

**Thursday, April 18, 2024**

## **Pavilion 1**

***Pre-Conference Learning Lab #1: 12:30pm - 3:30pm (Check-in begins at 12:00noon)***

***\*Pre-Registration and additional fee required – 3 CEUs***

***MUST check in by 10-minutes BEFORE the start of the session.***

***Introduction to POCUS & Emergency Thorax and Abdominal Assessment: The E-Fast Exam***

*Christopher Ludwig, EdD, LAT, ATC – University of California, Fresno*

*Josh Johnson, MS – University of Idaho*

Ultrasound is a powerful, cost-effective, non-invasive, and dynamic imaging modality that can augment physical exams, including for musculoskeletal injuries. This technology provides a rich source of clinical information on which to base medical decisions. However, the quality of the information in sonographic studies is highly dependent on operator skill. Therefore, practitioners must receive adequate training and education in sonography. To our knowledge, only two peer-reviewed articles have been published regarding ultrasound education in the Athletic Training profession, despite the well-established benefits of the techniques. This Learning Lab aims to provide a foundation for the use of ultrasound as an imaging tool for athletic trainers to build future proficiency in its use. (*Domain: II;BCS-O:I/Level: Essential*)

Learning Objectives:

- Describe the basic physics of ultrasonography
- Define common terminology with Point of Care Ultrasound
- Differentiate common imaging artifacts from real anatomical features
- Identify normal anatomical structures in a variety of sonograms
- Capture and optimize standard sonograms in a variety of studies (e.g., E-Fast – thorax, pulmonary, cardiac, abdominal, etc.)

***Pre-Conference Learning Lab #2: 4:30pm – 7:30pm (Check-in begins at 4:00pm)***

***\*Pre-Registration and additional fee required – 3 CEUs***

***MUST check in by 10-minutes BEFORE the start of the session.***

***Myofascial Release for the Hip and Thigh***

*Portia B. Resnick, PhD, ATC, BCTMB – California State University, Long Beach*

Athletic trainers have been using more manual therapy techniques in the clinic, including fascial manipulation techniques such as cupping and foam rolling. However, many entry-level athletic training programs do not provide an education in myofascial release, which has proven to be a beneficial manual therapy technique. Focus on the hip and thigh, including a review of the clinical anatomy, will add an additional tool for athletic trainers to use in all types of clinical practice. The lab will provide general techniques that can be applied to other fascial structures as well as specific techniques for the hip and thigh. (*Domain: IV;BCS-O:II/Level: Advanced*)

Learning Objectives:

- Describe the clinical anatomy of the hip and thigh
- Explain myofascial release and its role as a manual therapy treatment

- Discuss common soft tissue injuries/conditions of the hip and thigh that can benefit from myofascial release
- Identify appropriate myofascial techniques for the hip and thigh
- Demonstrate correct body mechanics when applying the myofascial techniques
- Demonstrate myofascial techniques for the hip and thigh

**Friday, April 19, 2024**

## **Pavilion 2-3**

### *Lecture Sessions*

7:30am – 8:30am

#### ***Beyond Aesthetics and Performance: The Potential Risks of Anabolic Steroid Abuse and Strategies to Mitigate Them***

*Guillermo Escalante, DSc, MBA, ATC, CSCS\*D, FISSN – California State University, San Bernardino*

Moderator: Michele Vasquez, MEd, ATC – California Baptist University

Healthcare providers, including athletic trainers, often provide education to their patients about the potential dangers of using androgenic anabolic steroids (AAS). While a major role of the healthcare practitioner is to help patients stop and/or avoid using AAS, some patients still insist on utilizing them. As such, healthcare providers need to be aware of how to best treat individuals who continue to utilize AAS despite the recommendations given in an effort to help mitigate the risks of using these drugs.

*(Domains: I,II/Level: Advanced)*

Learning Objectives:

- Discuss the prevalence of AAS use and the AAS user demographics
- Differentiate between TRT and AAS abuse
- Discuss potential health risks with AAS abuse
- Identify the factors of AAS use that may contribute to deleterious side effects
- Identify strategies that can be used to mitigate risks

8:30am – 9:30am

#### ***The Utility of Blood Flow Restriction in Athletic Training***

*Ethan Kreiswirth, PhD, ATC – Black Belt Sports Medicine, LLC*

Moderator: Tricia Kasamatsu, PhD, ATC – California State University, Fullerton

Currently, Blood Flow Restriction (BFR) is used as a modality throughout the sports medicine and sports performance world. There are few courses on its safety and utility. Most athletic trainers receive their knowledge from a third party or the internet. The purpose of this session is to educate athletic trainers on the utility and safety, as well as the evidence behind BFR. *(Domains: I,IV/Level: Essential)*

Learning Objectives:

- Define and explain Blood Flow Restriction Training (BFRT)
- Compare and contrast BFRT vs. weightlifting
- Explain and demonstrate the efficacy of BFRT within the field of rehabilitation

9:30am – 10:30am

**Management of Sudden Cardiac Arrest and Other Major Emergencies in Sports**

*Ketan Patel, MD – UMC Las Vegas/UNLV Department of Emergency Medicine*

Moderator: Tedd Girouard, MS, LAT, ATC, University of Nevada, Las Vegas

Sudden Cardiac Arrest (SCA) is a possibility at any level of competition regardless of sport. Screening techniques are neither absolute nor uniform, and thus, athletes will always be susceptible to SCA while in play. This session will focus on the management and preparation to handle major emergencies including SCA, along with delving into the obstacles to accessing the best care (AED/EMS) and how to address these. (*Domains: I-III/Level: Essential*)

