# RHEUMATOLOY ROTATION

#### RHEUMATOLOGY:

Unlike other specialties that can be described in one word; rheumatology requires much more explanation. Rheumatology is a specialty of internal medicine and pediatrics devoted to the diagnosis and management of over 100 complex and interesting diseases. Rheumatology is the study of inflammation that occurs in the bones, muscles and joints and sometimes the internal organs (e.g. kidneys, lungs, blood vessels, brain). The most common rheumatic disease is arthritis. Other complex diseases on the rheumatology spectrum include systemic lupus erythematosus, systemic sclerosis and Sjogren's syndrome, just to name a few.

Differential diagnosis is a constant challenge; the correct solution is primarily dependent upon a complete and accurate historical and physical examination data. Laboratory and x-ray evaluation usually plays a secondary role in diagnosis, but is often helpful in making treatment decisions.

Current treatment for most rheumatic diseases is usually only partly effective, largely because of our lack of understanding of the diseases at the cellular and molecular levels. Thus, research is rheumatology's most exciting challenge; the solutions likely to be found in the future will totally transform our clinical approach to these diseases. Meanwhile, pursuing a rigorously analytical approach to the problems you will see, mostly in outpatient practice but also in inpatients, is the best training you can get, not only for rheumatology but also for all of medicine.

The Rheumatology Fellow will be responsible for running the service (consult and outpatient assignments, X-ray and Path lists, etc.). There is a Section Library in the fellow's office (WH 8310B), which residents and students can use during the rotation (journals and books are not to be removed). (Please see Rheumatology Reading Lists and Internet Resources)

### RESIDENCY CURRICULUM

# **Educational Purpose**

The goal of the SUNY Upstate Rheumatology Residency Rotation Training Program is to train Internal Medicine residents:

## 1. Medical Knowledge/Patient Care/Professionalism

- To gain clinical competency in field of rheumatology and an understanding of both common and uncommon clinical features, presentations, pathophysiology, laboratory imaging manifestations, and basic management of Rheumatic diseases and syndromes
- To develop clinical skills in data collection by taking a history, completing a thorough exam, and interpreting and evaluating diagnostic studies
- To integrate acquired clinical data in the development of appropriate differential diagnoses and therapeutic plans.
- To perform common arthrocentesis such as the knee
- To develop excellent communication, professionalism, and humanistic skills.

## 2. System Based Practice/Interpersonal Communication Skills

- To be capable of working as an expert clinician
- To be able to teach Rheumatological clinical skills to learners at a more junior level.

### 3. Practice Based Learning and Improvement

• To develop and maintain habits of life-long learning to enhance rheumatologic skills.

## **Rheumatologic Diseases and Syndromes**

Residents will learn about rheumatoid arthritis, systemic lupus erythematosus, systemic sclerosis and related syndromes, sjogren syndrome, vasculitis, seronegative spondylarthopathies, osteoarthritis, infectious arthritis, gout and fibromyalgia. They will also be exposed to polymyositis and other rarer connective tissue diseases, other crystal induced synovitis, other non-articular rheumatic diseases, non-surgical exercise-related injury, other systemic diseases with rheumatic manifestations, metabolic bone disease including osteoporosis, joint surgery, and rheumatologic problems requiring rehabilitation therapy.

#### **Clinical and Procedural Skills**

Residents will be exposed to the following aspects of Rheumatologic Diseases and Syndromes:

- Clinical features and presentations
- Pathophysiology
- Laboratory and imaging manifestations

Residents will learn the following clinical skills:

- Competency in the unique characteristics of taking a rheumatologic history
- Performance of a brief and thorough examination of the joints and other musculoskeletal structures
- Evaluation and interpretation of laboratory and imaging studies
- Methods of formulating an appropriate differential diagnoses and therapeutic plan.
- Management of common rheumatologic diseases
- Procedural skills necessary for common joint aspirations and injections, such as the knee and tendon/bursa injection.

# **Outpatient Rheumatology Experience:**

Adult arthritis outpatient sessions are held on Monday and Wednesday afternoons (UHCC, Firm C), and Tuesday morning and afternoon at the VA Hospital (2East). The optional Pediatric Arthritis Outpatient Session is held Friday afternoons (805 Physicians Office Building) - Dr. William Hannan and Dr. Caitlin Sgarlat are the Pediatric Attendings. Sessions vary in how many learners can be accommodated. The fellow in charge will determine assignments.

Students and residents should work up new patients preferentially. Most of these are direct referrals and will require a complete work-up similar to that done in General Internal Medicine. All patients, both new and revisits will be presented to and reviewed with an Attending. Residents should identify all problems, work out the differential diagnosis, and have a plan for diagnostic evaluation and therapeutic management. Specific questions should be discussed with the Attending. More general questions will be handled in the post-clinic conference.

