



**HARVARD**  
MEDICAL SCHOOL

**NEW**

# SPORTS MEDICINE 2017

**April 19-21, 2017 • Boston, MA**

The comprehensive sports medicine update for MDs, PTs, NPs, PAs, and ATCs

## Guidance and Best Practices to Improve:

- Treatment of sports conditions
- Physical evaluation of sports injuries
- Use and interpretation of imaging
- Non-surgical management of injuries
- Multidisciplinary team-based treatment
- Safe return to play for athletes of all ages and abilities

## 2017 Updates and Expert-Led Education Covering:

- Regenerative medicine
- Bone health in athletes and active patients
- Treatment of sports concussions
- Management of chronic tendon disorders
- Sports cardiology: screening and management

Under the direction of  
Joanne Borg-Stein, MD  
Kelly McInnis, DO  
William Palmer, MD  
Adam Tenforde, MD

Optional skills development workshops for running medicine, cycling medicine, ultrasound for sports medicine

**Register at [SportsMedicine.HMSCME.com](http://SportsMedicine.HMSCME.com)**

## Accreditation

The Harvard Medical School is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

The Harvard Medical School designates this live activity for a maximum of 31.25 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

- Three-day Sports Medicine 2017: 23.00 *AMA PRA Category 1 Credits™*
- One-day optional skills development workshop:
  - » Musculoskeletal Ultrasound: 8.00 *AMA PRA Category 1 Credits™*
  - » Advances in Running Medicine: 8.00 *AMA PRA Category 1 Credits™*
  - » Cycling Medicine 2017: 8.25 *AMA PRA Category 1 Credits™*

### CANADIAN ACCREDITATION

The Royal College of Physicians and Surgeons of Canada recognizes conferences and workshops held outside of Canada that are developed by a university, academy, hospital, specialty society or college as accredited group learning activities.

### EUROPEAN ACCREDITATION

Through an agreement between the American Medical Association and the European Union of Medical Specialists, physicians may convert *AMA PRA Category 1 Credit™* to an equivalent number of European CME Credits® (ECMECs®). Information on the process of converting *AMA PRA Category 1 Credits™* to ECMECs® can be found at: [www.eaccme.eu](http://www.eaccme.eu).

### ABMS/ACGME COMPETENCIES

This course is designed to meet one or more of the following American Board of Medical Specialties and Accreditation Council of Graduate Medical Education competencies: patient care and procedural skills, medical knowledge, professionalism, practice-based learning and improvement, interpersonal and communication skills, and systems-based practice.

### IOM COMPETENCIES

This course is designed to meet one or more of the following Institute of Medicine competencies: apply quality improvement, provide patient-centered care, work in interdisciplinary teams, and employ evidence-based practice.

**DISCLOSURE POLICY:** Harvard Medical School (HMS) adheres to all ACCME Essential Areas, Standards, and Policies. It is HMS's policy that those who have influenced the content of a CME activity (e.g., planners, faculty, reviewers, and others) disclose all relevant financial relationships with commercial entities so that HMS may identify and resolve any conflicts of interest prior to the activity. These disclosures will be provided in the activity materials along with disclosure of any commercial support received for the activity. Additionally, faculty members have been instructed to disclose any limitations of data and unlabeled or investigational uses of products during their presentations.

**DISCLAIMER:** CME activities sponsored by Harvard Medical School are offered solely for educational purposes and do not constitute any form of certification of competency. Practitioners should always consult additional sources of information and exercise their best professional judgment before making clinical decisions of any kind.

## Course Overview

This comprehensive Sports Medicine course provides an in-depth, multi-disciplinary approach to common musculoskeletal conditions by regional anatomy, providing a thorough overview in the evaluation and management of injuries using best evidence-based practice. Physiatrists, orthopedists, radiologists, athletic trainers for the Boston Red Sox and New England Patriots, and physical therapists with expertise in each topic will discuss both non-operative and surgical management of sports injuries, including the role of diagnostic imaging and interventional procedures, and rehabilitation to restore function, with the goal to facilitate safe and accelerated return to play. The course presents an interdisciplinary approach to sports medicine care, including new and emerging treatments accounting for age and gender, and incorporates complex cases to synthesize learning.