Learning Objectives:

- Discuss the scope of emergencies that could occur in sports and utilize real-life examples to illustrate the wide scope of potential likelihood
- Develop plans on how to best intervene in the case of an emergent scenario
- Set a standard of response based on good resuscitation principles while considering logistical, financial, and access-related obstacles
- Discuss and explore the implementation of well-thought-out EAPs regardless of sport or athlete dynamics
- Summarize methods to improve emergent response by first-line providers (team staff) to achieve best outcomes in emergent scenarios

10:30am – 11:00am

**Trade Show Break and Free Communications Research Posters – Ballroom B**

11:00am – 12:00pm

**Functional Performance Outcome Measures for Return to Activity**

*Mike Diede, PhD, ATC – Brigham Young University*

Moderator: Melissa Montgomery, PhD, ATC – California State University, Fullerton

Returning to play criteria has been a long-standing tradition in medicine. Recent advancements in assessing functional movement and many patient-specific physical outcomes have been developed and evaluated. There is a gap in practice exposure to these measures, scores, and their application to clinical practice. Our patients will benefit as we adjust rehab protocols following outcomes assessment. This session will focus on the physical measures that can be done with minimal equipment. Components of the SFMA and the return to play functional testing measures including lower quarter; Y-Balance, mSEBT, Hop testing, Pro-agility, T-Test, and others, will be discussed and demonstrated. (*Domains: II,IV;BCS-O:I/Level: Essential*)

Learning Objectives:

- Distinguish when functional outcome measures are appropriate
- Develop specific measurement strategies to discuss and implement with patients during return-to-play decisions
- Compare functional outcome measures and recognize the strengths and weaknesses of each

12:00pm – 1:00pm

***Preparing for a Mass Casualty Incident Event: Understanding an Athletic Trainer's Role***

*Edward Strapp, FPC, TPC, NRP, LAT, ATC – Sports Medicine Emergency Management*

Moderator: Jamie DeRollo, DAT, MBA, ATC – Modesto Junior College

During a Mass Casualty Incident (MCI) event, if there is a plan in place the odds of increasing survival rates greatly increase. Pre-event planning is the best strategy. We must look at clearer options and a better method for survival to protect the greatest number of potential victims. Understanding the role of an athletic trainer in the initial phases of an MCI will allow the AT to build a better response system and have an accurate sense of what is necessary in this unique situation. *(Domains: I,III,V/Level: Advanced)*

Learning Objectives:

- Discuss and demonstrate the START Triage algorithm
- Explain how a pre-hospital inter-professional healthcare team works collaboratively to improve patient outcomes
- Discuss risk management, catastrophic injury planning, and crisis management principles
- Identify where specific medical interventions fit into START
- Demonstrate START in a simulated Mass Casualty Incident Event

1:00pm – 2:00pm

***Trade Show Lunch Showcase and Free Communications Research Posters – Ballroom B***

2:00pm – 3:00pm

***The Injured Performer: Medical Management for Circus Artists***

*Nathan Hollister, BS, MA, MD – Kirk Kerkorian School of Medicine, University Medical Center*

*Scott McDonald, AA, Professional Performer, Circus Coach – University of Nevada, Las Vegas*

Moderator: Mark D'Anza, MEd, LAT, ATC – Clark County School District

Circus artists are a distinctive and important population regarding their injuries and recovery process. Performers have special needs given that their bodies are quite literally their paycheck. They also are prone to both acute and chronic injuries given the stress of performing and training. Circus artists in particular have many unique considerations that need to be made when considering injury diagnosis, management, and ultimate “return to play” decisions. *(Domains: II,IV;BCS-O:I/Level: Essential)*

Learning Objectives:

- Identify specific circus apparatuses and the injuries associated with those apparatuses
- Discuss the unique needs and considerations one must take in the treatment and rehabilitation of performers in general, as well as circus artists specifically
- Identify the barriers to health care that performers have and develop techniques to help overcome these barriers
- Identify the unique aspects of a circus artist’s true and full “return to play”

3:00pm – 4:00pm

### ***Tendinopathy***

*William Rosenberg, MD – Silver State Sports Medicine, Las Vegas Raiders and Golden Knights*

Moderator: Tedd Girouard, MS, LAT, ATC – University of Nevada, Las Vegas

This session will present the epidemiology and pathophysiology of tendinopathy. Diagnostic imaging of tendinopathy, including ultrasound and MRI, will be explored. The latest evidence-based treatment options for tendinopathy will also be reviewed, including both nonoperative and operative treatment options. Indications for the treatment of athletes with tendinopathy will be discussed.

*(Domains: II,IV/Level: Essential)*

Learning Objectives:

- Explain the epidemiology and pathophysiology of tendinopathy
- Identify evidence-based treatment options for tendinopathy
- Discuss indications for the treatment of athletes with tendinopathy

4:00pm – 5:30pm

### ***FWATA Business Meeting***

5:30pm – 6:30pm

### ***California State Meeting***

## **Ballroom A**

### ***Lecture Sessions***

8:30am – 9:30am ***Athletic Training Student Session***

### ***The Effectiveness of Active Video Games as a Mode of Therapeutic Interventions Among the Active Population***

*Sabrina Deans, PhD, PES, ATC – Sierra College*

Moderator: Felipe Contreras – University of La Verne

The effectiveness of active video games (AVGs) as a mode of therapeutic intervention versus or in combination with traditional intervention has provided promising outcomes for improvement in proprioception and functional movement. This presentation will provide athletic training students with evidence-based literature allowing clinicians to explore rehabilitation techniques through gaming technology. *(Domain: Student/Level: Essential)*

