**UT Family Medicine Residency**  
**Sports Medicine (Musculoskeletal) Rotation**  
**Justin Turner, MD (Updated: June 2021)**

**Rotation Goal**  
The Sports Medicine rotation is a minimum 100 hours experience gained by a 4-week block rotation during the PGY3 year and other longitudinal experiences. Musculoskeletal complaints rank second only to upper respiratory infections as the reason people seek care but education in this area is lacking according to studies (Freedman 1998, Woodwell 2004). Therefore, the curriculum set forth is divided into several unique components with a purpose and focus to equip residents with the skills to provide optimal care of the athlete and patients with musculoskeletal complaints and promote health across the lifespan. Residents will gain longitudinal experience by caring for ambulatory patients in the UTFMC with musculoskeletal complaints, participating in pre-participation physical and on-site training for events such as high school athletics at Liberty, Humboldt, FHU, JSCC, Union, and Lane.

During this rotation, residents should achieve competency in the following areas:

i. Develop skills necessary to independently obtain an appropriate history and physical, including provocative techniques, on patients with musculoskeletal conditions. (Interpersonal and Communication Skills, Practiced-based Learning and Improvement, Patient Care)

ii. Develop an appropriate differential diagnosis and recommend treatment, including subspecialty care and therapy. (Patient Care, Systems-based Practice)

iii. Perform an age-appropriate and activity-specific preparticipation physical exam (Patient Care, Medical Knowledge, Interpersonal and Communication Skills, Professionalism)

iv. Communicate effectively with other health care professionals concerning musculoskeletal diseases. (Interpersonal and Communication Skills, Professionalism)

v. Communicate effectively and compassionately with patients, their families, coaches, and others involved with the care of the athlete/patient. (Interpersonal and Communication Skills, Professionalism)

vi. Understand the importance of exercise and its impact on disease as well as a prevention strategy and be able to prescribe an appropriate exercise program. (Patient Care, Medical Knowledge, Interpersonal and Communication Skills)

vii. Understand the importance of treating the medical, as well as the musculoskeletal conditions in the athlete. (Patient Care)

viii. Quickly and effectively triage acute injuries in the athlete with an understanding of mechanism of action. (Patient Care, Medical Knowledge)

**Musculoskeletal and Sports Medicine Experiences**

a. **Address:** Sports Orthopedic and Spine  
569 Skyline Drive Suite 100  
Jackson, TN 38301  
Phone # (731) 427-7888

b. **Supervisor(s):** Scott Johnson, M.D., Keith Nord, M.D., Justin Turner, M.D.

c. **Rotation Structure:**

   i. Three to four half-days per week in continuity clinic at the UTFMC.
   ii. Six to seven half-days per week at SOS.

d. **Responsibilities:**

   i. Residents should review the Residency Master Schedule to determine the exact times and dates that they are to work.
   ii. Residents are expected to act and dress in a professional and ethical manor at all times in accordance with the residency manual.
iii. **One week prior to the beginning of the rotation, residents should contact Allen, Dr. Johnson’s nurse to ensure scheduling.**
iv. Residents should actively participate in the care of patients with musculoskeletal conditions and explore how improper nutrition and inactivity relate to disease.

v. Evaluate patients with musculoskeletal complaints in various settings.
vi. When participating in care, residents should develop a list of differential diagnoses and initial treatment plans for patient with musculoskeletal conditions and demonstrate effective exchange of information and collaboration with other health professionals.

vii. Residents should gain a better understanding of the role of the primary care physician, specialist, physical and occupational trainers, and athletic trainers in athletes or patients with musculoskeletal conditions to gain understanding of the importance of a multidisciplinary approach to optimize individualized care.

viii. Gain a better understanding of proper referral patterns.
ix. Residents should review diagnostic imaging with the supervisor and become familiar with common injuries and what imaging to order for proper evaluation.
x. The resident should spend with physical therapy to learn appropriate referral and types of therapy offered.
xi. The resident should spend time in casting and splinting of simple non-displaced fractures to understand basic management.
xii. They should become familiar with and perform proper techniques for large joint aspiration and injections.
xiii. Residents should demonstrate knowledge of common musculoskeletal disorders gained by reading selected topics.

