

**RIVERSIDE UNIVERSITY HEALTH SYSTEM - MEDICAL CENTER
ORTHOPAEDIC SURGERY RESIDENCY PROGRAM**

**Sports Medicine (PGY-4)
(Duration: Two Months)**

Supervising Faculty: Dr. Bret Powers and Dr. Wade Faerber

The overall goal of the sports medicine rotation (PGY-4) is to educate the resident regarding diagnosis, treatment and prevention of sports related injuries. The PGY-4 experience will build upon the PGY-3 sports medicine experience with emphasis upon higher levels of decision making and technical skill acquisition.. Faculty supervision will advance from direct supervision to indirect supervision and in some cases oversight as resident ability progresses.

Patient Care

Goals

The orthopaedic resident must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health programs and the promotion of health.

Objectives

- Demonstrate competence in the pre-admission care, hospital care, operative care and follow up care (including rehabilitation) of patients.
- Demonstrate competence in their ability to gather essential and accurate information about their patients
- Demonstrate competence in their ability to make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date orthopaedic scientific evidence, and clinical judgment.
- Demonstrate competence in their ability to develop and carry out patient management plans
- Demonstrate competence in their ability to provide health care services aimed at preventing health problems or maintaining health.
- Demonstrate competence in the diagnosis and management of adult and pediatric orthopaedic disorders
- Able to effectively develop the initial patient care and clinical skills to facilitate adequate evaluation of common shoulder, elbow, knee, and ankle problems seen in the athletic patient population.
- Demonstrates clinical skills that include reproducible physical examination of the knee, shoulder, elbow and ankle.
- Demonstrates physical exam skills that facilitate identification of typical findings of sports medicine problems of various joints in the body.
- Able to demonstrate surgical skills that include portal placement for and complete diagnostic arthroscopy of the knee and shoulder, arthroscopic partial meniscectomy, harvest of the central-third patella tendon and hamstring tendons for ACL reconstruction, arthroscopic acromioplasty and deltopectoral approach to the shoulder for anterior stabilization, and open debridement of the lateral epicondyle of the elbow.
- Able to develop and carry out patient management plans.
- Able to use information technology to support patient care decisions and patient education.
- Competence in evaluation (history, physical examination, and imaging) and management (both operative and non-operative) of patients with sports injuries or conditions

- Supervised training in the operative and other technical skills integral to Orthopaedic sports medicine. Understanding of the indications, risks and limitations of the commonly performed procedures in the subspecialty
- Clinical experience including inpatient and outpatient opportunities observing, managing, operating and following patients with a wide variety of sports medicine problems.
- Opportunities to assume continuing responsibility with appropriate supervision for patients with acute and chronic injuries and to observe the natural course of athletic injuries and the effects of various therapeutic modalities on their outcome.
- Appropriate utilization of laboratory tests, physical modalities, and operative procedures for the diagnosis and treatment of athletic injuries. (e.g., Arthrometric testing [KT1000])
- Differentiating between those sports injuries that require immediate surgical treatment and those that can be treated nonoperatively
- Recognizing those sports injuries for which a minor delay in treatment would not be deleterious to the patient
- Acute care of Orthopaedic and other acute sports medicine injuries that may occur during athletic competition and how to deal with those injuries on the athletic field.
- Interpretation of radiologic examinations that are used for diagnosis of sports injuries, including specific views, tomograms, bone scans, arthrograms, CT scans, and MRI.
- Therapeutic modalities offered in the department of physical therapy, how to use them, and how to judge the appropriateness and efficacy of a treatment plan
- Diagnostic and operative arthroscopy

Example: Meniscal Tear, Patient Care Goals and Objectives:

- Appropriately interprets advanced imaging studies (e.g., MRI findings)
- Provides complex non-operative treatment (e.g., concomitant injuries—ligament, fractures)
- Capable of performing diagnostic arthroscopy and meniscal debridement
- Modifies and adjusts post-operative treatment plan as needed (e.g., knee arthrofibrosis, continued pain)

Medical Knowledge

Goals

The orthopaedic resident must gain medical knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge to patient care.