Learning Objectives:

- Explain the literature regarding the use of AVGs within the active population
- Describe when and/or how to implement AVGs into a therapeutic intervention program
- Discuss the outcomes resulting from adding AVGs to a rehabilitation program

9:30am – 10:30am

***The Association between the Retention Rate, Burnout, and Mental Health of Athletic Trainers***

*Nicole MacDonald, DrPH, ATC, CSCS – California Baptist University*

*Lisa Friesen, PhD, ATC – California Baptist University*

Moderator: Jolene Dickert, EdD, ATC – California Baptist University

The purpose of this talk is to discuss the variables and trends leading to the turnover rate and burnout of athletic trainers. Work-life balance is a problem in the profession of athletic training and poor mental health (burnout) can contribute to the imbalance. This presentation will provide insight into the contributing factors of burnout that may help athletic trainers recognize these factors and take steps to mitigate their effects. (*Domain: I/Level: Essential*)

Learning Objectives:

- Provide a discussion of the analysis of data from a survey research study conducted on athletic trainers regarding mental health and burnout
- Identify the factors contributing to poor mental health in the profession of athletic training
- Discuss possible ways of mitigating mental health challenges in athletic training to prevent burnout

10:30am – 11:00am

***Trade Show Break and Free Communications Research Posters – Ballroom B***

11:00am – 12:00pm ***Athletic Training Student Session***

***Enhance Your Capital and Culture to Influence Decision Making***

*Junior Domingo, MS, ATC – Citrus College*

Moderator: Mae Moraes – California State University, Long Beach

From the completion of an athletic training program to beginning their clinical practice, many young professionals need to build their “capital” to implement an appropriate athletic training facility culture that represents their professional philosophies and intended clinical practices. Currently, there is limited to no research on the development of an athletic training facility culture that reflects the athletic trainer, their intended practices, and decision-making. This presentation will allow for the discussion of how an athletic trainer can build their “capital” to allow them to grow professionally, develop and refine their philosophies, guide the decision-making process, and provide support to their patients and other stakeholders. (*Domain: Student/Level: Essential*)

Learning Objectives:

- Consider the effects that athletic training facility culture can have on the quality of health care provided
- Identify an athletic trainer’s potential human capital areas and create strategies to enhance its development to assist in the decision-making process
- Provide opportunities for self-evaluation of current state in comparison to intended/desired capital and culture
- Relate the importance of an athletic trainer’s human capital and athletic training culture in the overall operations and value provided through its healthcare practices

12:00pm – 1:00pm

***Learn to Get Paid: Negotiating for Fair Compensation***

*Kimberly Detwiler, DAT, ATC – San Diego State University*

Moderator: Margo Greicar, EdD, ATC – San Diego State University

Recent research has shown that over 50% of athletic trainers did not attempt salary negotiation during the hiring process. Many cited having no formal training or education as a reason they did not negotiate. Athletic trainers and students need training and education in how to determine a fair salary and then negotiate successfully. (*Domain: V/Level: Essential*)

Learning Objectives:

- Discuss what recent research has discovered about the negotiation experiences of athletic trainers
- Understand the resources available to determine a fair salary
- Synthesize information from the literature, resources, and this presentation to successfully negotiate compensation

1:00pm – 2:00pm

***Trade Show Lunch Showcase and Free Communications Research Posters – Ballroom B***

2:00pm – 3:00pm ***Athletic Training Student Session***

***How to Maximize Your Skill Set and Diversify Your Career***

*Kristyne Wiegand, PhD, ATC – Eastern Washington University*

Moderator: Jeffrey Tam – University of Hawaii, Manoa

In today's current cultural and societal climates, students and recent graduates are faced with a myriad of options to utilize their skill sets beyond the traditional path. Amid a changing society and faced with uncertainties, individuals are often left to wonder if they are on the right path or fulfilling their full potential. Athletic training students spend years honing specific skills but are not often reminded of how those skills can be used outside of the field or clinic, or even how the "unseen" or "soft" skills can be used to enhance their career pathways. This presentation aims to highlight the alternative and creative ways that AT students can use their skills to craft the career that fits them. (*Domain: Student/Level: Essential*)

Learning Objectives:

- Identify the "unseen" transferable skills that are developed during an athletic training degree, including communication, problem-solving and critical thinking, time management, work ethic, and teamwork
- Identify personal values and explore how these may fit into a career pathway
- Learn how to find and evaluate alternative career pathways



3:00pm – 4:00pm

***Introduction to Musculoskeletal Evaluation and Assessment using POCUS***

*Christopher Ludwig, EdD, LAT, ATC – University of California, Fresno*

*Josh Johnson, MS – University of Idaho*

Moderator: Denise Lebsack, PhD, ATC – San Diego State University

Ultrasound is a powerful, cost-effective, non-invasive, and dynamic imaging modality that can augment physical exams, including for musculoskeletal injuries. The technology provides a rich source of clinical information on which to base medical decisions. However, the quality of the information in sonographic studies is highly dependent on operator skill. Therefore, practitioners must receive adequate training and education in sonography. To our knowledge, only two peer-reviewed articles have been published regarding ultrasound education in the Athletic Training profession, despite the well-established benefits of the techniques. Our presentation aims to provide a foundation for athletic trainers to build future proficiency. (*Domains: II,IV;BCS-O:I/Level: Essential*)

Learning Objectives:

- Describe the basic physics of ultrasonography
- Define common terminology with Point of Care Ultrasound
- Differentiate common imaging artifacts from real anatomical features in the musculoskeletal system
- Differentiate between normal anatomy and a variety of pathological findings in the musculoskeletal system on ultrasound images

