

## **2019 Colorado Athletic Trainers' Association Annual Clinical Symposium and Meeting Speaker and Learning Objective List**

### **Ben Cowin, DC, MS, ATC**

#### ***Cannabis in Sport: The Performance Potential (1 CEU)***

##### ABSTRACT

Cannabis has been thrust into the forefront of the athletic world of late with the ban on CBD being lifted by WADA, CBD being taken off of the FDA's regulatory list & multiple states decriminalizing and legalizing cannabis for both medical and recreational use. As it continues to grow in popularity, so do the myths and "wives' tales" of what cannabis potentially can do. We want to take a look at the literature and see exactly what science says about the plant, phytocannabinoids, and the therapeutic potential it may have for your athletes.

##### LEVEL OF DIFFICULTY

Essential - includes core theory, concepts and applications

##### PRACTICE GAP

Currently the evidence on cannabis is very limited, especially when it applies to the athlete. The information in circulation has not been objectively researched and produced questionable results. Education regarding objective, evidence-based information about the physiological effects will assist athletic trainers in providing quality, and reliable information to their athletes regarding cannabis use.

##### LEARNING OBJECTIVES

1. The learner will identify the difference between CBD & THC
2. The learner will define the basic function of the endocannabinoid system (ECS)
3. The learner will identify the clinical implications of certain phytocannabinoids

##### LEARNING OUTCOMES

After identifying the difference between CBD and THC, as well as how the phytocannabinoids interact with the body, the learner demonstrates objective evidence-based decisions for the athlete's therapeutic care.

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### **James Genuario, MD**

#### ***Hip Microinstabilities: Clinical Presentation, Physical Examination, and Treatment (1 CEU)***

##### ABSTRACT

Hip Microinstability is a common cause of athletic hip pain and hip labral tears. Its pathophysiology and anatomy are often poorly misunderstood, misdiagnosed as femoroacetabular impingement, and mistreated. The lecture is intended to help clinicians better understand clinical presentation, diagnosis and management.

##### LEVEL OF DIFFICULTY

Mastery - highest level of theory concepts and application of knowledge of techniques within a specific area

##### PRACTICE GAP

Evaluation and treatment of the hip and pelvis have changed rapidly in the last decade. As surgical techniques have advanced, so have the prevalence of patients and athletes looking for answers to their hip dysfunction. As research advances, athletic trainers need to play a large role in evaluating and diagnosing hip injuries to provide a high level of treatment for these injuries. Athletic trainers will need to know the specific anatomy of the hip to use special tests, athlete history, and injury mechanism to help evaluate these injuries. Athletic trainers will also

play the key role in beginning and progressing the athletes through the hip rehabilitation process. They will need to understand ROM restrictions, muscles and their firing patterns, and return to sport progressions to create successful outcomes.

### LEARNING OBJECTIVES

1. The learner will be able to list and recognize the difference in clinical presentation between femoroacetabular impingement and hip micro instability.
2. The learner will be able to list specific special tests used to evaluate hip pathology
3. The learner will be able to list describe the initial rehabilitative process following non-operative hip injury.

### LEARNING OUTCOME

After recognizing the pathological differences of FAI vs labrum pathology, the learner will implement the appropriate hip protocol to address the unique needs of both conditions.

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## **TJ Hovel, PTA**

### *Blood Flow Restriction: Application and Integration (0.5 CEU)*

#### ABSTRACT

Application and integration of Blood Flow Restriction training into plan of care from acute to performance. Evaluation and treatment processes have changed rapidly in the last decade. As medicine evolves, science looks for new techniques or tools to speed and improve patient healing. As research advances, athletic trainer's role as evaluating and diagnosing clinician must advance and provide a high level of treatment for injuries. Specific knowledge of injury pathophysiology is crucial to connecting the bridge between injury and advanced techniques such as BFR. Athletic trainers play the key role in beginning and progressing the athletes through the rehabilitation process. Distinguishing first if BFR is appropriate, then applying this rehabilitative tool with specificity has the potential to improve and elevate patient outcomes.