2. **Longitudinal Exposure to Musculoskeletal and Sports Medicine** – Residents will receive longitudinal exposure to Musculoskeletal and Sports Medicine through their care of patients in the UTFMC as well as conferences given by faculty members. Residents are also expected to participate in pre-participation physicals to gain experience and to serve the community. Residents are expected to utilize these longitudinal experiences to improve their knowledge of Musculoskeletal and Sports Medicine and promote a healthy, active lifestyle in patients.

3. **Didactic Experience** – Residents will receive structured didactic lectures on issues related to Musculoskeletal and Sports Medicine throughout their three years of residency. The teaching of Sports Medicine is heavily due to hands-on training in core conferences and workshops, using films, patient demonstrations, and models. Residents will also receive hands-on MSK point-of-care ultrasounds training over the course of their residency through the POCUS curriculum.

**Rotation Objectives**

By the end of the Musculoskeletal and Sport Medicine rotation, PGY III residents are expected to expand and cultivate skills and knowledge learned during previous training and to achieve the following objectives based on the six general competencies. The resident should exhibit an increasing level of responsibility and independency as he or she progresses throughout the year.

<table>
<thead>
<tr>
<th>Competency</th>
<th>Required Skill(s)</th>
<th>Teaching Method(s)</th>
<th>Formative Evaluation Method(s)</th>
<th>Frequency of Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Patient Care</strong></td>
<td><strong>SPECIALTY SPECIFIC OBJECTIVES</strong></td>
<td>Conferences/Didactics</td>
<td>Direct Feedback</td>
<td>Daily</td>
</tr>
<tr>
<td></td>
<td>Perform an adequate history and physical examination of the adult and pediatric</td>
<td>Daily Rounds</td>
<td>Global Evaluation</td>
<td>Monthly</td>
</tr>
<tr>
<td></td>
<td>patient/athlete with a musculoskeletal disorder.</td>
<td>Research Discussions</td>
<td>Procedure Certification</td>
<td>Quarterly</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Self Directed Learning</td>
<td>In-training Exam</td>
<td>Annually</td>
</tr>
</tbody>
</table>
### Medical Knowledge

#### SPECIALTY SPECIFIC OBJECTIVES

Develop an understanding of the general considerations when caring for a patient with a musculoskeletal disorder or sports related injury

- Integration of family practice philosophy
- Ethical, psychosocial, economic and medico-legal issues
- Interaction with the sports medicine team
- Integration of basic sciences
  - Exercise physiology
  - Anatomy
  - Biomechanics and kinesiology
- Nutrition, fluids and electrolytes, and dietary supplements