5:30pm- 6:30pm

***Nevada State Meeting***

5:30pm-6:30pm

***Hawaii State Meeting – Pavilion 1***

**Pavilion 1**

***Mid-Conference Learning Lab #3: 8:00am – 10:00am (Check-in begins at 7:30am)***

***\*Pre-registration and additional fee required – MUST check in by 10-minutes BEFORE the start of the session.***

**Proprioceptive Neuromuscular Facilitation Techniques for the Spine and Trunk**

*Carolyn T. Greer, MA, ATC – University of San Diego, Retired*

This presentation will demonstrate and provide exposure to Proprioceptive Neuromuscular Facilitation (PNF) techniques focusing on the spine and trunk. The application of PNF techniques for extremity rehabilitation has become a proven and valuable tool for athletic trainers. Incorporating upper and lower extremity techniques to spine/trunk pathology will give the athletic trainer useful tools for the treatment of these conditions. This session will present cervical, thoracic, lumbar spine, and trunk techniques in PNF. It is recommended that attendees have upper and lower PNF experience (*Domain: IV;BCS-O:II/Level: Advanced*)

Learning Objectives:

- Define PNF, its application to rehabilitation and the principles and procedures of PNF discussed
- Demonstrate PNF patterns of motion for the spine and trunk
- Select PNF techniques utilizing isometric, concentric, and eccentric contractions and apply them to the spine and trunk

**Mid-Conference Learning Lab #4: 11:00am – 1:00pm (Check-in begins at 10:30am)**

*\*Pre-registration and additional fee required – **MUST check in by 10-minutes BEFORE the start of the session.***

### **Suturing 101: Basics of Suturing**

*Leslie Cardoza, PA-C, ATC – Carbon Health Urgent Care*

Skin injuries are commonly seen in athletics. In 2020, wound care and closure became a competency for athletic trainers per the CAATE Standards. It is important that all athletic trainers know the basics of wound care and be able to determine the appropriate wound care closure for a skin injury.

*(Domains: II,III,V/Level: Essential)*

**NOTE:** Pig's feet will be used for this suture lab

Learning Objectives:

- Discuss the stages of wound healing
- Identify wound-cleaning methods
- Explain and demonstrate holding of suture tools including pick-up and needle driver
- Evaluate wound type and determine if suture closure is needed
- Apply basic sutures to an appropriate wound

**Mid-Conference Learning Lab #5: 2:30pm-4:30pm (Check-in begins at 2:00pm)**

*\*Pre-registration and additional fee required – **MUST check in by 10-minutes BEFORE the start of the session.***

### **Advanced Suturing Techniques**

*Leslie Cardoza, PA-C, ATC – Carbon Health Urgent Care*

Wounds will vary in size, depth, and location depending on the type of injury sustained and may require different closure techniques for effective treatment. Athletic trainers should have a good understanding of how to evaluate wound severity and how to perform different types of skin closures to reduce the risk of infection/complications. This lab will provide athletic trainers with advanced skills to close deeper wounds and to perform closures that reduce the size of scarring. *(Domains: II,III,V/Level: Advanced)*

**NOTE:** Pig's feet will be used for this suture lab

Learning Objectives:

- Discuss the stages of wound healing
- Identify wound-cleaning methods
- Evaluate wound type and determine if suture closure is needed
- Apply advanced sutures to an appropriate wound

## **Saturday, April 20, 2024 – Hall of Fame Day**

### **Pavilion 2-3**

#### ***Lecture Sessions***

8:00am – 9:00am

#### ***What to do Before Shots are Fired: Designing an Emergency Action Plan for an Active Shooter Incident at your Institution***

*Edward Strapp, FCP, TPC, NRP, LAT, ATC – Sports Medicine Emergency Management*

Moderator: Laura Girgash, MS, LAT, ATC – Clark County School District; Dignity Health

During an active assailant event, if there is a plan in place the odds of survival during an active assailant event greatly increase. We must understand that pre-event planning is the best strategy. However, in the athletic trainers' world, the standard lockdown and shelter-in-place isn't always the best option. We must look at clearer options and a better method for survival to protect the greatest number of potential victims. We need to adjust an all-hazards plan or a school-day response for the unique settings where we find ourselves, athletes, and spectators. *(Domains: I,III,V/Level: Advanced)*

Learning Objectives:

- Describe the current knowledge of the profile (characteristics) of a shooter
- Incorporate the recommended components of an appropriate emergency action plan to prepare for a shooter in your institutional EAP
- Develop concepts for an active shooter policy that can be integrated into facilities, resources, and procedures at your institution's existing EAP

9:00am – 10:00am

#### ***Emergency Response to Dislocation: Reduction Techniques***

*Mike Diede, PhD, ATC – Brigham Young University*

Moderator: Michele Vasquez, MEd, ATC – California Baptist University

After the NATA position statement clarified reduction, in clinical practice, a gap exists regarding its implementation. There are clinical procedures associated with each type of dislocation. Techniques have not been taught or used consistently in athletic training clinical practice. It is key to discuss the decision processes, and when to reduce dislocations in the field. Techniques discussed will include all joints with common dislocations. The complicated cases and contraindicated techniques will also be discussed with specifics as to the risks and potential comorbidities with attempted reduction.

