NEWSLETTER OF THE AMERICAN ORTHOPAEDIC SOCIETY FOR SPORTS MEDICINE

sportsmedicine UPDATE

MAY/JUNE 2016



GOLF INJURIES

STOP Sports Injuries

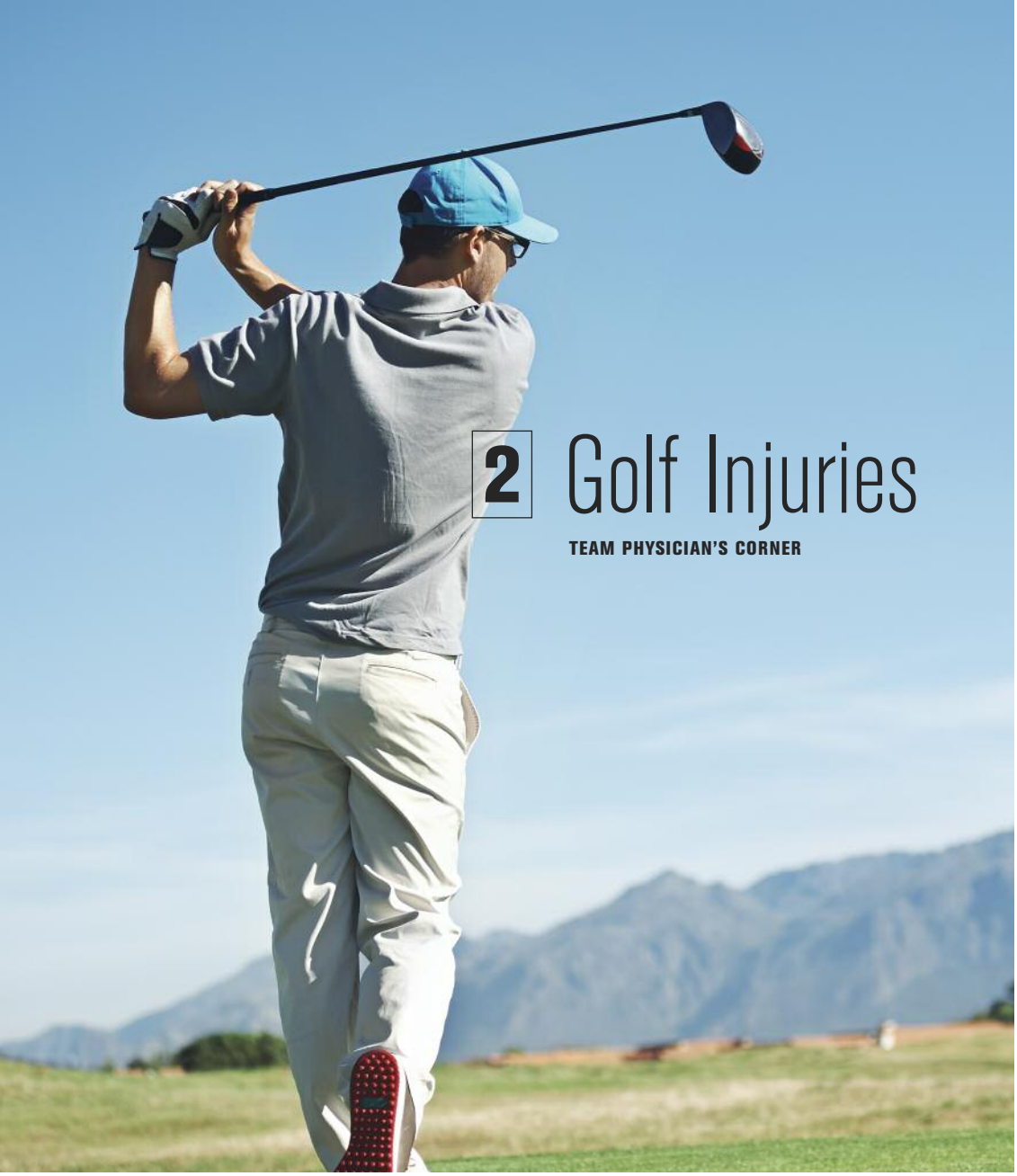
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SPORTS MEDICINE UPDATE is a bimonthly publication of the American Orthopaedic Society for Sports Medicine (AOSSM). The American Orthopaedic Society for Sports Medicine–a world leader in sports medicine education, research, communication, and fellowship–is a national organization of orthopaedic sports medicine specialists, including national and international sports medicine leaders. AOSSM works closely with many other sports medicine specialists and clinicians, including family physicians, emergency physicians, pediatricians, athletic trainers, and physical therapists, to improve the identification, prevention, treatment, and rehabilitation of sports injuries.

This newsletter is also available on the Society's website at **www.sportsmed.org.**

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FROM THE PRESIDENT



This is my last column as President, and I am reminded how important transitions are in our lives, and in our Society. This past year as AOSSM President has been a remarkable experience. I had the opportunity to build upon the programs and activities started by the leaders before me, as well as help forge new direction for the Society going forward with the selection of a new chief executive officer and the development of a strategic plan.

Little did I realize when I was nominated to be president that job #1 for me was going to be leading the search for new executive leadership. The Society has been fortunate to have stability in its senior management for the past 20 years, so when Irv Bomberger announced his upcoming retirement last summer, it was imperative to find a uniquely qualified individual to assume those responsibilities. The leadership—board and staff—worked closely to develop a plan to ensure we conducted a thorough, thoughtful search for a new CEO, including:

- Developing a timeline to ensure we had a new executive on board by July 1
- Forming a search committee comprised of current, former, and younger leaders: Ned Amendola, MD, Chuck Bush-Joseph, MD, Doug Brown, MD, and Ben Ma, MD. I served as Chair.
- Circulating an RFP and interviewing two search firms to oversee the search—ultimately selecting Tufts & Associates, a firm that specializes in medical and orthopaedic searches
- Enlisting outside counsel from Tom Nelson, who as a past AOSSM executive director and consultant, as well as AAOS CEO, was familiar with the Society's needs in an executive
- Identifying the qualities and responsibilities needed for the next CEO
- Initiating a national search in which Tufts reviewed, interviewed, and narrowed the pool of more than 85 candidates interested in the position
- Conducting extensive 2-hour face-to-face interviews with each of the semi-finalists
- Holding an intensive follow-up interview a month later with the finalists, including having them work through an assignment, respond to additional questions, and then having a meal with the search committee to provide further insight in a social occasion.

At the end of the process the Search Committee was confident that it had found the best possible candidate for the position and recommended Greg Dummer, CAE, for Board approval. Greg comes with great qualifications and experience as the CEO for the Society for Laboratory Automation and Screening (SLAS) for the past 16 years, as well as a director of marketing and communications with Smith Bucklin and Associates, the largest association management firm in the world. Greg has a stellar reputation, and it was apparent when he observed the AOSSM spring board meeting that he has the interpersonal and professional skills to continue leading the Society forward with that spirit that makes AOSSM special.

