UCLA-OLIVE VIEW INTERNAL MEDICINE RESIDENCY

RHEUMATOLOGY CONSULT CURRICULUM

Target: PGY 1-3
Updated September 2018

A. EDUCATIONAL OVERVIEW

Residents on the rheumatology service are expected to gain a level of competence such that they can independently manage relatively common and/or acute rheumatologic conditions (as appropriate for the general internist) such as osteoarthritis, gout, infectious arthritis, and localized musculoskeletal problems. For less common or more severe or complex cases such as rheumatoid arthritis, lupus, polymyositis and vasculitis, residents will, in the process of providing consultations under the supervision of a specialist, learn how to recognize and diagnose these conditions and appropriately refer them for specialty care.

B. ROTATION DESCRIPTION AND STRUCTURE

Training in rheumatology takes place at the Olive View-UCLA Medical Center, and spans the three years of training. It is composed of clinical experiences on the inpatient consult service and outpatient clinic. Rotations on the inpatient consult service are two weeks in length. Outpatient clinic is assigned during Ambulatory Medicine week and during the inpatient consult rotation. Trainees will care for patients with acute and chronic rheumatologic diseases. Residents will prepare a didactic conference and provide an in-depth review of some aspect of the basic science or a clinical problem related to the rheumatic diseases. Supervision is provided by the Rheumatology faculty and assisted by the Rheumatology fellow.

Monday	Tuesday	Wednesday	Thursday	Friday
9:00 AM – 12:00 PM Rheum Consult Rounds **Drs. Heinze/Wong**	89 AM: Rheum Consult Rounds **Dr. Clements**	8:00 – 12:00 PM **OVMC Rheum Clinic E** **Drs. Heinze, Weber & Wong**	8:00 AM – 12:00 PM **OVMC Rheum Clinic E** **Dr. Weber**	8:00 AM – 12:00 PM **OVMC Rheum Clinic E** **Drs. Heinze, Clements & Wong**
12:00 PM Noon Conference	12:00 PM Noon Conference	12:00 PM Noon Conference	12:00 PM Noon Conference	12:00 PM Noon Conference
1:00 PM – 4:00 PM Rheum Consults	1:30 PM – 3:30 PM Rheum Core Curriculum, Journal Club, Research, and Clinical Conferences OVMC Rm. 6D-103	1:00 PM – 4:00 PM Rheum Consult Rounds **Drs. Heinze & Wong**	1:00 PM – 4:00 PM Rheum Consult Rounds 1:30 PM – 2:30 PM (2nd & 4th Thursdays) MSK U/S & Radiology conference 2D-139 **Dr. Salibian**	1:00 PM – 4:00 PM Rheum Consult Rounds **Drs. Heinze, Clements & Wong**

C. GOALS & OBJECTIVES

Residents are expected to achieve the common goals and objectives of clinical care (see separate document) in addition to the following objectives by the three-year training.

1. **Goal: Master the differential diagnosis of rheumatologic diseases.**
    - Identify the patient's pattern of symptoms and findings (exam, labs, imaging) and correlate this to a differential list of rheumatologic conditions. (PC1, MK1)
    - For joint pain, assess the number, location, and progression of the patient's joint findings to formulate the differential diagnosis of arthritic diseases. (PC1, MK1)
    - Correlate the patient's visual findings (dermatologic features/rashes, hands, eyes, and radiographic features) to rheumatologic diseases. (PC1, MK1)
    - Explain how organ dysfunction is a sign of specific rheumatologic conditions or emergencies, including renal failure, thromboembolism, hypoxia, and encephalopathy. (PC1, MK1)

2. **Goal: Perform a thorough rheumatologic history and exam.**
    - For new or uncertain diagnoses, obtain a thorough yet focused history that includes the onset, frequency, severity, and descriptive qualities of the patient's symptoms. (PC1)
    - Perform a focused rheumatologic exam using appropriate terminology with particular attention to an accurate assessment of the joints and skin. (PC1, MK1)
    - Obtain a complete rheumatologic review of systems when evaluating new or chronic conditions to evaluate severity and response to treatment. (PC1)

3. **Goal: Implement a focused, cost-effective evaluation for rheumatologic complaints.**
    - Order specific labs and studies while justifying their use in the diagnosis or management of the patient. (PC2/3, SBP3)

4. **Goal: Understand the principles of treating rheumatologic diseases as well as the short- and long-term effects of such treatment.**
    - Assess the efficacy of chronic management using the patient's reported symptoms, compliance with recommended treatment, and a rheumatologic exam. (PC1/2)
    - Describe escalation therapy for rheumatoid arthritis and lupus. (PC2/3, MK1)
    - Recommend prophylactic measures and appropriate tapering for chronic corticosteroid use. (PC2/3, MK1)
    - Explain the indications and side effects of biologic agents: (MK1)
        - Adalimumab, Etanercept, Infliximab
        - Abatacept
        - Rituximab
        - Tocilizumab
        - Ustekinumab

    - Secukinumab
    - Belimumab
- Explain the indications and side effects of DMARDs: (MK1)
    - Hydroxychloroquine
    - Leflunomide
    - Methotrexate
    - Sulfasalazine
- Explain the indications and side effects of Anti-Inflammatory Drugs: (MK1)
    - Colchicine
    - Corticosteroids
    - NSAIDs
    - Prednisone
- Explain the indications and side effects of Immunosuppressive Drugs: (MK1)
    - Azathioprine
    - Cyclophosphamide
    - Mycophenolate Mofetil
    - Apremilast
    - Tofacitinib
- Explain the indications and side effects of Urate-lowering Treatment: (MK1)
    - Allopurinol
    - Febuxostat
    - Probenecid
    - Pegloticase

