Femoroacetabular Impingement: The Arthroscopic Approach:  
Dr. Scott Mullen

Presentation Objectives:

- Participants will be able to define femoroacetabular impingement (FAI).
- Appropriately diagnose FAI and differentiate from other causes of hip pain.
- Appropriately perform the diagnostic exams.
- Determine when it is appropriate to send their patient on for orthopedic consult.

Speaker Biography:

Scott Mullen, MD is an orthopedic surgeon at University of Kansas Hospital. He completed medical school, a general surgery residency and an orthopedic surgery residency at the University Of Kansas School Of Medicine. Following residency, he completed an Orthopedic Surgery Sports Medicine Fellowship at Steadman Hawkins Clinic in Denver, Colorado. Dr. Mullen has been a team physician for numerous teams, currently serving with the Royals, Chiefs, and various high schools. Dr. Mullen is an Ironman athlete and enjoys spending time with his wife and two kids.

Knowledge Gap:

Even with the awareness of potential causes of hip pain, patients suffering from acetabular labral tears related to femoroacetabular impingement (FAI) see an average of 4 physicians, have 3.4 diagnostic imaging tests, wait 32 months and spend more than $1700 dollars above Medicare’s calculated minimum cost before receiving an accurate diagnosis (Kahlenberg et al, 2014). There are many possible differential diagnoses for patients with FAI including but not limited to chronic hip adductor and hip flexor strains, stress fracture, loose bodies, osteochondral injury, athletic pubalgia, iliopsoas tendinopathy and internal snapping hip (Tibor and Sekiya, 2008). Untreated or improperly treated, FAI and the associated labral tears often lead to earlier degeneration and osteoarthritis in the hip joint (Leunig, Beaule and Ganz, 2009). This program will provide information regarding the common clinical presentation, assessment and management of FAI. Athletic trainers are often the first to evaluate and manage hip pain in their patients. The ability to recognize signs and symptoms of potential cases of FAI and labral tears is essential to assist the patient in getting to an appropriate physician for assessment and management of FAI. After diagnosis, having the knowledge to appropriately manage and rehabilitate the patient is important.


The Pediatric Patient Population: No Stone Unturned Physical Therapy Clinic; Joanna Koudele and Payden Dowling

Presentation Objectives:

- Certified athletic trainers and athletic training students will be able to recognize outcome measures and communication tools available when working with a pediatric population.
- Participants will be able to describe custom orthotics and braces used in this specific setting.
- Clinicians will be able to develop specific activities that address both musculoskeletal tone and sensory needs of patients.

Speaker Biography:

Joanna Koudele:

Joanna Koudele is a Physical Therapist at No Stone Unturned Therapeutic Learning Center in Manhattan, Kansas. No Stone Unturned Therapeutic Learning Center is an outpatient clinic that is focused on orthopedic and neurological based conditions in pediatric patients, including those with spectrum disorders. She has worked in Manhattan since 2014 and prior to that, worked as a Physical Therapist in Topeka, KS. She graduated from Wichita State Univ. with both her Bachelors in Exercise Science and her Doctorate in Physical Therapy. Jo serves as a clinical instructor for physical therapy students, a preceptor for Kansas State Athletic Training Program and is also certified in ASTYM.

Payden Dowling:

Payden Dowling is a Physical Therapist at No Stone Unturned Therapeutic Learning Center in Manhattan, Kansas. He graduated from Kansas State University with a Bachelors in Kinesiology and Gerontology in 2012 and received his Doctorate in Physical Therapy from University of Kansas Medical Center in 2015. Payden is currently working towards his specialty certification in pediatrics from the American Board of Physical Therapy Specialties. Payden also serves as a clinical instructor for physical therapy students and a preceptor for Kansas State Athletic Training Program.

Knowledge Gap:

As athletic trainer’s branch into more diverse clinical settings, the knowledge about additional patient populations must increase. Manhattan, KS is home to No Stone Unturned that specifically provides interventions for pediatric patients with developmental, cognitive and neurological delays. There is a gap in knowledge for the pediatric population as well as populations with varying levels of abilities. Conatser, Naugle, Stopka & Tillman (2010) discussed the level of
preparedness that ATs and athletic training students have in working with athletes with disabilities. The authors suggest specific content and experiences regarding these populations. Through this presentation, ATs and athletic training students should have a better understanding of some aspects of working with the pediatric and special needs populations.

