICAL Therapy & Balance Centers
Kysha Harriell, PhD, LAT, ATC, University of Miami
Marissa Holliday, ATC, University of Colorado – Boulder

Presented by the NATA Ethnic Diversity Advisory Committee

Disparities in representative leadership are prevalent throughout the health care system. Recently through cultural competence and patient value initiatives, there is an increased awareness of the importance of and need for racial, ethnic, and cultural diversity in leadership roles. Without cultural diversity in leadership positions, issues affecting ethnically diverse athletic trainers and patients do not have appropriate representation to address the problems that affect these populations. This panel discussion will examine the role leadership diversity plays in decision making, policy, education, and patient care. The panel will focus on how leadership diversity may decrease health disparities in underrepresented patients.

At the conclusion of this session, participants will be able to:

1. Recognize how race, ethnicity, and cultural effects leadership within the NATA and in communities.
2. Discuss why having individuals of diverse race, ethnic, and cultural background increases health care quality and patient outcomes.
3. Discuss how to improve leadership diversity and advocate change.

Live Surgeries - Syndesmotic Ankle Fixations: Tightrope versus Screw, (IV)

Skill Level: Advanced

CEUs: 1

Steven Kane, MD, Wellstar Atlanta Medical Center

The syndesmotic ligaments of the ankle hold the distal position of the fibula within the incisura fibularis where they help insure that the talus remains stable within the mortise. Injuries to the syndesmotic ligaments often create anterior/posterior or lateral displacement of the fibula in relation to the tibia which in turn allows the talus to displace laterally thereby destabilizing the mortise. The result of talar malposition within the mortise is abnormal pressures upon the tibiotalar articulation which may result in arthritis. Diagnosis, reduction and stabilization of syndesmotic injuries of the ankle is an important concept to be understood by those who see and treat athletic ankle injuries.

At the conclusion of this session, participants will be able to:

1. Describe the anatomy of the syndesmotic ligaments of the ankle.
2. Recognize and diagnose injuries to the syndesmotic ligaments of the ankle.
3. Differentiate the surgical options and employment of surgical stabilization procedures for syndesmotic injuries of the ankle.

Managing Adolescent Patients Recovering After Anterior Cruciate Ligament Reconstructions: From Surgery to Return to Play, (I, II, IV)

Skill Level: Advanced

CEUs: 1

Joe Hart, PhD, ATC, University of Virginia
Christopher Kuenze, PhD, ATC, Michigan State University



Anterior Cruciate Ligament (ACL) injuries are common in adolescent athletes. Anatomical, biomechanical, and psychological differences when compared to adult populations indicate that management should be tailored based on age and maturation. Unfortunately, it is challenging for clinicians who work with young athletes to synthesize and implement best evidence to assure optimal outcomes following ACL injury and reconstruction. The purpose of this presentation is to describe the best evidence regarding rehabilitation and return to play with specific focus on pediatric athletes. This session will provide current and best practice information to Athletic Trainers who are essential to the healthcare and well-being of young athletes recovering after ACL injuries.

At the conclusion of this session, participants will be able to:

1. Implement evidence-based return to play testing criteria among pediatric and adolescent athletes with recent ACL reconstruction.
2. Utilize objective assessment techniques to monitor a patient's activity participation after medical clearance for return to unrestricted physical activity following ACL reconstruction.
3. Discuss commonly reported barriers to clinical progress and return to play with pediatric or adolescent athletes and their parents from the time of surgery through the end of clinical care.

Measuring Head Impacts: A Window into Collision Sports, (I, II)

Skill Level: Advanced

Theme: Biometrics/Analytics

CEUs: 1

Jason Mihalik, PhD, CAT(C), ATC, University of North Carolina at Chapel Hill
Robert Lynall, PhD, ATC, University of Georgia

Athletes regularly sustain head impacts while participating in different sports. Studying these impacts is difficult and requires sophisticated instrumentation capable of measuring and recording head impact severity. These technologies have best been used in traditional helmeted collision sports such as football, ice hockey, and lacrosse. As new technology becomes available and is adopted, clinicians must understand and apply best practices to enhance clinical use and data interpretation for their patients and clients. This session will focus on telemetered helmets and mouth guards and their contribution to studying injuries.

At the conclusion of this session, participants will be able to:

1. Compare and contrast the strengths and weaknesses of available head impact telemetry systems.
2. Synthesize current peer-reviewed literature detailing head impact biomechanics outcomes in various sports at various levels of play.
3. Assess the potential benefits and drawbacks to including telemetry systems in clinical practice.

Neuromechanics of Hamstring Strain Injuries, (IV)

Skill Level: Advanced

Theme: Training Load

CEUs: 1

Charles "Buz" Swanik, PhD, ATC, FNATA, University of Delaware

Andrea DiTrani Lobacz, PhD, ATC, Neumann University

Hamstring strain injuries (HSI) remain one of the most commonly occurring medical problems in sport and recreation, and are associated with high rates of missed playing time and re-injury. Despite increased research, the financial cost and incidence of HSI continues to rise. However, understanding the neuromechanics of hamstring strains and adaptations promoted by eccentric training shows tremendous promise in the management of HSI. The latest evidence suggests that eccentric loading, such as the Nordic Hamstring Exercise, may play a protective role in mitigating risk factors and reducing HSI. This talk will discuss necessary synergistic relationships between the nervous system and hamstring muscle properties, the likelihood and mechanisms whereby various factors such as fatigue and competitive anxiety may interact with the neural and muscular properties to cause hamstring stiffness dysregulation. Additionally, the most up-to-date evidence will be presented on the implementation of eccentric training to induce protective changes to hamstring architecture and functional performance to combat the risks of fatigue and prior HSI. New findings pertaining to exercise volume and periodization of eccentric training, as well as factors to consider in the selection of eccentric exercises will be covered to assist the athletic trainer in the design of contemporary, effective HSI protocols. At the conclusion of this session, participants will be able to:

1. Explain risk factors for HSI with focus on the relationship between the nervous system and hamstring muscle properties.
2. Describe how sports related factors, such as fatigue and competitive anxiety, contribute to hamstring stiffness dysregulation.
3. Differentiate the effects of implementing an eccentric based program for HSI, including changes related to fascicle length, strength, fatigue, and injury risk.
4. Develop an eccentric training program with consideration of periodization, volume, and exercise selection in the management of HSI.

New Approaches to Skill Acquisition, (IV)

Skill Level: Advanced

Theme: Motor Learning

CEUs: 1.25

Dustin Grooms, PhD, ATC, CSCS, Ohio University

Rich Robinson, PhD, University of Indianapolis

Current rehabilitation strategy may not optimally restore motor coordination when the athlete returns to the cognitively demanding sport environment. This lack of motor function restoration is due in part to unique neuroplastic changes after injury that can be difficult to address. New breakthroughs in motor learning techniques hold promise to restore neural control of movement and potentially reduce re-injury risk. This session will overview how the brain changes after injury and what that means for motor skill re-acquisition and how applications of motor learning principles can improve function and decrease injury risk.