Special topics will include management of concussions, sports cardiology, adaptive sports, bone health in athletes, and regenerative medicine. Additional workshops are available to provide in-depth experience in cycling medicine, running medicine, and musculoskeletal ultrasound of the upper extremity.

## Learning Objectives

Upon completion of this activity, participants will be able to:

- Identify the most common sports medicine injuries by anatomy and associated risk factors including sport, age, and gender.
- Evaluate common injuries using best evidence-based practice in the physical examination, diagnostic imaging, and ultrasound techniques.
- Manage and prevent sports injuries effectively, with goals to optimize the health of the athlete and facilitate accelerated and safe return to play.

Customize  
Your Learning Experience

Participate in one of the following three optional workshops to customize your learning experience:

- Musculoskeletal Ultrasound
- Advances in Running Medicine
- Cycling Medicine 2017



# HARVARD MEDICAL SCHOOL

Dear Colleague:

How we diagnose, treat, rehabilitate, and prevent sports injuries has advanced considerably for those of us who treat professional athletes and those who treat patients with active lifestyles, and so have the questions now being raised by clinicians.

Consider the following:

- What are the most effective methods both surgically and non-surgically to manage injuries to tendons, joints, muscles, and ligaments in athletes, and how does this differ from non-athletes?
- Do I know the current evidence regarding regenerative medicine and joint preservation techniques?
- What are the most current advances in management of sports concussion and methods to facilitate return to play?
- How do I optimize care for the female athlete?
- What is the role of point-of-care sports ultrasound for evaluation and treatment of sports injuries?
- What are the most current recommendations for sports cardiology, and how should medical providers navigate legal aspects of medical eligibility and disqualification criteria?
- How do I evaluate bone health in athletes and promote lifelong skeletal health?

These are the types of questions and challenges that we address with this new program, which is led by world-renowned experts in PM&R, orthopedics, MSK radiology, primary care sports medicine, physical therapy, and athletic training. Education is practical with a focus on advancing your knowledge and skills, readily incorporating updates into practice, and ensuring patients the highest quality of care.

We hope you will join us.



Joanne Borg-Stein, MD  
*Course Director*



Kelly McInnis, DO  
*Course Director*



William Palmer, MD  
*Co-Director*



Adam Tenforde, MD  
*Co-Director*

# Sports Medicine 2017

## Harvard Medical School Faculty

Kathryn Ackerman, MD  
Marwa Ahmed, MD, MS  
Peter Asnis, MD  
Ashwin N. Babu, MD  
Antje Barrevel, MD  
Eric Berkson, MD  
Cheri Blauwet, MD  
Philip Blazar, MD  
Joanne Borg-Stein, MD  
Miriam A. Bredella, MD  
Connie Chang, MD  
Neal Chen, MD  
Irene S. Davis, PhD, PT  
Pierre D'Hemecourt, MD  
Lauren E. Elson, MD  
Christine Eng, MD  
Erin Futrell, PT, MPT, OCS  
Andreas H. Gomoll, MD  
Lenore Herget, DPT, SCS, MEd, CSCS  
Laurence Higgins, MD  
Christopher Hunt, PT, DPT, SCS, CSCS  
Zacharia Isaac, MD  
Grant L. Iverson, PhD  
Arvin Kheterpal, MD  
Inga Katharina Koerte, MD  
Minna Kohler, MD  
Dana Kotler, MD  
Daniel Lieberman, PhD  
Steven Makovitch, DO  
Scott D. Martin, MD  
Kelly McInnis, DO  
Robert Nascimento, MD  
David Nolan, PT, DPT, MS, OCS, SCS, CSCS  
Luke Oh, MD  
William Palmer, MD  
Edward M. Phillips, MD  
Kristin Popp, PhD  
Mark Price, MD, PhD  
Greg Robidoux, PT  
Darren Rosenberg, DO  
Marilou Shaughnessy, PsyD  
Adam Tenforde, MD  
George H. Theodore, MD  
Martin Torriani, MD  
Lindsay Troilo, PT, DPT, FAAOMPT  
Jon J.P. Warner, MD  
Meagan Wasfy, MD  
Reg B. Wilcox III, PT, DPT, MS, OCS  
Ross Zafonte, DO

