

# SPORTS medicine

SPRING 2019, ISSUE 1

**UPDATE**

## HYDRATION & RECOVERY

**Return-to-Play  
Sideline Assessment**

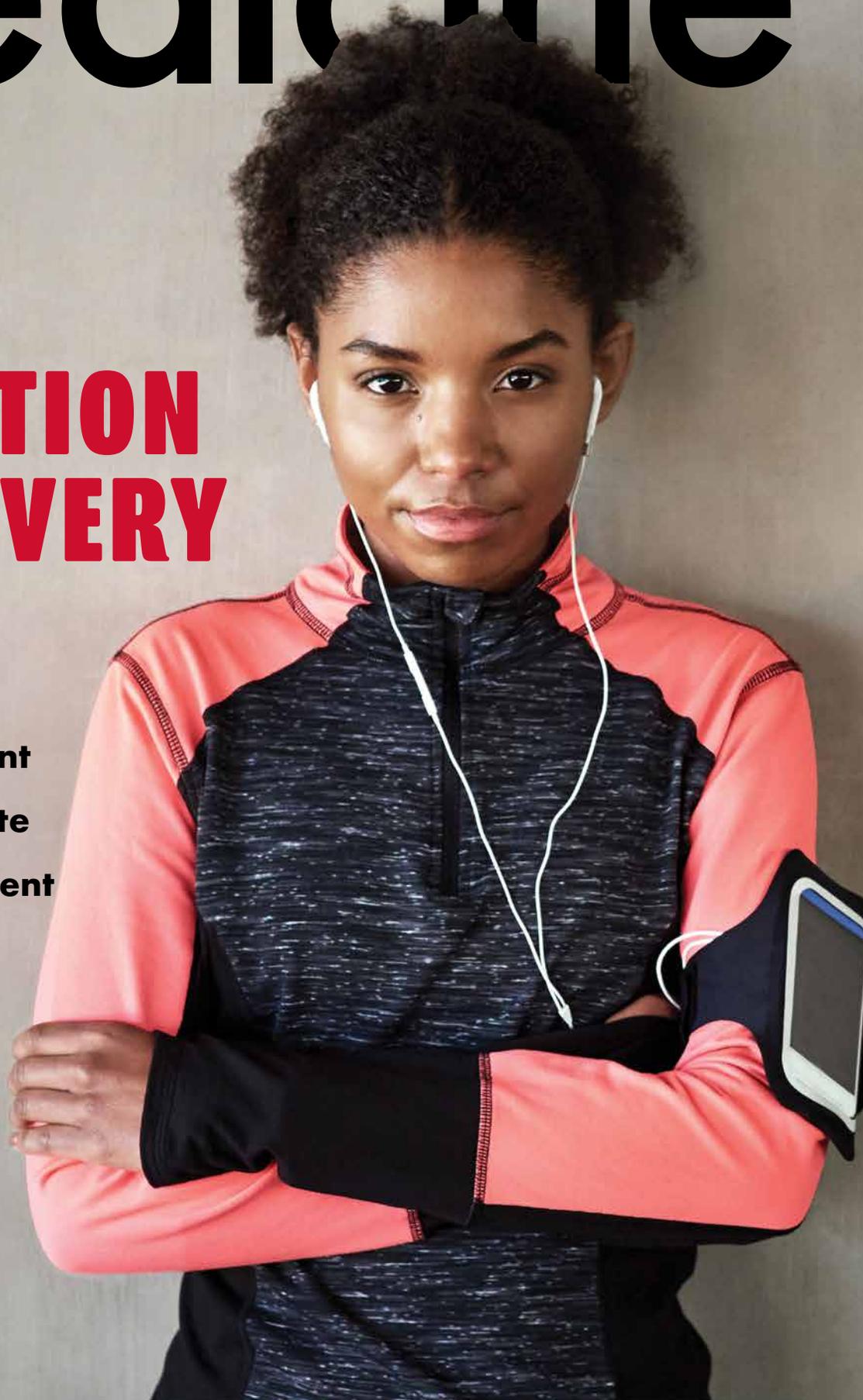
**Washington Update**

**2019 Self-Assessment  
Exam Available**

**Annual Meeting  
in Boston**

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*Sports Medicine Update* is a quarterly publication of the American Orthopaedic Society for Sports Medicine (AOSSM). AOSSM is a global leader in sports medicine education, research, communication, and fellowship, and is comprised 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 [sportsmed.org](http://sportsmed.org).

To contact the Society: American Orthopaedic Society for Sports Medicine, 9400 W. Higgins Road, Suite 300, Rosemont, IL 60018, Phone: 847/292-4900, Fax: 847/292-4905.

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## FROM THE PRESIDENT

### AOSSM Keeps Everyone in the Game of Life



The AOSSM and its members are dedicated to keeping people of all ages and abilities from being sidelined from life due to injury. An important way we do so is by conducting and cultivating high-impact research in sports medicine and translating it into our everyday patient care.

Real science supported by high-level evidence is hard work and it has set our Society apart from most others. Since 2003, AOSSM has invested more than \$5 million in research grants, awards, clinical studies, consensus statements, and international think tanks. These pursuits recognize and encourage the knowledge and new solutions that improve the efficacy and availability of treatment options, techniques, and technologies.

#### On the Frontlines

For 20 years, member research grants have generated substantive contributions to the orthopaedic sports medicine body of knowledge and improved quality of life for patients everywhere. An average of \$350,000 is awarded annually to a variety of basic science, translational, and clinical initiatives that reflect the diversity of our membership and research priorities. AOSSM's grant-supported work is showcased in more than 120 publications and has been cited more than 700 times. These carefully selected investments often result in advancements that enable researchers to attract additional funding from major government and corporate grantmaking organizations.