**Management of Articular Hip Dysfunction in the Athlete: Megan Bechtold**

**Presentation Objectives:**

- Present biomechanical considerations regarding hip pathology in the athlete.
- Introduce recent literature to support the role of the PT in conservative management for femoro-acetabular impingement (FAI).
- Consider regional dysfunctions that may play a role in the development or progression of FAI.
- Highlight key features of post-operative rehab after hip arthroscopy.

**Speaker Biography:**

Megan Bechtold is a native of the Kansas City area and spent her high school years playing basketball and volleyball competitively. From there, she attended The University of Kansas in Lawrence, KS, and obtained a bachelor’s degree in sports science. She went on to pursue a graduate degree at The University of Kansas Medical Center where she received her doctorate in physical therapy (DPT). She is board-certified in orthopedics (OCS) and also holds a manual therapy certification (CMPT). Her clinic focus is on sports medicine, running injuries, rehabilitation after orthopedic surgery, dry needling for muscular pain and dysfunction, biomechanical screening and analysis, and manual therapy of the neck after concussion injury.

**Knowledge Gap:**

Even with the awareness of potential causes of hip pain, patients suffering from acetabular labral tears related to femoroacetabular impingement (FAI) see an average of 4 physicians, have 3.4 diagnostic imaging tests, wait 32 months and spend more than $1700 dollars above Medicare’s calculated minimum cost before receiving an accurate diagnosis (Kahlenberg et al, 2014). There are many possible differential diagnoses for patients with FAI including but not limited to chronic hip adductor and hip flexor strains, stress fracture, loose bodies, osteochondral injury, athletic pubalgia, iliopsoas tendinopathy and internal snapping hip (Tibor and Sekiya, 2008). Untreated or improperly treated, FAI and the associated labral tears often lead to earlier degeneration and osteoarthritis in the hip joint (Leunig, Beaule and Ganz, 2009). This program will provide information regarding the common clinical presentation, assessment and management of FAI. Athletic trainers are often the first to evaluate and manage hip pain in their patients. The ability to recognize signs and symptoms of potential cases of FAI and labral tears is essential to assist the patient in getting to an appropriate physician for assessment and management of FAI. After diagnosis, having the knowledge to appropriately manage and rehabilitate the patient is important.
Overtraining Syndrome vs Metabolic Conditions: Jack Ransone

Presentation Objectives:

- Identify and explain the epidemiology data related to the risk of injury and illness related to participation in physical activity and wellness.
- Describe and understand common congenital or acquired abnormalities or illness, physical disabilities, and diseases affecting people who engage in physical activity.
- Describe the pathology of diseases of metabolic, endocrine and immune via blood transport (e.g., anemia, iron deficiency, hemolysis) that would impair strenuous physical activity.
- Define illness to body system in terms of etiology, pathogenesis, pathomechanics, treatment options, and expected outcomes.
- Analyze normal physiological responses of human body to trauma and inactivity of specific body tissues (ligaments/capsules, muscles, tendons, bones) in healing process thru epidemiological data.
- Describe cellular homeostasis, integration and coordination of cell function in response to communicable and pathological disease.
- Understand techniques and concepts spanning from assessment to intervention and treatment.

Speaker Biography:

Jack Ransone PhD, ATC, FACSM was named the director of the Nebraska Athletic Performance Laboratory (NAPL) in October of 2015. Dr. Ransone directs a lab that allows researchers space to conduct advanced research on everything from the biomechanics of elite athletes to athletic and nutrition supplements to biomarkers that measure saliva and recovery time to cardiovascular research to athletic equipment issues such as helmet and footwear design. The research allows for innovative solutions that benefit athletes in terms of their safety and athletic performance.

Dr. Ransone came to Nebraska from Texas State University, where he served as a professor and the Director of Athletic Training since 2003. Dr. Ransone has over 25 publications, $1.5 million in external grant funding, an educational text, four patents, 100+ national/international presentations and national awards including the highly prestigious “Most
Distinguished Athletic Trainer” by the National Athletic Trainers Association. Most recently, Dr. Ransone was the coordinator of medical systems for the NBA’s San Antonio Spurs from May of 2010 to December of 2014.