*(Domains: I-V;BCS-O:I,II/Level: Essential)*

Learning Objectives:

- Distinguish when joint relocation is appropriate and when it is not
- Discuss specific intervention strategies and implementation with the healthcare team
- Identify differences in reduction techniques and recognize the appropriateness of each
- Describe specific reduction/relocation techniques according to the anatomical structures involved

10:00am – 10:30am

**Break**

10:30am – 11:30am

***Gender Equity: Strategies & Tools to Level the Playing Field***

*NATA Strategic Issues in AT Lecture Series*

*Lyn Nakagawa, MS, ATC, CSCS – University of Hawaii*

Moderator: Melissa Montgomery, PhD, ATC – California State University, Fullerton

Female athletic trainers are represented in all practice settings and throughout healthcare, but glaring equity gaps exist in the workplace. Inequities in salary, leadership positions, and promotion for women ATs are well documented. As an example, the salary gap between men and women ATs INCREASED from 2018 to 2021 (NATA 2021 Salary Survey). This session will address recognition of the problem, analysis of underlying mechanisms, and proactive measures to overcome them. It will bring awareness to the issues surrounding inequity in the workplace and will provide strategies for all ATs to work together to address them. Resources will be presented to help ATs address equity issues in the job interview process, current employment, and post-employment. Leadership training will be emphasized to empower women with the skills needed to address and achieve workplace equity. Gender inequity is a societal issue and is pervasive throughout healthcare. Related literature on this topic specific to women in healthcare will be presented, as well as documentation demonstrating how gender equity enhances patient care. Equity initiatives and policies of other professional societies and associations will be shared to encourage collaboration on the state, regional, and national levels. *(Domain: V/Level: Essential)*

Learning Objectives:

- Identify the underlying mechanisms of gender inequity
- List the ways to identify gender inequity in the workplace
- Develop an effective plan to address gender inequity in your workplace
- Identify how gender equity enhances patient care
- Develop a plan to collaborate with other healthcare professionals/societies to address/create Gender Equity Policy Statements

11:30am – 12:30pm

***Ehlers-Danlos Syndrome and Hypermobility Spectrum Disorders in Athletes***

*Scott W. Cheatham, PhD, DPT, ATC, PT – California State University, Dominguez Hills*

Moderator: Denise Lebsack, PhD, ATC – San Diego State University

Ehlers-Danlos Syndromes (EDS) and Hypermobility Spectrum Disorders (HSD) are groups of genetic conditions that affect the body's connective tissue. Currently, there are no evidence-based guidelines for sports medicine professionals working with these athletes. This presentation provides current research evidence on EDS/HSD classification, diagnosis, clinical presentation, complications, management strategies, and injury prevention guidelines. *(Domains: II,IV;BCS-O:I/Level: Advanced)*

Learning Objectives:

- Define the EDS/HSD sub-types, diagnostic criteria, and complications
- Discuss the EDS/HSD clinical presentation and evidence-based examination techniques as they apply to the sports medicine professional

- Identify evidence-based strategies for EDS/HSD guidelines for manual therapy, therapeutic exercise, fitness, and sport activities
- Discuss available injury prevention guidelines for athletes with EDS/HSD

12:30pm-1:30pm

**Lunch Break**

1:30pm – 2:30pm

**Early Intervention for Jaw Sprain/Strain in Sports: Concussion, Whiplash, and Blows to the Jaw**

*Bradley A. Eli, DMD, MS – Facial Pain Specialists*

Moderator: Camille Veronica A. Lu, ATC, MPH – University of California, San Francisco

There is an increased interest in the safety of players in all sports. This has been highlighted by the long-term effects of head injury in football. The head, face, neck, and jaw are interconnected on many levels, and impacts involving the region can have negative long-term effects on the athletes outside of concussion. As a specialist in the new specialty of Orofacial Pain, I am seeing non-concussive blows starting long-term jaw, neck, head, headache, and facial pain conditions. To address this problem an easy-to-use, sideline-ready program has been developed to reduce and/or eliminate these conditions. It provides a simple guided treatment that also monitors the athlete over a 4-week period. This science-based program has been designed to reduce or eliminate the development of chronic pain conditions associated with head, neck, face, and jaw injury. This presentation will review all of the affected regions both anatomically and neurophysiologically to improve the athletic trainer's understanding of the "How, Why, and What" associated with these injuries and their players. *(Domains: II,IV,V/Level: Advanced)*

Learning Objectives:

- Discuss the unique issues associated with disorders of the cranial nerves
- Discuss the importance of early intervention regarding Jaw and Muscle Sprain Strain (JAMSS)
- Identify the effects of repetitive injury and the neuromuscular/neurovascular response

2:30pm – 3:30pm

**Revolutionizing Athletic Training: The Power of AI**

*Mary Placzkowski, DAT, LAT, ATC – Colorado State University Pueblo*

Moderator: Marissa Fukunaka, EdD, ATC – Kalani High School

Despite the rapid advancements in artificial intelligence (AI) and its widespread integration into various fields, there exists a notable practice gap in leveraging AI effectively for athletic training. While some progress has been made, there are several key areas where the application of AI in athletic training can be further developed and refined. *(Domains: II,IV/Level: Essential)*

Learning Objectives:

- Discuss AI fundamentals
- Outline potential benefits and challenges, and recognize AI's significance in enhancing athlete performance and injury prevention
- Discuss how to integrate and leverage AI wearable technology in athletic training
- Analyze the benefits, challenges, and ethical considerations associated with integrating AI into professional practices