## Guest Faculty

Jason Bartley, PT, DPT, OCS, FAAOMPT, COMT  
Physical Therapist/Clinical Educator  
Boston Red Sox

Michael Collins, PhD  
Executive and Clinical Director  
UPMC Sports Medicine Concussion Program

William W. Dexter, MD, FACSM  
Professor of Family Medicine  
Tufts University School of Medicine

David E. Ruchelsman, MD, FAAOS  
Clinical Assistant Professor of Orthopaedic Surgery  
Tufts University School of Medicine

James M. Whalen, MSED, ATC  
Head Athletic Trainer  
New England Patriots

## Wednesday • April 19

- 7:00 am **Registration**
- 7:50 am **Welcome and Introduction**  
Joanne Borg-Stein, MD
- 8:00 am **Cuff Injuries in the Athlete**  
Mark Price, MD, PhD
- 8:20 am **Shoulder Instability: When to Operate?**  
Laurence Higgins, MD
- 8:40 am **MRI: Shoulder Injuries**  
William Palmer, MD
- 9:00 am **Thrower's Shoulder: Special Considerations**  
Eric Berkson, MD
- 9:20 am **Value-Driven Shoulder Care**  
Jon J.P. Warner, MD
- 9:40 am Break (refreshments provided)
- 10:00 am **Ultrasound Applications**  
Martin Torriani, MD
- 10:20 am **Rehab and Return to Play**  
Reg B. Wilcox III, PT, DPT, MS, OCS
- 10:40 am **Audience Q&A, Expert Panel Discussion**  
Drs. Price, Higgins, Palmer, Berkson, Warner, Torriani, and Wilcox
- 11:00 am **Upper Extremity Nerve Injuries in Athletes**  
Christine Eng, MD
- 11:20 am **Epicondylitis**  
Cheri Blauwet, MD
- 11:40 am **MRI Elbow: Pearls and Pitfalls**  
William Palmer, MD
- 12:00 pm Lunch Break
- 1:20 pm **Traumatic Elbow Injuries**  
Luke Oh, MD
- 1:40 pm **Thrower's Elbow: Little League to Pro**  
Luke Oh, MD
- 2:00 pm **Ultrasound Applications**  
Joanne Borg-Stein, MD
- 2:20 pm **Rehab and Return to Play**  
Jason Bartley, PT, DPT, OCS, FAAOMPT, COMT
- 2:40 pm **Audience Q&A, Expert Panel Discussion**  
Drs. Eng, Blauwet, Palmer, Oh, Borg-Stein, and Bartley
- 3:00 pm Break (refreshments provided)
- 3:20 pm **Ulnar-sided Wrist Pain**  
Philip Blazar, MD
- 3:40 pm **Wrist Fractures**  
Neal Chen, MD
- 4:00 pm **Hand Injuries**  
David E. Ruchelsman, MD, FAAOS
- 4:20 pm **MRI: Common Injuries**  
William Palmer, MD
- 4:40 pm **Ultrasound Applications**  
Minna Kohler, MD
- 5:00 pm **Audience Q&A, Expert Panel Discussion**  
Drs. Blazar, Chen, Ruchelsman, Palmer, and Kohler
- 5:20 pm Daily Program Ends