The spring Board meeting also gave the AOSSM leadership an opportunity to establish its strategic priorities moving forward. The Society's past success is largely attributable to the Board establishing direction for AOSSM and then focusing on a few identifiable priorities in realizing its objectives. This approach led to the launching of *Sports Health: A Multidisciplinary Approach, Orthopaedic Journal for Sports Medicine,* our research initiatives, STOP Sports Injuries, online education programs, subspecialty certification related activities—CME and GME, and much more. Last month, the Board again outlined new priorities in each of our core mission areas—education, research, communication, and fellowship—that will draw from our strengths, engage collaboration with our colleagues in orthopaedic surgery and sports medicine, and provide meaningful, lasting involvement for orthopaedic sports specialists at all stages of their careers. When the new strategic priorities are finalized in July, we will share them with you.

I am proud of the accomplishments we've realized this year. As we prepare to transition to a new AOSSM president and chief executive officer, I realize that the Board's most significant contribution this past year was providing the Society with the strategic direction and executive support so that AOSSM and the profession can continue to excel.

Thank you for the honor and privilege of serving AOSSM as president.



Allen Anderson, MD



Golf Injuries

CHRISTOPHER J. TUCKER, MD

Golf is a popular international sport, with participation extending across all ages and abilities around the globe. Arising from its origins on the eastern links of Scotland as early as the fifteenth century, the game of golf has experienced a surge in popularity in the United States in recent history.

This can be attributed at least in part to expanding television coverage, the increasingly diverse array of golf courses designed by famous developers, the introduction of the game to younger players through golf instructional programs and camps, and the emergence of professional icons across several generations such as Bobby Jones, Arnold Palmer, Jack Nicklaus, and Tiger Woods. The National Golf Foundation estimates there were 28.6 million golfers in the United States in 2008, and more than 60 million golfers playing on over 32,000 golf courses around the world.[2,5]

Epidemiology

While sometimes considered a low-risk sport, the demands of the golf swing as well as the volume of practice and play required to improve one's ability can contribute to a significant number of injuries in both amateur and professional players. A recent large epidemiological study found that throughout a 2-year period, 60% of professionals and 40% of amateurs experienced an injury that removed them from play.[7] While some acute, traumatic injuries do occur, the majority of golf injuries are related to overuse.

Overuse injuries have been reported to account for up to 82% of all golf injuries.[7] In one survey, too much play or practice was the most commonly reported mechanism of injury in both professionals and amateurs.[10] Amateurs also commonly report poor swing mechanics and unintentionally hitting the ground as contributing to a large portion of their injuries.[1] One study has established a correlation between increased time spent on the golf course or driving range and higher rates of injury. This study reported that golfers who hit more than 200 practice balls per week or played four or more rounds in a week sustained significantly more injuries to the back, shoulder, wrist, and hand.[7]

Anatomic Distribution of Injury

Golf injuries can be characterized by the region of the body affected, such as the upper extremity, lower extremity, spine, and head. Studies have reported that 54% of all golf injuries occur in the upper extremity, including the shoulder, wrist, elbow, and hand.[7] The spine is typically reported as the next most frequently affected region of the body, followed by the lower extremity, and head. There is a reported difference in anatomic distribution of injuries between professionals and amateurs.[14] The most common injuries in professional golfers include back injuries, followed by wrist, and then shoulder injuries. The top three locations of injury in amateurs have been reported to be the elbow, back, and shoulder, respectively.[7] Furthermore, the distribution of injuries at the elbow, wrist, and hand tend to differ between professionals and amateurs. Professionals tend to be less prone to injury of the elbow, but appear to be more vulnerable to wrist and hand injuries.[13] In this article, we will discuss the most commonly affected regions of the body with a more detailed look at the potential for both acute and chronic injury.

> The severity of golfing injuries is often underestimated. Golf injuries have been reported to contribute to an average of 28 days of lost play per injury.

Professional vs. Amateur

Not surprisingly, the number of injuries per player increases along with skill level, likely due to the increased number of rounds of golf played and range balls hit while practicing to maintain or improve one's ability. Multiple studies have reported between 1.16 and 2.07 injuries per player in amateurs, compared with professionals experiencing between 2.07 and 3.06 injuries per player.[1,7,11] The frequency of injury amongst amateurs has also been stratified by handicap, with a 59% rate of injury in those with handicaps greater than 18, a 62% injury rate in those with handicaps between 10 and 17, and a 68% injury rate in those with handicaps less than 10.[12]

Injury Severity

The severity of golfing injuries is often underestimated. Overall, golf injuries have been reported to contribute to an average of 28 days of lost play per injury, with the injuries to the thoracic and lumbar spine, elbow, and wrist accounting for the longest absences from play.[7] Minor injuries, defined as absence from golf for less than one week, are the most common, accounting for more than 51% of all injuries.[7] Despite that, there is still a significant potential for major injury, with almost 30% of injuries leading to more than 1 month of lost time from play.[7] A high percentage of those injuries that cause chronic symptoms, defined as lasting for longer than 1 year, have been reported to occur in the knee (30%) and back (18%).[7]

Risk Factors

In addition to the number of rounds played and practice balls hit per week, several other risk factors for injury have been identified in the literature. Failure to warm up for at least 10 minutes before playing has been shown to more than double one's risk for injury (from 0.41 injuries per player who warmed up to 1.02 injuries per player who failed to do so).[7] Carrying one's golf bag also increases one's risk of injury, contributing to a reported increase in injuries to the lower back, shoulder, and ankle.[7] Finally, poor

conditioning and faulty swing mechanics have also been shown to be independent risk factors for injury in amateur golfers.[1,10]

Gender Differences

Both male and female golfers, at both the professional and amateur levels, sustain more frequent injuries in the lead arm, i.e., the left shoulder, elbow, wrist, and hand for a right-handed golfer.[13] Studies of the overall distribution of golf injuries by anatomical site looking for gender differences have shown a similar pattern for male and female golfers, with a single exception.[10,12] There is an observed trend for a lower frequency of injuries in the spine as compared to the upper extremity in both professional and amateur females when compared to their male counterparts. There are several potential explanations for the relatively higher rates of spine injury in males, but the leading theory is related to swing mechanics. Males generally have higher swing velocities, which is at least in part generated by the increased torque generated from the mechanics of a greater trunk rotation during the swing. This increased spinal rotational movement, while contributing to faster swing velocity, is also thought to result in an increased risk of injury to the spine in male golfers.[13]

Golf Injuries by Anatomic Location

Elbow

Traumatic injuries to the elbow can result from striking an object other than the ball, such as a rock, tree root, or the ground in the act of taking a large divot. Elbow injuries can also arise when the forearm flexors are strained from the rapid deceleration of the club when hitting out of the long rough. Overuse injuries can be a consequence of faulty swing mechanics, such as repetitively gripping the club too tightly. Lateral and medial epicondylitis are the two most common elbow problems in golfers.[2,13]