3:30pm – 4:30pm

**Medical Disqualification Following Concussion: Considerations to Aid in the Decision-Making Process**

*Michelle L. Weber Rawlins, PhD, ATC - San Diego State University*

Moderator: Tricia Kasamatsu, PhD, ATC – California State University, Fullerton

Concussion is one of the most challenging injuries that sports medicine professionals encounter. As with any injury, challenges arise with determining when continued sport participation may no longer be recommended following concussion. This presentation will address the knowledge and implementation gap between the literature and clinical practice by discussing various factors to consider in medical disqualification (MDQ) following concussion, supporting the patient through the process, and incorporating a team-based approach with numerous stakeholders. Attendees will learn factors to be considered when determining if MDQ is appropriate, their role in the process, and measures to support the athlete throughout the process. (*Domain: I/Level: Advanced*)

Learning Objectives:

- Identify factors to consider when discussing medical disqualification following concussion
- Describe methods of support for medically disqualified student-athletes following concussion
- Implement methods of support for student-athletes who have been medically disqualified following concussion

4:45pm – 5:45pm

***FWATA Quiz Bowl***

5:30pm – 6:00pm

***Awards Reception Social – Ballroom B (Bring your wristbands)***

6:00pm – 7:15pm

***Awards Reception – Ballroom B (Bring your wristbands)***

## **Ballroom A**

### ***Lecture Sessions***

9:00am – 10:00am

***De-mystifying Sports Science: How Athletic Trainers Can Capitalize on the Rise of Data***

*Kassi Hardee, MEd, ATC, LAT – St. David's Healthcare & The University of Texas at Austin*

Moderator: Kara Radzak, PhD, ATC – University of Nevada, Las Vegas

Of the various ways that incorporating sports science into a sports medicine practice can enhance outcomes, prevention and return to play decision-making are currently the primary focuses. Preliminary research indicates, for both upper and lower extremity injuries, that usage of criterion-based return-to-sport testing throughout the return-to-play decision-making process helps provide objectivity with overall functional testing goals and could lessen the chance of injury recurrence. In later rehabilitation phases, programs should cater to the patient's specific needs (sport, position, etc.), and this requires both qualitative and objective measurements when considering progression, milestone achievement, and ultimately full return to play clearance. (*Domains: II,IV;BCS-O:I,III/Level: Advanced*)

Learning Objectives:

- Identify methods to leverage and analyze already existing data for meaningful practice outcomes
- Summarize the state of objective upper and lower extremity testing as it might pertain to return-to-play decision-making
- Compare return-to-play methodologies and distinguish how to find enhanced meaning with objective measurements
- Develop systems to combine subjective/qualitative clinical standards with objective/quantitative applied measurements specifically pertaining to injury prevention and return-to-play concepts
- Thoughtfully consider what documentation variables in an individual setting could have the greatest impact on establishing data-driven practice standards

10:00am-10:30am

*Break*

10:30am – 11:30am **Athletic Training Student Session**

***The Unknown: From Class to Clinician***

*Kevan Murgia, ATC, CES – Los Angeles Rams*

Moderator: Jackson O’Neil – California State University, Fullerton

The educational need for this presentation is to introduce students to the unknowns that will arise as they transition from the classroom into practice as certified athletic trainers. This presentation will provide students with goals and tips for the transition and take away some of the “unknown”. The gap between available evidence and current clinical practice is that students may not be aware of or thinking about the unexpected while transitioning into practice. It is important to close this gap so that students are more prepared with background information on what to expect following graduation and the transition to practice. (*Domain: Student/Level: Essential*)

Learning Objectives:

- Develop a “1-year plan” for post-grad and transition to practice
- Develop a network of individuals whom you can bounce questions and ideas off of
- Identify strengths and weaknesses from your time in each of the ATP’s to find room for growth

11:30am – 12:30pm **Athletic Training Student Session**

***NATA Updates***

*Kathy I. Dieringer, EdD, LAT, ATC – President, NATA*

Moderator: Nicole Briseno – California State University, Fullerton

12:30pm-1:30pm

*Lunch Break*

1:30pm – 2:30pm ***Athletic Training Student Session***

***Foundational Principles of Functional Rehabilitation with Purpose***

*Bobby Gragston, ATC, PT, DPT – Los Angeles Chargers*

Moderator: Bre Yep – California State University, Fullerton

MSAT programs exist to educate students to provide athletic training services in a manner that uses evidence to inform practice. Evidence-based practice includes using the best research evidence, clinical expertise, and patient values and circumstances to connect didactic content taught in the classroom to clinical decision-making. Foundational knowledge in therapeutic interventions is taught across all CAATE-approved programs, but traditionally only ~ 6 hours of semester hours are dedicated throughout a traditional curriculum. It is imperative that ATs can appropriately stress implicated tissues in a functional manner with literature-supported exercise prescription variables throughout musculoskeletal rehabilitation so that employees can return to work and athletes can effectively return to performance. (*Domain: Student/Level: Essential*)

Learning Objectives:

- Explain the different observation essentials of functional exercise and rehabilitation
- Apply the functional application techniques and traditional exercise prescription variables to future programmed musculoskeletal rehabilitation
- Select appropriate exercise prescription variables and "tweaks" to manipulate when designing musculoskeletal rehabilitation programs based on evidence-based medicine

2:30pm – 3:30pm

***"Ouch" to 5K: Identifying Biomechanical Risk Factors for Running Injuries***

*Kristyne Wiegand, PhD, ATC – Eastern Washington University*

*Otto Buchholz, PhD, ATC – Eastern Washington University*

Moderator: Lauryn Dawes – University of Nevada, Las Vegas

The majority of running injuries are considered overuse, which results from the prolonged application of sub-threshold stresses to body tissues. There are a variety of internal and external factors that contribute to the development of overuse running injuries, including improper mechanics. While post-injury mechanics are potentially more straightforward, there is a lack of clarity as to whether someone's typical pre-injury mechanics can be classified as "risky." As such, it is important to understand the various mechanical risk factors for overuse injury, including structural properties of tissues and potentially injurious movement patterns. (*Domain: II/Level: Essential*)