In 2019 the AOSSM Research Committee will determine six new grant awards totaling \$570,000. All members are welcome and invited to apply for these grants. Applications for 2019 grants are due April 1. More information is available at [sportsmed.org/research](http://sportsmed.org/research), including an all-new, easy-to-use, online submission system.

The focus and priorities of AOSSM research investments are driven by a thoughtful agenda that is always being re-evaluated and refreshed. Led by the AOSSM Research Committee and chaired by Dr. Matthew Provencher with support from AOSSM Director of Research Kevin Boyer, AOSSM embraces well-defined strategic and operational goals to ensure transparency, communication, and flexibility for the development of

actionable new science and innovative technologies. Pending priorities include the exploration of new horizons in biologics, osteoarthritis in sports and post-traumatic osteoarthritis, return-to-sport/play, outcomes and outcome measures, youth sports injuries/early sports specialization, and the value of sports medicine intervention.

In addition to awarding grants to researchers who align with AOSSM priorities, projects of especially urgent importance are often established, assigned, and overseen directly by the AOSSM Research Committee. One current example of this is the re-evaluation and update of the International Knee Documentation Committee (IKDC) Subjective Knee Form (SKF). The SKF is a patient-reported outcome measure that is widely used in the research of knee disorders and injuries. The purpose of this AOSSM-directed project is to modernize the application and potentially shorten the completion time for the form through computerized adaptive testing.

#### Collaboration

By joining forces with related professional societies and sports organizations, AOSSM has exponentially increased the impact of its research efforts to reach hundreds of thousands of medical professionals and researchers around the globe. AOSSM and its partners have enhanced clinical guidelines, performance measures, and appropriate use of criteria; developed universally-respected position statements; presented leading edge research symposia and conferences; developed multi-discipline grants; and more. We are proud to collaborate with the National Collegiate Athletic Association (NCAA), International Olympic Committee (IOC), National Athletic Trainers' Association

(NATA), American College of Sports Medicine (ACSM), American Medical Society for Sports Medicine (AMSSM), and many other sports medicine leadership organizations.

Perhaps the most high-profile research collaboration launched and fostered by AOSSM is the Multicenter ACL Revision Study (MARS) Project. Our members' quest to understand why revision ACL repairs have less successful outcomes than primary repairs has taken on a life of its own and exploded into a 1,200 patient, 87 surgeon, 52 site multi-center project that receives millions of dollars in federal funding.

AOSSM Think Tanks are another profound example of the value of collaboration. We bring together world-renowned experts from all sports medicine disciplines to discuss, debate, and challenge known facts and theories to determine direction for best practices. These discussions have raised new research questions for diagnosis, treatment, therapy, and injury prevention protocols. Recent AOSSM Think Tanks have tackled topics ranging from early sports specialization to biologics, such as platelet rich plasma, biologic scaffolds for healing, and prevention of arthritis after injury.

### Each and Every AOSSM Member

Individual members and their patients can put their experience to work for AOSSM by actively contributing to the Surgical Outcomes System Global Registry (SOS), an important web-based orthopaedic and sports medicine data collection tool that is available for free to all AOSSM members. This easy-to-use system supports our expanding research priorities and addresses our need for more patient reported data. The AOSSM Research Committee will use SOS data in addition



to the knowledge, expertise, and synergy of AOSSM members to inform new projects and establish new priorities. Regardless of whether they conduct research, all AOSSM members are encouraged to use SOS as a tool to easily collect and analyze patient outcomes and procedures, contribute analyses, publish results, educate patients, and assess the cost effectiveness of treatment procedures and products.

Individual members also are encouraged to contribute to the AOSSM research agenda by presenting their work at AOSSM meetings and publishing their research in the *American Journal of Sports Medicine*, *Sports Health*:

*A Multidisciplinary Approach*, and the *Orthopaedic Journal of Sports Medicine*.

All told, AOSSM research is a strong testament to the fact that AOSSM is indeed a community of like-minded professionals whose shared goals and values advance the art and evidence-based science of orthopaedic sports medicine. Together, we support each other and keep our patients in the game of life.

Neal ElAttrache, MD



# UPDATE ON HYDRATION/ RECOVERY RESEARCH

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BY BRANDON J. ERICKSON, MD, AND GRANT JONES, MD



**T**he field of orthopaedic surgery tends to focus on objective findings when it comes to injury prevention, recovery, and injury treatment. These objective findings include shoulder/hip range of motion and pitching kinematics for prevention of elbow and core injuries in overhead athletes, proprioceptive training for prevention of anterior cruciate ligament (ACL) injuries, and many others.<sup>8,12,13,25</sup> However, factors such as hydration and muscle recovery are often glossed over by orthopaedic surgeons and left to trainers, therapists, nutritionists, and others to monitor and implement change. This article will discuss some of the hydration and recovery techniques that have emerged over the past several years and provide the evidence behind them.