Lateral epicondylitis most commonly involves the lead arm and is usually an overuse injury due to the vigorous, repetitive contraction of the extensor carpi radialis brevis (ECRB) resulting from gripping the club too tightly.[3] The lead arm forearm extensors experience high stress at impact when they serve to stabilize the wrist, and hitting the ground firmly at impact adds to this stress. Ironically, amateurs have been shown to experience lateral epicondylitis, or "tennis elbow," five times more frequently than classic "golfer's elbow," or medial epicondylitis, likely due to the tendency to grip the club too tightly.[2,12] Symptoms include pain in the lateral elbow with gripping or shaking hands, and tenderness at the ECRB origin. Nonoperative modalities such as icing, non-steroidal anti-inflammatories, and a course of rehabilitation are commonly initiated at the onset of symptoms. Adjunct treatments such as counterforce bracing or injections with corticosteroids or platelet-rich plasma are used for more refractory cases. Surgery is typically considered only after 6–12 months of failed non-operative measures, with a high rate of success with both open and arthroscopic techniques reported.[4]

Medial epicondylitis, or "golfer's elbow," occurs more often in the trail arm either as a result of repetitive, excessive muscular contraction, or after a single traumatic force such as inadvertently striking an immobile object with the club. Nonoperative treatment of medial epicondylitis is similar to that of lateral epicondylitis, including a combination of rest, ice, non-steroidal anti-inflammatories, physical therapy, bracing, and injections. Operative treatment involves the open debridement of pathologic tissue and repair of the flexor origin, commonly involving the flexor carpi radialis and pronator teres. Symptoms of ulnar nerve compression have been described in up to 24% of patients treated for medial epicondylitis, and nerve transposition should be a consideration in these cases.[2]

Wrist

It is not surprising that the wrist is a common site of injury for golfers, considering the extensive range of motion that both wrists must travel through to execute a proper swing. Most wrist injuries occur at the moment of impact, and result from the traumatic, sudden deceleration

The Professional vs. Amateur Golfer







of the club. Amateurs typically experience these injuries when hitting a "fat" shot, while professionals tend to get injured hitting a rock, tree root, or particularly thick rough. Three common resulting injuries include flexor carpi ulnaris tendinitis, extensor carpi ulnaris dislocation, and hook of the hamate fracture.

Overuse tendinitis of the wrist typically involves the lead arm, and can be associated with excessive radial deviation of the left wrist or thumb extension at the top of the backswing.[2] Extensor carpi ulnaris (ECU) instability results when the ECU tendon sheath is ruptured during a sudden flexion, ulnar deviation, supination movement, and can lead to painful snapping during repeated pronosupination.[2] Typically, a 2-month period of splint and then brace immobilization is recommended prior to surgical intervention with either direct repair or reconstruction of the ECU sheath. Fractures of the hook of the hamate occur when a severe compressive force is transmitted through the butt of the golf club to the upper hand (left hand in a right-handed swing) during a particularly forceful ground strike. Standard radiographs can miss the diagnosis, and special radiographic techniques such as the carpal tunnel view or CT scan should be used when the condition is suspected. Initial treatment typically involves immobilizing the wrist to allow for fracture healing, but persistent symptoms or the onset of associated neuropathy or tendon irritation can prompt surgical intervention with fracture fragment excision.[2,13]

Dorsolumbar Spine

The golf swing produces large loads in the spine, especially the dorsolumbar region, and acts across four primary directions: lateral flexion, anteroposterior traction, rotation, and compression.[13] The intense loads generated from downswing through follow-through can strain muscles, injure facet joints and lumbar discs, and cause injury to the posterior arc leading to spondylolysis.[6] In the older populations, the increased incidence of osteoporosis additionally places these golfers at risk for vertebral and rib stress fractures.[6] Additionally, since the intervertebral disks play a significant role in cushioning and providing the capacity for angular trunk rotation, any degree of disk degeneration will limit the power of the swing and make other spinal components vulnerable to injury.[13]

Paraspinal muscle injuries, such as tears and strains, are common in golfers, especially with the advent of the modern golf swing. The modern swing emphasizes more separation of the hips and shoulders in angular rotation, as well as a progressive downswing in which the hips lead the upper body and continue through impact where the hips are more open to the target than the shoulders. The "reverse-C" follow-through position places additional stress on the lumbar facet joints due to increased hyperextension, especially concerning in aging golfers predisposed to injury by pre-existing spinal degeneration.[6]

Most dorsolumbar conditions can be improved through rest, anti-inflammatory medications, physical therapy, traction or manipulation, and a lower back-focused exercise regimen designed to restore and maintain flexibility and core strength. Long-term management of lower back pain is centered on developing good habits



such as a thorough pre-participation warm-up routine, core strengthening exercises, and improvement in technique and swing mechanics. One study reports a 79% return to sport rate for golfers following symptomatic disc herniation, at an average of less than 5 months.[9]

Several preventive measures suggested to help with dorsolumbar spine injuries include:

- Maintaining a straighter back posture during the golf swing and weight transfer
- Controlling speed of swing during trunk rotation
- Reduction of the shoulder range of motion and trunk angular motion
- Improving dorsolumbar conditioning through flexibility and muscular strengthening exercises
- Use of a lumbar corset if needed.[13]

Shoulder

Most shoulder injuries are due to overuse and are related to the mechanics of shoulder rotation during the swing, as well as the cross-arm position required during both the backswing and follow-through. Acromioclavicular joint arthrosis can lead to pain in the lead shoulder at the top of the backswing, as well as contribute to subacromial rotator cuff impingement and bursal-sided tears in older patients with chronic spurring.[2] Both young and older golfers are susceptible to shoulder impingement due to the excessive range of motion required at both the beginning and end of the swing. External impingement can lead to inflamed bursal tissue and partial rotator cuff tears, while internal impingement can lead to labral tears, articular-sided rotator cuff tears, and humeral head articular cartilage lesions.[2] The damage can be enhanced by certain predisposing risk factors such as:

- Glenohumeral joint hyperlaxity or instability in younger players
- Weak or imbalanced rotator cuff musculature
- Tight and constricted posterior capsule in young or old players alike[13]

Summary

In summary, golf may be considered a rather safe activity for players of all ages and abilities, as long as the risks of overuse and traumatic injury can be avoided. The majority of golfing injuries are related to overuse problems, with the number one preventable risk factor being the amount of time spent playing or practicing the game. To reduce the risk of golfing injuries, players should consider warming up for at least 10 minutes per round or practice session, reducing their frequency of play to less than 4 rounds and 200 practice shots per week, and avoiding carrying their bag. Many overuse injuries can also be prevented by adopting a year-round physical conditioning program that focuses on muscular strengthening, flexibility, and aerobic conditioning.