There are no routine tests or imaging studies, but the Arthritis Panel (ANA, ANA specificity, rheumatoid factor, CCP Ab, ESR, CRP, uric acid) is commonly ordered at UH. Joint aspirations and injections, and synovial fluid analysis are frequently done. After training, the resident seeing the patient may perform these under supervision of the Attending.

For new patients: the chart note should be a complete work-up, specifying differential diagnosis, diagnostic and management plans. For returning patients: the chart note should briefly summarize the illness, and focus on changes since the previous visit, current status of the disease, and diagnostic and therapeutic plans. Try to make the plan as clear as possible for those who follow you. At UHCC residents and fellows type their note in epic. Be sure to send copies to the referring physician and other MD's involved with the patient. Also be sure to document the Attending's role, and leave space for their written note and signature. The Attending will typically also dictate/type a short note for the referring physician on new patients, and on all patients seen with residents

## **Inpatient Rheumatology Experience**

Consultation requests are directed to the Rheumatology fellows. Patients are admitted from all THREE hospitals (SUNY Upstate Medical University, Crouse Irving Memorial Hospital and the Veterans Administration Hospital), as well as continued follow-up of these patients for as long as indicated during their hospitalization. The consultation will come from the Internal Medicine and other services, also in the special care units and the Emergency Room. The Fellow should divide the consults between themselves, the residents and students, supervising the latter. The patient is then presented to the Consult Attending, if necessary on that day, but otherwise at scheduled morning rounds. A complete note should be written by the trainee working up the case, and thereafter regular follow-up notes; space should be left for the Attending's note. Residents initial notes should be reviewed and signed by the Attending before being placed in the chart. Follow-up patients should be seen by the responsible learner morning rounds.

The resident will perform literature searches when needed for evaluation or management of the patient. The resident will be exposed to an understanding of the indications and contraindications, techniques and possible complications of arthrocentesis, as well as skill in educating patients and obtaining informed consent for procedures, and interpretation of results. Close faculty supervision is provided for all resident activities, with a strong emphasis on developing logical analysis and independent decision-making skills.

For interested residents, basic rheumatology skills in the pediatric age group can be learned at an optional pediatric outpatient sessions on Fridays once a week.

Residents also enhance their cognitive and clinical skills in the variety of formal teaching conferences listed below, at which they are encouraged to participate actively in various ways. Residents are also encouraged to teach the more junior learners including medical students and lower PGY level residents.

#### **Resident Evaluations:**

The Section of Rheumatology adheres to Internal Medicine Departmental policy which reflects hospital policy as well as federal, state, and local laws which require continued and direct supervision of house staff activities especially regarding patient care. Immediate verbal feedback is given in the outpatient and inpatient settings regarding diagnostic evaluations and management proposals. Formal written evaluations made by the attending are sent thru the web-based MedHub evaluation system at the conclusion of each house officer's rotation. The section on Evaluation Processes of the Core Residency Program should be reviewed for more details.

http://www.upstate.edu/medresidency/current/evaluation.php

#### **Rheumatology Reading Lists and Internet Resources:**

The Primer on the Rheumatic Diseases is recommended for reading about the patients you see. By the end of the rotation, you should have finished at least all the major diseases. Students will have received the Primer during Pathology. Residents who do not have the current edition can obtain one from the Section.

Primer on the Rheumatic Diseases (13th edition, J. H. Klippel, M.D. Ed., Arthritis Foundation, Atlanta, 2008):

- Chapter 2 Evaluation of the patient
- Chapter 3 Musculoskeletal Signs & Symptoms
- Chapter 6 Rheumatoid Arthritis
- Chapter 8 Psoriatic Arthritis
- Chapter 9 Ankylosing Spondylitis

- Chapter 11 Osteoarthritis
- Chapter 12 Gout
- Chapter 14 Infectious Disorders
- Chapter 15 Systemic Lupus Erythematosus
- Chapter 16 Antiphospholipid Syndrome
- Chapter 17 Systemic Sclerosis
- Chapter 19 Metabolic Myopathies
- Chapter 21 Vasculitides
- Chapter 43 Operative Treatment of Arthritis
- Chapter 44 Complementary and Alternative Therapies

This comprises approximately 200 pages and contains an essential knowledge core. The remainder of the 500 page Primer would all be very useful material as well, particularly for Board exam preparation.