<table>
<thead>
<tr>
<th>Conferences/Didactics</th>
<th>Direct Feedback</th>
<th>In-training Exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily Rounds</td>
<td>Global Evaluation</td>
<td>Monthly Quarterly Annually</td>
</tr>
<tr>
<td>Research Discussions</td>
<td>Procedure Certification</td>
<td></td>
</tr>
<tr>
<td>Self Directed Learning</td>
<td>In-training Exam</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Daily</th>
<th>Monthly</th>
<th>Quarterly</th>
<th>Annually</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Basic and clinical research</strong></td>
<td><strong>Conferences/Didactics</strong></td>
<td><strong>Direct Feedback</strong></td>
<td><strong>Daily</strong></td>
</tr>
<tr>
<td>--------------------------------</td>
<td>--------------------------</td>
<td>--------------------</td>
<td>----------</td>
</tr>
<tr>
<td>Integrate knowledge of patient care aspects into the care of patients with musculoskeletal disorders or sports injuries</td>
<td>Daily Rounds Research Discussions Self Directed Learning</td>
<td>Global Evaluation Procedure Certification In-training Exam</td>
<td>Monthly Quarterly Annually</td>
</tr>
<tr>
<td>- The role of family physician as team physician, including on-site supervision</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Assessment and care of acutely injured athletes, including transportation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Medical management of the athlete, including sports-specific injuries</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Rehabilitation of ill and injured athletes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Exercise as treatment: physical and psychological problems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Medical care considerations for special athlete groups as outlined in selected readings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Medical equipment and supplies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Medical decision-making involving communication and interaction with athlete, coach, parents, significant others and consultants</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Summarize problems associated with exercise</strong></td>
<td><strong>Conferences/Didactics</strong></td>
<td><strong>Direct Feedback</strong></td>
<td><strong>Daily</strong></td>
</tr>
<tr>
<td><strong>Demonstrate knowledge of established and evolving biomedical, clinical, epidemiological, and social-behavioral sciences, as well as the application of this knowledge to patient care.</strong></td>
<td>Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning</td>
<td>Direct Feedback Global Evaluation Procedure Certification In-training Exam</td>
<td>Monthly Quarterly Annually</td>
</tr>
<tr>
<td>Objective</td>
<td>Conferences/Didactics</td>
<td>Direct Feedback</td>
<td>In-training Exam</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>-----------------------</td>
<td>-----------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Integrate knowledge of performing a history and physical examination into patient care</td>
<td>Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning</td>
<td>Direct Feedback Global Evaluation Procedure Certification In-training Exam</td>
<td>Daily Monthly Quarterly Annually</td>
</tr>
<tr>
<td>Promote preventive techniques, including physical training and safety and assessment of the exercise environment</td>
<td>Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning</td>
<td>Direct Feedback Global Evaluation Procedure Certification In-training Exam</td>
<td>Daily Monthly Quarterly Annually</td>
</tr>
<tr>
<td>Develop an understanding of the medical management of an athletic event</td>
<td>Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning</td>
<td>Direct Feedback Global Evaluation Procedure Certification In-training Exam</td>
<td>Daily Monthly Quarterly Annually</td>
</tr>
<tr>
<td>Recommend the appropriate comprehensive management strategy of the athlete</td>
<td>Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning</td>
<td>Direct Feedback Global Evaluation Procedure Certification In-training Exam</td>
<td>Daily Monthly Quarterly Annually</td>
</tr>
<tr>
<td>Apply knowledge of rehabilitation techniques to the care of patients</td>
<td>Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning</td>
<td>Direct Feedback Global Evaluation Procedure Certification In-training Exam</td>
<td>Daily Monthly Quarterly Annually</td>
</tr>
<tr>
<td>Plan and implement the techniques in pre-participation evaluation</td>
<td>Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning</td>
<td>Direct Feedback Global Evaluation Procedure Certification In-training Exam</td>
<td>Daily Monthly Quarterly Annually</td>
</tr>
</tbody>
</table>
### Integrate knowledge of the use of medical equipment and supplies into treatment of patients
- Taping and strapping techniques
- Casting and immobilization techniques
- Bracing techniques
- Team physician's equipment bag

<table>
<thead>
<tr>
<th>Training Activity</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conferences/Didactics</td>
<td>Daily Rounds</td>
</tr>
<tr>
<td></td>
<td>Research Discussions</td>
</tr>
<tr>
<td></td>
<td>Self Directed Learning</td>
</tr>
<tr>
<td>Direct Feedback</td>
<td>Global Evaluation</td>
</tr>
<tr>
<td>Procedure Certification</td>
<td>In-training Exam</td>
</tr>
<tr>
<td>Daily</td>
<td>Monthly</td>
</tr>
</tbody>
</table>

### Develop adequate knowledge of the common disorders in the musculoskeletal system of the adult and pediatric patient with assistance from upper level residents, faculty and specialists.

