

2010

Rheumatology Residency Rotation University of Colorado Health Sciences Center

This paragraph only applies if you are rotating at the University of Colorado Hospital. Please review the rest of the curriculum below.

Specialty Residents must complete the Web-based Training for Touchworks for this rotation. To complete the training, please follow the instructions below and then notify the Ambulatory Training team via email at UCH-AmbulatoryServicesTraining@uch.edu that the training is complete. They will send you a login via email.

1. Type www.uch.edu in the address field of your web browser.
2. Click the **For Employees** option in the upper-right corner of the page.
3. Under the **Other Helpful Links** section, select the [Ambulatory Services Training](#) link.
4. Under the **Web Based Training** section, select to complete each section: [Lesson 1](#), [Lesson 2](#), [Lesson 3](#) links under title **TouchWorks for Specialty Residents**.

Faculty Coordinator: Robert W. Janson, MD

Objectives and Goals:

Specific Goals:

1. Acquire basic core knowledge of clinical manifestations, clinical presentations, pathophysiology, and management of rheumatologic diseases or systemic diseases with rheumatologic manifestations.
2. Develop the clinical skills of data collection including history taking, physical examination, and the appropriate request of laboratory and imaging studies.
3. The performance and/or interpretation of diagnostic tests and therapeutic procedures common in the practice of Rheumatology.
4. Review the typical radiographic features of common rheumatologic diseases.
5. Recognize the need for appropriate Rheumatology consultation.

Educational Objectives:

1. Know the clinical manifestations, presentations, pathophysiology, and management of rheumatologic diseases including:
 - a. Systemic Connective Tissue Diseases:
 - i. Rheumatoid Arthritis
 - ii. Systemic lupus erythematosus
 - iii. Systemic sclerosis
 - b. Seronegative Spondyloarthropathies
 - i. Ankylosing Spondylitis
 - ii. Psoriatic Arthritis
 - iii. Reactive Arthritis
 - iv. Inflammatory Bowel Disease-Associated Arthritis
 - c. Vasculitides including PMR
 - d. Septic Arthritis
 - e. Crystal-Associated Diseases:
 - i. Gout and Hyperuricemia
 - ii. Calcium Pyrophosphate Dihydrate Deposition Diseases
 - f. Metabolic Bone Disease:
 - i. Osteoporosis
 - ii. Osteomalacia
 - g. Nonarticular and Regional Musculoskeletal Disorders:
 - i. Fibromyalgia
 - ii. Low Back Pain
 - iii. Regional Musculoskeletal and Overuse Syndromes
 - h. Inflammatory Muscle Diseases
2. Develop Clinical and Technical Skills:
 - a. Rheumatologic history including a relevant review of systems
 - b. Physical examination including the structure and function of axial and peripheral joints, periarticular structures, peripheral nerves, and muscles
 - c. Arthrocentesis and interpretation of synovial fluid analysis
3. Interpret the results of specific rheumatologic laboratory tests
4. Recognize the radiographic manifestations of common rheumatic diseases

Principle Teaching Methods:

Course Structure:

► The resident is provided with:

1. The specific Goals and Educational Objectives prior to the start of each rotation.
2. A syllabus or CD-ROM containing handouts for all of the didactic lectures.

3. The resident is instructed to use a recent textbook of Rheumatology or Medicine and/or Up-to-Date on line as basic reference sources for the rotation.

► The resident will attend the following didactic lectures given by the Rheumatology faculty each month:

1. Back pain
2. Fibromyalgia
3. Gout and Calcium Pyrophosphate Dihydrate Deposition Diseases
4. Joint examination
5. Knee pain
6. Laboratory Tests in Rheumatology
7. NSAIDs
8. Osteoporosis and Metabolic Bone Disease
9. Radiographic Manifestations of Rheumatic Diseases
10. Rheumatoid Arthritis
11. Seronegative Spondyloarthropathies
12. Shoulder pain
13. Synovial fluid analysis
14. Systemic Lupus Erythematosus
15. Vasculitis / PMR

► Rheumatology Division Conferences and Medical Grand Rounds:

1. Tuesday 8:00am Rheumatology Grand Rounds
2. Tuesday 9:00 am Rheumatology Journal Club, Radiology Conference, or Kelley's Textbook of Rheumatology Chapter Teaching Quiz
3. Tuesday 10:00 am Rheumatology Division Research Conference
4. Wednesday 12:00 pm Medical Grand Rounds

► Noon resident lecture series:

1. Gout
2. Laboratory Tests in Rheumatology
3. Septic Arthritis
4. Systemic Lupus Erythematosus
5. Rheumatology Specialty M&M Conference

► Arthritis Foundation Orientation:

The resident attends an orientation at the Arthritis Foundation, Rocky Mountain Chapter called "Beyond the Pill Box" to learn about the mission, operations, and services typically provided by nonprofit medical organizations.