#### LEVEL OF DIFFICULTY

Essential - includes core theory, concepts and applications

#### PRACTICE GAP

Evaluation and treatment processes have changed rapidly in the last decade. As medicine evolves, science looks for new techniques or tools to speed and improve patient healing. As research advances, athletic trainer's role as evaluating and diagnosing clinician must advance and provide a high level of treatment for injuries. Specific knowledge of injury pathophysiology is crucial to connecting the bridge between injury and advanced techniques such as BFR. Athletic trainers play the key role in beginning and progressing the athletes through the rehabilitation process. Distinguishing first if BFR is appropriate, then applying this rehabilitative tool with specificity has the potential to improve and elevate patient outcomes.

### LEARNING OBJECTIVES

1. The learner will describe basic application of BFR.
2. The learner will describe historical development of the BFR technique.
3. The learner will list the contraindications from BFR.
4. The learner will recognize the clinical criteria utilized to appropriately progress BFR rehabilitative patients.

## LEARNING OUTCOMES

In recognizing the contraindications of Blood Flow Restriction, the practitioner can immediately recognize an appropriate candidate for this intervention in an effort to improve patient outcomes. This ability protects the patient and saves critical rehabilitation time.

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## **Jeff Katzoff, PT, DPT, ATC, CSCS**

### *Sacroiliac Joint Dysfunction and Symptoms Commonly Misdiagnosed and Treated as Lower Extremity Injuries (1 CEU)*

#### ABSTRACT

Looking at treating athletic injuries is something that Certified Athletic Trainers (ATC) have always done. It is part of the profession. With the ever-changing philosophies in healthcare and the way we treat athletic injuries, ATC's have to stay abreast of both new and old techniques and strategies. When one looks at some of the various differences between the world of athletic training and physical therapy, one can see that the amount of exposure to lumbar spine conditions in the ATC world is limited. However, with the advancement in both treatment approaches and licensure in athletic training as well as the amount of ATC's that work in both the traditional setting and the clinical setting, it should be held in consideration that both professions understand the fact that looking at lower extremity radicular pain should be more broad than just thinking that it is a lumbar spine dysfunction.

#### LEVEL OF DIFFICULTY

Advanced - in-depth theory, concepts and applications of information and/or techniques that are presented beyond the Essential Level

#### PRACTICE GAP

The purpose of this presentation is to look at the various factors that lead an athlete to lower extremity radicular pain, how they can and should be assessed, and what the various treatment options are before declaring a condition surgical. Athletes often present with present vague symptoms and are unable to differentiate the condition. Iliotibial pain, lateral hip pain, anterior hip pain, lateral knee pain; none of the tests or treatments traditionally utilized are changing an athlete's condition or performance. Often, various lower extremity radicular pain patterns can be linked to sacroiliac joint dysfunction and are being missed in the lower extremity evaluation.

#### LEARNING OBJECTIVES

1. The learner will identify structural positioning and postural abnormalities, as well as injury mechanisms that can lead to lower extremity radicular pain associated with Sacroiliac dysfunction
2. The learner will recognize the difference between lower extremity radicular pain and the source of its symptoms with regards to postural dysfunction and injury.
3. The learner will describe a systematic differential evaluation to improve differentiation between Lumbar Spine and Sacroiliac Joint radicular pain.
4. The learner will identify a treatment plan to correct sacroiliac positioning and function to improve patient outcomes for lower extremity pain commonly misdiagnosed as lumbar spine dysfunction.

#### LEARNING OUTCOMES

After understanding the significant difference between lumbar spine and sacroiliac radicular pain distribution, appreciate the significant importance a thorough subjective and objective systematic differential evaluation in determining complex radicular pain dysfunctions. Through this the learner can create a treatment approach with

the understanding of the importance of both lumbar spine and sacroiliac stabilization to better treat the athlete as a whole.