At the conclusion of this session, participants will be able to:

1. Introduce the contemporary approaches that have potential to improve motor skill acquisition during rehabilitation.
2. Explain the neuroplasticity associated with injury and motor learning.
3. Integrate contemporary motor learning in rehabilitation to restore neural functionality and motor performance.

Osteochondritis Dissecans in the Youth Athlete: Diagnosis, Clinical and Surgical Management and Return-to-Play Considerations, (II, IV)

Skill Level: Advanced

CEUs: 1

Jay Albright, MD, Children's Hospital Colorado

Jordan Teboda, MS, LAT, ATC, Children's Hospital Colorado

Presented by the Pediatric Orthopedic Society of North America

Juvenile osteochondritis dissecans is a prevalent condition that affects the articular surface and sub-chondral bone among skeletally immature patients. While the true incidence is unknown, osteochondritis dissecans commonly affects the elbow, knee, or the ankle. Multiple factors have been linked to the development of osteochondritis dissecans. Currently, researchers are working toward developing effective treatment plans for this condition. Detecting osteochondritis dissecans can be difficult with routine clinical exam approaches, and because of this, OCD lesions go undiagnosed. Because of this osteochondritis dissecans should always be on the list of possible differential diagnoses when assessing youth athletes.

At the conclusion of this session, participants will be able to:

1. Identify the signs and symptoms of osteochondritis dissecans in the youth athlete, and they will incorporate specific examination techniques to differentiate between potential osteochondritis.
2. Apply the most up to date research on osteochondritis dissecans treatment programs to their clinical decision making.
3. Identify protocols and precautions following surgical interventions for osteochondritis dissecans.

Out of the Clinic and Into the Field: Monitoring Running Mechanics Using Wearable Sensors, (I, II, IV)

Skill Level: Advanced

Theme: Biometrics/Analytics

CEUs: .75

Alexandra DeJong, MEd, ATC, University of Virginia

Christopher Napier, PhD, PT, University of British Columbia



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Biomechanical running evaluations are often confined to treadmill assessments in laboratory or clinic settings; however, extrapolation of indoor running outcomes to outdoor training is hindered by environmental and observational constraints. Wearable sensors equipped with accelerometers and gyroscopes allow for outdoor running assessments during natural training scenarios. Clinicians are also able to continuously evaluate patient movement patterns over time without necessitating direct supervision. Long-term running monitoring becomes important when considering how

biomechanical outcomes influence performance, injury risk and evaluation, and potential avenues for gait-training. Thus, it is important to interpret how data from these sensors can be leveraged for clinical application.

At the conclusion of this session, participants will be able to:

1. Describe biomechanical outcomes obtained from wearable sensors, such as step rate, step length, and loading, in relation to running adaptations.
2. Describe the concepts taught in this session can be implemented during field-based interventions for patients with running-related injuries.
3. Describe principles of running monitoring with wearable sensors to clinical practice to facilitate performance and injury monitoring or evaluations for patients.
4. Describe wearable sensor data to in-field running demands to better understand adaptations associated with typical training scenarios.

Peer-to-Peer Discussion: LGBTQ+ Patient Cases, (I, II, III, IV, V)

Skill Level: Advanced

CEUs: 1

Ashley Crossway, DAT, ATC, Nazareth College

Emma Nye, DAT, LAT, ATC, Drake University

Emily Munson, MS, ATC, Lake Erie College

Lyn Meyerhoff, ATC

The purpose of this presentation is to provide educational content through discussion of real life patient cases regarding LGBTQ+ patients. Participants will learn more about the specific healthcare needs of the LGBTQ+ community, based on ATs experiences evaluating and treating this population. This presentation will address the unique considerations, current rules and regulations, and policy and procedures necessary to implement inclusive healthcare. This discussion will allow participants the opportunity to learn skills, resources, and share ideas to practice effective cross-cultural communication and be prepared to work respectfully in diverse work environments as it relates to LGBTQ+ athletic trainers and patients.

At the conclusion of this session, participants will be able to:

1. Integrate best practices in providing equitable healthcare to LGBTQ+ patients, including proper referrals related to this population.
2. Identify strategies in creating an environment of inclusivity and respect within athletic training for patients in the LGBTQ+ community.
3. Recognize and integrate current concepts, policies, and regulations as it pertains to healthcare for the LGBTQ+ community.

Proximal Dynamic Functional Stability for the Treatment of Lower Extremity Pathology, (II, IV)

Skill Level: Advanced

Theme: Biometrics/Analytics

CEUs: 1

Michael Higgins, PhD, ATC, PT, University of Virginia

This session will explore the evidence with regard to proximal control rehabilitation programs. Strength is not a linear progression to achieving improved biomechanical efficiency of lower extremity alignment, particularly with regard to sports related tasks. This course will identify the missing components in today's evidence based hip focused programs and will present a comprehensive approach to achieving Proximal Dynamic Functional Stability. Utilizing the hip to influence dynamic lower extremity alignment has gained considerable attention within the physical therapy related literature. There is evidence to support a proximal control theory, but there also appears to be a limit to its effectiveness, particularly with regard to sport related tasks. This course will examine the proximal control approach to rehabilitating the hip. There will be a brief functional anatomy review as well as a review of the EMG activity of some commonly utilized hip exercises.

At the conclusion of this session, participants will be able to:

1. Contrast between concentric energy generation and eccentric rotary control during loading response.
2. Identify the 8 elements that are needed in a hip focused therapeutic exercise program to reach Global Dynamic Functional Stability.
3. Describe how polyarticular muscle chains influence human movement.
4. Explain the concept that strength is a non-linear progression.
5. Discuss the clinical implications of adopting a globally connected kinetic chain paradigm and how it would impact the sports rehabilitation specialist.

Resocialization of Sports during COVID-19 Pandemic: What Healthcare Providers Should Know (I, II, III, IV, V)

Skill Level: A

CEUs: 1

John Dunham, MS, ATC, CES, Emory University
Stephany Coakley, PhD, LPC, Temple University
Ron Courson, ATC, PT, NRAEMT, University of Georgia
Brian Hainline, MD, National Collegiate Athletic Association

Presented by National Collegiate Athletic Association (NCAA) and the Intercollegiate Council for Sports Medicine (ICSM)

The purpose of this session is to demonstrate leadership and commitment to inform health care delivery decisions and protect healthcare providers and the student athlete in the face of a global pandemic.

At the conclusion of this session, participants will be able to:

1. Effectively re-socialize student-athletes back to sport and campus.
2. Demonstrate strategies to approach and provide help regarding the mental welfare of the student-athlete.
3. Recognize strategies to continue with providing a high level of care to the student-athlete during this pandemic.
4. Identify resources that the NATA has for the collegiate athletic trainer.
5. Identify resources that are available through the NCAA for institutions.