Clinical Experiences:

This is a supervised outpatient clinical experience. The resident sees assigned patients with a broad mix of rheumatic diseases and disease severity. The resident and attending will see and discuss each resident assigned case and the attending will review the pertinent physical findings and assist with a therapeutically useful assessment and plan. All rheumatic diseases are seen with fibromyalgia as a minor component of the resident's experience. Since the residents attend Rheumatology clinics at Denver Health Medical Center, UCHSC clinics at Fitzsimons, and the Denver VA Medical Center, they see a broad range of socio-economic society. Residents perform supervised arthrocentesis, soft tissue and bursal injections, and synovial fluid crystal analysis in clinic. Resident's duty hours are much less than 80 hours a week. No Rheumatology call or weekend service is required. Residents continue to attend their weekly general medicine continuity clinic(s) and required conferences.

Weekly Schedule:

| | 8:00 am – 12:00 noon | 1:00 pm – 5:00 pm |
|-----------|---|--|
| Monday | Lectures (Barbara Davis Center Conference Room, 2 nd floor) | Scleroderma Clinic (ACAM – 4 th floor at Fitzsimons) |
| Tuesday | Grand Rounds & Journal Club or Quiz (Barbara Davis Center Conference Room, 2 nd floor) | VA Arthritis Clinic (6 South, VA Hospital) |
| Wednesday | Lecture and Denver Health Arthritis Clinic (Davis Bldg., 3 rd floor) Noon: Medical Grand Rounds | Denver Health Metabolic Bone Clinic (Davis Bldg., 3 rd floor) |
| Thursday | VA Arthritis Clinic (6 South, VA Hospital) | University Arthritis Clinic (ACAM – 4 th floor at Fitzsimons) |

| | | |
|--------|---|--|
| Friday | Denver Health Arthritis Clinic (Davis Bldg., 3 rd floor) | Arthritis Foundation Orientation or possible lecture |
|--------|---|--|

Method of Evaluation of Resident Competency:

The resident's performance will be evaluated using the standard Department of Medicine Resident Evaluation form. This evaluation is competency-based as it pertains to the specific goals and educational objectives of the rotation. The evaluation will be shared with the resident.

On completion of the rotation, residents complete an on-line evaluation commenting on the faculty and rotation experience. The program reviews the evaluations and attending faculty physicians receive feedback. Collective evaluations serve as a tool to assess faculty development needs.

Institutional Resources:

The rheumatology clinics at all teaching hospital sites are modern and well equipped with staff, polarizing microscopes, dedicated injection trays, and computers with on-line access. All attending physicians are board certified in Internal Medicine and Rheumatology. Residents have autonomy but are not used for service. The residents attend the comprehensive didactic rheumatology lecture series during the rotation. Residents receive one-on-one instruction in musculoskeletal physical examination with direct feedback and discussion on each patient they evaluate. Fibromyalgia is a minor component of the residents' clinical experience.

Rotation Specific Competency Objectives:

Patient Care

History taking: Residents will be able to obtain a detailed, thorough, hypothesis driven history.

Physical Examination: Residents at all levels of training will perform a comprehensive physical exam on all new patients and, perform a screening and detailed physical examination of the musculoskeletal system as dictated by the situation. Residents will describe the physiologic and anatomic basis for their findings.

Charting: Residents will record data in a legible, thorough, systematic manner.

Procedures: Residents will be able to demonstrate knowledge of procedural indications, risks, contraindications, necessary equipment, specimen handling,

patient after-care, and minimization of discomfort with local or topical measures. Procedures include arthrocentesis, joint injection, bursal injection, trigger finger injection, carpal tunnel injection, and synovial microscopy.

Medical Decision Making: Residents will be able to develop a prioritized, differential diagnosis. They will be able to understand their limitations and understand when to seek the advice of consultants. Residents will establish and understand an orderly succession of testing for patients with suspected rheumatic disease (including understanding limitations of serologic testing, reading x-rays and differentiating the arthritides based on them). They will understand the administration, side effects, monitoring and drug-drug interactions of the disease modifying antirheumatic drugs (DMARDs), biologic agents, NSAIDs, and corticosteroids. Residents will begin to formulate an appropriate therapeutic plan for patients with a variety of rheumatic diseases. Residents will learn the epidemiology and natural history of treated and untreated rheumatic conditions. Residents will learn target joints for various diseases to assist with rheumatic differential diagnoses.

Ancillary Services: Residents will learn to interact and appropriately order ancillary services such as occupational therapy, physical therapy, and prosthetics.

Subspecialty Referrals: Residents will learn when to appropriately refer to the various subspecialties including neurology, orthopaedics, oncology, pulmonary, general surgeons, renal, and podiatry.

Medical Knowledge

Residents will demonstrate a progression in knowledge of the rheumatic diseases to include basic science, clinical criteria, diagnostic evaluation, current treatment and side effects, and psycho/social/functional behavior.

Residents will recognize rheumatic emergencies and urgencies and expedite care.

Interpersonal and Communication Skills

Residents will exhibit ethical, respectful behavior to patients and staff.

Professionalism

Residents will demonstrate accountability, compassion, dedication to patient care, patient advocacy, and respect that supersedes self interest. They will be punctual and prepared for teaching sessions and clinics. Residents are expected to show sensitivity and responsiveness to patients' age, gender, disabilities, and culture.

Practice Based Learning and Improvement

Residents will use clinically-based literature and electronic references to support patient care and education.

Systems Based Practice

Residents will effectively participate in the ambulatory rheumatology clinics, recognizing and facilitating the consultative and primary care activities of the specialty practice. They will adopt and understand available clinical practice guidelines.