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Volunteers Needed for Upcoming Clinics

We are excited to be partnering with the NCAA once again in 2016 to provide coverage for their annual youth clinic parent panels, which coincide with championship events throughout the year. We are currently looking for AOSSM members to speak to parents about youth sports injury prevention at the Women's College World Series in Oklahoma City, Oklahoma (June 4) and the Men's College World Series in Omaha, Nebraska (June 18). Please e-mail Joe Siebelts at joe@aossm.org to learn more and to express your interest in this opportunity!

Sports Safety Made Easy with the New STOP Sports Injuries Website

Sharing sports injury prevention information is easier than ever. The new site offers visitors a fresh, easy-to-navigate, and mobile-friendly environment while exploring injury prevention materials, which have also been expanded. Visit www.STOPSportsInjuries.org to see all the new site has to offer, and be sure to share with your patients!



STOP SPORTS INJURIES

Welcome to Our New Collaborating Organizations!

Thank you to the newest STOP Sports Injuries collaborating organizations for their commitment to keeping young athletes safe. Interested in having your practice or institution listed in the next *SMU*? Head over to www.STOPSportsInjuries.org and click "Join Our Team" to submit an application!

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Greg Dummer, CAE, Announced as New AOSSM CEO

The AOSSM Board of Directors is pleased to announce Greg Dummer, CAE, as the Society's next chief executive, replacing Irv Bomberger who will retire at the end of July. For the past 16 years, Mr. Dummer was CEO of the Society for Laboratory Automation and Screening (SLAS), a multi-disciplinary scientific society for academic, government, and industry researchers.

"Greg's 25 years of non-profit society management experience and wealth of expertise in strategic planning, membership development, international collaboration, and publishing will help grow our Society and meet our future opportunities and challenges," said Allen Anderson, MD, AOSSM President.

During his time at SLAS, Greg led the Board leadership through the successful merger of two international science societies, helped launch in-person and online educational programming, established a $1 million educational fund to annually award $100,000 research grants, and facilitated author workshops at universities and conferences throughout Europe and Asia. In addition, his previous experience included serving as a manager/supervisor/director for Smith, Bucklin & Associates (SBA), the world's largest association management firm, where he oversaw marketing and communications programs for more than 25 association clients.

"I am pleased to be able to turn over my executive responsibilities to Greg. He has a stellar reputation in the association management field, and I believe his professional strengths and personal qualities are a unique fit for the Society that will provide for its continued growth. AOSSM is a special organization, and I am sure Greg will serve the profession well," said Bomberger.

Greg is a Certified Association Executive through the American Society of Association Executives and was named one of the Top 25 Non-Profit CEOs in the United States by *CEO Update* magazine in 2009. He received his Bachelor of Arts in English from Beloit College in Beloit, Wisconsin.

"I am excited to be joining the AOSSM team and look forward to cultivating, learning from and leading staff, members, and the orthopaedic sports medicine community to future growth and excellence." —GREG DUMMER, CAE





AOSSM Board of Directors and Medical Board of Trustees participated in the spring Board Meeting at Sea Island, Georgia. During the meeting staff and the Boards developed the Society's next 5-year strategic plan which will be finalized and approved in July.

NAMES IN THE NEWS

Fossett Honored



Officials from Morehead State University's Department of Athletics, along with family, and friends, surprised longtime team physician, **Dr. Thomas Fossett,** with the dedication of the "Dr. R. Thomas Fossett Athletic Training Center" prior to the men's basketball game against Eastern Kentucky University in February. Fossett has served as MSU's official team doctor and orthopedic surgeon since 1973.

Indelicato Garners Multiple Awards



Congratulations to AOSSM Past President, **Peter Indelicato, MD,** on his recent sports medicine honors. Dr. Indelicato received the Pioneer of Sports Medicine Award from the Gwinnett Medical Center not only for his decades of service as the team physician for the University of Florida, but also for his research and advancement of the allograft tissue for anterior cruciate ligament (ACL) reconstruction. In addition, he will be receiving the 2016 Distinguished Southern Orthopaedist award at the Southern Orthopaedic Association's (SOA) 33rd Annual Meeting in Naples, Florida in July. SOA annually honors a physician who has made outstanding contributions in the field of orthopaedics.

Hip Preservation Award Given to Pascual-Garrido



Congratulations to AOSSM member, **Cecilia Pascual-Garrido, MD,** on her recent selection as the recipient of the 2016–2017 Harris/ANCHOR/Washington University Career Development Award in hip preservation. The Academic Network of Conservational Hip Outcomes Research (ANCHOR) includes 15 surgeons from nine institutions who focus on improving the diagnosis and treatment of adolescent and young adult patients with pre-arthritic hip disease.

Laurencin Receives Medal

Dr. Cato T. Laurencin, AOSSM member and a world-renowned physician-scientist in orthopaedic surgery, engineering, and materials science, has been named the 2016 recipient of the Connecticut Medal of Technology. Laurencin, of the University of Connecticut, will accept the award at the 41st Annual Meeting & Dinner of the Connecticut Academy of Science and Engineering (CASE) on May 24.

Founding AOSSM Member, Kay Clawson, MD, Passes Away



Dr. D. Kay Clawson, a founding member of AOSSM and an orthopaedic surgeon who was dean of the University of Kentucky (UK) College of Medicine from 1975 to 1983, passed away in March at the age of 88.

Clawson came to University of Kentucky from the University of Washington, where he was head of orthopaedic surgery for 17 years. He left Lexington to become executive vice chancellor at the University of Kansas Medical Center, a position he held for 11 years. During his tenure at UK, Clawson was credited with enhancing the administration of the college, particularly in regard to its finances, and with establishing positive relationships with the student body, according to a 1983 article in the *Herald-Leader*.

In retirement, Clawson did private consulting for hospitals and medical schools. Since 1996, he had been a consultant at the UK College of Medicine, spending most of his time counseling students and serving on the college's admissions committee.

A native of Salt Lake City, Clawson was a graduate of Harvard Medical School. Clawson is survived by his wife, Janet; a daughter, Dr. Kim Rosenstein of Lexington; a son, Dr. David Clawson of Seattle; and five grandchildren.

GOT NEWS WE COULD USE? *Sports Medicine Update* Wants to Hear from You!

Have you received a prestigious award recently? A new academic appointment? Been named a team physician? AOSSM wants to hear from you! *Sports Medicine Update* welcomes all members' news items. Send information to Lisa Weisenberger at lisa@aossm.org. High resolution (300 dpi) photos are always welcomed.

DEADLINE FOR SPECIALTY DAY 2017 ABSTRACT SUBMISSIONS APPROACHING

Get your research in front of the best in sports medicine! Submit your abstract for Specialty Day 2017 in San Diego at www.sportsmed.org. Deadline for submissions is May 18, 2016.

