I. Educational Purpose and Goals

The rotation will provide an in-patient and out-patient consultative experience in rheumatology and allergy/immunology. In the changing scope of internal medicine practice with managed care, internal medicine residents need to become competent with the initial evaluation and long-term management of patients with both acute and chronic rheumatologic diseases and office based procedures (e.g., arthrocentesis and trigger point injections). A major emphasis in this rotation will be on the importance of ordering proper laboratory investigations and their interpretation along with the knowledge of newer agents used in the treatment of allergic and autoimmune diseases.

II. Principal Teaching Methods

A. Supervised Direct Patient Care:

Residents will learn through direct patient care with the subspecialty rheumatology/allergy fellow and the Rheumatology attending’s supervision in inpatient and outpatient settings. On the inpatient consult service, the resident will present the patient to the Rheumatology fellow after the initial evaluation and then at daily rheumatology inpatient rounds with the rheumatology attending. In the outpatient clinics, the residents will present the patient to the Rheumatology attending. Residents are responsible for the initial written and dictated notes.

B. Didactic Lectures: Didactic case discussions with resident involvement will occur during teaching rounds and at the conclusion of clinics. Residents are also required to attend all Rheumatology/Allergy division functions including occasional Friday Case Discussions and journal clubs, and weekly fellow clinical conferences.

C. Independent Reading: The resident will read independently to answer questions about patient care that arise in clinics. The residents may use UpToDate, primary literature or other sources suggested by preceptors.

III. Educational Content

A. Mix of Diseases: Diseases seen in this patient population cover the breadth of rheumatology ranging from common problems such as rheumatoid arthritis, systemic lupus, vasculitis, crystal-induced arthritis, fibromyalgia, osteoarthritis and other soft tissue musculoskeletal problems like bursitis, tendonitis, carpal tunnel syndrome and trigger fingers, to less common disorders such as inflammatory muscle disease, Sjogren’s syndrome, scleroderma. The common disorders seen in the an Allergy and Immunology clinic include asthma, rhinitis, sinusitis, nasal polyposis, urticaria,
angioedema, anaphylaxis, atopic dermatitis, insect sensitivity, drug reactions, food and additive reactions, and ocular allergic diseases.

**B. Patient Characteristics:** Because of the diverse patient population in Sacramento and the wide geographic referral area, patients may present in the early stages of the disease or be referred when it is advanced. Both genders and all age groups are well represented (ages 15-90 years).

**C. Procedures and Services:** Rheumatology consultations on hospitalized patients on both the surgical and medical services, as well as in the various intensive care units. Basic procedures include arthrocentesis, tendon sheath injections, injections of the trochanteric and subdeltoid bursae. Office allergy procedures include: office Spirometry and its interpretation, immediate hypersensitivity skin testing or interpretation of RASTs, and immunotherapy.

**D. Learning Venues:**

1. **Conferences:**
   a. Attendance at medicine core conferences and medicine grand rounds are mandatory.
   b. Attendance at medicine morning report is optional, as time permits.
   c. Allergy/Immunology Journal Club (Optional): second Thursday of each month @ 1800
d. Allergy/Immunology Clinical Case Conference: Friday @ 1200—approximately 1-2 times a month

2. **Allergy/Immunology Journal Club:** Journal club topics range from clinical trials evaluating the efficacy of medications to epidemiologic studies to basic science articles.

3. **Clinical Case Conferences:** Forum for patient-based discussion of both common and unusual clinical diseases in rheumatology. After the fellow or resident presents a patient case as an unknown, the clinical rheumatology attendings present will discuss the case focusing on an approach to diagnosis and management of the disease, clinical pearls, and important issues to consider in the clinical management of the patient.