Stick the Landing: Using Motor Learning Principles to Optimize Assessment and Rehabilitation, (I, IV)

Skill Level: Advanced

Theme: Motor Learning

CEUs: 1.25

Adam Lepley, PhD, ATC, University of Michigan

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

Optimal movement strategies are vital for both injury prevention and performance, as improper motor patterns can place individuals at increased risk of injury, impair performance, and impede adequate neuromuscular recovery from injury. It is crucial for clinicians to not only detect improper movement during injury assessment, but also instruct ideal movements that will enhance neuromuscular control in the rehabilitation process. The goal of the proposed session is to provide the most up-to-date evidence regarding neuromuscular reorganization and motor learning to allow clinicians to better identify and treat movement deficiencies that impair performance and increase injury risk.

At the conclusion of this session, participants will be able to:

1. Evaluate at risk movement strategies for the purposes of decreasing injury risk, maximizing rehabilitation exercises, and improving athletic performance.
2. Develop and implement evidence-based movement screenings that are both time and cost effective.
3. Recognize underlying factors that contribute to movement dysfunction, including neuromuscular reorganization that impairs movement.
4. Implement the most up-to-date motor learning strategies that assist in retention of desired movement, such as external focus of control and biofeedback.

Sport-Related Head Trauma and Blood Biomarkers, (II)

Skill Level: Advanced

CEUs: 1

Breton Asken, MS, ATC, University of California at San Francisco

Objective evidence of sport-related concussion remains elusive but of significant clinical and research interest for advancing management practices. Blood biomarkers arguably offer the greatest potential and have now undergone almost a decade of research in sport-related concussion. Conceptual challenges to the field have highlighted the complexities of integrating a clinically-defined concussion syndrome with purely biologic measures of brain injury. This lecture covers the current state of blood biomarker research in sport-related concussion and their utility in concussion diagnosis, prognosis, and recovery tracking. Results from the Concussion Biomarkers Assessed in Collegiate Student-Athletes (BASICS) project and from large-scale, prospective studies will be discussed.

At the conclusion of this session, participants will be able to:

1. Understand factors unrelated to brain injury that impact measurement of blood biomarkers.
2. Summarize evidence for blood biomarkers as indicators of sport-related concussion history and cumulative exposure to repetitive subclinical head impacts.
3. Identify the most promising blood biomarker candidates for aiding diagnosis and prognosis of sport-related concussion.

4. Discuss the potential role for athletic trainers within a sport-related concussion management system that includes advanced biomarkers.
5. Appreciate practical and conceptual challenges to translating blood biomarkers of concussion from research settings to the clinic.

Talking About Critical Incidents and Psychological Trauma with High School and Collegiate Student Athletes, (I, III)

Skill Level: Advanced

CEUs: .75

Lovie Tabron, MS, LAT, ATC, California University at Pennsylvania

Donita Valentine, DAT, ATC, CCISM, District of Columbia Public Schools

Athletic Trainers often encounter patient/athletes who have been affected by critical incidents or traumatic events in their lives. Student/athletes frequently talk with or in the presence of the AT about these events. Since the AT commonly interacts with student-athletes at times of day when there is no access to counseling or psychological resources, it is important to have the skills to assess the individual for critical incident stress. This presentation will provide the AT with information about crisis intervention and peer-support for this age group and what the AT needs to know about planning and referral.

At the conclusion of this session, participants will be able to:

1. Explain the need for and importance of crisis intervention and peer-support in scholastic and college aged student-athletes.
2. Assess an individual for signs of critical incident stress.
3. Interpret the results of an initial evaluation for critical incident stress and access appropriate resources as needed.

Telemedicine Solutions for Clinical Practice, (I, II, III)

Skill Level: Advanced

CEUs: 1

Zachary Winkelmann, PhD, SCAT, ATC, University of South Carolina

Telemedicine is the practice of healthcare delivery from a distance. In the practice of telemedicine, patients and providers can connect through various forms of technology for the purpose of immediate triage, musculoskeletal-based assessment, and concussion evaluation. Moreover, telemedicine can be used for interprofessional collaboration focused on therapeutic rehabilitation and patient education to maximize the continuity of care. Athletic trainers should explore the purpose and feasibility of using telemedicine as a supplement, rather than replacement, in their patient care. This presentation will explore best practices of facilitating a telemedicine encounter and provide recommendations to improve telemedicine solutions in one's clinical practice.

At the conclusion of this session, participants will be able to:

1. Describe the role of telemedicine within healthcare, specifically athletic training.
2. Define the various mediums for telemedicine.
3. Recall empirical evidence regarding the effectiveness of telemedicine.

4. Identify the current and future role of telemedicine solutions including the best practices in facilitating telemedicine encounters in athletic training clinical practice.
5. Describe the ethical and legal principles regarding telemedicine in athletic training.

The Burden of Head Impacts in Sports and What's Being Done About It, (I)

Skill Level: Advanced

CEUs: 1

Robert Cantu, MD, FACS, FACSM, Emerson Hospital

Erik Swartz, PhD, ATC, FNATA, University of Massachusetts at Lowell

Concerns regarding the cumulative burden of head impacts from contact and collision sports continues to gain attention, particularly where it involves children. Later-life implications for brain health has contributed to an overall reluctance for parents to allow their children to play contact sports such as soccer, or collision sports, like football. Strategies have been implemented in an effort to decrease head impact exposure in its participants, yet high-level evidence supporting their effectiveness is limited. This session will inform on the current understanding for health implications of head impact exposure in sports and review strategies deployed or being developed to reduce this exposure.

At the conclusion of this session, participants will be able to:

1. Describe key findings from research focused on short and long term health implications related to cumulative head impacts sustained from sport participation.
2. Assess the level of evidence for research focused on short and long term health implications related to cumulative head impacts sustained from sport and research focused on strategies employed for head impact reduction.
3. Relate effectiveness of strategies used for head impact reduction to their own clinical practice.

The Intersection of Physical Literacy and Injury Risk in Youth Athletes, (I)

Skill Level: Advanced

CEUs: 1

Hayley Root, PhD, MPH, ATC, Monmouth University

Lindsay DiStefano, PhD, ATC, University of Connecticut

Physical literacy is the competence, confidence, and desire to engage in physical activity. Poor physical literacy competence is related to poor fundamental movement skill development and is also associated with musculoskeletal injury. However, this relationship has not been well appreciated within the sports medicine community. This tutorial will first present the current state of physical literacy in the United States and the relationship of physical literacy and musculoskeletal injury risk, as well as discuss translational strategies that attendees can use to promote and improve physical literacy within their settings.

At the conclusion of this session, participants will be able to:

1. Describe the relationship between physical literacy and motor development.
2. Compare and contrast physical literacy competency and risk factors for musculoskeletal injury.
3. Apply translational strategies to promote physical literacy interventions in pediatric populations.