<table>
<thead>
<tr>
<th>Training Activity</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conferences/Didactics</td>
<td>Daily Rounds</td>
</tr>
<tr>
<td></td>
<td>Research Discussions</td>
</tr>
<tr>
<td></td>
<td>Self Directed Learning</td>
</tr>
<tr>
<td>Direct Feedback</td>
<td>Global Evaluation</td>
</tr>
<tr>
<td>Procedure Certification</td>
<td>In-training Exam</td>
</tr>
<tr>
<td>Daily</td>
<td>Monthly</td>
</tr>
</tbody>
</table>

### Describe and apply to patient care health promotion & prevention techniques applicable to patients with musculoskeletal disorders and/or sports related injuries
- Role of exercise in mental and physical health promotion
- Pre-participation evaluation
- Injury prevention
  - Equipment
  - Taping techniques
  - Coaching techniques
  - Environment
- Conditioning and training techniques, including principles of aerobic and resistance training
- Exercise prescription
  - Age-related
  - Patients with chronic illness
  - The physically challenged athlete
  - Cardiac rehabilitation
- Community programs and facilities
- Establishing the community sports medicine system (network)
- Epidemiology of exercise and injury
- Promotion of patient education
- Exercise in pregnancy

<table>
<thead>
<tr>
<th>Training Activity</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conferences/Didactics</td>
<td>Daily Rounds</td>
</tr>
<tr>
<td></td>
<td>Research Discussions</td>
</tr>
<tr>
<td></td>
<td>Self Directed Learning</td>
</tr>
<tr>
<td>Direct Feedback</td>
<td>Global Evaluation</td>
</tr>
<tr>
<td>Procedure Certification</td>
<td>In-training Exam</td>
</tr>
<tr>
<td>Daily</td>
<td>Monthly</td>
</tr>
</tbody>
</table>

### Practice Based Learning and Improvement

<table>
<thead>
<tr>
<th>Training Activity</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conferences/Didactics</td>
<td>Daily Rounds</td>
</tr>
<tr>
<td>Direct Feedback</td>
<td>Global Evaluation</td>
</tr>
<tr>
<td>Procedure Certification</td>
<td>In-training Exam</td>
</tr>
<tr>
<td>Daily</td>
<td>Monthly</td>
</tr>
</tbody>
</table>

### SPECIALTY SPECIFIC OBJECTIVES

See General Family Medicine Objectives for a comprehensive list.

<table>
<thead>
<tr>
<th>Training Activity</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conferences/Didactics</td>
<td>Daily Rounds</td>
</tr>
<tr>
<td>Direct Feedback</td>
<td>Global Evaluation</td>
</tr>
<tr>
<td>Procedure Certification</td>
<td>In-training Exam</td>
</tr>
<tr>
<td>Daily</td>
<td>Monthly</td>
</tr>
<tr>
<td>Interpersonal and Communication Skills</td>
<td><strong>SPECIALTY SPECIFIC OBJECTIVES</strong></td>
</tr>
<tr>
<td>Interpersonal and Communication Skills</td>
<td><strong>SPECIALTY SPECIFIC OBJECTIVES</strong></td>
</tr>
<tr>
<td>Professionalism</td>
<td><strong>SPECIALTY SPECIFIC OBJECTIVES</strong></td>
</tr>
<tr>
<td>Professionalism</td>
<td><strong>SPECIALTY SPECIFIC OBJECTIVES</strong></td>
</tr>
<tr>
<td>Systems-Based Practice</td>
<td><strong>SPECIALTY SPECIFIC OBJECTIVES</strong></td>
</tr>
</tbody>
</table>
Develop an understanding of the appropriate role of subspecialty medicine in evaluation and treatment of patients with injuries related to sports and musculoskeletal disorders.

### Conferences/Didactics
- Daily Rounds
- Research Discussions
- Self Directed Learning

### Direct Feedback
- In-training Exam

### Global Evaluation
- Procedure Certification
- In-training Exam

### In-training Exam
- Daily
- Monthly
- Quarterly
- Annually

Demonstrates understanding of the role of various ancillary modalities of patient care that are available including physical therapy, nutritional education and home health.