Dr. Ransone’s other stops in collegiate athletics include: Oklahoma State University, San Jose State and Adams State College. He has also served as an athletic trainer for the 2016 IAAF World Challenge (Kingston Jamaica), 2015 World Cross Country Championships (Guiyang China), 2013 Continental Cup (Marrakech Morocco), 2012 Olympic Games (London England), World Outdoor Track and Field Championships (Deagu Korea), 2008 Olympic Games (Beijing China), 2004 Olympic Games (Athens Greece), the 2003 Pan American Games (Santo Domingo, Dominican Republic), 2002 U.S. National Wrestling Teams Tour of Europe (Nyiregyhaza Hungary and Faenza Italy), the 2001 World Indoor Track & Field Championships (Lisbon Portugal) and 2000 U.S. National Wrestling Teams Olympic Qualifier (Claremont France).

The East Stadium NAPL comprises approximately 23,000 square feet on the second and third floors of East Memorial Stadium. This cutting-edge facility allows the University of Nebraska-Lincoln to establish a center for excellence in sports science that provides a unique link between UNL’s prestigious athletic programs, various academic departments within the University and private partners with a shared interest in improving the health, safety and welfare of student-athletes and the general community. The NAPL is believed to be the first in-stadium, on-campus research center directed by a collegiate department of athletics. Both research centers work collaboratively to expand understanding of performance, safety, brain function, health and long-term well-being that benefits student-athletes, the military and society.

Knowledge Gap:

Even with the increased awareness of metabolic disorders in sports and the number of resources available to athletic trainers, athletes, parents and medical professionals; a knowledge gap remains for the overall care and treatment of patients with metabolic disorders such as diabetes (Horton & Subauste, 2016; Lancaster & Febbraio, 2016), Metabolic Syndrome (Batista & Soares, 2013; Maffetone & Laursen, 2016) and Immune Dysfunction (Gleeson & Walsh, 2012; Trushina, Mustafina, Nikitiuk, & Kuznetsov, 2012). The medical plan of care for these starts with the development of appropriate screening and physician’s treatment protocol. This program will provide the attendees information that is critical to develop a protocol for screening and treatment that is appropriate for different patients they will encounter.


The Importance of Hitting the Hill and Governmental Advocacy for ATs:
Jeff McKibbon and Tom Bruno

Presentation Objectives:
- Explain what exactly a hit the hill day is
- Provide rational and benefits to the profession of athletic training that are associated with legislative advocacy
- Give examples of previous successful Hit the Hill Days and what has been learned from them

Speaker Biography:
Jeff McKibbin, MEd, ATC, LAT, graduated from the University of Central Oklahoma with a bachelor degree in 1976 and his master degree in Education in 1977. In 1980, he returned to the University of Central Oklahoma as the Head Athletic Trainer for the UCO Athletic Department. In 1991, he was promoted to Assistant Athletic Director/Head Athletic Trainer which he held until 2004.

In 2004, he began working to implement Oklahoma’s first Graduate Athletic Training Program. This was accomplished in 2008 which secured his current position as the Program Director for a Professional Master Athletic Training Degree Program.

Jeff is the current Chair of the NATA Governmental Affairs Committee after serving eight years as the NATA GAC Representative from District V and four years on the NATA PAC Board of Directors. In addition, he is also the Chair of the Athletic Trainers Advisory Committee for the Oklahoma Board of Medical Licensure and Supervision which he has been involved with for over 25 years. He has been a member and chair of the Oklahoma Athletic Trainers Association (OATA) Governmental Affairs Committee, Reimbursement Committee and Student Scholarship Committee as well as all phases of the Executive Committee.

Jeff has been inducted into the Oklahoma Athletic Trainers Association Hall of Fame, Mid-America Athletic Trainers Hall of Fame and University of Central Oklahoma Athletic Hall of Fame. In addition, he has been awarded the NATA Service Award and Most Distinguished Athletic Trainers Award along with numerous other state, district and national awards.