Bylaws Change

The AOSSM Board of Directors is recommending a bylaws change to replace any reference of "Executive Director" with "Chief Executive Officer." The bylaws review included input from the Society's General Counsel. The changes are now available for review by the AOSSM membership by visiting www.sportsmed.org. The proposed changes will be voted on at the membership Business Meeting held during the Annual Meeting in Colorado Springs. Members should have received an e-mail with the redlined and clean copy versions of the bylaws for review. Any questions related to the proposed bylaws change should be directed to the executive office, in care of Sue Serpico, Executive Assistant at sue@aossm.org.



Keep Your Patients *In Motion*

Did you know that *In Motion* is available to be personalized with your own practice name and logo? For just $300, you will receive four personalized issues (Spring, Summer, Fall, Winter) and the high and low resolution PDFs to send to a patient's inbox, put on your website, or print out and place in your waiting room. For more information, contact Lisa Weisenberger, Director of Communications at lisa@aossm.org.

Join the Sports Medicine Conversation

Join our youth sports injury prevention TweetChats held the second Wednesday of the month at 9 PM ET/8 PM CT at #SportSafety. *AOSSM, AJSM, Sports Health,* and *OJSM* are also all on social media. Learn about the latest news and articles and stay up to date on Society happenings and deadlines.

Facebook

Facebook.com/AOSSM
Facebook.com/American-Journal-of-Sports-Medicine
Facebook.com/SportsHealthJournal
Facebook.com/STOPSportsInjuries
Facebook.com/TheOJSM

Twitter

Twitter.com/AOSSM_SportsMed
Twitter.com/Sports_Health
Twitter.com/SportsSafety
Twitter.com/AJSM_SportsMed

Correction

The following members were inadvertently not listed with our 2015 AOSSM Donors published in the March/April *SMU*. We apologize for the oversight and thank them for their support.

James D. Ferrari, MD
John-Paul Rue, MD
Matthew J. Salzler, MD
Theodore B. Shybut, MD

FELLOWSHIP NEWS

NEW! 2016 AOSSM Fellows Course

Kick Off to Your Orthopaedic Sports Medicine Training Year

AOSSM is pleased to announce that its inaugural Fellows Course will take place on July 29–30, 2016, at the Orthopaedic Learning Center (OLC) in Rosemont, Illinois.

Led by Course Chairs, Stephen F. Brockmeier, MD, Jeffrey R. Dugas, MD, and Kurt P. Spindler, MD, this course is an ideal kickoff to the orthopaedic sports medicine fellows' 2016–2017 training year; an educational platform to learn the principles of success for team coverage, and key topics of sideline emergencies, cervical and lumbar spine injuries, and imaging/arthroscopy of the shoulder and knee. The format includes didactic and hands-on lab sessions at the level expected of an incoming fellow or independent practitioner.

Registration opened on April 6 for programs to sign up their incoming 2016–2017 fellows. Please contact Meredith Herzog at meredith@aossm.org for details.

AOSSM gratefully acknowledges the Corporate Supporters of the 2016 AOSSM Fellows Course *(as of April 11, 2016):*

smith&nephew · DePuy Synthes MITEK SPORTS MEDICINE COMPANIES OF Johnson&Johnson · rti surgical · stryker · Vericel

AOSSM AWARDS 2016 RESEARCH GRANTS

Young Investigator Grant



Dr. Alan Zhang is the winner of the 2016 Young Investigator Grant. He is currently an Assistant Professor in the Department of Orthopaedic Surgery at the University of California, San Francisco. He specializes in sports medicine with a focus on the arthroscopic treatment of hip pathology including femoroacetabular impingement (FAI) and labral tears.

His study, *Quantitative Magnetic Resonance Imaging for Femoroacetabular Impingement of the Hip,* will use advanced imaging modalities to investigate the effects of FAI as well as treatment of FAI on articular cartilage health. Using quantitative MRI (QMRI) sequences such as $T_{1\rho}$ and T_2 mapping, changes in the matrix composition of articular cartilage can be quantified to indicate early damage that standard MRI is insensitive to. Dr. Zhang aims to apply QMRI to patients with FAI and determine its utility as a diagnostic tool for detection of early cartilage injury. Further, he aims to use QMRI to determine the effects of arthroscopic FAI treatment on cartilage health through longitudinal assessment of patients before and after surgery. The information from this study may provide orthopaedic surgeons with a new diagnostic tool to assess early cartilage injury in the hip and a better understanding of whether arthroscopic treatment for FAI can affect articular cartilage health.

Dr. Zhang is from Houston, Texas, and attended Rice University, where he studied biochemistry and cell biology. He obtained his MD from the UCSD School of Medicine and trained at the UCLA Medical Center for his orthopaedic surgery residency. He completed his sports medicine fellowship at the University of California, San Francisco. As faculty at UCSF, Dr. Zhang currently leads the treatment of athletic injuries of the hip in the Division of Sports Medicine. For this study, he will be working in collaboration with the UCSF Musculoskeletal Quantitative Imaging Group, lead by Dr. Sharmila Majumdar.

AOSSM gratefully acknowledges MTF Musculoskeletal Transplant Foundation for their support of the Young Investigators Grant.

Sandy Kirkley Clinical Outcomes Research Grant



Congratulations to Jason Dragoo, MD, as the recipient of the Sandy Kirkley Clinical Outcomes Research Grant. His study is a multi-center, randomized controlled trial investigating the use of autologous adipose derived stem cells (ADSCs) harvested using (1) a standard arthroscopic shaver system, and (2) point-of-care processing (cells never leave the operating room, which is required by the FDA) for the treatment of isolated articular cartilage defects in the knee compared to microfracture. The study will also use an FDA approved acellular wound matrix shown to be biocompatible with ADSCs to hold the cells in the defect. The results will be compared to the current standard of care (microfracture) that has recently been shown to produce mediocre long-term results. The results of this trial may foster the use of autologous biologics in orthopaedic surgery, as it employs arthroscopy (instead of liposuction) to harvest the cells and complies with current FDA regulations.

Dr. Dragoo is an Associate Professor of Orthopaedic Surgery at Stanford University. He specializes in sports medicine and serves as a team physician for Stanford University athletics, where he is the Head Team Physician for the Stanford football program. He serves on the Board of Directors for the PAC 12 Conference Health and Wellness Committee. He previously served as a physician for the US Ski Team, US Olympic Committee, and also served on the AOSSM Research Committee. He is an active member of the AAOS and currently serves on the Biologics Committee and has advocated for the use of autologous cell therapy to the FDA.

His basic science and clinical research has led to many advances in the use of biologics to augment tissue healing including: (1) investigations on the formulations and applications platelet rich plasma (PRP) and autologous growth factors, (2) cartilage regeneration using adult adipose-derived stem cells, and 3) the development of second generation methods, using autologous blood products, for tissue repair. He currently is an investigator on five NIH grants, has published three textbooks, and authored more than 70 peer-reviewed articles. His co-principal investigators are Andreas H. Gomoll, MD, of Brigham and Women's Hospital in Boston, Massachusetts, and Christian Lattermann, MD, of the University of Kentucky.