### Hydration

One of the most important aspects of athletic performance and muscle recovery is hydration. Unfortunately, many athletes fall short of maintaining proper hydration during athletic activities.<sup>4</sup> This can be due to several factors, although a lack of understanding and knowledge about proper hydration techniques, and the consequences of inadequate hydration seems to be the most significant.<sup>17</sup>

Hydration comes in several forms, including water, sports drinks (which can contain a myriad of supplements which may provide enhanced recovery such as high amylose starch, probiotics, etc.), and others.<sup>20</sup> While hydration is important during intense exercise, it is equally as important in the pre- and post-exercise period.<sup>19</sup> Athletes who lose just 1–2% of their body mass via sweat demonstrate several body changes, including increased core temperature, heart rate, and muscle

glycogen use. These athletes can also experience decreased neurocognitive function, cardiac output, and anaerobic power. Proper hydration strategies mitigate these factors and enhance performance and recovery in athletes. One hydration strategy that has recently gained traction is alkaline water consumption as a way to improve exercise induced muscle acidosis.<sup>9</sup> Chycki et al. found that mineral based highly alkaline water increased muscle power in both the upper and lower extremities in combat sport athletes compared to regular table water.<sup>9</sup>

Another hydration strategy is pre-loading the night before competition with a sports-hydration drink containing high amylose maize starch (HAMS). The fermentation of HAMS by colonic bacteria in the large intestine produces short chain fatty acids which enhance water and electrolyte absorption in the large intestine.<sup>20</sup> In a randomized single-blinded study comparing the addition



of HAMS with traditional sports drink hydration methods, O'Connell et al. found that Australian rules footballers achieved better hydration not only at the end of training following a recovery period, but also at the beginning of training.

While hydration is important to all athletes, those athletes who engage in rigorous and prolonged activities may necessitate different hydration strategies than recreational athletes. These individualized hydration strategies are based off of an athlete's sweat rate and sodium loss, and are therefore tailored to the individual athlete. The purposes of these individualized strategies are to enhance recovery from and improve neurocognitive and anaerobic performance during hard workout sessions.

Ayotte et al. performed a randomized crossover study in 45 collegiate athletes (aged 18–24) where the athletes were randomly assigned to either a prescription (personalized) hydration plan based

off prior assessments of sweat loss or to continue their usual hydration routine.<sup>2</sup> The authors assessed attention and awareness, lower body anaerobic power (standing long jump), and heart rate recovery. Per the study design, after a washout period of seven days, the groups were switched to ensure all athletes underwent both the personalized hydration plan and their routine hydration plan. The results showed significant benefits in the personalized hydration group, including improvements in jump distance (personalized hydration group jumped  $4.53 \pm 3.80$  in. farther), attention and awareness (personalized group tracked moving objects  $0.36 \pm 0.60$  m/second faster), and faster heart rate recovery.

### Cold Therapy

“Icing” is common practice following intense athletic activity. From pitchers icing their shoulder and elbow to linebackers jumping into ice baths,

many athletes believe cold therapy is an effective way to enhance recovery and minimize muscle damage.<sup>7</sup> Some studies have found a benefit to cold therapy in the first 24–72 hours after competition with enhanced recovery when compared to massage.<sup>7</sup> Siqueira et al. performed a study to evaluate the effects of multiple cold-water immersions versus no cold water therapy on muscle function, markers of muscle damage and systemic inflammation following exercise-induced muscle damage in 30 active males.<sup>22</sup> The cold water immersion group underwent 20 minutes of cold water therapy at 10°C each day for three days while the controls group had no cold therapy. The authors found that the group who underwent cold water immersions had less muscle damage than the control group but found no difference in systemic inflammation or muscle function recovery.

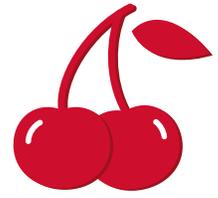
While cold therapy in general can be effective in mitigating muscle damage,

it is important to understand the exact temperature at which cold therapy is most effective. Vieira et al. performed a prospective study in 42 college-aged men to evaluate the effect of cold therapy water temperature on recovery.<sup>23</sup> The participants performed 5×20 drop-jumps and then immersed their lower extremities in cold water for 20 minutes. The groups were divided into a control group, 5°C group and a 15° C group. The authors measured isometric knee extensor torque, counter movement jump, muscle soreness, and creatine kinase before, immediately after, and at 24, 48, 72, 96, and 168 hours after exercise. Results showed the counter movement jump recovered quicker in both cold-water immersion groups compared to the control group ( $p<0.05$ ) while counter movement jump returned to baseline after 72 hours in the 15°C group, 96 hours in the 5°C group, and did not recover to baseline in the control group at any point in time. Creatine kinase returned to baseline at 72 hours and remained stable for all remaining measurements for the 15°C group, whereas it remained elevated past 168 hours in both the 5°C and control groups. Finally, there was a trend toward lower muscle soreness ( $p=0.06$ ) in 15°C group compared to control at 24 hours post-exercise. Hence, cold immersion may be more effective at slightly warmer temperatures (15°C compared to 5°C). While some studies have found a benefit to cold water immersion (CWI) for recovery following activities, other studies have found no benefit to CWI compared to placebo following running.<sup>1,26</sup> Further, sport specific studies looking at CWI are necessary to determine which athletes benefit from CWI and which may not.

## Nutrition

Proper nutrition is one of the most important factors to ensure efficient recovery in athletes following practice and game competition. While certain aspects of an athlete's diet are consistent across sports, personalized nutrition counseling based on each athlete's individual demands may help enhance performance and recovery.<sup>3,6</sup> There

**Tart Montmorency cherries** are rich in several phytochemicals and have been shown to provide a wide range of health benefits, including decreased circulating levels of inflammatory markers (C-reactive protein), improved sleep, and reduction in gout symptoms.



are a variety of nutrition plans that athletes follow for post-exercise recovery, including consuming carbohydrates immediately post-exercise, consuming protein immediately post-exercise, and others. While several studies have evaluated many different nutritional strategies to enhance recovery, no single plan has emerged as significantly better than others.<sup>3</sup>

## Tart Cherry Juice

Tart Montmorency cherries (*Prunus cerasus*) are rich in several phytochemicals and have been shown to provide a wide range of health benefits, including decreased circulating levels of inflammatory markers (C-reactive protein), improved sleep, reduction in gout symptoms, and many others.<sup>14, 16, 18, 21</sup> While the health benefits of tart cherry juice encompasses a variety of factors, there have been several studies that have evaluated the benefits of tart cherry juice in regards to muscle recovery, including reduction in delayed onset muscle soreness.<sup>5, 10, 24</sup> The exact dosing of tart cherry juice has varied between studies but has commonly been reported to be between 8 to 12 ounces (only one ounce if using concentrate) twice daily for a 4 to 5 day loading phase before competition and 2 to 3 days after competition to enhance recovery.