# Sports Medicine 2017

## Thursday • April 20

- 8:00 am **Labral Pathology / FAI: Best Surgical Candidates**  
Scott D. Martin, MD
- 8:20 am **Athletic Pubalgia**  
Joanne Borg-Stein, MD
- 8:40 am **MRI: Hip Injuries**  
Miriam A. Bredella, MD
- 9:00 am **Pain in the Butt**  
Dana Kotler, MD
- 9:20 am **Hip and Hamstring Tendinopathies**  
Adam Tenforde, MD
- 9:40 am Break (refreshments provided)
- 10:00 am **Ultrasound Applications**  
Ashwin N. Babu, MD
- 10:20 am **Rehab and Return to Play**  
David Nolan, PT, DPT, MS, OCS, SCS, CSCS
- 10:40 am **Audience Q&A, Expert Panel Discussion**  
Drs. Martin, Borg-Stein, Bredella, Kotler, Tenforde, Babu, and Nolan
- 11:00 am **Ligament and Meniscus Injuries**  
Peter Asnis, MD
- 11:20 am **Patellofemoral Problems**  
Robert Nascimientto, MD
- 11:40 am **MRI Knee: Mechanism Matters**  
Miriam A. Bredella, MD
- 12:00 pm Lunch Break
- 1:20 pm **Advances in Cartilage Repair**  
Andreas H. Gomoll, MD
- 1:40 pm **Lower Leg Injuries**  
Dana Kotler, MD
- 2:00 pm **Ultrasound Applications**  
Marwa Ahmed, MD, MS
- 2:20 pm **Rehab and Return to Play**  
Jim Whalen, MSEd, ATC
- 2:40 pm **Audience Q&A, Expert Panel Discussion**  
Drs. Asnis, Nascimientto, Bredella, Gomoll, Kotler, Ahmed, and Mr. Whalen
- 3:00 pm Break (refreshments provided)
- 3:20 pm **Ankle Sprains: High, Low, and Mimickers**  
George H. Theodore, MD
- 3:40 pm **Foot and Ankle-opathies**  
Lauren E. Elson, MD
- 4:00 pm **High-Risk Stress Fractures**  
Kelly McInnis, DO
- 4:20 pm **Advanced Imaging of Challenging Injuries**  
Connie Chang, MD
- 4:40 pm **Ultrasound Applications**  
Arvin Kheterpal, MD
- 5:00 pm **Foot Core Paradigm**  
Irene S. Davis, PhD, PT
- 5:20 pm **Audience Q&A, Expert Panel Discussion**  
Drs. Theodore, Elson, McInnis, Chang, Kheterpal, and Davis
- 5:40 pm Daily Program Ends

## Friday • April 21

- 8:00 am **Concussion Evaluation: Sideline to Clinic**  
Grant L. Iverson, MD
- 8:20 am **Active Rehab and Safe Return to Play after Concussion**  
Michael Collins, PhD
- 8:40 am **Vestibular Rehabilitation**  
Lenore Herget, DPT, SCS, MEd, CSCS
- 9:00 am **Long-term Sequelae: Concern for CTE**  
Ross Zafonte, DO
- 9:20 am **MRI: Emerging Technology in Brain Imaging**  
Inga Katharina Koerte, MD
- 9:40 am Break (refreshments provided)
- 10:00 am **Cervical Spine Injuries: Sideline and Beyond**  
Pierre D'Hemecourt, MD
- 10:20 am **Thoraco-abdominal Injuries: Not to Miss!**  
William W. Dexter, MD, FACSM
- 10:40 am **Audience Q&A, Expert Panel Discussion**  
Drs. Iverson, Collins, Herget, Zafonte, Koerte, D'Hemecourt, and Dexter
- 11:00 am **Lumbar Disc Injuries**  
Christine Eng, MD
- 11:20 am **Extension-based Lumbopelvic Pain in Athletes**  
Kelly McInnis, DO
- 11:40 am **MRI: Pain Generator or Not?**  
Zacharia Isaac, MD
- 12:00 pm Lunch Break
- 1:20 pm **Ultrasound Applications**  
Joanne Borg-Stein, MD
- 1:35 pm **Spinal Injections: Indications in Athletes**  
Steven Makovitch, DO
- 1:50 pm **Core Strengthening: Evidence Base**  
David Nolan, PT, DPT, MS, OCS, SCS, CSCS
- 2:10 pm **OMT for Myofascial Pain**  
Darren Rosenberg, DO
- 2:25 pm **Impact of Exercise Trends**  
Edward M. Phillips, MD
- 2:40 pm **Audience Q&A, Expert Panel Discussion**  
Drs. Eng, McInnis, Isaac, Borg-Stein, Makovitch, Nolan, Rosenberg, and Phillips
- 3:00 pm Break (refreshments provided)
- 3:20 pm **Sports Cardiology: The Endurance Athlete's Heart**  
Meagan Wasfy, MD
- 3:40 pm **Advances in Adaptive Sports**  
Cheri Blauwet, MD
- 4:00 pm **Bone Health** Adam Tenforde, MD
- 4:20 pm **Lifestyle Medicine: Practice What You Preach** Edward M. Phillips, MD
- 4:40 pm **Regenerative Biologics in Sports Injury**  
Joanne Borg-Stein, MD
- 5:00 pm **Audience Q&A, Expert Panel Discussion**  
Drs. Wasfy, Blauwet, Tenforde, Phillips, and Borg-Stein
- 5:20 pm **Course Wrap-up**  
Joanne Borg-Stein, MD, and Kelly McInnis, DO
- 5:40 pm Main Program Adjourns