The Qualms of Obtaining a Rectal Temperature: Overcoming Common Barriers for the Clinician, (III, V)

Skill Level: Advanced

Theme: Heat

CEUs: 1

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

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

Athletic trainers (ATs) and other clinicians are not utilizing the best practices (i.e. rectal thermometry) for diagnosing exertional heat stroke (EHS) in the prehospital setting. Lack of an accurate temperature can lead to a fatal EHS outcome. The purpose of this presentation is to describe the current facilitators and barriers to performing rectal temperature. Perceived barriers include lack of education and training, fear of liability, and absence of administrative support. Facilitators include a state mandate, enhanced perceived benefits for performing the skill and having peers adopt this skill. We will present strategies to overcome common challenges faced by athletic trainers.

At the conclusion of this session, participants will be able to:

1. Summarize the literature on common facilitators and barriers to obtaining a rectal temperature for the diagnosis of exertional heat stroke.
2. Identify and summarize the knowledge and behaviors of clinicians as it relates to performing the rectal temperature skill.
3. Develop strategies to overcome challenges faced for the implementation of this best practice in their clinical setting.

Therapeutic Use of Cannabis in Sports Medicine: What is the Evidence?, (IV, V)

Skill Level: Essential

CEUs: 1

Matthew Fedoruk, PhD, U.S. Anti-Doping Agency

Presented by the NATA Professional Development Committee

Cannabidiol (CBD) has been trending among athletes populations since the World Anti-Doping Agency removed it from the 2018 Prohibited List. As state-led marijuana and hemp legalization sweeps the nation, innumerable cannabis-based products are being marketed and sold for a variety of uses. Currently, there is much confusion regarding cannabis products such as CBD and tetrahydrocannabinol (THC) due to variable state laws, the abundance of products and forms of use. As the market continues to rise, athletic trainers must stay abreast of the scientific evidence supporting or negating the use of cannabinoids (such as CBD) in sport or for therapeutic purposes.

At the conclusion of this session, participants will be able to:

1. Describe the differences between CBD, THC, medical marijuana, and industrial hemp.
2. Summarize the research related to the potential therapeutic effects of cannabinoids.
3. Assess the relative risk of CBD and cannabis products based on industry/regulatory standards and status in sport.

The Use of Technology in Sports Medicine and Rehabilitation, (I, II, IV)

Skill Level: Advanced

Theme: Biometrics/Analytics

CEUs: 1

Scott Epsley, PT, Philadelphia 76ers

Kevin Robell, MA, ATC, Preventicx

The use of bio-analytics and wearable technology in the in the areas of patient care has expanded exponentially. Not only have platforms increased but the parameters measured are varied and numerous applications have been adapted to patient care in the athletic training field. This presentation will discuss the use of technology in the area of IOT, GPS/RFID tracking in assisting return to play decisions as well as ultrasound elastography in tendon management. This presentation will also discuss the gap between data collection and interpretation, streaming data sources, cloud technology, and common uses of this type of data in a clinical setting.

At the conclusion of this session, participants will be able to:

1. Identify the use of nine axis accelerometers for bone load monitoring in return to play decisions.
2. Evaluate the use of GPS/RFID tracking for movement analysis in muscle injury return to play decisions.
3. Evaluate the use of Ultrasound Elastography in tendon injury management.
4. Discuss differences between “streaming” data and “static” data that is commonly used in sports medicine and athletic training settings.
5. Identify current trends in sports medicine “Internet of Things” streaming data sources and explain common use cases of this type of data in a clinical setting

Training Loads and Stress Fractures in Distance Runners : How Much is too Much?, (I, IV)

Skill Level: Advanced

Theme: Training Load

CEUs: .75

Karrie Hamstra-Wright, PhD, ATC, University of Illinois at Chicago

Christopher Napier, PhD, PT, University of British Columbia

Training load plays a critical role in the prevention and rehabilitation of stress fractures in athletes. A holistic perspective regarding the numerous factors contributing to training load, as well as individualizing training load based on an integrative risk factor approach, has the potential to enhance preventive and rehabilitative efforts. A holistic and integrative approach requires an inter-disciplinary commitment to healthcare. The purpose of this session is to demonstrate how training load has a direct impact on stress fracture prevention and rehabilitation and generate ideas on how to utilize risk factors in an inter-disciplinary fashion when working with athletes.

At the conclusion of this session, participants will be able to:

1. Explain the role of training load in stress fracture prevention and rehabilitation/return to play.
2. Compare known and hypothesized risk factors and their role in individualizing training load for stress fracture prevention.
3. Evaluate stress fracture rehabilitation/return to play guidelines specific to training load.

Traumatic Brain Injuries and Musculoskeletal Injury Risk: An Exploration of Potential Neuromuscular Control Mechanisms, (I, IV)

Skill Level: Advanced

Theme: Motor Control

CEUs: 1

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

Robert Lynall, PhD, ATC, University of Georgia

Musculoskeletal injuries (MSKI) and traumatic brain injury (TBI) are common amongst traditional and tactical athletes and significantly degrade individual and team competition and battle field readiness. Concussion, a mild form of TBI, increases MSKI risk in physically active individuals, including military Service Members, for at least one year following the index concussion. A number of potential neuromuscular mechanisms have been suggested to increase MSKI risk following concussion (e.g., altered kinematics, dynamic balance impairments, lower voluntary muscle activation), but none have been definitively confirmed. Thus, there is a knowledge gap that must be filled with evidence-based information.

At the conclusion of this session, participants will be able to:

1. Identify the potential neuromuscular control factors that may increase musculoskeletal injury risk following traumatic brain injury.
2. Evaluate the current post-traumatic brain injury return-to-activity criteria to make recommendations to improve post-traumatic brain injury assessment and take a more holistic approach to return-to-activity determinations.
3. Apply current lower extremity musculoskeletal injury risk assessments to post-traumatic brain injury assessments to comprehensively assess when an individual is ready to return-to-activity following traumatic brain injury.

Utilization of Virtual Reality in Post-Concussive Rehabilitation: Timing, Dosing and Appropriateness, (IV)

Skill Level: Advanced

CEUs: .75

Rebecca Bliss, DPT, DHSc, University of Missouri

Cognitive and physical rehabilitation programs are essential in the recovery from traumatic brain injury (TBI). Virtual reality can be utilized as an adjunct platform for rehabilitation strategies as well as serve to improve client engagement. Virtual reality has also shown promise as a valid assessment tool for visual vestibular processing deficits as well as postural control impairments following concussion injury that were not detected with the BESS, King Devick or DVAT tests. This session is designed to describe current virtual reality assessment tools as well as rehabilitation platforms following TBI that can be utilized by athletic trainers.

At the conclusion of this session, participants will be able to:

1. Understand the benefits and role of virtual reality as an adjunct therapeutic intervention for clients during post-concussive rehabilitation.
2. Describe clients who would benefit from virtual reality from a vestibular ocular dysfunction perspective and select appropriate impairment criteria.
3. Develop appropriate timing and dosing of virtual reality for patients participating in post-concussive rehabilitation.