Howatson et al. evaluated the effect of tart cherry juice at reducing muscle damage, inflammation, and oxidative stress in 20 recreational athletes following a marathon.<sup>15</sup> The participants either consumed cherry juice or placebo for five days before, the day of, and for 48

hours following a marathon. The results showed faster isometric strength recovery, lower levels of inflammatory markers and increased levels of antioxidants in the cherry juice group. Similarly, Connolly et al. performed a randomized, crossover, placebo controlled study where 14 college males drank cherry juice or placebo for eight consecutive days and performed eccentric elbow flexion exercises.<sup>10</sup> After a washout period the groups were switched and the protocol was repeated. The variables that were tested included isometric elbow flexion strength, pain, and muscle tenderness both before and for four days after the eccentric exercise. Results showed that strength loss and pain were significantly less in the cherry juice groups compared to placebo.

Finally, while the effects of tart cherry juice on recovery in humans has been studied, the effect of tart cherry juice on muscle damage (via serum cardiac and skeletal muscle markers) in humans has not been critically evaluated. A study in horses found that administration of tart cherry juice decreased serum markers of muscle damage compared to placebo, but further studies are needed to confirm this benefit in humans.<sup>11</sup>

## Conclusion

There are many factors that contribute to recovery following athletic competition, including proper hydration, cold therapy, and adequate nutrition. An individualized program to each athlete may enhance recovery and improve performance. Further research is needed in this area to confirm early benefits of these factors.

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## Return to Play After Injury—10 Simple Sideline Assessments

BY SOMMER HAMMOUD, MD

Telling a child or youth athlete they are ready to get back in the game after injury can be a challenging decision for parents and coaches trying to find the right balance between protecting the athlete from further injury, while also avoiding unnecessary time away from the sport. When in doubt, err on the side of caution. After minor injuries, here are 10 simple and useful sideline assessments to help determine the ability of the athlete to safely return to the game:

1. Ensure there is no tenderness at the site of injury.
2. The affected joint should have normal range of motion compared to the uninjured side.
3. Strength of the involved limb should be near 100% relative to the uninjured side.
4. Swelling should be decreased to near zero.
5. Pain should be decreased to near zero.
6. For a lower body injury, the athlete should be able to walk, jog, and sprint without a limp.
7. athlete with a lower extremity injury should be able to perform runs with hard cutting/pivoting without pain.
8. athlete with a lower extremity injury should be able to perform single leg hop without pain.
9. For an upper body injury, the athlete should be able to throw with normal mechanics.
10. Have athlete perform sport-specific drills on sideline to ensure normal mechanics and balance.



## Make an Impact This Youth Sports Safety Month

Spring is knocking, and with it a busy season of youth sports activities will begin. Each April, we recognize and celebrate National Youth Sports Safety Month—a time for us to give special attention to a cause we hold high throughout the year. You can help us get the message of injury prevention out to young athletes, parents, and coaches during the month of April!

- **Share our Facebook and Twitter posts.** Remember to use the hashtags #YSSM19 and #SportsSafety.
- **Share your go-to “Sports Safety” tips** for young athletes on social media.
- **Submit a blog post** about a youth sports safety topic.
- **Tell us why sports safety matters to you** in a few sentences and email it to [joe@aossm.org](mailto:joe@aossm.org) to be featured on social media.
- **Host a youth sports safety event in your community!** Visit [STOPSportsInjuries.org](http://STOPSportsInjuries.org) and find our “Event Tools” under the “Resources” tab to help you plan.

## Come Grow with STOP Sports Injuries

Did you know more than 1,100 organizations currently collaborate with STOP Sports Injuries? The program was founded on the idea that grassroots efforts could help spread awareness and information about preventing overuse and trauma injuries in young athletes. This number includes more than 800 sports medicine practices, which hold local events and share our injury prevention information with patients. If you have not already signed-up, be sure to visit [STOPSportsInjuries.org](http://STOPSportsInjuries.org) and click “Get Involved” to learn more.

## 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 [STOPSportsInjuries.org](http://STOPSportsInjuries.org) and click “Join Our Team” to submit an application!

### Medical Institutions

**California Pacific Medical Center**  
San Francisco, California

**CHLA Sports Medicine Program**  
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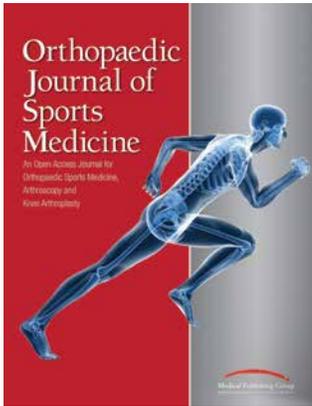
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## OJSM to Receive Impact Factor

Congratulations to Dr. Bruce Reider, Editor-in-Chief, and the entire *OJSM* team as we celebrate the good news that the journal will be receiving an Impact Factor this year! Thank you to all of our authors, reviewers, and subscribers for their contributions throughout the past six years, which have made this incredible honor possible.

## NAMES IN THE NEWS



### McCarty Testifies for Colorado Trainer Licensing

AOSSM Council of Delegates Chair, **Eric McCarty, MD**, recently testified at a meeting in the Colorado state capitol regarding a new classification that would require licensing for athletic trainers. Currently, Colorado is one of only a handful of states not requiring licensing for trainers. If signed by Governor Polis, the new classification is expected to allow athletic trainers to have better access to insurance when they cross state lines. The measure advanced in a House Committee by a vote of 10-1.