4. **Attending Rounds on inpatient service:** The rheumatology attending and fellow will make combined management and teaching rounds with the resident(s) on rheumatology 4-5 times a week. This will include approximately 1 hour of teaching and up to 1.5 hours of management rounds. There will be a total of 5 hours/week of teaching rounds. Rounds will include bedside teaching, in-depth presentation and discussion of 1-3 cases, and demonstration and evaluation of the resident(s)’ interview and physical examination skill. Resident(s) are to leave by 12:20 on Monday to ensure his/her attendance at medicine core conference.

**IV. Educational Goals and Objectives**

By the end of the rotation, the internal medicine resident will be familiar with the evaluation and treatment of common rheumatology and allergy/immunology diseases encountered in both the in-patient and out-patient setting. Specifically, the resident will gain proficiency in the rotation-specific competencies outlined below. As residents can rotate on this rotation during their PGY1, PGY2, or PGY3 year, there are not PGY-year specific competencies for this rotation.
A. Rotation specific competencies:

**Patient Care:** By the end of the rotation, residents will be able to:

- Obtain accurate and complete information through medical interviews, physical examination, medical records review;
- Perform procedures for which they are signed off on safely and considerately;
- Present a case thoroughly yet concisely;
- Synthesize a complete problem list and appropriate differential diagnosis based on available data;
- Demonstrate sound clinical judgment; incorporating patient preferences into the care plan;
- Be able to do and demonstrate appropriate initial evaluation and management of acute and chronic rheumatology and allergy/immunology complaints;
- Demonstrate ability to evaluate and manage common disorders;
- Interpret lab testing;
- Complete an initial evaluation and management of articular complaints.

**Medical Knowledge:** By the end of the rotation, residents will be able to:

- Describe an approach to patients with acute pauci- and poly-articular complaints.
- Know the pharmacology of commonly used medications for rheumatoid arthritis, systemic lupus, vasculitis, crystal-induced arthritis.
- Apply an evidence-based, analytical approach to acquiring knowledge.
- Access and critically evaluates current medical information and scientific evidence.
- Develop a competence in the principles of arthrocentesis and trigger point injection.

**Practice-Based Learning and Teaching:** By the end of the rotation, residents will be able to:

- Critique own performance.
- Be receptive to constructive criticism.
- Learn from errors and uses errors to improve patient care on both a personal and system-wide level.
- Use information sources effectively to support patient care decisions and to educate self, patients, and other physicians.
- Actively participate during interactive teaching sessions and case discussions.
- Respond to constructive criticism and enthusiasm for self-education and self improvement (practice based learning).

**Interpersonal and Communication Skills:** By the end of the rotation, residents will be able to:

- Develop a good working relationship and rapport and communicates clearly with other physicians, health professionals, and patients.
- Present cases concisely and in a well-thought out manner.
- Maintain comprehensive, timely and legible medical records.
- Communicate directly with consulting services after completion of consultation to relay clinical recommendations.

**Professionalism** By the end of the rotation, residents will be able to:

- Develop good rapport with patients and staff.
- Work with people from diverse backgrounds (professionalism).
• Demonstrate respect, compassion and integrity in working with patients, families, colleagues and other health professionals regardless of their background.
• Adhere to principles of confidentiality, scientific and academic integrity and informed consent.
• Recognize and identifies deficiencies in peer performance in a constructive manner.
• Take responsibility for patient care and acknowledges mistakes.

Systems-Based Practice: By the end of the rotation, residents will be able to:
• Work within the local, regional, and national medical system to deliver optimal patient care.
• Participate actively in improving the health systems to optimize patient care.
• Demonstrate appropriateness and cost-effectiveness of proposed diagnostic studies and therapeutic maneuvers.

V. Ancillary Educational Materials

A. Reading lists or other materials: A 2008 Primer of the Rheumatic Diseases is available for each resident from the UCDMC bookstore and contains the latest information on common and important diseases in rheumatology and allergy/immunology.

B. Pathological Material: The residents will be able to access reference pathology books to help guide their approach to rheumatology and allergy/immunology pathology.