Wading through the Athletic Recovery Landscape With so Many Gadgets, Gizmos and Wearables: Tips from an Athletic Trainer Perspective-2020 Update, (I, IV)

Skill Level: Essential

Theme: Biometrics/Analytics

CEUs: 1

Thomas Kaminski, PhD, ATC, FNATA, University of Delaware

Athletes at all levels of competition are in a constant search to improve performance and achieve success. In the last decade, athletes, coaches, strength and conditioning specialist, and Athletic Trainers have become increasingly focused on the concept of athletic recovery/physiological restoration. Gone are the days where athletes would perform endless hours of workouts/practices/competitions without adequate time for rest and recovery in between. Athletic trainers are on the front lines with regard to what interventions/strategies are best to prevent injury, minimize risk, and optimize physiological/musculoskeletal function. However, because the area of athletic recovery is so new, evidence to support various intervention strategies is lacking, that combined with the fact that there are a number of gadgets, gizmos and wearables being marketed, athletic trainers need to know what is right, just, and appropriate. The purpose of this presentation is to provide athletic trainers with a basic foundation of knowledge in the area of athletic recovery so that they can make informed decisions and maintain quality care to those athletes they administer to.

At the conclusion of this session, participants will be able to:

1. Describe the concept of athletic recovery and physiological restoration.
2. Describe physiological processes and systems are most important in athletic recovery.
3. Develop appropriate interventional recovery strategies that are tied closely with the physiological system and considerations for therapeutic interventions.
4. Compare commercially available products designed to assist with athletic recovery.
5. Describe various athletic recovery strategies in place across a spectrum of athletic training environments.

What Really Works When it Comes to Concussion Prevention Strategies, (I)

Skill Level: Advanced

CEUs: .75

Tamara Valovich McLeod, PhD, ATC, FNATA, A.T. Still University

Concussion is a significant public health and safety concern in which it is vital to ensure injury prevention efforts are effective. The prevention of concussion has been proposed through primary (eg. rule changes, prevention programs), secondary (eg. education), and tertiary (eg. active treatments) strategies. This presentation will discuss the current

evidence for the three prevention categories and provide attendees with strategies on incorporating effective prevention strategies into clinical practice.

At the conclusion of this session, participants will be able to:

1. Compare the current evidence for various concussion prevention strategies.
2. Explain the rationale for primary, secondary, and tertiary prevention strategies to better educate stakeholders.
3. Develop concussion prevention protocols based on the current evidence.
4. Recognize the role of the athletic trainer in implementing and evaluating prevention strategies for concussion.

Women in State Leadership Positions: How to Get Involved and Be a Successful Leader, (V)

Skill Level: Essential

CEUs: 1

Cara Gomez, EdD, ATC, Delaware State University

Athletic training state associations need strong and competent leaders. While more women are involved in leadership positions and there are fewer reported barriers to female leadership, women are often uncertain of how to become involved or are intimidated to volunteer for leadership roles. This presentation emphasizes the value of the female perspective in state and other leadership positions. The goal of this presentation is to encourage women to become involved in their state association. The session will also provide them with practical skills to help them succeed as leaders and provide effective solutions to barriers women face in leadership positions.

At the conclusion of this session, participants will be able to:

1. Identify perceived barriers and positive experiences of females involved in state association leadership positions.
2. Describe practical ways to become involved in a state association.
3. Develop skills and mindsets to be an effective leader in a state association.
4. Express solutions to barriers that women face in leadership positions.

On-Demand Rapid Fire Presentations

Adaptations in Overhead Athletes,

(I, II)

CEUs: 1.25

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 Silversen, MS, ATC, University of Minnesota

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

CEUs: 1

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)

CEUs: 1

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

Revy 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, MEd, 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)

CEUs: .75

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 SP 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)

CEUs: 1.25

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)

CEUs: 1

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

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

CEUs: .75

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, MEd, LAT, ATC, Corey Stringer Institute, University of Connecticut

Tactical Athletes, (I, II, IV)

CEUs: 1

Association of Heart Rate Variability with Perceptual-Motor Measures Among ROTC Cadets

Shellie Acocello, PhD, ATC, 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)

CEUs: 1

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

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

CEUs: 1

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

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

CEUs: 1

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

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

CEUs: 1

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

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

CEUs: 1

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

Health Consequences Following Concussion

CEUs: 1

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

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

CEUs: .75

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

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

CEUs: .75

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)

CEUs: 1

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 ρ 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

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

CEUs: 1

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 Bohannon, MS, AT, ATC, University of Toledo

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

CEUs: 1

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)

CEUs: .75

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)

CEUs: .75

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)

CEUs: 1

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

Sport Specialization, (I, II)

CEUs: 1

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

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

CEUs: 1

Epidemiology of Boys' Club Lacrosse Injuries During the 2018 Summer Lacrosse Season

Ian 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

Presented by the Southeast Athletic Trainers' Association

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

1-Assessment of Upper Extremity and Trunk Neuromuscular Control in Throwing Athletes

Drue Stapleton, PhD, ATC, CSCS, Rider University

2-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

3-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

4-Determination of Kerlan-Jobe Orthopedic Clinic Scores in Competitive Tennis Players

Alexis Walker, LAT, ATC, Lee Health-Lee School District

5-Inter-Rater Reliability of a Novel Movement Assessment Performed on Overhead Throwing Athletes

Richard Boergers, PhD, ATC, Seton Hall University

6-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

7-Relationship of a Novel Movement Assessment and Athletic Performance Tests in Softball Athletes

Johnny Rodriguez, ATC, CFSC, Union High School

8-Upper Extremity Muscle Activation and Perceived Fatigue During Simulated Baseball Game Pitching

Katsumi Takeno, MS, ATC, University of Toledo

Balance, (I, II, IV)

9-Abductor Hallucis Fatigue Influences Dynamic Balance Depending on Foot Type

Leif Madsen, PhD, ATC, Indiana University

10-Change in Baseline BESS Performance Among High School Athletes Following Sport-Related Concussion

Erin Baker, LAT, ATC, New Hampshire Musculoskeletal Institute

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

Stephen Glass, PhD, Radford University

12-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

13-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

14-The Investigation of Static and Dynamic Balance Among Levels of Joint Mobility

Lauren Cox, DAT, ATC, Indiana State University

15-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)

16-Assessing Influencers of Perceived School-Level Concussion Care and Support Among Collegiate Student-Athletes
Christine Callahan, MS, University of North Carolina at Chapel Hill

17-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

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

19-Development of Vasovagal Syncope Following Sport Related Concussions in Collegiate Volleyball Player: Level Four Case Study
Rock Lee, University of Central Arkansas

20-Emergency Medical Technicians' Beliefs and Knowledge on Impact Related Concussions and Athletic Trainers' Duties
Stephanie Keator, University of Lynchburg