### Wright and MARS Project Wins 2019 Kappa Delta Award

Congratulations to AOSSM member **Rick Wright, MD**, and his team for their recent Kappa Delta Award for their work, "Predictors of Clinical Outcome Following Revision Anterior Cruciate Ligament Reconstruction." The American Academy of Orthopaedic Surgeons (AAOS) presented the award at their annual meeting in March. The award is one of the highest research awards the AAOS bestows each year with manuscripts representing a large body of cohesive scientific work generally reflecting years of investigation.

### USBJI Call for Nominations

The Board of the US Bone and Joint Initiative (USBJI) is opening up a Call for Nominations for a Vice President officer position to serve from June 2019–June 2021, and seven Members-at-Large, to serve from June 2019–June 2022. These elections will take place during the June 7, 2019 Annual/Board meeting, Baltimore, Maryland. For complete details on requirements please visit us. Nominations for both positions should be submitted to Bruce Browner, MD, MHCM, FACS, FAOA Secretary at [smaier@usbji.org](mailto:smaier@usbji.org), by April 24, 2019.



### 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](mailto:lisa@aossm.org). High resolution (300 dpi) photos are always welcomed.

# ABOS WLA Is Under Way

BY DAVID F. MARTIN, MD, EXECUTIVE MEDICAL DIRECTOR,  
AMERICAN BOARD OF ORTHOPAEDIC SURGERY



I have previously written in *Sports Medicine Update* about the upcoming American Board of Orthopaedic Surgery (ABOS) Web-Based Longitudinal Assessment (ABOS WLA). I am delighted to say that you can now see first-hand what the new pathway is all about.

If you are an ABOS Diplomate, go to [abos.org](http://abos.org) and login with your username and password. You will see a link to the ABOS WLA. You can view all of the 100+ Knowledge Sources, 10 of which were chosen by a Knowledge Source Group consisting of practicing orthopaedic surgeons specializing in orthopaedic sports medicine who were selected by the AOSSM and the AAOS.

If you would like to participate in the ABOS WLA, you will need to choose 15 Knowledge Sources to study in-depth. These 15 Knowledge Sources will be the basis for the 30 multiple-choice questions that you will receive as part of the ABOS WLA. Starting April 15, there will be a five-week window to answer questions at a time and location of your own choosing.

Once you pay the \$260 assessment fee (\$300 if you have an Orthopaedic Sports Medicine Subspecialty Certificate), you can start answering your first question (beginning April 15). Those who have a Subspecialty Certificate will be able to recertify both their General and Subspecialty Certificates by choosing at least five Knowledge Sources from the Orthopaedic Sports Medicine category each year. To earn the initial Subspecialty Certificate, you will still need to complete an application, submit a case list, and take a computer-based examination.

For the ABOS WLA program, you will have three minutes to answer each question (open-book format) and can answer as many in one sitting as you desire, as long as all questions are answered by 11:59 p.m. on May 20.

There are two methods to successfully complete the ABOS WLA:

1. Diplomates with a certificate end date of 2019–2025 must earn five consecutive Quality Years by

correctly answering at least 24 out of 30 questions a year or answer all questions correctly by 2022.

2. Diplomates with a certificate end date of 2026 or later must answer 120 questions correct by end of their sixth year of their 10-year cycle or achieve five quality years by the end of the eighth year of their 10-year cycle.

Diplomates who do not successfully compete the ABOS WLA will still have the opportunity to pass an ABOS Oral or Computer-Based Recertification Examination.

Those Diplomates who expire in 2029 or 2030 cannot participate yet—only those in their current 10-year cycle. You will be however be able to see a list of the Knowledge Sources. Diplomates in non-operative and non-practicing practices must contact the ABOS for the application requirements.

The ABOS WLA meets the Part III Knowledge Assessment requirement of the ABOS Maintenance of Certification (MOC) program. Diplomates still must meet the other requirements of the ABOS MOC process. This includes completion of an application, application fee, case list, and earning the requisite Continuing Medical Education and Self-Assessment Examination credits.

I have suggested to a number of Diplomates who are curious about the program that they review the list of Knowledge Sources. There will likely be at least 15 that pertain to an individual's practice or that they find of interest. If they are eligible, they can participate in the ABOS WLA for one year. If they like it, they can continue. If they do not, they can still take a Computer-Based or Oral Recertification Examination when they are eligible. The only downside is the loss of one year of the ABOS WLA assessment fee.

More information, including requirements broken down by Diplomates' Certification expiration year, can be found at [abos.org](http://abos.org).

## Prepare Your Research for a 2020 AOSSM Research Award

The AOSSM Research Committee selects the best high-quality, high level of evidence, original research manuscript submitted for the AOSSM Research Awards including:

- **Excellence in Research Award**—given to the best manuscript concerning any topic in sports medicine research with a primary author under the age of 40 at the time of the 2020 AOSSM Annual Meeting.
- **Cabaud Memorial Award**—given to the best manuscript submitted concerning hard or soft tissue biology, in-vitro research, laboratory or “benchtype” research, or in-vivo animal research.
- **O’Donoghue Award**—given to the best manuscript submitted concerning clinical based research or human in-vivo research.

All manuscripts submitted by October 1, 2019 are considered for the 2020 Research Awards. Winners receive a \$2,000 honorarium and an invitation to present their research at the 2020 Annual Meeting. For complete research awards policies and submission instructions, visit [sportsmed.org/Research](http://sportsmed.org/Research) or email Kevin Boyer, AOSSM Research Director at [kevin@aossm.org](mailto:kevin@aossm.org). Retrospective studies and systematic reviews are not considered for Research Awards.