Knowledge Gap:
Athletic trainers are experts in the domains of injury prevention, diagnosis, and therapeutic interventions and are licensed or otherwise regulated in 49 states and the District of Columbia to provide such services. As clinical practice evolves over time so does the need to maintain contemporary practice statutes and regulations which appropriately reflect athletic training expertise. Governmental advocacy for professional support, statutory regulation, and other legislation that promotes athletic training and athlete safety is an arena that many athletic trainers are apprehensive of participating. Understanding, embracing and participating in advocacy efforts is the key to making a political impact.
**Hydration Considerations in Ice Hockey: Dawn Emerson**

**Presentation Objectives:**
- Discuss dehydration risk factors for patients competing in cooler environments, specifically in ice hockey.
- Discuss current hydration practices in ice hockey and the athletic trainers’ roles and responsibilities in educating, monitoring, and providing fluids and supplements.
- Discuss implementing individualized hydration protocols, including effectiveness and challenges.

**Speaker Biography:**

Dawn Emerson, Ph.D., ATC is an Assistant Professor and the Clinical Coordinator of the Athletic Training Program at the University of Kansas. Dr. Emerson received her B.S. in Athletic Training from The University of Alabama and both her M.S in Physical Education – Athletic Training and Ph.D. in Exercise Science – Applied Physiology from the University of South Carolina. Her area of research expertise is in thermoregulation and fluid balance. Her specific area of interests in hydration include: sodium imbalance, dehydration, fluid replacement and nutritional supplements, practical hydration measures, and the role of hydration in energy availability and sport nutrition. Regarding thermoregulation, her primary focus is on exertional heat illness risk factors, including medications such as non-steroidal anti-inflammatory drugs, and the role of the gastrointestinal tract during exertional heat stroke. Her interest in ice hockey led to working with two minor professional teams early in her career. During this time she became interested in hydration and heat related issues in this population.

**Knowledge Gap:**

There is limited research available on ice hockey athletes, but existing literature shows this patient population suffers from very similar risk and prevalence of the same hydration issues seen in hot, humid environments. While individualized hydration protocols are recommended, the clinical application and effectiveness requires overcoming certain barriers and altering for individual and sport demands. Athletic trainers are often the first line of defense in regards to hydration; understanding current practices and knowledge assists in improving prevention, education, and treatment strategies.
Weathering Weather: An Evidence Based Update: Brett McQueen

Presentation Objectives:

- Identify key governmental and private agencies responsible for weather information dissemination.
- List different weather phenomena and severity criteria.
- Discuss updated guidelines for emergency action planning in regards to weather safety and awareness.

Speaker Biography:

Brett McQueen is an athletic trainer for Children’s Mercy Kansas City and the owner of Lightning Performance Solutions. He is a doctoral candidate at Rocky Mountain University of Health Professions. His professional and research interests include: weather safety, human movement, biomechanics, adult learning strategies, and movement based injury prevention strategies.

Knowledge Gap:

As technology advances in our society, so do product lines. [1] This statement is especially true regarding weather and weather detection equipment. Dozens of different products and phone applications are available for purchase, but there is a large gap in the evidence suggesting how effective any of these products are in weather detection. Several decades of science has gone into developing technology for the prevention of injury and death from lightning strikes. [1, 2, 3] Evidence suggests few products actually yield the information claimed by the company opposed to what actually occurs in the field. [2, 3] The most recent NATA position statement on weather and lightning safety recommends the use of app technologies to monitor weather conditions. [1] This discussion based talk aims to evaluate the use of handheld lightning detectors versus phone app technology and their efficacy of providing appropriate information to reduce lightning injury or death in athletes.

Concussion Panel: Phil Vardiman, Mark Padfield, Matt Thomason, Christopher Fleming, Dr. Wright, Krista Andereck

Presentation Objectives:

- Identify the critical components of a concussion management and rehabilitation plans based upon current evidence and best practice.
- Discuss the potential impact of the media and social media on the medical care provided to athletes during televised games.
- Discuss best practices in concussion management in the secondary school, collegiate, private and rehabilitative settings
- Identify and discuss difficulties of concussion management in different athletic training settings

Speaker Biographies:

Phil Vardiman:

Dr. Vardiman is an Associate Professor and the Program Director for the Athletic Training Program at Kansas State University in the Department Human Nutrition and College of Human Ecology. Dr. Vardiman received his undergraduate degree from Park University in 1996, his Masters of Science from Oklahoma State University in 1998, and his PhD from the University of Arkansas in 2007. Dr. Vardiman’s research focus is the immune and inflammatory response to exercise and therapeutic modality clinical interventions. Dr. Vardiman has been a certified Athletic Trainer since 1996 and continues his sport coverage by traveling internationally with USA Track and Field and most recently represented the United States this past August in Brazil for the 2016 Olympic Games.