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## **Gary Sakryd, MS, AT (ret), PAC**

### *Posterior Fixed Rib Stress Fracture in a Professional Baseball Pitcher (0.5 CEU)*

#### ABSTRACT

Rib stress fractures in athletes is a relatively uncommon diagnosis. Rib stress fractures in baseball players have been reported in the first and floating ribs, however, fixed rib stress fractures in baseball players has not been reported. This presentation demonstrates the first reported case of a fixed rib stress fracture in a professional baseball pitcher. The anatomy, pathology, radiology and treatment of fixed rib stress fractures is presented.

#### LEVEL OF DIFFICULTY

Advanced - in-depth theory, concepts and applications of information and/or techniques that are presented beyond the Essential Level

#### PRACTICE GAP

Though rib fractures may be common place, less is known about rib stress fractures among the active population. Current evidence offers little for support for special testing norms and differential case studies. This case study will look at a professional baseball player and how to include the criterion for fixed rib stress fracture in the differential.

#### LEARNING OBJECTIVES

1. The learner will recognize how to test for a fixed rib stress fracture
2. The learner will explain the differential diagnoses for fixed rib stress fractures

#### LEARNING OUTCOMES

After recognizing how to accurately evaluate for a fixed rib stress fracture, the learner will modify changes differentials based on findings in thoracic evaluations. The knowledge of fixed rib stress fractures also identifies a biomechanical pathology for baseball athletes. This information can be utilized for preventative therapeutic interventions.

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## **Nicholas Studholme, DC**

### *Neurogenic Inflammation and its Role in Chronic Injury Pain (1 CEU)*

#### ABSTRACT

Neurogenic inflammation is commonly misdiagnosed as many different pain entities but especially as myofascial pain. It is a major contributor to the chronification of pain and this presentation will give you an introduction to treatment and management of neurogenic inflammation.

#### LEVEL OF DIFFICULTY

Mastery - highest level of theory concepts and application of knowledge of techniques within a specific area

#### PRACTICE GAP

The practice gap is that neurogenic inflammation can mask many different conditions that are misdiagnosed as a result of this not being considered as a differential nor having a skill set around how to manage it.

## LEARNING OBJECTIVES

1. The learner will recognize neurogenic inflammation.
2. The learner will describe how neurogenic inflammation can create chronic pain.
3. The learner will identify a framework to address neurogenic inflammation

## LEARNING OUTCOMES

After learning how to recognize neurogenic inflammation the learner will be able to identify a peripheral nerve and understand how to manually and chemically address this nerve pain.

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## **Jim Turk, MS, ATC**

*Patient Oriented Outcomes: If It Matters to My Patient It Should Matter to Me!*  
(0.75 CEU)

## ABSTRACT

Traditionally, ATs have focused on outcome assessments to drive clinical practice that have been based on measures that are more oriented towards the clinician, potentially ignoring those metrics that matter to the patient. This presentation will examine a more patient-centered & whole person approach to outcomes measurement. It will discuss the topic through the lens of the IOM Core Competencies and the Disablement Model and will attempt to equip the attendee with practical tools with which to apply the concept in their clinical practice.

## LEVEL OF DIFFICULTY

ESSENTIAL: includes core theory, concepts and applications

## PRACTICE GAP

ATs, traditionally, may be at risk of focusing their patient management on measures that are too clinician oriented. Without considering outcomes that matter to the patient, the AT may fail to provide patient-centered and whole person care, resulting in less than optimal results for their patient. This concept, while found in current educational models, was not traditionally a component of AT education, and as such, may be lacking in clinical practice.

## LEARNING OBJECTIVES

At the conclusion of the presentation, attendees will be able to: Describe the difference between outcomes that are clinician oriented and patient oriented. Explain the importance of basing clinical decisions on whole person data rather than just clinician-oriented data. Identify patient-based measurement tools that are applicable to their clinical practice.