### Conferences/Didactics
- Daily Rounds
- Research Discussions
- Self Directed Learning

### Direct Feedback
- In-training Exam

### Global Evaluation
- Procedure Certification
- In-training Exam

### In-training Exam
- Daily
- Monthly
- Quarterly
- Annually

Incorporate considerations of cost awareness and risk-benefit analysis in patient care

### Conferences/Didactics
- Daily Rounds
- Research Discussions
- Self Directed Learning

### Direct Feedback
- In-training Exam

### Global Evaluation
- Procedure Certification
- In-training Exam

### In-training Exam
- Daily
- Monthly
- Quarterly
- Annually

Advocate for quality patient care and optimal patient care systems

### Conferences/Didactics
- Daily Rounds
- Research Discussions
- Self Directed Learning

### Direct Feedback
- In-training Exam

### Global Evaluation
- Procedure Certification
- In-training Exam

### In-training Exam
- Daily
- Monthly
- Quarterly
- Annually

---

**Selected Reading Topics:**

1) Normal anatomy and physiology
2) Normal growth and development
3) Musculoskeletal history taking
4) Principles of musculoskeletal physical examination
5) Indications, contraindications, and interpretation of laboratory data (e.g., jointfluid)
6) Indications, limitations, contraindications, and informed consent for office-based musculoskeletal procedures such as:
   a) Common joint aspirations
   b) Common joint injections
   c) Common injections for bursitis
   d) Common injections for tendinopathy
7) Testing
   a) Interpretation of radiographs
   b) Use of magnetic resonance imaging (MRI), computed tomography (CT) scanning, bone scanning, and musculoskeletal ultrasound
   c) Indications for arthrogram, myelogram and arthroscopy
   d) Application of electromyography (EMG) and nerve conduction studies
8) Pathogenesis/pathophysiology and recognition of:
   a) Joint pain, swelling, and erythema
   b) Muscular pain, swelling, and injury
   c) Musculoskeletal trauma
d) Fractures  
  e) Dislocations  
  f) Tendinopathy spectrum  
  g) Tendon ruptures (partial and complete)  
  h) Nerve injuries  
  i) Bone and joint deformities  
  j) Bone and joint infections  
  k) Metabolic bone diseases  
  l) Musculoskeletal congenital anomalies  
  m) Musculoskeletal birth injuries  
  n) Compartment syndrome  
  o) Avascular necrosis  
  p) Osteoporosis  
  q) Overuse syndromes  
  r) Back pain syndromes

9) Pediatric problems  
  a) Hip dislocation  
  b) Congenital hip dysplasia  
  c) Legg-Calvé-Perthes disease  
  d) Osgood-Schlatter disease  
  e) Slipped capital femoral epiphysis  
  f) “Clubfoot” (talipes equinovarus)  
  g) In-toeing (metatarsus adductus, tibial torsion, femoral anteversion)  
  h) “Bowleg” (genu varum) and “knock knee” (genu valgum)  
  i) Physeal injuries (Salter-Harris classification)  
  j) Transient synovitis  
  k) Child abuse patterns of injury  
  l) Dislocation of the radial head (nursemaid’s elbow)  
  m) Blount disease  
  n) Rickets  
  o) Osteogenesis imperfecta  
  p) Thoracolumbar scoliosis