## Grant Submission Deadline Approaching

The 2019 AOSSM Research Grant application cycle will close April 1. You can now submit your application through our new submission center at [sportsmed.org/research](http://sportsmed.org/research). Be sure to review the guidelines and instructions for the grant opportunities as they have been updated. Applicants should ensure they have the most recent information from our website. Please contact Kevin Boyer, AOSSM Research Director, at [kevin@aossm.org](mailto:kevin@aossm.org) with questions. Grant winners will be selected by the AOSSM Research Committee at the 2019 Annual Meeting in Boston.

Grant Opportunity	Type of Research	Award Amount	Project Period
AOSSM/Aircast Foundation Return to Play Grant	Clinical	up to \$150,000	30–36 months
AOSSM/JRF Ortho Basic Science Allograft Grant	Basic Science or Translational	up to \$50,000	12–24 months
Osteoarthritis Grant	Basic Science	up to \$50,000	12–24 months
Sandy Kirkley Clinical Outcomes Research Grant	Clinical	up to \$20,000	12–24 months

## SOS Now Available to Members

AOSSM is now offering the Surgical Outcomes System (SOS) as a free member benefit! Sign up today to start easily collecting patient outcomes. Registering as an AOSSM member allows your de-identified data to be included in the AOSSM dataset and help advance AOSSM’s Research Agenda!



**Already using SOS?** Make sure you complete and submit the De-identification Acknowledgment agreement to ensure your patient outcomes are included in the AOSSM dataset.

**Paying to use SOS?** As an AOSSM member SOS is now a benefit of membership! You should have received an email with a pricing addendum depending on the model your site is enrolled in (HCO or Research). If you have not received the addendum, please contact Kevin Boyer at [kevin@aossm.org](mailto:kevin@aossm.org).

## Extremity War Injury Conference Strengthens Collaborations

AOSSM was excited to join the Society of Military Orthopaedic Surgeons (SOMOS) and the Orthopaedic Trauma Association (OTA) at Extremity War Injuries XIV: Evolving Combat Care and Readiness Research Symposium (EWI XIV). This annual event featured a new readiness and return to duty track which is synonymous with one of our main Research Agenda topics, Return to Play. Several AOSSM members participated in presentations, question and answer sessions, and small group breakouts to strengthen existing collaborations with the military, promote cutting edge research, and ultimately improve the care of civilian and military patients participating in all levels of activity.



# WASHINGTON UPDATE

BY JORDAN VIVIAN, AAOS LEGISLATIVE LIAISON



## AAOS Urges Congress to End Narrow Networks

On February 7, AAOS joined with dozens of medical specialty and state societies in asking Congress to push back against health insurance plans with narrow networks. These plans have sought to control costs by relying on inadequate networks of contracted physicians, leading patients to sometimes receive surprise bills for unanticipated out-of-network care. A bipartisan working group in the Senate has produced draft legislation called the Protecting Patients from Surprise Medical Bills Act. The proposal bans “balance billing,” or the practice of billing a patient for the balance of the bill not covered by insurance, for emergency services, and out-of-network care provided at in-network facilities. The legislation’s payment methodology for determining out-of-network reimbursement gives insurers the ability to determine usual and customary rates for emergency care and could create an incentive for insurers to systematically drive down physician payments.

## AAOS Requests HIPAA Clarity for Improving Coordinated Care

In December 2018, the Department of Health and Human Services (HHS) published a Request for Information (RFI) on Modifying HIPAA Rules to Improve Coordinated Care. This RFI was published to assist the Office for Civil Rights (OCR) within HHS to identify provisions of the Health Insurance Portability and Accountability Act’s (HIPAA) privacy and security regulations that may impede the transformation to value-based health care. It is also looking for aspects that limit or discourage coordinated care among individuals and covered entities (i.e., physicians,

hospitals, insurers) without meaningfully contributing to the privacy or security of an individual’s protected health information (PHI).

## Hospital Competition Act Introduced

Representative Jim Banks (R-IN) introduced the Hospital Competition Act of 2019 (H.R.506) on January 11. The bill aims to combat the rising cost of health care by increasing choice among hospital providers and addresses several AAOS priorities including: lifting restrictions on physician-owned hospitals, discouraging hospital consolidation and certificate of need laws, expanding site neutral payments, and increasing price transparency.

## Members of Congress Request Revision in Medicare Shoulder Policy

On January 4, Representatives Larry Bucshon, MD (R-IN), Andy Harris, MD (R-MD), Roger Marshall, MD (R-KS), and Ami Bera, MD (D-CA), sent a letter to the Centers for Medicare and Medicaid Services (CMS) asking that current Medicare payment policy on shoulder procedures be revised. They argued that payment policy should align with and support appropriate patient care, but the goal is not being met under existing policy.

The 2019 National Correct Coding Initiative defines the shoulder as a “single anatomic structure.” The members of Congress pointed out that all basic anatomy textbooks define the shoulder as comprised of five separate anatomical structures, and CMS payment policies should reflect this anatomical definition. “Physicians’ work in the five distinct areas of the shoulder are not mutually exclusive and represent treatment of different pathologic entities,” they argued.

For more information on all AAOS advocacy efforts, visit [aaos.org/dc](http://aaos.org/dc) or follow the AAOS Office of Government Relations on Twitter at [twitter.com/AAOSAdvocacy](https://twitter.com/AAOSAdvocacy).

# Let Us Help You Stay in the Game!

## 2019 Orthopaedic Sports Medicine Review Course

Plan now to attend the AOSSM/AAOS Orthopaedic Sports Medicine Review Course, taking place August 9–11, 2019 at the Renaissance Chicago Hotel in Chicago, Illinois.