Learning Objectives:

- Discuss the structural mechanics of biological tissue, primarily as they relate to the stress-strain relationship
- Identify movement patterns and other factors that may put a runner at a higher risk of injury
- Recommend potential solutions for runners at risk of injury



3:30pm – 4:30pm

***Optimizing the Return to Play: Unifying the Performance Team for Enhanced Results***

*Heather Farmer, MS, CSCS, RSCC – University of Nevada, Las Vegas*

Moderator: Kara Radzak, PhD, ATC – University of Nevada, Las Vegas

With the increased development of high-performance or sport science team pillars across the NCAA, more expertise is available for athletes' enduring rehabilitation and return to play (RTP). While each professional collects and analyzes data within their silo of expertise, data crossover exists that can enhance processes as well as outcomes when evaluated in a unified setting. While each member has specific objectives throughout the phases of the RTP, bridging this team ensures athletes are receiving the greatest care possible for health and performance. Evaluating the current performance team models to identify the markers for each professional during return to play and identifying the parallels allows for advanced treatment. With this, we can outline a comprehensive approach for enhanced results.

*(Domain: IV;BCS-O:I,III/Level: Essential)*

Learning Objectives:

- Evaluate the traditional path of the performance team areas during a return to play
- Identify where RTP decision criteria can be enhanced with context and depth via a unified performance team
- Apply a wholistic overlap of the performance team during RTP and identify where sport science can assist in facilitating holistic collaboration

4:30pm – 5:30pm

***Motor Abundance and Constraints: Theory and Applications for Injury Prevention and Rehabilitation Exercises***

*Sean P. Flanagan, PhD, ATC, CSCS – California State University, Northridge*

Moderator: Cris Stickley, PhD, ATC, CSCS – University of Hawaii, Manoa

The first part of this presentation will demonstrate how the dual influences of motor abundance and constraints shape the neuromechanics of human movement. The second part will examine how these concepts explain injuries that arise from compensatory motion, the limitations of movement screens, and how athletic trainers can manipulate constraints during exercises to achieve desirable outcomes.

There is a knowledge gap in how movement screens are used as diagnostic tools to identify impairment and the possible impairments that may cause a movement fault. There is a knowledge gap where one may think the demand is placed during an exercise and where it may be placed due to compensatory motion. *(Domains: II,IV/Level: Advanced)*

Learning Objectives:

- Define motor abundance, solution space, constraints, optimization, and robustness in the context of human movement
- Identify common constraints and how they influence movement
- Explain how motor abundance and constraints may lead to injury and prevent movement screens from being used as diagnostic tools
- Demonstrate how to use constraints during injury prevention and rehabilitation exercises

## Pavilion 1

**Mid-Conference Learning Lab #6: 8:00am-10:00am (Check-in begins at 7:30am)**

*\*Pre-Registration and additional fee required – **MUST check in by 10-minutes BEFORE the start of the session.***

### **Diagnostic Ultrasound: The Application and Utilization within the Athletic Training Setting**

*Eugene Roh, MD – Stanford University*

*Sanam Rezazadeh, MS, ATC – Stanford University*

The ability to learn how to operate diagnostic ultrasound is not easily accessible to the athletic training profession unless we go back to school to fulfill another degree. This lab will allow athletic trainers to understand the basics of ultrasound imaging, including understanding correct indications, operation of the unit, and obtaining and reading ultrasound images commonly acquired in sports medicine. The ability to receive feedback on the ease of operating the unit as well as how well this would be utilized within the profession can create the groundwork for possible incorporation into the athletic training profession.

*(Domain: II;BCS-O:I/Level: Essential)*

Learning Objectives:

- Understand the different uses for diagnostic ultrasound
- Identify the possible applications within the athletic training setting
- Discuss ultrasound principles
- Effectively operate a diagnostic ultrasound unit
- Accurately read an ultrasound image and identify anatomical landmarks while utilizing diagnostic ultrasound

**Mid-Conference Learning Lab #7: 11:00am-1:00pm (Check-in begins at 10:30am)**

*\*Pre-Registration and additional fee required – **MUST check in by 10-minutes BEFORE the start of the session.***

### **The Utility of Blood Flow Restriction in Athletic Training**

*Ethan Kreiswirth, PhD, ATC – Black Belt Sports Medicine, LLC*

Currently, Blood Flow Restriction (BFR) is used as a modality throughout the sports medicine and sports performance world. There are few courses on its safety and utility. Most athletic trainers receive their knowledge from a third party or the internet. The purpose of this lab is to educate athletic trainers on the utility and safety, as well as the evidence behind BFR. *(Domain: IV;BCS-O:II/Level: Essential)*

Learning Objectives:

- Define and explain Blood Flow Restriction Training (BFRT)
- Compare and contrast BFRT vs. weightlifting
- Explain and demonstrate the efficacy of BFRT within the field of rehabilitation
- Demonstrate and define the use of BFRT in the athletic training setting
- Apply and operate the use of BFRT on an individual
- Explain and justify the need for BFRT for a rehab protocol