For a more detailed discussion of the topics please go to the ACR Student-Resident Learner Page <a href="http://www.rheumatology.org/I-Am-A/Student-Resident">http://www.rheumatology.org/I-Am-A/Student-Resident</a>

#### TEACHING ROUNDS AND CONFERENCES

**Consultation rounds** will be held Mondays, Wednesdays and Friday mornings; new and follow-up inpatients will be presented and discussed.

#### The Wednesday A.M. Rheumatology Scientific Lab Conference/Journal Club

The weekly Scientific Lab Conference Sessions/Journal Clubs focuses on current rheumatic disease research both internally and externally.

The **Thursday A.M. Rheumatology Conference** will address specific topics or interesting cases, sometimes with a guest speaker. Local rheumatologists also attend and participate in the discussion. At regularly scheduled intervals, this conference combines with Pathology (Dr. Steve Landas), and Radiology (Dr. Mark Levinsohn);

# The Friday Didactic Sessions

Residents are **REQUIRED** to attend and potentially present at the weekly didactic conferences focusing on the scientific basis of Rheumatic Diseases. The schedule of sessions will follow along the topics listed for the ACR In-Training exam. For each Rheumatologic disease there will be a presentation and discussion on its pathophysiology, manifestations, treatments, and updates. The attending on call will assign the topic on Monday for the Friday presentation. The consult attending can also change the topic according to their discretion based of their cases on consult and outpatient services.

# **Check List for a Joint Aspiration/Joint Injection**

## **Preparation**

Povidone iodine swab stick - 3 for each site

Alcohol swabs - 10

Gloves size 7 Bandaid - 2 Gauze 4x4 - 2

#### **Needles**

For injection of local anesthetic -  $25G \frac{1}{2}$  inch Aspiration -  $25G \frac{1}{2}$  inch Injection steroid -  $25G \frac{1}{2}$  inch

### **Syringes**

To inject local anesthetic - 5cc

For aspiration - 20cc or larger depending on size of joint

# **Medications**

Ethyl chloride spray Lidocaine 1 % or 2 % Depomedrop 80 mg for large joints, 20-40 mg for smaller joints

# **Tubes for sending sample**

Green – crystal Purple – cells Red – culture, gram stain

#### **How to order Rheumatology Tests**

Reflex ANA ANA specificity
Immunofluorescence ANA Antinuclear antibody

ANCA Neutrophil cytoplasmic antibody

DVVT Hexphase Hexphase Beta 2 glycoprotein B2 glycoprotein

Complements C3, C4

SPEP protein electrophoresis, serum

# SUMMARY OF RESIDENT AND STUDENT RESPONSIBILITIES

- Provide prompt (within 24 hours) inpatient consultations and appropriate follow-up.
- Attend ALL assigned outpatient sessions.

# PERSONNEL AND TELEPHONE NUMBERS

Andras Perl, M.D., Ph.D., F.A.C.R., Professor and Chief

Hom Neupane, M.D., Associate Professor

Fatme Allam, M.D., Associate Professor

Hiroshi Kato, M.D., Instructor of Medicine

Julie Yu, M.D., Clinical Assistant Professor

Eduardo Bonilla, M.D., Clinical Assistant Professor of Medicine

Paul E. Phillips, M.D., F.A.C.P., M.A.C.R., Professor Emeritus

Lorne Runge, M.D., Professor Emeritus

William Hannan, M.D., (Pediatrics), Associate Professor

Caitlin Sgarlat, D.O. (Pediatrics), Assistant Professor

Sheetal Rayancha, M.D., Fellow (2015-2017)

Geeta Chaparala, M.D. Fellow (2014-2016)

	<u>Beeper</u>	Office Location	<u>Office</u>	<u>Home</u>	Cell #
Dr. Perl	441-7742	WSK 8299	464-4185	445-2921	420-5262
Dr. Phillips	467-4538	WSK 8310	464-4194	682-6607	427-1443
Dr. Neupane	441-1687	WSK 8310	464-4194	446-5167	
Dr. Allam	241-2877	WSK 8310	464-4194	484-7862	396-5958 or 718-431-4891
Dr. Kato	441-0211	WSK 7322	464-2127		646-750-1380
Dr. Runge	213-0836	WSK 8310	464-4194		380-9680
Dr. Ogrinc	241-1802	WSK 8310	464-4194	446-2847	884-2847
Dr. Hannan	441-1264	UH 5404	464-7611	492-3028	
Dr. Yu	441-4690	WSK 8310	464-4194		617-304-6712
Dr. Eduardo Bonilla	441-0691	WSK 7322	464-4467		315-870-8063
Dr. Chaparala	467-4944	WSK 8310	464-4194		315-560-6991
Dr. Rayancha	213-0232	WSK 8310	464-4194		315-794-9731