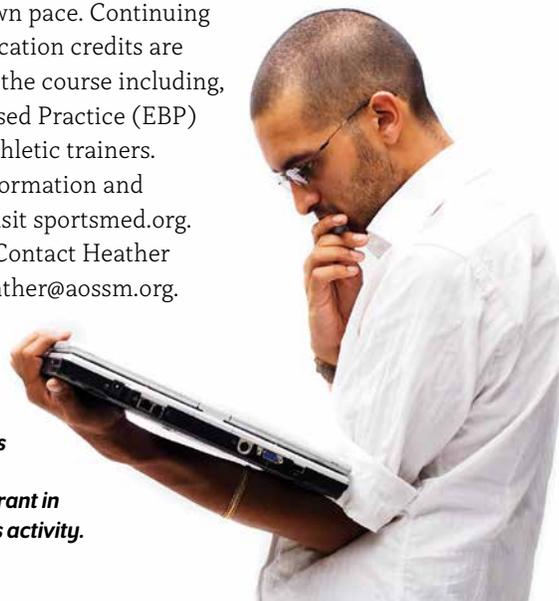
This course is the premier annual event for orthopaedic sports medicine surgeons, general orthopaedic surgeons, primary care sports medicine physicians, and orthopaedic surgery fellows who desire a comprehensive review of all orthopaedic sports medicine and general sports medicine topics. This is the only course of its kind providing an unparalleled overview of generally accepted standards-of-care in sports medicine.

It also will provide a great review for physician assistants, nurse practitioners, athletic trainers, or other healthcare professionals who work closely with surgeons and physicians to provide the best possible patient care. Those who have attended this course often comment that it has helped them communicate better with their healthcare team.

Registrants receive complimentary access to the AOSSM 2019 Self-Assessment Exam, along with recordings of the

lectures allowing you to pause and take notes or repeat, to ensure you understand key points, all at your own pace. Continuing Medical Education credits are available for the course including Evidence Based Practice (EBP) credits for athletic trainers. For more information and to register, visit [sportsmed.org](http://sportsmed.org). Questions? Contact Heather Heller at [heather@aossm.org](mailto:heather@aossm.org).

**AOSSM gratefully acknowledges Arthrex for an educational grant in support of this activity.**



## More Lab Spaces Available This Year for the 2019 AOSSM Fellows Course

The fourth annual AOSSM Fellows Course will take place July 26–27, 2019 at the OLC Education and Conference Center in Rosemont, Illinois. Led by Course Chairs, Stephen F. Brockmeier, MD, Lutul D. Farrow, MD, and Volker Musahl, MD, this course is a kickoff to the incoming orthopaedic sports medicine fellows' 2019–2020 training year. It provides an educational platform to learn the principles of success for team coverage, common injuries and emergencies on the sidelines, and imaging/arthroscopy of the shoulder, elbow, and knee. The format includes didactic sessions and hands-on shoulder and knee lab time at the level expected of an incoming fellow or independent practitioner. The schedule has been restructured to accommodate more fellows in the lab this year! Registration will open April 10. Please contact Meredith Herzog at [meredith@aossm.org](mailto:meredith@aossm.org) for details.

## NEW! 2019 AOSSM Self-Assessment Examination Now Available

The 2019 version of the Self-Assessment Examination (SAE) is now available for purchase! Each of the available versions (2017 SAE, 2018 SAE, and 2019 SAE) contains 125 peer-reviewed questions covering 11 subject areas, including feedback and references. Study at your own pace from the comfort of your home or office. Each exam offers CME credits and qualifies for Part II SAE under the ABOS MOC Program.

### Exam highlights:

- Downloadable answer key, including feedback and references for further study
- Imaging examples to build diagnostic skills
- Ability to reset and re-take the exam to reinforce learning (only the first attempt is recorded)
- Additional questions for purchase in groups of 25 in any topic domain to further measure learning

The cost per exam is \$150/members and \$175/non-members. The exams are available for purchase at [sportsmed.org](http://sportsmed.org). Questions? Contact Meredith Herzog at [meredith@aossm.org](mailto:meredith@aossm.org).

**AOSSM gratefully acknowledges Arthrex for an educational grant in support of this activity.**





JULY 11-14

# BOSTON

STAY IN THE SPORTS MEDICINE GAME

## ATTEND THE 2019 AOSSM ANNUAL MEETING!

Matthew T. Provencher MD, 2019 Program Chair, and his committee have crafted an impressive and groundbreaking scientific program that will engage you with your peers and mentors, answer burning sports medicine questions and leave you inspired to work together with your colleagues to implement best practices into your everyday work. Join us for:

### NEW

#### **Sports Health Symposium**

*Sports Health* is sponsoring a 4-hour symposium during the 2019 Annual Meeting in Boston on Thursday, July 11 from 1:00 p.m. to 5:00 p.m. While you are already familiar with the Annual Meeting format, the *Sports Health* Symposium will allow for an afternoon dedicated to the collaborate approach to athlete care. Orthopaedic surgeons, athletic trainers, physical therapists, and primary care allied health professionals will discuss return to play after ACL and shoulder injuries from a multidisciplinary approach, along with a focused discussion on the latest concussion treatment and prevention protocols with Allen Sills, MD, Chief Medical Officer for the NFL, and moderated by *Sports Health* Editor-in-Chief, Ed Wojtys, MD.

*This symposium is free with your AOSSM Annual Meeting registration and includes 3.5 CME credits for attendees, please indicate your interest upon registering as space is limited.* Athletic trainers also receive Evidence-Based Practice credits for their attendance. Questions? Contact Colleen Briars, AOSSM Director of Journal Publishing, at [colleen@aossm.org](mailto:colleen@aossm.org).