D. CORE TOPICS IN RHEUMATOLOGY

By the end of the three-year training, the resident will be able to explain the differential diagnosis, general diagnostic approach, and management for the following signs, symptoms, conditions, and diseases: (MK1)

- Crystal-induced Arthritis
    - Gout
    - Pseudogout (CPPD)
- Fibromyalgia
- Infectious Arthritis
    - Septic arthritis: Gonococcus, staphylococcus, streptococcus, etc
    - Viral arthritis: parvovirus B19, etc
    - Lyme disease

    - Atypical infectious arthritis: mycobacterial, fungal, etc
    - Rheumatic fever
    - Hepatitis C
- Osteoarthritis (OA)
- Polymyositis (PM) & Dermatomyositis (DM)
- Rheumatoid Arthritis (RA)
- Rheumatologic Emergencies
    - Acute septic arthritis
    - Catastrophic anti-phospholipid syndrome
    - Intestinal vasculitis
    - Neuropsychiatric lupus
    - Pulmonary/Renal syndromes (including alveolar hemorrhage)
    - Scleroderma renal crisis
    - Giant cell arteritis (GCA)
- Scleroderma
- Seronegative Spondyloarthropathies
    - Ankylosing Spondylitis
    - Arthritis associated with Crohn's Disease and Ulcerative Colitis
    - Psoriatic Arthritis
    - Reactive Arthritis
- Systemic Lupus Erythematosus (SLE)
- Sports-related Injuries
    - Shoulder
    - Elbow
    - Hip
    - Knee
    - Foot
- Vasculitis
    - Large Vessel Vasculitis
        - Temporal Arteritis and Polymyalgia Rheumatica (PMR)
        - Takayasu's Arteritis
    - Medium/Small Vessel Vasculitis
        - ANCA-associated Vasculitis
            - Granulomatosis with Polyangiitis (GPA; Wegener's)

        - Microscopic Polyangiitis (MPA)
        - Eosinophilic Granulomatosis with Polyangiitis (EGPA; Churg-Strauss)
      - Classical Polyarteritis Nodosa (PAN)
      - Thromboangiitis Obliterans (Buerger's Disease)
      - Goodpasture's Disease
    - Small Artery Vasculitis
      - Leukocytoclastic Vasculitis
      - Henoch-Schonlein Purpura
      - Cryoglobulinemia
      - Cholesterol Emboli
- Miscellaneous Diseases
    - Acromegaly
    - Adult Still's Disease
    - Amyloidosis
    - Anti-Phospholipid Antibody Syndrome
    - Autoinflammatory Syndromes
    - Baker's Cyst
    - Behcet's Disease
    - Carpal Tunnel Syndrome
    - Celiac Disease
    - Eosinophilic Fasciitis
    - Hemochromatosis
    - Hypertrophic Pulmonary Osteoarthropathy
    - Mixed Connective Tissue Disease
    - Paget's Disease
    - Raynaud Syndrome
    - Sarcoid
    - Serum Sickness
    - Spinal Stenosis

In addition, trainees are expected to demonstrate a working knowledge of the following, including indications, limitations, appropriate utilization, and/or interpretation. (PC1/4, MK2)

- Joint aspiration/injection and soft tissue injection techniques and indications
- Synovial fluid analysis
- Radiologic imaging studies of joint and bony structures

- Rheumatologic laboratory tests (sensitivity, specificity and implications of false positive results)

E. TEACHING METHODS

Clinical education is primarily delivered through direct patient care and attending rounds with the supervising attending physician and fellow. Bedside teaching will be employed to role model counseling skills, demonstrate physician exam techniques, and teach and perform procedures. Didactic learning is integrated into inpatient attending rounds, the core lecture series covering subspecialty topics in Rheumatology, journal clubs, and clinical and basic science didactic conferences.

Housestaff are required to attend the daily Noon Conference series and Morning Report when permitted by patient care duties.

Housestaff are expected to supplement their learning with additional reading on diseases encountered.

F. SUPERVISION AND EVALUATION

All housestaff and patient care will be supervised by the attending physician and fellow.

Residents will be evaluated by the supervising attending and fellow. Direct verbal feedback may be provided throughout the rotation, and written evaluation will be submitted electronically in MedHub at the end of the rotation. These can be reviewed by the resident at any time and will be reviewed with the housestaff during the Clinical Competency Committee meeting.

Direct observation and feedback of interviewing, examination, and/or counseling skills may be documented with the Mini-CEX.

G. EDUCATIONAL RESOURCES

Electronic resources are also available through the internet at Olive View-UCLA Medical Center and through UCLA.

- UpToDate
- Dynamed (coming)
- MKSAP Rheumatology
- Harrison's Principles of Internal Medicine
- PubMed
- Visual Diagnosis (VisualDx)

Recommended rheumatology resources:

- Klippel JH, ed. Primer on the Rheumatic Diseases.
- Firestein GS, et al. ed. Kelly's Textbook of Rheumatology. (available online MD Consult Books)
- Hochberg MC, et al. ed. Practical Rheumatology.
- West S, Rheumatology Secrets
- Fauci AS, et al. ed. Harrison's Rheumatology.