Washington Update

By Julie Williams, AAOS Senior Manager of Government Relations

Contact Congress Regarding Sports Medicine Licensure Clarity Act of 2015

Last year, Reps. Brett Guthrie and Cedric Richmond introduced the Sports Medicine Licensure Clarity Act of 2015 (H.R. 921). The bill would provide legal protection for sports medicine professionals by stipulating that the health care services provided by covered sports medicine professionals who travel to a secondary state with an athlete or team will be covered by the professional's medical malpractice insurance. The bill is bi-partisan, non-controversial, and widely supported with over 115 cosponsors.

During the past several weeks, AOSSM, the American Association of Orthopaedic Surgeons, the National Athletic Trainer's Association, the American Medical Society for Sports Medicine, and the American Academy of Physical Medicine have been asking members to contact their member of Congress to encourage them to become a cosponsor of this bill, or to thank them for supporting the bill and urge them to support advancing this bill in the House. If you haven't already done so, please reach out to your local member of Congress or visit advocacy.aaos.org for additional details.

Shoulder Coding Success

The Centers for Medicare and Medicaid Services (CMS) recently shared a letter with AAOS indicating that they will be remedying a shoulder coding issue that has been a key priority of AAOS, AOSSM, AANA, and ASES. AAOS President Gerald R. Williams, MD, along with Louis F. McIntyre, MD, from AANA, and William Shaffer, MD, AAOS Medical Director met with CMS officials in March to discuss the issue. At the meeting, the participants asked CMS to eliminate National Correct Coding Initiative (NCCI) edits for certain code pairs, arguing that the shoulder is technically three anatomic synovial joints and two articulations. The CMS policy had allowed the agency to deny payments when these procedures are performed or billed together. As a result of the meeting, CMS is deleting the edits that caused the relevant CPT codes to be denied.

Legislation Introduced to Delay the Comprehensive Care for Joint Replacement Demo

House Budget Committee Chairman Tom Price, MD, (R-GA) and Rep. David Scott (D-GA) introduced legislation that would delay the start of the mandatory CMS model to bundle payments for hip and knee surgeries until January 1, 2018. H.R. 4848, The Healthy Inpatient Procedures (HIP) Act, would ensure that physicians, hospitals, and post-acute care providers have adequate time to prepare for the onset of this complex payment system. While the program began April 1, 2016, legislative efforts continue.

Senate Health Innovation Proposal Moves Forward

The Senate Health, Education, Labor and Pensions (HELP) Committee wrapped up work on their medical innovation package with a third and final markup on April 6. The Committee passed five bipartisan bills, including two reform measures for the National Institutes of Health (NIH), a bill to advance precision medicine, a bill to enable the Food and Drug Administration to expedite an antibacterial drug's approval if it is for an identifiable, limited patient population, and a proposal to ensure the inclusion of minorities in clinical research at the NIH as well as to make progress on reducing health disparities among women,



minorities, and certain age groups. The bills will be combined into a single package to be considered on the Senate floor. This proposal is a companion to the House's 21st Century Cures initiative.

FDA Takes Further Steps to Curb Opioid Abuse

The Food and Drug Administration (FDA) recently announced that it will require black box warnings on immediate-release opioids to combat what the agency described as an epidemic of addiction. Ninety percent of opioids prescribed are immediate-release, which are usually taken ever four to six hours. The new FDA black box requirements will apply to drugs such as hydrocodone, oxycodone, and other frequently prescribed immediate release painkillers. The labels will include a variety of warnings about the risk of addiction, misuse, overdose, and death. In other related news, the FDA also announced new guidance to help drug manufacturers develop generic versions of opioid painkillers designed to prevent abuse.

New AOSSM Self-Assessment Examination 2016 to Release in May



AOSSM has three different self-assessment exam versions available, each with 125 new peer-reviewed questions to help you assess your strongest areas of sports medicine knowledge and identify areas for further study when preparing for the American Board of Orthopaedic Surgery's (ABOS) Maintenance of Certification (MOC) program. The AOSSM Self-Assessment Exam helps fulfill your MOC Part II self-assessment requirement and offers CME credits.

Who should purchase these exams?

- Orthopaedic surgeons preparing for the MOC recertification exam, sports medicine subspecialty certification exam and/or combined sports medicine recertification exam
- General orthopaedic surgeons or other health professionals needing a sports medicine refresher
- Physicians who need MOC Part II self-assessment credits

Exam highlights:

- Downloadable answer key, including feedback and references for further study
- Additional questions for purchase in groups of 25 in any topic domain to further measure learning
- Ability to self-pace your study from the comfort of your home or office
- Imaging examples to build diagnostic skills
- Ability to reset and re-take the exam to reinforce learning but only the first attempt is recorded
- iOS app that links to your online account

The cost per exam is $125/Members and $150/Non-Members. To order, visit www.sportsmed.org or call AOSSM at 847/292-4900. Questions? Contact Meredith Herzog at Meredith@aossm.org.

AOSSM gratefully acknowledges Arthrex for an educational grant in support of the Self-Assessment Exams.



Congratulations to Past President, Christopher Harner, MD, on presenting the Kennedy Lecture during the 2016 Specialty Day in Orlando, Florida. More than 1,000 were in attendance to hear his talk, "Give the World the Best You've Got."