21-Exploring the Relationship Between Premorbid Depression or Anxiety and Baseline King-Devick Performance
Danae Delfin, ATC, CSCS, CES, University of Alabama

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

23-Identifying Effects of Concussion on Behavioral and Hemodynamic Changes Using Functional Near-Infrared Spectroscopy
Allyssa Memmini, MS, ATC, University of Michigan

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

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

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

27-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

28-Pupillary Responses Indicate Neurocognitive Processing Differences in Working Memory Following Concussion
Christina Vander Vegt, MS, LAT, ATC, University of North Carolina at Chapel Hill

29-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

30-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

31-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

32-Effects of Concussion History on Baseline Balance and Vestibular/Ocular Motor Assessment

Haleigh Gray, ATC, University of Alabama

33-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

34-Sport-Related Concussion Recovery Trajectories Among Men's and Women's Collegiate Sports

Abigail Bretzin, PhD, ATC, University of Pennsylvania

35-The Effect of Sex on Length of Recovery from Sport Concussion in Collegiate Athletes

Holly Carrington, University of Virginia

Dance, Band and Performing Arts, (I)

36-Body Composition Measures and Injury Rates Within Collegiate Acrobatics and Tumbling Athletes

Ashlyne Vineyard, MAT, LAT, ATC, Baylor University

37-Collegiate Dancers' Aerobic Fitness Remains Similar Across their Collegiate Careers

Victoria Fautroy, ATC, George Mason University

38-Examination of Eating Disorder Risk Among University Marching Band Artists

Nancy Uriegas, MS, SCAT, ATC, University of South Carolina

39-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

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

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

41-Impact of Turnout Variance on Static Balance in Collegiate Classical Ballet Dancers

Marissa Ramos, MS, LAT, ATC, Indiana University

Education, (I, V)

42-Athletic Training Perceptions of Community Service and Civic Engagement Following a Service-Learning Experience
Kelli Snyder, EdD, ATC, University of Northern Iowa

43-Developing, Validating and Establishing Reliability of a Standardized Patient Evaluation Tool to Measure Healthcare Core Competency
Lindsey Eberman, PhD, ATC, Indiana State University

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

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

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

47-Recruiting and Retaining Racially Minoritized Students into Professional Post-Baccalaureate Athletic Training Programs
Kimberly White, MA, LAT, ATC, Indiana State University

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

Emerging Modalities, (I, III, IV)

49-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

50-Intramuscular Heating Rates of a Chattanooga Intellect 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

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

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

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

54-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)

55-Effect of Forearm Ice Towels on Cooling Rates Following Exercise-Induced Hyperthermia

William Adams, PhD, ATC, University of North Carolina at Greensboro

56-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

57-Influence of Physical Characteristics on Thermoregulation and Predicted Heat Safety in Runners

Rachel Katch, MS, LAT, ATC, University of Connecticut

58-Heat Tolerance Test Results Following A Runners First and Second Exertional Heat Stroke Episodes

Rebecca Stearns, PhD, ATC, University of Connecticut

Gait, (II, IV)

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

Katherine Collins, MS, Michigan State University

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

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

61-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)

62-Apophysitis of the Left Anterior Superior Iliac Spine in High School Golf Athlete

Andre Figueroa, Florida International University

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

Elizabeth Holmes, Saginaw Valley State University

64-Atypical Presentation of a Coccyx Dislocation in a High School Football Player

Quentin Archuleta, ATC, Marshall University

65-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

66-Incarcerated Umbilical Hernia in a Female Volleyball Athlete

Marissa Sciabarra, LAT, ATC, Virginia Military Institute

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

Marc Eilers, MS, ATC, Grand Canyon University

68-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

69-Nicotine Overdose in a High School Football Athlete

Levi Roberts, ATC, Marshall University

70-Pulmonary Contusion and Enlarged Spleen in a Collegiate Football Player

Kyle Daly, Kean University

71-Pulmonary Emboli in a Collegiate Male Basketball Player: A Chronic Occurrence

Marae Watkins, MS, LAT, ATC, Southern Arkansas University

72-Retinal Neovascularization in Collegiate Football Player: Level 4 Case Study

Courtney Miller, MS, LAT, ATC, Jacksonville University

73-Right Lower Quadrant Pain in a Women's Soccer Player

John Mosier, Ithaca College

74-Septic Bursitis in Competitive Cyclists: A Case Series

Adam Thompson, PhD, LAT, ATC, Indiana Wesleyan University

75-Vocal Cord Dysfunction in Women's Soccer

James Keddy, Kean University

76-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

77-Chronic Idiopathic Urticaria and Angioedema in a Division I Long Jumper

Haley Holz, ATC, University of Illinois

78-Lyme Disease in a Women's Basketball Athlete

Karli Dill, MA, ATC, Emory University

79-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)

80-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

81-Exploring Time between Primary and Subsequent ACL Reconstructions: A Preliminary Analysis

Brooke Torres, ATC, Emory University

82-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)

83-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

84-A Non-Contact Femur Fracture in a High School Football Player: A Case Study

Victoria Hunt, Texas A&M University

85-A Unique ACL Tibial Avulsion Without Bony Fragment in an Adolescent Football Player

Chelsea Richardson, ATC, OTC, Emory Healthcare

86-Bilateral Comparisons of Quadricep Thickness After Anterior Cruciate Ligament Reconstruction

Soul Cheon, Inha University

87-Cellulitis in Women's Soccer Preseason

Gabrielle Gonzalez, Kean University

88-Conservative Treatment of a Fibular Torus Fracture in a Collegiate Football Player

Jaclyn Ouellette, Florida International University

89-Cyclops Lesion Accompanied by Pigmented Villonodular Synovitis in a Collegiate Baseball Athlete

Scott Freer, PhD, LAT, ATC, Barry University

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

Neal Glaviano, PhD, ATC, University of Toledo

91-Iliac Crest Apophysitis in a Female Collegiate Distance Runner

Nicolas Merritt, DAT, ATC, Furman University

92-Leg Pain in a High School Athlete

David Jacobs, ATC, University of Kentucky

93-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

94-Multiligament Knee Injury with Capsular Avulsion in a Collegiate Football Player

James Galdieri, MS, LAT, ATC, East Stroudsburg University

95-Mysterious Presentation of Mid-Shaft Femoral Fracture

Emily Malinak, Boston University

96-Non-Contact Femoral-Tibial Dislocation With Peroneal Nerve Palsy in a High School Football Linebacker

Mason Briles, MS, LAT, ATC, Emory Healthcare

97-Non-Contact Total Knee Dislocation of the Posterolateral Corner in a College Football Player

Kayli Rudd, Florida International University

98-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

99-Non-Surgical Treatment for Medial Ankle Sprain with Avulsion Fracture

Mark Perez, Florida International University

100-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

101-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

102-Tibial Tubercle Avulsion Fracture in Two Different High School Athletes

Jenne DeAngelis, ATC, University of Kentucky

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

Stephan Bodkin, MEd, ATC, University of Virginia

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

Lauryn Lanzer, LAT, ATC, University of Kentucky

105-Two-Stage Revision Anterior Cruciate Ligament Reconstruction in a Professional Football Player