C. Computer-based Resources: Access to Up-to-Date in rheumatology and allergy/immunology is available via the computer. Online texts, the UC Davis Library, and Pubmed with access to electronic journals are available from any computer terminal.

D. Textbooks: Basic text books of rheumatology and allergy/immunology are available in the UC Davis Medical School Library on the UCDMC campus.

VI. Methods of Evaluation

A. Resident Performance: Resident performance will be assessed through direct observation on teaching and management rounds, active participation during discussions on teaching rounds, chart audit and review, and input from the fellow, peers, and support personnel. The attending will evaluate the resident in writing at the end of the rotation and provide verbal feedback during and at the end of the rotation using E-Value. Continuous feedback will be provided on a day-to-day basis as needed.

B. Rotation, Faculty, and Fellow Evaluations: The residents will evaluate the rotation, the fellow, and each attending at the end of the rotation using E-Value.

VII. Supervision

Residents will work in direct contact with the Rheumatology and Allergy/Immunology fellow and the service attending when they are on the medical wards. They will be expected to present, discuss and formulate a medical plan for each patient with the team. The attending and/or fellow are available 24 hours daily for assistance. In the clinics, residents will work with fellows and attendings.

VIII. Resident Schedule
A. Structure and Duration of Teaching Rounds: The Rheumatology and Allergy/Immunology consultation rotation will consist of an in-patient and out-patient component. In the morning, the resident will round on their assigned in-patients. In the early afternoon, residents will make rounds with the fellow(s) and the attending. The resident must attend at least 4 Rheumatology clinics and 1 Allergy clinic per week. Work hours will not exceed 80 hours per week, and the resident will have 1 day off a week on average. Moonlighting is discouraged during this rotation because of the intense nature of the educational experience. If moonlighting is authorized by the Rheumatology and Allergy/Immunology attending and the Internal Medicine Residency Program Director, the resident must report all hours worked, which are included in the 80-hour work-week.

B. Daily Schedule:

- Monday – Friday 0700-0900 Pre-round
- Monday – Friday 1300-1500 Attending Rounds
- Monday – Friday 0930-1200 Rheumatology and Allergy/Immunology Clinics
- Monday 1230-1530 Medicine Core Conference
- Tuesday 1300-1700 Rheumatology Clinic
- Thursday 0800-0900 Medicine Grand Rounds
- Friday (~every other week) 1200-1300 Allergy/Immunology Clinical Case Conference
- Thursday (second Thursday monthly) 1800-2000 Allergy/Immunology Journal Club

C. Patient Care Responsibilities: The Rheumatology and Allergy/Immunology fellow(s) will assign patients to the resident for evaluation as consults are requested. The fellow(s) will review all consults for their potential teaching value in making these assignments. The resident will continue to follow patients assigned to him/her on a daily basis until continued rheumatologic care is no longer necessary. On all consults, the resident is expected to:

1. Perform a thorough history and physical examination.
2. Formulate a differential diagnosis and management recommendations independently before discussion with the fellow(s) and attending.
3. Participate actively in the management of the patient and discussions concerning the patient.
4. Pre-round on the patients you are following before work rounds with the fellow(s) and attending teaching rounds.
5. Write a daily note on each patient he/she is following.
6. Contact the primary team directly about any urgent management issues decided during work and attending rounds.

D. Resident Clinic Responsibilities
The resident must attend at least 4 Rheumatology clinics and 1 Allergy clinic per week.

The resident will see new and return clinic patients. A thorough history (including a Review of Systems) and physical exam are required on all new patients. All patients will be reviewed and discussed with the attending prior to discharge from the clinic.

IX. Duty Hours

During this rotation, shifts are 12 hours or less and there is no in-house call activity. The schedules are arranged so that there are greater than 10 hours between all shifts. All residents get a minimum of 1 in 7 days free from responsibilities averaged over the four week rotation. Duty hours are limited to less than 80 hours per week.