10) Sports medicine-specific considerations  
  a) General considerations  
  b) Ethical, psychosocial, economic, and medicolegal issues  
  c) Interaction with members of the sports medicine team  
  d) Nutrition, fluids and electrolytes, and dietary supplements  
  e) Injury prevention  
      i) Discouraging use of improper techniques  
      ii) Promoting rule changes and enforcement of rules designed to enhance participant safety
iii) Proper equipment, fit, and maintenance
iv) Taping, strapping, and bracing techniques
v) Environmental factors affecting participant and spectator safety
f) Conditioning and training techniques, including principles of aerobic and resistance training
g) Appropriate exercise prescription for:
i) Healthy persons of all ages, taking into account physiologic differences related to age and sex
ii) Patients who have chronic illnesses, including diabetes, hypertension, congestive heart failure, asthma, and chronic obstructive pulmonary disease
iii) Pregnant women
iv) Physically or mentally challenged athletes
v) Patients who have various cardiovascular conditions, especially those known to increase the risk of sudden death
h) Sports medicine education promotion for patients and their families, athletes and their families, allied health professionals, coaches, and school administrators
i) Patient care aspects
   i) The important role of family physicians as part of a team of physicians for organized sports
   ii) The role of family physicians as medical directors and/or on-site medical care providers for mass participation sporting events
   iii) Appropriate assessment and care of acutely injured athletes, including, but not limited to:
       1) Evaluation, on-field management, and transport of suspected cervical spine injury
       2) Evaluation, and on-field and sideline management of suspected concussion or other head injury
       3) Evaluation, on-field management and transport of severe fractures and dislocations
iv) Medical management of ill and injured athletes, taking into account important sport-specific considerations
v) Rehabilitation oversight for ill and injured athletes, and return to play decision-making
j) Medical care considerations for special athlete groups
   i) Preadolescent athletes
   ii) Adolescent athletes
   iii) Female athletes
   iv) Geriatric athletes
   v) Physically challenged athletes
   vi) Student athletes
   vii) Recreational athletes
   viii) Athletes who have chronic diseases
k) Communication and interaction with patients and their families, athletes and their families, coaches, and school administrators
l) Exercise-induced asthma testing
m) Understanding of cardiac screening for exercise-related cardiac problems
11) Problems associated with exercise
   a) Exercise addiction
   b) Abuse of anabolic steroids and other performance-enhancing drugs
   c) Pressures placed on athletes by themselves, family members, teammates, coaches, and fans to participate even when injured
   d) Performance pressures placed on athletes by themselves, family members, teammates, coaches, and fans
   e) The intermittent exerciser
   f) How to deal with unmet and unrealized expectations
g) Alcohol and illicit drug use and abuse
h) Eating disorders

12) Management and therapy
   a) Outline of expected course with and without therapy
   b) Patient education for acute and chronic problems
   c) Targeted pharmacologic treatment
   d) Supportive/corrective devices, including braces, casts, splints, and orthotics
   e) Complementary and alternative modalities
   f) Prevention
      i) Preparticipation screening
      ii) Conditioning and training
      iii) Injury prevention
      iv) Physical fitness/exercise prescription
      v) Bone loss
   g) Rehabilitation
      i) Physical therapy
         (1) Cold, heat
         (2) Ultrasound and phonophoresis
         (3) Exercises
         (4) Electrical stimulation (e-stim) and iontophoresis
      ii) Occupational therapy
      iii) Complementary modalities (e.g., osteopathic manipulative therapy [OMT], massage, acupuncture)
      iv) Psychosocial aspects of trauma
   h) Surgery and follow-up care
      i) Internal and external fixation devices
      ii) Artificial joint replacement
      iii) Arthroscopy

13) Other problems
   a) Costochondritis
   b) Bursitis, tendiopathy, tenosynovitis
   c) Meniscal tears
   d) Synovial cysts
   e) Osteochondroses/aseptic necrosis
   f) Gout, Pseudogout
   g) Common fracture
      i) Closed tarsal and carpal bones, particularly navicular
      ii) Smith and Colles fracture
      iii) Nondisplaced medial or lateral epicondyle of humerus
      iv) Dancer’s and Jones fractures
      v) Nondisplaced humeral neck fractures.
Resources:

Books


Organizations

American Academy of Family Physicians. www.aafp.org

American Academy of Orthopaedic Surgeons. www.aaos.org


American College of Rheumatology. www.rheumatology.org

American College of Sports Medicine. www.acsm.org

American Medical Society for Sports Medicine. www.amssm.org


References


*Updated June 2021 using ACGME program requirements for Graduate Medical Education in Family Medicine and AAFP Musculoskeletal and Sports Medicine Recommended Curriculum Guidelines for Family Medicine Residents.*