Mark Padfield:

Mark Padfield is an outreach athletic trainer for OrthoKansas in Lawrence. He has been assigned to Tonganoxie High School since 2005. In addition to his AT duties, Mark teaches “FA/CPR/EMR” and “Care of Athletes” in the health science pathway, and coordinates the “at risk” program for THS. Mark has been a member of the KATS executive board since 2009, and is currently KATS president and a member of the MAATA Board of Directors.

Matt Thomason:

Matt Thomason is the Director of Sports Medicine for K-State Athletics. Mr. Thomason received his undergraduate degree from Texas Tech University in 2001 and his Masters of Science from Kansas State University in 2004. Mr. Thomason was hired as an Assistant Athletic Trainer at K-State in 2004 and then named the Head Athletic Trainer in 2005.
Christopher Fleming:

Chris is a long standing member of the medical community in Wichita. He is a graduate of Wichita State University, with a degree in Exercise Science with an emphasis on Athletic Training. He is the owner of Inspire Health & Performance and currently serves as a Captain for the Wichita Fire Department. Consequently, this enables Chris to have hands on patient care daily in many diverse settings. Chris is extremely passionate about providing the highest level of care with empowering education to all of the clients he serves. Chris looks forward to working with clients ranging from high level athletes to high level older clients with walkers.

Dr. Wright:

Dr. Keith Wright received a Bachelor of Science in pre-medicine from Kansas State University in 1976. Family Practice Physician. He graduated from University of Kansas Medical School in 1979 and completed a 3 year residency at Baptist Medical Center in Kansas City, Missouri. Dr. Wright then moved to Bolivar Missouri to join a partnership with other physicians to make the Bolivar Family Care Center. In 1991 Wright returned to Manhattan to start a private practice and was invited to be the team physician for the K-State Athletic Department. Dr. Wright has volunteered in this role ever since also taking on the position of medical director of the Kansas State University Athletic Training Program. He continues his practice as a physician at Stonecreek Family Physicians in Manhattan, Kansas. Wright’s involvement in the community isn’t limited to K-State students, as he is a senior aviation medical examiner for the FAA, medical director for Manhattan’s Homecare and Hospice, keyboardist in the Manhattan Barefoot Dixieland Band, First United Methodist Church choir member and Colbert Hills’ Champions Club member. Wright and his wife also enjoy when the kids come home with their spouses to cheer on the Wildcats.

Krista Andereck:

Krista Andereck is the Head Athletic Trainer for Manhattan High School and serves as a preceptor for the Kansas State University Athletic Training Program. Krista received her undergraduate degree from The University of Kansas in 2010, her Masters of Science degree from Fort Hays State University in 2014. Krista has been a Certified Athletic Trainer since 2011. Krista served as the Assistant Athletic Trainer for the National Champion Cross Country and Track and Field programs at Adams State University in Alamosa, CO after graduate school.

Knowledge Gap:

Even with the increased awareness of concussions in sports and the number of resources available to athletic trainers, athletes, parents and medical professionals; a knowledge gap remains for the overall care and treatment of patients suffering from a sports related concussion (Alsaalheen et al., 2013; Borich et al., 2013; Cournoyer & Tripp, 2014; Davis & Purcell, 2014; Laker, 2011; Naftel, Yust, Nichols, King, & Davis, 2014; Register-Mihalik et al., 2013; Scorzà, Raleigh, & O’Connor, 2012). The care of these injuries starts with the development of appropriate components of a concussion management protocol. There is also a need for education of government officials and the need for promoting appropriately written
concussion legislation in all states (Kilcoyne et al., 2014). Some factors affecting medical decision making related to concussions, such as conflict of interest, have been investigated (Partridge, 2014). However, the role that the media and social media is currently playing in the decision making of athletic trainers, and sports medicine professionals has not been thoroughly investigated. This program will provide the attendees information that is critical to develop a concussion management protocol, understand the legislation in the state of Kansas and what possible changes that need to be made to protect athletes and athletic trainers. There will also be a professional discussion on the impact of the media and medical decision making in sport. Professionals from all levels with years of experience will discuss this growing concern.