Bomberger Retiring in July

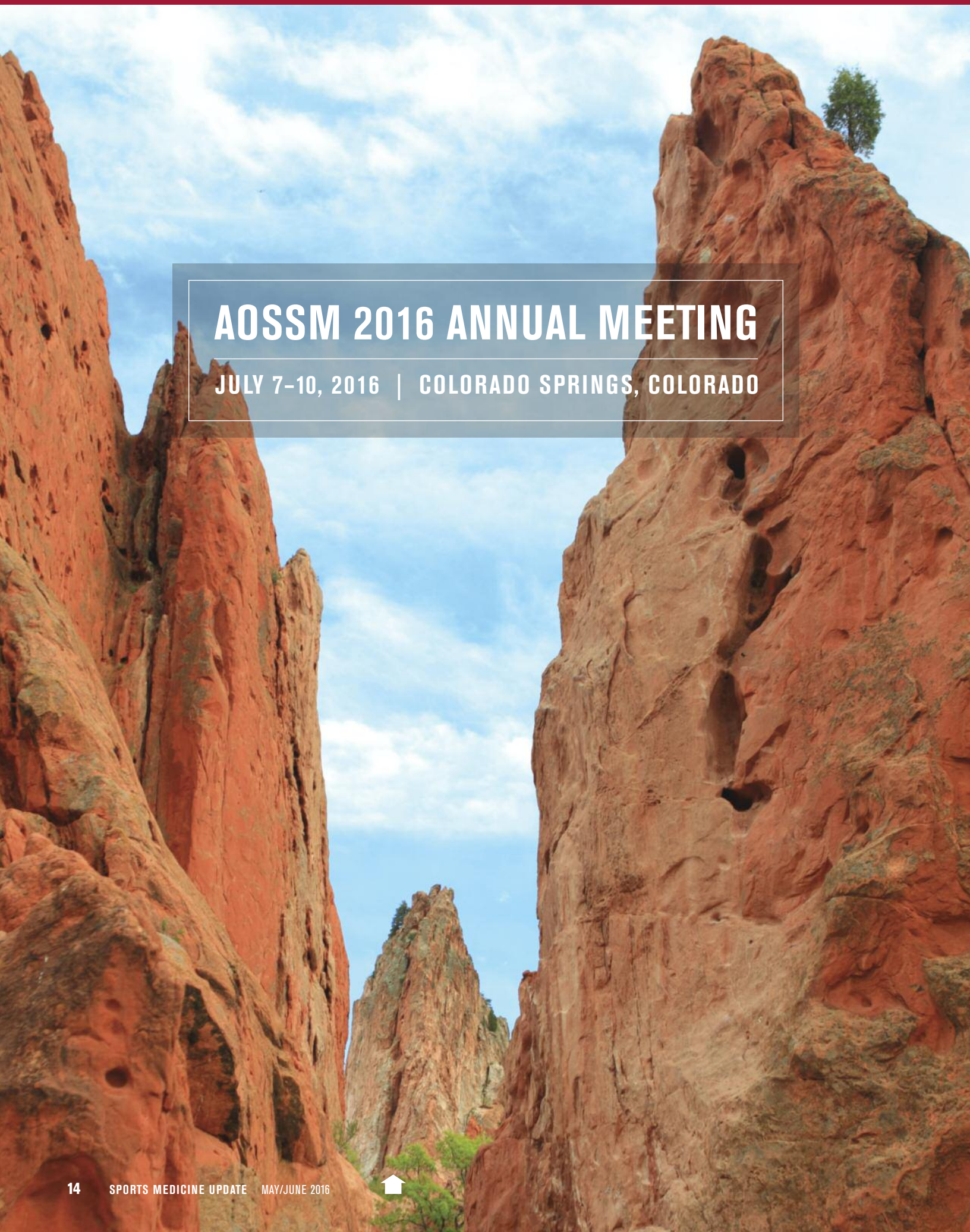


As has been noted in previous issues of *SMU,* Irv Bomberger, AOSSM Executive Director, is retiring at the end of July after 20 years of devoted service to the Society. His remarkable tenure has fostered extraordinary growth of the Society. The membership will benefit from his integrity, visionary leadership and institutional memory for decades to come. During the Annual Meeting in Colorado Springs, please stop down in the Resource Center in the Exhibit Hall. to sign a book of congratulations for Irv. We wish him well on his future endeavors.



BMUS Releases New Report

The Burden of Musculoskeletal Diseases in the United States: Prevalence, Societal and Economic Costs (BMUS), 3rd edition, is produced by the United States Bone and Joint Initiative (USBJI) in collaboration with a number of organizations. In March, the organization released an "Executive Summary on the Impact of Musculoskeletal Disorders on Americans—Opportunities for Action." For additional information on this report and other detailed data, tables, graphs, and analysis on all major musculoskeletal disorders, visit www.boneandjointburden.org.



AOSSM 2016 ANNUAL MEETING

JULY 7–10, 2016 | COLORADO SPRINGS, COLORADO

Excitement is Peaking for the 2016 AOSSM Annual Meeting

The best and brightest sports medicine doctors in the world are assembling July 7–10 in Colorado Springs at the beautiful Broadmoor Resort for the 2016 AOSSM Annual Meeting. This year's annual meeting promises to take a look at the issues that affect you every day. Here's just a few of the questions that will be addressed during the meeting:

- *How do I protect my online reputation?*
- *What is the latest research regarding injury prevention and clinical outcomes?*
- *Is there value in a registry?*
- *Should I own an ambulatory surgical center?*
- *What are patient outcomes and what is the real meaning and value?*
- *How do I get an athlete back on the field after injury; what are the best strategies?*
- *Are there new techniques for MPFL so I get it right the first time?*
- *What's the best way to manage the failed ACL?*
- *Non-operative and post-operative rehabilitation: Is there a better way?*
- *Can I have success with my Laterjay surgery every time?*

Program Chair, Kurt Spindler, MD, and his Program Committee have put together an array of educational opportunities that will enlighten and engage you on many different topics from athlete and practice management to the latest surgical techniques and pearls of wisdom. Other meeting highlights include:

- Watching master surgeons as they perform **4** live, surgical skill demonstrations on pediatric ACLR tunnels, hip arthroscopy, bicep tendon repair and chondral focal defects
- **10** new case-based round table discussions, on meniscus repair, PCL, revision ACL, patella femoral instability, large rotator cuff tear and more. Space is limited and several topics are already sold out!
- Presidential Guest Speaker and former Cleveland Browns Coach, Sam Rutigliano
- Afternoon Medical Publishing Group Workshop (Thursday, July 7)
- NIH Reviewer Information Session (Thursday, July 7)

Don't miss out on the best sports medicine meeting of the year and your opportunity to interact and exchange ideas with your peers, world-renowned experts, and friends from around the world!

Our advance registration deadline is June 10, after that pricing increases $100.
Haven't made up your mind yet? Visit www.sportsmed.org/aossmimis/annualmeeting to view the preliminary program and to register!

RENTAL CAR INFORMATION

AOSSM has arranged a special car rental discount for Annual Meeting attendees and guests! Visit www.hertz.com to book your car or call 800-654-2240. Use discount code CV#CV04YW0003.







UPCOMING MEETINGS & COURSES

For information and to register, visit www.sportsmed.org.