Ricardo Squillantini, MSAT, ATC, OTC, The Steadman Clinic

106-Current Dynamic Warm-Up Practices in Secondary Schools

Lauren Sheldon, MS, ATC, University of Connecticut

107-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

108-Influence of Rating of Perceived Exertion on Collegiate Cross-Country Athletes' Running Biomechanics

Alexandra DeJong, MEd, ATC, University of Virginia

109-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

110-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

111-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

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

Erin Pletcher, PhD, ATC, CSCS, Rowan University

113-Toe Out Angle During Squatting is Associated With Lower Extremity Structural Alignment

Jeremiah Tate, PhD, East Tennessee State University

114-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

115-Sex Differences and Hip Muscle Strength After ACL-Reconstruction

Amelia Bruce, MS, University of Virginia

116-The Effects of Virtual Reality Immersion on Drop Landing Biomechanics

Philip Brazalovich, MS, LAT, ATC, Memorial Hospital of Union County

117-Anticipation of Jump Task Impacts Lower Extremity Biomechanics During A Jump-Cut Maneuver

Zachary Ripic, MS, University of Miami

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

Elisa Godoy, MS, Appalachian State University

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

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

120-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)

121-A Comparison of Hardiness Between Athletes and Non-Athletes in a Collegiate Setting

Leah Kilchrist, LAT, ATC, MSAT, Texas State University

122-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

123-Perceptions and Beliefs on Preventative Training Programs Amongst Female Collegiate Gymnasts

Ja'Naya Alexander, MS, LAT, ATC, Thomas Jefferson University

124-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

125-Sexual Behaviors of Collegiate Student-Athletes

Amanda Flanscha, SCAT, ATC, University of South Carolina

126-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)

127-A Theoretical Model of Transition to Practice

Brianne Kilbourne, EdD, ATC, Emory & Henry College

128-Assessing Healthcare Professional' Knowledge of the Female Athlete Triad: A Pilot Study

Allison Smith, MS, SCAT, ATC, University of South Carolina

129-Assessment of Leadership Education Through Graduates of Doctorate in Athletic Training Programs

Elena Robinson, LAT, ATC, Indiana State University

130-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

131-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

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

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

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

Ellis Mair, ATC, Indiana State University

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

Tara Armstrong, ATC, Indiana State University

135-Athletic Trainers' Perceptions of Accessibility to Legal Resources for Those Working Per Diem Services

Alisha Pennington, MS, ATC, The ATvantage

136-Athletic Trainers' Perspectives of Telemedicine

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

137-Athletic Training and Wildland Fire: Providing Athletic Training Services to Smokejumpers

Isabella Callis, MS, LAT, ATC, Missoula Bone and Joint

138-Auditing Medical Documentation: A Quality Improvement Project

Elizabeth Neil, PhD, ATC, Xavier University

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

Danielle McCormick, Weber State University

140-Clinical Utility of Mental Toughness Measures: A Systematic Review of Measurement Properties

James Farnsworth, PhD, LAT, ATC, Texas State University

141-Delegation of Medical Authority from Supervising Physicians to Athletic Trainers in Texas

Kristen Sims-Koenig, ATC, Christus Trinity Mother Frances

142-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

143-Emotional Intelligence Among Athletic Trainers

Ashley Harris, PhD, ATC, CSCS, Aurora University

144-Examination of Energy Needs and Dietary Prolife Among Male and Female Athletic Trainers

Kacey Ohlemeyer, SCAT, ATC, University of South Carolina

145-Incoming Cadets Perception of Athletic Training

Kristin Cunningham, Tarleton State University

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

Thomas Greffly, LAT, ATC, Indiana State University

147-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

148-Knowledge and Perception of Cannabis Amongst Health Care Students

Anne Skjoldahl, Florida International University

149-Parental Perceptions of the Importance and Effectiveness of Patient-Centered Care Delivery

Sadie Morway, AT, ATC, CSCS, Indiana State University

150-Perceived Leadership Self-Efficacy in Athletic Trainers

Matthew Drescher, LAT, Indiana State University

151-Routine and Crisis Mental Health Policy Reviews in NCAA Affiliated Institutions

Kelcey Granger, MS, Indiana State University

152-The Collegiate Student-Athletes' View of Patient-Centered Care in Athletic Training Services

Ansley Redinger, LAT, ATC, Indiana State University

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

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

154-Work-Family Conflict Experienced by Collegiate Certified Strength and Conditioning Specialists

Taylor Hoekwater, ATC, EMTB, Central Michigan University

155-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)

156-Association of Visual-Cognitive-Motor Integration With Core and Lower Extremity Injury in College Football

Katherine Rogers, MS, ATC

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

Landon Lempke, MEd, ATC, University of Georgia

158-The Reliability of an Upper-Extremity and Lower-Extremity Visuomotor Reaction Time Task

Caitlin Brinkman, ATC, University of Kentucky

159-The Role of Task Demands on Decision Making in Dynamic Environments

Jeromy Alt, MS, ATC, University of Cincinnati

Upper Extremity Case Studies, (II, IV)

160-Carpometacarpal Joint Fusion for Severe Post-Traumatic Arthrosis in a Professional Football Player

Haley Simmons, MS, LAT, ATC, The Steadman Clinic

161-Chronic Inflammatory Demyelinating Polyradiculoneuropathy in a Division II Baseball Pitcher

Bryce Lawson, MS, ATC, CSCS, Phoebe Putney Memorial Hospital

162-Chronic Type IV Acromioclavicular Joint Separation in a 25-Year-Old Recreational Ski Athlete

Emma Young, LAT, ATC, The Steadman Clinic

163-Clinical Case Study: Ulnar Nerve Injury at the Wrist with Isolated Motor Symptoms

Michael Donohue, ATC, OTC, Vail-Summit Orthopaedics and Neurosurgery

164-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

165-Isolated Intramuscular Tear of the Triceps Medial Head in a Collegiate Football Athlete

Kevin Rojas, Florida International University

166-Isolated Scapular Body Fracture in a High School Football Player

Robert Casmus, LAT, ATC, Novant Health Sports Medicine

167-Parsonage-Turner Syndrome in a Female Collegiate Track Athlete

Kelly Bachmann, Capital University

168-Return-to-Professional Football Following Latarjet

Natalie Reynolds, ATC, CSCS, The Steadman Clinic

169-Scaphoid Lunate Advanced Collapse Wrist in a Collegiate Rugby Player

Debbie-Ann Garricks, Florida International University

170-Traumatic Thoracic Injury in a Ninja/Parkour Athlete: A Level 4 Rare Events Case Study

Ann Francis, Western Carolina University

171-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

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

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

Athletic Training Student Seminar (ATSS)

General Session: Avoiding Complacency in the Profession of Athletic Training: What NASA's Loss of the Space Shuttle Can Teach Us

Mary Kirkland, MS, LAT, ATC, NASA

Michael Ciannilli, NASA

In this presentation, NASA takes you back in time on a journey over a half century ago as America prepared for its first, ill-fated, Apollo 1 flight in 1967. Follow on to the iconic Apollo 13 mission to the Moon and then enter into the 1980's for the tragic launch of Space Shuttle Challenger. Finally arrive at 2003 as Space Shuttle Columbia prepares to return home from its 28th and tragic final mission into space. Learn how complacency directly contributed to the loss of these historic missions and engage in an extensive conversation on what the difficult, but invaluable, lessons learned from these tragic events can teach us today in the profession of Athletic Training. This experience is brought to you by NASA's Apollo Challenger Columbia Lessons Learned Program (ACCLLP). ACCLLP is the Agency's innovative effort to reimagine, reintroduce and effectively share the lessons learned from its history with an eye towards ensuring future mission success.

