

Sports Medicine

Spotlight

Sports medicine is the branch of medicine that deals with athletes and people who move a lot. Did you know that sports medicine specialists do not just focus on professional athletes, but may also focus on children and teens, adults who exercise frequently, and even people with physically demanding jobs?

Personal Connection

The field of sports medicine is all about helping people move safely and recover from injuries to get themselves moving again. Becoming a sports medicine specialist or working to care for athletes is all about the healing factor, along with learning about the science behind physical wellbeing and fitness:

- Are you interested in biology, fitness, and medicine?
- Are you highly active and love to move, run, dance, or play sports?
- Do you love getting hands-on with problems and solving them kinesthetically?

Other Connections

Sports medicine is a topic of medicine rather than a specific job. Even if you don't end up becoming a sports medicine specialist, there are many different career paths that are involved in and are a part of helping care for athletes, including:

- Working in rehabilitation and helping athletes who have been injured or have illnesses in order to regain range of movement and control their pain as a physical therapist
- Studying athletes' bodily responses to training and exercise to assist them in enhancing and refining their athletic performance and overall fitness as a sports physiologist
- Taping or bracing athletes to prevent injuries before a game, evaluating injuries, giving emergency care, creating rehabilitation plans and going through them with injured athletes, and recording injuries, healing and recovery processes as an athletic trainer
- Designing nutrition programs to improve or maintain the health of athletes as a means to reach peak performance or for therapeutic reasons as a nutritionist

Fun Facts/ "Did You Know?..."

Some fun facts about sports medicine:

Did you know that far more sports injuries occur during practices than games? According to the Stop Sports Injuries Organization, 62% of all athletic injuries occur on the practice field. [Read more here.](#)

Has Harvard always been weird? One of the first institutions in America that studied exercise physiology had a bizarre name: The Harvard Fatigue Laboratory. It was established in 1927 and was actually part of the Harvard Business School, not medicine. [Read more here.](#)

One subarea of sports medicine began as a female-only profession: The first professional organization for physical therapists was started in 1921 in response to World War I. Because the men had all just been at war, women took the lead, and the American Women's Physical Therapeutic Association was born. It had 274 members at the time. In 1922 the name was changed to the American Physiotherapy Association, and men were then allowed to join. [Read more here.](#)

Horses have their own sports medicine doctors: Equine sports medicine is a specialty that combines sports medicine and veterinary care. Equine sports medical experts offer support to horses (and their owners) with rehabilitation techniques specially designed for horses. [Read more here.](#)



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STEM Connection

Sports medicine, like any area of medicine, is significantly impacted by developments in technology. Here are just a few ways that new and emerging technologies are transforming the sports medicine world:

- More and better performance data through wearable trackers: Tools like Fitbits, Apple Watches, and even our smartphones have become goldmines of data about things like heartrate, body mass index, and sleep patterns. But the ways that wearables can track important data for sports medicine goes further. Tools like Vert can actually track workload and body strain of athletes in real time, helping to prevent overuse injuries before they happen. [Read more.](#)
- Powerful new prosthetics: New developments in materials science and engineering are leading to better, more lifelike prosthetics. Prosthetic limbs are being developed that use sophisticated electrical engineering to wire them directly to the nervous system, allowing them to be controlled by the brain. These prosthetics help people who otherwise couldn't regain their mobility move again, and sports medicine specialists need to be involved in their production to make sure they provide the necessary freedom of motion. With the right prosthetic, a lower limb amputee can run a marathon. [Read more.](#)
- Sports Medicine AR: From games like Pokémon Go to apps that make dinosaurs spring to life on your smartphone, augmented reality (AR) can bring you wherever you want to go. AR can help athletes recover from injuries faster by planting them back in their home stadium with cheering fans during rehabilitation exercises. Another example is a company called VR-Physio that uses AR games to help motivate people rehabilitating from neck and spinal injuries by making physical therapy fun. [Read more.](#)
- Rehabilitation technology: From the very first time early man thought to splint a broken bone, technology has been essential for rehabilitation. In the modern day, emerging technology like the AlterG Anti-Gravity Treadmill is helping people recover better and faster. This treadmill helps take pressure off joints by supporting part of the user's body weight through their waist. [Read more.](#)

Articles, Videos, and Podcasts of Interest

Perhaps you're curious about the future of sports medicine. [This article](#) from the Medical Futurist discusses some of the ways that technology is impacting sports medicine.

[In this Ted Talk](#), Jaspal Singh explores how playing sports benefits your body and your brain. There are many medical and health benefits of exercise.

If you're looking for the best of the best in sports medicine degrees, look no further than this list of bachelor's degree programs focused on sports medicine. [Learn more.](#)

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Journeys to Becoming a Sports Medicine Specialist

Sports medicine is an interesting field partially because of the range of people you can encounter. A sports medicine specialist may work with world-class ballet dancers, professional athletes, or with a little kid who broke his leg playing soccer. A great start for high school students is taking plenty of courses in science, but also embracing required physical education and health classes. Doing sports or other physical activity after school certainly won't hurt either!

Read about one doctor's exciting experiences in sports medicine:

Dr. Thomas Trojian is the lead physician for Drexel Athletics and the Chief of the Division of Sports Medicine at Drexel University College of medicine. He has worked with several world-class teams, including the Pittsburgh Steelers.

Dr. Trojian started off his journey in sports medicine by being an athlete himself. He played football at University of Pennsylvania, switched to rugby after experiencing an injury, and even went on to play rugby at the national and international levels. Being so invested in athletics made the decision to pursue sports medicine an easy choice.

When asked what his favorite part of being a sports team doctor, Thomas said, "Working with the athletes. Also, I like the need to stay very current with treatment options in order to return people back to athletics safely and quickly."

Dr. Trojian is a great example of the hard work it takes to become a sports medicine physician. "A doctor needs to finish med school, then a residency program. In my case, I did a residency program in family medicine. It thoroughly prepared me to become a team physician. Then you need to do a sports medicine fellowship. If a person chooses to go into orthopedic sports, then you need to complete medical school, an orthopedic residency, and a one-year orthopedic sports fellowship," he said.

You can read more about Dr. Trojian [here](#).

Read about how one student made his dream of going to the Olympics a reality:

Emeka Aludogbu had always wanted to someday reach the Olympics, but because of injuries he was unable to become a professional athlete. His passion for sports remained and he entered university to become a chiropractor and help athletes recover from injuries.

While in school, Emeka kept his eyes set on going to the Olympics – except this time not as an athlete but instead as a member of the Nigerian sports medicine team. He applied for program after program to get a chance of joining the sports medicine team, but he kept getting rejected. He says that while he was disappointed, he was "determined to keep going." He spoke with everyone he knew about his goals and ended up reconnecting with an old friend who had connections to the Nigerian Olympic team. Soon he had an interview and impressed the team so much he was not only invited to the 2016 Rio Olympics but now has a permanent position with the Nigerian Olympic team as the head chiropractic physician.

Emeka recommends that other students fighting for big dreams "never forget your focus. Always stay focused on your vision, and you will eventually arrive at your goal."

Read more about Emeka's path and his advice to students [here](#).