Objectives

- Demonstrate expertise in the knowledge of those areas appropriate for an orthopaedic surgeon
- Demonstrate investigatory and analytical thinking approach to clinical situations
- Demonstrates basic understanding of the information gathering process of the detailed history and physical exam with attention to the mechanism of injury as it relates to the athlete's specific sport as well as the impact of the athlete's complaints on his/her ability to perform the sports-specific tasks required by their chosen sport.
- Understanding the pathology and biomechanics of athletic injuries and the effects of injury on the athlete, including both the physical and psychological manifestations.
- Understanding the nonorthopaedic problems that occur in sports medicine and how to deal with these problems or how to refer them appropriately
- Understanding the psychological effect of injuries on athletes and how to deal with them personally and how to select consultants to assist in their management

- Understanding of sports equipment, particularly protective devices intended to allow the athlete to continue to compete, including helmets, protective pads, knee braces, foot orthotics, and others not specifically named.

Example: Meniscal Tear, Medical Knowledge Goals and Objectives:

- Demonstrates knowledge of current literature and alternative treatments
- Understands rehabilitation mechanics (e.g., quad strength closed vs. open chain)
- Understands biomechanics and implant choices
- Understands alternative surgical approaches (e.g., repair vs debridement)

Practice-based Learning and Improvement

Goals

The orthopaedic resident must demonstrate the ability to investigate and evaluate his/her care of orthopaedic patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and life-long learning

Objectives

- Identify strengths, deficiencies, and limits in one's knowledge and expertise
- Set learning and improvement goals
- Identify and perform appropriate learning activities
- Systemically analyze practice using quality improvement methods, and implement changes with the goal of practice improvement.
- Locate, appraise, and assimilate evidence from scientific studies related to their patients' health problems.
- Use information technology to optimize learning and improve patient outcomes.
- Participate in the education of patients, families, students, residents and other health professionals.
- Apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness.
- Acknowledges gaps in personal knowledge and expertise, and frequently asks for feedback from teachers and colleagues.
- Demonstrates computer literacy and basic computer skills in clinical practice.
- Describes basic concepts in clinical epidemiology, biostatistics, and clinical reasoning.
- Categorizes the study design of a research study
- Continually assesses performance by evaluating feedback and assessments
- Develops a learning plan based on feedback with some external assistance
- Demonstrates use of published review articles or guidelines to review common topics
- Uses patient care experiences to direct learning
- Ranks study designs by their level of evidence
- Identifies bias affecting study validity
- Formulates a searchable question from a clinical question
- Accurately assess areas of competence and deficiencies and modifies learning plan
- Demonstrates the ability to select an appropriate evidence-based information tool to answer specific questions while providing care.
- Applies a set of critical appraisal criteria to different types of research, including synopses of original research findings, systematic reviews and meta-analyses, and clinical practice guidelines

- Critically evaluates information from others: colleagues, experts, industry representatives, and patient-delivered information.
- Complete the personal learning project in the practiced based learning and improvement curriculum for the rotation.

Interpersonal and Communication Skills

Goals

The orthopaedic resident must demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and other health professionals.

Objectives

- Communicate effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds
- Communicate effectively with physicians, other health professionals, and health related agencies
- Act as a consultative role to other physicians and health professionals
- Maintain comprehensive, timely, and legible medical records
- Use effective listening skills and elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills, if applicable.
- Communicates with patients about routine care (e.g., actively seeks and understands the patient's/family's perspective;
- Able to focus in on the patient's chief complaint and ask pertinent questions related to that complaint)
- Recognizes and communicates role as a team member to patients and staff
- Responds to requests for information
- Communicates competently within systems and other care providers, and provides detailed information about patient care (e.g., demonstrates sensitivity to patient—and family—related information gathering/sharing to social cultural context;
- Begins to engage patient in patient-based decision making, based on the patient's understanding and ability to carry out the proposed plan; demonstrates empathic response to patient's and family's needs; actively seeks information from multiple sources, including consultations; avoids being a source of conflict; able to obtain informed consent [risks, benefits, alternatives, and expectations]); actively participates in team-based care; Supports activities of other team members, communicates their role to the patient and family
- Communicates competently in difficult patient circumstances (e.g., able to customize emotionally difficult information, such as end-of-life or loss-of-limb discussions; supports patient and family; engages in patient-based decisions making incorporating patient and family/cultural values and preferences)
- Understands the Operating Room team leadership role and obligations

Professionalism

Goals

The orthopaedic resident must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles

Objectives

- Demonstrate respect, integrity and compassion for others
- Demonstrate responsiveness to patient needs that supersedes self interest
- Demonstrate accountability to patients, society and the profession
- Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices.
- Demonstrate sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in culture, age, gender, disabilities and sexual orientation
- Demonstrate commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent and business practice
- Consistently demonstrates behavior that conveys caring, honesty, and genuine interest in patients and families
- Recognizes the diversity of patient populations with respect to gender, age, culture, race, religion, disabilities, sexual orientation, and socioeconomic status
- Recognizes the importance and priority of patient care, with an emphasis on the care that the patient wants and needs; demonstrates a commitment to this value
- Understands when assistance is needed and willing to ask for help
- Exhibits basic professional responsibilities, such as timely reporting for duty, being rested and ready to work, displaying appropriate attire and grooming, and delivering patient care as a functional physician
- Aware of the basic principles and aspects of the general maintenance of emotional, physical, mental health, and issues related to fatigue/sleep deprivation
- Demonstrates an understanding of the importance of compassion, integrity, respect, sensitivity, and responsiveness while exhibiting these attitudes consistently in common and uncomplicated situations
- Consistently recognizes ethical issues in practice; discusses, analyzes, and manages in common and frequent clinical situations including socioeconomic variances in patient care
- Recognizes limits of knowledge in common clinical situations and asks for assistance
- Recognizes value of humility and respect towards patients and associate staff
- Demonstrates adequate management of personal, emotional, physical, mental health, and fatigue
- Exhibits these attitudes consistently in complex and complicated situations
- Recognizes how own personal beliefs and values impact medical care
- Knowledgeable about the beliefs, values, and practices of diverse patient populations and the potential impact on patient care
- Recognizes ethical violations in professional and patient aspects of medical practice
- Consistently recognizes limits of knowledge in uncommon and complicated clinical situations; develops and implements plans for the best possible patient care.
- Assesses application of principles of physician wellness, alertness, delegation, teamwork, and optimization of personal performance to the practice of medicine
- Seeks out assistance when necessary to promote and maintain personal, emotional, physical and mental health

Systems-Based Practice

Goals

The orthopaedic resident must demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care.

Objectives

- Work effectively in various health care delivery settings and systems relevant to orthopaedics
- Coordinate patient care within the health care system relevant to their orthopaedics
- Practice cost-effective health care and resources allocation that does not compromise quality of care.
- Advocate for quality patient care and optimal patient care systems
- Work in interprofessional teams to enhance patient safety and improve patient care quality
- Participate in identifying system errors and implementing potential system solutions
- Describes basic levels of systems of care (e.g., self-management to societal)
- Understands the economic challenges of patient care in the health care system
- Recognizes importance of complete and timely documentation in teamwork and patient safety
- Explains the role of the Electronic Health Record (EHR) and Computerized Physician Order Entry (CPOE) in prevention of medical errors
- Gives examples of cost and value implications of care he or she provides (e.g., gives examples of alternate sites of care resulting in different costs for individual patients)
- Uses checklists and briefings to prevent adverse events in health care
- Appropriately and accurately enters patient data in EHR
- Effectively uses electronic medical records in patient care
- Orders and schedules tests in appropriate systems for individual patients balancing expenses and quality
- Successfully navigates the economic differences of the health care system
- Participates in quality improvement or patient safety program and/or project
- Reconciles conflicting data in the medical record.
- Effectively manages clinic team and schedules for patient and workflow efficiency
- Uses evidence-based guidelines for cost-effective care
- Maintains team situational awareness and promote “speaking up” with concerns
- Incorporates clinical quality improvement and patient safety into clinical practice
- Contributes to reduction of risks of automation and computerized systems by reporting system problems.
- Participate in one medical staff committee as a non-voting member, provide a formal presentation at the Orthopaedic Surgery educational grand rounds, and write a self-assessment of committee experience with relevant learning points articulated and documented.

ASSESSMENT METHOD:

Direct and indirect observation by faculty with assessment on formal end of rotation evaluation form.

DIDACTIC CURRICULUM REQUIRED ATTENDANCE:

RUHS Monday Pre-Op Conference (Monday AM)

RUHS Wednesday Conference (Wednesday AM)

RUHS Friday Post-Op Conference (Friday AM)

RUHS Ortho Monthly Research Meeting

RUHS Ortho Monthly Department Meeting/Educational Grand Rounds

RUHS Ortho Bi-Monthly M&M Conference