At the conclusion of this session, participants will be able to:

1. Understand the crucial role of communication and relationship building in promoting mission success and preventing undesired outcomes.
2. Appreciate the role of newer and/or younger staff in providing critical and perhaps less biased perspectives.
3. Appreciate the invaluable role of promoting the diversity of thoughts and ideas to obtain successful results.

Athlete Mental Health in the Age of COVID-19

Erin Haugen, PhD, LP, CMPC, Assessment and Therapy Associates of Grand Forks, PLLC

The past several months brought a number of changes to the sport environment due to COVID-19, many of which have the potential to impact the mental health and well-being of athletes. Although the transition back to sport is likely welcome for many athletes, they continue to deal with many stressors in and out of sport that complicate the return to play process, particularly as it relates to mental health and well-being. This presentation will discuss the challenges athletes are facing during the pandemic and throughout the return to sport, including but not limited to psychosocial stressors and performance concerns. The presentation will also discuss ways that those in athletic training can support athlete mental health and well-being during the time of COVID-19.

Leading from the Middle: Creating Positive Change in Athletic Training

Sean Rogers, DAT

In this session students will learn how to effectively advocate for an environment of equity and inclusivity through the process of 'leading from the middle'. This session will also explore current and future trends in Athletic Training while providing actionable ways to be an equitable leader during your career as an Athletic Trainer.

At the conclusion of this session, participants will be able to:

1. Explain the current structure of the National Athletic Trainers Association and Identify opportunities for students and young professionals to get involved.
2. Identify foundational leadership principles as it relates to Young Professionals in Athletic Training.
3. Apply and integrate concepts of cultural competency, advocacy and inclusion to foundational leadership principles.
4. Analyze opportunities and potential to create positive change through leadership.
5. Discuss the professional benefits of involvement and leadership.

Athletic Trainers in the Industrial Setting

Dalton Tice, ATC

Matthew Greene, ATC

Tiffani Hall, ATC

Heather Koster, ATC

Due to what is sometimes viewed as a "normal internship" or a "normal career pathway," while attending an undergraduate program, often times the future seems to be easily predicted. Life however can take different turns and present opportunities that may not have been part of "the plan." During this breakout session, we will create discussion on how the profession is changing and prepare athletic training students for some of the unknowns they may encounter. These unknowns can help shape a professional career or create roadblocks. The approach and actions taken determines the outcome. Various scenarios and concepts will be reviewed in order to demonstrate how to overcome barriers and help students recognize opportunities to "find their niche".

At the conclusion of this session, participants will be able to:

1. Demonstrate new fields and topics that are emerging in the profession.
2. Describe the need for future professional involvement to continue to grow the profession..
3. Define the ways students can contribute as the profession moves forward and expands its vision.
4. Discuss future opportunities for ongoing policy changes to implement best practices in SS athletes.

Life After Graduation: How to Take an Active Role in Advancing the Athletic Training Profession

Rodney Caffey, MS, LAT, ATC

Transitioning from being an athletic training student to a healthcare provider. What all did I learn from the mistakes I made. What does being an athletic trainer in sports performance look like? How do you integrate yourself as an athletic trainer with other professionals? What sets you a part? What are employers looking for? How to prove your worth.

At the conclusion of this session, participants will be able to:

1. Demonstrate new fields and topics that are emerging in the profession.
2. Describe the need for future professional involvement to continue to grow the profession..
3. Define the ways students can contribute as the profession moves forward and expands its vision.
4. Discuss future opportunities for ongoing policy changes to implement best practices in SS athletes.

The 10 Things Every Newly Certified Athletic Trainer Must Know

Tory Lindley, MA

Timothy Weston, MEd

Many newly credentialed ATs are active in the job market for the first time. The thrill of passing the BOC board exam is typically coupled with the fear of 'what's will be next in my career?!' These AT's are now faced with a pivotal period of transitioning to practice, having their first opportunity to set career goals and making informed decisions around several opportunities for specific clinical specialization. Professional and personal adjustments as a newly credentialed clinician can be both overwhelming and challenging. First job success can often be an indicator of longevity as an athletic trainer. This presentation will focus on specific ways to succeed during the first year of their career as an athletic trainer.

At the conclusion of this session, participants will be able to:

1. Illustrate the critical steps necessary to take in order to transition effectively to AT practice.
2. Recognize the clinical, ethical, and professional responsibility required of each credentialed AT.
3. Prepare a professional plan for success.
4. Prepare a personal plan for success.

15 for Fitness, sponsored by IcyHot

Loosen up with these (3) 15-minute yoga sessions.



15 for Fun Breaks

Back by popular demand, NATA 2019 Keynote Speaker, Jon Dorenbos, brings his world-renowned magic and humor to VNATA!

Steve Moore, creator and director of the syndicated sports cartoon, In the Bleachers, and long-time supporter of the athletic training profession, will share some of his most popular comics, and the inspiration behind them, during this 15-minute break.

Special Events

General Session

The celebration continues: During the General Session, association updates are announced, including the financial report, new board seats and new developments within NATA, during the State of Association address, presented by NATA President Tory Lindley, MA, ATC.

Face Time '20

VNATA attendees will get the opportunity to hear from the NATA presidential candidates' one last time during Face Time '20. Each candidate will present their presidential platforms and answer questions previously submitted to NATA.

Rules of Engagement

Those who take part in any NATA meeting or event, whether in-person or virtual, must treat each other with civility, courtesy and respect (both face-to-face and online), regardless of the sex, race, color, national origin, marital status, age, religion, disability, sexual orientation, occupation, line of business, or policy position of other participants.

Non-Discrimination

NATA does not discriminate on the basis of race, color, national origin, religion, sex, disability, military status, sexual orientation or age. NATA is committed to accessibility and non-discrimination in all aspects of its continuing education activities. Participants who have special needs are encouraged to contact program organizers so that all reasonable efforts to accommodate these needs can be made.

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