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

# Foot/Ankle (PGY-2) (Duration: Two Months)

# Supervising Faculty: Dr. Jennifer D'Amico

The overall goal of the Orthopaedic PGY-2 Foot/Ankle rotation is to develop a basic understanding of the principles of gait as well as skills to evaluate and treat the orthopaedic patient with disorders of the foot and ankle.

#### **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.

- 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.
- Clinical experience observing and managing patients with a variety of problems involving Orthopaedic repair of the foot and ankle on both and inpatient and outpatient basis.
- Evaluation and care for disorders of the foot and ankle through a wide range of ages, both sexes, acute, subacute and chronic disorders.
- Management of systemic disorders, such as rheumatoid arthritis, neuromuscular conditions and diabetes, as they pertain to deformities of the foot and ankle.
- Disorders specific to the foot and ankle such as compartment syndrome, malignant and instability.
- Supervised training in operative and other technical skills integral to foot and ankle.
  Orthopaedics understanding indications, risks and limitations of commonly performed procedures.
- Diagnosis of clinical disorders of the bones, joint and soft tissues of the foot and ankle.
- Continuing care and progressive responsibility for patient assessment, decisions regarding treatment, preoperative evaluation, operative experience, non-operative management, operative management, rehabilitation, long term follow up and other patient care.
- Use of diagnostic tests
- Interpretation of radiographic examination

- Development of a treatment plan to manage patients with traumatic, congenital and developmental, infectious, metabolic, degenerative, neurologic and rheumatologic disorders.
- Methods of prevention and treatment for the management of bony and soft tissue injuries of the foot and ankle, including the indications for various types of internal and external fixation devices and their application of the foot and ankle trauma.
- The development of operative skills in reconstructive Orthopaedics, such as soft tissue procedures, osteotomies, bone grafting, excisional arthroplasty, arthrodesis and prosthetic arthroplasty
- The recognition and management of complications of treatment
- The assessment of efficacy of treatment methods.
- Recuperative and rehabilitation techniques, including the use of physical and occupational therapy.

## Example: Ankle Arthritis, Patient Care Goals and Objectives:

- Obtains history and performs basic physical exam
- Appropriately orders basic imaging studies (e.g., three weight-bearing views)
- Prescribes non-operative treatments
- Splints fracture appropriately
- Provides basis peri-operative management (e.g., pre- and post-operative)
- Obtains focused history and performs focused exam and gait analysis
- Appropriately interprets basic imaging studies
- Prescribes and manages non-operative treatment (e.g., non-steroidal and anti-inflammatory drugs) [NSAIDs], steroid injections, brace, rocker bottom shoes)
- Completes pre-operative planning with instrumentation and implants
- Performs one basic surgical approach to the ankle/mid-foot/hind-foot arthritis (e.g., anterior or lateral transfibular)
- Provides post-operative management and rehabilitation (e.g., prothrombin time [PT] orders with goals and restrictions)
- Capable of diagnosis and early management of complications (e.g., wound healing problems, infection, deep vein thrombosis [DVT])

## **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.

- Demonstrate expertise in the knowledge of those areas appropriate for an orthopaedic surgeon
- Demonstrate investigatory and analytical thinking approach to clinical situations
- Understanding the natural history of disease and disorders of the foot and ankle, including the deformed, injured or diseased pediatric foot.
- An understanding of the dysvascular and neurologically impaired foot, including the neuropathic foot and the indications for various amputation procedures of the foot and ankle.

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- An understanding of prosthetics and orthotics pertaining to disorders of the foot, gait and amputation.

# Example: Ankle Arthritis, Medical Knowledge Goals and Objectives:

- Demonstrates knowledge of pathophysiology related to ankle/mid-foot/hind-foot arthritis
- Correlates anatomic knowledge to imaging findings on basic imaging studies. (e.g., osteophyte formation, joint narrowing, subchondral cysts and sclerosis)
- Demonstrates basic knowledge of natural history of ankle/mid-foot/hind-foot arthritis
- Demonstrates knowledge of gain mechanics (e.g., phases of gait) and normal limb alignment
- Demonstrates knowledge of ankle/mid-foot/hind-foot arthritis anatomy and basic surgical approaches (e.g., anterior, lateral-transfibular)
- Demonstrates knowledge of non-operative treatment options and surgical indications
- Correlates anatomic knowledge to imaging findings on advanced imaging studies (e.g., bone loss, articular deformity, subluxation)
- Understands the effects of intervention on natural history of ankle/mid-foot/hind-foot arthritis (e.g., effects of NSAIDS, steroid injections, brace, rocker bottom shoes)
- Demonstrates knowledge of abnormal gait mechanics of ankle/mid-foot/hind-foot arthritis (e.g., antalgic gait, circumduction, decreased stance) and abnormal limb alignment and adjacent joint function
- Understands alternative surgical approaches (e.g., posterior, posterolateral, posteromedial)
- Understands basic pre-surgical planning and templating
- Understand non-operative treatment options and surgical indications

## **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

- Identify strengths, deficiencies, and limits in one's knowledge and expertise
- Set learning and improvement goals
- Identify and perform appropriate learning activities
- Systematically 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 patient's health problems.
- Use information technology to optimize learning.
- 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 a feedback with some external assistance.
- Demonstrates use of published review articles or guidelines to review common topics in practice.
- 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.
- Complete the personal learning project in the practice 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.

- 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 provider, and provides detailed information about patient care (e.g., demonstrate 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.

#### **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 supersede 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 consents, 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 and 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.

#### **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 systems 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 briefing to prevent adverse events in health care
- Appropriately and accurately enters patient data in EHR
- Effectively uses electronic medical records in patient care.
- 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