**Mid-Conference Learning Lab #8: 2:30pm-4:30pm (Check-in begins at 2:00pm)**

**\*Pre-Registration and additional fee required – MUST check in by 10-minutes BEFORE the start of the session.**

**Exploring Current Concepts of Active Video Games as a Mode of Therapeutic Interventions for Active Individuals**

*Sabrina Deans, PhD, PES, ATC – Sierra College*

The effectiveness of active video games (AVGs) as a mode of therapeutic intervention versus or in combination with traditional intervention has provided promising outcomes for improvement in proprioception and functional movement. This lab will provide evidence-based literature and implementation strategies to allow athletic trainers to explore rehabilitation techniques through gaming technology. (*Domain: IV/Level: Essential*)

Learning Objectives:

- Explain the literature regarding the use of AVGs within the active population
- Describe when and/or how to implement AVGs into a therapeutic intervention program
- Discuss the outcomes resulting from adding AVGs to a rehabilitation program
- Select video gaming systems and games for the desired rehab outcome/goal
- Apply active video games as a mode of therapeutic intervention with self-assurance
- Instruct patient/athlete on how to perform gaming tasks

**Sunday, April 21, 2024**

## **Pavilion 2-3**

### ***Lecture Sessions***

8:00am – 9:00am

#### ***Social Determinants of Health and Concussion Care: Implications and Strategies to Lessen Impact***

*Michelle L. Weber Rawlins, PhD, ATC – San Diego State University*

*Alejandra Merriman, DAT, ATC, CES – Dorsey High School*

Moderator: Jolene Dickert, EdD, ATC – California Baptist University

The overall aim of this presentation is to provide attendees with general knowledge and strategies to lessen the impact of social determinants of health (SDH) and concussion care. Athletic trainers are well suited given our unique healthcare employment model, often being primed to understand the social and cultural circumstances that surround the patients to whom we provide care. Our presentation will provide a general SDH overview, describe how SDH may contribute to concussion care, and how to mitigate those disparities. The information provided will support healthcare provider efforts to decrease health disparities related to SDH in concussion care. *(Domain: I/Level: Advanced)*

Learning Objectives:

- Identify and describe SDH
- Describe how SDH may influence concussion care
- Implement strategies in efforts to potentially lessen the influence SDH may have on concussion care

9:00am – 10:00am

#### ***Enhancing the School-Based EAP Beyond the Document***

*Andrew Paulin, ATC – Mt San Antonio College, Retired*

Moderator: Mark D'Anza, MEd, LAT, ATC – Clark County School District

Have you recently reviewed your school-based Emergency Action Plan (EAP)? Research indicates that financial barriers can prevent procurement of the necessary equipment needed for potential emergent situations. A lack of knowledge has also been identified as a barrier to implementing an EAP. This presentation will provide opportunities for athletic trainers to rehearse and review their facilities EAP at their school-based athletic program. Discussion on the challenges of providing effective emergency medical services with time constraints, equipment limitations, rotating athletic training staff, and schedule conflicts will be explored. *(Domains: I,III,V/Level: Essential)*

Learning Objectives:

- Identify and discuss how a pre-hospital interdisciplinary healthcare team works collaboratively to improve patient outcomes
- Apply current scientific guidelines and treatment recommendations regarding prehospital trauma management
- Identify the effective methods of communicating with colleagues to deliver effective acute care at competition sites
- Examine and discuss the current scientific evidence to determine the effectiveness and efficacy of the use of various transportation equipment

10:00am – 11:00am

**Industrial Athletic Trainers**

*Yvonne Tapia, ATC, LAT – Amazon Fulfillment Center*

*Ulises Sanchez-Flores, MS, ATC, LAT – Amazon Fulfillment Center*

*Kyle Wilson, MEd, ATC, LAT – Amazon Fulfillment Center*

Moderator: Michelle Samuel, PhD, ATC, LAT – University of Nevada, Las Vegas

Industrial athletic trainers are a growing segment of the NATA and large industrial corporations. Their main purpose is to prevent injuries based on the analysis of injury trends and ergonomic issues in the workplace. They provide multiple health care services to individual employees and at the same time provide cost savings measures for the company and a safer work environment for employees.

*(Domains: I,II,III,V/Level: Essential)*

Learning Objectives:

- List the key job responsibilities of an industrial athletic trainer
- Recognize potential poor ergonomic conditions/risk factors at the workplace
- Identify and analyze injury trends
- Develop effective injury prevention activities
- Summarize the importance of OSHA

11:00am – 12:00pm

**Cultural Competency: An Introspective and Cognitive Approach to Patient Care with Native/Indigenous Athletes**

*Presented by the FWATA Ethnic Diversity Advisory Committee*

*Jasmine Velasquez, ATC, CTE, MEd – West Coast Sports Medicine/Team to Win*

Moderator: Alejandra Merriman, DAT, ATC, CES – Dorsey High School

To create a better quality of care for athletes, there needs to be a greater understanding of cultural competency. One of the foundations stated in the 5th Edition of the NATA Athletic Training Education Competencies states the following regarding patient care: the athletic trainer needs to demonstrate *“effective interpersonal and cross-cultural communication as it relates to interactions with patients and others involved in the health care of the patient.”* Native/Indigenous students (8-12th grade) make up less than 1% of students enrolled in schools, and many students have stated that this is due to the historic oppression that educational systems (outside of tribal lands) were “designed to erase us.” This carries over to patient care, many Native/Indigenous athletes will not get proper treatment or care due to these same concepts, that these systems do not include or value the native/indigenous athlete. But as athletic trainers, we have an obligation to fill in the gap of inequitable and culturally ignorant health care.

*(Domain: I/Level: Essential)*

Learning Objectives:

- Understand and discuss traditional and cultural medical practices
- Develop culturally relevant and effective treatment plans
- Be able to differentiate; what you know about an athlete’s culture and when you can learn from someone’s cultural