*Program changes/substitutions may be made without notice. To view the most up-to-date version of the course program, please visit the course website.*

# Sports Medicine 2017

## Optional Workshops

Customize your learning experience by attending a special, one-day skills development workshop. The nation's foremost authorities in three disciplines of sports medicine lead these highly interactive and hands-on programs.



### **Musculoskeletal Ultrasound: Focus on the Upper Extremity**

**Saturday • April 22, 8:00am – 5:30pm**

*Directors: Joanne Borg-Stein, MD and Ashwin N. Babu, MD*

See website for full schedule

[SportsMedicine.HMSCME.com](http://SportsMedicine.HMSCME.com)



### **Advances in Running Medicine: Focus on Bone Stress Injuries**

**Saturday • April 22, 8:00am – 5:30pm**

*Directors: Irene S. Davis, PhD, PT*

*and Adam Tenforde, MD*

*This workshop will take place at Spaulding Hospital Cambridge. A shuttle from the Boston Marriott Copley Place will be provided. Breakfast and lunch will be served.*

See website for full schedule

[SportsMedicine.HMSCME.com](http://SportsMedicine.HMSCME.com)



### **Cycling Medicine 2017**

**Saturday • April 22, 8:00am – 5:30pm**

*Director: Dana Kotler, MD*

See website for full schedule

[SportsMedicine.HMSCME.com](http://SportsMedicine.HMSCME.com)

## Who Attends

- Physicians, NPs, and PAs from the fields of:
    - Sports Medicine
    - Orthopedics
    - Internal Medicine
    - Family Medicine
    - Emergency Medicine
    - Physical Medicine and Rehabilitation
    - Radiology and Nuclear Medicine
    - Pediatrics and Adolescent Medicine
  - Physical Therapists
  - Certified Athletic Trainers
- ....and other healthcare practitioners who work with athletes or patients who are physically active

# Sports Medicine 2017

## Reasons to Attend

In the past year, there have been a number of very significant clinical changes that affect the way we diagnose, treat, and rehabilitate sports injuries incurred by elite athletes, weekend warriors, and patients with active lifestyles. This program provides a special and timely opportunity to hear directly from world-renowned physician specialists (physiatrists, orthopedists, radiologists), athletic trainers for the Boston Red Sox and the New England Patriots, and physical therapists on the cutting-edge of rehabilitation about these changes and how to incorporate them into practice to improve:

- Treatment outcomes for acute and overuse injuries of the spine, knee, hip, foot, and ankle, along with upper extremity conditions of the shoulder, neck, elbow, hand, and wrist
- The effectiveness and expediency of physical evaluations
- Appropriate diagnostic imaging and interpretation
- Rehabilitation and return to play
- Utilization of physical therapists and athletic trainers
- Non-surgical management of injuries
- Decisions to refer patients for surgery
- Multidisciplinary team-based treatment
- Injury prevention
- Pre-participation evaluation
- Treatment of special populations, including adaptive sports athletes, runners, and cyclists

Unique to this program is its immersive, fast-paced, 360-degree educational experience. You will learn about changes and advances in sports medicine from three critical, interrelated perspectives:

- Physical Medicine and Rehabilitation
- Musculoskeletal Radiology
- Orthopedics

Educational highlights include:

- The most effective methods, both surgically and non-surgically, to manage injuries to tendons, joints, muscles, and ligaments in athletes vs. non-athletes
- When and how to utilize cutting-edge regenerative sports medicine treatments
- Updates for regenerative biologics and joint preservation techniques
- Advances in the management of sports concussion and methods to facilitate return to play
- Practice recommendations to optimize care for the female athlete
- Guidance for point-of-care ultrasound for evaluation and treatment of sports injuries
- New recommendations for sports cardiology and how to navigate legal aspects of medical eligibility and disqualification criteria

## INQUIRIES

Call 617-384-8600 Mon-Fri 9am – 5pm EST or e-mail [CEPrograms@hms.harvard.edu](mailto:CEPrograms@hms.harvard.edu)



**HARVARD**  
MEDICAL SCHOOL

# SPORTS MEDICINE

Education for **PHYSICIANS, PTs, NPs, PAs, ATCs**

April 19-21

# 2017

Boston, MA



*Earn up to  
31.25 AMA PRA  
Category 1 Credits™*

Comprehensive approaches for improved:

- Physical examination of sports injuries
- Use and interpretation of imaging
- Treatment outcomes
- Rehabilitation and return to play
- Utilization of PTs and athletic trainers

This new program features 360-degree education, updates, best practices, and hands-on skills development workshops from Harvard Medical School's leading experts in the areas of:

- Physical Medicine and Rehabilitation
- Musculoskeletal Radiology
- Orthopedics

Register at **SportsMedicine.HMSCME.com**





# HARVARD

## MEDICAL SCHOOL

**SportsMedicine.HMSCME.com**

### Sports Medicine 2017

(Course #734715-1702)

#### Course Tuition

Wednesday, April 19 - Friday, April 21

**\$895**

#### OPTIONAL SKILLS DEVELOPMENT WORKSHOPS

Saturday, April 22, 8:00am - 5:30pm

##### Musculoskeletal Ultrasound

(limited to 40 participants)

**\$495**

##### Running Medicine

(limited to 50 participants)

**\$345**

##### Cycling Medicine

(limited to 50 participants)

**\$345**

*Your tuition includes mid-morning and afternoon refreshments, complimentary Internet in the meeting room, and the course syllabus online and on flash drive.*

### REGISTRATION, PAYMENT, CONFIRMATION, and REFUND POLICY

Registrations for Harvard Medical School CME programs are made via our secure online registration system. To register for this course, please visit the course website.

At the end of the registration process, a \$5 non-refundable processing fee will be added to your registration, and you will have the choice of paying by check or credit card (Visa, MasterCard, or American Express). If you are paying by check, the online registration system will provide you with instructions and a printable form for remitting your course fees by check. Postal, telephone, fax, and cash-payment registrations are not accepted. Fees shown in USD.

Upon receipt of your paid registration, an email confirmation from the HMS DCE office will be sent to you. Be sure to include an email address that you check frequently. Your email address is used for critical information, including registration confirmation, evaluation, and certificate. Refunds, less an administrative fee of \$75, will be issued for all cancellations received two weeks prior to the start of the course. Refund requests must be received by postal mail, email, or fax. No refund will be issued should cancellation occur less than two weeks prior. "No shows" are subject to the full course fee and no refunds will be issued once the conference has started.

### VENUE

Boston Marriott Copley Place  
110 Huntington Ave. • Boston, MA 02116 • 617-236-5800

### ACCOMMODATIONS

A limited number of rooms have been reserved at the Boston Marriott Copley Place Hotel until March 29, 2017. When calling the hotel, be sure to specify that you are enrolled in this activity to receive a reduced room rate. You can also make discounted hotel reservations by visiting the course website by March 29 and clicking on the dedicated link on the Venue page.

**Please do not make non-refundable travel arrangements until you have received an email from our office confirming your paid registration.**

*Booking in the Sports Medicine 2017 room block helps to support the course. Doing so helps us keep our meeting registration costs at their current low rate, and is convenient for you and keeps you close to your colleagues.*

**Register at**  
**SportsMedicine.HMSCME.com**