## LEARNING OUTCOMES

At the conclusion of the presentation, attendees will be able to: Describe the difference between outcomes that are clinician oriented and patient oriented. Explain the importance of basing clinical decisions on whole person data rather than just clinician-oriented data. Identify patient-based measurement tools that are applicable to their clinical practice.

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## **Amanda Turner, MS, RDN, CSSD**

*Fueling the Team Sport Athlete (1 CEU)*

## ABSTRACT

Team sport athletes at all levels are exposed to a variety of diet trends. Athletic performance can be negatively impacted if the wrong trends are adopted by the athlete. It's important that all sports medicine staff are reinforcing nutrition principles to help the athletes feel and perform their best with regard to the athlete's relationship to food and body image.

## LEVEL OF DIFFICULTY

Advanced - in-depth theory, concepts and applications of information and/or techniques that are presented beyond the Essential Level

## PRACTICE GAP

AT's are a first-line resource to recognize inadequate and inappropriate fueling in team sport athletes. Early recognition and referral to a sports dietitian will maximize performance, minimize injury and improve the athletes long term health. Nutrition messaging amongst the AT, coach and other sports medicine team members should be standardized and evidence-based.

Research based evidence shows that nutrition plays a key role in the speed and efficacy of rehabilitation in an injured athlete. If an athlete is not meeting nutrition needs during periods of injury rehabilitation, recovery is delayed, extending the time to return to play. Athletic trainers can bridge the gap between the athlete and healthy eating patterns since they have consistent contact with the athlete, returning them to play faster. Recovery would be expedited by athletic trainer's completing a short nutritional assessment, providing general nutrition tips, and referring to a sports dietitian for further assessment and nutrition prescription.

## LEARNING OBJECTIVES

1. The learner will be able to recall current research-based fueling strategies for the team sport athlete while in-season.
2. The learner will be able to identify athletes at risk of under fueling and messaging that can reduce risk of under fueling.

## LEARNING OUTCOMES

The learner understands three questions to ask athletes to assess food intake and relationship with food

The learner explains consequences of under fueling on athletic performance

The learner implements simple strategies for fueling athletes well during training and competition.

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## **Julie Wilson, MD**

### *Advancing Concussion Care for Athletes – Recognition, Recovery and Return to Play Considerations (1 CEU)*

## ABSTRACT

Care of sport-related concussion continues to evolve at a rapid pace and athletic trainers should be aware of current guidelines and emerging research to provide optimal care to athletes. This presentation will highlight various advancements in concussion clinical guidelines and research which is directly applicable to athletic trainers. Topics will include the importance of prompt recognition and removal from play, the role of active recovery in concussion management, return to sport considerations, concussion prevention strategies and risk of subsequent musculoskeletal injury following return to play after concussion recovery.

## LEVEL OF DIFFICULTY

Advanced - in-depth theory, concepts and applications of information and/or techniques that are presented beyond the Essential Level

### PRACTICE GAP

Historically, concussion guidelines emphasized the role of both physical and mental rest during recovery; however, in recent years, have evolved to incorporate active recovery strategies. Clinical practice has yet to consistently incorporate active recovery in the acute concussion recovery setting. Additionally, recent research supports an association between recent concussion and subsequent musculoskeletal injury risk, which has not traditionally been discussed in return to play counseling after concussion but may be relevant for athletes.

### LEARNING OBJECTIVES

1. The learner will identify the role of active recovery in concussion management
2. The learner will recognize factors which may influence return to sport decision making after concussion.
3. The learner will synthesize the evidence for concussion prevention strategies.

### LEARNING OUTCOMES

Concussion management is multifaceted, the learner will immediately be able to explain the effect of continued participation immediately after concussion on athlete recovery and counsel athletes on the risk of musculoskeletal injury following return to play after concussion.