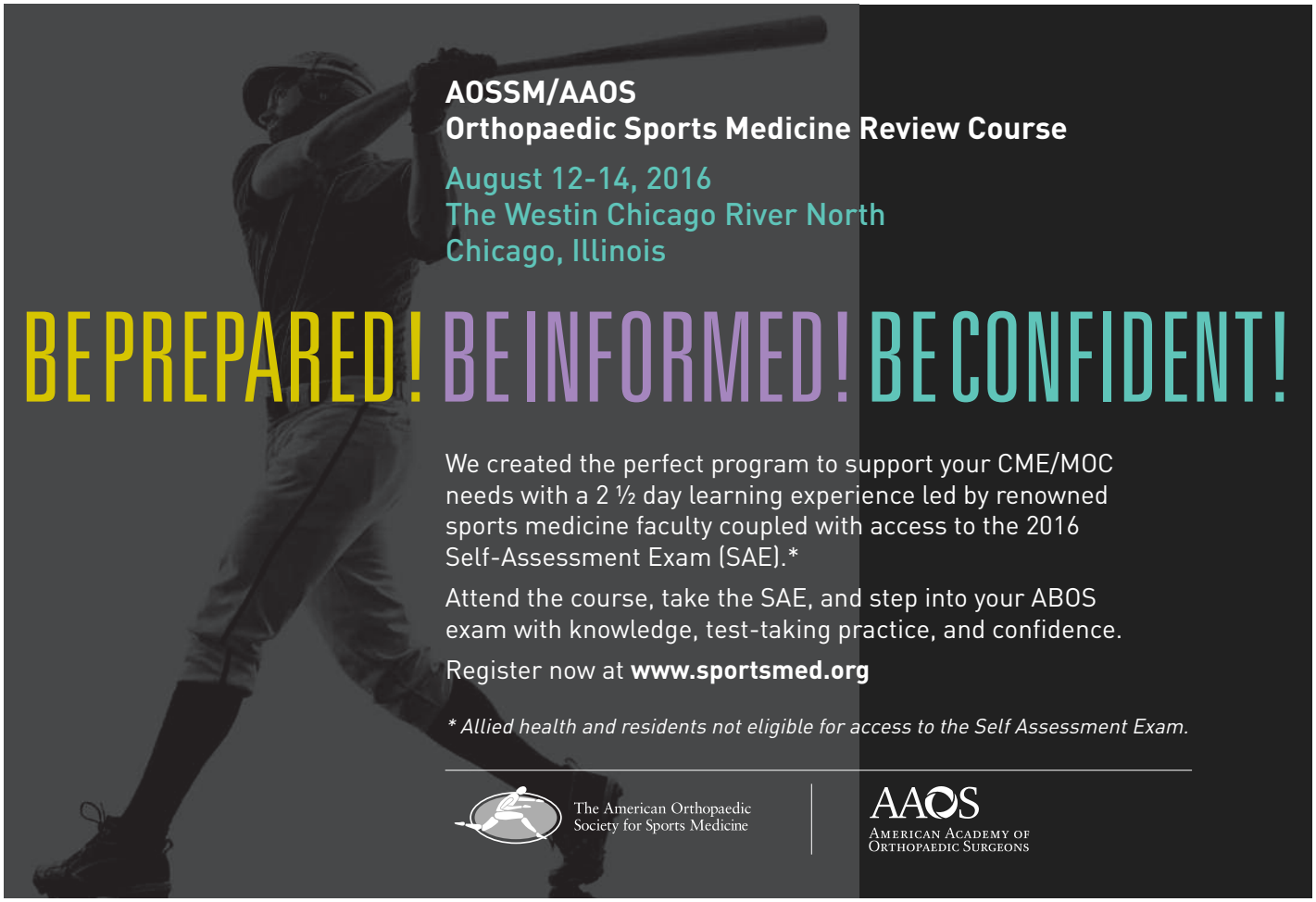
AOSSM 2016 Annual Meeting
Registration Open
July 7–10, 2016
Colorado Springs, Colorado

AOSSM/AAOS Orthopaedic Sports Medicine Review Course
Registration Open
August 12–14, 2016
Chicago, Illinois

Osteotomies Around the Knee: From Ligament Insufficiency to Chondrosis
Registration Open
September 23–25, 2016
Rosemont, Illinois

2016 Advanced Team Physician Course (ATPC)
December 8–11, 2016
Coronado, California

Specialty Day
March 18, 2017
San Diego, California



AOSSM gratefully acknowledges Arthrex for an educational grant in support of the AOSSM/AAOS Orthopaedic Sports Medicine Board Review Course.

You can **imitate** all you want,
but you'll **never be me**.



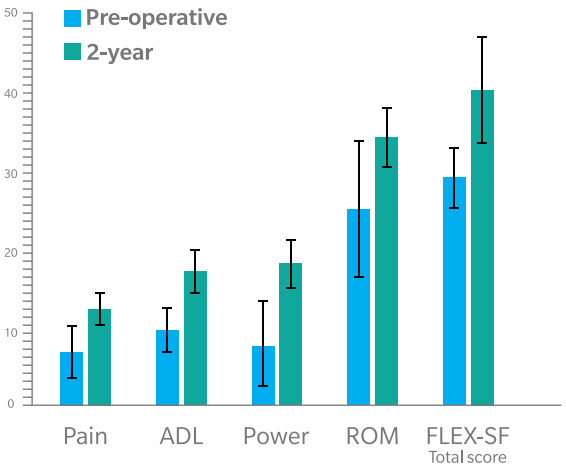
Get JuggerKnot® Results.

There's only ONE original soft anchor.

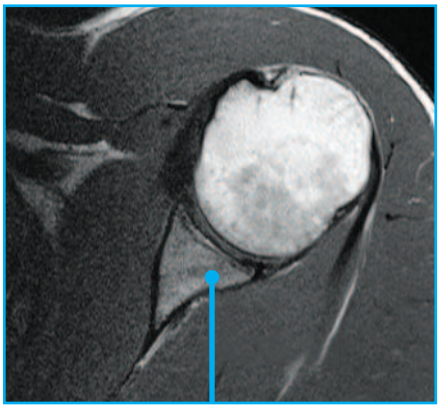
Searching for an all-suture anchor with proven, **clinical results?** Your search is over.

In one study, the JuggerKnot® Soft Anchor clinically demonstrated **improved patient outcomes** and fibrous tissue, **complete bony healing** or combined fibro-osseous healing in the anchor tunnel.[1] When you **demand results,** get JuggerKnot.

Constant Score and FLEX-SF Outcomes[1]



FLEX-SF = Flexilevel scale of shouder function; SD = Standard deviation; ROM = Range of motion; ADL = Activities of daily living



Ossified anchor tract at two years.

1. Agrawal, V, MD; Pietrzak, WS, Ph.D. Triple labrum tears repaired with JuggerKnot™ soft anchor: Technique and results. *Int J of Shoulder Surg* 2015;9:81-9.

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SPORTS MEDICINE UPDATE
AOSSM
9400 W. Higgins Road, Suite 300
Rosemont, IL 60018

Bone and Joint Initiative USA

SHARPEN YOUR KNEE SURGICAL SKILLS

Osteotomies Around the Knee: From Ligament Insufficiency to Chondrosis

September 23–25, 2016
Orthopaedic Learning Center,
Rosemont, IL

Registration deadline is September 9, 2016.

Course Chairs, **Elizabeth A. Arendt, MD**, **Alan M. Getgood, MBChB, MD and Robert F. LaPrade MD, PhD,** along with other expert knee faculty, will demystify the technique of realignment osteotomy through practical treatment algorithms that address simple and complex knee pathologies.

You will learn:

- Indications and surgical techniques for knee realignment osteotomy, including proximal tibia, distal femur and patellofemoral
- Indications and surgical techniques for osteotomies to treat ligament instability (e.g. ACL, PCL, posterolateral corner)
- Pre-operative planning of deformity correction pertaining to the knee
- The role of biological augmentation of realignment osteotomy



AOSSM
Surgical Skills Courses

Orthopaedic Learning Center, Rosemont, IL

Register today at **www.sportsmed.org.**

The American Orthopaedic Society for Sports Medicine

AOSSM thanks ZIMMER BIOMET **for their support of *Sports Medicine Update.***