#### **2 Live Surgeries**

- Shoulder Labral Repair
- Elbow UCL Reconstruction

#### **104 Research Paper Presentations**

Topics from biologics to the latest in shoulder repair

#### **92 Posters**

On cutting-edge research

#### **28 Instructional Courses**

Including round table discussions and later times

#### **4 Guest Speakers**

- **Tom Brady**  
New England Patriots Quarterback
- **Stanley Druckenmiller**  
Chairman of the Board, Harlem Children's Zone
- **Kenneth Langone**  
Chairman of Trustees, NYU Langone Medical Center
- **Madison Kocian**  
2016 Olympic Gold and Silver Medal Winning Gymnast

#### **New Innovation Symposium**

Highlighting new technologies in sports medicine with expert faculty

#### **2 Days of Exhibitor Product Demonstrations**

See the latest in products and services live in the Exhibit Hall.

#### **Fenway Family Private Party**

Catch up with your AOSSM friends and family and take in a rematch of the 2018 World Series between the LA Dodgers and the Boston Red Sox.

#### **Historic Boston's Sights, Sips and Sounds**

For the entire family from the fish at the New England Aquarium to the Freedom Trail to Faneuil Hall

#AOSSM2019

### REGISTRATION NOW OPEN

Learn more and register at [sportsmed.org](http://sportsmed.org).  
Early bird rates end June 11, 2019!

# UPCOMING MEETINGS

Learn more and register at [sportsmed.org](https://sportsmed.org).

## **2019 Annual Meeting**

**July 11–14, 2019**

Boston, Massachusetts

## **AOSSM/AAOS Orthopaedic Sports Medicine Review Course**

**August 9–11, 2019**

Chicago, Illinois

## **2019 State of the Art Soccer Medicine: An Update from Kids to the MLS**

**September 20–21, 2019**

Miami, Florida

## **Surgical Skills Course Shoulder and Elbow 2019: Techniques for Open and Arthroscopic Treatment of Common Conditions**

**October 11–12, 2019**

Rosemont, Illinois

## **Advanced Team Physician Course**

**December 12–14, 2019**

Las Vegas, Nevada





# ZIMMER BIOMET Sports Medicine

## What's **NEW**<sup>\*</sup> in **DOUBLE ROW** Repair?

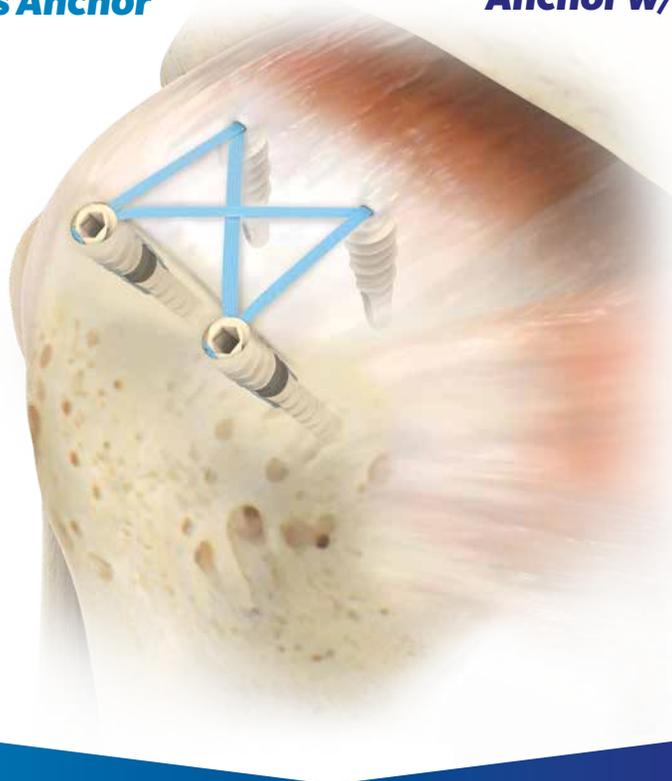


### Ventix Link

#### Screw-In Knotless Anchor

##### Lateral Row

- **Threaded, Vented** design for strong fixation & potential bony integration
- Unique cleat design for **Surgeon Controlled Tensioning** after anchor insertion
- **Accepts Up To Six (6) Limbs** of BroadBand Tape or #2 suture



### Quattro X

#### Anchor w/ BroadBand Tape

##### Medial Row

- **Double Loaded** with BroadBand Tape
- **Non-Sliding (Fixed) Tape Option** for double row knotless repairs
- **Sliding Tape Option** with tie-ability & low knot profile for knotted repairs



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## BREAKAWAY AND KEEP ALL YOUR ATHLETES IN THE GAME

### Course Co-Chairs

Christopher S. Ahmad MD  
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Learn more and register today at [sportsmed.org](http://sportsmed.org).



## 2019 STATE OF THE ART SOCCER MEDICINE

AN UPDATE FROM KIDS TO THE MLS  
SEPTEMBER 20-21, 2019 | MIAMI, FL

### OFF THE SIDELINES AND INTO THE GAME

Join AOSSM, ISAKOS, AMSSM and MLS for a new course covering the entire field – highlighting current research and techniques in soccer injury prevention, treatment and rehabilitation.

Experts from all corners of the globe will go beyond the usual topics to bring you a comprehensive view of soccer medicine today, addressing issues in medical and surgical treatment, the how-to's of performance science, analytics, and strength and conditioning, keeping all ages, levels of play and genders in mind.

Early bird registration rates end **August 20, 2019**

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AOSSM gratefully acknowledges Zimmer Biomet for their support of *Sports Medicine Update*.

